Great Lakes Gliding Club
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Standard Operating Procedures

Version 2.3
June 5. 2010

Great Lakes Gliding Club
Standard Operating Procedures

Revision History

Revision No.	Date	Details of Revision
1	September 13, 2006	New section on Club Membership (section 1) and revisions to aero-retrieves (section 8.4)
2	March 27, 2010	Change to Section 3.5 – Cars on Field – Club tow car added. Change to Section 6.8 - Progress in Club Aircraft – References to “1-26” removed and replaced with “Single seater”.
3	June 5, 2010	Change to Section 6.8 – Progress in Club Aircraft References to “Single seater” removed and replaced with Jantar Standard 1. Requirements changed.

Introduction

The Great Lakes Gliding Club (GLGC) has developed a set of Standard Operating Procedures (SOPs) designed to maximise our enjoyment of the sport of soaring while ensuring a safe, efficient operation. These Procedures have been reviewed and amended periodically over the years to ensure that they conform with Soaring Association of Canada and Transport Canada training and safety guidelines.

The requirements on gliding clubs are defined by Law in the Canadian Aviation Regulations (CARs), by SAC Standards and Recommended Practices, by the club constitution and by-laws, and its SOPs, by decisions voted on at club general and special meetings, and the club's insurance policy and *duty of care*.

All pilots flying with the GLGC are expected to be fully conversant with the Standard Operating Procedures of the Club and to abide by them. Members taking out or renewing their membership with the Club are, in effect, undertaking an agreement that they have read, understood and **will comply** with these SOPs.

When amendments are made to the Standard Operating Procedures, updated copies will be posted on the Club website. It is the responsibility of all club members to be fully familiar with the current version of the SOPs. A short written exam must be completed by all members each year verifying their knowledge of the SOPs.

While the GLGC adheres closely to the Soaring Association of Canada's recommended practices, some of the Club's procedures have been modified where necessary to better suit our own particular operational requirements. Where there are discrepancies between SAC recommended practice and GLGC SOPs, the GLGC SOPs are to be followed while flying at the club.

The GLGC SOPs were not just "made up." They have evolved from, and have been tested by, long (and sometimes painful) experience. However, it is recognised that conditions change over time and the Procedures must evolve to keep pace with new circumstances. All club members are encouraged to discuss any ideas or suggestions for procedural changes with the Chief Flying Instructor.

Further, it is recognised that in genuine emergency situations, actions contrary to the published GLGC SOPs may be required. Such actions must be left to the best judgement, good sense and airmanship of the members concerned, consistent with safety.

Gliding is a sport that carries with it a certain degree of risk, including the risk of serious injury or death. Members and other persons who choose to participate are voluntarily agreeing to assume these risks.

Safety Policy

The Great Lakes Gliding Club strives to provide a safe and efficient operation in all aspects of a gliding club to its members and to the public. Recognizing that all activities have an associated risk, part of the gliding club strategy to ensure safety is to plan for safety by identifying and minimizing risks wherever possible and having an open environment for feedback from all members. This includes the areas of flying operations, training programs, maintenance planning and security.

The Board of Directors is committed to the promotion of an active safety program in the club and will work with all members to implement the policies in this manual. All members are encouraged to think pro-actively about safety, and to bring forward ideas or recommendations for the improvement of safety, and thus a reduction in the number and cost of flying accidents. The club policy is not to blame or discipline a club member as a result of an incident or accident, unless the member shows willful negligence, disregard for rules or regulations, or has criminal intent. This does not prevent the club from altering flying privileges, e.g. to require dual flights. Flight safety shall be encouraged and maintained in the following ways:

- High member training standards;
- Thorough pre-flight preparations and planning;
- Maintenance of aircraft and equipment to the highest standards set forth in the CARs and the manufacturers' recommendations;
- A focus on safety at all directors' and club meetings;
- Internal and external audit procedures;
- Maintaining meaningful feedback to all members to encourage their input on safety issues; and
- Member recognition program (club awards and SAC annual award submission).

In an effort to ensure that all flights are operated in the safest manner possible, all pilots shall be free from any external pressure from other members, or their passengers to complete a flight. The supervising instructor (for a non-licensed student pilot) or pilot in command acting within the club flying rules, shall have the final say in undertaking a flight.

This manual shall be the responsibility of the Safety Officer, who shall annually and in conjunction with the CFI and other pilots as required (to form the club Safety Committee or larger group, for example for the annual risk assessment and review), undertake a complete review and update of the Safety Program and amendment of this Manual as appropriate.

Signed date 27 March 2010
Tom Robertson
President, Great Lakes Gliding Club

Emergency Response Plan

An emergency, for the purpose of this document, is defined as either of the following:

- An accident or incident involving a club aircraft or glider owned by a club member; or
- An accident or incident on the field involving injury to a club member or guest, or damage to club property

In the event of such an emergency, the Duty Instructor shall normally act as the Emergency Coordinator, and shall immediately take charge. If present, the Chief Flying Instructor or Club President may choose to take over the responsibilities of the Emergency Coordinator, but a clear hand-off of responsibilities must take place. If the Duty Instructor is not on the field when the emergency occurs (i.e. if the Duty Instructor is flying at the time or is incapacitated), the senior instructor present will act as Emergency Coordinator.

All club members are expected to comply with the directions given by the Emergency Coordinator. His/her role is to take charge of the immediate actions that must take place in the event of an emergency. While this plan is designed to offer general guidance with respect to the actions that should be taken, it is recognized that no plan can fully cover all contingencies and that the Emergency Coordinator will use his or her best judgment to take such actions as are warranted by the situation.

Immediate Actions

Should the emergency involve serious injury, the first priority should always be the injured party(ies). The Emergency Coordinator will ensure that:

- Help is called for by dialing 911
  - Note that the airfield address is posted at the flight line, on the golf carts and at the telephone in the hangar (be sure to quote the fire number, 7272 and describe the location as “the second property to the east of the Adjala-Tecumseth Townline on the north side of the 6th line in Tottenham”, if the emergency has occurred at the field)
- First aid is provided by a qualified individual if at all possible
  - A list of first-aid qualified club members and the locations of the first aid kits is posted in those same locations
- A club member is sent to the road to direct the emergency response team towards the site of the emergency (club radios are to be commandeered to aid with this task)

In all emergency situations, all launches of aircraft are to be discontinued until the emergency is controlled.

Fire extinguishers are located in the towplane; on the golf carts; in the hangar (southeast corner) and at the fuel dump (these locations are list with the emergency numbers at the flight line, in the golf carts and by the phone in the hangar) – all club members should familiarize themselves with these locations and the use of this equipment.

Follow up

The Emergency Coordinator should act as the main point of contact with the emergency response team (i.e. police, fire and ambulance).

In the event of serious injury, notification of next-of-kin should be left to the authorities (note that contact information is on file with the CFI); however, all club members would be well-advised to contact family members to reassure them that they are safe and that further details will be provided when available. To this end, the Emergency Coordinator should contact the Club President (or a member of the Board) to contact those club members not present at the club.

All contact with the media is to be through the Club President or his/her delegate; club members are strongly discouraged from discussing the emergency with the media.

The Emergency Coordinator is responsible for reporting any reportable aviation accident or reportable aviation incident to the Transportation Safety Board of Canada as described in section 3.0 of the General Information section of the Aeronautical Information Manual. In addition, a brief report is to be made immediately for the CFI, Safety Officer and the Board of Directors who shall notify the insurance company and SAC. This is to be followed up with the required SAC accident report form and handed to the CFI and Safety Officer for sign off and forwarding to the SAC National Office.

All club members are expected to comply with the directions given by the Emergency Coordinator.

Membership

Visitors are welcome at the club, and we offer introductory flights to anyone interested in trying gliding for themselves. Each year we also accept a limited number of new club members who want to learn how to fly sailplanes. Flying with other club members who are licensed instructors, the students pursue a course of instruction and ground studies which will lead toward their Glider Pilot License, issued by Transport Canada. Usually it takes between 40 and 60 flights before the student will be ready to fly solo.

