Schweizer SGS 1-34 Pilot Briefing

Pilot Name:

The 1-34 is a 15-meter Standard Class Sailplane. This ship is a dream to fly. It's safety features as well as its excellent flying characteristics make it an ideal sailplane for the average soaring pilot, which is why LESC has one! This ship is a good transition from the 1-26 to other higher performance gliders. This briefing will give you an idea of what to expect from this wonderful aircraft.

The basics you've learned while flying the 2-33 and 1-26 will serve you well in this and any glider you fly in the future. A good correlation is the 2-33 is like driving the family station wagon - exciting because it was what you learned in, but not much in the way of handling or performance. The 1-26 is like an MG Midget - better handling and lots of fun to zip around in, but again, not much in the way of performance. The 1-34 is a 1-26 on steroids and much like a muscle car. It has a familiar feel, but has the legs to reach those far away goals. Beyond the 1-34 you have the Pilatus which is like a Corvette - sleek and probably your first taste of what performance is all about. Maybe someday you'll decide you're ready for a glass ship - the Ferrari (but that's a discussion for another time).

The transition from the 1-26 to the 1-34 will probably be one of the easiest of your soaring career. However, your flight instructor is the key to making this a smooth and enjoyable operation - besides, a checkout by a qualified LESC CFIG is required prior to your first flight in any LESC glider. The following notes will also be helpful and should be digested by the aspiring 1-34 pilot before the actual check out session with their instructor. The experience required to fly LESC's 1-34 (and all of LESC's gliders for that matter) is described in the LESC Standard Operating Procedures.

Obtain a copy of the 1-34 Flight Manual. Memorize the airspeeds for minimum sink and best glide. Consider proper approach speeds for varying surface winds and turbulence.

There are some features of the 1-34 that are very different from other sailplanes you've been flying. One of the more obvious is noticed as you walk up to the glider - it's all metal construction. What's not so obvious is it's monocoque construction, which simply put means that there's no frame and the skin is structural. Any dents or tears in the skin or loose/popped rivets render this glider non-airworthy.

You'll find a familiar cockpit layout. As I said, it's basically a 1-26 on steroids. The control harmony and layout are almost exactly like the 1-26. The main difference you'll find in the controls is that the glider is a little slower in roll response as compared to the 1-26 due to the longer wing. these longer wings are something to be aware of during takeoff and landing, especially if there are tall weeds at the edge of the runway. Make sure you are centered in the runway for both takeoff and landing and keep the wings level.

Next is the preflight inspection. If possible, do a dry run on this before your actual check out with your instructor. The LESC 1-34 Checklist will show you what to check and your instructor will cover the preflight in detail. Pay particular attention to any wrinkles, dents or tears in the skin. Look for loose or popped rivets. At this time be sure you understand the

center of gravity and gross weight limitations of your particular glider. If you are a light weight you may need seat ballast under your cushion, or should you be a heavy weight see if seat ballast was removed after a previous flight.

When preflighting the cockpit observe the control layout. The seat has a good range of adjustment so find a comfortable position and see if you can easily reach and operate all the controls.

Never pull the 1-34 by the wingtips! Moving the glider is best accomplished by pushing the glider behind the wings, in the center of the fuselage, or with the use of a tow vehicle. **Lift the tail by pushing down on the nose before turning the glider when ground handling!**

For your first flight it is suggested that you tow to at least 3000 feet. Even in no lift conditions this will give you time to fly all your training maneuvers and feel at ease. Particularly practice stalls with and without spoilers. The spoilers are quite effective and cause the nose to pitch down. Become familiar with the spoilers before it's time to land. Practice slow flight, imminent stalls and some steep turns. Concentrate on coordination. The 1-34 with its longer wing is less forgiving of skidded turns and more susceptible to spins. Poorly coordinated steep banked turns can lead to a spiral dive. Time to land so soon?

List the appropriate performance limitations and speeds (in MPH)

Stall speed:	
Minimum sink speed:	
Pattern speed:	
Vne, dive brakes closed:	
Vne, dive brakes open:	
Minimum Sink speed:	
Best L/D speed:	
Best L/D:	
Sink rate (FPM) @ best L/D:	
Maximum gross weight:	
Maximum pilot weight:	
Minimum pilot weight:	
Maximum positive load factor:	
Maximum negative load factor:	