

When 1980 World Aerobatic Champion and renowned air show performer, Leo Loudenslager, died in 1997 due to complications from injuries sustained in a motorcycle accident, a poem written by actor and aviation enthusiast Cliff Robertson entitled "Where Have All The Old Planes Gone?" was read by air show performer Sean D. Tucker, and published in the book "Tales from the Cockpit" by John McCollister

## WHERE HAVE ALL THE OLD PLANES GONE Cliff Robertson

Where have all the old planes gone? Where have all their pilots gone? They have flown to God knows where -They have vanished into the air.

They have vanished, so it seems flown away with childhood dreams

Where have all the old planes gone? Where have all their pilots gone? Left their memories warm and tall left those memories with us all.

Where have all the old planes gone? I must fly one ere I go; I must fly one high and low.

I will fly one last flight unafraid of dark of night.

I will fly, but not alone –
I will fly with friends from home.
I will fly until dawn
In formation – with old planes gone.



## IN CASE YOU MISSED IT . . . Helicopter Wake Turbulence

Greg Ellis discovered a webinar from the National Association of Flight Instructors (NAFI) that is strongly recommended to all club members. It runs just under an hour, and deals with how the peculiar wake turbulence of helicopters can affect other aircraft and even things on the ground (wingstands, ladders, etc.) in ways that are certainly not intuitive. The videos in the webinar are truly gripping. Check out <a href="https://mentorlive.site/program/65.html">https://mentorlive.site/program/65.html</a>. Note that you can get WINGS credit by taking the quiz at the end.

Front Royal is no longer the sleepy low-traffic airport it was when we started flying here, so it's important for all of us to be aware of the skydivers, increased GA tenant traffic, and certainly helicopters!!



#### FAMILY DAY FLY-IN AT BURNER FIELD!

Another great family fly-in and social at Burner Field is scheduled for May 13 (rain date May 20)! Mark your calendars now, pack something to eat, and bring the family out to this lovely grass strip near Woodstock where we'll be



hosted by Bill and Sharon Burner.

Burner Airport (VG55) Airport Graphic Elevation: 965 ft

FAA Identifier: VG55 Lat/Long: 38-52-55.3790N / 078-33-28.0410W 38-52.922983N / 078-33.467350W 38.8820497 / -78.5577892

Elevation: 965 ft
Runway 3/21: 3100 x 100 ft (turf), trees both end
Temporary Unicom: 123.30
Traffic Pattern: Power: <u>TBD during Brief.</u>



This is always a highlight of Skyline's operations where you can get experience flying into what a real gliderport is supposed to look like, and it checks off a major milestone (flying at a 'new' field).

Take route 66 West to Route 81 south. South 17 miles to the Woodstock Exit, # 283. Turn Right onto route 42 South, one and a half miles to Coffmantown Road, (Rte 680) which is a small, easy to miss road that goes off to the Right. It is at the bottom of a hill, immediately after crossing Narrow Passage Creek. Caution: the turn is sharp and at the bottom of a hill. It is only about 50 feet past the creek and comes up quickly. Turn Right onto Coffmantown Road 0.3 miles to the gliderport entrance on the right, just past some stables which are on the right. Take the gravel driveway up the hill. The gliderport is not visible from Coffmantown Road. Park on North side of hangar. If anybody gets lost you can contact Bill at 703-906- 6455.



# ZERO TO 60 IN 3 SECONDS . . . WINCH LAUNCHES ANYONE? PART I

**Anand Mohan** 

The Story begins...

As a teenager in 1991, I was introduced to the wonderful world of flight in a glider. I flew a British made T.21b Slingsby glider (similar to the picture below) at the Delhi Gliding Club out of Safdarjung Airport in New Delhi, India.



VT-GCG was an open cockpit two-seater with side-by-side seating. Painted red and cream and mostly wood and fabric, the high wing glider was a gentle teacher that was launched into the air by a rotating drum winch and a metal wire cable. The winch was at the far end of the air field. After getting a flag signal to launch, the winch operator would start the drum rolling and slack would quickly go out of the cable. In a couple of seconds we'd be rolling at 40 mph and then airborne!