Because **Great Lakes** is a club and ***not a commercial operation***, members are encouraged to help out with the various duties and chores around the field, ranging from helping to prepare the aircraft for flight in the morning to assisting at the flight line, and securing the aircraft at the end of the day. Because our instructors and tow-pilots are volunteers, you pay only for aerotows and rental of the gliders.

Club membership is available in several categories. Costs of membership, aerotows and glider rentals change from time to time and are detailed on the club website, www.greatlakesgliding.com.

1.1 Full Membership

Full membership includes all of the rights and privileges of membership in the club, including voting rights at the club's Annual General Meeting, membership in the **Soaring Association of Canada** (SAC), insurance, and the bi-monthly national magazine, **Free Flight**.

Licensed pilots are also required to invest in the club with a one-time refundable interest free debenture, the amount of the debenture being shown on the club website.

1.2 Student Membership / Family Members

A reduced membership fee is available to full-time students and spouses and children of members. This category of membership also includes all of the rights and privileges of membership in the club, including voting rights at the club's Annual General Meeting, membership in the **Soaring Association of Canada** (SAC), insurance, and the bi-monthly national magazine, **Free Flight**.

1.3 Air Cadets

A reduced membership rate is also available to Air Cadets.

1.4 5-Flight Instructional Package

The 5-flight package can be upgraded to full membership* at a discount, but alone is non-receiptable and non-refundable. It must be used in the current season.

**Full membership is considered upon application to our Membership Committee.*

1.5 Associate Membership

Associate Membership is only available to fully paid-up members of other SAC gliding clubs. The cost of an Associate Membership is 50% of our Full Membership rate. Associate Membership is only available one time and is not renewable by the individual. The applicant for Associate Membership will need to provide proof of liability insurance, membership in SAC, paid membership at their home club and sign appropriate documents holding GLGC harmless.

1.6 Monthly Membership

A monthly membership for the months of April, May and June, or any combination of these months is available to SAC members who are not members of GLGC. Monthly membership may be renewed each flying season at the discretion of the club but only for the months listed above. The fee structure varies from month to month and is shown on the club website, www.greatlakesgliding.com. Fees for monthly membership are payable in advance and are non-refundable. The applicant for Monthly Membership will need to provide proof of liability insurance, membership in SAC, paid membership at their home club and sign appropriate documents holding GLGC harmless.

Flying Order

2.1 The Flight Book

At the current level of club membership, the Board of Directors has chosen to forego a formal Flight Book in favour of a first-come, first-served rotation, based on common courtesy.

The first pilot or student pilot to arrive at the field is normally entitled to the first flight of the day, to be followed by the others in their order of arrival. A pilot or student pilot may choose to defer flying until a later time, when they can take their place in the normal rotation.

An efficient operation dictates that all pilots should be to be ready to fly with pre-flight inspection ["walk-around"] and pre-take-off checks completed, prior to the landing of the tow-plane from the previous launch. These checks can be completed prior to moving the glider onto the flight line. Given that normal turn-around for the tow-plane is six to eight minutes, the pilot should start his / her pre-flight preparations no later than when the prior flight takes off. If the pilot is not ready, the next pilot on the rotation is entitled to take his / her place and the unready pilot will have to wait for a later flight.

2.2 Instructional Flights

As an aid to training, pre-solo student pilots will normally be entitled to two consecutive instructional flights. The second flight must be taken immediately after the first flight is completed (and with the same instructor) unless the instructor advises otherwise. The second flight may not be deferred until later in the day (i.e. if the second consecutive instructional flight is declined, the student pilot must then wait his / her turn on the normal rotation prior to flying again that day).

The combined duration of the two flights should not exceed one hour. During soaring training, the pre-solo student pilot may elect to stay up for one hour in one flight, waiving rights to the second flight.

Although every effort will be made to ensure that the two consecutive flights are available, the Field Manager may, at his / her discretion, limit all students (without discrimination) to one flight in view of aircraft availability and/or demand.

2.3 Soaring Flights

All pilots are entitled to flights of one-hour duration except for private aircraft, five-hour silver duration attempts, special extended flights (see below) and cross-country flights. The flight may be used for a solo flight, an introductory flight or a passenger flight.

2.4 Extended Flights

If there does not appear to be much demand for the aircraft, the Field Manager may authorise a flight longer than one hour. A flight in a club aircraft of longer than two hours, however, must be authorised in advance by the Duty Instructor.

2.5 Intros and Member's Friends

Intros are strangers to the club and will be added to the normal rotation for flying. All pilots should note that the fee for an introductory flight covers the cost of the tow to 3000' and a 25 – 30 minute flight. The pilot of an introductory flight may, of course, choose to pay for a higher tow and/or a longer flight. The additional cost will be charged to the pilot at the regular club rates. Under no circumstances should an introductory flight be of duration longer than one hour.

Bona fide friends of members may fly on the member's flight as a passenger. If the member is not qualified to fly passengers, the member may ask another member to fly his / her friend. Such flights are normally charged to the member's account and must follow normal club duration rules for regular soaring and extended flights.

Both intros and member's friend must complete a day membership application for insurance purposes. However, in the case of member's friends, the day membership fee shall be waived.

2.6 Flight Priorities

1. As called for by the Duty Instructor (i.e. 1st solos and other special purpose flights)

2. Aborted takeoffs or tows, at the discretion of the Field Manager

3. A sincere cross-country or 5-hour duration attempt, at the discretion of the Field Manager

4. A club purpose, at the discretion of the Field Manager

NOTE: Instructional and soaring flights have equal priority. The pilot must be ready to fly; otherwise the next pilot in line who is ready will get the tow. Intros have no flight priority beyond that of the pilot wanting to fly them.

The Field Manager may at any time use his / her discretion to change the flying order if, in his / her opinion, it will improve the efficiency of the flight operation or be fairer to the members present.

2.7 Weather Flights

A weather flight by the tow-plane is justified only if there is a genuine uncertainty as to the height of the cloud-base or as to the VFR weather minima. Such flights should be rare and must be authorised by the duty instructor.

Pre-Flight Operations

3.1 Daily Inspections

It is the responsibility of the Duty Instructor to ensure that each Club glider undergoes a Daily Inspection (DI) by a **qualified** person[1] before it is permitted to fly.

The person carrying out the Daily Inspection must sign in the DI Book (kept in the glider) that the aircraft is airworthy before the aircraft is flown. Any defects ("snags") should be recorded in the DI Book. Aircraft with known snags may be flown only if, in the opinion of the Duty Instructor, the snag does not affect the airworthiness of the aircraft; equipment declared unserviceable should be marked with a DO NOT FLY tag.

Pilots should review the DI Book to apprise themselves of snags prior to flying the aircraft. All noted snags will be reported to the Club Director in charge of aircraft maintenance on a daily basis for corrective action.

A necessary part of the D.I. is to ensure that the aircraft and canopy are clean and free of bugs.

3.2 Visitors

Visitors are a possible safety problem because they do not know the club procedures and may not have read the posted notices. Club members should show them where they are safe to watch, and advise them to stay clear and to the side of operational areas and to be extra vigilant for approaching aircraft when walking near a runway. Visitors should not be allowed to handle aircraft unless briefed and closely supervised on how to do so safely and correctly. Under no conditions should a visitor be allowed to launch a glider by signaling or running a wing. Accompany them if necessary to increase their safety, and ask them not to touch the gliders. Visitors can easily distract pilots especially during pre-launch checks and should be kept away from pilots at these times.

Children of members are welcomed on the flight line, but should be thoroughly briefed by their parents on safety and club SOPs and should be closely supervised at all times.

