

Finger Lakes Soaring Club Operations Manual



Revised 2014

Finger Lakes Soaring Operations Manual

dated 2014 Updated by Jim Martin

Introduction

Welcome to the Finger Lakes Soaring Club (FLSC). This club has been an operation for over 60 years. Originally it was called the Rochester Soaring Club and began operation at the Batavia Airport, in the 1950's. In the early sixties, the club moved to the Dansville Airport.

The club is a nonprofit 501 (c) 3. tax exempt organization. It is dedicated to providing flight instruction in numerous models of sailplanes leading to FAA Private Pilot, Commercial, and Flight Instructor licenses. Our instructor core is one of the most experienced in the world. Our flying equipment ranges from basic trainers to higher performance competitive cross-country sailplanes.

The club membership is composed of people from all walks of life, ages, and occupations. Our members consist of high school and college students, businessmen, college professors, engineers, professional pilots, lawyers, and a test pilot.

It is a volunteer organization, and as such, we need every member's voluntary effort to defray the cost of operation. Although we give rides to our friends, family members, and others in the community, we're not a commercial operation.

For many years we have had a junior program for high school and college students which offers flight training at a much reduced cost. To offset the cost reduction, we expect junior or student members to devote more volunteer time to facilitate operations, clean aircraft, mow the lawn, and other projects.

Our equipment has been obtained by many years of careful and frugal operation. It is a legacy to the generosity and donation of many lifetimes of experience and careful planning by everyone in the past and present club.

Glider launch methods use tow-planes such as our Pawnee (a modified crop duster) and Citabria (which is fully aerobatic), a winch, and sometimes ground/autotow operations.

The national organization that oversees soaring operations in the United States, is the Soaring Society of America (SSA), based in Hobbs, N. M. This organization consists of over 12,000 fellow glider pilots. Due to insurance reasons, every member of our club is a member of the SSA. Their website is www.SSA.org

Our website can be found at: WWW.FLSC.org

We strive to run the safest organization possible, which requires everyone to be careful with equipment, be knowledgeable of our procedures, be attentive at all times when operations are in progress, and be willing to serve.

Our hope is this manual will help you to do this as you transition to a full member of the club.

THE DANSVILLE MUNICIPAL AIRPORT



Field Elevation: 662 feet Above Sea Level (MSL)
Primary Runways: 14-32 3500ft available
18-36: 2443 Ft useable
Glider Operations: Grass Parallel to Runways
14-32, Easterly side
Unicom Frequency (CTAF): 123.0
Airport Telephone: (585) 335-5849.
Unicom: 122.9
Glider air to air: 123.3 outside traffic area
Powered Traffic Pattern Altitude: 1500 ft MSL
(850 AGL) West Side for Rwy 32

Following is excerpted from the FAA Airport Directory;

DANSVILLE MUNI (DSV) 1 NW UTC-5(-4DT) N42°34.25' W77°42.78'

662 B S4 FUEL 100LL

RWY 14-32: H3500X100 (ASPH) S-30 MIRL 0.7% up SE

RWY 14: VASI(V2L)—GA 3.0° TCH 53'. Road.

RWY 32: VASI(V4L)—GA 4.0° TCH 53'. Road.

RWY 18-36: H2443X100 (ASPH) S-30 MIRL 0.9% up S

RWY 18: Thld displcd 165'. Tree.

RWY 36: Tree.

AIRPORT REMARKS: Attended 1300Z†-dark. Extensive glider activity.

Normal glider ops utilize rgt-hand pattern for the turf area to the rgt of Rwy 32; left hand pattern for the turf area to the left of Rwy 14. ACTIVATE MIRL Rwys 14-32 and 18-36 and VASI Rwys 14 and 32—123.0.

WEATHER DATA SOURCES: ASOS 118.325 (585) 335-2380.

COMMUNICATIONS: CTAF/UNICOM 123.0

BUFFALO FSS (BUF) TF 1-800-WX-BRIEF. NOTAM FILE DSV.

® ROCHESTER APP/DEP CON 123.7

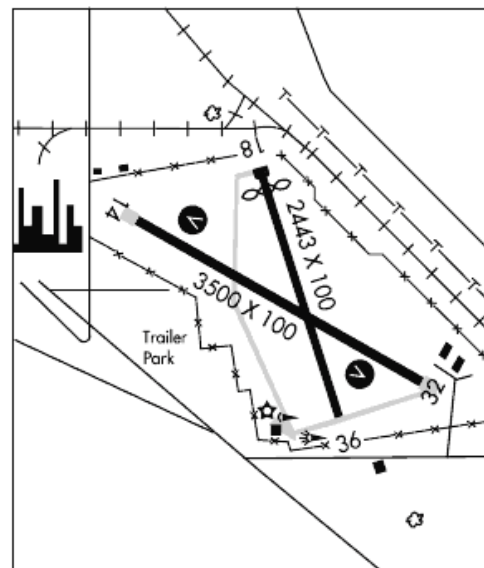
RADIO AIDS TO NAVIGATION: NOTAM FILE BUF.

GENESEO (L) VOR/DME 108.2 GEE Chan 19 N42°50.06'

W77°43.97' 186° 15.6 NM to fld. 990/09W.

COMM/NAV/WEATHER REMARKS: Clncl del thru Flight Services
1-888-766-8267.

DETROIT
L-301, 31E, 32F
IAP



This Airport is an uncontrolled airport without a tower. It has several instrument approaches which can be used for training during good and poor weather. When weather dictates, the airspace is Class E due to these approaches. Aircraft using these approaches may be tuned to the approach frequency, and switch to the airport frequency only at the last moment or on short final.

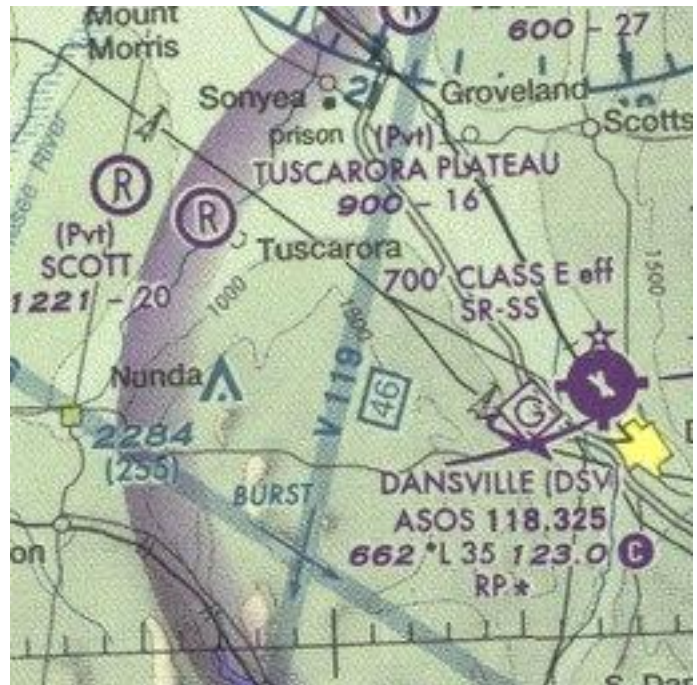
-This airport has a mix of aircraft traffic (both powered and motorless gliders, balloons, and yes, sometimes even hang gliders will drop in), with and without radios, and especially on weekends. Remember;

- We share the airport.
- Be a good neighbor!
- Be courteous, and careful.
- Communicate if you have a radio.
- Modify what you are doing if it can help the other aviator out!

