





GEAR DOWN AND LOCKED ... GEAR DOWN AND LOCKED ... GEAR DOWN AND LOCKED ...

We often hear that "there are those who have landed wheels up, and there are those who will".

Each year, pilots take their expensive, retractable landing gear-equipped aircraft and land with the wheels up. Why does this happen? How can we prevent it?

Why does it happen?

Some of the reasons are:

- **Distraction**: Pilots flying retractable landing gear aircraft may get distracted and forget to select the landing gear down. By concentrating too much on communicating with ATC or passengers, they forget to fly the aircraft and skip checklist items.
- 2. Unstabilized/rushed approach: Pilots multitask, fall behind the aircraft and often end up in an unstabilized or rushed approach. They focus on correcting the flight path while dealing with radio communications and traffic, and they forget the retractable gear.
- 3. Limited flight training in retractable gear operation: Some pilots may not have been taught useful retractable gear operational techniques, such as prioritization of landing gear checklist items or positional imprinting, where pilots select visual or positional markers to remind them to confirm that the gear is down.

How to prevent it?

Three things to remember when operating a retractable gear aircraft:

- Always use the checklist: This is self-explanatory. However, aircraft operational tasks and associated checklist items don't all have the same value. Items related to retractable gear operations are high priority. If your checklist includes the G.U.M.P.S. mnemonic, remember that the G stands for "gas" and the U stands for "undercarriage"!
- Always fly a stabilized approach: Pilots who consistently fly stabilized approaches are much less likely to forget critical steps, such as lowering the landing gear. The key to achieve consistency is through practice, repetition and by flying the same stable approach all the time.
- **Always confirm GEAR DOWN AND LOCKED 3 TIMES:** Confirm a minimum of three times that your retractable landing gear is down and locked. These three times may differ depending on aircraft, checklist, position and situation. This is where you can "imprint" in your mind at least three moments to check the gear. The constant remains to always CHECK GEAR DOWN AND LOCKED 3 TIMES.

When to go around? Common guidance is that if you cannot have the aircraft stabilized, properly configured and ready for landing a half-mile back, then you should seriously consider overshooting.

To view the complete *Take Five* list, please click **here**.