3.4 Golf Carts

Golf carts are used at GLGC both to move gliders and for movement of members on the field. The carts are expensive and their use should be limited to essential activities to preserve battery life.

1 All pilots and student pilots must be so indicated by an endorsement in their logbooks.

Only club members should drive the carts; children of members may only be allowed to operate the carts if a parent is with them in the cart.

3.4 Moving Gliders

As many people as necessary to ensure its safety must handle a glider being moved on the field. The control column of the glider should be secured so that when the glider is moved the control surfaces do not bounce around (especially the elevators, which can contact the ground and suffer damage when the glider is being moved quickly over rough ground).

When a vehicle tows the glider, there should be one person at either wing to prevent the glider from overtaking the vehicle in case of a sudden stop. In all cases where a glider is being moved by a vehicle, the rope must be longer than one-half the wingspan to avoid the wing contacting the tow vehicle if a swing should develop as the result of a crosswind or sudden stop.

The wingtip being held on the up-wind side should be held lower than the wingtip on the downwind side in order to minimise the possibility of the aircraft being blown over. In gusty conditions, a person should be on hand to secure the nose or the tail, depending on the wind direction.

When handing over from one wing tip holder to another, the first person says "**Your Wing**" and the second acknowledges with "**My Wing**", and then takes hold of the wing tip; this very clear communication should be used anywhere a hand-over is made. When moving gliders around, only use the words "**Stop"** and "**Go"**. These two commands are clear and unambiguous; the word *whoa* sounds like *go*, and *OK* can mean either *yes* or *no* or anything else! All members should be encouraged to use only these words when handling aircraft;

Ideally there should be three people available for each aircraft on the field. Before club members leave for the day, they are encouraged to move aircraft that are not being used at the flight line back to the tie-downs. If possible, unused gliders should be tied-down (rather than leaving them to be secured late in the day by the few remaining members).

All movement of gliders shall be on the south side of the runway; the north side should be used only for flight operations.

3.5 Cars on the Field

A car is a necessary part of the soaring pilot's equipment. Cars on the airfield, however, are at best a nuisance and can very easily create a hazard unless their use is carefully regulated. Cars used to tow a glider to the flight line must be returned to the designated parking area prior to flight. Do not park your car on the "out-of-use" runways or in the areas used for parking gliders and tow-planes. **Park your car in the designated parking area**.

With the exception of the Club Tow Car, cars are prohibited from entering the active runway area for the purpose of retrieving gliders.

3.6 Parachutes

It is recommended that parachutes be worn in all single-seat aircraft and in the two-seat gliders during training flights for spin recovery training. Parachutes **must** be worn during aerobatic flights.

Parachutes should be inspected for damage prior to the day's operations. Parachutes must never be placed on the ground or left in the cockpit or in direct sunlight. They must always be protected from the rain and dampness and should be kept in the shade. When not in use parachutes should be returned to the designated place in the club trailer.

Because they are vital pieces of emergency equipment they should be kept in good condition at all times, as follows:

- Check parachutes daily before use, and have them repacked according to the manufacturer's recommended schedule;
- Keep parachutes clean and dry at all times; keep warm in winter during extended storage, and never place on the damp ground;
- Keep fuel and oils away from all parachutes at all times;
- Declare the parachute unserviceable and repack if it is allowed to become wet or damp, or if the retaining pins become bent or withdrawn from their retainer position, or if the rigger's red seal-chord is broken.

3.7 Aircraft Tail Dollies

Aircraft tail dollies should be removed as soon as the glider is placed on or returned to the flight line.

3.7 Pre-Flight Inspection

It is the responsibility of the Pilot-in-Command to inspect the aircraft before flight. He / she must ensure that the aircraft has not sustained damage on a previous flight and that any apparatus for ground handling (e.g. tail dollies) has been removed. A walk-around before getting into the cockpit is mandatory; the only circumstance in which a walk-around may be waived is when the Pilot-in-Command was also the PIC of the immediately preceding flight and the glider was brought immediately back onto the flight line after landing.

Note that a walk-around is just that: a visual inspection of the glider for damage while walking

around the aircraft. It should take no more than a couple of minutes and should take place prior to moving the glider on to the flight line, to avoid delaying the operation.

Before getting into the cockpit, the pilot should ensure that the appropriate amount of ballast is carried and that it is secured in place. Clearly readable placards showing minimum and maximum pilot weights (with and without ballast) are affixed to the inside walls of the cockpits.

3.9 Tow-rope Inspection

The Duty Instructor is responsible for ensuring that the Towropes are inspected for serviceability before the day's operations and periodically throughout the day for damage.

3.10 Housekeeping

Tires are to be kept off the runway at all times. They should only be on the flight line when used to hold down a wing of an aircraft and must be returned to the picnic table area when not being used. Similarly, unused cushions should be returned to the club trailer. This is not just a matter of neatness — the wing runner should not be expected to run an obstacle course while running a wing.

Take Off

4.1 Connecting Rope to Aircraft

No person is to hook up the towrope to an aircraft (either to the glider or to the tow-plane) unless he / she has been instructed in how to do so. Incorrect insertion of the towrope ring in the tow hook has caused both failures to release in flight and pre-mature releases. This can result in a serious and potentially dangerous situation. At best, incorrect connections usually result in an aborted flight and/or a lost towrope.

The Pilot-in-Command should make certain that the person(s) hooking up the glider and the tow-plane know their job. Do not take this for granted.

Under no circumstances should the towrope be attached to the glider until the pilot-in-command is strapped in, has completed his / her pre-takeoff checks and has indicated his / her readiness for the rope to be connected.

In addition to the daily inspection of the rope, the persons connecting the rope to the aircraft are responsible for examining the rope ends for wear. When in doubt about a frayed or worn rope, consult an instructor prior to connecting it to the glider.

The person hooking up the rope should ensure that the rope is free of any loops or tangles that could result in a knot when the tow-plane takes up the slack. Clear loops and tangles well away from the aircraft. Demonstrating your lassoing and rope trick skills can result in the Tost ring hitting and damaging a glider's canopy.

Make sure that there are no other ropes lying unused in a position where they could foul other aircraft on takeoff or landing.

4.2 Ground Signals for Take-off

During normal flight operations, two people are required to assist during the take-off of the glider and the tow-plane. One (the wing runner) is positioned at the port (left) wingtip of the glider; the second (the tow-plane signaller) is positioned well ahead of and well off the port side of the tow-plane. The role of the tow-plane signaller is to relay the wing runner's signals to the pilot of the tow-plane.

The signallers are responsible for the safety of the take-off. They must ensure that the runway ahead is clear of aircraft, people, ground vehicles and other obstructions; and that no aircraft are landing or in the circuit that would interfere with the take-off (remember that landing aircraft have priority over aircraft taking off). The wing runner is in control of the take-off since he / she is in the best position

to see traffic conditions and check on the readiness of the Pilot-in-Command of the glider. However, the tow-plane signaller should not accept a signal if he / she believes it is unsafe to do so.

To ensure that a take-off does not interfere with a landing, a take-off should not be initiated if any aircraft (glider or aeroplane) is on the Final or Base leg of the circuit.

4.3 Wing Runner

After the Pilot-in-Command of the glider has completed the pre-take-off checks and the rope has been connected, the wing runner should position him / herself at the port wingtip of the glider. Only after the Pilot-in-Command gives the "thumbs up" signal should the wing runner raise the wingtip to the level position. There is a reason for this — the raised wing on the glider is a highly visible indication to anyone on the field or in the circuit that a take-off is about to commence.

Before lifting the wing, the wing runner is to look all around for traffic and obstructions to the take-off. The wing runner should also confirm that (1) the tail dolly has been removed from the aircraft; (2) the canopy is closed and locked; and (3) the Pilot-in-Command has been made aware of the position of the spoilers. If everything is clear, the wing runner calls out "**all clear**" loud enough for the Pilot-in-Command of the glider to hear. He / she then lifts the wing to the level position (upwind wing slightly low in a crosswind) and proceeds to signal to take up slack.

