VERTICAL SPEED INDICATORS

1. Introduction

1.1 An incident on a light aircraft has shown the possible danger of the presentation of false information to the pilot due to reversed indication by the vertical speed indicator during a fast rate of descent.

1.2 Instruments complying with FAA TSO Specification C8b are fitted with stops to prevent such occurrences. It is not known whether other instruments, particularly those likely to be installed in imported aircraft of below 5700 kg MTWA, are similarly equipped.

2. Action

2.1 Before issue or renewal of the Certificate of Airworthiness of any aircraft, it shall be established whether the vertical speed indicator is fitted with limit stops. This may be done by test or reference to the manufacturer.

2.2 If stops are not fitted:

(a) for aircraft which are subject of an application for the issue of a Certificate of Airworthiness in the Transport Category, the vertical speed indicator shall be replaced by an instrument which has stops.

(b) for aircraft other than those specified in sub-paragraph (a), the vertical speed indicator shall be replaced by an instrument that has stops or alternatively the placard defined in paragraph 3 shall be fitted.

3. Placards

3.1 The following placard shall be fitted adjacent to a vertical speed indicator not fitted with stops:

‘This indicator is not fitted with limit stops and a rate of change of altitude in excess of the maximum calibration will cause indication in the reverse sense’.

3.2 The placard may, as a temporary measure, be type-written on white card, but shall be replaced by a more permanent placard as soon as possible.

4. Record

A record of the action taken to comply with paragraph 2 above shall be made in the aircraft log book, quoting the serial number of the instrument.

DIRECTOR GENERAL
DEPARTMENT OF CIVIL AVIATION
MALAYSIA.