

SKYLINES

Newsletter of Newsletter of the Skyline Soaring Club for June, 2020

Who remembers using Very High Frequency Omnidirectional Ranges (VORs) for navigation? In use since 1946, they're being decommissioned with the advent of GPS. This is the Linden VOR, located on the ridge top about 3 miles SW of KFRR.

COVID AIRLINE PROCEDURES

Erik van Weezendonk

In aviation, COVID definitely falls under the I-for-ILLNESS in the IMSAFE pre-flight checklist. I think how my employer is dealing with flight operations has similarities that could be applied to a "normal" Skyline Soaring Club (SSC) weekend, pre-COVID.

My airline has approximately 5,300 pilots on its seniority list and owns ~300 "trunk" aircraft (plus another 250+ smaller planes). Of the 5,300 pilots, I'd estimate that ~4,000 (that *might* be a low number) are flying trips every month, with the remainder either medically out of the cockpit, folks

in the training department as students or instructors, and folks in management positions or on special projects.

So far, my airline has 21 pilots that have tested positive for COVID. To me, that's a remarkably low number, especially considering the amount of flying we do, going to almost every continent, crossing the ocean every day and night, swapping aircraft quite often, mixing crews, etc. So...how do airlines handle COVID?

1. We pre-flight ourselves before we show up for a trip. I have an app on my company-issued iPad called Everbridge, which is a Mass Notification

System. It produces a questionnaire we have to fill out every few days, and especially in the days leading up to a trip confirming any symptoms and/or exposure. I don't think SSC should be requiring such, but if you're even considering going to KFRR, you should monitor your temperature, at a minimum.

For crews, the risk of testing positive while abroad (ESPECIALLY in China) is that if you test positive, you become a guest of your new host country. An additional step for international crews is having a nose-swab test you before you start a trip so you can find out if you're infected while still in the U.S., and NOT get stuck overseas, getting treatment, and not being allowed to leave until you're well. No, I also don't think we should be doing nose swabs at KFRR.

2. When we show up at work, mandatory masks, no excuses. Some pilots have their own N95 masks, some have a homemade cloth mask, some are wearing the company issued mask.



We're wearing them in our crew lounge (think FBO at KFRR, but larger, holding 200-300 crew members maintaining 6 foot barrier as best they can). We don't touch computers, but use our personal iPad. We meet, discuss the flight plan, then get to the airplane.

3. We get to airplane via a bus that has seats 10-12, but the limit is 7. Great for normal complement of two pilots, but also good for long-haul flights that have augmented crew of three or four. We leave space between seats and we keep the masks on. So far, no real interaction except between pilots.

4. At the aircraft, First Officer does the walk-around while the Captain does a cursory Safety Check of outside of aircraft



(ensures it's the right airplane, chocks, etc). From this picture, it seems certain that I've got the right airplane (they're all named!)

5. Captain goes upstairs, checks for essentials on board.... e.g. fuel, coffee, and SANICIDE, an Anti-COVID spray.

This stuff is nasty to spray on to screens/into electronics or on your skin. We put on latex gloves, spray it on to absorbent towels, and wipe down lots of switches, levers, knobs, buttons, checklists, seat belt buckles, etc . I think we can do this at SSC. So far, I've mentioned two physical barriers (masks and gloves) plus a disinfectant spray, and a procedure of wiping down items that many will/have touched. There's also a piece of paper on the yoke clip saying "This Aircraft Has Been Disinfected" to make us feel better.



6. Final precautions. An airline flight has two pilots (or more) plus a Ramp Agent, loading crew of 10 or so, a Dangerous Goods Agent and they are all part of making sure the flight goes out safely, legally, on time. Pre-COVID, those folks would come into the flight deck quite often while we were briefing and preparing for our flight. Now..... absolute minimal. We'll usually get 1 or 2 visitors (DG agent to let us know its ready for inspection, and the Ramp Agent to make sure we're the correct crew and to scan badges). If they enter the flight deck, they have a mask on.

While I wear thin latex gloves while pre-flying, once we've closed the door, I toss those gloves and I hang the mask where my headset would normally be. I do not advise against flying with a mask on, but I think it would be prudent to have one on up until we, as glider pilots, are either ready to launch (additional checklist item) or at least until canopy is closed.