If the take-off is interrupted for any reason, the wingtip should be lowered to the ground until the pilot again indicates that he / she is ready for take-off and the above procedure is repeated.

4.4 Tow-plane Signaller

The tow-plane signaller should stand about one rope length ahead of the tow-plane and to the port side of the wing. He / she should be well clear to the side to give sufficient clearance for the glider's wingspan, allowing room for drift — the glider pilot should not have to worry about clearing the tow-plane signaller during the take-off. The signaller should continue to relay the signals until the tow-plane passes and must continue to face the glider until it has safely gone by. This position is optional and may be foregone in benign conditions at the discretion of the Duty Instructor and Duty Towpilot.

4.5 Description of the Signals

The following "take up slack" and "all out" signals should be given in vigorous manner and should be as close to 180° as is comfortable to ensure that the movement is clearly seen and unmistakably identified.

Take Up Slack Positive and continuous 180° side-to-side motion of the extended arm **below**

	shoulder height, at right angles to the direction of take-off.
All Out	Positive and continuous circular motion of the extended arm, at right angles to the direction of take-off.
Stop	Holding one or both arm(s) vertically upwards without motion. At the same time shout "**STOP**" loud enough for the glider pilot to hear and release the rope.

*These signals are the same as those in use by the Soaring Association of Canada as shown in the manual "**Soar and Learn to Fly Gliders**." In case of discrepancies, the SAC signals are those that should be used.*

Note that anyone on the field has authority to stop a take-off if it appears unsafe for any reason. However, only the wing runner can re-initiate a take-off (once cleared to do so by the Pilot-in-Command of the glider).

4.6 Pre-Take-Off Check

C	**Controls**	Free and Correct; positive control check
I	**Instruments**	Functioning and Correct; Altimeter set to field elevation
S	**Straps**	Secure and tight, front and rear cockpits (if the rear cockpit is unoccupied, straps secured and ends tied to prevent interference with the controls
T	**Trim**	Checked for free and correct movement, set for take-off; appropriate amount of ballast carried
R	**Release**	Checked for freedom of movement and ability to release taut rope
S	**Spoilers**	Check for operation (top and bottom of wings); positive control check; closed and locked for take-off
C	**Canopy**	Closed and locked (front and rear cockpits)
O	**Options**	What will you do if... (...rope breaks, traffic obstructs runway, etc.)

Circuit Procedures

5.1 Takeoff

Because of the possibility of an aircraft veering on take-off or landing, take-offs are not to be initiated if any landing aircraft is on the base or final leg of the circuit.

Both landings and takeoffs must be conducted in the centre of the strip. Extra care must be taken to ensure that the runway is kept clear and takeoffs are not initiated unless it is certain that the aircraft will have departed the runway before any landing aircraft enters the final leg of the approach.

5.2 Height above Active Runway

There can be considerable traffic in the vicinity of the airfield and a careful lookout must be maintained at all times. Aircraft crossing overhead the active runway (and the extensions of the active runway in both directions where traffic might be expected) must do so with extreme caution and careful lookout and in no case lower than 1000' AGL.

At all times when flying below 1,000’ AGL, the Pilot-in-Command must be aware of the risk of an uncommanded stall and/or spin. Speed should be increased at low altitudes and should not be less than Approach Speed (1.3 V_{SO} + V_W) at heights below 1,000’ AGL.

5.3 Thermalling in the Vicinity of the Circuit

Pilots should be extremely cautious and alert when thermalling in the vicinity of the circuit. No thermalling is to be done below 1,000' AGL in the vicinity of the circuit and in no circumstances should a pilot thermal after entering the downwind leg of the circuit.

5.4 Circuit Direction

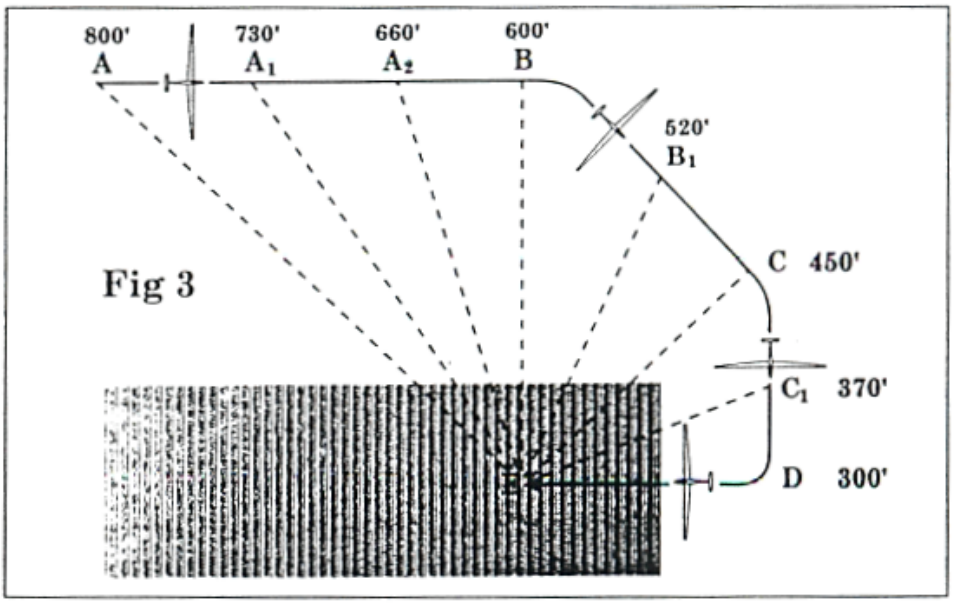
The Duty Instructor will set the active runway and the circuit direction at the beginning of the day with due regard to wind, crosswind component, noise abatement and operational procedures. The circuit direction will be indicated by markers adjacent to the active runway. If in doubt about the circuit direction (i.e. about whether left-hand or right-hand circuits are in use), **ask**!

Note that normally the tow-plane will use right-hand circuits when gliders are using left-hand circuits and *vice versa* so caution must be exercised in the vicinity of the airfield — **watch for both glider and tow-plane traffic when entering the circuit, and when turning downwind, base and final.**

5.5 Circuit Entry

Circuit entry is to be made at either the upwind end of the downwind leg at 800' AGL, or mid-downwind at no less than 600' AGL. The object of a good circuit entry is to give to time to assess the wind and traffic conditions (prior to entering the circuit), complete the downwind checks and to arrive abeam the landing aim point at 500' AGL.

At GLGC, we use a modified circuit pattern utilizing two 45º turns onto the base leg rather than the traditional 90º turn, as shown below:



This circuit pattern has been adopted to (1) provide the pilot(s) with better visibility/sightlines towards the aim point and (2) to ensure that the angle of descent towards the aim point remains more consistent during the approach. All pilots flying of the GLGC field, including private owners, are encouraged to comply with this circuit pattern.

5.6 Before-Landing (Downwind) Checks

S	**Straps**	Secured and tightened for landing (pilot and passenger / instructor)
W	**Wheel, Water and Wind**	Wheel down and locked; water ballast dumped; check wind speed and direction again
A	**Airspeed**	Approach speed calculated ([1.3 x stall speed] + wind) for given conditions
F	**Flaps**	Set for landing configuration
T	**Trim and Traffic**	Trim for calculated approach speed; check again for traffic
S	**Spoilers**	Unlock and check operation

5.7 Landing Runway

All pilots should touch down abeam the runway/circuit direction markers or, in their absence, abeam the parked glider that is furthest down the runway. Where possible, the landing pilot should plan to bring the glider to a stop as soon as safely possible beyond the touchdown point, leaving room for other aircraft to over-fly and land beyond his /her aircraft. Pilots should plan to edge over to towards the south side of the runway towards the end of their landing roll, consistent with safety.

