



# **Skyline Soaring Club Operations Manual**

**Revision 10.8**

**1 September 2025**

# Revision History

Date	Revision	Comment
1 Aug 2012 (JN)	7.1	Acknowledges new-member orientation session (1.4) Formalizes guidance for advance coordination of instruction (2.1.4) Clarification of runway change coordination guidelines (2.2.1) Restricts reservations for guest flights to once per calendar quarter (2.3.2) Clarification of launch sequencing guidelines (2.4) Clarifies duty instructor responsibility to monitor student solo (3.1.4) Clarification of flight duration limits (3.6)
1 Jan 2013 (JN)	7.2	Gives DO primary responsibility for terminating ops in high winds (2.9) Clarifies rules for practice PTT (3.3)
1 Apr 2013 (JN)	7.3	Clarifies club special currency requirements (3.1.5) Adds policy for use and refill of club oxygen system (3.11)
20 Jul 2013 (JN)	7.4	Expanded coordination briefing outline (2.2.1) Radio required on all flights (3.1.7) Gear down call required for retractable-gear gliders (3.8) Wing Runner guide updated (App B) Wave window Certificate of Waiver updated (App C)
11 Apr 2014 (JN)	7.5	Clarifies that payments are due within 30 days of statement/invoice (1.4.5) Corrects FIRC terminology (1.6.4) Separates DO and ADO duty descriptions (1.6.9 and 1.6.10) Formalizes two-week limit on reserving instruction (2.1.4) Updates club flight recorder reservation rules (2.3.1)
1 Aug 2014 (JN)	7.6	Introductory memberships no longer free with FAST flight (1.3.1) New Member Orientation Session mandatory (1.4) Adds member medical and physical qualifications (1.4.1) Adds requirement to check tire pressures daily (2.2.3) Reinstates 15 mph speed limit for ground vehicles (2.5) Adds 123.3 as primary 2-way comm for Skyline Ground (3.1.7) Updates Wave Window LOA (App C)
7 Sep 2014 (JN)	7.7	Revised membership categories and application process (1.3)
1 Jan 2015 (JN)	7.8	VHF radio required for vehicles on taxiways (2.5) Relaxes requirements for flying the Cirrus (3.2.3) Adds guidelines for use of cameras on club aircraft (3.16)
21 Jun 2015 (JN)	7.9	Clarifies approval level for membership types (1.3)
25 Sep 2015 (JN)	7.10	Proration of dues for reactivating members (1.3.8) Clarifies launch priority rules (2.4)
5 May 2017 (DE)	8.1	Redefines the approval level for new members (Chapter 1) & (1.3.2) Updates acceptable driving routes for Gators/ATV and personal vehicles (2.5.2) Clarifies roll out for normal landings (3.8) Expands guidelines for use of cameras on club aircraft (3.16)
27 March 2018 (RG)	9.1	Added "Charter Member" (1.1) Deleted Probationary Member initiation fee refund & Board of Director's approval (1.2) Clarifies Inactive Membership Requirements (1.4.8) Added ADO Qualification Checklist to ADO qualifications (1.7.10) Clarifies Student/Instructor tow priority (2.4(c)) Added Discus Qualifications (3.2.4) Added Discus to Appendix A "General Performance Reference" (Appendix A)

27 April 2018 (RG)	9.2	Clarified Member Financial Responsibilities in the event of damage to club equipment (3.15.3)
25 February 2019 (RG)	9.3	Updates Discus CS Qualifications (3.2.4) Adds Discus assembly personnel requirements (3.2.4.1) Combined Paragraph 3.15.2 and 3.15.3 that clarifies member financial responsibilities in the event of damage to club equipment (3.15.2)
23 July 2019 (RG)	9.4	Further defines financial charges levied on Inactive members returning to Full membership (1.4.8) Corrected paragraph reference to 1.7.4 (1.7.3) Allows new instructors a two-year waiver to earn SSAI status (1.7/4) Clarifies responsibilities for verifying pilot qualifications (2.2.5) Deleted references to the Cirrus (2.3.1, 3.2.3, 3.8, Appendix A) Defines PIC financial responsibilities for damage to equipment and civil liabilities in the event of an incident (3.15.3) Deleted the Skyline Soaring Wave Window (3.12) and removed wave window documentation (Appendix C)
3 September 2019 (RG)	9.5	Defines who the Club considers a Service Member, Service Member SSA membership, and Service Member SSA annual dues (1.4.5) Clarifies definition of Student Member [23-years old and younger] (1.4.6) Clarifies that a Skyline Soaring Club Qualified Duty Officer will be assigned for all flight operations and no such operations will be conducted without a DO (2.2)
17 November 2019 (RG)	9.6	Added spin training guidance (3.17)
22 November 2019 (RG)	9.7	Updated Skyline Soaring Club wave window operations (3.12 & Appendix C)
10 May 2020 (JK)	9.8	Updated Operations in Windy Conditions (2.9(d))
15 November 2020 (JK)	9.9	Updates Appointed Officer qualifications (1.7) Updates Chief Duty Officer responsibilities (1.7.8) Updates Duty Officer qualifications and responsibilities (1.7.9) Updates the Assistance Duty Officer qualifications (1.7.10)
1 May 2021 (SZ)	9.10	Updates Discus pilot qualifications (3.2.4) Updates Cross-Country pilot requirements (3.9d)
3 June 2022 (SZ)	10.1	Corrected minor typographical and format errors (global) Deleted Membership Categories / moved to the Club bylaws (Chapter 1, 1.1 – 1.4.10) Added comment on electronic payments (1.5.5) Clarified operating hours for Club operations (2.1.1) Deleted the acceptance of credit cards at the field & added payment via electronic means and how recorded in the operations log (2.2.2) Updated verification of pilot qualifications (2.2.5) Updated transiting to runway 10 parking (2.5.1) Deleted the Honda ATV for ground towing at KFRR (2.5.2) Clarified parking location for the Gators (2.5.2) Updated operations in windy conditions (2.29, Appendix C) Clarified visitor participation in Club operations (2.10) Deleted references to the Grob-103 (3.2.1, 3.2.2, 3.4.3, 3.8, Appendix A) Added PW-5 Qualifications and Performance (3.2.2, Appendix A) Updated takeoff considerations and deleted obsolete diagrams (3.3) Updated fuel and oil requirements for the Husky (3.4.2) Updated recommended towing speeds (3.4.3) Removed reference to the Tost reel in the Pawnee (2.2.4, 3.4.1, 3.4.6) Clarified use of cameras in flight (3.16) Corrected the link to the Wing Runner training course (Appendix B)
5 March 2023 (SZ)	10.2	Clarified cancellation of operations due to weather considerations (2.1.2)
27 November 2023 (SZ)	10.3	Suspension of flight eligibility of any member for safety considerations. (3.1.8)

30 November 2023 (SZ)	10.4	Removed the special currency requirement to have flown from the field of operations within the past two years (3.1.5)
5 January 2025 (SZ)	10.5	Limited Member practice Premature Termination of Tow (PTT) to instructional flights only. (3.3)
2 March 2025 (SZ)	10.6	Changes to Club pilot currency and interpretation of FAR 61.57 with regard to Club instructor currency. (3.1.5)
25 May 2025 (SZ)	10.7	Removed references to the SGS-136 “Sprite.” (2.3.1, 3.2.2, 3.4.3, 3.8) Codified the requirement to attend the MANDATORY Annual Club Safety Meeting or review the presentation prior to operating Club equipment. (1.5.6)
1 September 2025 (SZ)	10.8	Removed “SGS 1-36 Sprite” general performance speeds from Appendix A General Performance Reference (Appendix A)

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# Introduction

Skyline Soaring Club (SSC) is based at the Front Royal - Warren County Airport (KFRR) in Front Royal, Virginia. The Club operates primarily at KFRR but occasionally conducts operations at other sites as well. KFRR is a public airport, with facilities and local airspace shared with other users. We must maintain a high standard of courtesy, professionalism, and discipline in the air and on the ground. All aspects of operations will comply with Federal Aviation Administration (FAA) Aviation Regulations (FAR's).

## Chapter 1 – Member Qualifications and Key Personnel

All memberships shall be approved by the Board of Directors, provided that, approval may be granted by the Duty Officer for Visiting memberships and by the Membership Officer for FAST and Inactive memberships. See the Club By-Laws for information on the different memberships categories.

### 1.1. - 1.4.10. Information moved to Skyline Soaring Club By-Laws

#### 1.5.1 Medical and Physical Qualifications

Soaring is a sport that requires significant mental and physical competence. Although there is no requirement for glider pilots to have an FAA Medical Certificate, the same general criteria for fitness to fly still applies:

- If you have been treated for any mental or physical disorder in the last three years, you must discuss the reasons with a Club flight instructor before completing an application.
- You must have good eyesight and hearing, and must be able to speak and communicate clearly (in English language).
- You must not have been diagnosed with any condition that interferes with your cognitive ability to consistently follow instructions or exercise sound judgment.
- You must not be taking medications, either over-the-counter or prescription, that could interfere with your ability to fly (for a list of such medications, see <http://www.leftseat.com/medcat1.htm> )
- You must weigh no more than 242 pounds (dressed), this is the maximum allowable weight in the two-seat gliders. Some Club sailplanes have lower weight limits than that which may affect the extent to which you can use all Club equipment.

A Club flight instructor, the Membership Officer, or any member of the Board of Directors will be glad to help you answer any fitness-related questions. Potential Club members who are discovered to be mentally or physically unsafe for flight operations, may be, at the discretion of the Board of Directors, denied membership, and if the candidate has provided false or misleading statements with regard to mental or physical health in order to gain membership, the Club reserves the right to cancel membership and to retain any deposits or payments made. Current members who develop an unsafe medical condition, as determined by the Board of Directors, will be reassigned inactive member status.

#### 1.5.2 Work Commitment

In addition to the timely and full payment of all fees and charges, members are expected to contribute personal labor to the operations and maintenance of the Club and the assets we share. This commitment will typically average 6–10 days per year and be based on member qualifications. Most new members serve initially as Assistant Duty Officers (ADO). All members participate in operations, maintenance, and administrative responsibilities.

#### 1.5.3 Duty Roster

A duty roster with assignments for each scheduled flying day will be established and made available to members via the Club web page (<http://www.skylinesoaring.org>). The Roster will include Duty Officers (DO), Tow Pilots, Instructors, and ADOs for all normally scheduled flying days. Members must monitor the online roster for scheduled assignments. Members are responsible for resolving their own scheduling conflicts and arranging for replacements, if necessary. The member scheduled

for a given assignment is responsible for advising the DO for that day, and the Scheduling Officer, of any substitutions he or she has arranged.

#### **1.5.4 Communication**

Club information is disseminated via various email lists, and through a monthly electronic newsletter, "Skylines". Members are expected to obtain/maintain internet access in order to access the Club web site and receive Club email traffic.