So, thanks for hanging in there with me. An airliner flight goes out with 1-4 pilots, a ground crew of 10-15 making that happen, and we've done it safely, soundly, and repeatedly. I see that parallel to a

tow pilot, ADO, DO, and a few wing walkers. We can do this, and we need to be smart. A trained crew can make soaring fun and safe. Keep calm, stay strong, and carry on. See you at Front Royal in the future!!!



REMEMBERING OUR FRIEND RYAN

Bob Sallada

This ain't easy. I'm no stranger to losing various types of 'flying buddies' – primarily during significant stints as a carrier aviator and engineering test pilot, but Ryan Trexel was different - his death wasn't related to flying, he was early in his 16th year, and he was among the quietest people I've ever known.

I met Ryan when he was a *very* young sprout going on four years ago when I flew his first instructional flight with him in mid-July, 2016. Wow, was he a quiet kid! I couldn't hear him face-to-face, let alone airborne (and surprisingly, my hearing has remained good despite the toll on other parts of this old bod). And - Wow, I sure couldn't get him to 'open up', even if I could have made out the very few words he spoke! As I often do, in my first conversation with Ryan and his granddad, Ralph Sharpe (who was Ryan's consistent 'chauffeur' until he got his driver's license) I asked him 'why the interest in gliders?' That drew a blank - until Ralph said 'answer him'. 'Because my granddad used to fly.' My standard AeroMed question followed, and Ralph said that he could get them to the airport often enough to establish an all-important high frequency of instruction. I decided that it would be helpful if I self-appointed myself as Ryan's "Club Bud" and act a bit as a mentor, primarily in the form of providing continuity during his forthcoming beginning sessions.

Anyone who has been an active Club member for the past couple of years would know Ryan – the red-haired, *very* quiet and *very* skinny kid, with a bit of uncharacteristic flair for fashion (at least by my standards!), who was visibly growing vertically, but not horizontally. And, as he acclimated to the environment, would willingly pitch-in with the

grunt work to the extent that his rather frail 105lbs would permit. His vocal 'transmission volume' also improved over time. But, continually noteworthy was the challenge of drumming up some sort of conversation.

Ryan took to the mechanics of glider-flying pretty well and was flying at an excellent rate, but after half a dozen or so sessions together, our veritable lack of communications caused me to proclaim it time for him to get the fresh perspectives of other instructors. For a while I only occasionally flew with him after that and limited our conversations to 'how's school going' kind of stuff. His SPR's indicated that he was maintaining his high flying frequency and progressing at a pretty nominal rate. I was very pleased that he and Ralph (as chaperon) would be participating in the 2017 summer week-of-training. Ditto with his attendance – not once, but twice! – at George's winter ground school. That was when I realized that Ryan was really persevering and I got back into the act by reassuming my pseudo-mentoring role. Commensurately, the verbal channels opened up a bit. And ... by Golly, we mutually agreed that he was ready for solo on November 4th, 2018, and he did it – and nicely (at least as seen from the outside!) One of the two times I ever saw a bit of emotion from Ryan was in his response to my asking how it felt; "I've never been so terrified in my life!!", followed by his wry smile. Sorta made my day! (The second 'emotional display' was later fulfilling his request for a few positive and negative g's during some un-gliderlike maneuvers, which generated a couple of 'yips')

We then buckled down to press on with the program – establish a realistic solo regimen and prepare for the Knowledge Test – again, not to interfere with school, which he consistently reported was going swimmingly. Ryan went on to solo two more times, the last one a couple of days before last Christmas. As a 'one-off' Christmas present, I cheated a bit in helping with locking the spoiler handle since he'd gotten stuck in the 'old K' – and was alertly and properly chastised by Andrew, the tow pilot, for being in front of the wing with the tow line attached!

Despite his fugal use of the spoken word, Ryan occasionally surprised me with a relatively lengthy and thoughtful email. The last of them was in late February apologizing for his procrastination in prepping for the Knowledge Test and admitting that the 'difficult' Junior year of high school was being just that, particularly with Pre-Calc. He said that he had his hands full maintaining the grades he'd always been used to. I sympathized with him, remembering from my tutoring days. 'You won't need that part of Calculus when you get to the 'real thing'. That reminds me of his family (Granddad and mother, he said) college exploratory trip the summer before. It sounded like they went to many schools. He showed up at the airport afterwards with a Purdue (my alma mater) ball cap.

