

## 005 PRE TAKE OFF CHECKS

### (Preparation for Flight)

**Aim:** To learn the Checks to be completed to ensure you and the glider are ready for takeoff.

**Checks:** Checks is a term we use to describe a series of actions that check a task is completed, a setting is made or an action is carried out prior to carrying out a particular phase of flight. We usually complete them in a “say and do” manner; that is, we announce the check, state the key word for the check, then carry out the check actions.

During your training it is important you do the checks from a very early stage, even if you are not doing the actual take-off.

Lets look at an example. The first check in the Pre Takeoff checks is Controls. We should conduct the check as follows:

Say out loud “I will do the Pre Takeoff checks. Controls.....” then we smoothly move the control column to fully deflect the elevators up and down, the ailerons fully left and right, and move the control column around the outer extremities of its possible travel to check that there are no obstructions to full and free movement, and deflect the rudder to full left, then full right. If you can see the controls, look to see they move in the correct way. And then say, “full and free and in the correct sense.”

The rest of the checks have specific actions and considerations that are verbalised to confirm they are completed.

#### **The Pre Takeoff Checks:**

Your instructor will take you through the following checks, teaching you the actions required and appropriate words to say as you complete the checks.

These need to be learnt off by heart. They must always be completed in order and you must not allow yourself to be distracted while doing them.

#### **Out of cockpit Preparation**

<b>A</b>	<b>AIRCRAFT</b>	Is it in reasonable condition to take over---flat tyres/ damage /distortion...Does it look right? Do you need charts, water loggers?
<b>B</b>	<b>BALLAST</b>	Are there weights in it ? Do you need them?
<b>C</b>	<b>CONTROLS</b>	Are they moving in the correct sense?
<b>D</b>	<b>DOLLIES</b>	Have all the rigging aids, tail dollies rudder locks etc all been removed?

**In the cockpit**—all occupants should be strapped in before starting

<b>C</b>	<b>CONTROLS</b>	Are they unrestricted, and move in the correct sense?
<b>B</b>	<b>BALLAST</b>	Reconfirm placard weights—aerobatic/non-aerobatic?
<b>S</b>	<b>STRAPS</b>	Confirm they are secure, holding you down as well as back in the seat. Check the second seat.
<b>I</b>	<b>INSTRUMENTS</b>	Are they all zeroed or reading normally. Electrical system on, barograph on?
<b>F</b>	<b>FLAPS</b>	Are they fitted, are they set for take off?
<b>T</b>	<b>TRIM</b>	Exercise the lever and set.
<b>B</b>	<b>BRAKES</b>	Exercise the brakes—confirm both opening together. Close them and lock.
<b>E</b>	<b>EVENTUALITIES</b>	Brief the options and responsibilities for action in the event of a Non-Normal situation on takeoff. Decide the approach speed
<b>C</b>	<b>CANOPY</b>	Closed and locked and resisting upward pressure—positive check(push up gently on the frame---ask 2 <sup>nd</sup> seat to confirm locked in the rear.

**Tips:**

- Practise doing the checks when sitting in a glider on the ground. This costs nothing but your time.
- Say the checks out loud so people know you are doing them and will not disturb you. It also helps your Instructor monitor what you are doing.
- If interrupted when doing your checks it is easy to miss a check when you restart. The safest thing to do is restart the checks and run through them again – it takes only a few seconds and it could save you from an embarrassing or dangerous error of omission.
- Do not hook on or accept the tow rope or cable for attachment until the checks are completed and you are completely ready for takeoff.
- It is quite okay to use a checklist or mnemonic penned on paper or your hand as a memory jogger.

**Need To Know:**

- What to check, say and do to complete the Pre Takeoff Checks.
- What to do if you are interrupted when doing the checks.

**Further Reading:** • Glider Flight Manual, Ken Stewart. Specific detail of what needs to be checked on a particular glider.  
BGA Laws and Rules