

# Adelaide Soaring Club

## Gliding Conversion Standards for ASC Solo Pilots.

### Preamble

The following standards are intended as a guide for ASC instructors. Generally, they will be adhered to, and some, such as completion of pre-solo training prior to flying solo are clearly mandatory. However, it is accepted that some pilots show a greater aptitude and skill level than others and it is permissible, when appropriate, to waive some aspects of the standards if the instructor has assessed the pilot competent to proceed.

***Be aware however, that this is expected to be very much the exception rather than the norm.***

### First Solo Aircraft

The choice of aircraft (103 versus 505) will be made by the instructor converting the pilot to solo. The basis for the decision will be the experience the student pilot has obtained on type during ab initio training. Solo flying in the aircraft NOT chosen for first solo will be subject to conversion as noted in the section below titled, **Second Twin Aircraft (Front Seat)**.

### First Solo

Aircraft	Minimum Requirements	Privileges
Grob 103 OR DG 505	<ul style="list-style-type: none"><li>• Completion of Pre-Solo training as evidenced by training record, in Glider Pilot logbook</li><li>• "Sign off" by an ASC instructor.</li><li>• Student has read and can demonstrate a thorough understanding of the aircraft flight manual (on ASC website)</li></ul>	<ul style="list-style-type: none"><li>• Solo flights subject to prior check by ASC instructor and demonstration of knowledge of local airspace.</li><li>• Pilots to commence post solo training.</li></ul>

### First Single Seat Aircraft

Aircraft	Minimum Requirements	Privileges
Grob 102	<ul style="list-style-type: none"><li>• Minimum 3 solo flights in Grob 103 or DG 505, whichever was flown as first solo.</li><li>• Student has read and can demonstrate a thorough understanding of the aircraft flight manual (on ASC website) and demonstrate knowledge of critical operating envelope</li></ul>	<ul style="list-style-type: none"><li>• Not on same day as first solo flight.</li><li>• Solo flights subject to prior check by ASC instructor.</li></ul>

	<ul style="list-style-type: none"> <li>• Must satisfy instructor regarding knowledge of local airspace.</li> <li>• “Sign off” by an ASC instructor.</li> </ul>	
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### **Second Single Seat Aircraft (Discus or LS8)**

Aircraft	Minimum Requirements	Privileges
Discus	<ul style="list-style-type: none"> <li>• Completion of at least the following post solo training syllabus. <ul style="list-style-type: none"> <li><i>Unit 27 – Advanced Aerotowing</i></li> <li><i>Unit 28 – Sideslipping</i></li> <li><i>Unit 29 – Steep Turns</i></li> <li><i>Unit 30 Thermal Centering Techniques</i></li> <li><i>Unit 31 Thermal Entry</i></li> <li><i>Unit 32 Soaring with other Gliders</i></li> <li><i>Unit 42 Daily Inspection</i></li> </ul> </li> <li>• Minimum of 15 launches as solo pilot including at least 5 in Grob 102.</li> <li>• Minimum of 5 hours PIC.</li> <li>• Student has read and can demonstrate a thorough understanding of the aircraft flight manual (on ASC website) and demonstrate knowledge of critical operating envelope.</li> <li>• Satisfactory Check Flight and Conversion by an ASC instructor familiar on type.</li> </ul>	<ul style="list-style-type: none"> <li>• Check flight must include spin check.</li> <li>• Must satisfy instructor regarding knowledge of airspace requirements.</li> </ul>
LS8	<ul style="list-style-type: none"> <li>• 20 launches in tail dragging single seat glider (i.e.Discus)</li> <li>• Student has read and can demonstrate a thorough understanding of the aircraft flight manual (on ASC website) and demonstrate knowledge of critical operating envelope.</li> <li>• Satisfactory Check Flight and Conversion by an ASC instructor familiar on type.</li> </ul>	<ul style="list-style-type: none"> <li>• Check flight must include spin check.</li> <li>• Must satisfy instructor regarding knowledge of airspace requirements.</li> </ul>

\* Where possible the DG 505 should be used. This better emulates a “tail dragger” aircraft if appropriately tail ballasted.

