

U.S. Department of Transportation **Federal Aviation**

Administration

SAFO

Safety Alert for Operators

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Flight Standards Service Washington, DC

http://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/safo

A SAFO contains important safety information and may include recommended action. SAFO content should be especially valuable to air carriers in meeting their statutory duty to provide service with the highest possible degree of safety in the public interest. Besides the specific action recommended in a SAFO, an alternative action may be as effective in addressing the safety issue named in the SAFO.

Subject: Preflight of helicopter hydraulic systems to include validation of control movement smoothness and identification of adverse flight control "stick-jump."

Purpose: This SAFO reemphasizes the importance for operators to ensure their pilots are conducting preflight system checks that specifically includes review of the helicopter's hydraulic system to validate control movement smoothness and any adverse flight control "stick-jump." This SAFO supplements SAFO 06021 issued December 6, 2006.

Background: After investigating a Sikorsky S-76C+ helicopter accident that experienced an upset and subsequent crash into the Baltic Sea, the National Transportation Safety Board (NTSB) sited in NTSB Safety Recommendation A-05-35 the urgency for applicable helicopter operators to conduct functional tests of helicopter hydraulic system checks to include validation of control movement smoothness and checking for any adverse flight control "stick-jump." Such preflight checks may show that the system is malfunctioning or inoperative prior to flight.

Discussion: This SAFO is being issued to reemphasize the importance of helicopter preflight inspections. This includes functional tests of the aircraft hydraulic systems, in accordance with the Rotorcraft Flight Manual (RFM) or published and approved guidance. This is help ensure a complete preflight check of the hydraulic system and is essential to the safety of flight.

Recommended Action: All directors of operations and chief pilots of part 135 helicopter operators and part 142 training centers should ensure that all air carrier training programs include pilot training and checking of aircraft hydraulic systems during initial and recurrent training. All pilots of aircraft equipped with a hydraulic system should test the function of the hydraulic system, to include control movement smoothness and checking for any adverse flight control "stick jump," in accordance with the RFM/Published and approved guidance, as part of an accepted aircraft checklist.

Questions concerning this SAFO should be directed to the Part 135 Air Carrier Operations Branch, AFS-250, at 202-267-8166.

Approved by: AFS-200