

Freedom's Wings International Event Orientation

Foreword/addendum for the 2015 season

A couple of incidents occurred during the past season that pointed out the need for some additional suggestions/instructions for our guests, particularly first-timers:

Relatively minor: We do not recommend that female guests wear skirts, especially relatively short skirts. Slacks, jeans, or shorts as appropriate for comfort are better choices ... unless you want to flash your panties(!?) Our crews are polite and discrete, but you may find yourself in an unusual physical attitude that could be embarrassing during ingress/egress to and from the glider.

Much more serious: It's not unusual for a guest, particularly a first-timer, to celebrate the event after his/her first flight. One of our guests caused some damage to one of our gliders while celebrating in front of a wing while the next guest was secured in the glider for the next flight. The celebrating guest did not respond to shouts from the pilot to get clear of the glider, and an abrupt tug from the tow vehicle resulted in damage.

So let us be clear on the following points:

- Do not approach a glider unless summoned and/or accompanied by a member of the crew.
- Other than a brief pause for pictures after your flight, do not linger in front of the glider, its wings or tail assembly. Get well behind the glider (12-15 feet) to ensure your safety and that of the pilot and next guest.
- ***If you do not show proper consideration for your own safety and that of our crew and other guests you may be asked to leave immediately.***

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By Bruce Brown June 9, 2013

Introduction:

Freedom's Wings warmly welcomes you to this Event, we are delighted you have chosen to participate! Safety is our highest priority. This document will familiarize you and those who accompany you with safety procedures and protocol to ensure that your experience will be safe and enjoyable. Freedom's Wings recognizes that individuals with a disability are individuals; therefore, inform Freedom's Wings of any special requirements you might have?

Preparation for the day of your flight:

In general, it is best to consume a moderate amount of food at your normal mealtime (a too empty or too full stomach tends to intensify any possible queasiness). In most cases, it is advisable to arrive at the airport well hydrated.

Dress for the forecast weather conditions. During hot weather; wear a broad rim hat (such as a Tennis Hat) and consider using a parasol for shade from sunlight (while on the ground). If you choose to wear a Baseball Cap, it is suggested to remove the button to preclude contact with the canopy in the event of turbulence. During cool or cold weather, dress warmly employing several loose fitting layers of clothing and a knit sock hat. Baseball Batter's gloves offer some warmth and a good feel of the flight controls (your Pilot might offer you the opportunity to steer the glider sometime after release from tow); a spare pair of ski-type gloves can be donned also for colder conditions. Be aware that all parts of the body can radiate and thus lose body warmth; therefore, ensure paralyzed areas are well insulated also.

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Preparation for the day of your flight (cont'd):

Event flights are normally 15 to 20 minutes duration to altitudes within 3,000 feet above the airport; whereas rides at other times can extend (soaring conditions permitting) up to one hour duration to altitudes that can be as high as possibly 9,000 feet above the airport; be aware that the air temperature normally decreases about 3.5° F per increase of each thousand feet of altitude.

Arriving at the airport:

An area road map may be attached (to this document) to assist locating the relevant airports (automobile GPS navigation guidance is also very helpful).

Freedom's Wings International Event Airports are normally as follows :

Adirondack Soaring Club, Saratoga County Airport, NY; Blairstown Airport, NJ; Philadelphia Glider Council PGC Gliderport, Hilltown, PA; Mid-Atlantic Soaring Association M-ASA Gliderport, Fairfield, PA & Frederick Municipal Airport, MD; or Van Sant Airport, Erwinna, PA. The respective airport diagram may also be attached.

A Freedom's Wings Volunteer will direct you to a designated parking area and then to the waiting area which will be safely clear of the "Flight Line". Gliders that are about to land are nearly silent and rotating propellers of tow planes and other power aircraft present hazards; therefore all children must be accompanied and supervised at all times by an adult and pets must be secured by a leash.

Only Freedom's Wings Volunteer Wing Runners and similarly trained and qualified personnel of the Freedom's Wings Event Co-Host may participate in the ground movement and "Wing Running" of the gliders.

