

Airworthiness Directive Schedule

Components and Equipment

Avionics (Formerly Radio Communication and Navigation Equipment)

25 July 2019

- Notes:**
1. This AD schedule is applicable to avionics equipment installed on aircraft.
 2. This AD schedule includes those National Airworthiness Authority (NAA) ADs applicable to avionics equipment installed on aircraft. NAA ADs can be obtained directly from the applicable NAA website. Links to NAA websites are available on the CAA website at <http://www.caa.govt.nz/airworthiness-directives/states-of-design/>
 3. The date above indicates the amendment date of this schedule.
 4. New or amended ADs are shown with an asterisk. *
-

Contents

DCA/RAD/1	Distance Measuring Equipment - Modification.....	3
DCA/RAD/2	Cancelled – Purpose Fulfilled	3
DCA/RAD/3A	Cancelled – Purpose Fulfilled	3
DCA/RAD/4	Cancelled - Purpose Fulfilled	3
DCA/RAD/5	Cancelled – Purpose Fulfilled	3
DCA/RAD/6	Cancelled – Purpose Fulfilled	3
DCA/RAD/7	Centaurus Model C3-100 GPWS - Removal	3
DCA/RAD/8D	Cancelled – Purpose Fulfilled	3
DCA/RAD/9A	Radio Altimeter Antennae - Inspection	4
DCA/RAD/10	ATC Transponder - Modification	4
DCA/RAD/11	KLN 89B GPS RNAV System - Limitation.....	5
DCA/RAD/12	BF Goodrich Skywatch SKY497 - Flight Manual Limitations	5
DCA/RAD/13	Cancelled – Purpose Fulfilled	5
DCA/RAD/14	Skyforce Avionics Skymap and Tracker II – Battery Installation	6
DCA/RAD/15	Autopilot Servo Actuator - Inspection.....	6
DCA/RAD/16	UPS Apollo SL30 VHF NAV/COM – Removal from Service	7
DCA/RAD/17	Garmin GNS 430 – Modification	8
DCA/RAD/18	Rockwell Collins, 621A-3 Transponders – Pulse width test.....	8
DCA/RAD/19	Rockwell Collins TDR-94 Mode S Transponders - Modification.....	9
DCA/RAD/20	Collins Air Data Computer - Rework	9
DCA/RAD/21	Cancelled - DCA/RAD/32 refers	10
DCA/RAD/22A	Cancelled – DCA/RAD/30 refers.....	10
DCA/RAD/23	Becker Transceivers - Modification.....	10
DCA/RAD/24	Narco AT150 Transponders.....	10
DCA/RAD/25	Terra TRT 250 Transponders – Mode S Inspection.....	11
DCA/RAD/26	Cancelled – Superseded by DCA/RAD/28.....	11
DCA/RAD/27	Garmin Apollo GPS – Software Modification, Testing, and Re-identification	12
DCA/RAD/28A	Garmin GTX 33, GTX 33D, GTX330 & GTX330D Transponders – S/W Upgrade.....	12
DCA/RAD/29	Shadin ADC-2000 Air Data Computers – Inspection and Modification	13
DCA/RAD/30	Goodrich TAWS8000 – Inspection and Replacement	13
DCA/RAD/31A	Sandel Avionics ST3400 TAWS/RMI – Placard, AFM and Software Upgrade	14
DCA/RAD/32	Cancelled – DCA/RAD/52 refers.....	15
DCA/RAD/33	COMMS Units & Mode S transponders – Modification and Replacement	15
DCA/RAD/34	Garmin GSM Servo Gearbox Units – Inspection and Replacement	17
DCA/RAD/35B	Cancelled – Purpose Fulfilled	17
DCA/RAD/36	MST 67A Mode 'S' Transponders – Inspection and Rework.....	18
DCA/RAD/37A	Cancelled – DCA/RAD/45 refers.....	18

DCA/RAD/38	FreeFlight GPS Receivers – Discontinued NavData Support.....	18
DCA/RAD/39	Kannad 406 AF-Compact ELT – Inspection and Rework	19
DCA/RAD/40B	Funkwerk Mode S Transponders – AFM Amendment & Placard.....	19
DCA/RAD/41	MST 67A Mode 'S' Transponders – AFM Amendment and Modification	20
DCA/RAD/42	Pitot & Angle of Attack Probes – AFM Amendment and Inspection	21
DCA/RAD/43	Mode S Address Code – Inspection	22
DCA/RAD/44	Funkwerk Mode S Transponders – AFM Amendment, Placard & Replacement	23
DCA/RAD/45	Avidyne Primary Flight Displays – Inspection and AFM Limitations	24
DCA/RAD/46	Trimble/FreeFlight Approach Plus System – Software Update.....	25
DCA/RAD/47	Thales VHF Data Radio – Modification.....	26
DCA/RAD/48	Honeywell Navigation & Avionic Computers – AFM Amendment & Modification.....	26
DCA/RAD/49	Cancelled – DCA/RAD/53 refers.....	27
DCA/RAD/50A	Mode S Transponders – Modification or Replacement.....	28
DCA/RAD/51	Honeywell ELT Model RESCU 406S – Inspection and Modification.....	29
DCA/RAD/52	Honeywell Primus II NV-850 – Inspection, AFM Amendment and Modification.....	30
DCA/RAD/53	Rockwell Mode S Type TDR-94 & TDR-94D – Inspection and Modification.....	33
DCA/RAD/54E	Artex 406 ELT(AF) – Inspection and Modification.....	34
DCA/RAD/55	Dittel VHF/AM Airband Transceivers – Modification	35
DCA/RAD/56A	TDR-94 Mode S Transponder – Modification and Replacement	36
DCA/RAD/57	Mode S Transponder Control Panels – Modification.....	37
DCA/RAD/58	ELT Antenna – Inspection, Modification and/or Replacement	38
DCA/RAD/59	Radio Altimeter Indicator IND201 – Inspection and Modification.....	39
DCA/RAD/60	Traffic Alert and Collision Avoidance System (TCAS) – Software Upgrade.....	40
<p>From 1 October 2012 the Civil Aviation Authority of New Zealand (CAA) will no longer rewrite the text of State of Design ADs. Applicable State of Design ADs will be listed below and can be obtained directly from the National Airworthiness Authority (NAA) website. The links to NAA websites are available on the CAA website at http://www.caa.govt.nz/airworthiness-directives/states-of-design/ If additional NZ ADs need to be issued when an unsafe condition is found to exist in an aircraft or aeronautical product in NZ they will be added to the list below.</p>		
	41
FAA AD 2012-26-15R1	Cancelled – Purpose fulfilled.....	41
EASA AD 2014-0019	Cancelled – EASA AD 2014-0095R1 refers	41
FAA AD 2014-05-27	Rockwell Collins TPR-720 and TPR-900 Mode S Transponders – Inspection	41
EASA AD 2014-0095R1	Crash Position Indicator – Modification.....	41
EASA AD 2014-0125	Crash Position Indicator System – Replacement.....	41
FAA AD 2012-14-15	Honeywell KGS200 Mercury WAAS (GNSSU) - Airworthiness Limitations	42
FAA AD 2014-18-01	Rockwell TDR-94 & TDR-94D Mode S Transponders - Inspection.....	42
FAA AD 2015-10-51	Avidyne Integrated Flight Displays – Limitations	42
EASA AD 2015-0093	Northrop Grumman LITEF LCR-100 AHRS – Modification	42
FAA AD 2017-16-01	Ameri-King ELTs – Inspection	43
FAA AD 2017-22-14	Rockwell Collins Traffic Surveillance Units – Inspection.....	43
EASA AD 2018-0247	Mode S Transponders – Inspection	43
FAA AD 2019-01-02	Aspen Avionics EFD500 and EFD1000 Displays – Inspection	43
EASA AD 2019-0004 (correction)	Global Navigation Satellite System – Inspection	44
* FAA AD 2019-12-09	Rockwell Collins FDSA-6500 System – Inspection	44
* FAA AD 2019-13-03	Trig Avionics, Avidyne & BendixKing/Honeywell Mode S Transponders – Inspection	44

DCA/RAD/1 Distance Measuring Equipment - Modification

Applicability: All Murphy Rebecca Mk 7 and Mk 8B DME

Requirement: Embody modifications CAA-74, VE-82, VE-83, E-123 and E-124

Compliance: Before use on airborne operations

Effective Date: 31 August 1971

Notes:

1. Originally issued without a Log Book number, AD Code now allocated.
2. A copy of the reference document may be obtained from the Director

DCA/RAD/2 Cancelled – Purpose Fulfilled

Effective Date: 30 October 2008

DCA/RAD/3A Cancelled – Purpose Fulfilled

Effective Date: 30 October 2008

DCA/RAD/4 Cancelled - Purpose Fulfilled**DCA/RAD/5 Cancelled – Purpose Fulfilled**

Effective Date: 30 October 2008

DCA/RAD/6 Cancelled – Purpose Fulfilled

Effective Date: 30 October 2008

DCA/RAD/7 Centaurus Model C3-100 GPWS - Removal

Applicability: Centaurus Model C3-100 ground proximity warning system (GPWS) equipment, that may be installed in, but not limited to the following aircraft types; EMBRAER EMB-110 series, Fairchild SA226-TC series and SA227-AT series.

Requirement: To prevent failure of the GPWS equipment to provide certain aural warnings, which could inhibit the ability of the flight crew to prevent the aircraft from impacting the ground, remove the Centaurus Model C3-100 GPWS from service.
(FAA AD 97-01-12 refers)

Note: Rule Parts 121 and 135 require certain aircraft be fitted no later than 1 January 1999 with a GPWS that meets the requirements of TSO C92 series. The Centaurus Model C3-100 GPWS does not meet these requirements.

Compliance: By 1 January 1999

Effective Date: 14 March 1997

DCA/RAD/8D Cancelled – Purpose Fulfilled

Effective Date: 30 October 2008

DCA/RAD/9A Radio Altimeter Antennae - Inspection

Applicability: All aircraft that operate under IFR and are fitted with radio altimeters.

Requirement: To ensure correct operation of radio altimeter and GPWS (if fitted), accomplish the following:-

1. Inspect radio altimeter antennae to ensure they are free from paint. If any antenna has been painted, rectify before further flight. Surface protection (including painting) approved by the antenna manufacturer is permitted.

Where antenna manufacturer specifies antenna is not to be painted, ensure that "Do not paint" placards are in place and legible.

2. Introduce procedures to ensure that:-

(a) Radio altimeter antennae are not painted, except for surface protection (including painting) approved by the antenna manufacturer.

(b) A regular inspection is performed to ensure that where antenna manufacturer specifies antenna is not to be painted, "Do not paint" placards are in place and legible.

Note: Care is required in determining the location of antennae. Some aircraft types have several alternative antenna mounting positions which are covered by blanking plates the same size and shape as the actual antenna.

Compliance:

1. By 1 September 1997
2. Introduce procedures by 1 August 1998

Effective Date: DCA/RAD/9 - 1 August 1997
DCA/RAD/9A - 5 June 1998

DCA/RAD/10 ATC Transponder - Modification

Applicability: AlliedSignal (Bendix-King) KT 76A Air Traffic Control (ATC) transponders; P/N 066-1062-00/10/02; S/N 93,000 through 109,999.

Requirement: To prevent the transmission of misleading encoding altimeter information between affected aircraft and ground-based ATC radar sites (and nearby TCAS equipped aircraft), accomplish the following:-

Replace the two resistor network modules, RM401 and RM402, with new glass-coated parts per the MODIFICATION PROCEDURE section of AlliedSignal SB KT 76A-7, dated July 1996.

(FAA AD 98-14-03 refers)

Compliance: By 31 July 1999

Effective Date: 31 July 1998

DCA/RAD/11 KLN 89B GPS RNAV System - Limitation

Applicability: AlliedSignal KLN 89B GPS RNAV system P/N 066-01148-0101 with software mod level 01/03 or 01/04 and configured for IFR operations.

Requirement: 1. Installations previously configured and approved for IFR Non-Precision Approaches (NPA) are no longer approved for IFR NPA (refer Note 1) and a placard stating the following is to be installed adjacent to the GPS receiver and in clear view of the pilot:

GPS NOT APPROVED FOR IFR APPROACH

2. Installations previously configured and approved for IFR primary means en-route only operation are no longer approved (refer Note 2) and a placard stating the following is to be installed adjacent to the GPS receiver and in clear view of the pilot:

GPS LIMITED TO VFR OPERATIONS ONLY

Note 1: Installations configured and approved for en-route, terminal and NPA operations may still be used as an en-route IFR navigation aid.

Note 2: The configuration of the KLN 89B can be determined as en-route only if the APT 8 page is not accessible and a page stating "GPS APPROACHES DISABLED" must be acknowledged upon power up. AlliedSignal KLN 89B Alert SB 423 refers.

Note 3: Installation of software update per AlliedSignal Software Bulletin KLN 89B-SW2 to incorporate software mod level 01/05 is terminating action for this AD.

Compliance: By 7 August 1998

Effective Date: 31 July 1998

DCA/RAD/12 BF Goodrich Skywatch SKY497 - Flight Manual Limitations

Applicability: BF Goodrich Skywatch SKY497 installations with a top-mounted antenna.

Requirement: To prevent the display of target indicators on the wrong side of the aircraft caused by an internal component failure in the SKY497 installations with a top-mounted antenna, accomplish the following:-

Insert BF Goodrich Alert SB #78A, dated October 21, 1998 into the Limitations Section of the aircraft flight manual.

This SB specifies verifying the correct antenna configuration each time an aircraft equipped with a SKY497 installation with a top-mounted antenna is powered-up.

If an incorrect antenna configuration is found during any of the power-up procedures specified in the aircraft flight manual information required by this AD, prior to further flight, remove the SKY497 installation from service.

(FAA AD 98-25-02 refers)

Compliance: Insert Alert SB #78A into the Limitations Section of the aircraft flight manual within the next 25 hours TIS

Effective Date: 12 February 1999

DCA/RAD/13 Cancelled – Purpose Fulfilled

DCA/RAD/14 Skyforce Avionics Skymap and Tracker II – Battery Installation

Applicability: Skyforce Avionics Skymap and Tracker II model numbers SM2000 and TR2000.

Requirement: To prevent possible battery reverse polarity and high voltage capable of producing high temperatures, install only battery types SM2223 (Nickel Cadmium) or SM2230 (Alkaline) specified in Skyforce Avionics ASB TRSY037C. Ensure the unit is configured and operated per ASB TRSY037C.

If Nickel Metal Hydride rechargeable batteries or Lithium batteries are found installed, remove the batteries per ASB TRSY037C.