I will never forget the email I got from Ralph Sharpe, his grandfather, on the morning of April

2nd saying that Ryan had died in his sleep the night before (and the virus was not suspect). I'd last seen Ryan when we flew together a month earlier. Although it wasn't a solo day, we had two good flights, including one in which Ryan got his first taste of a prolonged thermalling climb. As usual, I gently chided him about prepping for the Knowledge Test (after school work, of course!) and said 'I'll see you next time – the sooner, the better!' We were off to a great year, or so I thought.

Ryan, I'm so fortunate to have had the chance to contribute to a part of your life. You will be very missed by all. Bon Voyage good buddy.



Internet Tools for Predicting Soaring Weather May 7, 2020 – A Good Soaring Day

Jim Garrison

Forecast For May 7, 2002 - Using the internet weather resources discussed last month, we will try to predict and analyze the weather from Thursday, May 7, 2020. This day turned out to be a very good day for soaring in Virginia.

Popular Weather and Surface Analysis -- After a couple of days of clouds caused by a cold front passing the area, Thursday, May 7 was predicted in the popular weather to be a clear, sunny day with a high temperature of about 66 °F and 8-10 kt surface winds out of the north – northwest. The NOAA aviation weather surface map predictions for Thursday were forecasting a cold front passage late Wednesday (not shown). Figure 1, right, shows the actual NOAA surface map for early Thursday morning displaying a cold front well off the coast with nicely positioned areas of high and low pressure sending Canadian air and generally northerly winds over the area.

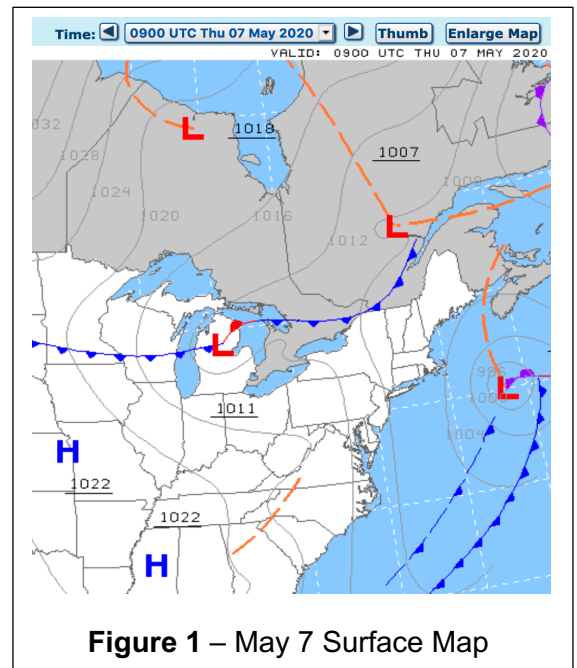


Figure 1 – May 7 Surface Map

This is the classic beginning of a good soaring day in Virginia and the Skew T data and the soaring programs all agreed. One fly in the ointment was that the air was pretty dry and the likelihood of good cloud fields was not assured. Another issue was the strength of the predicted winds over the area. While the isobars in Figure 1 were not close, both the GFS model and the HRRR models were predicting 20 knot NW winds in the

boundary layer. The forecast winds were good or bad depending on the launch point; they were perfect for the ridges but might disrupt the thermals in the Piedmont areas.

Skew T Analysis - The problem of no cumulus clouds is predicted by the Dulles Skew T – Log P plot from the morning. Figure 2, right, shows the actual IAD RAOB Sounding for May 7 at 8 AM. Extrapolating the high temperature for the day of 66 °F (about 18 °C) along the dry adiabatic lines shows a large thermal index (transparent orange area) capped by a small temperature inversion between 800 and 750 mb.(about 6500-8000 feet). This indicates strong thermals and the likely tops of thermals at roughly 8000 feet (actual flights indicated thermal tops of about 8500 feet – see below). The dew point (green line) shows the air is fairly dry. Extrapolating the surface dew point to the red temperature line along the light blue line of the mixing ratio shows that the air may or may not be wet enough to form clouds at the tops of the thermals (again, the flights indicated mostly blue thermals). The black line labelled LCL indicates the height to which a parcel of water saturated air would have to be raised to condense to a cloud (LCL stands for lifted condensation level). This level usually approximates the base of cumulus clouds. The slight inversion would be expected to limit the height of clouds.

