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Subject: CEN22LA234 Memorandum for the Record
Effects of Stuck Valves

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According to Robinson, past experiences of a stuck valve in a R44 have resulted in the pilots reporting some or all the following symptoms: Vibrations felt through the airframe, popping, or misfiring out of the exhaust, loss of power, low rotor RPM and/or engine RPM fluctuations.

As the valve sticks and a power loss begins, the engine RPM will decrease. The governor will sense the reduction and open the throttle to maintain RPM. This will result in a higher than normal Manifold Air Pressure. This will also result in some yaw movements, often described as a "twitching" to varying degrees.