Pattern altitude for powered aircraft is 1,500' MSL (900 ft AGL). Club gliders typically enter downwind at 1500'-1600' MSL (900-1000ft AGL). Powered traffic will stay to the West of the field, unless making approaches to Runway 14 or 18. Glider patterns are typically to the East of the field. It is not a good idea to thermal in the traffic pattern, especially on the West side of the airport below 1,500' (850' AGL). In all cases "see and avoid," which means – find and avoid other traffic, and it's very important not to force a conflict with any traffic. Gliders have the right of way when on tow and landing, yet the other traffic may not be aware you are there.

-Dansville Airport has an unusual quota of displaced thresholds due to fences and trees, which must be observed even when landing on the parallel grass. On glider operations, our landing spot is the first light PAST the threshold (200-250' past threshold lights).

-Keep cars off the airport except for retrieving and towing gliders. Other aircraft are also authorized to use the grassy areas on the airport. You never know whether a power plane (or a glider) is going to use the active runway or the grass.



Aviate, Navigate, Communicate; Always Remember -- Fly the glider first, then, as you gain proficiency in the glider, use your radio to announce your presence in the landing pattern and help resolve traffic conflicts. A few friendly words over Unicorn can keep everyone informed of your landing intentions. Keeping aircraft separated and aircraft separate from people and other vehicles is important.

General Comment - Lookout:

If you're the wing runner, take a dedicated purposeful look at the pattern, crossing runways, runup areas, taxiways, fueling areas and especially the departure end of both runways before signaling a go ahead.

-The airport manager / FBO (Fixed Base Operator) has the last word in any dispute over airport operations. He does not like it if we land toward the airplane tie-down area. The airport manager may revoke your flying privileges, and besides that - it's risky. Keep in mind, though, that the FARs allow you to do whatever is necessary to end the flight safely.

Special Procedures may be enacted when balloons are operating, or when trains are being loaded with windmill parts near Foster Wheeler.

Before you begin your instruction flights with FLSC it is advised that you get an airport tour of all landing areas, taxiways, lights, chuckholes, and traffic conflict locations.

Glider Operations:

RUNWAY 32:

Normally, Gliders operate from the grass on the south east side of Runway 32 near the clubhouse trailer, for most takeoffs and landings, up to a 5 Knot tailwind (by agreement with the other users of the Airport). This allows for a more efficient operation.

We refer to the runway as 32, because it is orientated on a 320 degree magnetic heading. The prevailing wind for this airport is approximately from the Northwest (320 degrees).

Stage the gliders with tails toward the East side fence, tied down if leaving the glider unattended, nose into the wind.

Ready for Launch: Once the glider has been preflighted, checklists completed, and ready for launch, move the glider to the takeoff area.

Takeoff: should use the grassy area closest to the clubhouse. Ensure the glider and tow will clear any other gliders if the wing should drop while launching, or any other problem develop.



Runway 32 Operations Layout

Aborts:

If your tow plane has not broken ground at the Runway 32/18 intersection, aborted takeoffs or rope breaks should land straight ahead, to the right side of the grass. Avoid Woodchuck holes, runway lights, signs and drains.

If you do take off successfully but have a rope break, or are waved off before you have sufficient altitude to turn around, there are fields just off the north end of 32. Some are planted in corn, others grain or grass, but all are preferable to a low altitude turn, and certainly use them if you cannot make it back to the airport.

Also, It's worth it to take the tug and checkout all landing areas on the airport each season, and look at the fields at the north end of the airport. Heads up! Remember that you must choose a safe landing area, and it may not be where you took off from.

Landing Pattern Rwy 32; (see figure)

Landing: should be made in the grassy area parallel to the paved runway, near the runway marker lights, to leave enough room for a launch to the right of your path. Aimpoint should be at least 200 ft. past the perimeter fence, and avoid the runway threshold lights. Landing rollout should be close to the runway edge, avoiding the runway edge lights. This allows other gliders to land to the East of previously landed gliders.

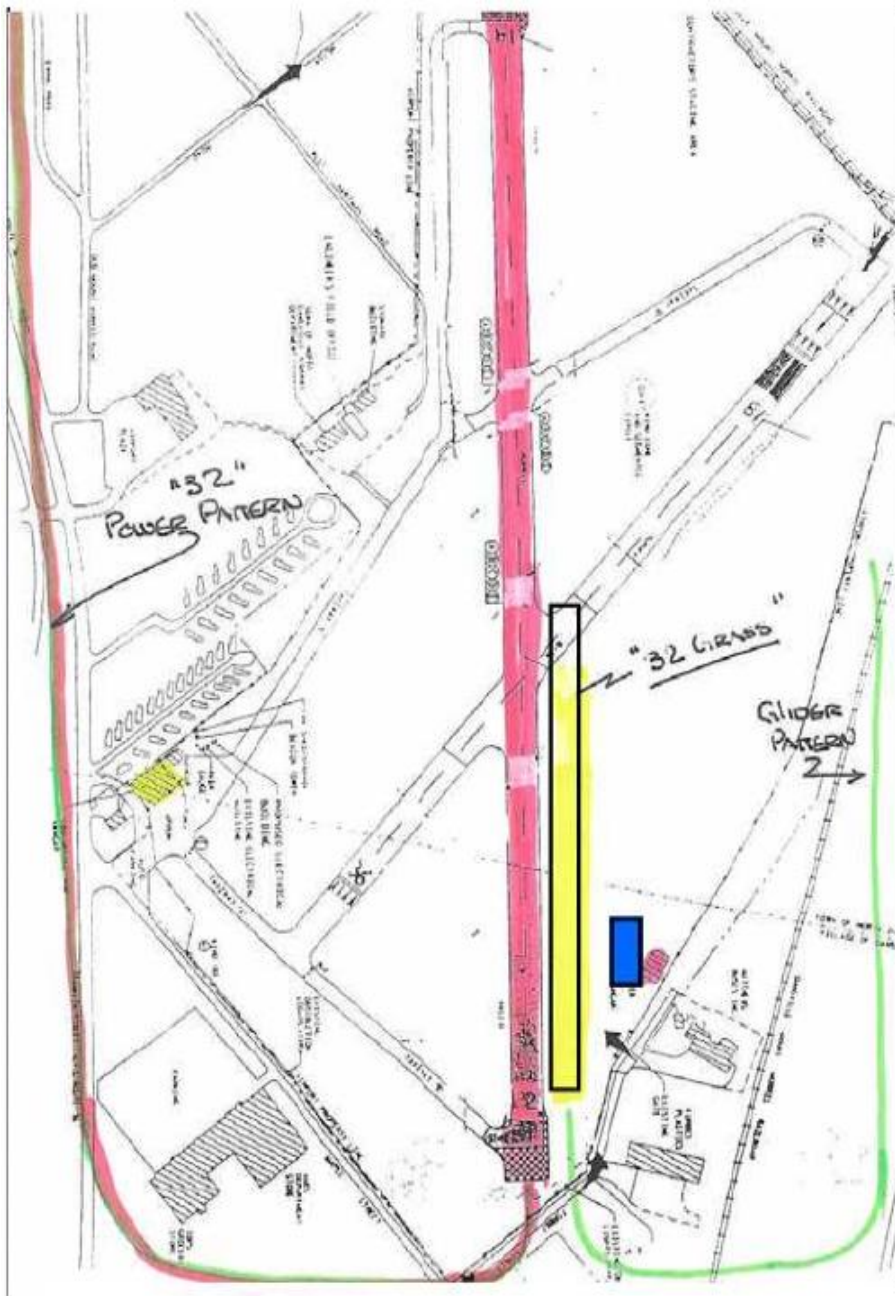
Gliders fly a right-hand pattern (right turns to each leg) (on the east ridge or FLSC hangar side of the airport, with the "downwind leg" going south, parallel to 32). Power traffic landing on Rwy 32 flies a left-hand pattern to the West of the field. In this case, Base Leg glider traffic will be head on, (this can surprise a power pilot) and then end up merging on final approach. When turning base to final, power traffic on low final over the town is hard to see...look carefully!

