



No.	CF-2014-29	1/2
Issue Date 28 August 2014		

AIRWORTHINESS DIRECTIVE

The following airworthiness directive (AD) may be applicable to an aircraft which our records indicate is registered in your name. ADs are issued pursuant to **Canadian Aviation Regulation (CAR) 521 Division X**. Pursuant to **CAR 605.84** and the further details of **CAR Standard 625, Appendix H**, the continuing airworthiness of a Canadian registered aircraft is contingent upon compliance with all applicable ADs. Failure to comply with the requirements of an AD may invalidate the flight authorization of the aircraft. Alternative means of compliance shall be applied for in accordance with **CAR 605.84** and the above-referenced **Standard**.

This AD has been issued by the Continuing Airworthiness Division (AARDG), National Aircraft Certification Branch, Transport Canada, Ottawa, telephone 613 952-4357.

Number: CF-2014-29

ATA: 11 **Supplemental Type Certificate (STC):** SA02-15 (FAA - SA09866SC)

Subject: Placards and Markings - Lack of Proper Airspeed Limitations for Turboprop Engine Installation

Effective: 11 September 2014

Replacement: Supersedes Federal Aviation Administration (FAA) AD 2011-12-02.

Applicability: Viking Air Limited model DHC-3 aeroplane with a Honeywell (Garrett) TPE-331-10 or -12JR turboprop engine installed in accordance with Transport Canada STC SA02-15 or FAA STC SA09866SC.

Compliance: As indicated below, unless already accomplished.

Background: Analysis by the FAA has shown that at the time of certification, the airspeed limitations were not adjusted for the DHC-3 aeroplanes equipped with a Honeywell TPE-331-10 or -12JR turboprop engine installed as per FAA STC SA09866SC. When the FAA STC was familiarized, the corresponding Canadian STC SA02-15 also failed to include adjusted airspeed limitations.

As such, the FAA issued AD 2011-12-02 that mandates new Maximum Operating Limit Speed (VMO) limitations and modifies the airspeed indicator by adding a red line at the VMO speeds. However, the FAA AD did not remove the existing red radial lines at the never-exceed maximum permissible dive speeds, the yellow arc from the current Maximum Structural Cruising Airspeed (VNO) to the Never-Exceed Speed (VNE) or the reference to VNE in the existing DHC-3 Airplane Flight Manual (AFM).

This AD is issued to address the deficiencies in the above-noted STCs and to prevent the loss of aeroplane structural integrity due to the affected aeroplanes being able to operate at speeds that exceed those determined to be safe. This AD introduces new airspeed limitations and requires the installation of a temporary placard until the airspeed indicator is modified.

Corrective Actions: 1. Before next flight, from the effective date of this AD, insert the following information into the Limitations section of the AFM or AFM Supplement for the affected STCs:

"Airspeed limitations: VMO = 144 MPH for wheel/ski installation and VMO = 134 MPH for floats installation."

2. Within 10 hours air time from the effective date of this AD, fabricate a placard using letters of at least 1/8-inch in height with the following words:

Pursuant to **CAR 202.51** the registered owner of a Canadian aircraft shall, within seven days, notify the Minister in writing of any change of his or her name or address.

To request a change of address, contact the **Civil Aviation Communications Centre (AARC)** at **Place de Ville, Ottawa, Ontario K1A 0N8**, or **1-800-305-2059**, or www.tc.gc.ca/civilaviation/communications/centre/address.asp

"Airspeed limitations: VMO = 144 MPH for wheel/ski installation and VMO = 134 MPH for floats installation."

Install this placard on the aeroplane instrument panel next to the airspeed indicator within the pilot's clear view.

3. Within 30 days from the effective date of this AD, modify the airspeed indicator accordingly to reflect the above limitations. If present, remove the yellow arc and the existing red radial lines at the never-exceed maximum permissible dive speeds. Mark the airspeed indicator with a red radial line at 144 MPH for a land/ski plane and/or with a red radial line at 134 MPH for aeroplanes with floats installed.

The action of this paragraph terminates the need for the placard required by paragraph 2 above.

The action in this paragraph can be done instead of the placard requirement in paragraph 2, provided that it is done within 10 hours air time from the effective date of this AD.

Authorization: For the Minister of Transport,

ORIGINAL SIGNED BY

Gordanko Jeremic
Acting Chief, Continuing Airworthiness

Contact: Yosha Mendis, Continuing Airworthiness, Ottawa, telephone 613-952-4357, facsimile 613-996-9178 or e-mail AD-CN@tc.gc.ca or any Transport Canada Centre.