The airport asphalt was a thermal magnet in the middle of the city where for six months of the year "balmy" 100 degree+ temperatures are the norm! But the Prime Minister's residence was a scant 6000 feet to the North, so for "security reasons" we budding aviators were limited to tows of 400-600 feet AGL, then released to do a 2 minute pattern with a return to the field. One "brave" qualified glider pilot flouted the rules to soar effortlessly for a couple of hours...and for his pains was grounded on his return! After 41 launches in my logbook, I chafed under the restrictions and turned my back on gliding.

I moved to the USA in 1994 for grad school. After school I began powered flight training and got a number of ratings.

I tried gliding again in 2002. In the space of a weekend I soloed a Krosno (on aero tow) at a commercial operation in Kutztown PA, but WX moved in. I didn't complete that rating and went back to powered flight. Still, something in the recesses of my memory beckoned me to the peace and quiet of gliding.

In 2021 I reached out to SSC. I was informed that because I was not a rated glider pilot, I'd have to go on a waitlist. Would I still be interested? I was disappointed but said "Yes" with an eye to the future. In 2022 I came off the waitlist, and started flying in SSC K's. To speed up my path to soaring solo, I took some excellent advice from club members and went

down to Seminole Lake Gliderport in FL for five days, coming back with a Commercial Glider add-on. Then the old "itch" re-surfaced- now that I was Aero tow qualified, what about a Ground-Launch endorsement to make me a more knowledgeable glider pilot?

Right after I went on SSC's waitlist, I had done some Google searching and found Eastern Soaring Center's (ESC) winch operation in Petersburg WV. I contacted the owner/operator, Brian Collins (a retired USAF Col) to ask about getting a rating at his school. I went through my flying background and prior gliding experience. Brian heard me out patiently. He was extremely generous with his time, and shared a wealth of ground-launch training materials on his website, but his take was that unless I was glider rated I'd have to go through the training pretty much like an Ab Initio student. He advised me to get my rating and then to come back and train with him for a ground-launch endorsement. Sound advice. So in March 2023 I contacted Brian, rating in hand and ASK-21 qualified, to schedule time to come out to train. After some back and forth we finally settled on the weekend of April 8-9 for me to come out and get ground-launch trained.

What's a winch ...and why winch launches anyway?

Post WWII, winch-launching lost out to aero tow as the preferred method of getting gliders into the air in the USA owing to the availability of comparatively cheap fuel and cheap single-engine tow planes.

Outside the USA, not having our cheap fuel and airplane availability, winching remained a common method of getting gliders airborne. To this day Canada, the U.K., France, Germany, India, Australia and New Zealand (and I'm sure other countries that I have missed) have a rich tradition of using winches to launch gliders.

A quick look at SSC's membership directory reveals 15 winch-endorsed members, so my apologies to those of you who already know all this. For those who don't know, winch launching is a technique by which a glider can be launched to 2000-4000 ft. AGL in only 1-2 minutes using a very long, 5000 -10000 ft. cable which is connected to a stationary winch. The winch is essentially a high-powered gas or diesel engine run by an operator who winds the cable in on a drum at speeds of up to 70 mph.



Eastern Soaring Center's Winch

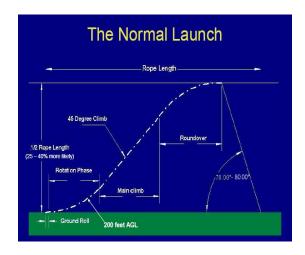
Apart from the significantly lower cost of operations, the winch enthusiast has other good reasons to recommend winching:

- There is no tow plane, so no formation flying, and no danger to tow pilot or tow plane.
- You are never out of gliding range of the airfield in the event of an emergency on launch.
- Statistically, accidents-especially fatal accidents- are way lower in winchlaunches (at least in the rest of the world where this form of launch is commonplace).
- 4. If you like roller coasters, this is for you! You accelerate quickly into a 45 degree climb until you top out and release.

Make no mistake though, winch launching is not all fun and games. I was told that it is challenging for both the pilot and the winch operator. Good communication between pilot and ground crew is key. Very little aero tow knowledge and muscle memory translate to winch launching (and in some cases is almost opposite to ingrained training). When abruptly and unexpectedly switched from "launch" mode to "land" mode in the event of an emergency (like a rope break or loss of winch power) inexperienced ground-launch pilots perform poorly, although task-switching is a skill that can be learned.