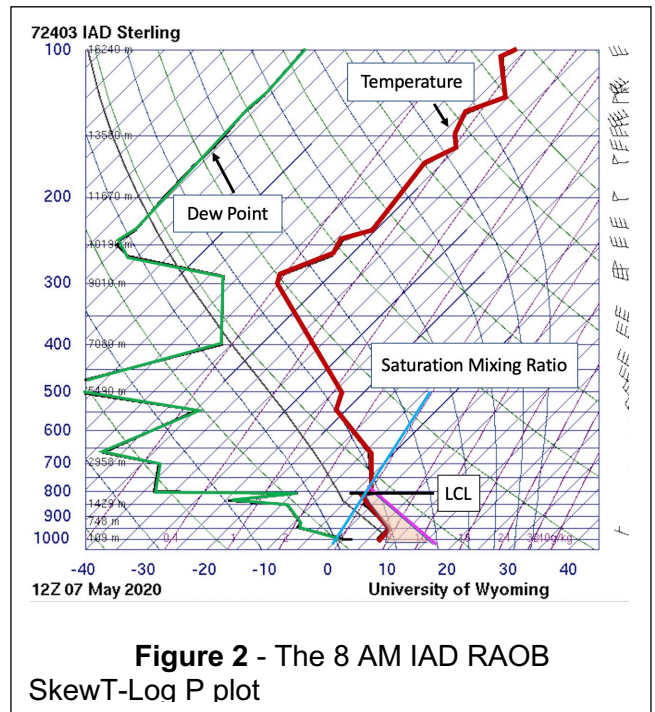


Figure 2 - The 8 AM IAD RAOB SkewT-Log P plot

It is interesting to compare the actual RAOB Sounding for the morning with the Skew T – Log P plot generated by some of the computer models of the atmosphere. The model sounding is shown in Figure 3, right. Note that the Skew T plot from the Op40 model predicts the temperature well, but there is much more variation in the plot of the dew point (blue line). The models often smooth the dew point curves. The magenta line shows the same degree of instability in the boundary layer as the RAOB plot does and the LCL is at approximately the same altitude (800 mb). The winds are very similar between the actual sounding and the model.