### **First Twin Aircraft (Front Seat)**

This section assumes that the pilot concerned has achieved solo in either the Grob 103 or the DG 505. Whichever aircraft it is, these standards apply to the other (twin) aircraft.

Aircraft	Minimum Requirements	Privileges
Grob 103 OR DG 505	<ul style="list-style-type: none"><li>• Completion of Pre-Solo training as evidenced training record in Glider Pilot log book.</li><li>• Minimum 10 solo flights in Grob 102, Grob 103 or DG 505</li><li>• Student has read and can demonstrate a thorough understanding of the aircraft flight manual (on ASC website) and demonstrate knowledge of critical operating envelope.</li><li>• Satisfactory Check Flight and Conversion by an ASC instructor familiar on type</li><li>• Sign off" by an ASC instructor.</li></ul>	<ul style="list-style-type: none"><li>• Check flight must include spin check</li><li>• Must demonstrate adequate knowledge of airspace.</li><li>• With a "B" Certificate can fly front seat 'mutuals' with another "B" Certificate holder.</li></ul>

### **Second Twin Aircraft (Front Seat)**

Aircraft	Minimum Requirements	Privileges
DG 1000	<ul style="list-style-type: none"><li>• Be rated for Discus.</li><li>• Minimum of 15 hours as PIC</li><li>• Pilot has read and can demonstrate a thorough understanding of the aircraft flight manual (on ASC website) and demonstrate knowledge of critical operating envelope.</li><li>• Satisfactory Check Flight and Conversion by an ASC instructor familiar on type.</li></ul>	<ul style="list-style-type: none"><li>• Check flight to include spin check.</li><li>• Must demonstrate adequate knowledge of all relevant airspace.</li><li>• With a "B" Certificate can fly front seat 'mutuals' with another "B" Certificate holder.</li></ul>

### Twin Aircraft Rear Seat Operations

Aircraft	Minimum Requirements	Privileges
All Twin Aircraft	<ul style="list-style-type: none"><li>• Be Front Seat rated for the conversion aircraft</li><li>• Be rated for Discus.</li><li>• A series of familiarisation flying with an instructor to be comfortable with different perspectives. Including a spin check.</li><li>• Student has read and can demonstrate a thorough understanding of the aircraft flight manual (on ASC website) and demonstrate knowledge of critical operating envelope</li><li>• Satisfactory Check / Familiarisation Flight and Conversion by an ASC instructor familiar on type.</li></ul>	<ul style="list-style-type: none"><li>• With a “B” Certificate can fly front or rear seat ‘mutuals’ with another “B” Certificate holder.</li></ul>

### Carrying passengers in ASC aircraft

Aircraft	Minimum Requirements	Privileges
Pilot must be rated for the aircraft they want to fly	<ul style="list-style-type: none"><li>• Completion of at least the following post solo training syllabus.<ul style="list-style-type: none"><li><i>Unit 27 – Advanced Aerotowing</i></li><li><i>Unit 28 – Sideslipping</i></li><li><i>Unit 29 – Steep Turns</i></li><li><i>Unit 30 Thermal Centring Techniques</i></li><li><i>Unit 31 Thermal Entry</i></li><li><i>Unit 32 Soaring with other Gliders</i></li><li><b>Unit 37 Passenger Carrying</b></li></ul></li><li>• Sign off” by an ASC instructor.</li></ul>	<ul style="list-style-type: none"><li>• May fly a passenger under the supervision of the ASC duty instructor.</li></ul>

### Pre-requisite for Aerobatic training

Aircraft	Minimum Requirements	Privileges
Pilot must be rated for the aircraft they want to fly	<ul style="list-style-type: none"><li>• Completion of at least the following post solo training syllabus. <i>Unit 27 – Advanced Aerotowing</i> <i>Unit 28 – Sideslipping</i> <i>Unit 29 – Steep Turns</i></li><li>• Sign off" by an ASC instructor.</li></ul>	<ul style="list-style-type: none"><li>• The pilot may undergo aerobatic training with a qualified ASC instructor</li></ul>

## **Powered Sailplanes**

Gliding Australia Operations Manual (Part 2) and The Gliding Australia Powered Sailplane Manual (OPS0009) outline the training and conversion syllabus for operating both powered assisted and self-launching sailplanes. Importantly, all pilots operating Powered Sailplanes (except power-assisted 'turbo' style gliders incapable of self launching) must hold a valid Powered Sailplane Endorsement in their logbook for the intended mode of operation.