(CAA UK AD 005-10-99 refers)

Compliance: By 31 December 1999

Effective Date: 17 December 1999

DCA/RAD/15 Autopilot Servo Actuator - Inspection

Applicability: Honeywell KAP 140 or KFC 225 autopilot system that incorporates any autopilot servo actuator referenced in the Honeywell service information and the chart below. AlliedSignal Avionics manufactured the KAP 140 and KFC 225 autopilot systems before transferring the design data to Honeywell.

SB No.:	Rev No.:	Applies To:
SB KS 270C-4 ALERT P/N: 600-01514-0041	Rev 1	KS 270C Pitch Servo Actuators, P/N 065-00178-XXXX (all versions), S/N 2701 and below.
SB KS 271C-5 ALERT P/N: 600-01516-0051	Rev 1	KS 271C Primary Servo Actuators, P/N 065-00179-XXXX (all versions), S/N 4201, 4158 through 4148, and 4103 and below.
SB KS 272C-4 ALERT P/N: 600-01518-0042	Rev 2	KS 272C Trim Servo Actuators, P/N 065-00180-XXXX (all versions), S/N 2435

These autopilot systems and autopilot servo actuators could be installed on, but not limited to, the following aircraft:

Cessna 172R, 172S, 182S, 206H, and T206H (Model KAP 140)

Commander Aircraft 114B and 114TC (Model KFC 225)

Mooney M20R and M20S (Model KFC 225)

Piper PA-28-181 (Model KAP 140), PA-46-350P (Model KFC 225)

Raytheon/Beech A36 S/N E3157, E3218 through E3293, E3295, and E3297 through E3301 (Model KFC 225)

Raytheon/Beech 58 S/N TH1841, TH1870, TH1884 through TH1932, and TH1934 (Model KFC 225)

Requirement: To detect and correct a loose fastener in the autopilot servo actuator, which could cause the autopilot servo actuator to not disengage when power to the autopilot is removed, accomplish the following:-

Inspect the autopilot servo actuator for a loose fastener per the applicable service information referenced in the applicability section of this AD. If a loose fastener is found, prior to further flight, modify the autopilot servo actuator per the applicable service information.

(FAA AD 2000-05-24 refers)

Note: As an alternative to the inspection and modification required by this AD, it is permissible to prevent use of the autopilot provided the following is accomplished:-
Check the primary flight controls for normal feel and motion and make any necessary adjustments:
Pull and tie off the applicable circuit breakers as referenced in the Compliance section of the applicable service information referenced in this AD;
Fabricate a placard, using letters of 1/8-inch in height, with the words "Autopilot Not Operational"; and install this placard in the cockpit within the pilot's clear view.

Compliance: Within the next 50 hours TIS.

Effective Date: 27 April 2000

DCA/RAD/16 UPS Apollo SL30 VHF NAV/COM – Removal from Service

Applicability: UPS Aviation Technologies Apollo SL30 VHF NAV/COM radio P/N 430-6040-300 or 430-6040-301.

Requirement: To prevent use of incorrect bearing information by the pilot, which could result in inaccurate navigation information, accomplish the following:-
Determine what version of Digital Signal Processor (DSP) Software the SL30 is using, per the following procedure (operation manual also refers):

1. Turn the SL30 on. The SL30 will go through a short initialization routine and then briefly display the last VOR check date.
2. Press SYS and turn the large knob if necessary to the System Info page. Press ENT.
3. In the System Info function turn the large knob to Nav Software Version.
4. Turn the small knob to left to view DSP Software Version.

If the radio is using DSP Software Version Number 1.00, the VOR function for navigation must not be used. Attach on or near the SL30 within view of the pilot, a placard that reads as follows:

USE OF SL30 VOR FUNCTION FOR NAVIGATION PROHIBITED.

Insert a copy of this AD into the Limitations Section of the Aircraft Flight Manual.
(FAA AD 2001-14-51 refers)

Compliance: Before further flight.

Effective Date: 5 July 2001

DCA/RAD/17 Garmin GNS 430 – Modification

Applicability: This AD applies to the Garmin GNS 430 unit, P/N 011-00280-00: S/N:
9630001, 9630002, 96300017, 96300028, 96300034, 96300040, 96300068,
96300104, 96300108, 96300122, 96300125, 96300130, 96300142, 96300149,
96300161, 96300165, 96300218, 96300222, 96300232, 96300269, 96300272,
96300308, 96300333, 96300340, 96300348, 96300354, 96300369, 96300372,
96300382, 96300394, 96300411, 96300413, 96300429, 96300437, 96300451,
96300484, 96300485, 96300489, 96300504, 96300506, 96300513, 96300522,
96300549, 96300563, 96300585, 96300587, 96300618, 96300621, 96300624,
96300628, 96300641, 96300653, 96300664, 96300713, 96300734, 96300756,
96300766, 96300781, 96300785, 96300786, 96300808, 96300831, 96300837,
96300842, 96300846, 96300866, 96300870, 96300872, 96300899, 96300916,
96300923, 96300925, 96300929, 96300941, 96300961, 96300984, 96300987,
96301021, 96301108, 96301130, 96301280, and 96301296 through 96303200.

These units may be fitted to numerous light aircraft types including, but not limited to; Cessna singles and twins, Piper aircraft, Beech and Mooney M20 series.

Requirement: To prevent the erroneous display of information, which may lead to a dangerous flight situation, accomplish the following;

1. Modify the affected GNS 430 unit to incorporate circuitry changes to the deviation and flag outputs per the Modification Instructions section of Garmin SB 9905, Revision A.
2. Do not install an affected GNS 430 unit unless it has been modified per part 1 of this AD.

(FAA AD 2001-23-17 refers)

Compliance: 1. By 30 June 2002
2. From 20 December 2001

Effective Date: 20 December 2001

DCA/RAD/18 Rockwell Collins, 621A-3 Transponders – Pulse width test

Applicability: Aircraft equipped with Rockwell Collins Mode C 621A-3 Air Traffic Control (ATC) transponder(s), part number 522-2703-XXX (where XXX is any series number).

Requirement: To prevent transmission of inaccurate altitude data, which could cause the pilot receiving the data to change course, either ascending or descending, and possibly lead to a mid-air collision or near mid-air collision, accomplish the requirements of FAA AD 2002-06-05.

Compliance: Inspect by 31 December 2002, repair if necessary, before further flight.
(FAA Note about MMEL applies)

Effective Date: 27 June 2002

DCA/RAD/19 Rockwell Collins TDR-94 Mode S Transponders - Modification

Applicability: 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 DHC-8 series aircraft.

Requirement: To prevent erroneous altitude resolutions from causing a reduction in ACAS or TCAS separation margins, accomplish the following;

1. Determine whether the altitude information from any TDR-94 Mode S transponder is derived from a digital air data source or a Gillham (Gray Code) encoded source. Conduct this check per Rockwell Collins SB No.17 or SB No.20 as applicable to transponder model. If the altitude information is derived from a digital air data source no further action is required.
2. If the altitude information is derived from a Gillham (gray code) encoded source, modify the unit IAW Rockwell Collins SB 17, SB 17 Rev 1 or SB 20 as applicable. Collins Product Information Letter 71 also refers. (FAA AD 2002-06-06 refers)

Compliance:

1. Before 31 October 2002
2. At the next Transponder check required by NZCAR 91.611 or by 30 March 2003, whichever occurs first.

Effective Date: 25 July 2002

DCA/RAD/20 Collins Air Data Computer - Rework

Applicability:

Model	P/N	S/N
ADC-85 (Incorp SB 58)	622-8051-002 622-8051-003	All
ADC-85A (Incorp SB 58)	822-0370-113 822-0370-123 822-0370-139 822-0370-404 822-0370-408	All
ADC-850D (Incorp SB 58)	822-0389-133	All up to and including 3DGW (except for 1P6D, 22RC-22RF, and 23WK-3DGP).
ADC-850F (Incorp SB 58)	822-1036-406 822-1036-418	All

These Units may be installed in but are not limited to the following aircraft: Raytheon B200, B300, C90A and 1900D.

Requirement: To prevent unwarranted display of the ADC failure flag, which may occur when selecting alternate static air source, accomplish the following; Remove any affected ADC from the aircraft. As applicable, replace or reprogram parts or circuit card assemblies on central processing unit (CPU) circuit cards. Test the ADC and re-install the ADC. Carry out the above per Rockwell Collins SB 62, Revision No. 2, ADC-85/85A/850C/850D/850E/850F-34-62, Revision No. 2, or SB 62, as applicable, and the applicable Collins Computer Component Maintenance Manual, and Collins Avionics Standard Shop Practices Instruction Manual. (FAA AD 2002-14-19 refers)

Compliance: By 23 August 2003

Effective Date: 25 July 2002

DCA/RAD/21 Cancelled - DCA/RAD/32 refers

Effective Date: 30 November 2006

DCA/RAD/22A Cancelled – DCA/RAD/30 refers

Effective Date: 29 June 2006

DCA/RAD/23 Becker Transceivers - Modification

Applicability: Becker VHF-AM Transceivers Model AR4201-() S/Ns 150 through 9499 which have not incorporated Becker SB AR4201-01/03.

Requirement: To avoid loss of communication due to transceivers susceptibility to interference from strong signals on adjacent frequencies, accomplish the following;

If S/N is in affected range insert notice in aircraft flight manual limitations section:

USE OF BECKER AR4201 Limited to VFR ONLY

Accomplishment of the SB is terminating action for this AD.
(LBA AD 2003-234 refers)

Compliance: By 30 November 2003

Effective Date: 30 October 2003

DCA/RAD/24 Narco AT150 Transponders

Applicability: NARCO Avionics Inc. AT150 transponders with "Chassis Level A", SNs 10000 through 12598 inclusive.

Requirement: As a results of overseas reports of AT150 transponders not recognizing and responding properly to Mode S interrogations from Mode S ground stations and Traffic Alert and Collision Avoidance System (TCAS-II) airborne equipment the actions specified in this AD are intended to prevent loss of aircraft airspace separation and the possibility of mid-air collision.

1. For AT150 transponders with a SN listed in this AD that are **not modified** in accordance with NARCO SB No. AT150 No. 1, dated July 29, 1977, do the following:

- a. Install resistor part number (P/N) 312180102 and transistor P/N 755610028; and change transponder to "Chassis Level B".
- b. Test transponders in accordance with the Corrective Action, Testing the Modification, and Return to Service paragraphs of NARCO SB No. AT150 No. 6.

2. For Transponders with a SN listed in this AD, that **are modified** in accordance with NARCO SB No. AT150 No. 1, dated July 29, 1977, do the following:

- a. Change transponder to "Chassis Level B" and test transponders in accordance with the Testing the Modification paragraph of NARCO SB No. AT150 No. 6, and perform a bench test to the transponder before returning it to service. Information on bench testing can be found in AT150 Manual P/N 03606-0600.
(FAA AD 2004-08-16 refers)

Compliance:

1. By 30 November 2004.
2. By 30 November 2004.

Effective Date: 27 May 2004

DCA/RAD/25 Terra TRT 250 Transponders – Mode S Inspection

Applicability: Model TRT 250 transponders, P/N 0900-0250-00, with S/N 4194 and below, Modification Level 4 and below;
3-inch ATI-mounted TRT 250 pushbutton transponders, P/N 0900-0250-20, with S/N 5324 and below, Mod Level 4 and below; and
TRT 250 D digital display transponders, P/N 0900-0250-30, with S/N 1155 and below, Mod Level 1 and below.

Requirement: To prevent failure of the transponder to respond properly to Mode S interrogations from Mode S ground stations and Traffic Collision Avoidance System (TCAS) II airborne equipment, which could result in loss of airspace separation, accomplish the following:

1. Remove the TRT 250 series transponder per Terra Corporation Mandatory SB-104, Revision 1, and determine the P/N, S/N, and modification level. If the determination made reveals one of the applicable P/Ns, S/Ns, and modification levels, replace the affected transponder with:
 - a. A Terra Corporation transponder that has been modified per SB-104, Revision 1.
 - b. An unaffected Terra Corporation transponder; or,
 - c. Another manufacturer's transponder that responds properly to Mode S interrogations from both an Air Traffic Control Radio Beacon System (ATCRBS)/Mode S ground station and TCAS II airborne equipment.
2. If installing a replacement Terra Corporation transponder that has been modified per SB-104, Revision 1, perform a ramp test per the Testing section of SB-104, Revision 1. Conduct the tests and checks required by CAR 91.613 prior to approving the aircraft for return to service.

Note: Installation of an affected Terra Corporation transponder that has been modified and tested per SB-104, Revision 1, or another transponder that responds properly to Mode S interrogations from both an ATCRBS/Mode S ground station and TCAS II airborne equipment constitutes terminating action for the requirements of this AD.
(FAA AD 95-01-01 refers)

Compliance: 1. By 30 January 2005.
2. Before further flight after installation.

Effective Date: 29 July 2004

DCA/RAD/26 Cancelled – Superseded by DCA/RAD/28.

Effective Date: 26 May 2005

DCA/RAD/27 Garmin Apollo GPS – Software Modification, Testing, and Re-identification

Applicability: Garmin AT, Apollo GX50/55/ 60/65 TSO-C129a GPS navigation units with software versions 3.0 through 3.4 inclusive; as listed in UPS Aviation Technologies SB 561-4002-001.

Requirement: To prevent the GPS navigation unit, under certain conditions, from providing erroneous cross-deviation information, which could result in the aircraft deviating from its intended course for a brief period of time, accomplish the following:

Modify and test the software for the Apollo GX50/55/60/65 TSO-C129a GPS navigation unit by accomplishing all of the actions specified in paragraphs 3.B. and 3.C. of UPS Aviation Technologies SB 561-4002-001. Re-identify the modified Apollo GX50/55/60/65 TSO-C129a GPS navigation unit, per paragraph 3.D. of the SB.

(FAA AD 2004-13-20 refers)

Compliance: Before 31 January 2005.

Effective Date: 29 July 2004

DCA/RAD/28A Garmin GTX 33, GTX 33D, GTX330 & GTX330D Transponders – S/W Upgrade

Applicability: Garmin GTX 33, GTX 33D, GTX330 and GTX330D Mode S Transponders installed with software versions 3.00, 3.01, 3.02, 3.04 or 3.05.

Note 1: The applicability of this AD revised to exclude those aircraft fitted with Mode S Transponders with software versions 3.06 or newer. There is no change to the AD requirement. No action required if already in compliance with DCA/RAD/28.

Requirement: To prevent aircraft equipped with Garmin GTX 33, GTX 33D, GTX330 and GTX330D Mode S Transponders installed with software versions 3.00, 3.01, 3.02, 3.04 or 3.05 from possibly transmitting inaccurate replies to interrogating aircraft, due to suppression when the pulses are below the minimum trigger level, resulting in reduced vertical separation, install software upgrade version 3.06 or a newer version, per GARMIN MSB 0409.