The north side of the field can be used as an emergency landing area if landed aircraft block the centre portion of the runway. Pilots should consider landing on one of the nearby fields if other gliders or the tow-plane are blocking the runway.

After the glider has safely rolled to a stop, the pilot(s) should **immediately** get out of the cockpit and push the tail of the glider off the runway to the south side as far as possible, without danger of damage, to make room for other landing aircraft. Post-flight briefings of students should take place after the glider has been pulled off the active runway.

Gliders should be retrieved and returned to the take-off staging area only using the south side of the field. While any other aircraft is on final, or when another take-off is about to commence, the retrieve must be stopped and the wing closest to the runway lowered to the ground, so as not to interfere with the landing or take-off in progress.

Tow-planes and other powered aircraft should abort the landing and go around if the landing area is

obstructed, except in the case of an emergency. See the Tow Pilot Operating Procedures (section 10).

Touchdown of all aircraft should be abeam, or beyond, the runway/circuit direction markers or, in their absence, the furthest glider parked beside the runway. *Remember that it is always easier to push the glider back than to carry the pieces forward.*

All pilots are reminded that glider airfield procedures differ somewhat from normal airport procedures and extra caution is necessary at all times.

5.8 Taxiing or Returning to the Takeoff Area

Aircraft returning to the takeoff area are to do so on the south side of the field to avoid blocking the landing area when another aircraft is in the circuit. (Don't forget to watch for the tow-plane as well as gliders).

Aircraft moving to the takeoff area of the runway should stop and the wing closest to the runway should be lowered to the ground should it become apparent that a takeoff is going take place shortly. The glider wing being raised to the horizontal position indicates this. Similarly, the retrieve should be halted and the wing closest to the runway lowered to the ground when an aircraft is seen on final.

5.9 Aircraft Responsibility

The Pilot-in-Command of an aircraft is responsible for its reasonable care until another club member has clearly and willingly accepted such responsibility. After landing, the Pilot-in-Command of the aircraft is responsible for its return and proper positioning on the flight line. Immediately after leaving the cockpit, the canopy must be closed and latched to prevent it from being blown open and damaged. When the glider is parked, a tire or other suitable weight must be placed on the upwind wing.

Any damage to the glider is the responsibility of the Pilot-in-Command and/or the individual who has caused the damage (e.g. in the case of ground damage) and the insurance deductible (currently $500) will be charged to the responsible individual. Disputes over responsibility may be reviewed by the Flying Committee.

5.10 Runway Changes

Gliders must take off and land on the active runway under all but emergency situations.

Where practical, an aircraft may land long on the runway going out of use if this puts them in a more

favourable position to move to the new runway. It should be noted, however, that the runway change is most likely due to a wind shift, so the aircraft landing long for such a runway change will probably experience a tailwind on landing. **Due care must be taken to ensure the safety of crew and aircraft on such a landing.**

If it is not apparent from the wind which runway is active (or if the runway/circuit direction markers are not visible), the Pilot-in-Command of a landing aircraft should land on the runway he / she considers to be most appropriate. The Duty Instructor will brief pilots on the ground when a runway change is imminent.

Runway change decisions are the responsibility of the Duty Instructor, usually after consultation with the tow pilot(s). **Changes are not to be made without the permission of the Duty Instructor or his / her appointee.**

Tow pilots may sometimes choose, if the wind is not strong, to land the tow-plane downwind on the active runway providing such landing this does not endanger crew or aircraft. The purpose of such landings is to improve the efficiency of the operation and such decisions must be made in consultation with the Duty Instructor or his / her appointee. In any such case, the tow pilot must abort the landing and go around or delay the landing if it will interfere with the landing of a glider.

5.11 Post Flight Procedures

If strong and gusty winds prevail after a landing, the pilot must stay in the cockpit until help arrives, keeping the upwind wind on the ground.

Canopies must be handled with care. Before closing the canopy, ensure that the shoulder harnesses are not caught in the frame — the resultant tension will crack the Acrylic canopy, causing several thousand dollars of damage and several lost flying days while the canopy is being repaired.

Flight Procedures

6.1 Spring Checkouts

Every ***solo glider pilot, including private owners and instructors***, is required to take **a minimum of two Check Flights, one of which will include spin avoidance and recovery training, with an instructor** before flying as Pilot-in-Command (solo or with a passenger [or student, in the case of instructors]) in each new membership year.

All pilots checked out for passenger carrying that have not flown as Pilot-in-Command during the previous six months must complete a minimum of either two Check Flights with an instructor or five solo flights before they can carry passengers.

All pilots must also attend the club's annual Safety Seminar. A second session of the Safety Seminar will be scheduled for those pilots who could not attend the official session as a result of legitimate prior commitments.

Spring Checkouts are to be verified in the pilot's logbook by the instructor who has conducted the Check Flight. All pilots, including instructors and tow pilots must produce their permits or licence validation certificates and licences at the beginning of each gliding season for recording by the C.F.I.

6.2 Student Check Flights

Unlicensed solo pilots are required to take a Dual Check Flight with an instructor every fifth flight or after a protracted absence from flying, until they obtain their licences.

6.3 Passengers and Introductory Flights

Passengers should sit in the rear seat with the pilot up front for improved visibility for the pilot. The passenger cannot be expected to keep a lookout for other aircraft, as would a student with an instructor in the back seat. Instructors flying introductory flights may fly from either seat.

Licensed glider pilots may be endorsed for passenger carrying and flying from the back seat, **at the discretion of the C.F.I. only.** A checkout to fly from the back seat is seen as a useful step in the progression from licensed pilot to instructor. A minimum of 2 years experience as a licensed glider pilot[2] is required before applying for a back seat checkout, and such checkouts will be done on the understanding that the applicant intends to pursue an instructor's rating.

[2] less glider flight experience may be required if the applicant currently holds a private (or higher) pilot's license with 2 or more years of P1 experience

6.4 Waiver Forms

Waiver forms must be completed for all passengers -- family members and friends as well as Intros — whenever the passenger is not a member of the Great Lakes Gliding Club. This is most important and for your protection. The completed waiver forms should be kept with the Flight Sheets for later filing.

6.5 Members Flying Together

The Club actively discourages the practice of one member who is not an instructor taking another member who is not an instructor for a passenger ride. Such flights should take place only in very exceptional circumstances, and only with the permission of the Duty Instructor. In such circumstances, there must be a clear delineation of which pilot is to be the Pilot-in-Command (P1) for the flight. The P1 must fly the glider from the front seat and the P2 will under no circumstances fly the glider below 1200' AGL.

6.6 Radio Procedures

The radio is a safety feature, not a convenience, and all pilots should bear the following in mind:

1. **THINK BEFORE YOU TALK** (know what you want to say before you say it).
2. **LISTEN BEFORE YOU TALK** (don't step on anyone else's transmission).
3. **KEEP ALL TRANSMISSIONS BRIEF AND TO THE POINT** (formulate your transmission in your mind first, for brevity and clarity — standard phraseology should be used whenever possible.)
4. **MAKE AS FEW TRANSMISSIONS AS POSSIBLE** (the frequency is crowded).
5. **THE RADIO IS *NOT* A SUBSTITUTE FOR MAINTAINING A PROPER LOOKOUT AT ALL TIMES**.

Procedures

Tow-planes will call when entering the downwind leg of the circuit.

The Duty Instructor or his / her delegate will call "Great Lakes Traffic, aircraft on the runway," when a glider has landed on the active runway and is unlikely to be removed from the runway in time to prevent being a hazard to other landing aircraft. Pilots hearing this call should be alert to the possibility that they may have to land at an alternate airfield.

Glider Pilots

The frequency 123.4 MHz has been set aside as a special-use frequency for glider pilots and is used primarily for information purposes by pilots flying cross-country. All glider pilots should, at a

minimum, undergo training to meet radio licensing requirements.