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Arriving at the airport (cont'd):

Event participants must be able to follow directions of the Freedom's Wings Volunteers and the designated Inspiration Flight Pilot. The maximum weight of Event Passengers is 220 pounds. Participants should inform the Freedom's Wings Staff of their current weight, (for weight & balance computations). At Events, a Hoyer Lift having a Spring Scale will be available to ascertain the weight of those uncertain of their current weight.

Ingress/Egress:

Event participants must be escorted under the direct supervision of a Freedom's Wings Volunteer to and from the glider to preclude injury to persons or damage to the glider.

Communicate any special requirements you might have to the Volunteers assisting your ingress/egress. During transfer to and from your wheelchair and the glider, inform the Freedom's Wings Volunteers promptly if any discomfort is experienced during ingress/egress and give specific information and direction to the Volunteers concerning the issue. A Hoyer Lift will be available at Events. Freedom's Wings provides an assortment of cushions and pillows for body support; you may also bring your personal cushions. Prior to boarding, turn off and safely stow your cell phone.

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Cockpit Familiarization:

A Freedom's Wings Volunteer will normally open and close the Canopy.

The Plexiglas Canopy should only be lifted by the Fiberglass Frame, not the Plexiglas Window (doing so will eventually produce stress cracks within the Plexiglas). The canopy will normally be closed or held open, to preclude damage from slamming shut from wind gusts or the thrust of powered aircraft.

After you are comfortably seated, your Pilot or a Volunteer will point out the various controls and instruments; items such as: **DO NOT TOUCH**, Touch When Directed, and the Various Instruments. For your convenience, annotated cockpit photos from the Front and Rear Seats are attached. Note: passengers will normally occupy the Front Seat.

A Freedom's Wings Volunteer will assist you with the fastening of your safety harness. Safety Harness Operation: to fasten your safety harness, insert the four metal ends into the circular buckle, tighten the waist first by pulling upward on the center and two waist belt straps ends, and then tighten the shoulder straps by pulling downward on the two shoulder strap ends; to unfasten your safety harness, rotate the fins of the circular buckle.

Permissible Carry-On Items:

You may bring a camera (video and/or still camera) which must have a strap to secure the camera around the neck or the wrist (to preclude the possibility of having loose objects within the cockpit). 'Kindle' type electronic books are not permissible onboard as they have no security strap and are very large and hence can block the view of your pilot seated aft of you.

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Permissible Carry-On Items (cont'd):

Normally, photography will not be permissible during Sterile Cockpit Operations (see "Sterile Cockpit Concept" p.6); secure approval from your Pilot before photographing and always be aware of the positioning of the camera so as to not block the view of your Pilot. (Note: point the camera to aim (avoid sighting through viewfinders in flight as this tends to evoke nausea).

Potable water may be carried in a small (up to 12 FL oz.) plastic bottle (which has a strap to secure the bottle to the shoulder harness); Note: flights of 15 to 20 minutes duration may not require potable water, but water carriage is recommended for longer flights and perhaps energy bars as well. During the Cockpit Familiarization, you will receive direction from a Freedom's Wings Volunteer as to how to safely stow carry-on items to avoid jamming the flight controls.

Communication:

Freedom's Wings Sailplanes are equipped with state of the art avionics; including a VHF (Very High Frequency) Radio Communications Transceiver and Intercom System which utilize headsets and boom mics (Microphones). The Intercom System is voice activated allowing communication between front and rear seat occupants via the headsets which also allow radio transmission via the VHF Transceiver. Your Pilot will operate the VHF Transceiver by pushing the Red button on the top of his or her Control Stick (DO NOT PRESS THE RED BUTTON ON THE TOP OF THE CONTROL STICK as doing so activates the transmitter!). Normally your Pilot will announce (via the intercom) that he or she is about to transmit on the radio; this is your signal to remain silent during that radio transmission as voice from both front and rear boom mics would be transmitted.