(FAA AD 2005-01-19 refers)

Note 2: If software version 3.03 or 3.06 or a newer version is already installed, no further AD action is required. Software versions 3.03 and 3.06 correct a TAS, TCAD, and TCAS I system "whisper-shout" problem that could potentially lead to the aircraft not being visible at certain ranges.

Compliance: By 27 September 2009.

Effective Date: DCA/RAD/28 - 26 May 2005
DCA/RAD/28A - 27 August 2009

DCA/RAD/29 Shadin ADC-2000 Air Data Computers – Inspection and Modification

Applicability: Shadin ADC-2000 Air Data Computers (ADC), P/Ns 962830A-1-S-8, 962830A-2-S-8, and 962830A-3-S-8 with configurations B, C, and D.

These ADCs are installed on, but not limited to, Alliance Aircraft Group, LLC. H-250, B-N Group Ltd BN2A, Bombardier Inc. DHC-3 and DHC-6, Cessna Aircraft Company 172, 180, 180E, 185, 206, 206E, 206F, 206G 208, 210L, 310, DeHavilland Inc. DHC-2, and The New Piper Aircraft, Inc. PA-28-180, PA-28-181, PA-31-350, PA-32-300, PA-32-301, PA-32R-300, PA-34-200T.

Requirement: To prevent these air data computers from displaying incorrect altitude information, which could cause the flight crew to react to this incorrect flight information and possibly result in an unsafe operating condition, accomplish the following:

1. Perform a preflight check per the interim procedures of Shadin Service Bulletin SB28-05-002, revision C, dated 29 June 2005 to ensure the Air Data Computer (ADC) and the Electronic Flight Information System (EFIS) altimetry accuracy.

If the altitudes, altimeter, and elevation differ by more than 75 feet, IFR flights are not permitted. (Note limitation in tech log.)

2. Modify the ADC by returning to a Shadin Repair Facility for an upgrade per SB28-05-002.

Until the ADC is modified and reinstalled, the aircraft may only be flown if minimum equipment requirements for the aircraft are still met.

(FAA AD 2005-25-08 refers)

Note 1: Requirement 1 may be accomplished by the pilot in accordance with CAR Part 43, Appendix A. The pilot must be trained and authorised (Part 43, Subpart B refers) and certification must be provided (Part 43, Subpart C refers).

Note 2: Shadin ADC-2000 Air Data Computers (ADC), P/Ns 962830A-1-S-8, 962830A-2-S-8, and 962830A-3-S-8 with configurations B, C, and D may not be installed on any aircraft either as an initial installation, or as a replacement part, unless it has been upgraded per requirement 2.

Compliance: 1. Within the next 25 hours TIS, and thereafter before each flight, until the ADC is upgraded as specified in requirement 2.

2. By 23 May 2007.

Effective Date: 23 February 2006

DCA/RAD/30 Goodrich TAWS8000 – Inspection and Replacement

Applicability: Any aircraft fitted with Goodrich TAWS8000 terrain awareness warning system P/N 805-18000-001, that incorporates hardware "Mod None", "Mod A" or "Mod B". These units may be fitted, but not limited to the following aircraft types:

Cessna Aircraft Company	421, 500, 501, 525, 525A, 550, 551, 650, and S550.
Dassault Aviation	Mystere-Falcon 20 series.
Gulfstream Aerospace LP	1125 Westwind Astra.
Raytheon Aircraft Company	100, 200, 300, 400A, and F90.
Sabreliner Corporation	NA-265.
The New Piper Aircraft Inc	PA-42-1000.

Requirement: To prevent the loading of the baro set potentiometer, which could result in an unacceptable attitude error and cause the pilot to make unsafe flight decisions, accomplish the following:

1. Inspect the TAWS8000 TAWS P/N 805-18000-001 that incorporates hardware installation "Mod None", "Mod A" or "Mod B" to determine if both the TAWS8000 and any other device are connected to the same baro set potentiometer.

Inspect per Goodrich Avionics Systems, Inc. Service Memo SM #134 and the applicable installation manuals.

2. If both the TAWS8000 TAWS and any other device are connected to the same baro set potentiometer, remove the TAWS8000 TAWS and cap and stow the connecting wires, per SM #134 and the applicable installation manuals, or replace the TAWS8000 TAWS unit with a unit that incorporates hardware "Mod C", per Goodrich Avionics Systems, Inc. Alert Service Bulletin SB #A117, dated 9 July 2003.

Note: Do not install or reconfigure any TAWS8000 TAWS P/N 805-18000-001 which does not have hardware "Mod C" embodied.

(FAA AD 2004-08-15 refers)

Compliance:

1. Within the next 5 hours TIS, unless already accomplished.
2. Before further flight, unless already accomplished.

Effective Date: 29 June 2006

DCA/RAD/31A Sandel Avionics ST3400 TAWS/RMI – Placard, AFM and Software Upgrade

Applicability: Sandel Avionics Incorporated (Sandel) model ST3400 Terrain Awareness Warning System/Radio Magnetic Indicator (TAWS/RMI) units approved under TSO C113, C151a or C151b as identified in Sandel ST3400 Service Bulletin SB3400-01, revision B.

These units are installed on, but not limited to, Boeing 737 and 747 aircraft, LearJet 24, 35, 36 and 55 aircraft, BAe Jetstream 3101 aircraft, Cessna 208, 208B, 421C, 501, 525, 550, 560, 650 and S550 aircraft, Israel Aircraft Industries Westwind 1124 aircraft, Piper PA-31T2 aircraft, Raytheon 58, 1900D, 400, A36, 200, 300, 350, A200, B100, B200, B300, C90, C90A, C90B, E90 and F90 aircraft and Twin Commander 500-A and 695A aircraft.

Note 1: This AD revised to include note 2 and requirement 4.

Requirement: To prevent a bearing error, which could lead to an aircraft departing from its scheduled flight path and result in reduced separation and possible collision with other aircraft or terrain, accomplish the following:

1. Install a placard on the TAWS/RMI unit which states "Not for primary VOR navigation", per Sandel ST3400 Service Bulletin SB3400-01, revision B.

2. Amend the limitations section of the AFM to include the following statement: "Use of ST3400 TAWS/RMI for primary VOR navigation is prohibited unless the indicator has 3.07 or A3.06 software or later."

3. For TAWS/RMI units with S/Ns up to 1999 install software revision 3.07, per SB3400-01, and for S/Ns 2000 onwards, install software revision A3.06, per SB3400-01.

Note 2: Software revisions later than 3.07 or A3.06 are considered acceptable for compliance with requirement 3 of this AD.

4. A Sandel model ST3400 TAWS/RMI unit shall not be fitted to any aircraft unless modified in accordance with Sandel ST3400 Service Bulletin SB3400-01, revision B.

(FAA AD 2006-16-18R1 refers)

Note 3: Requirement 2 may be accomplished by inserting a copy of this AD into the AFM.

Note 4: The placard and AFM revision as required by requirement 1 and 2 may be removed after the software upgrade required by requirement 3 has been accomplished.

Compliance:

1. By 31 August 2008, unless already accomplished.
2. By 31 August 2008, unless already accomplished.
3. By 31 October 2008, unless already accomplished.
4. From 31 July 2008.

Effective Date: DCA/RAD/31 - 31 August 2006
DCA/RAD/31A - 31 July 2008

DCA/RAD/32 Cancelled – DCA/RAD/52 refers

Effective Date: 29 April 2010

DCA/RAD/33 COMMS Units & Mode S transponders – Modification and Replacement

Applicability: Honeywell Communication Unit model RCZ-833J P/N 7510700-763 and P/N 7510700-863.
Honeywell Communication Unit model RCZ-833K P/N 7510700-765 and P/N 7510700-875.
Honeywell Communication Unit model RCZ-851J P/N 7510700-813.
Honeywell Communication Unit model RCZ-851K P/N 7510700-815.
Honeywell Communication Unit model RCZ-854J P/N 7510700-725 and 7510700-825.

Honeywell Mode S transponder XS-856A P/N 7517400-865 and 517400-885.

Honeywell Mode S transponder XS- 856B P/N 7517400-866 and 7517400-886.

Honeywell Mode S transponder XS-857A P/N 7517400-876 and 7517400-896.

These Honeywell parts are installed on, but not limited to, Bombardier Model BD-700-1A10 and BD-700-1A11 aircraft, Cessna Model 550 and 560 aircraft, Cessna Model 650 aircraft, Dassault Model Falcon 900EX aircraft, S/N 97 and S/N 120 onward, Dassault Model Falcon 2000EX aircraft, S/N 6 and S/N 28 onward, Embraer model EMB-135BJ, -135ER, -135KE, -135KL, and - 135LR aircraft, Embraer model EMB-145, -145ER, -145MR, -145LR, - 145XR, -145MP, and -145EP aircraft; Learjet Model 45 aircraft; Lockheed Model 282-44A-05 (C-130B) aircraft; Lockheed Model 382G series aircraft; Raytheon Model Hawker 800 (including variant U- 125A), 800XP, and 1000 aircraft.

Note 1: These Honeywell products are approved under Technical Standard Order TSO-C112.

Requirement: To prevent the transponder of the COMMS Unit from going into standby mode, which could increase the workload of the flightcrew and result in improper functioning of the traffic alert and collision avoidance system, accomplish the following:

1. For all aircraft revise the normal procedures section of the AFM to include the following statement:

‘After completion of any 4096 ATC Code change (also referred to as Mode A Code), check the status of the transponder. If the transponder indicates that it is in standby mode, re-select the desired mode (i.e., the transponder should be in the active mode).’

Note 2: This may be accomplished by inserting a copy of this AD in the AFM.

Note 3: Accomplishing requirements 3 or 5 of this AD, terminates the actions specified in requirement 1 of this AD.

2. Replacement of the identification plates of certain COMMS Units:

For aircraft fitted with an affected COMMS Unit, replace the product signature plate, the identification plate, and MOD plate of the COMMS Unit with new plates, and test the COMMS Unit, per the instructions in Honeywell Alert Service Bulletin 7510700-23-A0048, dated January 27, 2006.

If the COMMS unit fails the test, reinstall MOD V into the transponder of the COMMS unit per Honeywell Alert Service Bulletin 7517400-23-A6015, revision 001, before further flight.

3. Replacement of Certain Transponders:

For aircraft fitted with an affected COMMS Unit, replace the XS-852E/F mode S transponder of the COMMS unit with a new or modified XS-852E/F mode S transponder that has MOD V installed, per the Honeywell Alert Service Bulletin 7510700-23-A0047, revision 001.

Note 4: After accomplishing requirement 3 of this AD, the AFM amendment required by requirement 1 may be removed.

Note 5: Honeywell Alert Service Bulletin 7510700-23-A0047, revision 001, refers to Honeywell Alert Service Bulletin 7517400-23-A6015, revision 001, as an additional source of service information for installing MOD V into an XS-852E/F mode S transponder.

4. Replacement of the identification plates of certain transponders:

For aircraft fitted with an affected transponder, replace the modification plate of the transponder with a new plate and test the transponder, per the instructions in Honeywell Alert Service Bulletin 7517400-23-A0017.

If the transponder fails the test, reinstall MOD Y into the transponder per requirement 5 of this AD, before further flight.

5. Installation of MOD Y into certain transponders:

For aircraft fitted an affected transponder, install MOD Y into the applicable mode S transponder, per the instructions in Honeywell Alert Service Bulletin 7517400-23-A6016.

Note 6: After accomplishing requirement 5 of this AD, the AFM amendment required by requirement 1 may be removed.

6. Parts installation:

No person shall install any affected parts identified in the applicability section of this AD, unless the applicable software modification has been installed in the transponder in accordance with requirements 3 or 5 of this AD.

(FAA AD 2006-19-04 & EASA AD 2007-0156 refers)

Compliance:

1. By 30 September 2007.
2. 3. 4. & 5. By 30 February 2009.
6. From the effective date of this AD.

Effective Date: 30 August 2007

DCA/RAD/34 Garmin GSM Servo Gearbox Units – Inspection and Replacement

Applicability: GSM 85 servo gearbox units, P/N 011-00894-00, 011-00894-02, 011-00894-04, 011-00894-06, 011-00894-07, 011-00894-08, 011-00894-09, 011-00894-10, 011-00894-11 and 011-00894-14.

These servo gearbox units are installed on, but not limited to, Cessna 182T, T182T, 206H, and T206H aircraft, Beech G36 and G58 aircraft, Diamond DA40 and DA40F aircraft, Columbia 350 and 400 aircraft and Mooney M20M and M20R aircraft.

Note: Other aircraft may have these servo gearbox units fitted through an approved modification.

Requirement: To detect and correct defective Garmin GSM 85 servo gearbox units, which could result in the gearbox jamming due to the possibility of there being foreign debris inside the assembly and lead to the pilot having to apply sufficient control force to override the servo gearbox slip clutch in order to control the aircraft, accomplish the following:

Inspect the identification label of the GSM 85 servo gearbox unit to establish the mod level. The mod level marked on the identification label indicates if the GSM 85 servo gearbox unit is already in compliance with this AD.

If the identification label on the GSM 85 servo gearbox unit P/N 011-00894-00 or 011-00894-10 is marked at mod level 3, no further action is required.

If the identification label on the GSM 85 servo gearbox unit P/N 011-00894-02, 011-00894-04, 011-00894-06, 011-00894-07, 011-00894-08, 011-00894-09, 011-00894-11, or 011-00894-14 is marked at mod level 1, no further action is required.

If the identification label on the GSM 85 servo gearbox is not marked at mod level 1 or 3, inspect the servo gearbox for foreign object debris. If foreign object debris is detected replace the gearbox before further flight.

Accomplish these requirements per Garmin International, Inc. SB No. 0713, revision A, B, C or D, and Cessna Aircraft Company Single Engine SB SB07-22-0, as applicable.

(FAA AD 2008-02-06 refers)

Compliance: Within the next 100 hours TIS or by 29 February 2008 whichever occurs sooner.

Effective Date: 31 January 2008

DCA/RAD/35B Cancelled – Purpose Fulfilled

Effective Date: 30 May 2013

DCA/RAD/36 MST 67A Mode 'S' Transponders – Inspection and Rework

Applicability: Honeywell MST 67A Mode 'S' transponders P/N 066-01143-1101, 066-01143-1201 and 066-01143-1301, S/N all through 1141 and P/N 066-01143-1602, S/N all through 1503.