#### **1.5.5 Financial Obligations**

Each member is responsible for settling payments due before leaving the field at the end of each flying day. Verify your flying charges and any other purchases with the Duty Officer (DO) and pay by check before leaving the airfield. If you choose to carry a (positive) credit on account with the Treasurer, it is your responsibility to track the balance, and if the balance is sufficient to cover the entire day's charges, you may direct that the charges be deducted from your account. Cash and credit cards are not accepted, so plan on paying by check. Club dues, and other charges such as hangar fees for members who keep a trailer in club spaces, will be invoiced by email and those charges are due within 30 days of the invoice date, with payment by check mailed to the Treasurer (or handed to the Duty Officer). Any fees for electronic payments are the responsibility of the member making the payment and the Club would not incur any fees for accepting the electronic payment. Accounts more than 30 days overdue will be considered delinquent. A delinquent member may not fly until the account has been settled, and after 45 days the Board of Directors may review the case and consider terminating membership.

#### **1.5.6. MANDATORY Annual Safety Meeting**

The **MANDATORY** Club Annual Safety meeting is usually held in conjunction with the Club Annual Membership meeting, kicking off the beginning of annual scheduled Club operations. Every Club member **MUST** attend the **MANDATORY** Annual Safety meeting or review the Safety meeting video/briefing charts (posted to the Club website) each year before being allowed to operate Club equipment.

#### **1.6 Elected Officers**

Members of the Board of Directors are elected by the membership and manage Club operations. The President, Secretary, and Treasurer are elected by the Board of Directors. See Club By-Laws for details.

#### **1.7 Appointed Officers**

Certain operational positions are filled by appointment by the Board of Directors or its delegates. The Chief Tow Pilot, Chief Instructor, Chief Duty Officer, Membership Officer, and Safety Officer must be Full members. All other roles may be filled by Full, Probationary, Family, Student or Service members meeting the other qualifications and approvals as described below.

##### **1.7.1 Chief Tow Pilot**

The Chief Tow Pilot (CTP) is appointed by the Board of Directors and must meet FAA requirements for towing gliders. The CTP must be a qualified SSC Tow Pilot and should be rated as a Certificated Flight Instructor - Airplane if possible. The CTP may designate CFI(A)-qualified Tow Pilot Instructors, as required, to conduct aircraft checkouts, provide towing instruction, and log necessary endorsements. The CTP shall have the authority to select, train, and recommend to the SSC Board of Directors Tow Pilots who meet the certification, experience, training and currency requirements and who are a Probationary, Full, or Service member. All potential Tow Pilots will be evaluated by the CTP, which may include flight and knowledge evaluation. The CTP shall also have the authority to monitor, evaluate and, if necessary, rescind SSC Tow Pilot status. The CTP will evaluate towing operations and will coordinate with the Board of Directors, the Safety Officer, and the Chief Duty Officer if it appears that operating procedures need to be revised.

##### **1.7.2 Tow Pilots**

Tow pilots must fulfill all Skyline Soaring Club, FAA, and insurance requirements for towing and have an endorsement by the Chief Tow Pilot (or a designated Tow Pilot Instructor) in his or her logbook, in addition to the experience, instruction, and endorsement requirements of 14 CFR Parts 61.31 and 61.69. To begin training as an SSC Tow Pilot, a pilot must have

logged at least 200 total hours flight time in airplanes and have a tail-wheel endorsement. Additionally, the pilot must have logged at least 10 hours of pilot in command time in tail wheel airplanes after receiving a tail-wheel endorsement. All pilots who desire to become SSC Tow Pilots must:

- Complete the Soaring Safety Foundation (SSF) online Tow Pilot Course
- Satisfy the minimum experience requirements required by the current insurance policy in the tow aircraft that they will be qualified in, before acting as PIC during towing operations.
- Complete a Tow Pilot checkout conducted by the SSC Chief Tow Pilot or an SSC Tow Pilot Instructor. Additionally, the Board of Directors must approve all Tow Pilot candidates after recommendation by the Chief Tow Pilot.

### **1.7.3 Chief Flight Instructor**

The Chief Flight Instructor is appointed by the Board of Directors to oversee Flight and Ground Instruction and designate other Club flight instructors. He/she will direct the development and maintenance of a Skyline syllabus of instruction for all student and transition pilot members; participate in the Club's standing Safety Review Committee; coordinate periodic training sessions for Club flight instructors; maintain a confidential summary of student members' Instruction Reports for review by Club instructors; and actively encourage sound training programs for Club flight instructors. He/she must hold appropriate current FAA certification as a flight instructor in gliders.

The Chief Flight Instructor shall have the authority to appoint flight instructors who meet the requirements set forth in Section 1.7.4 and are a Probationary, Full, or Service member. The Chief Flight Instructor shall promptly inform the Board of each new flight instructor appointed.

### **1.7.4 Flight Instructors**

Club flight instructors must meet FAA requirements to instruct in gliders, be a designated Soaring Society of America Instructor (SSAI), and be approved by the Chief CFI. Flight instructors who do not meet the requirements of the SSAI shall be given a waiver for 24 months until they fulfill the requirements for and are designated an SSAI by the SSA. Flight instructors shall provide all flight instruction offered by the Club; follow the Club training syllabus; promote and encourage the members' progress through the entire continuum of the Soaring Society of America/Federation Aeronautique International (SSA/FAI) badge series; maintain currency on training issues promulgated through the Soaring Safety Foundation (SSF) and other sources as appropriate; conduct Flight Reviews under FAR 61.56 and other instructional programs promoted by the Club; participate in periodic Club Instructor's Meetings; and fully utilize the SSC online Student Progress Reporting (SPR) system. Flight instructors are expected to participate in collaborative ventures such as development of training materials and programs for the Club.

Club flight instructors are encouraged to participate in SSF-sponsored Flight Instructor Refresher Clinics (FIRC) for the renewal of their CFI certificates. To promote that activity, the Club shall reimburse each Club instructor for up to \$150 of the registration fee for attending an SSF FIRC, not more often than every other calendar year.

### **1.7.5 Membership Officer**

The Board of Directors will appoint a Membership Officer, who shall facilitate new member recruitment, coordinate demonstration flights for potential new members, and oversee the participation of Introductory Members in Club activities. He shall develop and distribute materials to help new members get established, and generally provide member guidance. The Membership Officer shall have the authority to approve individual written requests for inactive membership status and will promptly notify the Treasurer and Board of Directors of this action.

### **1.7.6 Safety Officer**

The Board of Directors shall appoint a Safety Officer who will assess the flying safety environment and coordinate recommendations with the Board of Directors and appropriate Club Officers. The Safety Officer will develop at least one mandatory safety seminar per year, conduct an annual audit according to Soaring Safety Foundation guidelines, and perform other duties as requested by the Board. When directed by the Board, the Safety Officer will select, convene, and chair a



Special Review Panel to investigate any specific issue or incident which indicates the need to review operating procedures, or to resolve incident-specific problems.

#### **1.7.7 Scheduling Officer**

The Board of Directors will appoint a Scheduling Officer, who shall establish and maintain the duty roster.

#### **1.7.8 Chief Duty Officer**

The Chief Duty Officer (CDO) is appointed by the Board of Directors and shall oversee all Duty Officers and maintain the Duty Officer training program. The CDO will coordinate with the Membership Officer to periodically assess when members should be considered for assignment as Duty Officers or Assistant Duty Officers.

#### **1.7.9 Duty Officers**

Duty Officers (DO's) are appointed by the Chief Duty Officer. DO's must possess a minimum of a Private Pilot Glider certificate, complete the DO Training Program, and demonstrate competency in required DO knowledge and skills. While on duty, the DO is in charge of, and responsible for, all Club ground and flight operations. The CDO will notify the Board and the Scheduling Officer when a member is approved for DO duty.

#### **1.7.10 Assistant Duty Officers**

Assistant Duty Officers (ADO's) are appointed by the Chief Duty Officer. ADO's must have completed the Soaring Safety Foundation online Wing Runner Course, the ADO Training Program, and demonstrate required knowledge and competency in required ADO knowledge and skills. The CDO will notify the Board and the Scheduling Officer when a member is qualified and approved for ADO duty.

# Chapter 2 -- Ground Operations

## 2.1 Operations Scheduling

The Scheduling Officer assigns a full duty crew for each weekend day in the normal flying season, as determined by the Board of Directors.

### 2.1.1 Hours of Duty

The assigned duty crew (Duty Officer, Assistant Duty Officer, Tow Pilot, and Instructor) shall normally arrive at the field by 0800L in order to start operations no later than 0900L (beginning with the Spring Equinox), and 0900L in order to start operations no later than 1000L (beginning with the Fall Equinox), unless prior arrangements are made to start operations at another time. Each member of the duty crew should remain on the flight line during his/her period of duty unless a suitable substitute accepts the responsibilities of the office and remains until their return or until normal close of operations. The Duty Officer will ensure that all gliders have landed prior to official sunset and shall remain at the field until all launched gliders are accounted for at the end of the day.

### 2.1.2 Weather Cancellation

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.

### 2.1.3 Ad Hoc Flying

Members who wish to initiate operations on a day without a full duty crew assigned by the Scheduling Officer (such as weekdays or off-season) may poll the membership to determine if there is sufficient interest. Any such operations on a previously non-scheduled day must conform with all Club rules. Members who choose to run an operation assume responsibility for Club equipment, must ensure that the operations logs for each day are uploaded to the Club web site, and must ensure checks and receipts are sent to the Club Treasurer. When organizing members determine that there is sufficient interest, the flying day will be added to the duty roster schedule, with a minimum of the tow pilot and duty officer positions identified, and notice will be provided to all members by email.

### 2.1.4 Prioritization for Instruction

Members who desire instruction are encouraged to coordinate in advance with the scheduled Duty Instructor, to ensure both the instructor and student are able to prepare for planned flights, and to allow the instructors to manage student workload. Reservations for instruction may be made with the Duty Instructor up to two weeks in advance. Duty Instructors should list any pre-coordinated instruction on the duty roster (under 'notes') and may limit instruction to students who have already coordinated. If the anticipated student load exceeds what can be expected in a normal full day of flying, the Duty Instructor should attempt to recruit an additional instructor. Students who arrive at the field without prior coordination will be prioritized for available instruction by the Duty Officer (after coordination with the Duty Instructor) based on their arrival time at the field. Even if additional instructors are available, the launch queue for instruction will still be managed by the Duty Officer and Duty Instructor.

## **2.2 Duty Officer Responsibilities**

The Skyline Duty Officer Instructions & Checklist (provided by the Chief Duty Officer) establishes a detailed and comprehensive set of instructions for use by Duty Officers. The following information is provided for use by all Club members. The intent is to ensure that all members understand and coordinate ground and flight operations with the DO.

The Duty Officer is in charge of, and responsible for, the smooth, efficient, and safe execution of Skyline Soaring Club ground and flight operations. An SSC qualified Duty Officer will be assigned for all flight operations of Skyline, and no such operation will be initiated except by the Duty Officer. The Duty Officer will not fly when so assigned, and will remain on duty until flight operations are complete and Club equipment securely stored, unless he/she is properly and willingly relieved. For each period of operations, the Duty Officer shall bear responsibility for all club operations other than those strictly under the control of a PIC of an aircraft in flight. During SSC operations the Duty Officer is the Club's sole representative for any discussions with or guidance from the airfield manager, the press, or public safety officials.

