



# **CIVIL AVIATION AUTHORITY OF NEW ZEALAND**

## **AIRWORTHINESS DIRECTIVES**

**Amendment Nr 25-04**

**Effective date 24 April 2025**

*These Airworthiness Directives are issued pursuant to sections 429(1) and 429(2) of the Civil Aviation Act 2023 and according to the procedures in Civil Aviation Rule Part 39. Holders of New Zealand certificates of registration for aircraft are required to comply with Civil Aviation Rule 39.53.*

**Airworthiness Directive Schedule****List of New or Revised ADs****Amendment Nr 25-04****24 April 2025**


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<b>AD Schedule</b>	<b>AD Number</b>	<b>AD Title</b>	<b>Eff Date</b>
Avionics Equipment	FAA AD 2025-07-01	Thommen AC32 Digital Air Data Computers (ADCs) - Inspection	15-May-25
Bell 407 helicopters	Transport Canada AD CF-2025-21	Main Rotor Expandable Blade Bolts - Inspection	6-May-25
Bell 427 helicopters	Transport Canada AD CF-2025-21	Main Rotor Expandable Blade Bolts - Inspection	6-May-25
Balloons - PRV Adaptor CB8426	UK CAA AD G-2025-0001R1-E	Pressure Relief Valves (PRV) Adaptor CB8426 – Inspection	15-Apr-25
Kawasaki BK117 Series	JCAB AD TCD-10427-2025	Main Rotor Head – Inspection	24-Apr-25
Safran Helicopter Engines Arriel 2 Series	EASA AD 2022-0083	Cancelled – EASA AD 2025-0079 refers	24-Apr-25
Safran Helicopter Engines Arriel 2 Series	EASA AD 2025-0079	Airworthiness Limitations	24-Apr-25

**State of Design Airworthiness Directives**

Hyperlinks to all the various National Airworthiness Authorities (NAA) and State of Design home pages are available on the CAA website at: [Links to state of design airworthiness directives | aviation.govt.nz](https://aviation.govt.nz/links-to-state-of-design-airworthiness-directives)

These hyperlinks will take you to a particular State of Design AD home page. There you can search for the aircraft type, or the specific AD you are looking for.

The hyperlinks in the AD Schedules will only take you to the State of Design AD home page. We do not provide links to individual ADs, because these change too often to keep current.

If you are having difficulty obtaining a particular AD, send a request to the CAA at: [airworthinessdirectives@caa.govt.nz](mailto:airworthinessdirectives@caa.govt.nz)

**Note:**

**Airworthiness Directive Schedule Amendment Nr. 25-05 is scheduled for issue on Thursday 29 May 2025.**

## Notes on New and Revised Airworthiness Directives

### Transport Canada AD CF-2025-21 Main Rotor Expandable Blade Bolts – Inspection

Transport Canada AD CF-2025-21-E with effective date 6 May 2025 is applicable to Bell 407 and 427 helicopters, all S/N.

Bell Textron Canada Limited (BTCL) was informed that some Main Rotor Expandable Blade Bolts, PN 406-310-103-103, might not have received the correct heat treatment.

The incorrect heat treatment may result in stress corrosion cracking of the affected blade bolts, leading to a detachment of the main rotor blade and loss of helicopter control.

For the reason described above, main rotor blade bolts PN 406-310-103-103, with a S/N listed in Table 1 in Transport Canada AD CF-2025-21 must be removed from service and replaced with a serviceable expandable blade bolt in accordance with accomplishment instructions in:

- For Bell 407 helicopters, BTCL ASB 407-24-137 initial release, dated 17 July 2024, or later revisions approved by Chief, Continuing Airworthiness, Transport Canada.
- For Bell 427 helicopters, BTCL ASB 427-24-47 initial release, dated 7 August 2024, or later revisions approved by Chief, Continuing Airworthiness, Transport Canada.

The Transport Canada AD can be obtained from the Transport Canada AD webpage at: [Airworthiness Directives - Advanced Search](#)

### UK CAA AD G-2025-0001R1-E Pressure Relief Valves (PRV) adaptor CB8426 – Inspection

UK CAA Emergency AD 2025-0001R1-E with a New Zealand effective date 15 April 2025 is applicable to hot air balloon cylinders fitted with Pressure Relief Valve (PRV) adaptor CB8426.

This Airworthiness Directive has been revised to include a note applicable to the inspection of PRV adaptors for cracks before each flight.