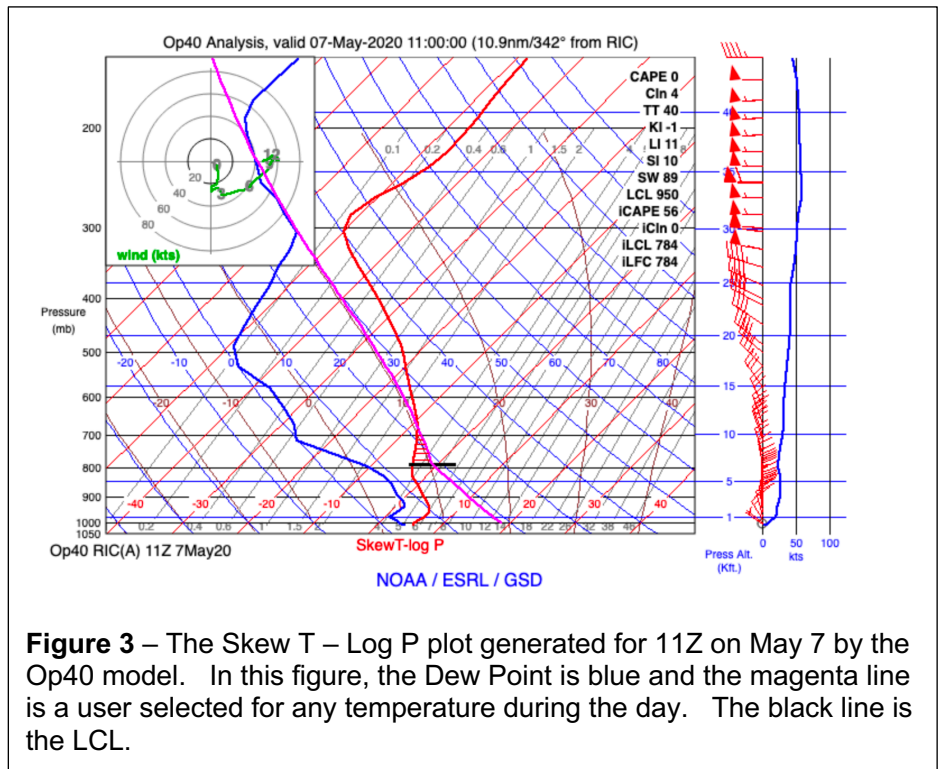


Figure 3 – The Skew T – Log P plot generated for 11Z on May 7 by the Op40 model. In this figure, the Dew Point is blue and the magenta line is a user selected for any temperature during the day. The black line is the LCL.

Comparing the Skew T – Log P plots generated by the two soaring programs, XC Skies and SkySight, shows them to look very similar to the OP40 model in Figure 3. These data are not shown as they are repetitive with Figure 3. Importantly, both soaring program models correctly indicated the 20 kt north–northwest winds and 5-6 kt lift over the entire area.

Satellites - The uncertainty generated by both the RAOB and Op40 model about whether the day would be blue or have clouds is nicely settled by satellite views and pilot reports. Figure 4, right, shows the Geos 16 visible satellite view of the area at about 9 AM (1300Z). No clouds are visible and pilot reports said the sky was mostly blue with a few cumulus clouds over the mountains later in the day (see Figure 8). Later satellite images also looked like Figure 4. Note that no wave clouds are visible; this result is as expected from the Skew T plots.

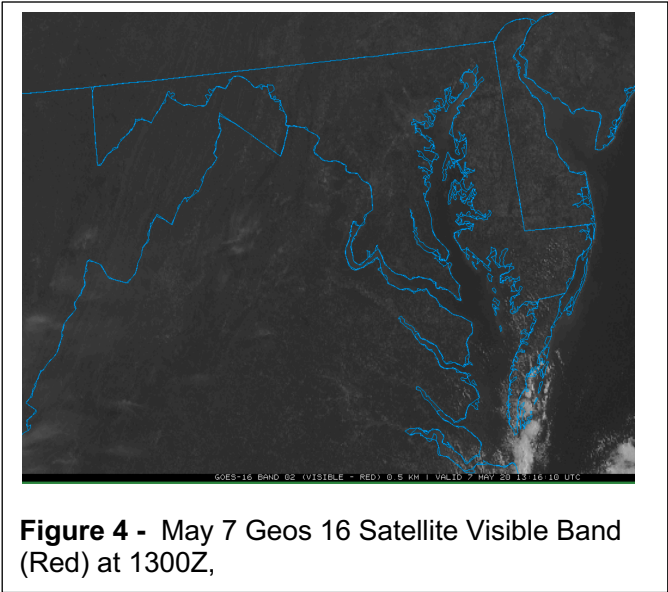


Figure 4 - May 7 Geos 16 Satellite Visible Band (Red) at 1300Z,

All in all, the indicators are that it will be a blue, windy spring day with strong thermal lift. Indeed, that is what it was. *The Flying* – The proof of all this weather analysis lies in the soaring flights made during that day. There were seven flights in Virginia posted to the OLC on May 7. See - <https://www.onlinecontest.org/olc-3.0/gliding/daily.html?st=olc&rt=olc&df=2020-05-07&sp=2020&c=US&sc=4>

Two spectacularly long ridge flights were made from New Castle; one of over 1000 km by Jim Franz (Figure 4) and one of over 750 km by JP Stewart (Figure 5). They took advantage of the strong NW winds and good thermals for transitions between the Sinking Creek ridge and the “main” ridge. Thermals took them to over 8500 feet at times.