It shall be the general duty of the Duty Officer to direct the day's flight operations including, but not limited to, the airworthiness of equipment, the safety of operations, the priority and duration of flights (except where otherwise controlled), the logging of flights, and the observance of FAA, airport, and Skyline rules. The Duty Officer is entitled to take all reasonable steps which he/she feels will promote safety of SSC operations. Specific duties of the DO (assisted by the ADO) include, but are not limited to, those listed in the following paragraphs:

### **2.2.1 Coordination & Communication**

At the beginning of each operating day, the Duty Officer shall notify the Potomac TRACON Supervisor by telephone of the planned start/finish times for glider operations, maximum altitudes expected, and the approximate area of most glider traffic with reference to appropriate local NAVAIDS.

Before initiating operations, the Duty Officer shall conduct a daily coordination briefing with all members of the duty crew and all available Club members. The Duty Officer will brief the critical information individually to members who arrive after the initial briefing. Minimum required briefing items include the following:

- Identification of the assigned duty crew, and volunteer augmenting towpilots / instructors
- Weather, NOTAMS, and facility status for KFRR and logical alternates
- Physiological considerations
- Status of gliders, towplanes, and ground tow vehicles
- Contact information exchange for any glider pilots flying outside safe no-lift gliding distance, and retrieve considerations
- Initial flying line-up
- Review of launch procedures and signals, and critical tow signals
- Emergency actions and Emergency Response Plan
- Responsibility to confirm with Duty Officer the accuracy of logged flight data, and to settle payments

The Duty Officer will determine the active runway for Skyline operations by coordinating with the airfield manager and the duty tow pilot and duty instructor, will continue to verify that the proper runway is in use, and make appropriate changes in the glider operations as needed. When the glider pattern is changed, he/she should notify all glider pilots of the change, including those who are airborne, via radio. Transition between runway ends is an inherently delicate balance between the overriding safety concerns, and the practical need to fit in with other traffic while minimizing adverse impact on Club members. The decision to launch gliders from the currently active end and recover on the other end, versus just ground-towing gliders to the other end for the next launch, is a judgment call left to the Duty Officer after consultation with the airfield manager and the duty tow pilot and duty instructor.

In addition to notifying pilots of changes in the glider pattern, the Duty Officer shall ensure that gliders announce taking the active runway on the radio. Detailed radio operation procedures are included in the Skyline Duty Officer Instructions and Checklist.

### **2.2.2 Operations Logs**

The Duty Officer shall keep, or cause to be kept, an accurate operations log concerning both SSC equipment and member owned sailplanes, including names of pilots, passengers and students, release altitudes, takeoff and landing times, new

member information, payments received, and expenses. This is normally done through the SSC Duty Log software program in the Club laptop computer. It is the responsibility of the Duty Officer to upload the Duty Log file to the Club web site at the end of the day's operations. The Duty Officer is also responsible for mailing members' personal checks (no cash!) covering all flight services, receipts, and membership applications to the Skyline treasurer as soon as possible (within 2 days) after each period of flying activity. If a member plans to pay charges by electronic means, the Duty Officer will log as "account" as payment in the SSC Duty Log software. The member will send electronic payment to the Skyline Soaring Club account. No further action is required by the Duty Officer. As noted in paragraph 1.5.5.: Any fees for electronic payments are the responsibility of the member making the payment and the Club would not incur any fees for accepting the electronic payment.

### **2.2.3 Daily Aircraft Inspections**

The Duty Officer will ensure that all tire pressures on all club ships have been checked, and corrected if necessary, before leaving the hangar area each morning. The Duty Officer will ensure that a preflight inspection has been completed on each club glider (daily inspection and positive control check) by a qualified pilot prior to its first flight. This will normally be performed by the first scheduled pilot for each aircraft.

### **2.2.4 Towropes**

The Duty Officer will ensure that an adequate number of serviceable towropes (at least two per tow plane) are available for the day's operations. He/she will ensure that all towropes are inspected prior to use. Once a tow rope is deemed unsafe for use, the Duty Officer will remove the rope from service, tie a loop in the worn section, put it back on a reel, if possible, place it back in the rope box in the trailer, and send a note to the Ropes Meister about the rope needing attach a note to the rope for repair or replacement.

### **2.2.5 Verifying Pilot Qualifications**

Each Club member is responsible for maintaining awareness of their flight currency status (FAA: 14 CFR § 61.57 – Recent Flight Experience: Pilot in Command) and /or SSC: Operations Manual Section 3.1.5 (Special Currency Requirements) and if not in compliance with the requirements stated in the sections above shall coordinate with a club instructor to become current before flying a club ship solo or with passengers, as appropriate. The Duty Officer shall assist and attempt to ensure that each pilot is authorized to fly the Club equipment he/she plans to use if there is any question of the member's qualifications. This will be done by checking the member's logbook endorsements, SSC training record, and SSA membership (as applicable). The Duty Instructor should work with the Duty Officer to verify solo endorsement currency for student pilots. Final responsibility for pilot qualifications remains with the individual pilot.

### **2.2.6 Aircraft Parking**

The Duty Officer will direct Club aircraft ground traffic and parking. He/she may take steps to keep traffic and parking near the flightline to a minimum. The Duty Officer should arrange the flightline in such a manner as to permit safe landings of tow planes and gliders, as well as safe parking and efficient flow of aircraft on the ramp.

### **2.2.7 Assignment of Wing Runners**

The Duty Officer shall ensure that a qualified wing runner is assigned and available for each takeoff. To be considered qualified, a member must have completed the Soaring Safety Foundation Wing Runner Course, and have received practical training on the KFRR flight line. The DO may rotate this duty among qualified members present when there are sufficient personnel available. The Duty Officer may request that qualified members use the opportunity to train new members. The DO/ADO will monitor takeoff operations to ensure that the standard signals and procedures are used at all times.

### **2.2.8 Water**

The DO shall make drinking water available on the flight line. All pilots are encouraged to drink sufficient quantities before and during flight.

### **2.2.9 Securing Aircraft at End of Day**

The Duty Officer will direct the return of Club gliders and other Club equipment to the hangar or tie-down as appropriate and ensure that the gliders are adequately secured. The Duty Officer will require members to secure hangar doors after movement of gliders from or to a hangar, and will make sure that the hangar is secure (locked) at the end of each flying day.

## **2.3 Reserving Skyline Gliders**

### **2.3.1 Flight Tests and Badge/Record Attempts**

The Club two seat gliders may be reserved for a designated two-hour period for a flight test (checkride).

Reservations for a Discus or the PW-5 may be made for FAI badge/record attempts. Members may reserve a Discus or the PW-5 no more than one day per month and no more than three days per year for badge/record attempts. Reservations will be made by notifying the scheduled Duty Officer no later than 2100L on the evening before the reservation day.

The Club Nano electronic data recorder may be reserved in advance for badge/record attempts. Reservations will be made by notifying the scheduled Duty Officer no later than 2100L on the evening before the reservation day. When not in use, the flight recorder remains at the field and under the control of the Duty Officer, plan ahead to allow time for charging before use, recharging after use, and downloading of data log files at the field.

### **2.3.2 Guest Flights**

Members may reserve any of the Club two-seat gliders for a one-hour period on days of scheduled Club operations, for the purpose of flying guests (provided the member is qualified and current). The purpose of this privilege is to permit members to fly a guest without having to be the first person at the field to establish position in the launch queue, making it possible for them to escort their guest to the field. Each member is limited to one guest flight reservation per calendar quarter. Members wishing to reserve a Club ship should contact the Duty Officer directly no later than 2100L on the evening before the reservation day. Reservations are permitted for one hour increments between 1200L and 1500L hours (e.g., for 1200-1300L; 1300-1400L; 1400-1500L). The pilot must arrive at the airport at least 15 minutes before his/her scheduled start time. Failure to do so will cause the reservation to be canceled. Multiple flights during a pilot's allotted time are permitted.

Pilots should plan to land by 50 minutes of flight time in order to permit the glider to be returned to the launch point for the next pilot by one hour after takeoff. This rule may be waived by the DO when there are no other pilots waiting to use the ship.

The Duty Officer shall administer the schedule in accordance with Club operating procedures pertaining to duration of flights in Club ships, priority for use of Club ships, etc., and shall have the authority to adjust the schedule as conditions warrant.

Reservations for guest flights shall defer to reservations for flight tests and badge/record attempts, as described below.

## **2.4 Launch Sequencing**

The Duty Officer is the final authority on the establishment of tow priority and all decisions concerning launches.

The Duty Officer will maintain a takeoff priority list. It is the responsibility of the individual pilot to add his or her name to the list upon arrival at the airport on the day of the operation, and to record the time of arrival. This is a list of priority for tows and not necessarily an order for takeoff. Pilots are expected to be in their glider, in position at the staging area, by the time the tow plane is ready to take the active runway for the next tow. If they are not ready, the Duty Officer should coordinate to stage the next glider in the launch queue in their place. Pilots (including students) who wish another flight will be sequenced using their last landing time instead of their arrival time at the field. Exceptions to the normal launch sequence priority include the following:

- (a) A pilot declaring an FAI badge leg or record attempt may exercise a single priority for tow.
- (b) Members taking FAA-required Practical Examinations shall have priority for equipment at any time the examiner or DPE is available for the flight(s).

(c) On Saturdays, Sundays, and legal holidays before 12:00, student pilot club members will have priority for tows and use of Club gliders. Instructional student flights will have priority over solo student flights. Duty Instructors (DI's) will manage the sequencing of instructional flights during this time period, keeping the Duty Officer (DO) properly advised. Duty Instructors are encouraged to pre-plan the student-priority period to promote maximizing the limited time allocation.

(d) An aborted launch due to no fault of the glider pilot (e.g. actual or simulated rope break) will entitle the pilot to an immediate relaunch provided he/she lands promptly after the abort.

