

## Understanding Landing Checks

These checks are not a poem, demonstrate that you have checked each item with either touching the control or pointing at the relevant gauge. Emphasise that you have completed the check on the particular item, by accentuating the statement verbs “*is/are*” etc, as in “brakes **ARE** off”



| Code                       | Check Statement  | Explanation   |
|----------------------------|--|---|
| <b>B</b>                   | Brakes<br>Brakes <b>are</b> off  | The manual or automatic handbrakes are off  |
|                            | Pressure <b>is</b> felt  | The brake pedals are squeezed to ensure that back pressure is felt, indicating that the brake lines and callipers are not leaking   |
| <b>U</b>                   | Undercarriage<br>Undercarriage <b>is</b><br>Down/Fixed                       | Check to ensure that retractable undercarriage has been lowered and “3-greens are seen” (3 green lights). If a fixed undercarriage then call “ <i>is fixed</i> ”  |
| <b>M</b>                   | Mixture<br>Mixture <b>is</b> Rich  | Check that the mixture control is set to the rich position. This ensures that maximum power is available should a go-around or touch-and-go be needed.  |
| <b>F</b>                   | Fuel<br><b>Is</b> On and <b>set</b> to fullest tank                          | Check that the fuel cock has not been knocked closed in flight, or if in an aircraft with non-crossfeeding tanks the fuel cock is set to the tank with the greatest contents  |
|                            | <b>Is</b> sufficient for approach, go-around <b>and</b> divert to xyz        | From your pre-landing FREDa check you should already know the remaining fuel status (ie how many minutes/hours of remaining fuel you have on board) so this should already be mentally calculated                                   |
|                            | Fuel Pump <b>is</b> on (if fitted)   | Where an auxiliary booster fuel pump is fitted, it should be turned on  |
|                            | Fuel pressure <b>is</b> in the green   | Fuel pressure gauge (where fitted) should be checked that both the engine-driven mechanical pump and electric auxiliary pump are proving adequate and safe fuel pressure  |
|                            | Primer <b>is</b> closed <b>and</b> locked                                    | Check to make sure that the primer is closed so that no excess fuel can be inducted into the engine and that it is locked so that it cannot inadvertently open  |
| <b>F</b>                   | Flaps<br>Will take <b>when</b> required                                      | Self brief yourself on when you are going to lower the flaps, ie on Downwind or Base, what stages of flaps and where.<br>e.g. “ <i>I will take 2-stages on base, and final stage on finals</i> ”                                    |
| <b>I</b>                   | Instruments<br>Altimeter <b>is</b> set                                       | Set to the airfield QNH (altitude) or QFE (height above airfield) as directed by FISO, Controller, Radio or ATIS  |
|                            | DI <b>is</b> aligned with compass  | Check the magnetic compass reading when wings-level and in steady, un-accelerated flight. Align the Direction Indicator with the compass reading  |
|                            | Engine T’s and P’s <b>are</b> in the green                                   | Check the engine(s) oil temperature and pressure are within limits  |
|                            | Vacuum <b>is</b> in the green  | The engine-driven vacuum pump is delivering 3-5 inches mercury of vacuum to drive the vacuum-driven instruments (usually the AI and the DI)   |
|                            | Ammeter <b>is</b> charging   | Ensures that the alternator is producing sufficient power for all the electrical services, with sufficient capacity to charge the main battery  |
| <b>C</b>                   | Carburettor<br>Carb heat <b>is</b> on  | Check for any icing of the carburettor, then leave on. This stops you from forgetting to turn it back on the critical phase of low engine power during the descent.   |
| <b>H</b>                   | Harness<br>Harnesses <b>Are</b> Fastened <b>and</b> secure                   | Check that lap-straps and shoulder straps are tightened   |
| <b>H</b>                   | Hatches<br>Hatches and doors <b>are</b> locked and windows <b>are</b> secure | Check that the door(s) are fully closed and latched shut, and that the windows (where fitted) and locked shut   |
| <b>L</b>                   | Landing Light<br>Landing light <b>is</b> on                                  | Improves visibility when on finals for those about to line up or cross the active runway, also useful at night when landing   |
| <b>C</b>                   | Clearance<br>Clearance <b>is</b> given                                       | When in a controlled environment you may require a clearance to land. Check that such clearance has been issued   |
| <i>When lowering flaps</i> |  |   |
| <b>A</b>                   | Airspeed<br>Airspeed <b>is</b> flap-safe                                     | Check the airspeed to ensure that the aircraft is within $V_{fe}$ , the flap lowering safety speed indicated by the white arc on the ASI  |
| <b>F</b>                   | Flaps<br>Flap <b>is</b> lowered <b>and</b> symmetric                         | Check that as the flap lowers that there is no unexpected rolling caused by asymmetric flap extension. This is why we lower flaps in stages to ensure we can maintain control should there be a failure in the flap lowering system |
| <b>T</b>                   | Trim<br>Trim <b>is</b> set   | After giving the flaps time to lower, and the aircraft time to settle at it’s new attitude and airspeed, re-trim  |