Because there are many users on the frequency and congestion is a concern, glider pilots should not make mandatory downwind calls. Mandatory calls may lead to complacency towards maintaining a proper lookout and could prove dangerous should an aircraft arrive NORDO. Calls should only be made if unsure of the position of traffic, if safety requires an unusual circuit entry (e.g. straight in or to a non-active runway), to alert other pilots to a potentially dangerous situation or for training purposes.

Student Pilots

As a training organization, it is incumbent on us to instruct our students in use of the radio, including radio procedures and correct phraseology. However, practice calls for training purposes are restricted to those times when the frequency is not busy (e.g. morning and late afternoon flights) and should use proper phraseology at all times. Students are, however, be encouraged to get into the practice of calling to alert other aircraft when joining another glider in a thermal, passing another glider or leaving a crowded thermal.

Ground Station

Transmitting on the ground station radios should be restricted to the Duty Instructor or his / her authorized delegate only, except in the case of emergencies. Pilots must not expect 'air traffic control' or UNICOM services from this facility. The station is to be used for emergency and operational purposes only. For the purposes of training, the Duty Instructor may use the ground station to reply to calls from training aircraft, but by pre-arrangement only.

6.7 Practice Contest Finishes

A pilot wishing to practice a contest finish must radio his intentions in advance **and receive permission from the Duty Instructor**.

A practice contest finish is a downwind run along the runway, **not less than 300' AGL**. The pilot is expected to maintain a sharp lookout and due regard for traffic, and will be held responsible for any damage caused by him / her accidentally or otherwise.

6.8 Progress in Club Aircraft

The following are the current minimum requirements -- not the average requirements. **Exceptions will be made only at the discretion of the C.F.I.**:

Aircraft	Minimum Requirements	Checkout
Krosnos (solo)	Valid Student Permit. Recommendation of at least two Class II instructors or one Class I instructor. **At the discretion of the C.F.I. only.**	In the Krosnos by two Class II or one Class I instructor.
Jantar Standard I	Valid Glider Pilot License. Recommendation of at least two Class II instructors or one Class I instructor. **At the discretion of the C.F.I. only.**	In the Krosnos by two Class II or one Class I instructor.

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Note: A spin recovery check is compulsory when checking out on a different type of aircraft.

It is important that the pilot be thoroughly familiar with a new type of aircraft prior to flying it solo. The Pilot's Operating Handbook must be studied and the candidate pilot must be prepared to pass a written test on the limitation and characteristics of the new type prior to flying the aircraft for the first time.

6.9 Student Pilot Permits

Transport Canada requires that a student pilot hold a properly completed Licence Validation Certificate / Student Pilot Permit before going solo on a glider. Transport Canada sends the permit to you upon receipt of a satisfactory medical report. Prior to your first solo, the Student Pilot Permit portion of the form must be certified by a person within the club who has been given certification authority by Transport Canada (the C.F.I. or one of the instructors can advise you as to whom these persons are). You will be asked to produce certain documents (birth certificate, etc.) needed for this certification. Members are advised to consult with the C.F.I. as soon as they receive their Licence Validation Certificate / Student Pilot Permit regarding documentation.

6.10 Canadian Aviation Regulations (CARs)

All pilots are required to familiarise themselves with CARs. Ignorance of these rules cannot and will not be accepted as excuses for breaches of Flying Regulations. An oral examination covering some of the most important of these regulations will be administered by the club prior to going solo.

Instruction

7.1 SAC Manuals

The SAC (Soaring Association of Canada) manual, **Soar and Learn to Fly Gliders,** is the official guide that the club uses for flight training and as the main reference for the ground school course.

Copies of the manual are available from the Club Treasurer.

7.2 Ground School

Student Pilot Ground Schools are normally conducted once a year, during the winter. It should be noted that Transport Canada requires 15 hours of ground school instruction as a prior requirement for writing the written license examination.

The Ground School is normally held one evening a week for a 15-week period and includes such topics as Principles of Flight, Rules of the Air, Airmanship, Navigation and Meteorology. Details and schedules are available from any of the instructors.

7.3 Conformity with SAC Guidelines

In some cases, because of operational considerations, Great Lakes Gliding Club practice may vary somewhat from the SAC guidelines. In such cases, the Great Lakes Gliding Club practices are to be followed while flying at the club airfield.

Badge and Cross-Country Flying

8.1 Priorities

Badge flights and cross-country flying in club aircraft is to be made at the discretion of the Chief Flying Instructor only. Any member wishing to make a 5-hour duration attempt or a cross-country flight must have a valid Glider Pilot Licence and the prior approval of the Chief Flying Instructor to make such an attempt. The requirements for the particular task must be met and the pilot must meet with GLGC requirements.

The pilot must arrive at the gliding field before 10.00 am to make his / her intentions known to the Duty Instructor, and inform the Duty Instructor of any special limitations on the prior approval by the Chief Flying Instructor.

8.2 Planning Cross Country Flights

It is a good approach to learn cross-country flying by flying planned triangular or square flights around the gliding field. It acts as a step-by-step method to iron out problems and learn to improve inter-thermal speed. It also teaches the effects of wind and glide angle without adding the problems of navigation and the threat of off-field landings to the work-load, since the pilot can always remain within gliding range of the field. It also provides the opportunity to practice photographing turn-points.

The Great Lakes Gliding Club is fortunate in that a number of the instructor have considerable cross-country experience. You should plan on taking advantage of that experience by asking these instructors to take you up to practice cross-country flying skills after you obtain your licence.

8.3 Cross-Country Requirements

The chart on the following page summarises the competence level and responsibilities required by GLGC members wishing to use club gliders on cross-country attempts. Pilots wishing to fly cross-country will be required to meet these requirements on an annual basis.

Cross-Country Requirements

- Permission from the Chief Flying Instructor
- Silver Badge 5-hour duration requirement met
- Silver Badge 1000-metre height gain requirement met
- Bronze Badge requirements met
- Car, trailer, retrieve crew arranged
- Barograph or Flight Data Recorder fully prepared
- Official Observer arranged
- Responsible for re-assembly and test flight of glider after return to field (if de-rigging was necessary
- Responsible for 100% of all expenses not covered by insurance in case of accident or damage to club equipment

The short-field landing check, spin check, and covered altimeter check are to be noted in the pilot's logbook by the supervising instructor (any designated instructor with a minimum of the Silver Badge).

8.4 Retrieves

The pilot must plan in advance for the possibility of requiring a retrieve. Proper planning with the retrieve crew is an essential part of the cross-country experience. Retrieve by the tow-plane will not be allowed unless:

- the sailplane has landed at a nearby airport or aerodrome with a runway length of at least 1500', and a speedy retrieve will allow more flying in that sailplane during the day
- the tow-plane is not immediately required for additional towing at the club and is therefore available for the retrieve
- approval is received from both the Duty Instructor and the Chief Tow Pilot

The cost of an aerotow retrieve will be based on an hourly rate as posted on the Club website. However, should a club member request an aerotow retrieve from a field that conforms with the club's retrieve requirements and which is within 10 km of our airfield then (at the discretion of the Chief Tow Pilot) the retrieve will be charged at the rate of a standard 3,000' tow.

Because of the risk entailed in attempting a tow-plane retrieve from a field other than an airport or aerodrome, a retrieve using a ground crew and trailer is always the best solution. Many of the pilots and students in the club will gladly volunteer to help as crew given prior notification and training. It is normal club etiquette to reciprocate by volunteering as retrieve crew for those who have crewed for you.

8.5 Barograph Loan

The club barographs are available on a first-come, first-served, daily loan basis for genuine Badge and cross-country attempts. The priority of use is (1) cross-country attempts; (2) gain of height attempts and (3) other.

Certification of the barograph is the responsibility of the pilot requiring the barograph trace. Camphor smoking of the barograph is also the pilot's responsibility, and it should be re-smoked after the flight to ensure that it is ready for the next attempt.