## **Cross Country Requirements** (as Pilot In Command)

### **General**

Aircraft	Minimum Requirements	Privileges
Pilot must be rated for the aircraft they want to fly	<ul style="list-style-type: none"><li>Completion of at least the following post solo training syllabus.<ul style="list-style-type: none"><li><i>Unit 27 – Advanced Aerotowing</i></li><li><i>Unit 28 – Sideslipping</i></li><li><i>Unit 29 – Steep Turns</i></li><li><i>Unit 30 Thermal Centring Techniques</i></li><li><i>Unit 31 Thermal Entry</i></li><li><i>Unit 32 Soaring with other Gliders</i></li><li><i>Unit 34 Outlanding, Planning, Demo, Execution</i></li><li><i>Unit 25 Glider and trailer preparation</i></li><li><i>Unit 36 Airspace and Navigation</i></li></ul></li></ul>	<ul style="list-style-type: none"><li>May fly cross country under the supervision of the ASC duty instructor.</li><li>If the pilot holds a GPC, they do not require direct supervision of the ASC duty instructor to go cross country</li></ul>

- It would benefit pilots to have experienced cross country flying with an ASC Coach.

### **Single Seat Aircraft**

Aircraft	Minimum Requirements
Grob 102	<ul style="list-style-type: none"><li>5 hours + 15 launches in type</li><li>Discus rated.</li><li>Approval of ASC Duty Instructor for each flight.</li></ul>
Discus	<ul style="list-style-type: none"><li>5 hours + 10 launches in type</li></ul>
LS8	<ul style="list-style-type: none"><li>5 hours + 20 launches in type or Discus</li></ul> Must have at least 3 launches in type

## **Twin Seat Aircraft**

Aircraft	Minimum Requirements
Grob 103	<ul style="list-style-type: none"><li>• 5 Hours + 15 launches in type</li><li>• Discus rated.</li><li>• 2 single seater cross-country paddock landings.</li></ul>
DG 505	<ul style="list-style-type: none"><li>• 15 hours + 20 launches in type</li><li>• Discus rated.</li><li>• 2 single seater cross-country paddock landings</li></ul>
DG 1000	<ul style="list-style-type: none"><li>• 15 Hours + 20 launches in type</li><li>• Discus rated.</li><li>• 3 single seater cross-country paddock landings.</li></ul>

## **Carrying of Water Ballast**

The carrying of water can significantly increase cross-country performance via an increased wing loading. It is advantageous if...

- Thermals are large.
- Thermals are strong.
- Streeting allows Dolphin flying.
- You fly faster.

Unless higher speeds are achieved it is best not to ballast or dump the ballast if the flight has commenced, as the increased wing loading will result in slower climbs. Water ballast should not be used if...

- Thermals are small.
- Thermals are weak.
- You do not increase your un-ballasted average speed.

To carry water ballast pilots must ...

- Be cross-country rated.
- Have achieved FAI Gold distance.
- Have attended a briefing for type on carrying of water ballast (evidenced in log book).
- For the first 3 flights must be with no more than 60kg (litres) of water ballast (Subject to weight and balance of type).

## **Use of Oxygen**

To operate and use glider oxygen systems pilots must...

- Be cross country rated.
- Have attended a briefing from the ASC's Oxygen Officer or delegate (evidenced in log book).
- Be of good health such that proper and appropriate use of oxygen under the guidelines will not endanger the pilot or others.