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Date: September 17, 2024

Subject: ERA24LA166 Examination of Governor Control

Lead: Van S. McKenny IV, Aerospace Engineer, NTSB

NTSB Aerospace Engineer Van McKenny oversaw the examination of the engine governor control box on September 17, 2024, at Robinson Helicopter, Torrance, California, and provided the following information via an e-mail received on September 20, 2024:

The engine governor control box was functionally tested on an engineering test rig and bench tested using a signal generator per the RHC acceptance test procedure (Test Per PRS-69 Rev F). The governor control box passed all testing parameters.

Engine Governor Control box information:

PN: D278-1, Rev E
SN: 3030
Lot: 133

Visual Exam:

No external damage.
Cannon plug - all pins are present, no damage, no corrosion.

Functional Test:

Governor control started responding at 80% Engine rpm (as designed). The governor responded appropriately from the upper end and to the lower end of the governing range. The throttle advanced when at or below 101.5% rpm and retarded the throttle when at or above 102.5% rpm. The range between 101.5%-102.5% is the deadband range, and as long as the engine rpm is within that range the governor does not initiate throttle movement.