Being known for my bad judgment none of this scared me off!

The basic idea of a winch launch:



A Normal winch launch follows the path of a half-parabola. The idea is to maximize height before release without stalling the glider or breaking the weak link.

Acceleration comes quickly and in 3 seconds the glider is off the ground. As the ever-decreasing length of cable is wound on the drum, the glider can establish a climb angle in excess of 45 degrees but the pilot must rotate smoothly over 5-6 seconds to get the glider into this nose up attitude or risk a "departure" stall!

At the top of the half-parabola, the glider releases the cable and remaining cable is wound back onto the drum of the winch in less than a minute. The glider is then on its way, free to soar!

very deep stall and a full spin even when the yaw is not excessive

### Training Day!

In the week prior to April 8, I read copious amounts of ground-launch training materials on ESC's website and took several tests that I sent to Brian to be graded. I was well prepared with the theory- or so I thought!

I'd planned to fly into ESC's base at Grant County Airport (KW99) but my Cessna 172 was down for maintenance so I made the threehour drive to W99 early on the morning on April 8, getting there right at 0900.

A few minutes after I got there we started training by reviewing my tests at the terminal building. I was told I'd done well, but I missed some questions that had multiple correct answers. One in particular stuck out. The question was:

Following a cable break during a steep climb....

A. The nose will immediately rise sharply as the tension from the cable stops

- B. Airspeed can be maintained if the pilot quickly lowers the nose to a normal gliding attitude
- C. If the airspeed is not maintained, the pilot can avoid a stall by lowering the nose at reduced G's until sufficient airspeed is reached since stall speed approaches zero at Og
- D. A nose-down attitude must be held for an extended period of time (e.g., several seconds) in order to regain sufficient airspeed
- E. A stall or spin is not possible as long as the nose is initially lowered well below the horizon
- F. If a proper recovery is not accomplished, the glider can enter a

I'd correctly identified A, D and F...and I was told to add C to that list! That was my introduction to zero G pushovers...

After covering the ground material, reviewing logbooks and pilot certificates, we hopped on an ATV and zipped to the end of runway 31. The winds were very light that early in the day so we planned to launch off the grass adjacent to runway 31 and land back on runway 13 so we could minimize time between launches. The syllabus for the ground-launch endorsement is pretty structured: a minimum of 16 flights, about 10-11 dual and about 5-6 solo. Emergencies (rope breaks, winch power loss, erratic power) were to be generally announced and weren't to begin until flight 5.

I was introduced to the ASK-13 we were to fly, N11EK (almost Nike!) and I did a pre-flight while Brian went down to the other end of the



runway to have a word with a comparatively new winch operator, Charles, who was being mentored by an old hand, Brandon.

I was a passenger for the first launch, although Brian talked through each part of the procedure and then gave me the controls after release.

Following an uneventful landing we turned around, hooked up and began launch 2...when suddenly after liftoff we started overrunning the cable! We nosed down, simultaneously releasing the cable and landed straight ahead to the side of the cable. We learned on the cable retrieve that the winch operator's hand

had slipped, leading to a loss of power. So much for no unannounced emergencies, but what a wonderful lesson on staying alert during launch and flying the glider!

On launch 3 I was in charge with a little coaching and at the very top of the parabola we released and went into a zero G pushover- a brief but wonderful feeling of weightlessness! On launches 4, 5, 7, 9 and 10 I practiced thosenot because I was told to, but because I was hooked by the novelty of the maneuver. I likened these to a hammerhead turn from previous aerobatic training, pivoting on the CG instead of my wingtip. In between we worked on emergencies: rope breaks with straight ahead landings, rope breaks with a 180 degree turn back to the runway, rope breaks with a Sturn to landing, rope breaks with a 360 degree turn, under speeds, over speeds... all while finessing the liftoff, rotation, climb, round over and release, and crosswind corrections. We also worked on left-hand and right-hand patterns to runway 13 and 31 with speed control. Finally, after 10 flights we were at 1400 and I was TIRED! A cold wind had given me a headache and I needed a break so we stopped for a quick lunch.

I was open to the idea of stopping training for the day and starting again the next day. But the WX was great, so after lunch and a warm up, headache now gone, I was ready to fly again.

