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## SAFETY ALERT

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## LOW-G MAST BUMPING ACCIDENTS

Despite improvements in awareness and training over the past 20 years, there continue to be low-G mast bumping accidents in Robinson helicopters. This type of accident is entirely avoidable by using good pilot judgment and adhering to the following operating procedures:

- Always avoid cyclic pushover maneuvers which could cause low-G, particularly following a cyclic pull-up. Initiate descents with collective, not forward cyclic. Remember, low-G pushovers are <u>prohibited</u> maneuvers in Robinson helicopters.
- If low-G (a lightweight feeling) does occur, apply gentle aft cyclic as soon as you recognize it. Do not wait for a right roll to begin. Low-G induced right roll indicates you are losing control of the helicopter.
- Do not over-react to turbulence. The helicopter rides turbulence quite well if your control inputs are relaxed and gentle.
- Slow down in turbulence. Also, slow down in the following situations:
  - o Any time your full attention is not focused on aircraft control, for example when tuning avionics or having conversations with passengers.
  - o During primary instruction or transition training.

Just as with automobiles, aircraft controls are more sensitive at high speed. Slowing down increases the safety margin against inadvertent or incorrect inputs and allows the time necessary for pilot reactions if corrective inputs are required. Additional time is particularly important during training because of a potential delay when transferring control from student to instructor.

R44 and R66 helicopters are capable of high cruise speeds, especially when lightly loaded. A yellow precautionary operating range has been added to R44 and R66 airspeed indicators as a reminder to slow down for safety. The yellow arc indicates the maximum recommended cruise speed is 110 KIAS. Speeds above 110 KIAS are not recommended except in smooth air with the pilot's attention fully focused on flying.

REVIEW SAFETY NOTICES SN-11, SN-29, AND SN-32 LOW-G MAST BUMPING ACCIDENTS ARE PREVENTABLE