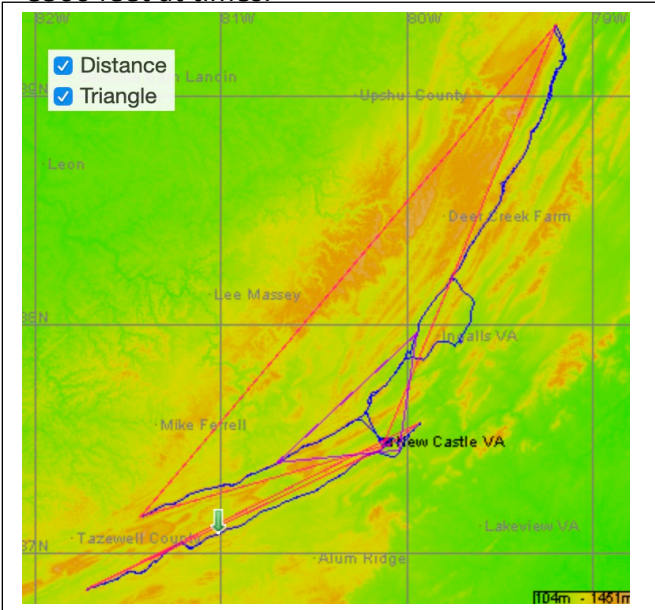


Figure 4 – Jim Franz’s 1000 km Flight.

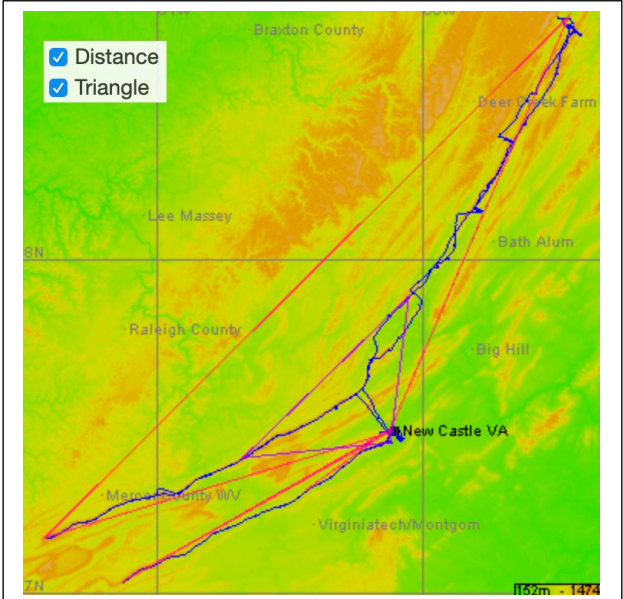


Figure 5 - JP Stewart’s 750 km Flight

There were 5 thermal flights made from Merlin; the OLC gps traces for those made by Pete Appleby and Scott Gross are shown in Figures 6 and 7, respectively. Both pilots reported mostly blue conditions with thermals to over 8000 feet and some cumulus clouds over the mountains. Pete made a 300 km declared out and return flight to Luray and back to Merlin. Scott tried a large 500 km triangle across the Blue Ridge near Bedford, up to Front Royal on the west side of the valley and back to Merlin. Unfortunately, he ran out of day

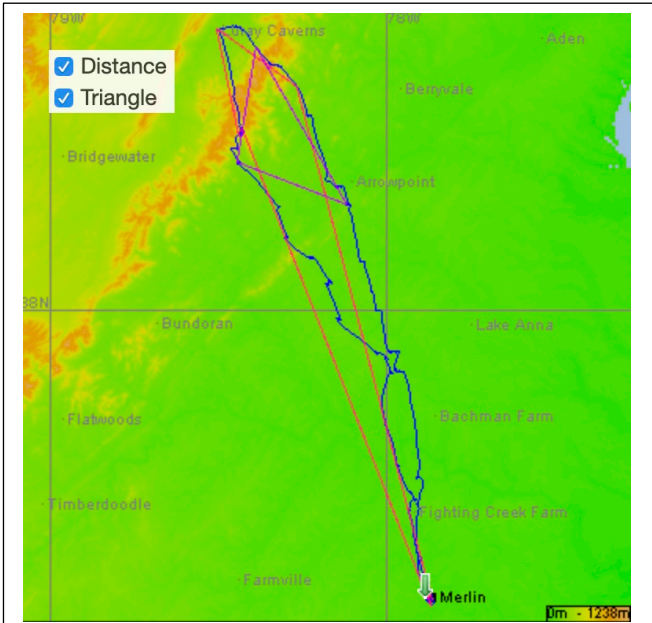


Figure 6 - Pete Appleby's 300 Km Flight

on the way home and had to use his motor to get back – still a great flight.