Your instructor will demonstrate the standard landing patterns, and also unusual or modified patterns. Students should practice arriving on Downwind (900 to 1,000' AGL) so that we can look over the landing areas well, determine the wind direction, accomplish the landing checklist, and scan for traffic. Announce your intentions on the radio.

Remember, non- standard patterns may be required when needed to get to a safe landing area.

Do not overshoot the turn onto final. It may cause a traffic conflict. Roll out on the extended runway centerline and crab into the wind to maintain ground track

When setting up a landing on the opposite (west) side of the paved runway in the grass, be aware that you're crossing the threshold of 32, and may cause a conflict with the power traffic pattern for final on 32. You will be making an intentional runway incursion. Take extra care to search for other aircraft, and use the radio to keep other traffic informed.



Runway 32 Patterns

Retrieval: Once stopped, rotate the glider's nose 90 degrees toward the east while waiting for the Tug to arrive. Tugs will travel in the area closest to the clubhouse, paralleling the landing area until abeam the stopped glider, scan for and wait for any traffic, then turn 90 degrees to retrieve the glider.

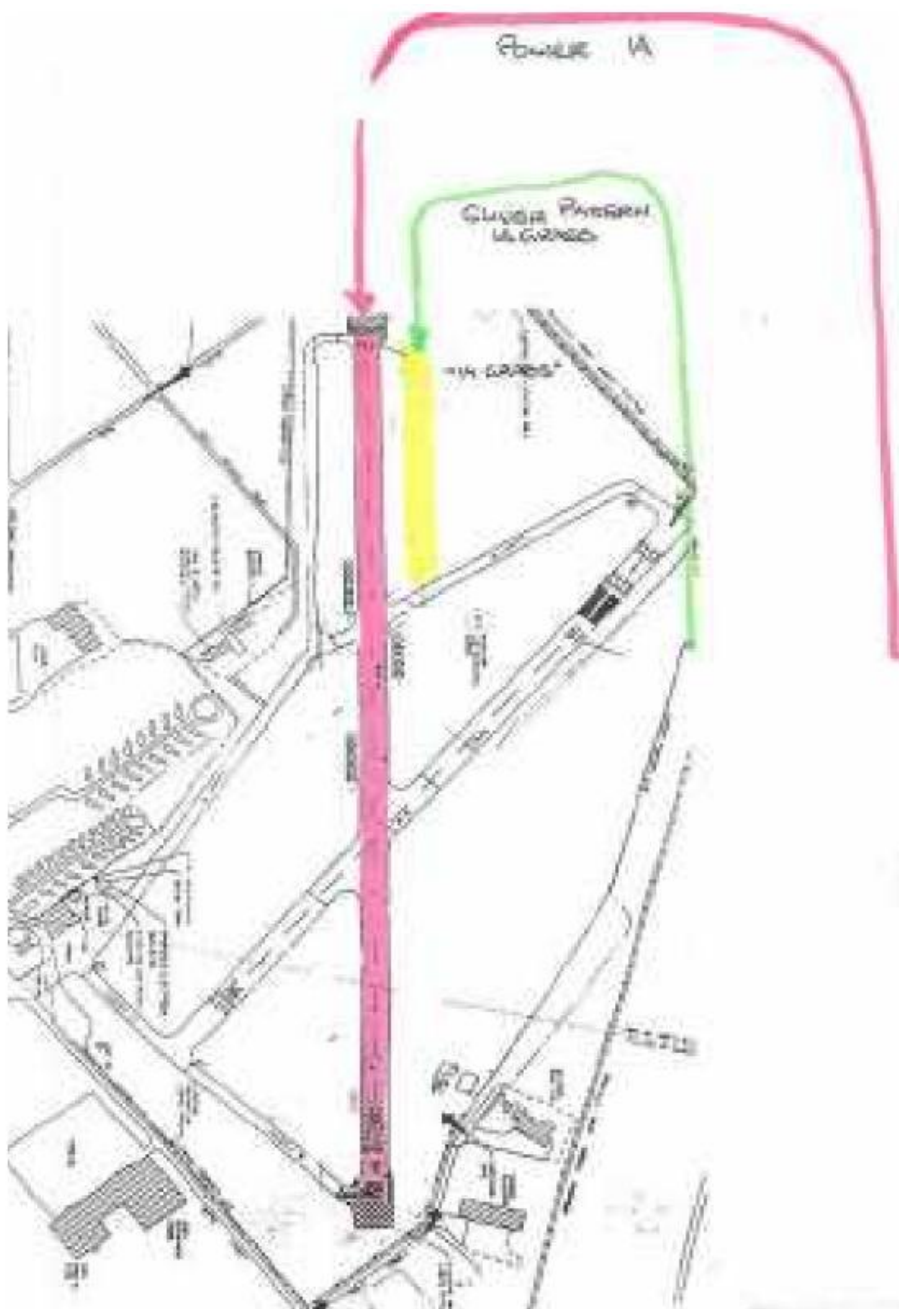
If this area is congested or a tow plane is staged for takeoff, the grass on the opposite side of the paved runway (West side) may be better for your landing. Use of the West side may keep the tow operation running smoothly when lots of gliders are active. Nothing prevents a glider from landing on the paved surface, except to minimize wear and tear on the tires.

Winch Operations (See Appendix)

RUNWAY 14 Operations

Glider and Power landing patterns for Rwy 14 are also along the east side of the airport. Gliders enter the pattern parallel to Rwy14 at about 900-1000 ft AGL. Gliders normally land in the grassy area to the East of Rwy 14 close to the runway lights. Again, if need be, the pavement is fine for landing, yet powered traffic will not expect this.

Because Glider and power traffic share the same left-hand pattern for Rwy14, power traffic normally fly a wider pattern than gliders- be sure to look out and around your normal path, but also look above and below your altitude since power traffic maintains altitude on downwind legs.



Runway 14 Patterns

Noise COMPLAINTS: At the end of “14”, just to the north east, about 50’ is a house and a telephone pole, designated as a red oval in the diagram on this page.. Make sure your pattern

is good and square (if possible) so that you do not have to fly over the house or pole (the owner complains and besides it's to the left of the approach as you land to the grass anyway).