## 2.5 Vehicles

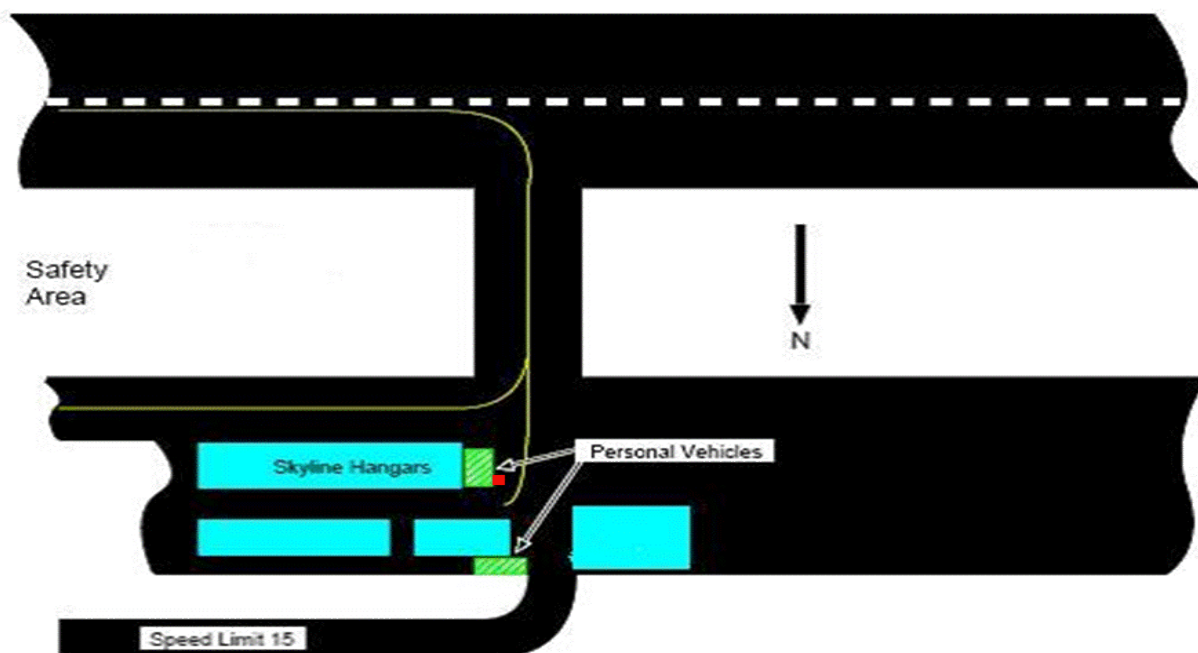
The final authority concerning the use of vehicles on airport property is the airfield manager, acting under the authority of the Warren County Airport Commission. The maximum speed for any ground vehicle anywhere on the airport is 15 mph, and no vehicle may be left with the engine running unless the driver is at the wheel. Any vehicle on the taxiways (or runway) must have a VHF transceiver and monitor the airfield frequency (a handheld radio will suffice). Be prepared to clear the taxiway immediately if it is needed by a med-evac helicopter or needed by a glider as a last resort for landing.

### 2.5.1 Parking

Parking for Club members and guests is normally in the main parking lot on the east side of the airport terminal. For Runway 10 operations, Club members with at least a student pilot certificate and are experience driving on the taxiway may drive on the taxiway to the Runway 10 parking area. Guests and Club members without a minimum of a student pilot certificate will need to drive around the north side of the airport and enter at the gate near the end of Runway 10 and park in the small parking area west of the taxiway. There is a key to the gate in the DO computer bag and in the hangar key lock box.

Club members may also park their cars close to the west end of the Club hangar spaces, well out of the way of any aircraft that may need to taxi, as indicated by the cross-hatched area in the following diagram. Limit parking in this area to no more than four vehicles side by side, extending no further from the hangar than the red or white squares painted on the ramp. This will typically allow at least 8 vehicles if parked without wasting space. Under no circumstances should any vehicle ever be parked unattended in front of any hangar. No vehicle may be left unattended (driver not at the controls) with the engine running. Member glider trailers may also be parked at the end of the hangars for the purpose of assembly/disassembly of gliders, but shall be positioned so as not to interfere with other airport operations.

With the consent of the Duty Officer, Club tow pilots and/or instructors may park inside the Club hangar in the spaces where Club aircraft have been removed. It is imperative that keys be left in any cars parked inside the hangar. No exceptions!



## 2.5.2 Ground Towing

Only Club tow vehicles (or vehicles designated by the Duty Officer) shall be used to move Club gliders on the ground. The Gators shall be driven on the taxiway to and from the hangars. Never drive these vehicles on the auto access road. When not in use, these vehicles should be parked in front of the terminal building or in the grass on the edge of the ramp/taxiway closest to the ops area. Owners of private gliders may optionally use their own vehicles for moving their gliders, with prior approval of the Duty Officer after coordination with the airfield manager, but must return their vehicles promptly, via the auto access road, to the normal parking area(s) after completing the move. The taxiway should not be used for automobile travel without a glider in tow — if you need to move between the hangar and the staging area, drive on the auto access road. Vehicles should never be driven on the runway or on the runway-side of the hold-short lines, unless necessary to resolve a safety-of-flight issue, and then only after coordination with the Duty Officer.

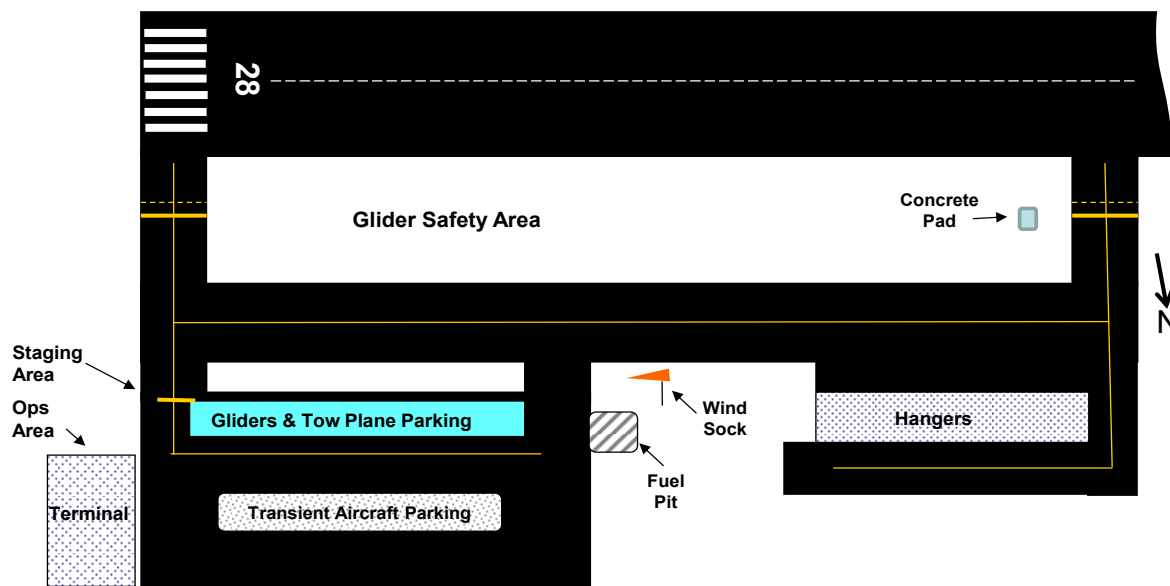
## 2.6 Minimizing Runway Incursions

In the interest of expeditious traffic flow, the Glider should be prepared for flight prior to entering the runway. When possible, pilots should strap in and perform pre-takeoff checks at the glider staging line. The glider can then be pushed into position by other members designated by the Duty Officer. Launch preparation on the runway should be kept to a minimum. If a problem is recognized which will delay the launch, consider removing the glider from the runway for re-staging. The Duty Officer will ensure that a pattern of delays does not develop and that minimum time on the runway is observed.

All personnel involved in staging a glider must be vigilant for aircraft traffic in the air or on the ground and ensure that a glider is not moved into position on the runway until it is safe to do so. The radio in the glider will be turned on and used to announce entry onto the runway and to assist personnel in clearing for other aircraft traffic.

## 2.7 Operations Area, Runway 28

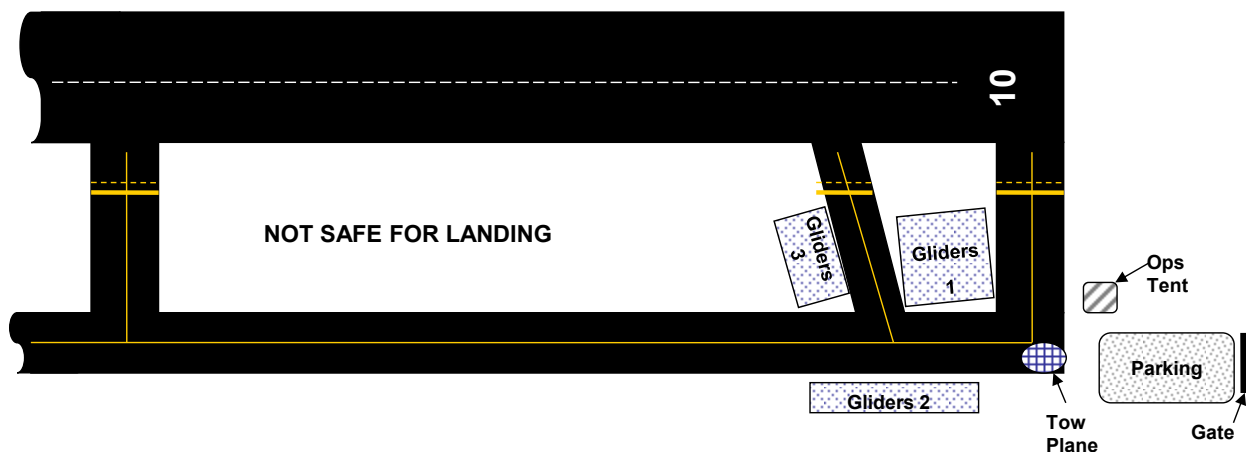
Runway 28 is the preferred no-wind runway. It will be used for operations unless weather conditions (wind) dictate otherwise. The safety area, which is the grass area between the runway and taxiway east of the mid field taxiway, provides an alternate glider landing area if the runway is occupied. If you need to use the Safety Area, plan to land and stop before crossing the mid-field taxiway, and avoid the concrete pad that remains just East of the taxiway.



Towplanes (and all other power aircraft) should enter and exit the main parking ramp by the entrance nearest to the fuel pit, and avoid use of the area between the terminal and the East end of the main taxiway – airfield management wants to keep the glider staging area free from power traffic to the maximum extent practical.

## 2.8 Operations Area, Runway 10

Gliders will normally be parked between the two short cross-taxiways near the end of runway 10, no closer to the runway than the hold lines. If there are more gliders than can fit into "Gliders 1" then the additional gliders they should then be placed into location 2 then location 3. If gliders or the towplane are blocking the end cross-taxiway and power traffic approaches on the main taxiway for takeoff, be prepared to make a radio call to the taxiing aircraft to determine if the pilot can accept taking the runway from the angled cross-taxiway.



## 2.9 Operations in Windy Conditions

The Duty Officer has the primary responsibility for deciding when the weather has become too hazardous to continue flying or is unsuitable for starting operations. The Duty Officer will coordinate this decision with the Duty Tow Pilot and Duty Instructor. If the Duty Officer or the Duty Tow Pilot or the Duty Instructor considers it hazardous to continue, operations shall be terminated. The Duty Officer will ensure the following rules are observed to help protect the aircraft from wind damage:

- (a) Sailplane tail dollies shall be removed any time a glider is left unattended, and wings should never be allowed to overlap, in case weather-vaning causes a glider to rotate.
- (b) Sailplane spoilers will be secured open any time winds exceed 10 knots, and wings will be weighted with shot bags. Tow plane parking brakes will be set any time winds exceed 10 knots.
- (c) Operations with wind speeds or gusts above 15 knots require a person on each wing tip of any Club glider unless it is tied down.
- (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. Refer to the wind charts at Appendix C for wind limits.
- (e) Quartering tail winds of more than 5 knots, particularly with high performance gliders and/or gliders with CG tow hooks, often cause directional control problems and require particular caution by glider pilots and their wing-runners.

