

## **6 Minutes for Safety Topic: Structural Damage / Controllability Check**

Note: POH / AFM guidance takes precedence over this checklist. If your specific aircraft POH / AFM has a controllability check, use it instead of this checklist.

Recommend perform this check when structural integrity of the aircraft has been compromised (actual or suspected). For example:

- Mid-air collision with other aircraft or debris
- Bird strike
- Ground obstacle strike (tree, wire, snag, etc.)
- Control jam / failure
- Lightning strike
- Asymmetric flaps
- Icing
- Hail damage
- Over-G
- Any occurrence that would cast doubt as to the structural integrity / normal flight characteristics of the aircraft

The aircraft may be perfectly controllable at a specific airspeed and / or configuration. However, acceptable flight characteristics may be an issue at approach and landing speeds. It is advisable to ascertain this before attempting a normal landing approach (e.g. getting close to the ground). Upon determining a structural issue exists that is having a negative effect on flight characteristics, recommend accomplishing the following:

1. Maintain aircraft control (use trim as required to help control the aircraft / relieve control pressure)
2. Load - jettison
3. Attain a safe altitude (recommend 2000' – 3000' AGL minimum)
4. Determine optimum configuration for landing (flap position)
5. Slow only to that airspeed which allows acceptable handling qualities for continued flight
6. Prior to descent: Check handling characteristics at approach / landing speeds
7. Land at the nearest suitable airport

Note: Suitable airport determination should include evaluation of the following:

- Weather (winds / crosswinds, ceiling / visibility, etc.)
- Runway condition
- Runway length / width
- Facilities (emergency response)
- Pilot experience