If you go over the house, be sure you fly higher, and land down field. We have plenty of runway (4,000 ft) so that it is not a problem. Tow pilots should be aware that the telephone pole likes to catch tow ropes.

OBSTACLES: Also at the 14 approach end are two large VASI Lights. These are big rectangular objects just to the side (100') of the runway about 1,000 feet from the threshold. Please miss these because they can hurt you, and they are expensive. Finally, when landing on the alternate (west) side of 14 (or when moving gliders from tie down area), please avoid all runway markers and taxiway lights at all intersections.

Takeoff RWY 14:

Make sure that you start your takeoff run close to the perimeter fence, especially on hot days. You are taking-off over the town, and your options with a rope break are limited once you're initially airborne! They get slimmer until you turn to the east (left). Make sure of fields available on this take off. There is one straight ahead, hard to negotiate (and certain to cause some damage), and once the tow has started a left turn, there will be some good fields in the vicinity of the high school. This will be behind you until you turn.

RUNWAY 18/36

CAUTION: Operation on these runways are considered abnormal operations, usually caused by unusual prevailing winds that will generate significant downwash and down draft effects off the ridges, and airport buildings. Typically, when such conditions exist, a wave is working, and the rotor may exist over the airport. Exercise extreme caution. Generally, gliders use runways 18/36 only for landings. (They are short and into the ridges on takeoff). In the rare event that the wind conditions in Dansville strongly favor these runways, turbulence and downwash from the hills make glider towing marginally safe. Liftoff will appear normal, but your climb rate will be severely reduced once airborne.

Tows from this runway should be made only with an experienced FLSC tow pilot. Tows of two-place gliders from this runway are not recommended. Talk to your instructor first.

Landings may be made on the grass on the east side of 18/36 for the purpose of simulating off field landings. If the active runway is 14/32 (and it usually is), please use care in planning your pattern and landing.

Winch Operations (See Appendix)

FLSC FIELD OPERATIONS RULES

I. INTRODUCTION

We know that everyone in the club wants a safe operation, that's fun, and efficient. By following the rules we are protecting you, your passenger, and your investment in the equipment we operate. We have a reason for every one. If you have any doubt how to interpret the rule, contact an instructor and a Board Member. These operations rules are designed to assure safety; If the rule conflicts with reality, go with what is safest. Our hope is to maximize equipment utilization and to make soaring fun.

By accepting membership in the club, you signify you accept these rules. All members should review these rules yearly for changes. No one should willingly violate these rules. Willful violation is grounds for termination of membership.

II GENERAL RULES

Flying must be done in accordance with current Federal Aviation Regulations. Your instructor will familiarize you with them but you should be knowledgeable as well. The "FAR/AIM" book is available from a number of sources, even the FBO office at DSV. Be well versed in Parts 61 for certification requirements, and Part 91 for flying operations.

Infractions/unsafe operations: Safe operations and procedures must be practiced at all times. Members should report safety infractions or unsafe operation to the ops manager and/or an instructor on the field as soon as possible.

If a dangerous condition needs immediate intervention, members should "help each other" to avoid damage or injury. A nice "here let me help!" does wonders. Try not to display a critical attitude, make sure the pilot knows you are trying to just help out, and bring the development to the attention of an experienced member, who will decide how to intervene. Don't be discouraged by what seems like a lack of response. An important part of intervention may be letting time go by to defuse things!

In the event of a dispute or interpretation of rules, the Operations Manager must make the decision, and may have to consult with the more experienced members.

If no certified glider flight instructor (CFIG) or OM is present on the field, the incident should be reported on a safety reporting form available in the clubhouse or on the website (flsc.org), sent by E-mail to the Safety Officer, and a copy included with the days tow sheets. Follow up by telephone. If you feel compelled to say something to the offender please be tactful. It is usually best to leave it to a more experienced member, an appropriately trained and certified person, while trying to preserve club unity and personal growth of all.

Rules Violations: Bring violations to the attention of the Operations Manager (OM) and Instructor(s) on the field. They will determine how to handle them. If no instructor is available, contact a Board member. Members should not quibble with each other over perceived violations.

The pilot involved is required to make a written statement, preferably on the Safety Reporting Form, and contact the Safety Officer. The Operations Manager may consult with any FLSC member to assist them, but the ruling shall be final unless subsequently modified by the Board.

Security of Aircraft

The security of FLS aircraft rests with the pilot from the time they take charge of the equipment until it is returned and properly secured, or until the pilot turns the aircraft over to another

qualified pilot member of FLSC. This responsibility includes all associated FLSC equipment, such as weights, cushions, parachutes, trailer, etc..

The pilot is responsible for pre-flight inspection and documentation as required by regulations.

No FLSC sailplane may take off without a currently rated and experienced FLSC member on board. The pilot in command must be an active member, unless otherwise approved by the Board. Pilots' log books may be subject to review by the Operations Manager prior to any flight.

Maneuvers must be limited to those for which the aircraft is rated (Pilot Operating Handbook) and in compliance with FAA regulations. (eg. recovery above 1500', outside controlled airspace etc.) Do not attempt any maneuver you have not been previously cleared by an instructor to perform. Students may not soar below 1000 feet above the ground, and licensed sailplane pilots below 600 feet. Soaring is not allowed in or near the active traffic pattern areas of aircraft.

III. Responsibilities of Operations Manager (OM)

The Club schedules an Operations Manager (OM) to govern the operation each scheduled flying day. Their primary duty is to conduct the operation safely and efficiently. The OM has final authority on the field.

Primarily, the OM is responsible for the Safe Operation of the field, and to assign tasks to make sure that the safety is maintained. A member must do tasks assigned by the Operations Manager.

- 1) Tactfully manage the available members, launch and retrieval operations to maintain efficient operations. Secure and assign as necessary: an FLSC sailplane wing runner and a tow plane signal person to each launch. Retrievals might, for instance, be assigned to the next pilot waiting to fly the sailplane since she or he has a vested interest in efficiency
- 2) Suspend operations (in consultation with the tow pilot) when unsafe conditions exist. (Usually this involves high and/or gusting winds, limited visibility or ceiling, or impending storms). When operations are suspended, all aircraft are to be returned to their proper storage places.
- 3) Deal with any unsafe condition or incident or delegate it to an instructor on the field and/or to bring it to the attention of the FLSC Safety Officer.
- 4) Discourage other members from tactless criticism of persons who make mistakes, and deal with it constructively. Professional or pseudo professional embarrassment teaches nothing and drives members away.

Operations Manager Responsibilities:

- (1) Appear on the scheduled day by 9 AM, in time to start operating by 9:30 AM.
- (2) If unable to take the assigned duty, the assigned manager must have arranged for a substitute by calling an alternate and arranging to exchange duty.
- (3) Determine with the Instructor and Tow Pilot the operating runway; and equipment needs for the day. Call conferences upon changes, and preside over the day.
- (4) Adhere to all operating rules. If doubt exists whether to continue to fly, discontinue operations until it is safe to do so.
- (5) Maintain and administer priority flight lists (or delegate the responsibility) for the use of sailplanes and tow planes
- (6) Maintain the daily Operating Log accurately and completely.
- (7) Keep, sign and date the Operations Log.
- (8) Keep the flight line area clear of all obstructions, including observers, children, dogs, parked cars, airplanes, or appoint a host to guests.
- (9) Coordinate rides for passengers to maintain a proper balance between accommodating guests seeking rides and the needs of FLSC members
- (10) Issue Ride certificates (or delegate the task) to those wishing to purchase rides.
- (11) Collect the proper fees (or delegate the task) from Guest Members, Junior Members, and purchasers of 3-flight Introductory Memberships.
- (12) Enter all receipts into the Cash Receipts Log or delegate the task.
- (13) Total the time and enter total time for each sailplane in the sailplane log in the locked log box (SW corner of clubhouse desk) at the end of the day.
- (14) Store all equipment at the end of the day.
- (15) Submit all receipts, along with the Cash Receipts Log to the receiving Treasurer (There is an envelope in the trailer with postage for the purpose).