We did one dual flight (with a new winch operator, Colton, also a comparative newbie) just to make sure that I was still good to go. Then I was kicked out of the nest to solo N11EK for five flights- around the patch to take off and land on runway 31 each time.

My solo flights were a learning experience too! Learning a new winch operator's characteristics, his speeds- his "touch"- is important to a safe launch. Also rather than starting at the very end of runway 31 as we had done for a good part of the morning, I was now launching almost from midfield to speed up launch and recovery. On my first couple of launches I was on the radio asking the winch operator to speed up ("Faster, Faster") until at 1700-1800 ft. I felt like I was just not getting power close to the top of the launch, so I released manually. All perfectly safe, but another lesson in flying the launch alertly and flying the glider at all times. After recovery # 16 we put the glider and equipment away and went back to the terminal building to do paperwork. It took 32 years... but I had earned a ground-launch endorsement for gliders!

Finally...

I've heard at least one SSC member jokingly suggest we get a winch. In doing research for this article I've learned a lot more about winching. So stay tuned SSC members- with Jim Kellett's blessing I will be boring you more about the wonderful world of winching! Happy soaring!



Your Board met again on 4 March 2023 after the Annual Membership and Safety meeting. The Board welcomed Carlos Troncoso to the world's second greatest (after the United States Senate) deliberative body. The Board also met on 13 April via Zoom video teleconference. Various Club members attended to watch the magic.

During the 4 March meeting, the Board reelected Stephanie Zilora as Skyline Soaring Club President. Keith Hilton was approved by the Board to serve another year as Club Secretary.

Ralph Vawter continues to note that the Club is in very good financial shape. As of the 13 April the club checking account had \$84,000. The only major expense coming up is the second \$13,000 insurance payment next month.

Ralph is still looking for a Club member that is a real accountant who knows Quickbooks. He has used a professional accountant at various times, but that is quite expensive.

The Board expressed its sincere thanks to Jim Kellett for conducting the FAST flights over the past few years. Since no other instructor has stepped up to fill Jim's shoes, our membership officer, Tim Moran just contacts the Duty Instructor and requests that they make the FAST flight. Pretty much like a request for instruction, but without the two weeks prior limit. The Duty Instructor can request the assistance of a Surge instructor if they feel they require assistance.

Chief Instructor, John Noss, noted that the Club currently has 30 students. About half of the students can be considered "active." John and Membership Officer, Tim Moran, manage the student load and student wait list. John and Tim believe the club is pretty saturated with new student members after accepting ten new members at the beginning of the year. There is still one potential new member coming from the Civil Air Patrol but last we heard, the CAP still needed to approve it. There are still 28 prospective students on the wait list.

Club Safety Committee Chairman Ron Wagner noted his frustration to the Board with the FAA adding the approved Glider Aerobatic Safety Area on the FAA sectional charts. It doesn't appear that the area will be included on the charts until at least August.

Ron also provided an update on the proposed changes to the KFRR traffic pattern. There was a proposal from Ron for Gliders to always fly a downwind pattern on the North side of the runway and powered aircraft to always fly downwind on the South side of the runway. He noted that Grant from Silent Falcon (now

operating the airport) is not in favor of gliders and powered aircraft flying opposite patterns. Grant believes all traffic should fly the same pattern. For now we don't anticipate any changes to the KFRR traffic pattern.

Keith Hilton updated the Board on the status of the glider fleet. He noted that he plans to replace the Tost releases in both ASK-21s during their annual inspections. The Board authorized replacement sooner if the opportunity arose. As noted, the Tost releases in N321K were replaced during the 18 April 2023 annual. The cost of the two releases was \$1,400.

Keith purchased one new (spare) rear wheel and tire (\$422.00) for the ASK-21s. We had three built up wheel/tire combinations for the ASK-21s. The bearings went out on one of the old wheels.

The Board continues to consider selling the Sprite. Now that it is stored in the hangar, it seems to be getting significant use. Erik van Weezendon has been communicating with Silent Falcon about renting space to store the Sprite in their hangar.

The Board has voted to remove the "hull" insurance from the Sprite. The Board consensus was that the hull value does not justify the insurance premium.