This type of equipment is known to be installed on, but not limited to, Learjet Inc. (Gates) 31A aircraft, Raytheon Aircraft Company (Beech) 200 series aircraft, Sabreliner Corporation (North American) NA-265 series aircraft and SAAB SF340A/B series aircraft.

Requirement: To prevent the transponder not responding correctly when interrogated by a ground radar system which could result in the radar system discarding the reply and not displaying the aircraft on the radar screen, modify the MST 67A Mode 'S' transponder per the instructions in Honeywell Software Bulletin SWB MST 67A–SW2.
(EASA AD 2006-0269 refers)

Compliance: By 28 March 2008, unless previously accomplished in accordance with UK CAA AD 001-01-2003 or any equivalent European Union Member State AD that was issued in response to the UK AD.

Effective Date: 28 February 2008

DCA/RAD/37A Cancelled – DCA/RAD/45 refers

Effective Date: 3 April 2009

DCA/RAD/38 FreeFlight GPS Receivers – Discontinued NavData Support

Applicability: Model TNL 1000DC
Model TNL 2000 / 2100 / 3000 / 3100
Model TNL 2000T / 2100T / 3000T / 3100T
Model TNL Approach 2000 / 2101 / 2101 I/O

Note 1: This AD is prompted due to FreeFlight Systems releasing Service Information Letters FFS02 and FFS04. FreeFlight (Trimble) NavData Services are to be discontinued for all non “PLUS” Navigation Systems when the database for AIRAC cycle 0813 expires on 14 January 2009. After this date the affected GPS receivers are only eligible to be used as an aid to visual navigation under VFR. FreeFlight GPS receivers were formerly manufactured by Trimble.

Requirement: To prevent a significant safety risk due to there being no assurance that the contents of the database (after AIRAC cycle 0813) is either complete or accurate, install a placard on the GPS receiver with the following text:

FOR VFR USE ONLY

(FreeFlight Service Information Letter FFS02 refers)

Note 2: The ICAO Manual on Required Navigation Performance (RNP) Doc. 9613 requires routes and procedures to be loaded from a current navigation database. (Refer CAA Rule Part 91 Appendix A.10(3)(i) - Navigation systems and equipment installed for operation in RNP, MNPS, or VSM airspace).

Note 3: FreeFlight Systems are researching a viable solution to continue NavData support for the model TNL Approach 2000 / 2101 / 2101 I/O systems (FreeFlight Systems Service Information Letter No. FFS04 refers). The solution will require hardware and software upgrades from FreeFlight as well as new databases from Jeppesen. The NZCAA will consider reviewing this AD when a solution becomes available for the model TNL Approach 2000 / 2101 / 2101 I/O systems.

Compliance: By 14 January 2009.

Note 4: Database AIRAC cycle 0813 is effective from 18 December 2008 through to 14 January 2009.

Effective Date: 31 July 2008

DCA/RAD/39 Kannad 406 AF-Compact ELT – Inspection and Rework

Applicability: Kannad 406 AF-Compact ELT P/N S1840501-01 or P/N S1840501-02 fitted with a RC100 (3 position) toggle switch.

Note 1: This AD does not affect Kannad 406 AF-Compact ELT P/N S1840501-01 or P/N S1840501-02 fitted with a rocker switch supplied with RC200 Remote Control Panel P/N S1820513-11. The RC100 (3 position) toggle switch is supplied with RC100 Remote Control Panel P/N S1820513-03.

Requirement: To ensure the RC100 toggle switch activates the ELT if selected for an in flight emergency, accomplish the following:

1. Inspect the wiring connections per the instructions in paragraph 3.C. in Kannad Service Letter (SL) No. SL_S1840501-25-01. If any incorrect wiring connections are found, correct before further flight.
2. Test the ELT, including the remote toggle switch and confirm the installation is functioning correctly per the instructions in paragraph 3.E. in SL No. SL_S1840501-25-01.

Note 2: Connection of Kannad 406 AF-Compact ELT to an RC100 toggle switch or RC100 Remote Control Panel requires a 3-wire bundle.

Note 3: A copy of Kannad Service Letter (SL) No. SL_S1840501-25-01 can be obtained from <http://www.aviationsafety.co.nz/>
(NZ Occurrence refers)

Compliance: 1. & 2. Within the next 50 hours TIS, or the next scheduled maintenance inspection, or by 30 September 2008 whichever occurs sooner.

Effective Date: 31 July 2008

DCA/RAD/40B Funkwerk Mode S Transponders – AFM Amendment & Placard

Applicability: Model TRT600 Mode-S Transponders, all P/N, all S/N.

These transponders are known to be installed on, but not limited to, AMS-Flight (Rolladen-Schneider) LS 4 series gliders, DG Flugzeugbau DG-800 and DG-1000 series powered gliders, Diamond Aircraft Industries DA 20 aircraft, Extra EA-200 and EA-300 series aircraft, HB-Flugtechnik GmbH HB 21 and HB 23 series powered gliders, Scheibe SF 25 C powered gliders, Schempp-Hirth Discus, Ventus and Nimbus series powered gliders, Schleicher gliders and Stemme S 10 series powered gliders.

Note 1: No action required for model TRT600 Mode S transponders if already in compliance with DCA/RAD/40A. This AD revised to exclude TRT800A and TRT800H transponders with Funkwerk Avionics having developed Mod-Index 10 for these transponders. The requirements for TRT800A and TRT800H transponders now addressed in DCA/RAD/44.

Note 2: For further issues that may lead to future AD action refer to EASA Safety Information Bulletin (SIB) 2008-84R1 issued 12 November 2008.

Requirement: To prevent intermittent loss of detection on the Mode S Secondary Surveillance Radar (SSR) which could compromise aircraft safety, accomplish the following:

1. Amend the limitations section of the AFM to include the following text:

'Do not operate this aircraft in airspace where a transponder is required and Mode S interrogation is used by the ground system, unless accepted by ATC prior to entering this airspace'.

Note 3: This may be accomplished by inserting a copy of this AD into the limitations section of the AFM.

2. Install a placard in full view of the pilot, with the following instructions:

Do not operate this aircraft in airspace where a transponder is required and Mode S interrogation is used by the ground system, unless accepted by ATC prior to entering this airspace.

Note 4: The requirements of this AD are considered to be an interim action until the manufacturer has a modification available.

(EASA AD 2008-0158R2 refers)

Compliance: 1. By 30 December 2008 unless already accomplished.

2. By 30 December 2008 unless already accomplished.

Effective Date: DCA/RAD/40 - 28 August 2008
 DCA/RAD/40A - 30 October 2008
 DCA/RAD/40B - 27 November 2008

DCA/RAD/41 MST 67A Mode 'S' Transponders – AFM Amendment and Modification

Applicability: Honeywell MST-67A Mode-S Transponders P/N 066-01143-2001, S/N all through MST67A-F1450, and
 Honeywell MST-67A Mode-S Transponders P/N 066-01143-2101, S/N all through MST67A-G2850,
 Fitted to aircraft that must comply with Mode-S Enhanced Surveillance (EHS) operational requirements as required by ICAO Annex 10, Volume IV, Fifth Edition, July 2007.

Note 1: These transponders are known to be installed on, but not limited to, Cessna model 550, 560 and 650 "Citation" series aircraft, Gulfstream Aerospace Corporation G-1159B aircraft, Gulfstream (IAI) Model 1125 "Astra" aircraft, Hawker Beechcraft (Raytheon) Hawker 800 series aircraft and Sabreliner Corporation (North American) NA-265 series aircraft.

Requirement: To prevent affected MST 67A units possibly causing Air Traffic Management disruptions due to Mode-S Enhanced Surveillance (EHS) not being supported, accomplish the following:

1. Amend the limitations section of the AFM with the following text:

MODE-S TRANSPONDER: KNOWN TRANSMISSION ANOMALY - NO EHS DAPS.

Note 2: This requirement may be accomplished by inserting a copy of this AD into the limitations section of the AFM. The flight plan for every flight should be amended as required.

2. Modify affected transponders per Honeywell Service Bulletin MST 67A-34-56, Publication number 605-07740-0060 revision 0, dated 05 March 2008, or replace the transponder with a unit which has software version 01/04.

Software version 01/03 may be used as an alternative, provided that it has been determined that the aircraft is not affected by the problems identified in paragraph 1.C of Honeywell SB MST 67A-34-56. Honeywell Software Bulletin MST 67A-SW5, Publication number 605-07740-0050 revision 0, dated 07 November 2007 pertains to this subject.

Once requirement 2 has been accomplished remove the AFM amendment required by requirement 1 of this AD.

Note 3: The wording in paragraph 1.C of Honeywell SB MST 67A-34-56 may lead to confusion. MST-67A Transponders with software version 01/03 do accept Aircraft/Flight Identification Labels 233 through to 236 with SSM set to '00', but will not accept the labels if SSM is set to '11'.

3. An affected MST-67A Transponder shall not be fitted to any aircraft which are required to comply with Mode-S Enhanced Surveillance (EHS) operational requirements as required by ICAO Annex 10, Volume IV, Fifth Edition, July 2007 unless it has been modified in accordance with Honeywell SB MST 67A-34-56 or SWB MST 67A-SW5.

(EASA AD 2008-0159 refers)

Compliance:

1. Before further flight, unless previously accomplished.
2. By 25 March 2010.
3. From 25 March 2010.

Effective Date: 25 September 2008

DCA/RAD/42 Pitot & Angle of Attack Probes – AFM Amendment and Inspection

Applicability: Harco Labs, Inc. pitot/angle of attack (AOA) probe P/N 100435-39, 100435-39-001, 100435-40 and 100435-40-001, S/N 740000 through to 799999.

Note 1: Affected pitot/angle of attack (AOA) probes can be fitted to various aircraft type.

Note 2: These probes are known to be fitted to Eclipse Aviation Company Model EA500 aircraft with S/N 000001 through to 000189 at manufacture, including other S/N aircraft where an affected probe was fitted in the field.

Requirement: To prevent failure of the pitot/AOA probe heaters which could result in a probe blockage and unreliable aircraft speed indication, accomplish the following:

1. Inspect the aircraft logbooks and determine if an affected pitot/AOA probe is fitted to the aircraft.

If an affected pitot/AOA probe is not fitted to the aircraft, no further action is required.

If an affected probe is fitted to the aircraft, or if the S/N of the probe cannot be positively determined, amend the limitations section of the AFM with the following text:

“Operate Only under Day Visual Flight Rules (VFR)”

“File Only a VFR Flight Plan”

Note 3: Requirement 1 of this AD may be performed and certified under the provision in Part 43 Appendix A.1 (7) by the holder of a current pilot licence, if that person is rated on the aircraft, appropriately trained and authorised (Part 43, Subpart B refers), and the maintenance is recorded and certified as required by Part 43.

Note 4: A copy of this AD may be inserted into the limitations section of the AFM to comply with this requirement.

2. If an affected probe is fitted to the aircraft, or if the S/N of the probe cannot be positively determined, test the pitot/AOA probe heater performance per Eclipse Aviation Alert Service Bulletin SB 500-34-019 revision C, dated 20 August 20, 2008 for probes fitted to Eclipse model EA500 aircraft, and for all affected pitot/AOA probes per

Harco Labs, Inc. SB-34-10-10-001 revision F, dated 19 August 19 2008 including Harco Pitot AOA Probe Internal Tubing Heater Verification Test Procedure No. P1149 revision E.

If the pitot/AOA probe fails the test, replace it with a pitot/AOA probe S/N which is not affected by this AD per ASB No. SB 500-34-019, or the applicable aircraft maintenance manual as required, and test the replacement pitot/AOA probe per requirement 2 of this AD.

If the replacement pitot fails the heater performance test the probe can remain in service up until 29 December 2008 provided that the limitation section of the AFM is revised per requirement 1 of this AD.

If the pitot/AOA probe passes the heater test performance, remove the operational limitations inserted into the AFM per requirement 1 of this AD.

Note 5: If requirement 2 was previously accomplished per SB-34-10-10-001 revision E, or an earlier revision, the Pitot AOA Probe Internal Tubing Heater Verification Test Procedure Data Sheet may be used to accomplish procedure 3.1 lines 1 through to 14, or procedure 3.2 lines 1 through 14 of Harco Pitot AOA Probe Internal Tubing Heater Verification Test Procedure No. P1149 which is referenced in 8. Appendix A of SB-34-10-10-001 revision F.

3. An affected pitot/AOA probe shall not be fitted to any aircraft unless requirement 2 of this AD has been accomplished.
(FAA AD 2008-19-01 refers)

Compliance:

1. Before further flight.
2. By 29 December 2008.
3. From 29 September 2008.

Effective Date: 29 September 2008

DCA/RAD/43 Mode S Address Code – Inspection

Applicability: All aircraft fitted with a Mode S transponder.

Note 1: A person must not operate an aircraft with Mode S transponder equipment installed unless the State of Registry has assigned the aircraft a unique Mode S address code. CAR Part 91.247(b) refers. For New Zealand registered aircraft the CAA allocate Mode S address codes in accordance with AC 91-2.

Requirement: This AD is prompted after receiving reports from Airways Corporation of New Zealand registered aircraft operating with ICAO 24 BIT Mode S codes that have not been assigned by the CAA of New Zealand for the aircraft and data messages that do not comply with the system technical requirements.

Since aircraft with the above defects do not meet system requirements, test the Mode S transponder system in accordance with the Aircraft Maintenance Manual procedures and determine from the transmitted message that:

- (a) the unique New Zealand Mode S address code is transmitted correctly, and
- (b) the transmitted message conforms to the requirements specified for capability of the system i.e. basic Mode S, Elementary Surveillance or Enhanced Surveillance.

If the transmitted code is not the New Zealand Mode S address code assigned to the aircraft, configure the Mode S transponder system with the CAA allocated code and retest the installation.

If the aircraft has not been assigned a New Zealand Mode S address code, obtain the code from the CAA in accordance with AC 91-2. Configure the Mode S transponder system with the CAA allocated code and retest the installation.

The Flight ID field in the transmitted message should contain the aircraft callsign, being either the flight number as indicated on the submitted flight plan or the aircraft

registration.
(Airways Corporation report refers)

Compliance: By 30 December 2008

Note 2: Thereafter the transmission of the unique 24 bit Mode S transponder address code must be checked at every biennial avionics inspection in accordance with the requirements in CAR Part 91.605(e)(3).

Effective Date: 30 October 2008

DCA/RAD/44 Funkwerk Mode S Transponders – AFM Amendment, Placard & Replacement

Applicability: Model TRT800A, all P/N, S/N all through 40539908 not embodied with Mod-Index 10, and model TRT800H, all P/N, S/N all through 30250007 not embodied with Mod-Index 10.

