Exemption No. 10465

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
KANSAS CITY, MO 64106

In the matter of the petition of

VIKING AIR LIMITED

for an exemption from § 23.1549(b) of Title 14, Code of Federal Regulations

Regulatory Docket No. FAA-2011-1345

GRANT OF EXEMPTION

By letter dated November 30, 2011, Mr. Adam Dennis, Certification Engineer, Viking Air Limited (VAL), 1959 de Havilland Way, Sidney, British Columbia V8L 5V5 petitioned the Federal Aviation Administration (FAA) on behalf of VAL for an exemption from § 23.1549(b) of Title 14, Code of Federal Regulations (14 CFR). The proposed exemption, if granted, would allow VAL to temporarily use the color white in lieu of green on the Honeywell Primus Apex (Apex™) Electronic Flight Instrument System (EFIS) to depict normal engine operating conditions during certification testing of the VAL DHC-6, Series 400 Twin Otter airplane.

The petitioner requests relief from the following regulation:

Section 23.1549(b) prescribes, in pertinent part, that:

"(b) Each normal operating range must be marked with a green arc or green line, not extending beyond the maximum and minimum safe limits;"

The petitioner supports its request with the following information:

The petitioner states:

"Viking Air Limited (VAL) requests a temporary exemption from the requirements of 14 CFR 23.1549(b) for the VAL DHC-6 Series 400 (Twin

Otter) to the extent necessary to allow FAA type certification of the aircraft with the current Honeywell Primus Apex™ engine displays.

As conditions for granting the requested temporary exemption, VAL commits to the following:

1. VAL working with Honeywell International Inc. will design and certify an engine display configuration on Primus ApexTM for the DHC-6 Series 400 specific to meeting the FAA normal engine display color requirements as specified in FAR 23.1549(b).
2. This design and certification will be accomplished within fifteen (15) months of granting this exemption.
3. VAL will provide a service bulletin to all US-registered field aircraft after certifying the new display configuration."

The FAA has determined that good cause exists for waiving the requirement for Federal Register publication because the exemption, if granted, would not set a precedent, and any delay in acting on this petition would be detrimental to VAL.

The FAA's analysis is as follows:

The FAA finds that:

1. The integration on the Apex™ and with Crew Alerting System (CAS) messages, dynamic caution and warning engine display ranges, and integration with the Master Caution / Warning (MCW) System achieves a high level of safety that ensures immediate pilot awareness of caution or warning conditions.

2. The integrated cockpit environment developed around Honeywell's Primus Apex™ also enhances the availability of engine information on both the pilot and co-pilot's Primary Flight Displays (PFD's).

3. The overall integration of the cockpit, the caution and warning level CAS messages available with respect to engine torque and T5 displays, and the associated digital display inverse video caution and warning level display design effectively provides the crew with current operating information, crew alerting, and achieve a high degree of safety.

4. The denial of this petition for exemption would delay the United States certification of the DHC-6 Series 400 airplane for approximately fifteen (15) months. VAL and U.S. DHC-6 Series 400 operators would experience significant revenue loss as a result. Additionally, the US Army would be delayed access to the aircraft. This delay may also result in aircraft order cancellations and revenue loss for Viking's US partners and suppliers, including Honeywell International.

The FAA's Decision

In consideration of the foregoing, I find that a grant of exemption is in the public interest. Therefore, pursuant to the authority contained in 49 U.S.C. §§ 40113 and 44701, delegated to

me by the Administrator, Viking Air Limited is granted an exemption with time-limited conditions from §23.1549(b) to the extent necessary to allow type certification of the model DHC-6 Series 400 airplanes with engine indications not in compliance with the requirements of § 23.1549 (b). For the model DHC-6 Series 400 airplanes, this exemption is subject to the following conditions and limitations:

Conditions and Limitations

1. Viking Air Limited must certify and incorporate into the production line requirements for engine indications fully compliant with the requirements of §§ 23.1549(a), (b), and (c), into the model DHC-6 Series 400 airplanes no later than July 31, 2013.

2. Viking Air Limited must retrofit the model DHC-6 Series 400 airplanes delivered under the terms of the exemption with the new engine indications described in Condition 1 above no later than December 31, 2013.

3. Until the incorporation of the changes required in Conditions 1 and 2 of this exemption have been completed, Viking Air Limited must add to the airplane flight manual (AFM) a description of the indications and their non-compliant use of color, and the necessary instructions for properly interpreting indications.

4. For airplanes subject to Condition 2 of this exemption, the operating limitations section of the airplane flight manual (AFM) must include the following statement:

> "No person may operate this airplane after December 31, 2013, unless the engine indications have been modified in accordance with the terms of Exemption No. "

This statement may be removed from the AFM after the required modification has been made.

This exemption terminates on July 31, 2013, unless sooner superseded or rescinded.

Issued in Kansas City, MO, on March 1, 2012.

John Colomy

John Colomy
Acting Manager, Small Airplane Directorate
Aircraft Certification Service