



SAIB: CE-13-18

Date: March 8, 2013

SUBJ: Ice and Rain Protection; Reduced Visibility Flying in Rain or Mist

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin is being issued to advise you of an airworthiness concern on **Viking (deHavilland) Model DHC-3 Otter airplanes**. Specifically, it recommends that operators apply a rain repellent compound to the forward windshield before flights where rain or mist conditions are anticipated.

At this time, this airworthiness concern is not considered an unsafe condition that would warrant airworthiness directive (AD) action under Title 14 of the Code of Federal Regulations (14 CFR part 39).

Background

The FAA received reports of reduced visibility while flying in rain or mist with Viking (deHavilland) Model DHC-3 Otter airplanes modified with a turbine engine. Pilots described an aerodynamic “dead spot” on the forward windshield where rain/mist would not clear. The reports indicated that the condition was not an issue with the original installed radial engines and that visibility could be improved with the application of a rain repellent.

While considering what actions to take, we issued an airworthiness concern sheet (ACS) to the public to invite related comments or concerns. We received comments that indicated that flying in rain/mist had some effect on all Viking Model DHC-3 Otter airplanes, both turbine and non-turbine powered. Some operators had modified or were considering modifying their airplanes by adding vortex generators to the nose in order to improve visibility. Another operator reported good results from buffing and polishing their windshields in order to remove any scratches and over spray, which could hinder the rain runoff. The majority of the operators reported better visibility after the application of a rain repellent to the windshield.

Recommendations

Based on the comments to the ACS received from the public, we recommend operators apply a rain repellent compound to the forward windshield before any flights where rain or mist conditions are anticipated. In order to not introduce any additional scratches to the windshield surface, we also recommend operators apply the compound using a clean, soft, microfiber cloth.

For Further Information Contact

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