The barograph should only be wound immediately prior to the flight to ease strain on the spring. Remember: like your grandfather's watch, this is a precision instrument … **do not wind to the limit.**

The barograph must be started, a baseline scribed and the case sealed in the presence of an Official Observer (OO).

8.6 Use of Club Equipment Away from the GLGC Base of Operation

Approval to trailer and fly any club aircraft away from the home field requires the permission of the Board of Directors. Such requests should be channelled through the Chief Flying Instructor.

Pilot(s) will be responsible for 100% of all expenses not covered by insurance in case of accident or damage to club equipment.

Discipline

9.1 Instructors' Authority

The Duty Instructor, or any instructor, is authorised to discipline any person(s), including tow pilots, for infractions of the flight or ground rules. This includes grounding of the person(s) until the case can be reviewed with the Chief Flying Instructor.

9.2 Flying Committee

The Flying Committee acts on:

Rules, as an Advisory Committee available to advise the Chief Flying Instructor, at his request

Rulings, as a court of appeal.

The Flying Committee is appointed by the Board of Directors of the Club and is composed of the Chief Flying Instructor as Chairman and four licensed pilots, at least one of which must be a senior tow pilot.

9.3 Appeals

A member may appeal a ruling on a flying or ground rule infraction. The sequence of appeals is as follows:

1. **The Chief Flying Instructor**
2. **The Flying Committee**
3. **The Board of Directors**
4. **A Meeting of the Membership of the Club**

A higher element on the chain does not offer an opinion unless specifically asked to do so. Decisions are binding unless overruled by a higher level.

Operating Procedures for Tow Pilots[3]

10.1 Take-off Signals

It is imperative the all tow pilots thoroughly familiarise themselves with the club Operating Procedures, especially sections 4.2 - 4.5.

After the release, the tow pilot should remain clear of the circuit at all times, except for the purpose of landing. A thorough lookout is of vital importance. Tow pilots are reminded that landing gliders have priority over all other traffic.

10.2 Circuit Procedures

All tows should normally climb straight out to at least 300' AGL before making a shallow turn into wind and away from noise-sensitive areas. Unless otherwise arranged with the glider pilot, the objective of the tow is to always remain within a comfortable gliding distance of the field.

The tow pilot must be aware of the release height (normally 2000' AGL) in order to position the tow-plane at the proper drop zone (i.e. upwind and within gliding distance of the field) at the required altitude.

Noise abatement is always a consideration: avoid low flying at take-off power over houses whenever possible. However, the tow pilot is expected to exercise good judgement and airmanship at all times, and the safety of crew, aircraft and people on the ground are always the primary considerations.

10.3 Towing Speeds

Full throttle, full rich mixture and retracted flaps are normally used for take-off . **The cylinder head temperatures (CHT) must be carefully monitored at all times.**

A towing speed of 60 - 65 mph is adequate and desirable for most gliders. However, you may be asked for a lower tow speed for low performance gliders, or a higher tow speed for high performance gliders (especially those carrying water ballast). If in doubt about the required tow speed, find out before making the tow.

[3] This section is for the information of all club members; more detailed procedures are included in the Towing Procedures Manual.

10.4 Descent Procedures

Shock-cooling the engine can be a real danger in towing, if too low a power setting and/or too high a descent speed is used. The result is cracked cylinders and an out-of-service tow-plane. Care must be taken to prevent shock-cooling.

As soon as you are certain that the glider has released:

- Start a shallow climbing left turn, apply full flaps, and reduce to 2,000 r.p.m. in approx. 10 seconds.
- Use carb heat as required.
- Speed must be no higher than 85 m.p.h. until engine cooling is completed.
- (This is a good time to plan your routing back to the field so that only shallow turns are planned and contemplate a routing to avoid noise-sensitive areas. Plan to arrive on the downwind or base leg with a minimum of turns.)
- Further reduce the r.p.m. slowly to be at 1500 or 1400 after engine is sufficiently cooled.
- Now flaps can be retracted and speed increased above 80 and mixture brought to lean.
- On final approach, extend the flap and mixture to rich.
- Immediately after landing, flaps up, and mixture to lean.
- Mixture is to be kept at lean setting until "take up slack" is signalled for the next tow.

Note: throughout the cooling procedure do not allow cylinder temp to decrease at a rate greater than 50º F/min. /(28º C/min.)

At all times, **keep a sharp lookout for other traffic**. Do not assume that local gliders and other tow-planes will be the only traffic. Remember that visiting traffic may not be familiar with our circuit procedures.

The downwind leg of the tow-plane circuit is normally on the opposite side to that used by the gliders. Check all parts of the circuit carefully for gliders, and **adjust your circuit to accommodate glider traffic**. Tow-pilots should call on downwind – e.g. “Great Lakes traffic, SYI downwind.” To reduce radio traffic, try to keep radio calls to a minimum of one call per circuit unless the situation dictates more R.T.

On short final over the road at the west end of the runway, **ensure that you have sufficient height that the tow-rope will not endanger people or vehicles on the ground**. The aiming point when approaching from the west is the taxiway intersection approximately at midfield. Towpilots will find that this allows plenty of stopping distance for the Pawnee.

10.5 Approach and Landing Procedures

All normal landings are to be made on the centre of the runway and abeam or beyond the parked gliders. **If the runway is obstructed, go around** for another circuit. In the event of a go-around, release the towrope on the strip if possible.

10.6 Emergency Signals

If you are having problems with the tow-plane, **waggle your wings and the glider should release immediately**. Use this signal only if you have a genuine problem. **Release the rope from your end only if the tow-plane is in danger or the glider cannot release**.

If the glider pilot finds that he / she cannot release his / her end of the rope, the glider pilot will fly out to the right of the tow-plane and waggle the glider wings. On this signal, tow the glider back over the airfield and release the rope from your end.

If both the glider and the tow-plane are unable to release the rope, initiate a slow descent (200 - 300 ft. per minute), avoiding steep turns. Fly a wide circuit, making a long final approach at 60 - 65 mph. Avoid sudden decelerations during the ground roll.

10.7 Miscellaneous

When taxiing near parked gliders, take care that the propwash does not upset gliders. Always turn such that the prop wash does not blow into parked gliders or into the hangar.

Before starting the engine, or when the engine is running, a licensed pilot must be strapped into the pilot's seat (i.e. the engine must be shut down when a new pilot takes over.)

Spring checkouts for towing are less formally structured than for glider pilots, but tow pilots are advised to check with the Chief Tow Pilot at the beginning of each season before commencing to tow.

Description of the Jobs on the Duty Roster

The flying operation at the Great Lakes Gliding Club depends heavily on the assigned duty people. A brief description of each job is given below. In all cases, **if you are unable to attend on the assigned date, it is your responsibility to find a substitute**. Be sure to notify the Chief Flying Instructor so any such change.

Chief Flying Instructor

The CFI shall be responsible for operational control for all flying (CAR 426.22). He or she may appoint assistants, and authorize others to perform certain functions, but the CFI retains the responsibility for all flying at the club. The decisions of the CFI are final.

Duty Instructor

The Duty Instructor (a minimum of a SAC class II instructor**) is expected to be on the Field and prepared to start instructing by 10.00 am**. **It is his / her responsibility to organise, direct and control the day's flying operations until the aircraft are tied down at the end of the flying day**.

The Duty Instructor must ensure that Daily Inspections have been completed on all aircraft flying that day. He / she is responsible for determining the active runway and setting the circuit direction for gliders and tow-planes, and should conduct the day's flying briefing. If, in the opinion of the Duty Instructor, weather conditions deteriorate to the point where flying becomes unsafe or ill-advised (e.g. strong or gusty winds, thunderstorms, low ceilings or poor visibility), the Duty Instructor has the authority to shut down the operation temporarily or for the day.

