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Date: December 12, 2025

Subject: WPR24LA241, Email Responses

Contact: Thom Webster, Accident Investigator, Robinson Helicopters Inc.

Verbatim excerpt of August 8, 2024, email correspondence:

Take a look at page 4.11 of the POH (Practice Autorotation), It talks about reducing throttle "as desired" for separation of the needles, then cautions on how to avoid inadvertent engine stoppage. The safety course recommends to reduce the throttle just below 80%, so the governor is deactivated, and to avoid reducing to idle speeds. We no longer publish a Flight Training Manual.

I believe the only actual callout in the MM is when reinstalling a fuel control unit, is to set it to 58-62%.

Verbatim excerpt of December 12, 2025, email correspondence:

NTSB Question: What is the logic/reasoning to "avoid reducing to idle speeds? Also, why is this not in the POH as a NOTE, etc?

Manufacturer Answer: There have been several instances of engines stalling inflight when reducing the throttle to idle for several different reasons. Improper mixture settings, improper carb heat applied, High/Hot conditions, cold conditions, improper magneto timing, any engine hiccup*, etc. To address any and all conditions that may cause an engine to stall, avoiding the idle position prevents any chance of a stall. When instructing or practicing how to control the aircraft in autorotation, the controls are the same whether the engine RPM is at 78% or idle, so why take the chance of stalling the engine? Safety Notice SN-27 does touch on this subject.

A helicopter rotor system cannot drive a stalled or stumbling engine the same way a propeller can in an airplane so in the event that an engine (in flight) is struggling to run at idle, the airplane hardly notices and can reopen the throttle to recover power. The helicopter has a lighter weight flywheel and the drag of the cooling fan so if the engine stumbles in the smallest of ways at idle, it is very likely to stall completely.

NTSB Question: The operator commented..."where does it state to adjust the idle after delivery?" They added that they could not find it. You previously stated in the email that the only callout is during the installation of the fuel servo, which allows for 58-62%. I have heard of flight schools in high altitude environments checking and adjusting flight idle, with one operator making sure idle is adjusted within 5 hrs. If there is no documentation, the question is how do operators get this information? Are they at the mercy of word of mouth/experience or verbal guidance from RHC?

Manufacturer Answer: There is a note on page 4-8 of the POH stating "Idle mixture and speed may require adjustments as conditions vary from sea level standard. Refer to R44 Maintenance Manual for idle adjustment procedure."