These transponders are known to be installed on, but not limited to, APEX (Robin) DR1050, DR250, DR350 and DR400 series aircraft, Cessna 150, 172, 182, 210, T303 and 337 series aircraft including those aircraft originally manufactured by Reims Aviation in France, Diamond Aircraft Industries DV 20 aircraft, Extra EA-300 series aircraft, Grob G 109 B powered gliders, Grob G 115 series aircraft, Mooney M20J aircraft, Piper PA-28 series aircraft, Scheibe SF 25 C powered gliders, and True Flight Holdings (Grumman, American) AA-5B aircraft.

Note 1: This AD is applicable to affected model TRT800A and TRT800H transponders regardless whether these transponders are in compliance with DCA/RAD/40 and/or DCA/RAD/40A.

Note 2: EASA Safety Information Bulletin (SIB) 2008-84R1 issued 12 November 2008 pertains to the subject of this AD.

Requirement: To prevent intermittent loss of detection on the Mode S Secondary Surveillance Radar (SSR) which could compromise aircraft safety, accomplish the following:

1. Amend the limitations section of the AFM to include the following text:

‘Due to a performance problem of the transponder, do not operate this aircraft in airspace where a transponder is required, except as published by the appropriate ATC (Air Traffic Control) Authority’.

Note 3: This may be accomplished by inserting a copy of this AD into the limitations section of the AFM.

2. Install a placard in full view of the pilot, with the following instructions:

Do not operate this aircraft in airspace where a transponder is required, except as published by the appropriate ATC (Air Traffic Control) Authority.

Note 4: The AFM limitation amendment and placard installation per requirements 1 and 2 of this AD replace those requirements previously mandated by DCA/RAD/40 and DCA/RAD/40A for affected model TRT800A and TRT800H transponders.

3. Replace affected transponders with a unit modified in accordance with Funkwerk Avionics SB No. TRT800-A-H-1 revision 1.04 dated 17 October 2008 or later approved revisions, and remove the AFM limitation amendment and placard installation mandated by requirements 1 and 2 of this AD.

4. An affected transponder shall not be fitted to any aircraft unless the unit is modified in accordance with Funkwerk Avionics SB No. TRT800-A-H-1. (EASA AD 2008-0183 refers)

Compliance:

1. By 30 December 2008 unless already accomplished.
2. By 30 December 2008 unless already accomplished.
3. By 27 November 2010.
4. From 27 November 2010.

Effective Date: 27 November 2008

DCA/RAD/45 Avidyne Primary Flight Displays – Inspection and AFM Limitations

Applicability: Avidyne Corporation (Avidyne) Primary Flight Displays (PFDs) P/N 700-00006-000, 700-00006-001, 700-00006-002, 700-00006-003 and 700-00006-100 with S/N listed in Avidyne SB No. 601-00006-096 revision 1 dated 14 July 2008.

These PFDs are installed on, but not limited to Adam model A500 aircraft, Cessna model 441 aircraft (embodied with STEC Alliant STC No. SA09547AC-D), Cessna models LC42-550FG and LC41-550FG aircraft (Columbia Aircraft Manufacturing and The Lancair Company previously held the type certificate for these aircraft), Cirrus models SR20 and SR22 aircraft, Diamond model DA 40 aircraft, Hawker Beechcraft model E90 aircraft (embodied with STEC Alliant STC No. SA09545AC-D), Hawker Beechcraft model 200 series aircraft (embodied with STEC Alliant STC No. SA09543AC-D), and Piper models PA-28-161, PA-28-181, PA-28R-201, PA-32R-301 (HP), PA-32R-301T, PA-32-301FT, PA-32-301XTC, PA-34-220T, PA-44-180, PA-46-350P, PA-46R-350T and PA-46-500TP aircraft.

Note 1: This AD retains the requirements of superseded DCA/RAD/37A and introduces a terminating action per requirement 3 of this AD.

Requirement: To prevent certain conditions existing when PFDs display incorrect attitude, altitude, and airspeed information which could result in airspeed/altitude mismanagement or spatial disorientation of the pilot, accomplish the following:

1. Inspect the aircraft logbooks and determine if an affected PFD is fitted to the aircraft.

If the PFD S/N cannot be positively identified in the aircraft logbooks, inspect the PFDs installed on the aircraft and determine if an affected PFD is fitted.

If an affected PFD is fitted, accomplish requirement 2 of this AD.

If an affected PFD is not fitted, no further action is required.

2. For aircraft fitted with an affected PFD, accomplish whichever of the following applies:

a) For aircraft with a flight manual (AFM) or a pilots operating handbook (POH), revise the limitations section by incorporating the text in the appendix of FAA AD 2009-05-05.

b) For aircraft which do not have an AFM or a POH, incorporate the text in the appendix of FAA AD 2009-05-05 into the aircraft records.

Fabricate a placard (using at least 1/8-inch letters) with the following text and install the placard on the instrument panel within clear view of the pilot:

“FAA AD 2009-05-05 CONTAINS LIMITATIONS REGARDING AVIDYNE PRIMARY FLIGHT DISPLAYS (PFD) AND REQUIRE INCORPORATION OF THESE LIMITATIONS INTO THE AIRCRAFT RECORDS. THESE LIMITATIONS MUST BE FOLLOWED.”

Note 2: Requirements 1 and 2 of this AD may be performed and certified by the pilot/operator under the provision in Part 43 Appendix A.1 (7) by the holder of a current pilot licence, if that person is rated on the aircraft, appropriately trained and authorised (Part 43, Subpart B refers), and the maintenance is recorded and certified as required by Part 43.

3. Terminating Action:

Inspect the PFD and determine if there is a label on the exterior of the PFD (near the TSO label) marked “Deviation 08-19A” or “MOD 52”.

If the label with “Deviation 08-19A” or “MOD 52” is found, then the PFD has been modified at production. Remove the limitations introduced by requirement 2 of this AD. No further action is required.

If the label with "Deviation 08-19A" or "MOD 52" is not found, accomplish the PFD air data system performance verification test in section 3.3 of Avidyne SB No. 601-00006-096, revision 1 dated 14 July 2008.

If the PFD passes the test, remove the limitations introduced by requirement 2 of this AD. No further action is required.

If the PFD does not pass the test, remove the PFD and install a PFD that has passed the air data system performance verification test, or install a PFD that has been modified by the manufacturer (the PFD will have a label marked "Deviation 08-19A" on the exterior of the PFD near the TSO label or a "MOD 52" marking), or install a PFD which is not an affected S/N. Remove the limitations introduced by requirement 2 of this AD.

4. A PFD shall not be fitted to any aircraft unless the PFD has passed the air data system performance verification test in section 3.3 of SB No. 601-00006-096, or the PFD has been modified by the manufacturer (the PFD will have a label marked "Deviation 08-19A" on the exterior of the PFD near the TSO label or a "MOD 52" marking).

Note 3: If the aircraft has an AFM or POH, a placard per requirement 2.b of this AD may be fitted to the instrument panel in addition to, but not instead of incorporating the text in the appendix of FAA AD 2009-05-05 in the limitations section of the AFM/POH.

Note 4: Copies of the FAA ADs may be obtained from
http://www.airweb.faa.gov/Regulatory_and_Guidance_Library
(FAA AD 2009-05-05 refers)

Compliance: 1. & 2. Before further flight, unless previously accomplished.
3. By 18 April 2009.
4. From 3 April 2009.

Effective Date: 3 April 2009

DCA/RAD/46 Trimble/FreeFlight Approach Plus System – Software Update

Applicability: All aircraft fitted with Trimble or FreeFlight Systems 2101 I/O Approach Plus global positioning system (GPS) navigation system (2101 I/O Approach Plus system) P/N 81440-XX-241E, 81440-XX-241F or 81440-XX-241G with software revision -241E, -241F or 241G.

Note 1: The XX appearing in the P/N indicates the numbers 02, 03 or 12.

Requirement: To prevent a pilot making an unsafe decision based on erroneous information provided by the 2101 I/O Approach Plus system which could result in loss aircraft control, upgrade the system software to revision P/N 81440-XX-241J for Trimble or FreeFlight Systems 2101 I/O Approach Plus GPS navigation system P/N 81440-XX-241E, 81440-XX-241F or 81440-XX-241G which currently have software revision -241E, -241F or -241G.

Note 2: Sections II and III of FreeFlight Systems SB No. SB 81440-XX-00-19 dated 12 December 2006 pertains to the requirements of this AD.

Note 3: Upgrading the Trimble or FreeFlight Systems 2101 I/O Approach Plus GPS Navigation System's software to revision P/N 81440-XX-241J is a terminating action to the requirements of this AD.

(FAA AD 2009-05-08 refers)

Compliance: By 30 October 2009 for aircraft approved for IFR flight, unless previously accomplished.

By 30 January 2010 for aircraft approved for VFR flight, unless previously accomplished.

Effective Date: 30 April 2009

DCA/RAD/47 Thales VHF Data Radio – Modification

Applicability: Thales Communications VHF Data Radios P/N EVR716-11-0300A, EVR716-11-0350A, EVR716-01-0100A, EVR716-01-0200A and EVR750-03-0100A.

These radios are known to be installed on, but not limited to all Bombardier DHC-8-400 aircraft models, all Airbus A318, A319, A320, A321, A330 and A340 aircraft models and all Boeing 717, 727, 737, 747, 757, 767, 777 aircraft models.

Requirement: To prevent a phenomenon known as 'PLOC' (Prolonged Loss of Communication) due to a 'sleeping receiver' not receiving radio communication from ATC or another aircraft, accomplish the following applicable SB:

For Thales VHF Data Radio P/N EVR716-11-0300A & EVR716-11-0350A accomplish the instructions in Thales Communications SB No. EVR716-23-015 initial issue or revision 01.

For Thales VHF Data Radio P/N EVR716-01-0200A accomplish the instructions in Thales Communications SB No. EVR716-23-012 initial issue or revision 01.

For Thales VHF Data Radio P/N EVR716-01-0100A & EVR750-03-0100A accomplish the instructions in Thales Communications SB No EVR7-23-05 initial issue or revision 01.

Note 1: The accomplishment of the applicable manufacturer SB is a terminating action to the requirements of this AD.

Note 2: Later approved SB revisions may be used to accomplish the requirements of this AD.

(EASA AD 2006-0334R1 refers)

Compliance: By 30 May 2010.

Effective Date: 30 April 2009

DCA/RAD/48 Honeywell Navigation & Avionic Computers – AFM Amendment & Modification

Applicability: Honeywell NZ-2000 navigation computers, and
Honeywell IC-800 and IC-800E integrated avionics computers.

These computers are known to be installed on, but not limited to Bombardier, Inc. CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604) aircraft, Dassault Aviation Mystere-Falcon 900 aircraft, Gulfstream Aerospace Corporation G-1159A, GV and G-IV series aircraft, Lockheed 382G series aircraft, Hawker Beechcraft formerly Raytheon Aircraft Company BAe.125 Series 800A (including C-29A and U-125) aircraft.

Requirement: To prevent uncommanded deviations from the intended flight path due to a possible shift in the Flight Management System (FMS) computed position which could result in compromised terrain/traffic avoidance if the deviations are not detected by the flight crew, accomplish the following:

1. Determine if an affected NZ-2000 navigation computer and IC-800 or IC-800E integrated avionics computer with a P/N and software modification level is fitted to the aircraft as identified in Honeywell Technical Newsletter (TN) No. A23-6111-008 revision 001, dated 22 February 2007.

Note 1: For the purpose of this AD all Flight Management System (FMS) computers with a P/N and software modification level identified in the newsletter are affected by this AD.

2. For aircraft fitted with an affected computer, revise the limitations section of the AFM to include the information in appendix A of TN No. A23-6111-008. This may be done by inserting a copy appendix A of the newsletter into the AFM.

3. For affected IC-800 or IC-800E Integrated Avionic Computers (IAC) listed in Honeywell ASB 7017300-22-A6112 revision 001, dated 7 February 2008 update the computer software per the instructions in ASB 7017300-22-A6112 before further flight.

For affected NZ-2000 Navigation Computer (NAV computer) listed in Honeywell ASB 7018879-34-A6060 revision 001, dated 21 January 2008, ASB 7018879-34-A6062 original issue, dated 12 June 2007, or ASB 7018879-34-A6063 original issue, dated 6 July 2007 update the computer software per the instructions in the applicable ASB before further flight.

Once the software has been updated, remove the AFM amendment introduced by requirement 2 of this AD.

Note 2: For affected IC-800 or IC-800E Integrated Avionic Computers (IAC) if Honeywell SB 7017300-22-A6112 dated 22 June 2007 was accomplished prior to the effective date of this AD, then the requirements of this AD have been met for those IAC.

(FAA AD 2009-08-01 refers)

- Compliance:**
1. By 30 May 2009.
 2. By 30 May 2009.
 3. By 14 May 2010.

Effective Date: 14 May 2009

DCA/RAD/49 Cancelled – DCA/RAD/53 refers

Effective Date: 29 April 2010

DCA/RAD/50A Mode S Transponders – Modification or Replacement

Applicability: Rockwell Collins TDR-94 Mode S Transponders P/N 622-9352-007, 622-9352-008 and 622-9352-108, all S/N, and
 Rockwell Collins TDR-94D Mode S Transponders P/N 622-9210-007, 622-9210-008 and 622-9210-108, all S/N

Fitted to aircraft operating in Mode S designated airspace and fitted with Honeywell AZ800 or AZ810 (all P/N) air data computers (ADC) where the data bus interface between the Honeywell ADC and the Rockwell Collins transponder is providing the Selected Altitude data input to the transponder.

These transponder/ADC combinations are known to be installed on, but not limited to, ATR 42 and ATR 72 series aircraft, Bombardier (formerly Canadair) CL-600-2A12 (601 Variant) and CL-600-2B16 (601-3A and 601-3R Variants) aircraft, Bombardier (formerly De Havilland Canada) DHC-8 series aircraft, Dassault Aviation Mystère-Falcon 900 series aircraft and Gulfstream G-IV aircraft. For exceptions see Notes 3 & 5 of this AD.

Note 1: No action required if already in compliance with DCA/RAD/50. This AD revised to introduce note 4 with no change to the AD requirement or compliance. For more information regarding transponder designated airspace refer to the Aeronautical Information Publication (AIP).

Requirement: To prevent invalid selected altitude data being transmitted to Mode S ground stations which could create disruptions in the ATC management and potentially compromise aircraft safety, accomplish the following:

1. Modify the transponder in accordance with the applicable Rockwell Collins SB listed in tables 1 and 2 of this AD and modify the aircraft in accordance with an approved aircraft modification,
or replace the transponder with a TDR-94 P/N 622-9352-309 or 622-9352-409, or with a TDR-94D P/N 622-9210-309 or 622-9210-409 as applicable, in accordance with an approved aircraft modification.