## 2.10 Visitor Control

The DO and ADO shall ensure that visitors are properly briefed and supervised. The Duty Officer is responsible for ensuring that ONLY people required for aircraft operations are allowed on the runway and taxiways. Supervision of children is a



must! All children at Skyline operations who are not family members or student pilots shall be under the direct and constant supervision of an adult member of Skyline Soaring.

Because of Club insurance requirements, non-members must be supervised by Club members when ground handling gliders. Non-members may not drive the ground tow vehicles when towing a Club glider.

All pets shall be on a leash or in a cage while at any Skyline flying operation.

# Chapter 3 -- Flying Operations

## 3.1 Flight Eligibility

### 3.1.1 Field Orientation

A member may not fly a Club aircraft as Pilot in Command (PIC) without a field orientation flight with a Skyline instructor at the location where the flight is to be made. The instructor will ensure the field orientation includes a discussion of local operating procedures, Club operating rules, and local area features such as terrain, airspace, and weather.

### 3.1.2 Pilot in Command Authorization

A member may not fly a Club glider as Pilot in Command unless he/she has been checked out by a Skyline instructor for the specific type aircraft, documented by an endorsement in the member's logbook. Approval to fly a Club single place glider shall require flight instruction in a two place glider of similar performance or prior solo experience in type, a cockpit check, and Skyline instructor endorsement for solo flight.

### 3.1.3 Back Seat Endorsement

A member may not fly a Club two-seat glider as Pilot in Command from the back seat, unless he/she has been checked out by a Skyline instructor for the specific type aircraft, documented by an endorsement in the member's logbook.

### 3.1.4 Student Solo Flight Endorsements

A Skyline-approved glider instructor must be present at the airfield for all student or transition pilot solo flights. For the purpose of this paragraph "present" is defined as being on the ground at the airfield, or flying in the local area, and the instructor must have discussed with the student or transition pilot what the intended flight profile will be, prior to the flight.

### 3.1.5 Special Currency Requirements

Members may not fly a Club glider unless they have performed at least three takeoffs and landings in a glider within the last 90 days. If a pilot does not meet this special currency requirement, the member must fly with a club-approved instructor in a glider and be signed off as having accomplished a 'currency flight'. That will satisfy the club special currency requirement for another 90 days. Normal FAR 61.57 currency requirements for carrying passengers ("persons") still apply. As an exception, permitted by FAR 61.57(e)(5), non-landing-current club glider instructors may fly with glider-rated pilots for the purpose of re-establishing their club special currency, allowing that pilot to then fly additional flights in a club glider without an instructor (if cleared).

Tow Pilots may not tow gliders using a Club towplane unless they have performed at least three takeoffs and landings in an airplane within the last 90 days. If they are otherwise current according to FAR 61.57 (Pilot in Command) and FAR 61.69 (Towing), but have not performed at least three takeoffs and landing within the last 90 days, they may perform up to three takeoffs and landings to regain Club currency prior to commencing scheduled operations as the Duty Tow Pilot (on the day of scheduled duty, and prior to scheduled first glider launches).

### 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.

### 3.1.7 Radio Required

The Duty Officer will ensure 'Skyline Ground' monitors KFRR CTAF frequency 123.0 and glider common frequency 123.3 at all times. Gliders and towplanes should use 123.0 (CTAF frequency) when on the taxiways or the runway, and when in or approaching the pattern. Gliders and towplanes should use 123.3 for two-way communications with Skyline Ground which are not essential to airport traffic. Skyline Ground should only transmit on 123.0 for genuine safety-of-flight purposes. Any

Club member or visiting pilot, whether flying a Club glider or private glider, must have on board (and use) a fully functioning VHF aviation-band transceiver. A hand-held radio will suffice. A successful radio check with the tow pilot is required before every takeoff.

### **3.1.8 Flight Eligibility Suspension**

The Safety Officer or the Chief Flight Instructor may suspend the flight eligibility of any member, if appropriate for safety considerations. As soon as possible after the initiation of the suspension, the suspension authorities will agree on a course of action, such as remedial training, to restore the member's flight eligibility. The suspension authorities will inform the member of the suspension and prescribed course of action; they may also inform other relevant parties as necessary, such as the Duty Officer(s) for upcoming flight operations. The Chief Flight Instructor may delegate the remedial training to another instructor.

## **3.2 Specific Glider Requirements**

### **3.2.1 ASK-21**

The ASK-21s are intended for primary instruction and pleasure flying. Their use is open to all members. These gliders are also intended for advanced training, e.g., preparation for cross-country soaring. If the member pilot has no experience in type or in a similar glider, a minimum of three dual flights with a Skyline instructor will be required before solo or PIC operation.

### **3.2.2 PW-5**

The PW-5 Smyk (Polish for: "Little Rascal") is intended for member pleasure flying (including cross-country soaring for qualified member pilots) and student supervised solo flying. Solo students will be transitioned to the PW-5 after dual instruction in the ASK-21. Pilots that do not hold a glider rating on their certificate must have at least three solo flights in a Club ASK-21 prior to flying solo in the PW-5. A cockpit briefing and signoff by a Skyline instructor is required for all members prior to flying as Pilot in Command. The maximum flight time charged for the PW-5 on a single flight shall be three hours.

### **3.2.3 DELETED**

### **3.2.4 Discus CS**

The Discus CS is intended for member pleasure flying (including cross-country soaring for qualified member pilots). The minimum requirements for flying the Discus CS are: be a SSC Probationary, Full, Student, or Family member; Glider Private Pilot certificate; meets SSC currency requirements; six Pilot in Command flights in a glider in the previous 90-days preceding the checkout flight; pass the SSC Discus written test; and "check ride" in a Club two-seat glider with the Club instructor that is providing the sign off; an endorsement in the member's logbook by a Discus-qualified Club CFI that he/she has received ground instruction in the operating characteristics and control systems of the glider and is deemed proficient for safe flight.

#### **3.2.4.1. Discus CS Assembly**

A minimum of two individuals are required to assemble and disassemble the Discus.

## **3.3 Takeoff Considerations**

Front Royal operations present a unique challenge for towed glider takeoffs. The lack of good landing areas off either end of the runway requires us to be especially vigilant. We can accept tail winds up to about 5 kts; however, the pilots of both the glider and the tow plane must be in agreement as to what is acceptable. Local thermal activity will often cause the windsocks at opposing ends of the runway to be in disagreement.

The most critical consideration is the initial climb from a point where the Glider can no longer abort and land straight ahead, to about 150 ft above the departure end of the runway. The minimum altitude for initiating an intentional (practice/training) simulated rope break / Premature Termination to Tow (PTT) is 200 ft AGL. Members may not practice a PTT without a club instructor on board the aircraft. The instructor pilot (or PIC) will coordinate with the Duty Officer prior to initiating an intentional PTT.

When operating in high temperatures (density altitude exceeding 3000 ft), the Tow Pilot should endeavor to stay within reach of the runway until reaching an altitude of about 1500 ft MSL (800 ft AGL). The Crosswind turn may be either to the left or the right depending on the wind, and other traffic.

### **3.4 Tow Procedures**

The Skyline Tow Pilot Manual (See appendix XXXX) provides a detailed and comprehensive set of instructions for use by Club tow pilots. The Chief Tow Pilot shall maintain the Tow Pilot Manual. The following information is provided for use by all Club members, so as to better understand and coordinate with towing operations. The Tow Pilot is responsible for the safety and proper operation of the tow plane and launch operations. The Tow Pilot shall not leave the pilot's seat while the prop is turning.

#### **3.4.1 Tow Plane Inspection**

The Tow Pilot is responsible for a thorough preflight inspection of the tow plane. The Tow Pilot must refuse to fly the aircraft if he/she considers the operation hazardous for any reason.

#### **3.4.2 Fuel and Oil**

Fuel and oil should be sufficient at the start of operations to minimize the necessity of refueling during the primary flying hours. When the fuel quantity has been reduced to one quarter full, the tow plane shall be refueled. The oil level of the Husky should be maintained between six and **seven** quarts. The oil level in the Pawnee should be maintained between eight and nine quarts. The Tow Pilot will ensure to the maximum extent possible that the fuel tanks are appropriately filled before the tow plane is returned to the hangar for the night, in order to reduce the accumulation of condensation in the tanks and reduce the workload at the beginning of the next day of operations.

#### **3.4.3 Towing Speeds**

Since each type of glider has its specific best towing speeds, it is essential that the Tow Pilot be aware of which type he/she is towing at all times and observe the proper towing speed. In general, gliders of low wing loading (e.g., 1-26) should be towed at 63 MPH IAS (55 KIAS). All others (e.g., ASK 21, PW-5, Discus, and Private fiberglass gliders) should be towed at **75 MPH IAS (65 KIAS)** or higher if requested by the glider pilot, as may be the case when water is carried. At no time should prolonged towing below 63 MPH IAS (55 KIAS) be conducted.

#### **3.4.4 Towing Area**

Unless otherwise requested, Tow Pilots will maneuver so as to be on the upwind side of the field on reaching the altitude of expected release, and remain in the vicinity of the field during the entire tow. Additionally, Tow Pilots will comply with noise abatement procedures established by the CTP and/or the Board.

#### **3.4.5 Turning on Tow**

The primary requirements of the towing operation are to maintain a correct and consistent attitude, and to avoid maneuvers or attitudes which are inconsistent with the experience of the glider pilot. Unless a fully experienced pilot is in the glider, turns should be restricted to bank angles of twenty degrees. With students on tow, turning should be held to the minimum consistent with safety.

#### **3.4.6 Towrope during Landing**

The landing approach shall be made so as to avoid dragging the towrope over any obstruction. The rope shall be dropped in the clearway short of the runway. The Duty Officer or an assistant should confirm that the towrope has been dropped, as appropriate, and advise the tow pilot, via radio, prior to landing if it has not. The Tow Pilot shall avoid taxiing over the towrope, especially on hard surface runways

### **3.4.7 Aero Retrieves**

An aerial retrieve will be initiated only after the Duty Officer and Duty Tow Pilot determine that it will not interfere with normal towing schedules, and when it is certain that the retrieve can be completed before dark. Priority for aerial retrieve of Club equipment may be given if it appears in the best interest of most Club members present. The Duty Officer makes the final decision on this priority. Aerial retrieves will only be made from published airports. The PIC will be charged an aerial retrieval fee (see SSC fee schedule). A Skyline Tow Pilot is the only person who may perform an aerial retrieve of a Club ship.

### **3.4.8 Launches to Signal Knob**

When departing to the northwest, the Tow Pilot must be particularly watchful of turbulence along the east slope of the Massanutten Ridge. It is best to approach Signal Knob from the northeast at the end of the ridge. If requested by the glider pilot, the tow pilot may transition to a cross country tow configuration, or climb at reduced power, to avoid climbing above 1000 meters (3281 ft) AGL for badge flight attempts. The recommended release point is at about 3700 ft MSL along the west slope of the ridge.