The Duty Instructor is not expected to spend his / her entire day instructing. The main job is to oversee the flying operation, especially with regards to safety and compliance with Club Operating Procedures. Provided other instructors are available, he / she should, in fact, spend as much time on the ground as possible.

He or she also shall supervise the Class III instructors (the CFI may opt to do this when present), and shall supervise all student pilots who wish to fly solo. This duty may be shared with other Class I or Class II instructors who are present.

The duty instructor shall ensure that the MOU or other protocol with NAV CAN is properly followed. He or she shall coordinate soaring activities, cross-country tasks and badge attempts, retrieve-crew arrangements, etc., and watch for anticipated weather changes during the day. He or she shall keep a watch on the general flying of members and shall provide briefings and debriefings

when requested or when deemed appropriate.

When handing over to another instructor, an adequate briefing shall be done to include status of instructors, pilots, student pilots, ground crew, and towpilots, who are currently on duty or flying. Also he or she should discuss the outlook for the weather and any other points that could affect the new duty instructor's decisions.

The duty instructor shall ensure that the following tasks are assigned and carried out satisfactorily before flying each day: his or her leadership is vital for the safe operation that is to follow:

- Obtain weather forecast and determine that the weather is suitable for flying;
- Checking NOTAMS and other notices as applicable;
- Activating Memorandum of Understanding (MOU) and/or notifying local NAV CAN facilities of intended flying operations as required;
- Inspecting the airfield for condition and identifying and marking any problem areas
- Performing Daily Inspections (DIs) on all gliders and towplanes and other equipment by students and pilots who have been approved by the club, and the DI books filled in and signed;
- The DIs shall include a check that the C of A, C of R and Insurance Certificate is on board each aircraft, that the journey logbook is up to date, and that time remains before the next scheduled inspection;
- Setting up the launch point, including This may include a special flight-line vehicle that contains tow ropes, parachutes, cushions, time keeping and flight priority systems;
- Checking that an adequate supply of drinking water is available at the launch point;
- Briefing of all flight-line or launch-point persons before flying starts to include discussion of weather (limits to consider for students, others, etc.), towing and circuit protocols, and glider retrieving procedures;
- Ensuring that all gliders moved to a flight line have been DI'd before they are moved, to prevent inadvertent use; (it is noted however that it is each pilot's responsibility to ensure that the aircraft is airworthy and has been given a DI);
- There may be an all-pilots briefing before the start of flying each day, in which case the duty instructor of other assigned person shall give this briefing after consulting with the field manager and agreeing on the objectives, safety points and flying possibilities for the day, etc.

Emergency Coordinator

In the event of an emergency, the role of Emergency Coordinator will normally be filled by the Duty Instructor. If present, the Chief Flying Instructor or Club President may choose to take over the responsibilities of the Emergency Coordinator, but a clear hand-off of responsibilities must take place. If the Duty Instructor is not on the field when the emergency occurs (i.e. if the Duty Instructor is flying at the time or is incapacitated), the senior instructor present will act as Emergency Coordinator.

All club members are expected to comply with the directions given by the Emergency Coordinator. His/her role is to take charge of the immediate actions that must take place in the event of an emergency. Details of the Emergency Coordinators responsibilities are shown in the Emergency Response Plan at the beginning of this document.

All club members are expected to comply with the directions given by the Emergency Coordinator.

Starting Tow Pilot

The Starting Tow Pilot is expected to be at the field by 10.00 am and ready to start flying by 11.00 am. He /she is responsible for the safe and efficient operation of the day's towing operations. The Starting Tow Pilot is to confer with the Duty Instructor regarding the active runway, circuit direction and release area. The Starting Tow Pilot is to open a new tow card and the final pilot of the day is to deposit the card in the mailbox in the hangar.

Noise abatement and consideration for the neighbourhood of the club forms an important part of the duties of the towpilot. Our club relies upon sound judgement on the part of the towpilot and the club will assist in determining the dates and times of weddings, garden parties, music festivals or any event in the area that may be disrupted by our operation. Weddings in Colgan will be posted on the hangar door and should be monitored for the Saturday operation. On Sundays, no towing should occur south of the field until after 13:15. Towing repeatedly over an area must be avoided, and tows must be planned to alternate as the day progresses. While training gliders must be kept somewhat close to the field, an single-seat glider may be towed straight upwind for the entire tow, as they can always get back home from any point during the tow.

Because we underlie the YYZ Terminal Radar Control Area, we must be mindful of its boundaries on tows that exceed 2,700 feet agl (3,500 msl)

The Starting Tow Pilot normally tows for the first two or three hours of the day's operation. However, when more tow pilots are available, he / she may cease duty at his / her discretion.

Field Manager

The Field Manager is an unassigned position which all pilots are expected to assume at some point during the day's operations. **The Field Manager is expected to ensure that the Flight Sheets are completed for each flight, that Day Membership waiver forms are completed for Intros and Guest Flights, that money is collected for Intros, and that only members in good standing are allowed to fly**. The Field Manager is also responsible to ensure that parachutes, seat cushions, barographs and ballast are returned to their proper storage areas after each flight.

During the day the field manager's (duty pilot's) duties shall include:

- Ensuring the operation is running smoothly and safely to maximize members' soaring opportunities; this to include ensuring proper time-keeping, use of tow ropes and parachutes, and that gliders, when not in use, are adequately secured or tied down;
- Scheduling pilots according to the club roster system;
- Operating the flight line so that pilots and gliders make maximum safe use of launch capabilities of towplanes;
- Ensuring that pilots and gliders are ready for flight before being moved into place on the flight line or takeoff grid;
- Ensuring gliders are moved off the runway/retrieved after landing;
- Assisting with training new members for retrieving and parking or positioning gliders, assisting pilots to get ready, launching gliders, signaling takeoffs, etc., and
- Other tasks may be delegated to an Assistant Field Manager at busy times; these include:
    - Time keeping for each flight, and log book entries;
    - Listening to and responding to the ground radio; note that no control instructions may be issued, only advisories and information may be given;
    - Maintaining a list of pilots wishing to fly solo, dual and with guests and visitors, who should be suitably greeted and briefed about safety and the procedures used at the flight line/launch point;
    - Passenger weighing and signing of membership application and waiver forms for introductory flights; etc;
- In the event of an accident, implementing the Emergency Response Plan;
- Handling all equipment so as to minimize risk of damage and/or injury.

The Field Manager is also responsible to confirm that the Pilot-in-Command has properly secured his / her aircraft after flight (i.e. tire on the wing, canopies closed and locked, etc.). The Field Manager should also supervise the return of the aircraft to the tie-downs at the end of the flying day and the return of club equipment, flight sheets, etc, to the clubhouse.

Before leaving the flight desk to go flying or go home, the Field Manager must enlist another member to assume the responsibility of Field Manager. Before going home at the end of the soaring day, members and guests are asked to remove garbage insofar as possible. Members are reminded to

ensure the doors to the hangar and storage units are closed. Golfcarts are to be left on the chargers. Towropes are to be tidied up and put in storage, towplanes and gliders are to be tied down and covers put in place, and glider batteries are to be left on charge.

The job of Field Manager can be onerous and often thankless. Therefore, courtesy dictates that all pilots should take their fair turn helping out as Field Manager.

Note: *In consideration of our neighbours, the day's normal operations do not begin until 10.30 am on Saturdays and 11.00 am on Sundays. However, equipment can and should be taken to the flight line, inspected and cleaned, and made ready to fly by 11.00 am.*

Safety Officer

The Board of Directors appoints the Safety Officer at the beginning of each flying season. The role of the Safety Officer is to audit all aspects of the Club's operations, both flying and on the ground, and offer suggestions where necessary to improve the overall safety of the operation. In addition, the Safety Officer will complete an annual safety audit of the Club for review with the Flight Training and Safety Committee of SAC. The Safety Officer speaks with the full authority of the Board of Directors on all issues regarding safety.