For New Zealand registered aircraft the inspection of PRV adaptors for cracks before each flight may be accomplished by adding the inspection requirement to the tech log. The visual inspection 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.

The UK CAA AD is prompted by three instances of failed CB8426 reported in the last 9 months to Cameron Balloons Limited. Failed components have presented with a crack located on the upper hex portion of the adaptor. There are estimated to be approximately 2,000 adaptors in service. The failure mode of the reported failures is under urgent investigation by Cameron Balloons Limited. The intent of this Airworthiness Directive is to detect and correct failed CB8426 adaptors. The consequence of a failed CB8426 adaptor is there will be an uncontrolled leak of LPG fuel.

This Airworthiness Directive requires that the results of the inspections should be reported to Cameron Balloons Limited in the event of the discovery of cracking. As the cause of the failed CB8426 adaptors is not known, these required inspection reports will help determine the extent of the failures in the affected fleet. Based on the results of these reports, further corrective action is likely to be warranted. Given that the unsafe condition addressed by this AD is likely due to a manufacturing or maintenance non-conformity problem, a reporting requirement is instrumental in ensuring that as much information as possible regarding the extent and nature of the non-conformity or breakdown can be gathered, especially where that data may not be available through other established means. This information is necessary to ensure that proper corrective action will be taken.

Cameron Balloons Limited have issued 'Alert Service Bulletin 36, Revision 0 Dated March 2025' to give further guidance on this issue, including 'Accomplishment Instructions'.

The UK CAA AD can be obtained from the UK CAA AD webpage at: [G-2025-0001R1-E: Cameron Balloons Limited: Hot Air Balloons – Cylinders fitted with PRV adaptor CB8426– Inspect for Cracking | UK Civil Aviation Authority](#)