## **3.5 Ridge Flights and Orientation**

Ridge familiarization flights on the Massanutten Ridge will include briefing considerations for avoiding hang glider traffic and the Woodstock launch area. Remain well clear of their launch area and associated observation tower. Another hang glider launch area exists on the western slope of the Blue Ridge near the parking area along Skyline Drive, adjacent to the Linden VORTAC. Plan to return from Signal Knob from an altitude of at least 3000 ft MSL. Note that trees will block the view of the runway at this altitude and identification of the airport will be difficult. From Signal Knob, the Front Royal airport is approximately on a 140 degree bearing.

## **3.6 Duration of Flights**

Flights in the two place Club gliders are normally limited to one hour, and flights in assembled single place Club gliders are normally limited to one and one-half hours. Club aircraft that normally require assembly prior to flight do not have a time limit. The Duty Officer may reduce this time if, in his/her judgment, the waiting list is abnormally long. He/she may also increase this time provided that such action will not deny any member use of the sailplane. The Duty Officer will notify aircraft by radio if they need to land early or are exceeding their time. Pilots of airborne Club aircraft must confirm with the DO by radio before extending flights beyond the published limit.

## **3.7 Returning to Front Royal Airport**

Plan all local flights to return to within one nautical mile of the field at a minimum altitude of 2000 ft MSL (1300 ft AGL), in a position for normal pattern entry. Do not attempt to work lift over the airport or traffic pattern at an altitude less than 2000 ft MSL (1300 ft AGL).

## **3.8 Traffic Pattern**

The airport management has established, as standard and published practice, that powered aircraft (including the tow plane) will fly left traffic and gliders will fly right traffic. Patterns should be planned to be at 1,500 MSL (800 AGL) abeam the touchdown point. The normal traffic pattern airspeed is 55 indicated (knots in the ASK-21 Discus, and PW-5), or 50 plus half the maximum wind (including gusts), whichever is greater, until established on final and landing is assured, at which point the POH-recommended final approach speed may be used (adjusted for winds).

Radio (KFRR Unicom 123.0) shall be used to monitor traffic and announce all pattern entries. Be sure to include the phrases “glider” and “right traffic” (in some form) in radio calls for all glider patterns. If flying a retractable-gear glider, include a “gear down and locked” call as part of every traffic pattern transmission.

Normal landings will be planned on the main runway to roll out straight ahead and stop on the centerline abeam the midfield taxiway. If the main runway is not available due to a traffic conflict, the safest alternative may be landing in the grass Safety Area between the runway and the main taxiway, East of the midfield taxiway. When landing in the grass Safety Area from the runway 10 direction, plan an early turn to base accordingly and plan to land after crossing the midfield taxiway, and avoid

the concrete pad that remains in the grass. Although primarily used by gliders, this grass safety area may occasionally be used by powered traffic (typically taildraggers practicing grass field landings).

If the main runway is not available and the Safety Area is not available, and delaying the landing is not an option, gliders will need to be creative. One solution may be to talk to other landing traffic (especially if gliders) and land in sequence on the runway or grass safety area. In this manner, three gliders may land on the runway, one long, one midfield, and one short field. Similarly, two may land safely on the grass landing area. If this technique is to be used, radio communications between pilots to agree on the plan is essential.

Another solution is to land on the main taxiway. If this is necessary, use the radio to clearly announce the intention to all aircraft and ground traffic, and ask the Duty Officer ("Skyline Ground") to assist in keeping the taxiway clear.

### **3.9 Cross Country Flights**

Any flight in a Club glider which requires atmospheric lift to return to the appropriate traffic pattern of the takeoff airport is, for the purposes of this section, considered to be a cross country flight. Except for flights with a Club Instructor in the aircraft, all cross country flights in a Club glider must be authorized in advance by a Club Flight Instructor. The member pilot must also meet the following requirements:

- (a) The pilot must hold a current Private Pilot Glider (or higher) certificate, must have logged at least 15 hours and 50 flights in gliders, have earned the Bronze Badge (or higher badge's distance leg), have been approved by a Skyline instructor for cross country flight, and have made a landing in a glider on more than one field.
- (b) The pilot must demonstrate adequate preparation for the cross country flight to a Skyline instructor on the airport at the time of the planned flight.
- (c) The pilot must establish with the Duty Officer that he/she has firm arrangements for a competent retrieve crew and an adequately equipped retrieve vehicle. The pilot must return the sailplane to the glider hangar, tie-down, or flight line as appropriate in time for the next scheduled flight, or on the morning of the day subsequent to the cross country flight, whichever is earlier. Reassembly (of a normally assembled glider) is the responsibility of the cross country pilot.
- (d) The pilot must have an endorsement in the member's logbook by either a Club CFI or a non-CFI Club member who is experienced in the assembly/disassembly of the glider to be taken cross-country and use of the trailer that he/she has performed those tasks under supervision and can perform those actions unsupervised.

### **3.10 Aerobatics**

Aerobatics in Club gliders are not allowed except:

- (a) By Club-approved CFIG Aerobic Instructors for the purpose of maintaining aerobatic proficiency;
- (b) For dual instruction in aerobatics for Club members by a Club-approved Aerobatic Instructor;
- (c) For spin training required by the FARs for flight training purposes.

All Club-approved CFIG Aerobic Instructors must be approved by the Board of Directors, based on the recommendation of the Chief Flight Instructor. Aerobatic instruction will be conducted according to guidelines in the Skyline Aerobatics Guide. All aerobatic flight in Club gliders shall be conducted in strict compliance with the applicable FAR's (14 CFR 91.303) and only after coordination with the FBO of the operational site where the flight(s) are conducted.

### **3.11 Oxygen**

Members may not fly Club aircraft above 12,500 feet MSL without use of an approved oxygen system and must have a logbook entry signed by a Skyline Soaring Club instructor documenting training on the oxygen system to be used. The club oxygen system will normally be kept in the hangar in its dedicated case and may be reserved for use by any Club member (if properly trained) by contacting the Duty Officer. If use of the oxygen system results in the cylinder pressure falling below 1800 psi (bottom of the green arc), it will be the responsibility of the member to take the cylinder and have it

refilled to 2200 psi (top of the green arc, or as close to that as the fill station is able to provide), and returned to the hangar by the beginning of scheduled flying operations the following weekend. The cost of the oxygen refill will be reimbursed by the club (contact the Treasurer), for all operations of Club gliders at KFRR (but not at wave camp or other off-site deployments).

## **3.12 Skyline Wave Window Operations**

### **3.12.1 Advance Notice**

Skyline Soaring is responsible for coordinating the times of the intended use of the authorized area with the Washington ARTCC operations manager in charge by telephone at (703) 771-3470 at least two (2) hours in advance of anticipated use of the wave window (see Appendix D) and must leave a phone number where a Skyline representative can be contacted during authorized use of the area.

### **3.12.2 Entering and Leaving the Wave Window**

Skyline Soaring Club shall receive final approval from Washington ARTCC prior to entry into the authorized wave window on 133.2 or via telephone (703-771-3470). Upon leaving the authorized area (i.e., descending below FL 180), Skyline Soaring Club shall advise Washington ARTCC when the authorized area is clear of glider aircraft on 133.2 or via telephone (703-771-3470).

### **3.12.3 Termination of Wave Window Ops**

When all wave window operations are completed on any given day, the Duty Officer must advise Washington ARTCC as soon as possible via telephone (703-771-3470).

## **3.13 Planned Offsite Operations**

Skyline Soaring occasionally plans and conducts offsite events that include flying operations, such as ‘away days’ or deployments to wave camps, or in support of activities organized by the SSA or other clubs, including competitions.

Any proposed offsite operation will be identified in advance to the Board of Directors, a volunteer project officer will be designated to conduct detailed planning, and interim approval of the concept is required prior to beginning detailed planning or negotiating details with offsite event coordinators. When substantive details are known, the project officer will present the proposal to the Board of Directors for final approval. Factors which must be considered include:

- Proposed dates of the event
- Proposed participating members
- Club assets that will be relocated, and what means of transportation will be used
- Probable financial arrangements – especially any requirement to expend Club funds in excess of revenue
- Means by which operations will be recorded, and logged into the Club ops log software
- Any exceptions to normal Club operating rules, whether more restrictive or less restrictive – for example, limits on student solo flights, or higher limits on winds (as in wave camp ops), or local rules which conflict with club rules

## **3.14 Emergency Action Plan**

The Club has an established Emergency Action Plan, developed in coordination with the fixed base operator, to provide guidance to members in the event of any accident or incident involving Club members or Club aircraft. All members are required to become familiar with the EAP.

### **3.15 Responsibility for Damage**

#### **3.15.1 Damage Reports**

It is the responsibility of the Skyline member serving as Pilot in Command when any damage occurs to promptly report that damage to the Duty Officer and directly or via telephone to the President or the designated maintenance officer, as well as the proper authorities, if necessary. A written report must be sent to the President within seven days. This applies to all accidents occurring at Club facilities whether in flight or on the ground.

#### **3.15.2 Accident Investigation and Financial Responsibility**

The Board of Directors will investigate all cases of damage to Club equipment. The Board shall be obliged to find the Pilot in Command financially responsible (up to \$2,000) for damage if evidence indicates that the Pilot in Command has been negligent. (The PIC may be found negligent if a breach of FAA, airport, or Skyline rules is found to have contributed to the cause of the damage or if the Board finds that the member was otherwise negligent.) Any damage resulting from an off-field landing is the PIC's financial responsibility up to \$2,000. Any member who operates a club aircraft as pilot in command when not in compliance with FAA: 14 CFR § 61.57 – (Recent Flight Experience: Pilot in Command) and /or SSC: Operations Manual Section 3.1.5 (Special Currency Requirements) shall be personally responsible for 100% of any physical damage to said aircraft and any civil liability arising from such operation.

#### **3.15.3. DELETED**

### **3.16 Use of Cameras**

Externally mounted cameras may not be affixed to any Club gliders or towplanes. Cameras on selfie sticks shall not be extended out of the canopy vent window at any time. Internally mounted cameras may be temporarily installed but no modifications may be made to the aircraft, and it is the responsibility of the pilot to ensure that the unit is properly secured and will not interfere with safety of flight or safety of the occupants. Any damage resulting from camera use will be the responsibility of the pilot. Do not attempt to use a hand-held camera and fly a club aircraft at the same time. If a camera becomes dislodged (falls) from its fixed point during the tow, landing pattern, or other critical portion of the flight, the PIC should not attempt to retrieve or fix it until the critical flight period is over. Care should also be taken to ensure no camera or other device may fall into the foot wells where it may potentially interfere with rudder pedal operation.