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You are part of the Freedom's Wings Safety Team:

"Sterile Cockpit Concept"

Maintain a "Sterile Cockpit" (limit conversation to essentials, i.e. pointing out air traffic to your pilot) during the pre take-off checklist and the actual take-off until climbing 1,000 feet above the airport and during descent from 1,000 feet above the airport until the glider has completely stopped after landing (your Pilot will announce passing 1,000 feet above the airport during climb/aero tow and during descent to inform you of Sterile Cockpit Operations/Non-Sterile Cockpit Operations).

Advise your Pilot, at any time (including Sterile Cockpit Operations), of air traffic (other gliders, airplanes, helicopters etc.) referencing the relative position of the sighted traffic to an analog clock, the left wing is nine o'clock, the nose is twelve o'clock, and the right wing is three o'clock. For example: You: "I see an airplane one o'clock." Your Pilot: "Roger, I see the airplane, he's about a mile away, turning away from us, not a problem, and thanks...let me know if you see any other traffic."

The Take-Off:

Your pilot will communicate via signals and/or radio to the Volunteer Wing Runner and the Tow Pilot. The glider will achieve flying speed before the Tow Plane and therefore will fly just a foot or two above the runway until the tow Plane becomes airborne, at which time both aircraft will climb in formation.

Your Pilot will operate the Release Knob (see Cockpit Photo Attachments) at the agreed upon altitude which will normally be between 2,000 to 3,000 feet above the airport. Your Pilot might advise you of a mechanical tow release sound just prior to releasing from tow.

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Comfort notes:

As the glider ascends or descends, there will be a pressure change of the ambient air; possible inner ear pressure and attendant discomfort may be relieved by chewing gum and/or yawning during climb and holding the nose with the mouth closed while blowing (as done while inflating a balloon) during descent can reduce this inner ear pressure/discomfort.

Your Pilot might circle in thermals (rising columns of warmer air) to gain or sustain altitude; advise him or her if you experience any queasiness at the first indication, at which time he or she will fly with the wings level as much as is possible to ease any discomfort. Fresh air from the canopy Air Scoop and the Air-vent helps stave off nausea; as well as does directing your scan outside the cockpit, (rather than looking down at the instrument panel inside the cockpit). An airsickness bag is stowed in the cockpit sidewall map pouch near your seat.

To increase cockpit ventilation: PULL the Air-vent knob located at the top left of the front instrument panel and/or PUSH the Air Scoop located within the Sliding "Window" of the Canopy. To decrease ventilation: PUSH the Air-vent knob located at the top left of the front instrument panel and/or PUSH the Cantilever Arm of the Air Scoop within the Sliding "Window". Note: the Air Scoop can only be opened when the Sliding "Window" is closed. To close the Sliding "Window": grasp the cylindrical knob and PUSH forward until the "Window" snaps into the Close position. To open the Sliding "Window": grasp the cylindrical knob, PULL inboard and then PULL aft. (See the Cockpit Photo attachments).

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You might have the opportunity to steer the glider!

At some time after release from the tow, your Pilot might offer to let you steer the glider briefly! If so, he or she will ask you to place your right hand on the Control Stick (see photo attachment) while your Pilot "follows you through" (which means, he or she will retain a gentle touch/backup on the flight controls while you move the controls).

To effect positive control of the Glider, your Pilot will state: "You have the controls, I am following you through." You state: "I have the controls and you are following me through."

Gently apply pressure to the controls: moving the Control Stick forward will lower the nose and accelerate the Glider, conversely, moving the Control Stick aft will raise the nose and decelerate the Glider; Turns: moving the Control Stick to the right, will bank the wings (and turn the Glider) to the right, moving the Control Stick to the left will bank (and turn the Glider) to the left. The Manual Control for the Rudder is used to co-ordinate left and right Control Stick inputs, left Rudder with left Control Stick input, and right Rudder with right Control Stick input. To apply left Rudder: PUSH the Manual Rudder Control, conversely, to apply right Rudder: PULL the Manual Rudder Control. (Note: if the Manual Rudder Control is not installed during your Event Flight, your Pilot will apply appropriate Rudder inputs from his or her seat).