Table 1 – TDR-94 Transponders		
Current P/N	New P/N (options)	Modify transponder per Rockwell Collins SB:
622-9352-007	622-9352-309	TDR-94/94D-34-506
	622-9352-409	TDR-94/94D-34-507
622-9352-008	622-9352-309	TDR-94/94D-34-505
	622-9352-409	TDR-94/94D-34-507
622-9352-108	622-9352-409	TDR-94/94D-34-505

Table 2 – TDR-94D Transponders		
622-9210-007	622-9210-309	TDR-94/94D-34-506
	622-9210-409	TDR-94/94D-34-507
622-9210-008	622-9210-309	TDR-94/94D-34-505
	622-9210-409	TDR-94/94D-34-507
622-9210-108	622-9210-409	TDR-94/94D-34-505

2. Rockwell Collins TDR-94 transponders with P/N 622-9352-409 and TDR94D transponders with P/N 622-9210-409 are ADS-B capable. Disable the ADS-B function on these transponders once requirement 1 of this AD has been accomplished, unless compliance with EASA AMC 20-24 has been demonstrated.

3. Do not fit a transponder listed in the applicability section of this AD on any aircraft modified per requirement 1 of this AD.

Note 2: This does not apply to those ATR-42 and ATR-72 aircraft fitted with affected transponders and a Honeywell AZ800 or AZ810 ADC as listed in the applicability section of this AD, if the installation has been implemented in accordance with an ATR design definition. On these aircraft the Selected Altitude is not provided by the ADC.

Note 3: Rockwell Collins SB No. TDR-94/94D-34-505 dated 2 September 2008, SB No. TDR-94/94D-34-506 dated 2 September 2008 and SB No. TDR-94/94D-34-507 dated 9 September 2008 pertains to the subject of this AD.

Note 4: This AD revised to specify that it does not apply to those DHC-8 Series 100, 200 and 300 aeroplanes, all models, on which the affected transponder and ADC installation has been done in accordance with the applicable Bombardier Type Design definition, although equipped with affected transponders and Honeywell AZ800 or AZ810 ADC as listed in the applicability section of this AD. These aircraft are exempt from having to meet the requirements of this AD, since on these aeroplanes' original architecture, the Selected Altitude is not provided by the ADC. This exemption does not apply to aeroplanes that have been modified to enable a digital link between the air data computer and the transponder.

Note 5: Compliance dates remain within 12 months after 29 October 2009 (the effective date of DCA/RAD/50).

(EASA AD 2009-0173R1 refers)

Compliance:

1. By 29 October 2010.
2. By 29 October 2010.
3. From 29 October 2009.

Effective Date: DCA/RAD/50 - 29 October 2009
DCA/RAD/50A - 28 October 2010

DCA/RAD/51 Honeywell ELT Model RESCU 406S – Inspection and Modification

Applicability: Honeywell ELT model RESCU 406S with:
P/N 1151324-1 Series 1, 2, 3, 4, 5 and 6, all S/N, and
P/N 1151324-1Mxxx Series 1, 2, 3, 4, 5 and 6, all S/N, and
P/N 1152794-1Mxxx Series 1, all S/N, and
P/N 1152890-1Mxxx Series 1, all S/N, and
P/N 1152892-1Mxxx Series 1, all S/N, and
P/N 1153046-1Mxxx Series 1, all S/N.

Note 1: This AD is also applicable to ELT model RESCU 406S P/N 1151324-1 originally manufactured by Allied Signal Aerospace Canada.

Note 2: The "xxx" in the ELT P/N represents any International Telecommunication Union country code.

Requirement: To prevent the ELT from failing to transmit the 406 MHz coded signal in the event of activation due to possible improper grounding of the cover to the internal frame of the ELT unit which could result in an unnecessary safety risk during an actual emergency situation, accomplish the following:

1. Review the aircraft records or inspect the ELTs installed on the aircraft, and determine if an affected ELT is fitted.

Modify affected ELT units, or replace with an ELT units that has been modified per the instructions in Honeywell SB 1151324-25-39 revision 1 dated 14 July 2009 or later Transport Canada approved revisions.

2. An affected ELT shall not be installed on an aircraft unless that ELT unit has been modified per the instructions in Honeywell SB 1151324-25-39 revision 0 dated 26 June 2009, or revision 1 dated 14 July 2009, or later Transport Canada approved revisions.

Note 3: ELT units which are in compliance with SB 1151324-25-39 revision 0, dated 26 June 2009 prior to the issue of this AD meet the requirements of this AD. No further action is required.

Note 4: A copy of Honeywell SB 1151324-25-39 which is mandated by Transport Canada AD CF-2009-44 can be obtained from Honeywell Aerospace at pubs@honeywell.com
(Transport Canada AD CF-2009-44 refers)

Compliance:

1. By 25 August 2011.
2. From 25 February 2010.

Effective Date: 25 February 2010

DCA/RAD/52 Honeywell Primus II NV-850 – Inspection, AFM Amendment and Modification

Applicability: Honeywell Primus II RNZ-850()-851() Integrated Navigation Units listed in:
Honeywell ASB 7510134-34-A0016 revision 001, dated 4 March 2003, and Honeywell ASB 7510134-34-A0017 original issue, dated 11 July 2003, and Honeywell ASB 7510134-34-0018 original issue, dated 8 July 2004, and Honeywell ASB 7510100-34-A0034 original issue, dated 28 February 2003, and Honeywell ASB 7510100-34-A0035 original issue, dated 11 July 2003, and Honeywell ASB 7510100-34-0037 original issue, dated 8 July 2004.

These Integrated Navigation Units (INU) are installed on, but not limited to, BAE Systems (Operations) Limited (Jetstream) Model 4101 aircraft, Bombardier Model BD-700-1A10 aircraft, Bombardier Model CL-215-6B11 (CL-415 variant) aircraft, Cessna Model 560, 560XL and 650 aircraft, Dassault-Aviation Model Mystere-Falcon 50 aircraft, 328 Support Services GmbH (Dornier) Model 328-100 and -300 aircraft, Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model EMB-135 aircraft and Model EMB-145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP aircraft, Learjet Model 45 aircraft, Hawker Beechcraft Corporation Model Hawker 800XP and Hawker 1000 aircraft, and Sikorsky Model S-76A, S-76B, and S-76C aircraft.

Note 1: This AD supersedes DCA/RAD/32 to introduce requirement 5 which is applicable to additional affected INU. No further action required for those INU in compliance with requirement 3 of superseded DCA/RAD/32 (requirement 3 of this AD). Requirement 3 of DCA/RAD/32 was to be accomplished by 30 November 2008 (24 months after 30 November 2006 the effective date of DCA/RAD/32).

Requirement: To ensure that the flightcrew has an accurate glideslope deviation indication, accomplish the following:

1. For INU P/N 7510100-811 through to 7510100-814, 7510100-831 through to 7510100-834, 7510100-901 through to 7510100-904, 7510100-911 through to 7510100-914, 7510100-921 through to 7510100-924, 7510100-931 through to 7510100-934:

Inspect the modification plate of the Honeywell Primus II NV-850 Navigation Receiver Module (NRM) P/N 7510134-811, -831, -901 or -931 which is part of the Honeywell Primus II RNZ-850/-851 Integrated Navigation Unit (INU) to determine if Mod "L" has been embodied.

The modification plate is located on the bottom of the INU, is labeled NV-850, and contains the P/N and S/N for the NRM. If Mod "L" is embodied, the letter "L" will be blacked out. The Honeywell SBs listed in the applicability of this AD are an acceptable source of service information for this inspection.

If Mod L is embodied accomplish either requirements 2 or 3 of this AD. After 30 November 2006 (the effective date of DCA/RAD/32) requirement 3 is to be accomplished in lieu of requirement 2 before further flight.

Note 2:

Requirements 1 and 2 of this AD were to be accomplished within 5 days after 27 March 2003 (the effective date of DCA/RAD/21). Requirement 2 of this AD is no longer applicable and included for completeness.

2. AFM amendment for INU with P/N listed in requirement 1 of this AD:

Revise the limitations section of the aircraft flight manual (AFM) to include the following statements (which may be accomplished by inserting a copy of this AD into the AFM):

Flight Limitations

When crossing the Outer Marker on glideslope, the altitude must be verified with the value on the published procedure.

For aircraft with a single operating glideslope receiver, the approach may be flown using normal procedures no lower than Localizer Only Minimum Descent Altitude (MDA).

For aircraft with two operating glideslope receivers, the aircraft may be flown to the published minimums for the approach using normal procedures if both glideslope receivers are tuned to the approach and both crew members are monitoring the approach using independent data and displays.

3. For INU with P/N listed in requirement 1 of this AD with Mod L embodied:

Inspect the modification plate on the Honeywell Primus II NV-850 NRM P/N 7510134-811, -831, -901 or -931 which is part of the Honeywell Primus II RNZ-850()/-851() INU and determine if Mod L, N, P, R or T is embodied.

The modification plate located on the bottom of the INU is labeled NV-850 and contains the P/N and S/N of the NRM. If Mod L, N, P, R or T is embodied the corresponding letter on the modification plate will be blacked out. Honeywell ASB 7510100-34-A0035, dated 11 July 2003 and SB 7510100-34-0037 dated 8 July 2004 are acceptable sources of service information for this inspection.

If Mod L, N, P or R is embodied (which relates to the glide slope fix), accomplish all applicable related investigative, corrective and other specified actions, per the instructions in ASB 7510100-34-A0035.

If Mod T is not embodied (which relates to the localiser fix), accomplish all applicable related investigative, corrective and other specified actions, per the instructions in SB 7510100-34-0037 to ensure that the NRM is at the Mod T configuration.

Once requirement 3 has been accomplished the amendment introduced by requirement 2 of this AD may be removed from the AFM.

4. For INU with P/N listed in requirement 1 of this AD:

Do not install a Honeywell Primus II NV-850 NRM which has Mod "L" embodied on any Honeywell Primus II RNZ-850()/-851() INU on any aircraft, unless requirement 3 of this AD is accomplished.

5. For INU with P/N not listed in requirement 1 of this AD:

Inspect the modification plate of the Honeywell Primus II NV-850 NRM P/N 7510134-611, -631, -701, -731, 811, -831, -901, or -931 which is part of the Honeywell Primus II RNZ-850()/ -851() INU and determine whether Mod L, N, P, R, or T is embodied. The modification plate is located on the bottom of the INU and is labeled NV-850 and contains the P/N and S/N of NRM. If Mod L, N, P, R, or T is embodied, then the corresponding letter on the modification plate will be blacked out. Honeywell ASB 7510100-34-A0035 and SB 7510100-34-0037 are acceptable sources of service information for this inspection.

If the NRM P/N is 7510134-611, -631, -701, or -731 and Mod T is found embodied no further AD action is required.

If the NRM P/N is 7510134-611, -631, -701, or -731, and Mod T is not embodied, accomplish the investigative, corrective, and other specified actions per Honeywell SB 7510100-34-0037 to ensure the NRM is at the Mod T configuration.

If the NRM P/N is 7510134-811, -831, -901, or -931 accomplish all the applicable investigative, corrective, and other specified actions per Honeywell ASB 7510100-34-A0035 and SB 7510100-34-0037 to ensure that the NRM P/N has been updated to the 7510134-611, -631, -701, -731 configuration and Mod T has been embodied.

6. Do not install a Honeywell Primus II RNZ-850()/ -851() INU that contains a NV-850 NRM P/N 7510134-811, -831, -901, or -931, or a P/N 7510134-611, -631, -701, or -731 that does not have Mod T embodied, unless requirement 5 of this AD has been accomplished.

(FAA AD 2010-07-02 refers)

Compliance:

1. Within 5 days after 27 March 2003 (The effective date of DCA/RAD/21).
2. Before further flight after inspection per requirement 1.
3. Before further flight after the effective date of this AD.
4. After the effective date of this AD.
5. By 29 October 2012.
6. After the effective date of this AD.

Effective Date: 29 April 2010

DCA/RAD/53 Rockwell Mode S Type TDR-94 & TDR-94D – Inspection and Modification

Applicability: Rockwell Collins Mode S Transponders Type TDR-94, P/N 622-9352-004, 622-9352-005, 622-9352-006, 622-9352-007, 622-9352-008, 622-9352-108, 622-9352-207, 622-9352-308, and 622-9352-408, all S/N.

Rockwell Collins Mode S Transponders Type TDR-94D, P/N 622-9210-004, 622-9210-005, 622-9210-006, 622-9210-007, 622-9210-008, 622-9210-108, 622-9210-207, 622-9210-308 and 622-9210-408, all S/N.

These transponders are known to be installed on, but not limited to, ATR 42 and ATR 72 aircraft, Bombardier (formerly Canadair) CL-600-1A11, CL-600-2A12 (601 Variant), CL-600-2B16 (601-3A, 601-3R and 604 Variants), CL-600-2B19, CL-600-2C10, CL-600-2D15 and CL-600-2D24 aircraft, Bombardier (formerly De Havilland Canada) DHC-8 aircraft, Dassault Aviation Mystère-Falcon 50 (including EX variant), Mystère-Falcon 900, Falcon 900EX, Falcon 2000 and Falcon 2000EX aircraft, Gulfstream G-IV aircraft, Hawker Beechcraft (formerly Raytheon, Beech) 200 and 400 series aircraft, SAAB SF340A and 340B aircraft, and Sikorsky S-92 helicopters.

Note 1: No action required if already in compliance with DCA/RAD/49. This AD retains the requirements of superseded AD DCA/RAD/49, and introduces helicopters in the AD applicability and the requirement.

Requirement: To ensure the transponder interface meets the specifications of ICAO Annex 10 volume IV amendment 77 section 3.1.2.10.3.10 "Inhibition of replies" accomplish the following:

1. Determine that the transponder Air/Ground discrete input connections are installed per table 1 of Rockwell Collins Service Information Letter TDR-94() SIL 07-1, document reference 523-0809129-001000, dated 25 May 2007.

If the wiring installation is not compliant with the information provided in table 1 of the SIL, modify the aircraft Air/Ground discrete input connections per approved modification instructions.

2. For affected helicopters determine that the transponder Air/Ground discrete input connections are installed per table 1 of Rockwell Collins Service Information Letter TDR-94() SIL 07-1, document reference 523-0809129-001000, dated 25 May 2007.

If the wiring installation is not compliant with the information provided in table 1 of the SIL, modify the aircraft Air/Ground discrete input connections per approved modification instructions.