### **3.17. Spin Training**

Spin training may be conducted with the Club's spin kit equipped ASK-21 N321K. Spin training will ONLY be conducted with a Skyline Soaring Club instructor certified to conduct spin training in an ASK-21. Spins may be demonstrated and practiced after solo but before a checkride, if desired, or may be flown at any time by rated pilots (with an SSC certified instructor). Members wishing to complete spin training should study N321K's POH (including Technical Note 4B) for spin description, entry and recovery procedure restrictions, and spin kit details. Additionally, the member must review the Spin Training Task in the Student Syllabus. Members and instructors MUST complete a weigh-in on the day of flight at the airfield, as dressed for flight (A scale is provided as part of the Club's spin training kit). Parachutes may be worn at the discretion of the pilot and instructor but are not required. If worn, they must be worn during the preflight weigh-in. Glider CG will be computed to determine the number of spin kit disks to install to achieve 73% aft CG (16") without exceeding maximum allowable gross weight. In general, to begin a spin, tow to at least 4,000 feet AGL (5,000 feet AGL is preferred) to allow for multiple spins. Typical altitude loss per turn in the ASK-21 spin is 200 to 250 feet. Typical altitude loss during recovery from a spin in the ASK-21 is less than 300 feet from initiation of recovery through return to normal flight. MINIMUM altitude to initiate spin recovery is 2,500 feet AGL. After spin training has been completed, the spin kit will be removed from the glider and the spin kit safety "diaper pin" will be returned to the stud on the forward cockpit instrument panel.



## Appendix A

### General Performance Reference

For reference only! Refer to POH for safety-of-flight data.

Glider	Stall	Stall w/brakes	Min. Sink	Rec Appch	Best <i>L/D</i>	Vne	Max Aero Tow	Va	Max Crosswind
ASK-21 Dual	40 kts	42 kts	42 kts	49 kts	34 @ 50 kts	151 kts	97 kts	97 kts	
ASK-21 Solo	35 kts	37 kts	37 kts	49 kts	34 @ 48 kts	151 kts	97 kts	97 kts	
PW-5	26-31 kts	30-36 kts	42 kts	51 kts	32 @ 48 kts	121 kts	81 kts	81 kts	12 kts
Discus CS	31 kts	34 kts	42 kts	51 kts	43 @ 54 kts	135 kts	97 kts	108 kts	11 kts

# Appendix B

## Wing Runner Overview

Wing Runners must have completed the Soaring Safety Foundation's online Wing Runner Course (<http://soaringsafety.org/school/wingrunner/toc.htm>), and must have completed practical training under the supervision of a Club DO, ADO, or Instructor. The following is a summary of what is expected of a Wing Runner during the course of a typical launch:

### B.1 Responsibility

The Wing Runner fulfills a critical role in every glider launch, to include supervision of the movement of the glider onto the runway and correct positioning, hookup of the towrope, confirmation of critical checklist item completion, passing signals for taking up slack and for launch, and helping to stabilize the glider during the first few seconds of the takeoff roll. Before the glider is pushed onto the runway, it should be clear who the designated Wing Runner is, and that person should remain in control of all launch assistance. Once the glider is hooked up, all other personnel should be clear of the runway unless being instructed in Wing Runner responsibilities.

### B.2 Assisting Pilot

The Wing Runner assists with the shoulder harness, and then, only after the pilot is fully ready for hookup, connects the towrope. If possible, glider pilots should be strapped in and ready to fly before the glider is pushed onto the runway (manpower permitting). It is important that the wing runner avoid rushing the pilot's preparations, because this can lead to a potentially dangerous oversight. It is much better to start getting ready a little earlier. The wing runner should ask the pilot if he/she has performed a positive control check and should ensure that the tail dolly, if applicable, has been removed. Note: The Duty Officer shall direct the glider pilot in the lead glider to be ready for launch before the tow plane lands from its previous tow.

### B.3 Takeoff Sequence

After connecting the towrope, the wing runner shall station himself behind the spoilers of the left wing, where he is visible in the towpilot's mirrors, and in position to confirm that the canopies are closed and latched. After confirming that the glider pilot is ready, the wing runner signals the tow pilot to take up slack by swinging one arm, extended downward in front of the body, continuously in a wide arc. As the towplane pulls forward, the wing runner shall move to the left wingtip of the glider. When all the slack is removed, the Wing Runner will pass the hold signal (arms held horizontal). After the wing runner has confirmed that the traffic pattern is clear, spoilers are closed and locked, canopies are closed and locked, and tail dolly has been removed, the Wing Runner will advise the pilot that the pattern is clear. Then, the glider pilot signals the wing runner to level the wings with a thumbs-up signal. After the sailplane pilot gives the begin-takeoff signal (sailplane rudder waggle), the wing runner then gives the begin takeoff signal by rotating the same arm in a full circle, and continuing this motion until the tow plane acknowledges with a rudder waggle, and takeoff is started.

### B.4 Stopping the Launch

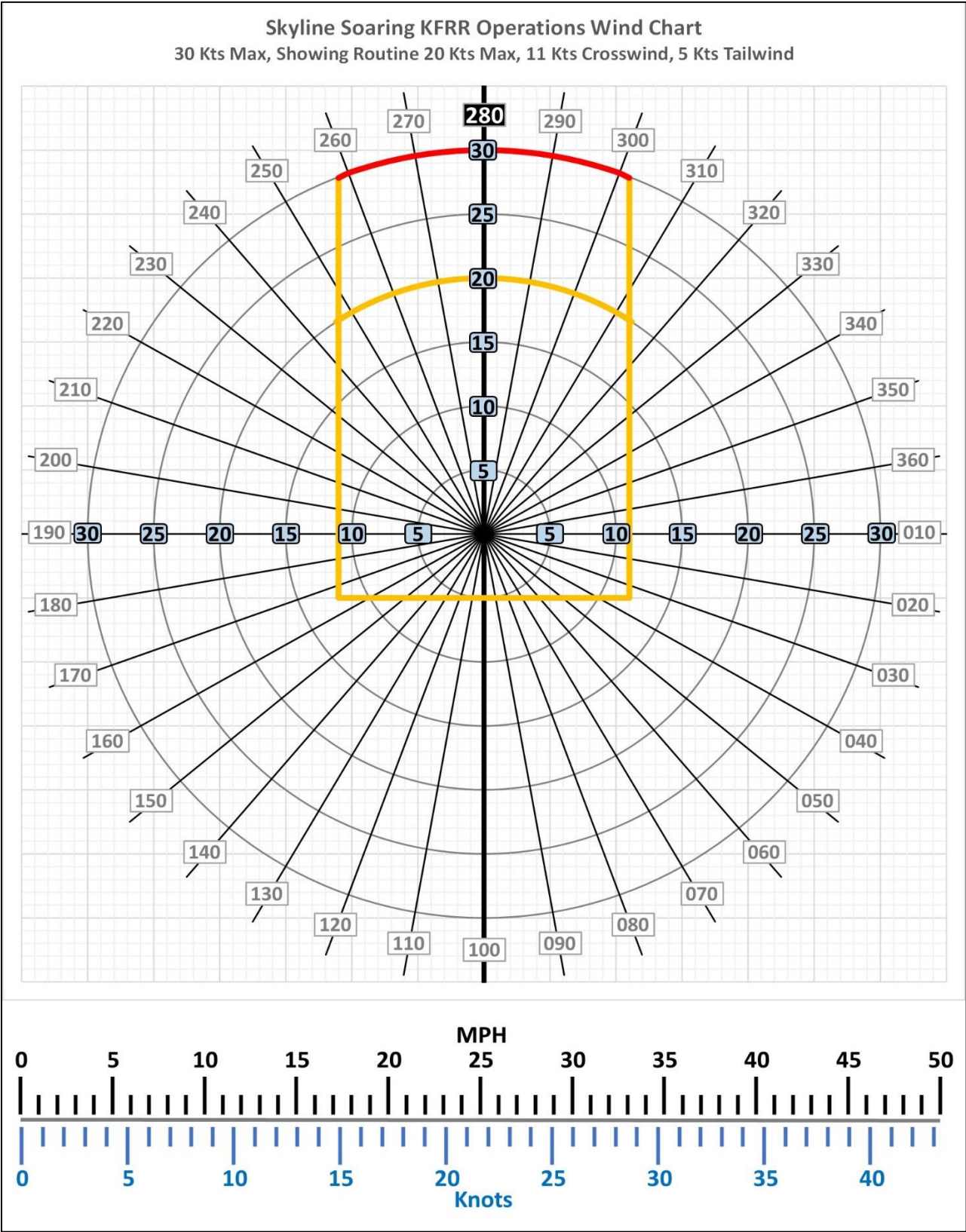
If for any reason it is necessary to stop the takeoff before it actually starts, the stop signal is given by lowering the wingtip to the ground and giving the stop operations signal (waving expended arms over the head). Normally, this will not be done for reasons of traffic, but it must be done if there is evidence that the glider pilot and/or tow pilot has failed to see some immediate hazard or has not completed pre-takeoff checklist actions. The PIC is responsible for the timely release of the towrope at any time he/she perceives an emergency.

### B.5 Running the Wing

When the glider starts to roll, the wing runner provides balance until aileron control is established. This normally occurs as the glider's speed exceeds the capability of the wing runner to keep up during a normal takeoff. Care should be exercised not to impose fore and aft loads on the wingtip, because this will cause the glider pilot swerve when the wingtip is released. However, it is the wing runner's responsibility to keep the wing level. This may be particularly critical in a crosswind situation when a gust may pick up a wing before aileron control speed is attained. In crosswinds, the upwind wing should be held a little lower than the level position. Holding the wing down in such a situation can greatly assist the pilot of the glider and is a primary reason for having a wing runner.