WOW; can you tell this is the person responsible? Don't worry! we will pair you with an experienced club member until you are comfortable. This manual will become a good checklist to refer to at the beginning of the day and at the end of the day, to make sure it's all done!



Daily Operations Manager Checklist:

- ☐ Open Walkin Gate (Combo 11832 – ASOS Freq)
- ☐ Open Ops Trailer (Combo 1903)
- ☐ Open Club House and Hangar (keys are in Ops Trailer)
- ☐ Check Aircraft Status (on wall by computer in Club House)
- ☐ Check Weather (800-WX-Brief) & NOTAMS / ASOS: 118.32 (585-335-2380)
- ☐ Check Phone Messages
- ☐ Gas Tow vehicles (Combo for Gas Tank 1903)
- ☐ Pull Out Aircraft (use 3 People)
- ☐ Set up Ops Table:
 - Radio (set to 123.00) Battery Charged / Antenna hooked up
 - Ops Manual
 - Forms
 - Ride Paperwork / Cash Log
- ☐ Operation Brief with Tow Pilot & Instructor
 - Active Runway
 - Weather Considerations
 - Prioritize Schedules
- ☐ Assign Wing Runners / Towplane Monitor
- ☐ Throughout Days Operations
 - Ensure Safe Operations
 - Confer with Tow Pilot on Runway Changes
 - Ensure all gliders are tied down and canopies secured
 - Fill out Ops Log
 - Rehangar if weather deteriorates
 - If weather will impact safe operations – make an announcement on 123.3 for other club aircraft
- ☐ Put Aircraft away in hangar
 - Glider Batteries on charge
 - Ensure all doors are locked
- ☐ End of Day
 - Fill out all club aircraft logbooks
 - Complete Ops Logs, Ride Logs & Tow Logs – place in envelope and send to club Treasurer (Mark Black)
 - Note any maintenance issues – mark on aircraft status board in club house and call Maintenance Officer (Cy Kastner)
 - Ensure Phone is set to Answer
 - Lock all doors and lock Ops Trailer
- ☐ **3 Flight Member Procedures**
 - Step 1) Take the \$180 check made out to Finger Lakes Soaring Club- give the 3flight member their 3flight package of materials. 3flight Packages can be found in the closet (top shelf) in the OPS Center part of club house in the cardboard box on the top shelf.
 - Step2) Open the package and remove two documents:
 - 1) FLSC FAST Program - Membership Application
 - 2) SSA - Fly A Sailplane Today! Voucher (has the serial number in bottom right hand corner)
 - Step3) Have the new member fill out BOTH Documents.
 - Step4) Please make sure the "check" and BOTH Documents are submitted to the Receiving Treasurer at the end of the day along with the OPS Sheet and Tow Sheet from Tow Plane.

Ground Tug Operation

- Always cross active landing areas at 90 degrees (better visibility; min crossing time)
- Speed is not too fast for wing person, rope at least ½ wingspan
- Launch queue – tails toward East fence
- Dismounting: Always shut down engine, If walking away, always disconnect glider
- High-wind operation: Tie-down Gliders with nose into wind, rope tight,
- Ensure canopy is down & latched, speed brakes open & tail dolly removed

IV. SAILPLANE PILOT-IN-COMMAND AND SOLO STUDENT RESPONSIBILITIES

- 1) Check Weather conditions, TFRs and NOTAMS, wind direction for operations
- 2) Assure the airworthiness of the sailplane (check the status board), pre-flight the craft, weight and balance
- 3) Assume responsibility for the sailplane.
- 4) Assure that the sailplane, Pilot, and the passenger, are ready to fly. (plan ahead so you're not rushed, and do not hold up operations. Pull up to the flight line when ready, and not before)
- 5) Confirm the presence of a wing runner and a tow plane monitor.
- 6) Display standard signals (hookup, when ready to launch , thumbs up signal & rudder-waggle)
- 7) Check for traffic at release altitude and assure safe release,
- 8) Move the sailplane after landing off the active runway as quickly as possible to permit safe takeoff and landing of other sailplanes.
- 9) Stay with and secure the sailplane after landing and before the ship is tied down.
- 10) Clean the sailplane- free of bugs and debris from the flight, only use plastic polish on canopies
- 11) Report equipment problems to the Chief of Maintenance

V. INSTRUCTOR RESPONSIBILITIES

- (1) Arrive on time, ready to instruct by 9:00 AM (shift officially ends at 1:00 PM).
- (2) Remain on duty throughout the 9:00-1:00 instructional period, and beyond this period if required to assist in providing passenger rides or further instruction.
- (3) Brief Lesson Plan and expectations for each flight, review student progress log
- (4) Monitor student check of flight preparation; WX TFRs NOTAMs, preflight
- (5) Monitor and examine students on required reading material; assure review of Operational and Aeronautical knowledge
- (6) Assure that students who have scheduled instruction get appropriate priority.
- (7) Honor the 45-minute time limit for instructional flights
- (8) Critique the Student tactfully and thoroughly, complete logbook and progress log
- (9) Assist / be available for consultation on ground operations
- (10) Authorize solo/post solo students' flights.
- (11) Identify passengers who show talent and encourage them to join!

V. WING RUNNER RESPONSIBILITIES

- (1) Check takeoff direction is consistent with the wind direction, If not bring it to the attention of the pilot and/or the Ops Manager
- (2) Assist pilot and passenger in entering the sailplane and securing seat belts.
- (3) Relay special pilot instructions to tow (e.g. pilot wants a 3000-foot tow, or will box the wake)
- (4) Know and use standard SSA hand signals

- (5) Look for knots frays or tangles of rope. The hook-up procedure is as follows: the tow plane passes -but may not stop- within 20-30 feet of the glider to be towed, person with a hook grabs the towline & walks back to the glider. When the tow plane is about 180 feet in front of the glider (rope a little slack), the hook- up person gives the stop signal by holding both hands (or paddles) crossed overhead
- (6) Check for obvious sailplane problems, such as open spoilers, tail dolly still attached, or canopy not latched; ask pilot if brakes are open intentionally?
- (7) Hook up the sailplane at the pilot's request
- (8) Check for other sailplanes or power traffic landing or taking off - before complying with launch request. Watch cross-runways and patterns.
- (9) Look for the pilot's thumbs up, "ready or launch" signal.
- (10) Lift wing after pilot signal
- (11) Keep upwind wing low in event of crosswind.
- (12) Run the wing, yet don't hold it back or throw it
- (13) Move out of the Landing / Launch area

