

INTRO TO DAILY INSPECTION (DI)

Aim: To learn how to inspect and certify a glider for flight.

It is important that we only ever fly a glider that is safe to be flown. The gliders are maintained to a very high standard by qualified engineers. However, the ongoing serviceability of a glider must be regularly checked to ensure they remain serviceable between the routine checks done by engineers. With training, glider pilots are authorised to carryout the necessary daily inspection of a glider to ensure it is safe for flight.

The DI:

The Daily Inspection (DI) is done each day before the glider is flown. It is best done in a methodical order to ensure the same order, technique and habit can be applied to any glider you have to DI.

To adequately inspect the glider, you need to have good easy access to all parts of the glider and good ambient lighting. This is usually achieved by moving the glider out of its storeage area to a place where either wing can be placed on the ground.

The inspection starts with a check of the glider's documentation as we are looking to ensure the glider's routine maintenance is up to date.

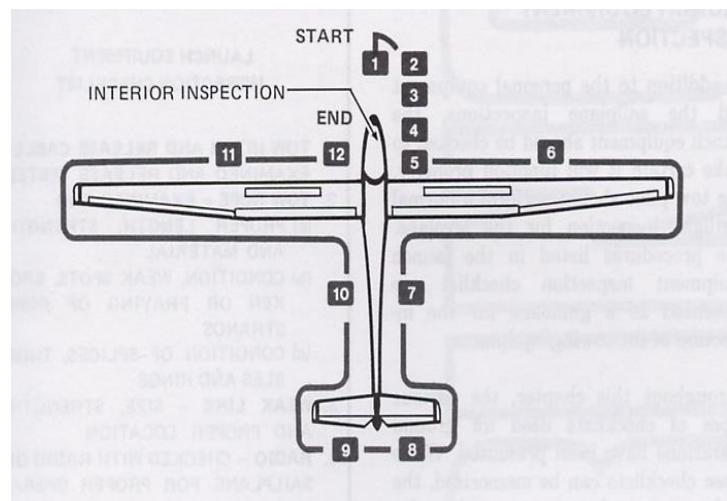
An inspection of the yellow DI book (usually stowed in a side pocket in the cockpit) allows us to check the blue page in the middle called the Tech Log to ensure the expiry dates have not passed.

Next, turn to the front pages where any minor faults are noted so we can see if conditions have changed since being recorded there.



With the "paperwork" checked and in order, we can inspect the cockpit area, then the internals of the fuselage where controls and rigging pins and connections are. Once happy with the insides, we can unlock the brakes and set the flaps (if fitted) for access as we go around the exterior of the glider. Inspect and then close the canopy, checking the locking mechanism and side vents / sliding windows. Closing the canopy guards against it being damaged if left open as we inspect the exterior.

We can now move around the glider in a clockwise direction checking fittings like nose hooks, pitots, yaw string, skids, wheels, surface skin, static holes, markings, controls, brakes, etc. We are looking for any signs of wear and tear or damage, for normal functions, full and free movement of controls, no binding or excessive slop / play, rubbing, chips, scratches, puncture holes etc, etc. Your Instructor will point out the specific points to check and when the opportunity exists, any examples of damage etc that would be cause for reporting and repairing before flight. Some remedial action can be completed by pilots, eg. inflating a low tyre, while other work can only be done by a GNZ approved engineer.



If in any doubt about what is acceptable, check with an experienced pilot or Instructor. At this stage of training though, you will not be authorised to sign off the DI but as you gain experience under supervision, you will be given more and more responsibility for carrying out the DI of the glider you will be training in.

When happy with the serviceability of the glider, we reopen the cockpit and fill out and sign the DI Record page to record that the DI is complete. We restow the book in the side pocket.

In this example, the last entry shows the glider was rigged and DI'd and a duplicate inspection carried out and signed for.

Tips:

- Have a square of cardboard or carpet to kneel on so you keep your clothes clean when getting down low to inspect the underside of the glider and wheel area.
 - Have a torch available to inspect into dark areas, particularly if light conditions are poor like on an overcast day.

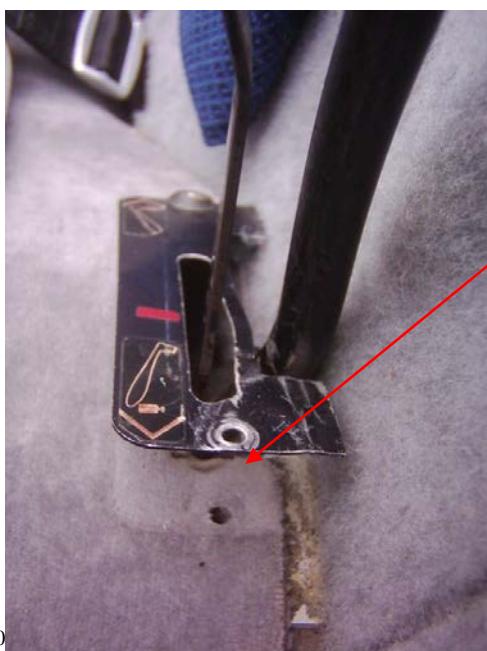
Need To Know:

- How to position and prepare a glider for a DI.
 - How to check the relevant documentation.
 - Who you can seek advice from if you find something during the DI that you are uncertain about.

Further Reading:

- GNZ Daily Inspection & Tech Log Book. Details of inspections, any defects and validity of documentation
 - GNZ MOAP Part 3 Pg 3-1-4 Details of what is in the Technical Log

DAILY INSPECTION RECORD							
Date	Work Done	DI Signed	Duplicate Signed	Aero	Wire	Hours	Mins
23/1/04	DI	<i>John Smith</i>		2		50	
23/1/04	DP	<i>John Smith</i>		3		05	
20/1/05	DI	<i>John Smith</i>		3		40	
28/1/05	DI	<i>John Smith</i>		3		35	
29/1/05	DI	<i>John Smith</i>		5		30	
31/1/05	DI	<i>John Smith</i>		1		10	
12/2/05	DI	<i>John Smith</i>		1		00	
22/2/05	DI	<i>John Smith</i>		1		30	
8/3/05	DI	<i>John Smith</i>		3		15	
12/3/05	DI	<i>John Smith</i>		3		20	
16/3/05	DI			2		55	
17/3/05	DI	<i>John Smith</i>		1		20	
18/3/05	DI	<i>John Smith</i>		1		50	
23/3/05	DI	<i>John Smith</i>		2		00	
27/3/05	DI	<i>John Smith</i>		1		20	
9/4/05	P-16	<i>John Smith</i>					



This photo shows a screw and washer are missing from the front plate that surrounds a trim lever in the front cockpit of a Twin Astir.

The screw and washer need replacing AND the cockpit area must be searched for the missing bits as these could float about until one jams a control in flight.