

Service Letter

Subject:

Propeller Care Recommendations.

Applicability:

All GA8 aircraft.

Background:

Experience from GA8 Airvan operators has shown that inadequate care of the propeller can result in possible propeller blade failure and/or accelerated wear of airframe components.

Recommendations:

Owners, operators and maintenance personnel should ensure that all inspection and maintenance practices are carried out in accordance with the Hartzell Propeller Owner's Manual Number 115N.

Vibration problems due to propeller system imbalance are normally felt throughout the RPM range, with the intensity of vibration increasing with RPM. Vibration problems that occur in a narrow RPM range are a symptom of resonance, which is potentially harmful to the propeller. Propeller vibration shall be investigated and rectified following the recommendation of the Hartzell Propeller Owner's Manual Number 115N.

Other symptoms of propeller vibration include excessive or rapid wear of the elevator hinge points or horizontal stabilizer aft pivot mounts. Excessive wear of the horizontal stabilizer aft pivot mounts in combination with abnormal propeller vibration may result in lateral movement at the horizontal stabilizer trim screw-jack attach area with possible trim creep under certain aerodynamic loading conditions. If these symptoms are evident then propeller vibration shall be investigated and rectified following the recommendation of the Hartzell Propeller Owner's Manual Number 115N. Damaged or worn airframe hinges or pivots are to be repaired or replaced.

It is recommended that a dynamic balance of the installed propeller is carried out in accordance with the recommendations of the Hartzell Propeller Owner's Manual Number 115N following any repair or maintenance to the propeller that may alter the balance characteristics.

Weight and Balance:

Nil change.