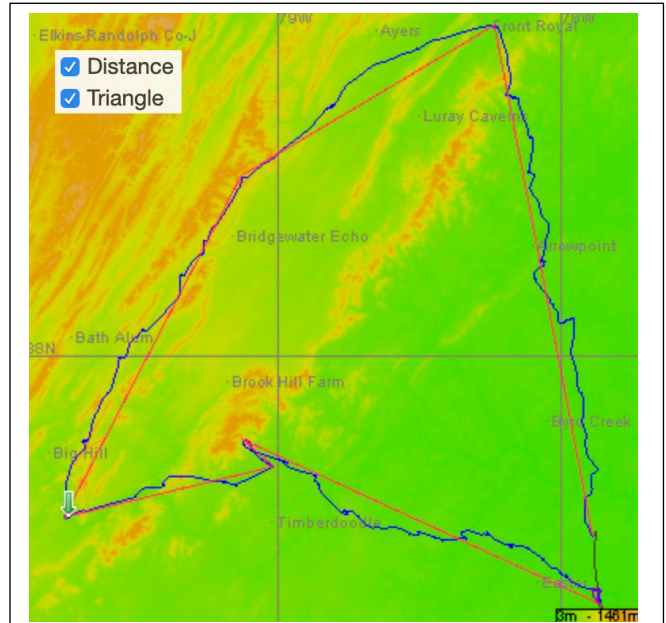


Figure 7 - Scott Gross's near 500 km flight

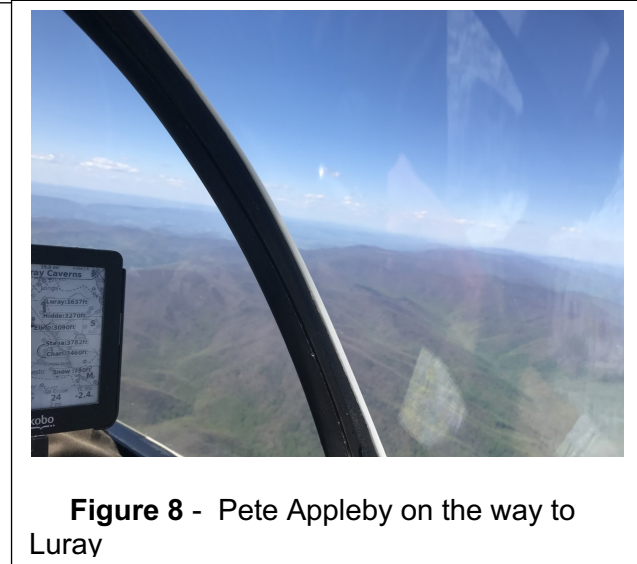


Figure 8 - Pete Appleby on the way to Luray

Pete Appleby provided a nice picture taken from his DG-200 while crossing the Blue Ridge that nicely sums up the day. Note his comfortable altitude and that there are no clouds over the Blue Ridge. As predicted by the real and model SkewT – Log P plots, only thin, wispy cumulus clouds are seen over the Allegheny mountains.



BOARD MEETING HIGHLIGHTS

Keith Hilton, Secretary

The Board has been meeting about every two weeks for the last few months via on-line Zoom video teleconferencing. Several Club members participated or have just joined in to listen in on Board discussions. Brian Clark sends out an

invitation to all Club members before each meeting; if you are interested in attending, ask him to send you the link to join the meeting.

The bulk of the discussions have been around the COVID-19 impacts to Club operations and the resumption of operations. At the 16 April meeting, Treasurer Steve Rockwood provided the Board

members an in-depth look at the financial impacts of suspension of operations. It was noted that even if we didn't fly for the remainder of the 2020 season, the Club would still be financially sound. The Board has relied heavily on the Club Safety Officer, Club Chief Flight Instructor, Chief Tow Pilot, and Club members who are medical professionals as well as CDC, FAA, Government experts, and local governors' directives. It has not been an easy decision. As you are aware from President Jim Kellett's emails to the Club, the Board authorized the tow pilots to begin shaking off some rust on 23 May with single-pilot glider operations beginning on 30 May. Dependent on the status of the virus and declination of new cases in the surrounding area, the Board is *considering* opening up for dual instruction around 13 June. The Board has cancelled the week-of-training for this summer as well as the May Family Day at Bill and Sharon Burners.