Note 2: ATR aircraft modified per ATR SB ATR42-34-0164 or SB ATR72-34-1093 (modification no. 05602), as applicable to the aircraft model, including those ATR aircraft embodied with modification no. 05602 at production are not affected by this AD.

Note 3: Bombardier CL-600-2B19 aircraft, S/N 7122 modified per Bombardier SB 601R-34-146 is not affected by this AD.

Note 4: Dassault aircraft modified per Dassault Aviation SB F50-457 (modifications M2966 and M2968), SB F50-469 (modification M2998), SB F900-354 (modification M3896), SB F900-368 (modification M5013), SB F900EX-239 (modification M3896), SB F900EX-270 (modification M5013), F2000-312 (modifications M2624 and M2632), SB F2000-327 (modification M2468), SB F2000EX-043 (modification M2624) or SB F2000EX-084 (modification M2468), as applicable to aeroplane model, are not affected by this AD.

(EASA AD 2010-0067 refers)

Compliance: 1. 29 May 2010.
2. 29 April 2011.

Effective Date: 29 April 2010

DCA/RAD/54E Artex 406 ELT(AF) – Inspection and Modification

Applicability: The following Artex 406 MHz ELT (AF) models:

ME406 series, and
G406-4 series, and
110-406 series, and
C406 series, and
B406-4 series

Note 1: DCA/RAD/54E revised to acknowledge that Oceania Aviation Limited is an Authorized Service Centre (ASC) for ACR Electronics (Artex). There is no change to the AD requirements or the compliance.

Both Fieldair Engineering Limited and Oceania Aviation Limited are Authorized Service Centres (ASC's) for ACR Electronics (Artex) and are FAR 145 certified repair stations. To date these two NZ maintenance organisations have been trained and authorised by ACR Electronics to embody the new improved mechanical G-Switches per ACR Electronics (Artex) Service Notice 32 and 33. Hawker Pacific NZ Limited is no longer an Authorized Service Centre (ASC) for ACR Electronics (Artex).

Requirement: To minimise the possibility of G-switch failure which could result in the Emergency Locator Transmitters Automatic Fixed (ELT(AF)) not transmitting in an emergency situation, accomplish the following:

1. Remove the ELT (AF) from the mounting tray and test the operation of the G-switch assemblies of affected ELT (AF) per the G-switch check procedure in the applicable Artex maintenance manual.

If the G-switch assemblies fail the test, accomplish all corrective actions per the manufacturer's instructions and complete a CA005D defect report form and submit to the CAA.

If the G-switch assemblies pass the test, reinstall the ELT (AF) in the aircraft and accomplish the post installation test requirements per the instructions in the applicable Artex maintenance manual.

2. For Artex ME406 and ME406 HM ELTs:

Replace the ELT G-Switches with P/N A1-12-0135 per ACR Electronics (Artex) Service Notice 32, dated 23 August 2013.

3. For Artex C406 series, B406-4 series and G406-4 series ELTs:

Replace the ELT G-Switches with P/N 8703 per ACR Electronics (Artex) Service Notice 33, dated 11 September 2014.

Note 2: If the ELT (AF) is found defective the aircraft may be operated with an inoperative automatic ELT in accordance with the provisions in:

- a. CAA Rule 91.529(c) where the aircraft may be flown to a place where repairs can be made,
- b. CAA Rule 91.529(d) where the aircraft may remain in service for a period of not more than 7 days provided an ELT(S) or PLB is carried, or
- c. As otherwise approved by the Director.

Note 3: For Artex HM models all 6 axes should be tested.

Note 4: Defect report form CA005D is available on the CAA website at <http://www.caa.govt.nz/Forms/Forms.htm>

Note 5: The 6 month repetitive test/inspections mandated by requirement 1 of this AD can be terminated for Artex ME406 series and ME406HM series ELTs once requirement 2 of this AD has been accomplished.

Note 6: The 6 month repetitive test/inspections mandated by requirement 1 of this AD can be terminated for Artex C406 series, B406-4 series and G406-4 series ELTs once requirement 3 of this AD has been accomplished.

(NZ Occurrences refer)

Compliance:

1. For ELT with less than 6 months TIS since installation or less than 6 months TIS since the last test per CAA Rule 91.605(e)(4)(ii):

Within 6 months since initial installation or last test per CAA Rule 91.605(e)(4)(ii) and thereafter at intervals not to exceed 6 months.

For ELT with more than 6 months TIS since installation or more than 6 months TIS since the last test per CAA Rule 91.605(e)(4)(ii):

Within 90 days TIS after 24 June 2010 (the effective date of DCA/RAD/54), and thereafter at intervals not to exceed 6 months.

2. By 31 October 2015

3. By 29 January 2017

Effective Date: DCA/RAD/54D - 28 May 2015
DCA/RAD/54E - 30 June 2016

DCA/RAD/55 Dittel VHF/AM Airband Transceivers – Modification

Applicability: Model FSG 2T VHF/AM Airband Transceivers P/N F10350, S/N 35(X)-05100 through to 35(X)-06462 except those units marked with Mod-index SB 1.06, and S/N 353-05172, 353-05189, 355-05557, 355-05696 and 356-05828.

Note: These units are manufactured by Dittel Messtechnik GmbH (formerly Walter Dittel GmbH, Luftfahrtgerätebau). The 'X' in the S/N prefix denotes any digit between 2 and 9. This digit identifies the year of manufacture (e.g. 2 = 2002, 3 = 2003, etc.)

These transceivers are known to be installed on, but not limited to, aircraft certificated (validated) by EASA under CS 22, CS 23, CS-31HB and CS-VLA, and aircraft certificated (validated) prior to 28 September 2003 under equivalent National Standards by EU Member States or associated countries.

Requirement: To prevent degraded transceiver performance and/or transceiver failure due to the possible incorrect installation of capacitor C2038, accomplish the following:

1. Modify the FSG 2T VHF/AM transceiver by replacing capacitor C2038 with a new part per the instructions in Dittel SB FSG2T-1.06 dated 29 July 2010 or later approved revisions.

2. An affected FSG 2T VHF/AM transceiver shall not be fitted on any aircraft unless it has been modified per the instructions in Dittel SB FSG2T-1.06.

Compliance: 1. For affected FSG 2T, S/N 35(X)-05100 through to 35(X)-05550:

By 30 March 2011

For affected FSG 2T, S/N 35(X)-05551 through to 35(X)-06000:

By 30 September 2011

For affected FSG 2T, S/N 35(X)-06001 through to 35(X)-06462:

By 30 March 2012

2. From 30 September 2010

Effective Date: 30 September 2010

DCA/RAD/56A TDR-94 Mode S Transponder – Modification and Replacement

Applicability: Rockwell Collins Mode S Transponders identified by type and P/N as follows:
Type TDR-94 P/N 622-9352-007, 622-9352-207, 622-9352-008, 622-9352-108, 622-9352-308, 622-9352-309, 622-9352-408, 622-9352-409, all S/N, or
TDR-94D P/N 622-9210-007, 622-9210-207, 622-9210-008, 622-9210-108, 622-9210-308, 622-9210-309, 622-9210-408, 622-9210-409, all S/N, and
Installed in combination with certain Rockwell Collins Air Data Computers (ADC) as specified below, and the Rockwell Collins Commercial Standard Digital Bus (CSDB) databus is being used to transfer altitude information between the ADC and the transponder(s):
ADC Type ADC-81A P/N 622-4401-XXX, ADC-82A P/N 622-6475-XXX, ADC-82C P/N 622-8329-XXX, ADC-82L P/N 622-8105-XXX, ADC-85 P/N 622-8051-XXX, ADC-85A P/N 822-0370-XXX, all suffixes, all S/N.
These transponders, in combination with CSDB altitude information transfer, are known to be installed on, but not limited to Hawker Beechcraft 200 (King Air) series and 1900D aircraft, Dassault Aviation Mystère-Falcon 20 and Mystère-Falcon 50 aircraft, and SAAB SF340A and 340B aircraft.

Note 1: This AD has been revised to correct a typographical error in the applicability section of the AD. The P/N for Rockwell Collins ADC-85A was incorrectly quoted as 622-0370-XXX

Requirement: To prevent transmission of incorrect Selected Altitude parameters due to a databus interface protocol incompatibility which could result in disruptions in the Air Traffic Management process, and potentially compromising aircraft safety, accomplish either one of the following actions:

Modify the transponder and the aircraft per the approved aircraft modification instructions. Details of the transponder modification are provided in table 1 or table 2 of this AD as applicable to transponder type design, or

Replace the transponder, in accordance with approved aeroplane modification instructions, with a TDR-94 unit identified by P/N 622-9352-310 or 622-9352-410, or a TDR-94D unit identified by P/N 622-9210-310 or 622-9210-410, as applicable.

Note 2: The referenced Rockwell Collins SB, contains modification instructions for the transponder only and does not contain approved aircraft modification instructions.

Note 3: Rockwell Collins TDR 94 transponders with P/N 622-9352-410 and TDR94D transponders with P/N 622-9210-410 are ADS-B capable. Concurrent with accomplishment of the modification per the requirements of this AD, the ADS-B function must be disabled unless compliance with EASA AMC 20-24 has been accomplished.

Note 4: For fixed-wing aeroplanes to which this AD applies, refer to Rockwell-Collins, Inc. Service Information Letter 08-1 to identify whether an installation is affected. Additionally, Rockwell-Collins, Inc. Service Information Letter 2-85 details the part numbers assigned for aeroplanes certified with the ADS-81/82 Air Data System.

Note 5: Although this AD applies only to fixed-wing aeroplanes with the affected transponders installed and operating under Instrument Flight Rules (IFR) in the designated Enhanced Surveillance (EHS) airspace in Europe, to maintain compatibility and interoperability NZ operators should incorporate the required Software updates at next opportunity. If requested and appropriately substantiated, CAA can approve Alternative Methods of Compliance for this AD.

(EASA AD 2010-0204 correction dated 7 June 2011 refers)

Table 1:

TDR-94 Transponders Current P/N	New P/N (options)	Rockwell Collins Service Bulletin (SB) instructions to be used for modification
622-9352-007, 622-9352-008, 622-9352-207, 622-9352-308, 622-9352-309	622-9352-310	TDR-94()-34-508
622-9352-007, 622-9352-008, 622-9352-108, 622-9352-207, 622-9352-308, 622-9352-309, 622-9352-408, 622-9352-409	622-9352-410	TDR-94()-34-509

Table 2:

TDR-94D Transponders Current P/N	New P/N (options)	Rockwell Collins SB instructions to be used for modification
622-9210-007, 622-9210-008, 622-9210-207, 622-9210-308, 622-9210-309	622-9210-310	TDR-94()-34-508
622-9210-007, 622-9210-008, 622-9210-108, 622-9210-207, 622-9210-308, 622-9210-309, 622-9210-408, 622-9210-409	622-9210-410	TDR-94()-34-509

Compliance: By 28 October 2011.

Effective Date: DCA/RAD/56 - 28 October 2010
DCA/RAD/56A - 30 June 2011

DCA/RAD/57 Mode S Transponder Control Panels – Modification

Applicability: Gables Engineering type G7490, G7492 or G7493 series ATC/TCAS control panels.

Affected control panels are known to be installed on but not limited to Airbus A300-600 and A310 aircraft, ATR 42 and ATR 72 aircraft, BAE Systems (formerly British Aerospace) BAe146, AVRO 146-RJ and ATP aircraft, Boeing 707, 727, 737, 747, 757, 767 and 777 aircraft, Fokker F27 Mark 050 and Mark 0502 aircraft, F28 Mark 0070 and Mark 0100 aircraft, Lockheed 382 (Hercules) and L-1011 (Tristar) aircraft, McDonnell Douglas DC-8, DC-9, MD-88, MD-90-30, DC-10 and MD-11 aircraft, and Sabreliner Corporation (formerly North American) NA-265 aircraft, all models, all S/N.

Affected control panels can also be installed on these aircraft, if modified in accordance with a certain STC, known to include, but not limited to, Rockwell-Collins STC ST01256WI-D issued by the FAA and validated in Europe by STC EASA.IM.A.S.01061. Other STC's known to be affected include Air France STC EASA.A.S.0010, EASA.A.S.01140, EASA.A.S.02820, EASA.A.S.02896 and EASA.A.S.03034, and Aviation Traders Limited (ATL) STC EASA.A.S.00611, EASA.A.S.00648, EASA.A.S.01040 and EASA.A.S.02817.

In addition, a number of airline companies are known to have installed the affected control panels on their aircraft through minor modifications, approved under their own Design Organisation Approval (DOA).

Requirement: To prevent loss of ATC transponder transmission, due to a possible loose connection of a resistor which can result in disruptions in the ATC management process and potentially compromise aircraft safety, accomplish the following:

1. Remove the two digital board assemblies PC2 and PC4 at revision 01 with P/N as indicated in Table 1 of this AD and replace with two modified digital board assemblies PC2 and PC4 at revision 02 per the instructions in Gables Engineering SB G7490 ()-34-01, SB G7492 ()-34-01 revision 01, or SB G7493 ()-34-01, as applicable.

Table 1:

Affected Panels:	Digital Board Assemblies P/N:
All G7490, except G7490-49 through to G7490-52	P/N 701-0983-02
G7490-49 through to G7490-52	P/N 701-0983-05
G7492	P/N 701-0983-02
G7493	P/N 701-0983-06

2. An affected Gables Engineering type G7490, G7492 and G7493 series ATC/TCAS control panel shall not be fitted to any aircraft, unless the panels have been modified per the instructions in requirement 1 of this AD and the applicable Gables Engineering SB.

Note: Gables Engineering publications: Service Information Letter (SIL) 85 dated 19 May 2009, SB G7490 ()-34-01 dated 19 May 2009, SB G7492 ()-34-01 revision 01 dated 22 May 2009, and SB G7493 ()-34-01 dated 19 May 2009 and later approved revisions of these documents pertains to the subject of this AD.

(EASA AD 2011-0043 refers)

Compliance:

1. By 21 April 2013.
2. From 21 April 2013.

Effective Date: 21 April 2011

DCA/RAD/58 ELT Antenna – Inspection, Modification and/or Replacement

Applicability: Tri-Band ELT antennas P/N 21-41 () series, all S/N through to 12999 used in combination with the four ELT types: ELT (AF), ELT (AP), ELT (S) and ELT (AD).

The affected antennas are known to be installed on, but not limited to, Eurocopter (formerly Eurocopter France, Aerospatiale) AS 350, EC 155 and AS 332 series helicopters. Affected antenna may also be installed on fixed wing aircraft.