VII. TOWPLANE MONITOR DUTIES;

- (1) Avoid the tow plane & propeller at all times
- (2) Hook rope to the tow plane if needed, ensure tow rope is in good condition, no frays
- (3) Relay glider pilot instructions to tow pilot
- (4) Talk to tow pilot if pilot opens the door,
- (5) Check for obvious tow or sailplane problems (such as open spoilers) ask if pilot wants them open? Stop the launch if not corrected.
- (6) Check for traffic on cross & active runways
- (7) Look for and transmit wing runner signals
- (8) Signal tow pilot to take up slack rope, and launch signal
- (9) Stop tow plane if wing runner puts sailplane wing down or if any unsafe condition develops, even if you are the only one that sees it. (Arms crossed above head)

VIII. TOW PLANE PILOT RESPONSIBILITIES

- (1) Exercise judgment regarding all operations (you may be the most experienced)
- (2) Current License, Medical certificate, tow currency, and club clearance.
- (3) Arrive by 9 AM, or 1/2 hour prior to duty time
- (4) Check 1-800 WX Brief, ASOS, and NOTAMs/TFRs at start of day.
- (5) Preflight tow plane.
- (6) Follow all SSA ground, launch, and airborne signals.
- (7) Maintain tow log.
- (8) Manage & purchase fuel, sign invoice.
- (9) Properly secure the tow plane, when unattended.
- (10) Leave tow plane clean and fuel-ready at the end of the day.
- (11) Attach charger at end of day if necessary.
- (12) Report equipment problems to the Maintenance Officer. (CAM)

IX. MOVING OF SAILPLANES ON THE GROUND - STORAGE

Cars may enter upon the field when towing sailplanes or the operations trailer. Sailplane trailers must be towed via the road to the staging area for the day. For ground towing, use a sturdy rope longer than 1/2 the sailplane wing span (40 feet is a good length). Cause the glider track to follow the car track. Driver should be aware of and warn of ruts and holes, but wing guy must stay awake!

Keep car windows open to maintain communication between driver and wing walker. Adjust mirror so you can see wing walker.

In mild wind conditions, the wing walker should be on the left (driver) side wing. In higher winds (7-12 MPH wind), the walker should take the upwind wing.

In strong (12 MPH or more) wind (the Blanik is very susceptible to a swing around due to castoring tailwheel): Keep a wing walker on each wing, with upwind wing held low.

Strong tail wind –Use a wing walker and "tail walker" to keep the tail low (prevent it from blowing up and over or overrunning the tow car (yes, it has happened)).

Head Winds require a wing walker and a licensed pilot belted into the sailplane to prevent an angle of attack sufficient for takeoff. Especially with light machines. An empty 1-26 can take off from a three-point stance if a 4 MPH walking speed is added to a 15 MPH head wind and its normal associated gusting.

The walker should watch out for other people's heads (banging onto the wing!), another sailplane, tow plane, etc.

The driver and walker should both watch for all air traffic taking off and landing, landing lights, and holes in the ground. Talk to each other! If the car is stopped at a runway due to traffic, wing walker should lower the sailplane wing so that moving aircraft know your machine is not in motion. Lower the runway side wing.

Do not drive cars with loose towropes attached; this has resulted in injury! (We are not making this stuff up; people have actually been ensnared in the tow plane tow rope and dragged down field!)

Be sure the sailplane tail is off the ground continually when it is being turned (unless equipped with a swiveling tail wheel); wings also, if there are no wing wheels.

Tie down unused sailplanes by the nose, "into the wind", open brakes and put flaps in "off" position. (A sudden change in wind speed or direction can damage a sailplane if it is not secured).

For overnight outdoor storage, secure nose, wings and tail; make sure weights and cushions are in sailplane, cushions are protected from rain, and install gust locks and canopy covers.

IXb. MOVING AIRCRAFT

At least two pilots are required to move an aircraft in or out. Any person may call out "STOP!" if a surface is too close to contact with another object. Ensure canopies are latched before moving any glider.

Take gliders removed from the hangar to a tie down spot and secure as required, nose into the wind, rope tight, spoilers deployed (if able), canopies locked.

Park the Tow-plane so they cannot blow gliders around when starting.

X. RESPONSIBILITY FOR DAMAGE/ACCIDENTS

Remember, FLSC assumes repair costs from ground handling and trailering on the home airport except in cases of negligence as determined by the Board. All equipment is expensive, so be careful, please!

FLSC will assume repair costs resulting from paid passenger rides (not including flights in which an FLSC member is giving his or her personal guest a ride).

The pilot in charge involved in a flying accident, or damage incurred in trailering off field will be responsible for repair costs up to the current deductible on FLSC's insurance policy, except as indicated in the next paragraph.

Accidents from violations of FLSC rules, FAR's, or motor vehicle laws (flying and trailering) may result in the pilot's full financial responsibility.

XI. REPORTING OF ACCIDENTS AND UNSAFE INCIDENTS

To maintain safe operation, it is essential that accidents and unsafe incidents be reported, addressed, and corrected.

Accidents: An FLSC pilot in command (PIC) involved in an accident with club aircraft must, by law, report that accident immediately to the FAA district office and the NTSB (reference 49CFR Part 830), if there is substantial damage (which grounds the aircraft, until it is appropriately inspected and/or repaired) or personal in-jury. You are required to make a written report that is coordinated with the Club. This will be submitted after consulting with the Safety Officer and Board Members. The Club, as owner of the aircraft, must also make a report. The PIC may be liable for damages, the insurance deductible, and may have FAA Pilot's License actions taken against them.

Incidents: Any FLSC member who witnesses any unsafe incident should report it immediately to an Instructor or Board member on the field at the time, or if there is no such individual at the field in calling and writing a report to the Safety Officer as soon as is practical. The instructor will determine the appropriate action. The instructor may refer the matter to the Safety Committee. The Safety Committee shall maintain a file. The Safety Committee will then address the issue, informing the member involved as is necessary to assure confidence in the process, individual growth, and club integrity.

XII. RIDES, GUEST MEMBERSHIPS, AND OTHER USES OF FLSC AIRCRAFT

Generally, FLSC sailplanes are for the use of FLSC members, and FLSC tow planes are for towing gliders piloted by FLSC members. However, others may fly in FLSC aircraft.

Guest memberships may be issued to pilots .

Licensed pilots may provide rides to friends and relatives if they are approved and current according to FARs. To give a ride from the back seat, the field instructor must approve the pilot.

The FLSC provides, on an as-available basis, rides to non-member visitors. For such flights, a commercially rated sailplane pilot, current in the make and model of the sailplane to be flown, per FARs part 61 must operate the sailplane. The Ops manager must collect or provide for payment at the time of the ride. Fees will be posted on the website, and briefed yearly.

3 Flight Member Procedures

Step 1) Take the \$180 check made out to Finger Lakes Soaring Club- give the 3flight member their 3flight package of materials. 3flight Packages can be found in the closet (top shelf) in the OPS Center part of club house in the cardboard box on the top shelf.

Step2) Open the package and remove two documents:

1) FLSC FAST Program - Membership Application

2) SSA - Fly A Sailplane Today! Voucher (has the serial number in bottom right hand corner)

Step3) Have the new member fill out BOTH Documents.

