Subject: Bird Strike Safety Information for Helicopter Operations.

Purpose: This InFO provides information to helicopter operators, including flight schools and flight training facilities, about bird strike hazards.

Background: Following investigations of bird strikes involving rotorcraft, the Federal Aviation Administration (FAA) tasked the Aviation Rulemaking Advisory Committee (ARAC) to provide recommendations regarding bird strike protection rulemaking, policy, or guidance for normal category rotorcraft; to evaluate existing bird strike protection standards for transport category rotorcraft; and to provide recommendations for enhancement. The ARAC established the Rotorcraft Bird Strike Working Group (RBSWG), composed of industry manufacturers and rotorcraft operators, to provide advice and recommendations to the ARAC. The RBSWG studied bird strike reports for rotorcraft in the National Wildlife Strike Database. The RBSWG found little information is provided to helicopter operators, including flight schools and flight training facilities, about bird strike hazards.

Discussion: The RBSWG studied numerous reported bird strikes to both Part 27 normal category and Part 29 transport category rotorcraft. The RBSWG evaluated the engineering involved with protecting these rotorcraft, which resulted in recommendations to the ARAC that rotorcraft use a risk-based approach (based on number of seats) to meet bird strike airworthiness standards. The RBSWG determined the installation of bird strike resistant windshields could lead to significant improvement, however these measures were not as easily implemented in the lighter Part 27 rotorcraft. Consequently, the RBSWG made additional recommendations to reduce the likelihood of an injurious bird strike. The RBSWG report is publicly available at the following webpage: link.

Recommended Action: Helicopter operators, including flight schools and flight training facilities should complete the following actions:

- Learn about the local bird population and use it to plan and fly routes. Among the key considerations are seasonal migratory times and concentration patterns within the typical operating area.

- Reduce airspeed when practical. Three out of four bird strikes (77%) occur during airspeeds greater than 80 knots. When operating rotorcraft in areas of high bird concentrations, the
likelihood of a damaging bird strike goes up as airspeed increases. When operating in these areas, fly at 80 knots or less, particularly when at lower altitudes.

• Increase Altitude. Increase altitude as quickly as possible and practical, when allowed by other flight variables. There is a 32% decrease of bird strike likelihood for every 1,000 feet gained above 500 feet AGL. Also, birds fly higher at night, so an increase in altitude may be needed even more at night than during the day.

• Wear personal protective equipment (PPE). A helmet and visor, at least for the crewmembers, should be worn when practical. This is one of the simplest acts that can improve safety in rotorcraft operations.

• Use taxi and/or landing lights in a continuous mode during sunny conditions and at night when practical, and use a 2-Hz pulsed mode during partly cloudy conditions, and/or install lighting systems that provide the equivalent with white incandescent, high intensity discharge (HID), or light emitting diode (LED) lighting.

Contact: Questions or comments regarding this InFO should be directed to the FAA’s General Aviation and Commercial Division at 202-267-1100 or email at 9-AFS-800-Correspondence@faa.gov.