Note 1: Chelton P/N 21-41 () series antennas installed in combination with the following ELT units are not affected by this AD:

Chelton Avionics, Inc DBA Wulsberg Electronics (formerly ARTEX) ELT model C406-N HM, P/N 453-5061,

Chelton Avionics, INC DBA Wulsberg Electronics (formerly ARTEX) ELT model C406-N, P/N 453-5060, and

ELTA ELT model ADT406²AF/AP-H, P/N 01N65901 rev. (x).

Note 2: The four basic ELT types are: ELT (AF) - Automatic Fixed, ELT (AP) - Automatic Portable, ELT (S) - Survival, and ELT (AD) - Automatic Deployable and are defined in paragraph 1.2 of EUROCAE ED-62A or in paragraph 2.1 of RTCA DO-204.

Note 3: Chelton Limited (trading as Cobham Antenna Systems) was formerly Chelton (Electrostatics) Limited.

Requirement: To prevent failure of the ELT accomplish the inspections, modification and/or replacement requirements mandated in EASA AD 2011-0103.
This AD mandates an ELT antenna self-test before the first flight of every day. Within 6 months of the effective date of this AD affected antennas must either be replaced or modified and tested per the instructions in SB 02/2011 issue 1.

Note 4: Analysis has shown that there is a possibility for an electrostatic charge to build up on the outside surface of the Chelton P/N 21-41 antenna. With the antenna connected to an ELT this electrostatic charge can be conducted via the radiating element to the transceiver which will result in the ELT not functioning as intended. Chelton Limited (trading as Cobham Antenna Systems) SB 02/2011 issue 1 dated 18 April 2011 or later approved revisions pertains to the subject of this AD.
(EASA AD 2011-0103 refers)

Compliance: At the compliance times specified in EASA AD 2011-0103.

Effective Date: 30 June 2011

DCA/RAD/59 Radio Altimeter Indicator IND201 – Inspection and Modification

Applicability: Radio altimeter indicator IND201 P/N 102-2100, all S/N.

The affected radio altimeter indicators are known to be installed on, but not limited to, EC 120 B, AS 350 B2, AS 350 B3 and AS 355 NP helicopters. It is also possible that the radio altimeter indicator is installed on fixed wing aircraft.

Requirement: To prevent erroneous altitude indication, accomplish the following:

1. Determine that the display setting of the radio altimeter is in feet. The units of measurement displayed (meters or feet) is changed via pin programming. If the indicator displays the altitude in meters accomplish requirement 2 of this AD.

2. For radio altimeter indicators which display the altitude in meters:

Modify the radio altimeter installation to indicate in feet per the instructions in SMS (trading as Cobham Avionics) SB No.102-2100-34-002 dated 10 November 2011 or later approved revisions, or

If the preferred display setting for altitude is meters, then replace the radio altimeter indicator with a different P/N not affected by this AD per approved modification instructions.

3. A radio altimeter indicator IND201, P/N 102-2100 shall not be installed on any aircraft unless the indicator has been modified per the instructions in SMS SB 102-2100-34-002.

Note: SMS SIL No. 102-2100-34-001 revision 01, dated 13 July 2011 or later approved revisions provides additional information concerning the subject of this AD.

(EASA AD 2011-0239 refers)

Compliance:

1. By 26 July 2012
2. By 26 January 2013
3. From 26 January 2013

Effective Date: 26 January 2012

DCA/RAD/60 Traffic Alert and Collision Avoidance System (TCAS) – Software Upgrade

Applicability: Traffic Alert and Collision Avoidance System (TCAS) units with P/N listed in Aviation Communication & Surveillance Systems (ACSS) Technical Newsletter 8008359 revision B, dated 3 August 2011.

Requirement: To prevent TCAS units from dropping tracks which could compromise air traffic separation and result in mid-air collisions, accomplish the inspections and corrective actions specified in FAA AD 2012-02-08.

Note: A copy of FAA AD 2012-02-08 can be obtained from the FAA AD website at http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAD.nsf/MainFrame?OpenFrameSet

(FAA AD 2012-02-08 refers)

Compliance: At the compliance times specified in FAA AD 2012-02-08.

Effective Date: 29 March 2012

From 1 October 2012 the Civil Aviation Authority of New Zealand (CAA) will no longer rewrite the text of State of Design ADs. Applicable State of Design ADs will be listed below and can be obtained directly from the National Airworthiness Authority (NAA) website. The links to NAA websites are available on the CAA website at

<http://www.caa.govt.nz/airworthiness-directives/states-of-design/>

If additional NZ ADs need to be issued when an unsafe condition is found to exist in an aircraft or aeronautical product in NZ they will be added to the list below.

FAA AD 2012-26-15R1 Cancelled – Purpose fulfilled

Effective Date: 3 December 2014

EASA AD 2014-0019 Cancelled – EASA AD 2014-0095R1 refers

Effective Date: 12 May 2014

FAA AD 2014-05-27 Rockwell Collins TPR-720 and TPR-900 Mode S Transponders – Inspection

Applicability: Rockwell Collins, Inc. Mode S transponders TPR-720: CPN 622-7878-001, 622-7878-020, 622-7878-120, 622-7878-200, 622-7878-201, 622-7878-301, 622-7878-440, 622-7878-460, 622-7878-480, 622-7878-901; and

TPR-900: CPN 822-0336-001, 822-0336-020, 822-0336-220, 822-0336-440, 822-0336-460, 822-0336-480, 822-0336-902.

Affected transponders may be installed with the embodiment of a STC or other means, on other aircraft not listed in FAA AD 2014-05-27.

Effective Date: 2 May 2014

EASA AD 2014-0095R1 Crash Position Indicator – Modification

Applicability: HR Smith (Technical Developments) Crash Position Indicator (CPI) System 15-503-134 and 15-503-134-1 series, when fitted with Control Panel part number (P/N) 503-22-() and Beacon release unit P/N 503-21 and System Interface Unit P/N 503-24-() (including 503-24) or P/N 503-42-() (including 503-42), except System Interface Units having P/N 503-24-A, P/N 503-24-()-A, P/N 503-24-G, P/N 503-24-()-G, P/N 503-42-A, P/N 503-42-()-A, P/N 503-42-G or P/N 503-42-()-G.

This CPI System is known to be installed on, but not limited to aircraft listed in EASA AD 2014-0095R1.

Effective Date: EASA AD 2014-0095 - 7 May 2014
EASA AD 2014-0095R1 - 12 May 2014

EASA AD 2014-0125 Crash Position Indicator System – Replacement

Applicability: HR Smith (Technical Developments) Crash Position Indicator (CPI) system 15-503-134-1 series, if fitted with a

- Beacon Release Unit (BRU) Part Number (P/N) 503-21-1, and

- System Interface Unit (SIU) P/N 503-24 or P/N 503-24-2 or P/N 503-24-6.

This CPI system is known to be installed on, but not limited to Airbus Helicopters (formerly Eurocopter) Model EC 225 LP.

Effective Date: 22 May 2014

FAA AD 2012-14-15 Honeywell KGS200 Mercury WAAS (GNSSU) - Airworthiness Limitations

Applicability: All Honeywell International, Inc. model KGS200 Mercury2 wide area augmentation system (WAAS) global navigation satellite sensor units (GNSSU), Honeywell P/N 066-01201-0102 and P/N 066-01201-0104.

Affected equipment is installed on, but not limited to, PILATUS AIRCRAFT LTD. model PILATUS PC-12/47E aircraft.

Effective Date: 19 July 2012

FAA AD 2014-18-01 Rockwell TDR-94 & TDR-94D Mode S Transponders - Inspection

Applicability: Rockwell Collins, Inc. P/N Mode S transponders TDR-94: CPN 622-9352-008, 622-9352-108, 622-9352-308, 622-9352-408; and

Rockwell Collins, Inc. P/N Mode S transponders TDR-94D: CPN 622-9210-008, 622-9210-108, 622-9210-308, 622-9210-408, and

That are known to be installed on, but not limited to the aircraft listed in paragraphs (c)(2)(i) through (c)(2)(xiv) of FAA AD 2014-18-01,

Except those aircraft listed in paragraphs (c)(3)(i) through (c)(3)(vi) of FAA AD 2014-18-01 that have been modified at manufacturer or in service.

Effective Date: 14 October 2014

FAA AD 2015-10-51 Avidyne Integrated Flight Displays – Limitations

Applicability: Avidyne Corporation (Avidyne) Integrated Flight Displays (IFDs):

P/N 700-00083-() loaded with software release 9.3.1.0 or earlier release (referred to as Model R9–10 inch),

P/N 700-00171-() loaded with software release 9.2.5.0 or earlier release (referred to as Model R9–12 inch), and

P/N 700-00182-() loaded with software release 10.0.3.0 or earlier release (referred to as Model IFD540).

These IFDs are installed on, but not limited to aircraft identified in FAA AD 2015-10-51.

Effective Date: 18 May 2015

EASA AD 2015-0093 Northrop Grumman LITEF LCR-100 AHRS – Modification

Applicability: Northrop Grumman LITEF GmbH LCR-100 Attitude Heading Reference System (AHRS), P/N 145130-2000, P/N 145130-2001, P/N 145130-7000, P/N 145130-7001 and P/N 145130-7100.

These AHRS units are known to be installed on, but not limited to, Pilatus PC-12, Learjet 31A, Cessna 560XL, RUAG (Dornier) 228 series, and PZL Mielec M28 (Sky Truck) aeroplanes; and Bell Helicopter Textron Inc. 412EP, Bell Helicopter Textron Canada 407, and Sikorsky S-76C helicopters.

Effective Date: 10 June 2015

FAA AD 2017-16-01 Ameri-King ELTs – Inspection

Applicability: Ameri-King Corporation model AK-450-() and AK-451-() series Emergency Locator Transmitters (ELTs).

Affected ELTs are installed on, but not limited to aircraft identified in Table 1 to paragraph (c) of FAA AD 2017-16-01.

Effective Date: 24 October 2017

FAA AD 2017-22-14 Rockwell Collins Traffic Surveillance Units – Inspection

Applicability: Rockwell Collins, Inc. TSSA-4100 Field Loadable Software (FLS) Rockwell Collins P/N 810-0052-002, -003, -010, -011, -012, -100, or -101 found in TSS-4100 Traffic Surveillance System Processing Units P/N 822-2132-001.

FLS P/N 810-0052-002, -003, -010, -011, -012, -100, or -101 found in TSS-4100 Traffic Surveillance System Processing Units are known to be installed on, but not limited to the aircraft listed in paragraphs (c)(1)(i) through (14) of FAA AD 2017-22-14.

Effective Date: 20 December 2017

EASA AD 2018-0247 Mode S Transponders – Inspection

Applicability: Trig Avionics TT31 Mode S transponders, P/N 00220-00-01, S/N 05767 through to 09715 inclusive, except those transponders embodied with modification (mod) level 7 or higher.

P/N 00220-00-01 may have been procured as part of Trig Avionics P/N 00225-00-01, which designates a kit consisting of a transponder and a mounting tray.

Avidyne Corporation AXP340 Mode S transponders, P/N 200-00247-0000, also marked with Trig Avionics P/N 01155-00-01, S/N 00801 through to 01377 inclusive, except those transponders embodied with mod level 1 or higher.

BendixKing / Honeywell International KT74 Mode S transponders, P/N 89000007-000001, also marked with Trig Avionics P/N 01157-00-01, S/N 01143 through to 02955 inclusive, except those transponders embodied with mod level 1 or higher. P/N 89000007-000001 may have been procured as part of BendixKing / Honeywell International P/N 89000007-002001, which designates a kit consisting of a transponder and a mounting tray.

Affected transponders are known to be installed on, but not limited to, Part 23 (JAR, FAR, CS) aeroplanes and Part 27 (JAR, FAR, CS) helicopters.

Effective Date: 29 November 2018

FAA AD 2019-01-02 Aspen Avionics EFD500 and EFD1000 Displays – Inspection

Applicability: Aspen Avionics, Inc., Evolution Flight Display (EFD) EFD1000 Primary Flight Display, EFD1000 Multi-Function Display (MFD), EFD1000 Emergency Backup Display and EFD500 MFD units fitted to aircraft listed in the applicability section of FAA AD 2019-01-02 and meet the following conditions:

Software version 2.9 (SW 2.9) is installed;

The Flight Information Service-Broadcast (FIS-B) Weather Interface option is enabled; and

Independent airspeed, attitude, and altitude back-up instruments are not installed.

Effective Date: 7 February 2019

EASA AD 2019-0004 (correction) Global Navigation Satellite System – Inspection

Applicability: Thales Global Positioning System/Satellite Based Augmentation System (GPS/SBAS) receivers, Topstar 200 LPV, identified by P/N C17149HA01 and P/N C17149JA02, using Satellite Based Augmentation System (SBAS).

These receivers are known to be installed on, but not limited to, certain ATR 42-500 and ATR 72-212A aircraft (refer Note 1 of EASA AD 2019-0004), and Sikorsky S-76D helicopters.

Effective Date: EASA AD 2019-0004 - 25 January 2019
EASA AD 2019-0004 (correction) - 31 January 2019

*** FAA AD 2019-12-09 Rockwell Collins FDSA-6500 System – Inspection**

Applicability: Rockwell Collins Flight Display System (FDS) Application FDSA-6500 P/N 810-0234-1H0001, 810-0234-1H0002, 810-0234-1H0003, 810-0234-2H0001, 810-0234-2C0001, 810-0234-2C0002 and 810-0234-4B0001.

Affected Flight Display Systems are installed on, but not limited to, Bombardier Inc. Model CL-600-2B16 (604 variant) aircraft and Textron Aviation Inc. models 525B, B200, B200C, B200CGT, B200GT, B300, B300C and C90GTi aircraft.

Note 1 in paragraph (c) of FAA AD 2019-12-09 references Rockwell Collins Operator Bulletin OPSB 0193-19 revision 1, dated 3 April 2019, which contains additional information related to the applicability of this AD.

Effective Date: 25 July 2019

*** FAA AD 2019-13-03 Trig Avionics, Avidyne & BendixKing/Honeywell Mode S Transponders – Inspection**

Applicability: Trig Avionics TT31 Mode S transponders, P/N 00220-00-01 and P/N 00225-00-01 with S/N 05767 through to 09715 inclusive and Modification (Mod) Level 6 or below embodied.

Avidyne Corporation AXP340 Mode S transponders, P/N 200-00247-0000, also marked with Trig Avionics P/N 01155-00-01 with S/N 00801 through to 01377 inclusive and Mod Level 0 embodied.

BendixKing/Honeywell International KT74 Mode S transponders, P/N 89000007-002001, also marked with Trig Avionics P/N 01157-00-01 with S/N 01143 through to 02955 inclusive and Mod Level 0 embodied.

Effective Date: 27 August 2019