# Appendix C

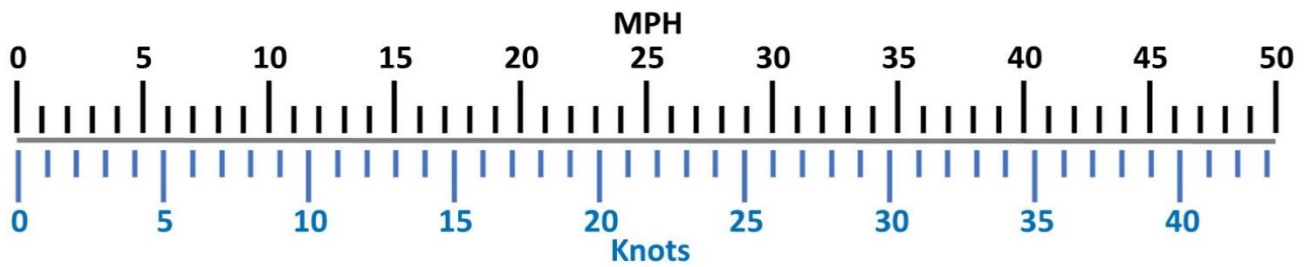
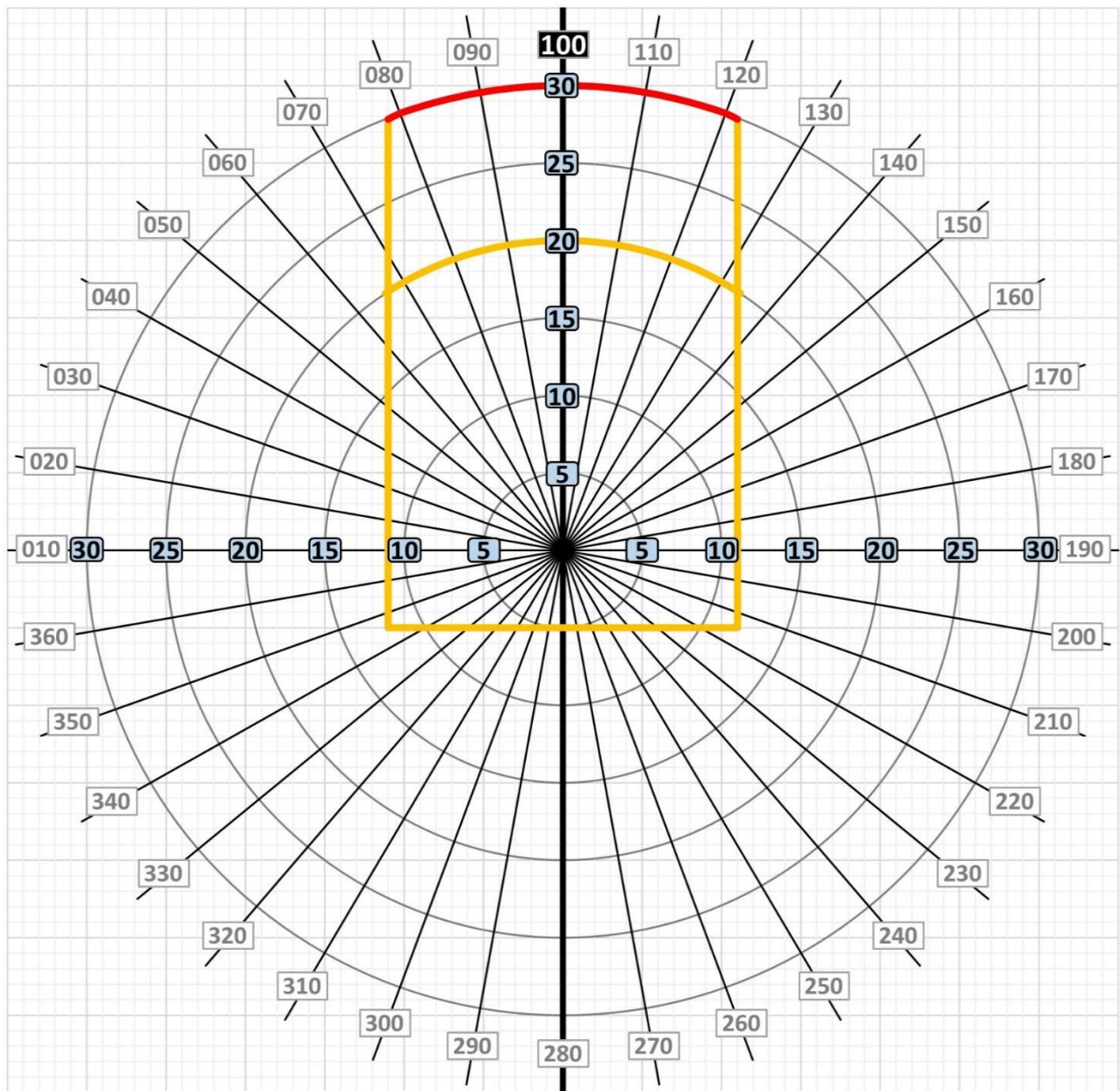
## Runway 28 Wind Chart



## Runway 10 Wind Chart

### Skyline Soaring KFRR Operations Wind Chart

30 Kts Max, Showing Routine 20 Kts Max, 11 Kts Crosswind, 5 Kts Tailwind





## Appendix D

### Skyline Soaring Club Wave Window

Washington Center and Skyline Soaring Club, Inc.

#### LETTER OF AGREEMENT

EFFECTIVE: October 1, 2019

**SUBJECT:** Glider Operation in Class A Airspace

**1. PURPOSE** This Letter of Agreement (LOA) establishes an area and procedures for glider operations within Class A airspace under the jurisdiction of Washington Center.

**2. CANCELLATION:** This LOA will terminate on October 1, 2024, unless a new termination date is mutually agreed. Nothing precludes this LOA from being terminated by either party.

**3. SCOPE:** The area and procedures specified herein are for the conduct of VFR operations in Class A airspace by members of the Skyline Soaring Club (SSC). This area is referred to as the "Skyline Soaring Area," and is defined in Attachment 1.

**4. RESPONSIBILITIES:**

a. Upon request by members of the Skyline Soaring Club, the Center authorizes deviation from FAR 91.135 to those members who are operating within the Skyline Soaring Area and who comply with the procedures specified in this LOA.

b. Pilots shall comply with applicable Federal Aviation Regulations.

c. Glider flights may be conducted within the glider area between FL180 and FL230, inclusive. These operations are authorized only during the time approved by Washington ARTCC. The glider area referred to in this LOA is depicted on the map and is described as a polygon defined by the following coordinates:

beginning point; 38 52' 30" / 78 51' 31", to 38 48' 58" / 78 46' 13", to 38 45' 15" / 78 38' 00", to 38 39' 20" / 78 42' 29", to 38 40' 00" / 78 56' 30" to beginning point.

d. This authorization is applicable only during the hours between official sunrise and sunset.

e. Pilots shall not fly in the authorized area with less than 1,000 feet vertically and 1 mile horizontally from any cloud formation or if flight visibility is less than 5 miles.

f. Pilots shall become familiar with local terrain features so that flights will be contained within the glider area by visual reference to the ground.

g. SSC shall assume separation responsibility between authorized aircraft operating in the glider area.

ZDC SSC LOA

Effective: October 1, 2019

h. The SSC must ensure that all pilots utilizing these procedures are familiar with and comply with all conditions of this LOA.

**5. COORDINATION:**

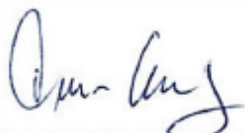
a. SSC shall be responsible for coordinating the times of the intended use of the authorized area with the Washington ARTCC operations manager in charge: 703-771-3470. Coordinate at least 2 hours in advance and include the telephone number where the SSC representative can be contacted while area is in use.

b. The SSC shall receive final approval from Washington ARTCC prior to entry into the authorized area on 133.2 or via telephone. SSC shall advise Washington ARTCC when the authorized area is clear of glider aircraft on frequency 133.2 or via telephone at the number listed in provision 5.

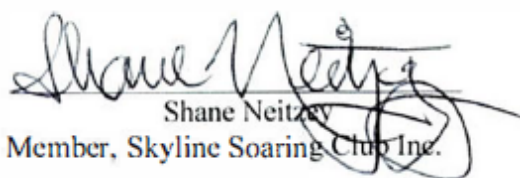
c. SSC shall assume responsibility for relay of communications between glider aircraft using the authorized area and Washington ARTCC.

d. SSC shall advise the Washington ARTCC operations manager in charge as soon as possible after glider operations applicable to this waiver have ceased.

**6. SIGNATURES:**

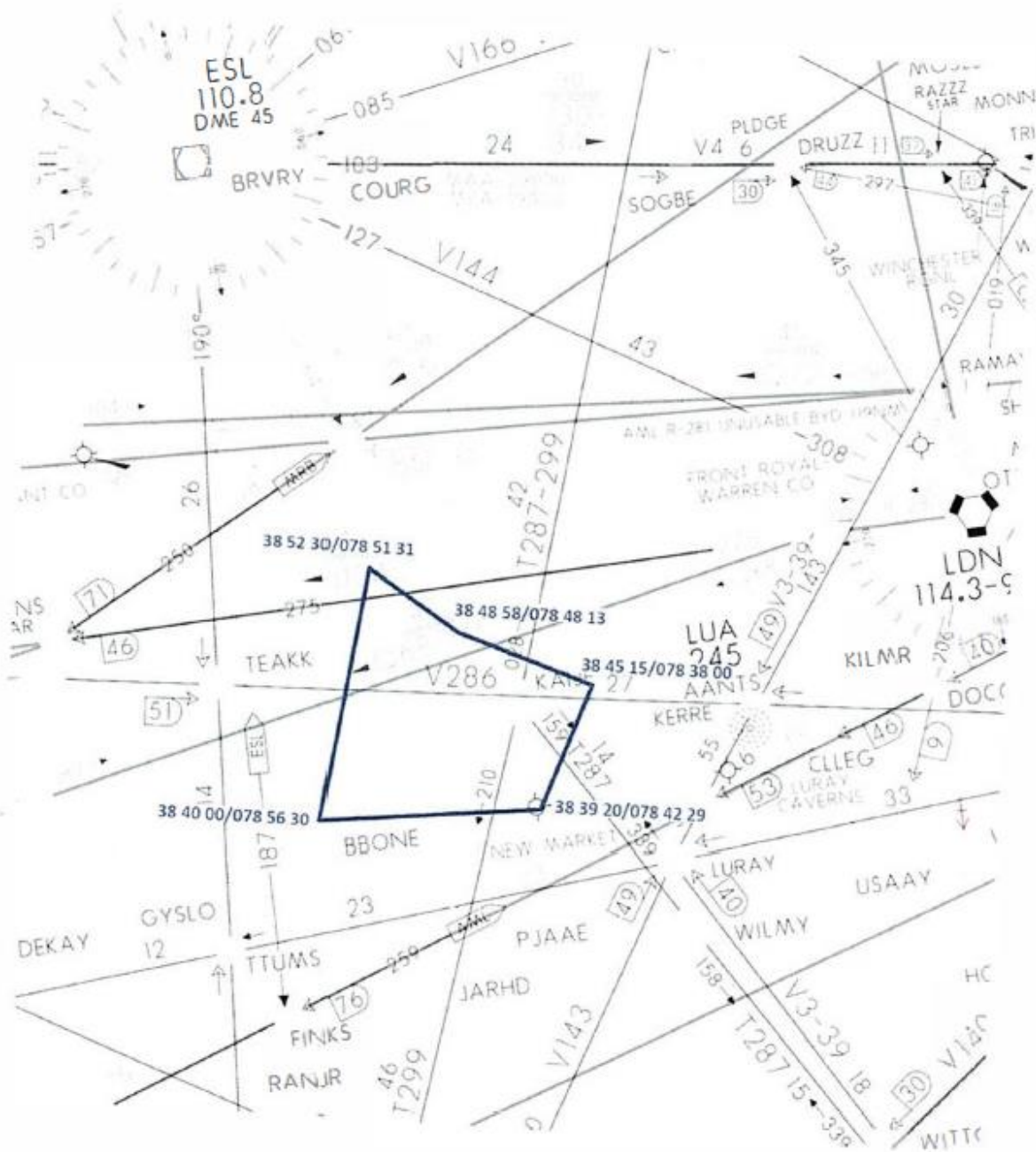


Carl Adams  
Air Traffic Manager, Washington Center



Shane Neitz  
Member, Skyline Soaring Club Inc.

# Skyline Soaring Area



ZDC SSC LOA

Effective: October 1, 2019