Step4) Please make sure the "check" and BOTH Documents are submitted to the Receiving Treasurer at the end of the day along with the OPS Sheet and Tow Sheet from Tow Plane.

Tow planes may also be used for tow pilot check out, field selection training for cross country approval, spin training, orientation to familiarize a new member with the local flying area, aero retrieve of an FLSC sailplane from another airport, and limited personal use (Citabria only) when the aircraft is not needed for FLSC activities.

All such tow plane use is charged at the current tach hour rate, except in the case of aero retrieves, the normal tow fee will be charged if it is higher. Extended personal use of tow planes, or any other use, is subject to approval by the Board.

XIII FLIGHT MANAGEMENT AND DURATION – Daily Aircraft Scheduling

Priority of flights is established by the Ops Manager on a "first come, first fly" principle. A "priority rack" may be set up in the operations trailer with a column of slots for each active sailplane. (A qualified pilot will place his or her card at the bottom of the column for the sailplane to be flown. The pilot whose card is situated in the top position shall be the next to fly the sailplane.) Check with the Operations Manager for the day.

A pilot waiting a turn may fly another available sailplane without losing his or her place in line in the discretion of the Ops Manager.. A pilot flying an alternate sailplane or otherwise unable to take his or her turn when the primary sailplane becomes available shall forfeit her or his "primary" machine of choice.

Members having a sailplane reserved for cross-country flying may not use alternative sailplanes while the reservation is in effect unless approved by the Ops manager.

Unless extended by the Operations Manager prior to take off, the duration of local flights on weekends are limited to:

- 1) 60 minutes for normal FLSC flying
- 2) Introductory (3 flight) Member (2000' tow) 45 minutes
- 3) Dual instruction flights 45 minutes
- 4) Flights to obtain currency 15 minutes
- 5) For Bronze Badge duration (2 hour) flight attempts, the operations Manager may authorize the use of a sailplane by the first qualified pilot requesting it on any given day. The attempt may be made in the sailplane of the pilot's choice when the pilot's regularly scheduled turn to fly comes up in that sailplane. This is not a reservation system. It simply allows one pilot per day to attempt a longer flight to qualify for the Bronze Badge. At the discretion of the Operations Manager, more than one pilot may be authorized to attempt this flight on a given day.

XIV FLYING PRIORITIES

When first arriving at the field, check with the Ops Manager and schedule your flight, and then place your card in the slot for the appropriate aircraft. If receiving instruction, coordinate with the duty instructor as well. Assist operations as directed.

- 1) Instructional flights and check rides have priority over all other flights, before 1 PM. Reserved instruction has priority over unscheduled instruction.
- 2) Students may reserve a trainer for one-hour blocks between 9:00 AM and 1:00 PM for the purpose of dual instruction flights. These reservations shall be made in advance with the Duty Instructor, daily schedule on the website, or through the FLSC "hot line" telephone. Reservations should also be made for licensed pilot annual field check rides, and Flight Reviews
- 3) Solo students, if qualified, have priority for the 1-26 before 1PM. Solo students have priority for trainers before 1:00 PM if they are not being used for instructional flights.
- 4) After 1:00 PM, tows and club aircraft are available to Regular members on a first-come first-fly basis. Associate members are entitled to receive tows in the same manner as regular members. However, when Regular members are waiting for tows, Associates shall alternate with Regular members.
- 5) If the 2nd trainer is available, normally, rides will have priority in that aircraft until 1:00 PM. Also from 1:00 PM on, the Ops Manager shall determine priority of rides vs instruction.

XV CURRENCY FLIGHTS

Instructors receive three tows at the start of each season without charge. If not previously qualified to instruct in the Blanik, at least one flight must be made in the Blanik. If the Blanik is

not available the instructor shall receive one 1,000 foot tow in the Blanik at a later date, free of charge. Soaring is not encouraged during currency rides, unless no one else will be using the aircraft.

Every pilot is required to have one or more check rides, as required, with an instructor at the start of each season before being qualified to pilot FLSC sailplanes or to be towed by FLSC tow planes.

To become qualified to pilot the Blanik the check ride must be in the Blanik.

It is the responsibility of all FLSC members to maintain their skill levels commensurate with FARs and club endorsements for use of FLSC equipment. Apparent failure to comply requires the member to redemonstrate those skills to an FLSC CFI. .

XVI. QUALIFICATION FOR USE OF SAILPLANES

Dual instructional flights: All current members are eligible to take dual instruction from a CFI. Pilots are eligible to fly rear seat when approved to do so by FLSC CFI log book endorsement.

Solo: Members are eligible to solo when approved to do so by logbook endorsement of two FLS CFI's.

The candidate must pass an FLSC Pre-Solo written test and spin training, preferably in the Blanik. Spin instruction and off field selection training may take place in an appropriate Tow Plane.

Students must obtain approval from a CFI on the field immediately prior to each solo flight.

Other Glider Aircraft Checkout

Prior to checkout in another club glider, the pilot will be knowledgeable of the Pilot Operating Handbook (POH) for that aircraft and receive a briefing and logbook endorsement from a club CFI on all equipment, aircraft handling characteristics, assembly and trailering, and any towing peculiarities. The following order is recommended for normal progress.

Blanik: Licensed sailplane pilot members are eligible to act as pilot in command of the Blanik after the member has met the requirements for piloting the 1-26 or ASK-21, has obtained a briefing on the Blanik characteristics from an FLSC CFI, has demonstrated flight proficiency in a dual flight in the Blanik, and has had his or her log book endorsed by an FLSC CFI. The member must make a supervised solo flight under the observation of the endorsing CFI.

Blanik from the rear seat: Members are qualified to fly the Blanik from the rear seat after meeting the requirements for PIC of the Blanik, five flights as PIC from the front seat, and passing a check ride in the rear seat by an FLSC CFI, who shall endorse the pilot log.

Aerobatics: No Club member will perform aerobatics unless previously authorized for that maneuver by an appropriate club glider aerobatic instructor pilot.

1-26: Student and licensed pilot members are eligible to fly the 1-26 when approved to do so by logbook endorsement of an FLSC CFI. Students must obtain approval from a CFI on the field immediately prior to each solo flight. Spin recovery recurrent training may be required in the discretion of the CFI.

Grob: Licensed and solo sailplane pilot members are eligible to fly the Grob after the member has met the requirements for piloting the 1-26, has reviewed the Pilot Operating Handbook, had a briefing on the performance and limitations by an FLSC CFI, has demonstrated flight proficiency in a dual flight in the Blanik, has been observed by an FLS CFI to have performed solo spins in the 1-26 or Blanik within 30 days prior to the initial flight, and has had his or her log

book endorsed by an FLSC CFI. The member must make a supervised flight under the observation of the endorsing CFI.

XVII. CROSS COUNTRY AND DURATION BADGE FLYING

FLSC encourages cross country flying and the earning of soaring badges by its qualified members. Cross-country flying is defined as flying outside of gliding range of the airport (taking account of winds aloft), assuming all lift quits at any time. This section describes provisions for utilizing club equipment for cross country flying on days with the best soaring conditions while, at the same time, allowing other members the maximum opportunity to fly the sailplanes.