Keith is planning the installation of an ADS-B transponder into the PW-5. The funding for that installation (\$4,000) will come from the Club's avionics fund.

After the successful in-person Annual Membership and Safety meeting the Board voted to reserve the Rivermont Volunteer Fire Department meeting room again on 9 March 2024 for the 2024 Annual meetings.

The Board voted unanimously to change Article V, Section 1 (b) of the Club by-laws concerning holding Club elections via an electronic means vs in person at a Club meeting. The new pararagraph reads: "Except as may other otherwise be provided herein or in the articles of Incorporation, the members of the Board of Directors of the Club shall be elected by a majority vote of the Club members." The new By-Laws are being posted to the Club website.

The Board also voted unanimously to change Chapter 2, Paragraph 2.1.2. of the Skyline Soaring Club Operations Manual that clarifies the cancelation of Club operations due to weather considerations. The guidance now states:

"Duty Crew members are expected to be at the field at the assigned Duty Roster time/date, unless there are reasonable safety concerns to get to the airfield such as severe weather conditions, impassable roads due to snow or icing, or named storms.

Duty Officers should not cancel operations until they arrive at the airfield and have assessed the weather situation for that day on-site.

Communication with the duty crew on possible cancellation and with the general membership on plans to fly in the prior two days before cancelling is highly recommended. If severe weather conditions as mentioned above are forecasted for the duty day, the DO must send an email to the club mailing list no later than 6 am on the assigned duty day announcing the cancellation.

Duty Crew members and other club members are encouraged to take advantage of opportunities for ground school and to participate in cleaning and maintenance tasks such as hangar cleanup, refrigerator cleaning, and polishing gliders.

If the current weather does not permit safe operation and is not expected to clear in a reasonable time (2-3 hours), the Duty Officer may cancel flying for the day. After securing all

Club equipment, the duty crew may leave the airfield. Any subsequent initiation of operations will require the appointment of a new qualified duty crew from among members present."

The new Operations Manual is being posted to the Club website.

The Board discussed a joint "venture" or "single membership" (i.e. membership in MASA or Skyline Soaring Club would authorize using either Club) with MASA. It was noted that we have the visiting temporary one-day membership available if someone from MASA wants to fly with SSC. The option of a reduced membership rate was discussed. The consensus of the Board was that there wasn't a need for this joint venture at this time.

The Board discussed the need for a release of liability form for non-member guest flights. This becomes a very complex issue. Feedback from our insurance provider Costello noted that having someone sign a release of liability does not prevent a family member from suing the Club. After lengthy discussions the Board determined that it was not worth pursuing this. As a reminder, if you are not a Club instructor, passengers are not allowed to operate the glider flight controls.

The subject of new hangar leases with Warren County continues to be a topic of discussion for the Board. The Board voted to join with Friends of KFRR on their proposed hangar lease. The proposed hangar lease has been reviewed and endorsed by an AOPA lawyer. We have yet to sign new hangar leases with Warren County.

The next Board meeting is scheduled for 18 May at 1830 via ZOOM video teleconference. Please feel free to attend. Please let me or a Board member know prior to the meeting if you have something specific that you would like the Board to address so you can be added to the agenda.





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

Stephanie Zilora President
Directors
Robert Jacobsen
Jim Perlmutter
Peter Ross
Erik van Weezendonk
Stephanie Zilora
Carlos Troncoso

Keith Hilton - Secretary Ralph Vawter - Treasurer Ron Wagner - Safety Officer Tim Moran -Membership Officer Shane Neitzey – Chief Towpilot John Noss – Chief CFI

Ken Ring - Hangar
Meister
Ertan Tete - Field
Computer Meister
Carlos Troncoso – Chief
Duty Officer
Mike Ash - Duty Roster
Chief
Piet Barber Webmaster
Brian Clark - Assistant
Webmaster
Jim Kellett - Newsletter
Editor

Evan Dosik - ASK-21 (N321K) & Grob Meister Guido Kramp / Rob Jacobsen – Discus Meister Richard Good – Sprite Meister David Collier - Tow Vehicle Meister Andrew Neilson – **Towplane Meister** Keith Hilton - ASK-21 Meister Peter Melenson – Club A&P Matt Vosika -Organizations Liaison Officer