COMMONWEALTH OF AUSTRALIA CIVIL AVIATION SAFETY AUTHORITY SCHEDULE OF AIRWORTHINESS DIRECTIVES

AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/RAD/64 and issues the following AD under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

Radio Communication and Navigation Equipment

AD/RAD/64 Amdt 1

Skywatch SKY497

13/2006

Applicability:

BFGoodrich Avionics Systems Inc Skywatch SKY497 traffic advisory system installations with a top-mounted antenna.

Note 1: These installations are known to be fitted to, but not limited to, the following aircraft models.

Manufacturer Aircraft Model and/or Series

Raytheon Beech 90, 100, 200 and 300 Series

Cessna 172, 182, 206, 208, 210, 300, 400 and 500 Series

Piper PA-23, PA-31-360, PA-31T, PA-32, PA-34, PA-42 and PA-46

Hawker HS-700 and HS-800

Mitsubishi MU-2 Series

Dassault F10

Mooney M20 Series

Bombardier de Havilland DHC-6 Series

Westwind 1124

Bell 407

Eurocopter SA365

Socata TBM700

Requirement:

- 1. Add the information contained in one of the following documents to the LIMITATIONS section of the Flight Manual:
 - a. FAA AD 98-25-02 Amdt 39-10924 Appendix titled "Power-Up Procedures for Skywatch SKY497 Installations with Top-Mounted Antenna".
 - b. BFGoodrich Alert Service Bulletin SB #78A dated 21 October 1998.

COMMONWEALTH OF AUSTRALIA CIVIL AVIATION SAFETY AUTHORITY SCHEDULE OF AIRWORTHINESS DIRECTIVES

Radio Communication and Navigation Equipment

AD/RAD/64 Amdt 1 (continued)

This task may be accomplished by inserting a copy of either document into the limitations section of the Flight Manual.

The introduction of software version 16, 1.7 or 1.8 provides an equivalent level of safety to this requirement and the statement may be removed form the flight manual.

Note 2: The limitations added to the Flight Manual require the pilot to verify the antenna configuration of the SKY497 each time the system is powered up.

2. If an incorrect antenna configuration is found during any of the power-up procedures specified in the Flight Manual limitations required by this Directive, remove the SKY497 from service.

Note 3: FAA AD 98-25-02 Amdt 39-10924 refers.

Compliance:

- 1. Remains unchanged as "Within 25 hours time in service from the effective date of the original issue of Directive".
- 2. Prior to further flight.

This Amendment becomes effective on 21 December 2006.

Background:

The FAA has been advised of numerous reports of internal component failure of SKY497 installations which changes the antenna configuration from a top to a bottom mount. The change in configuration would result in target indications appearing on the incorrect side of the aeroplane (ie the actual target at the 9 o'clock position relative to the aircraft shows on the SKY497 installation in the 3 o'clock position). This directive requires that the antenna configuration be verified each time the system is powered up.

This amendment introduces software changes that verifies the correct antenna configuration each time an aircraft equipped with the SKY497 system with a top-mounted antenna is powered up.

The original issue of this Airworthiness Directive became effective on 24 February 1999.

James Coyne

Delegate of the Civil Aviation Safety Authority

9 November 2006