Members qualified for cross country flight may reserve sailplanes on weekends and holidays using the website scheduling system or by approval of the Board, and receiving confirmation. You may make one reservation in each calendar month. The 1-26, Grob, or Pegasus, may be reserved for a duration badge leg attempt in the same manner. On weekdays the sailplanes may be used for either purpose, without reservations, on a first come, first served basis.

To be eligible to fly any FLSC sailplane cross country, the pilot must be a Regular A member of the FLSC, be approved for cross country flying by one FLSC CFI and the FLSC Board, and meet the requirements below for each type of sailplane.

Unless waived by a CFIG, to qualify to fly the 1-26 cross country, the member must:

- (1) Have made a minimum of 15 flights in the 1-26, three of which must have been made within the 60 days prior to each cross- country flight;
- (2) Have completed the requirements for the Bronze Badge and the five-hour badge leg for the silver Badge; have demonstrated to an FLS CFI his or her spot landing proficiency with the altimeter covered and have obtained a CFI endorsement in his or her log
- (3) Have received a cross-country briefing from an FLSC CFI and received an endorsement in their log book.
- (4) Have 30 minutes of dual instruction in field selection in the Citabria tow plane;
- (5) Have demonstrated knowledge of retrieve procedures, handling the ship on the ground, assembly and disassembly, trailering, and preflight and post-flight inspection.

To qualify to fly the Grob cross country, the member must:

- (1) Have met the requirements for flying the 1-26 cross country; Have attained the Silver Badge;
- (2) Have obtained the approval of three FLSC instructors;
- (3) Have made at least 15 flights in the Grob, with at least five of these within the 60 days prior to each cross-country flight;
- (4) Have logged at least 150 total hours in gliders; except as may be granted to pilots who have already made three or more structurally damage-free out-landings in gliders with L/D > 30:1 within two years of the intended flight

To be qualified to fly the Blanik solo cross country, the member must:

- (1) Have met the requirements for flying the Grob cross country;
- (2) qualified to fly the Blanik locally; and
- (3) Have logged at least 100 miles of cross-country flying.

Additional Provisions

- (1) The pilot is responsible for the security of the sailplane, trailer, tools, and any other FLS equipment that may be involved in the cross-country flight.

- (2) The pilot must provide a retrieve car, wired to match the trailer to be used, and crew.
- (3) Before starting the flight, the pilot is responsible for hooking up the trailer, checking the lights, arranging for and briefing the crew, and providing car keys.
- (4) The scheduled cross-country pilot must arrive at the airport by 10:00 AM. Failure to do so results in forfeiting the reservation, and the sailplane becomes available for local flying.
- (5) Pilots who have not left the vicinity of the airport by 2:30 PM must return to the field and make the sailplane available for local flying.
- (6) The pilot is responsible for returning the sailplane to the field and having it ready to fly by 10:00 AM on the day following the cross-country flight, if that day falls on a weekend or holiday.
- (7) Any request for an exemption or waiver of these regulations must be applied for Board of Directors



Appendices

Winch Operations: see FLSC website for Training Documents

General Comments:

Winch operator and glider pilots will have had an endorsement by a club approved instructor prior to operating alone or solo.

All winch operations will use radios tuned to 123.00 MHz, and will be thoroughly arranged with the Operations Manager and towpilot (if operating simultaneously).

The winch tow rope will be laid out between the landing area and towplane launching areas. When dragging the rope back to the launch area, avoid all runway lights, and signs.

Gliders ready for winch launch will be staged against the perimeter fence.

Ensure the proper weaklink is attached before glider hookup.

Winch (& Car) Launch Procedures

1. Always launch into the wind.
2. Prebrief all signals and communications with Winch, retrieve, wingrunner, and all pilots.
3. Control the climb angle so that it changes gradually into the full climbing angle at a safe height and speed. More tension on the cable/rope increases the speed of the glider, unless it overpowers the winch.
4. If airspeed cannot be maintained above stall speed plus 5K with stick full aft, radio for more speed or release, since airspeed will not increase if tension is not increased.
5. If airspeed increases above the placarded turbulent winch tow speed, call for a reduction in speed, or release, if a reduction of back pressure does not reduce speed.
6. Correct for crosswind by banking slightly or crabbing into the wind. Release slightly upwind since the cable will drift downwind when released, especially if a chute is attached.
7. When ready to release, lower the nose slightly before pulling the release hard twice. Be prepared in case the cable is not released - to spiral down.
8. Thoroughly prepare for and brief all unexpected situations -expect a rope break or winch power failure during any phase of the launch. Plan your pattern and landing based upon wind conditions and phase of launch. In strong headwinds, a straight ahead landing may be best. You may have to continue ahead after release before making your turn back.
9. Don't use spoilers until you have confirmed you have regained safe flying speed, yet, don't delay the use of full spoilers (or slip) if needed to land safely.
10. Always use well-coordinated banked turns with appropriate airspeed.

Tow Pilot Checkout

See FLSC website for current syllabus and requirements and the Glider Flying Handbook FAA-H-8083-13A Chapter 12

An excellent resource is the SSA Website: <http://www.soaringsafety.org/school/towpilot/tpctoc.htm>

Minimum FAA requirements: Sec. 61.69

Glider towing: Experience and training requirements.

- (a) No person may act as pilot in command for towing a glider unless that person-
- (1) Holds a private, commercial or airline transport pilot certificate with a category rating for powered aircraft;
 - (2) Has logged at least 100 hours of pilot-in-command time in the aircraft category, class and type (ASEL), if required, that the pilot is using to tow a glider;
 - (3) Has a logbook endorsement from an authorized (*Glider*) instructor who certifies that the person has received ground and flight training in gliders and is proficient in--
 - (i) The techniques and procedures essential to the safe towing of gliders, including airspeed limitations;
 - (ii) Emergency procedures;
 - (iii) Signals used; and
 - (iv) Maximum angles of bank.
 - (4) Except as provided in paragraph (b) of this section, has logged at least three flights as the sole manipulator of the controls of an aircraft while towing a glider or has simulated towing flight procedures in an aircraft while accompanied by a pilot who meets the requirements of paragraphs (c) and (d) of this section.
 - (5) Except as provided in paragraph (b) of this section, has received a logbook endorsement from the pilot, described in paragraph (a)(4) of this section, certifying that the person has accomplished at least 3 flights in an aircraft while towing a glider, or while simulating towing flight procedures; and
 - (6) Within 24 calendar months before the flight has--
 - (i) Made at least three actual or simulated tows of a glider while accompanied by a qualified pilot who meets the requirements of this section; or
 - (ii) Made at least three flights as pilot in command of a glider towed by an aircraft.
- (b) Any person who, before May 17, 1967, has made and logged 10 or more flights as pilot in command of an aircraft towing a glider in accordance with a certificate of waiver need not comply with paragraphs (a)(4) and (a)(5)

To fly the Pawnee you must have;

- A high performance endorsement (or be grandfathered)
- A tail wheel endorsement (or be grandfathered).

And meet Club Requirements

- Receive Tow Pilot orientation briefing and authorization from Chief Tow Pilot
- Review Pawnee / Citabria Operating Handbook
- Review the FLSC Operations Manual
- Review the FLSC Tow Pilots Handbook
- Briefed on Noise Sensitive Avoidance Areas

Our Insurance Carrier has additional requirements, which the chief towpilot will ensure you qualify for.

TOWPLANE PATH EXAMPLE