Members flying private ships do not need to meet the 90-day Club currency requirement to fly Club gliders but must receive approval from a Club instructor prior to receiving a tow by a Club tow plane as noted in paragraph 3.1.6 (see below) in the Skyline Soaring Operation Manual.

3.1.6 Non-Club Gliders

Members of any type not meeting the special currency requirements above may receive a tow in a non-Club glider provided that a Skyline instructor approves, following a review of their credentials, discussion of applicable Club and airport operating procedures, and/or performance of a field check flight at the instructor's discretion.

Operations will only be conducted by volunteer members. No one will be assigned a duty crew position for the foreseeable future. Ad hoc operations can also resume after 30 May. Members who volunteer for a 'duty position' should contact Mike Ash, the Rostermeister, directly.

The Board received notice that an additional hangar may be offered to the Club. The Board has discussed acquiring this additional hangar. That objective would be to move the Husky to the

"new" hangar and to place the assembled Discus in the current Husky hangar. With the lack of Club income, the Board is being judicious in spending more money on an additional hangar. With the management issues at the airport it has also been a challenge to find out if a hangar is actually being offered to the Club.

After requests from several Club instructors and members to provide a bit more flexibility to the Duty Crew for operations in windy conditions, the Board came up with the following change to the Club Operations manual:

*2.9(d) With steady or gusty winds **persistently exceeding 20 knots, the Duty Crew will determine when Club operations should cease, and Club gliders must be returned to storage areas and secured. With steady winds or gusts reaching 30 knots or greater, Club gliders and tow planes shall be returned to the hangar. Operations in windy conditions must be discontinued and Club equipment put into the hangar whenever the number of people present falls below the number needed to safely handle the aircraft on the ground.***

In making this decision, the Board thought the Club Duty Crew was in the best position to determine when to halt operations. If the wind is directly down the runway, operations can probably be conducted safely. If it is a cross wind, operations are probably not safe. Again, the Duty Crew is in the best position to make the decision.

Our Chief Duty Officer, Reynolds Renshaw, has decided to go inactive. Brian Clark has taken the Action to identify qualified individuals to replace Reynolds. He will be contacting eligible members and searching for a volunteer to fill the important Chief Duty Officer position.





Skyline Soaring Club, Inc.

is a private, 501(c7) non-profit organization, dedicated to the enjoyment and promotion of the sport of soaring. SSC is based at the Front Royal-Warren County, Va. Airport and is an affiliate club of the Soaring Society of America.

For information about the club go to

www.skylinesoaring.org

Jim Kellett - President

Directors

Brian Clark

Bill Burner

Evan Dosik

Jim Perlmutter

Ken Ring

Dick Garrity - *Ex officio*

Keith Hilton - *Secretary*

Steve Rockwood - *Treasurer*

John Noss - *Chief CFI*

Shane Neitzey - *Chief Tow Pilot*

Erik van Weezendonk - *Safety*

Officer

Tim Moran - *Membership Officer*

Reynolds Renshaw - *Chief Duty Officer*

Ken Ring - *Hangar Meister*

Ertan Tete - *Field Computer Meister*

Mike Ash - *Duty Roster Chief*

Piet Barber - *Webmaster*

Brian Clark - *Assistant Webmaster*

Jim Kellett - *Newsletter Editor*

David Collier - *Tow Vehicle Meister*

Andrew Neilson - *Tow Plane Chief of Maintenance*

Peter Melenson - *Club A&P*

Keith Hilton - *ASK-21 (N321K & N341KS) Meister*

Evan Dosik - *ASK-21 (N321K) & Grob Meister*

Guido Kramp / Rob Jacobson - *Discus Meister*

Peter Ross - *Sprite Meister*

Matt Vosika - *Organizations Liaison Officer*