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You might have the opportunity to steer the glider! (cont'd):

As the Glider banks, apply a little aft pressure on the Control Stick to keep the nose of the Glider "following" the horizon as the Glider turns. To level the wings, simply reverse the aforementioned process. At the completion of you steering the Glider, your Pilot will state: "I have the controls", you will then remove your hands from the flight controls and state: "You have the controls."

How does the Pilot know the Glider can glide back to the airport?

The best glide ratio of the Grob G-103 is 36:1 which means for every mile of altitude, the glider can fly 36 miles (in still air) which equates to a gliding distance of six nautical miles per 1,000 foot of altitude. Your Pilot will plan on an 18:1 glide ratio which will affect a 50% margin of safety.

As you approach 1,000 feet above the airport and the traffic pattern entry, your Pilot will announce "Sterile Cockpit Operations" and begin the Landing Checklist. Prior to testing operation of the Airbrakes/Spoilers, he or she will inform you of the attendant sound, vibration of the airframe and slight change in cockpit air pressure as the Airbrakes/Spoilers are deployed.

Your Pilot will fly a traffic pattern and adjust the glide path to touch down by extension and retraction of the Airbrakes/Spoilers which partially decrease the lift of the wings (within the extension area) and increase drag.

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After Landing:

A Freedom's Wings Volunteer Wing Runner will connect a ground tow line attached to a ground tow vehicle to the Glider to return to the starting point or the tie-down area. You will remain seated until reaching the designated area for egress. Your Pilot might open your canopy for ventilation and ask you to hold the canopy frame securely during ground tow, or he or she might walk alongside the cockpit and hold the canopy open while a Volunteer Wing Runner 'walks the wing' .

Emergency Egress:

Although evacuation of the Glider is highly unlikely: to open the canopy, PULL the Velcro Security Strap (on the left red handle) inboard, PULL red handles on right and left of canopy fully back together. Push canopy up and away with the left hand. Release safety harness (to unfasten your safety harness, rotate the fins of the circular buckle). _ . (See Cockpit Photo attached).

Epilogue:

It is our privilege to fly with You! We invite you to become a member of Freedom's Wings International and possibly to flight train to earn your FAA Private, Commercial, or Certified Flight Instructor Certificate(s) in a Freedom's Wings Glider! Freedom's Wings Pilots with a disability who have earned the FAA Private, Commercial, and/or Certified Flight Instructor Glider Certificate(s) are awarded their Freedom's Wings **Pilot Wings**!

Freedom's Wings Highest Priority IS Safety; which is achieved through synergism of the Freedom's Wings: Safety Chairman, Maintenance Chairman, Wing Runner Volunteers, the Freedom's Wings Flight Training Department, and of course **You** through your study of this document and your participation in the safety of your flight!

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Epilogue (cont'd):

The Freedom's Wings cadre of FAA Certified Flight Instructors employ: CRM (Crew Resource Management), Glider Flight Simulation, the Freedom's Wings Free Library consisting of Soaring Books and Films in DVD and VHS format, and Annual Safety Seminars.

Freedom's Wings was the first in the region to sponsor an FAA accredited "Wings" Safety Seminar: "Freedom in Soaring" (July, 2011).

The cadre of Freedom's Wings Flight Instructors has several SSA (Soaring Society of America) Designated Flight Instructors who administer the SSA "A", "B", "C", and "Bronze" Soaring Pin (Badge) Programs; as well as offer guidance to advanced Freedom's Wings Pilots pursuant to the SSA Soaring Badges: "Silver", "Gold", and "Diamonds" (which is archived in the Fédération Aéronautique Internationale, (Lausanne, Switzerland).

Freedom's Wings International represented the USA at Gruyère, Switzerland (July, 2011).

Visit our website www.freedomswings.org,

our facebook page: [Freedom's Wings International - disabled sports, flying](#)

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Sincerely,

Freedom's Wings International