

# PŘÍKAZ K ZACHOVÁNÍ LETOVÉ ZPŮSOBILOSTI

CAA-AD-043/2002

Datum vydání: 10 dubna 2002

## LETADLOVÉ ZAŘÍZENÍ - ODPOVÍDAČ MÓD S - KONTROLA/MODIFIKACE

**Týká se:** odpovídačů módu S - TDR-94 (Collins part number (CPN) 622-9352-004) a TDR-94D (CPN 622-9210-004), které získávají údaje o výšce zakódované v Gillhamově (Grayově) kódu a mohou být instalovány na následujících letadlech, ale nejen na těchto: Aerospatiale ATR42, deHavilland DHC-7 a DHC-8 a Short Brothers Models SD3-60 a SD3-60 SHERPA.

**Datum účinnosti:** 16. května 2002

**Provést v termínech:** Jak je popsáno v FAA AD 2002-06-06, od data účinnosti tohoto PZZ.

**Postup provedení prací:** Dle FAA AD 2002-06-06 (příloha tohoto PZZ).

Poznámky: Provedení tohoto PZZ musí být zapsáno do letadlové knihy. Případné dotazy týkající se tohoto PZZ adresujte na ÚCL sekce technická - Ing. Schmied. Pokud to vyžaduje povaha tohoto PZZ, musí být zapracován do příslušné části dokumentace pro obsluhu, údržbu a opravy letadla. Tento PZZ byl vypracován na základě FAA AD 2002-06-06.

**Ing. Pavel MATOUŠEK**  
**Ředitel sekce technické**  
**Úřad pro civilní letectví**

**2002-06-06 Rockwell Collins, Inc.:** Amendment 39-12683; Docket No. 2000-CE-32-AD.

(a) *What airplanes are affected by this AD?* This AD applies to TDR-94 Mode S transponders (Collins part number (CPN) 622-9352-004) and TDR-94D Mode S transponders (CPN 622-9210-004) that derive altitude information from a Gillham (gray code) encoded pressure altitude source and are installed on, but not limited to, the following airplanes that are certificated in any category:

- (1) Aerospatiale ATR42 series airplanes;
- (2) deHavilland DHC-7 and DHC-8 series airplanes; and
- (3) Short Brothers Models SD3-60 and SD3-60 SHERPA airplanes.

(b) *Who must comply with this AD?* Anyone who wishes to operate any airplane with one of the affected TDR-94 or TDR-94D Mode S Transponder units installed must comply with this AD.

(c) *What problem does this AD address?* The actions specified by this AD are intended to prevent erroneous altitude resolutions from causing a reduction in the intended aircraft collision avoidance system (ACAS) or traffic alert and collision avoidance system (TCAS) Change 7 minimum separation margins. Such a condition could result in air traffic control or the pilot making flight decisions that put the airplane in unsafe flight conditions.

(d) *What actions must I accomplish to address this problem?* To address this problem, you must accomplish the following:

Actions	Compliance	Procedures
(1) Determine whether the altitude information from any TDR-94 Mode S transponder (CPN 622-9352-004) or	Within the next 3 months after May 3, 2002 (the effective date of this AD).	As specified in Rockwell Collins Service Bulletin No. 17 (TDR-94/94D-34-17), dated February 8, 1999,

<p>TDR-94D Mode S transponder (CPN 622-9120-004) is derived from a digital air data source or a Gillham (gray code) encoded source.</p>		<p>Service Bulletin 17, Revision No. 1, dated May 15, 2000, or Service Bulletin 20 (TDR-94/94D-34-20), Revision No. 1, dated May 2, 2001. Collins Product Information Letter No. 71, dated January 1999, references Service Bulletin 17, dated February 8, 1999</p>
<p>(2) If the altitude information is derived from a Gillham (gray code) encoded source, have the unit modified to prevent erroneous altitude reporting. The modification encompasses converting the TDR-94 transponder from Collins part number (CPN) 622-9352-004 to CPN 622-9352-005 or converting CPN 622-9352-004/005 to CPN 622-9352-006; and converting the TDR 94D transponder from CPN 622-9210-004 to CPN 622-9210-005 or converting CPN 622-9210-004/005 to CPN 622-9210-006.</p>	<p>At the next transponder check required by 14 CFR 91.413 and occurs 3 months after May 3, 2002 (the effective date of this AD) or within the next 9 months after May 3, 2002 (the effective date of this AD), whichever occurs first.</p>	<p>In accordance with Rockwell Collins Service Bulletin No. 17 (TDR-94/94D-34-17), dated February 8, 1999, Service Bulletin 17, Revision No. 1, dated May 15, 2000, or Service Bulletin 20 (TDR-94/94D-34-20), Revision No. 1, dated May 2, 2001. Collin Product Information Letter No. 71, dated January 1999, references Service Bulletin 17, dated February 8, 1999.</p>
<p>(3) If the altitude information from all affected transponders is derived from a digital air data source, no modification action is required by this AD.</p>	<p>Not applicable</p>	<p>Not applicable.</p>
<p>(4) Do not install any TDR-94 Mode S transponder (CPN 622-9352-004) or TDR-94D Mode S transponder (CPN 622-9210-004) on any airplane if the altitude information is derived from a Gillham (gray code) encoded source, unless the modification required by paragraph (d)(2) of this Ad is incorporated.</p>	<p>As of May 6, 2002 (the effective date of this AD).</p>	<p>Accomplish the modification in accordance with Rockwell Collins Service Bulletin No. 17 (TDR-94/94D-34-17), dated February 8, 1999, Service Bulletin 17, Revision No. 1, dated May 15, 2000, or Service Bulletin 20 (TDR-94/94D-34-20), Revision No. 1, dated May 2, 2001. Collins Product Information Letter No. 71, dated January 1999, references Service Bulletin 17, dated February 8, 1999.</p>

(e) *Can I comply with this AD in any other way?* You may use an alternative method of compliance or adjust the compliance time if:

(1) Your alternative method of compliance provides an equivalent level of safety; and

(2) The Manager, Wichita Aircraft Certification Office (ACO), approves your alternative. Submit your request through an FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Wichita ACO.

**Note:** This AD applies to each airplane identified in paragraph (a) of this AD, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if you have not eliminated the unsafe condition, specific actions you propose to address it.

(f) *Where can I get information about any already-approved alternative methods of compliance?* You can contact Roger A. Souter, FAA, Wichita Aircraft Certification Office (ACO), 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4134; facsimile: (316) 946-4407; e-mail: roger.souter@faa.gov.

(g) *What if I need to fly the airplane to another location to comply with this AD?* The FAA can issue a special flight permit under sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate your airplane to a location where you can accomplish the requirements of this AD.

(h) *Are any service bulletins incorporated into this AD by reference?* Actions required by this AD must be done in accordance with Rockwell Collins Service Bulletin No. 17 (TDR-94/94D-34-17), dated February 8, 1999, Rockwell Collins Service Bulletin Service Bulletin 17 (TDR-94/94D-34-17), Revision No. 1, dated May 15, 2000, or Service Bulletin 20 (TDR-94/94D-34-20), Revision No. 1, dated May 2, 2001. The Director of the Federal Register approved this incorporation by reference under 5 U.S.C. 552(a) and 1 CFR part 51. You can get copies from Rockwell Collins Inc., Business and Regional Systems, 400 Collins Road Northeast, Cedar Rapids, Iowa 52498. You can look at copies at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Room 506, Kansas City, Missouri, or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

(i) *When does this amendment become effective?* This amendment becomes effective on May 3, 2002.