# CIVIL AVIATION AUTHORITY OF NEW ZEALAND

A/L 25-04

## AIRWORTHINESS DIRECTIVE SCHEDULE REVISION STATUS

24 April 2025

Schedule:	Date:	
AD Schedule Cover Page	24 APR 25	
AD Schedule Revision Status	24 APR 25	
List of New or Revised ADs	24 APR 25	
<b>Aeroplanes</b>		
Aeroplanes General - Large (Greater than 5700kg MCTOW)	27 JULY 23	
Aeroplanes General - Small (Up to 5700kg MCTOW)	29 JUNE 23	
Aero Commander 100 Series	24 JUN 21	
Aerostar 600 and 601 Series	25 FEB 21	
Air Tractor AT-402, AT-502 & AT-504 Series	29 APR 21	
Air Tractor AT-602	29 APR 21	
Airtourer Series (NZ Aerospace)	26 OCT 00	
Alpha Aviation HR200 & R2000 Series	27 AUG 15	
American Champion 7 and 8 Series	26 JUL 18	
Auster & Beagle Series	26 JUL 12	
Aviat A-1 Series (Husky)	27 AUG 20	
BAC-167 Strikemaster	30 OCT 14	
Beagle Aircraft B.121 Series 2	30 JUN 11	
Beechcraft 17 Series	31 AUG 00	
Beechcraft 18 Series	31 AUG 00	
Beechcraft 23 & 24 Series	31 AUG 00	
Beechcraft 33, 35 & 36 Series	19 DEC 19	
Beechcraft 60 Series	22 FEB 01	
Beechcraft 76 Series	29 APR 21	
Beechcraft 77 Series	28 AUG 08	
Beechcraft 90 Series	27 MAY 10	
Beechcraft 58 & 95 Series	29 AUG 13	
Beechcraft 99 Series	27 JUL 06	
Beechcraft 200 Series	30 NOV 23	
Beechcraft 300LW	24 FEB 22	
Boeing-Stearman E75 & A75N1	28 AUG 08	
Bolkow BO 208 C Junior	14 MAY 93	
Bolkow BO 209 Monsun	28 AUG 08	
British Aerospace Dove (DH 104)	19 FEB 93	
British Aerospace Heron (DH 114)	19 FEB 93	
Britten-Norman Islander BN2 Series	25 JUL 24	
Cessna 120 Series	28 APR 22	
Cessna 150/152 Series	29 SEP 11	
Cessna 170 Series	30 JUN 11	
Cessna 172 Series (includes R172)	29 OCT 20	
Cessna 175 Series	28 JUL 16	
Cessna 177 Series	23 FEB 23	
Cessna 180 Series	26 NOV 20	
Cessna 182 Series	26 NOV 20	
Cessna 185 Series	26 NOV 20	
Cessna 188 Series	27 AUG 20	
Cessna 195 Series	28 NOV 13	
Cessna 206 Series	29 OCT 20	
Cessna 207 Series	29 OCT 20	
Cessna 208 Series	25 MAR 21	
Cessna 210 & 205 Series	23 FEB 23	
Cessna 303 Series	30 JUN 11	
Cessna 337 Series	27 JUL 17	
Cessna 310 & 320 Series	29 SEP 16	
Cessna 402 Series	31 MAY 18	
Cessna 404 Series	29 NOV 07	
Cessna 414 Series	24 FEB 00	
Cessna 421 Series	31 MAY 18	
Cessna 425 Series	27 APR 06	
Cessna 441 Series	27 MAR 14	
Cessna 500 Series	27 MAY 10	
Cessna 501 Series	24 SEP 15	
Cessna 510 Series	26 APR 18	
Cessna 525 Series	26 SEP 24	
Cessna 560 Series	27 MAY 10	
Cirrus SR20 and SR22 Aircraft	19 DEC 24	
De Havilland DH60 Series (Moth)	26 APR 18	
De Havilland DH80 Series (Puss Moth)	26 MAR 09	
De Havilland DH82 Series (Tiger Moth)	26 APR 18	
De Havilland DH83 Series (Fox Moth)	26 APR 18	
De Havilland DH89 Series (Dragon Rapide /	28 OCT10	
		Dominie)
		De Havilland DH94 Series (Moth Minor)
		De Havilland DHC-1 Series (Chipmunk)
		De Havilland DHC-2 Series (Beaver)
		De Havilland DHC-3 Series (Otter)
		Diamond DA 20 Series
		Diamond DA 40 Series
		Diamond DA 42 Series
		Diamond DA 62 Series
		Douglas DC3C-S1C3G
		Dornier Do 228 Series
		Eagle X-TS & 150 Series
		Embraer EMB-500
		Embraer EMB-820 Series
		Erco 415-D Series (Ercoupe)
		Extra EA 300 Series
		Fairchild SA227
		G-164 Ag-Cat Series
		Gippsland GA200 Fatman
		Gippsland GA8 Airvan
		Grumman American AA-1 & AA-5 Series
		Grumman G-44 Series
		Gulfstream Aerospace G-IV Series
		Gulfstream Aerospace GA-7
		Harvard 2, 2A and 3 Series
		Helio H-250 (Courier)
		Jabiru Aeroplane Series
		Kodiak 100
		Lake LA-4, LA-4-200 & Model 250
		Maule Series
		Miles M38 Messenger
		Mitsubishi MU-2B-26A/-60 Series
		Mitsubishi MU-2B-30 Series
		Mooney M20 Series
		Moravan Zlin Z-50
		Moravan Zlin Z-137T
		Nanchang CJ-6 Series
		North American P-51 Series
		Nomad N22 and N24 Series
		Pacific Aerospace CT/4 Series
		Pacific Aerospace FBA-2C Series
		Pacific Aerospace Fletcher FU24 Series
		Pacific Aerospace Cresco 08-600
		Pacific Aerospace 750XL
		Percival Proctor Mk1
		Percival Proctor Mk5
		Pilatus PC-6 Series
		Pilatus PC-12 Series
		Piper J3 Series
		Piper PA-14 Series
		Piper PA-18 Series
		Piper PA-20 Series
		Piper PA-22 Series
		Piper PA-23 Series
		Piper PA-24 Series
		Piper PA-25 Series
		Piper PA-28 Series
		Piper PA-30 Series
		Piper PA-31 Series
		Piper PA-32 Series
		Piper PA-34 Series
		Piper PA-38 Series
		Piper PA-39 Series
		Piper PA-42 Series
		Piper PA-44 Series
		Piper PA-46 Series
		Pitts S-1 & S-2 Series
		PZL-M18 Dromander Series
		PZL-104 Wilga 35 and 80
		Reims F406 Series
		Robin DR400 Series
		Robin R1180 Series
		Robin R3000 Series
		Rockwell Commander 112 & 114 Series
		Slingsby T67 Series
		Rallye, MS880 and MS890 Series
		Socata TB9, TB10 and TB20 Series

# CIVIL AVIATION AUTHORITY OF NEW ZEALAND

A/L 25-04

## AIRWORTHINESS DIRECTIVE SCHEDULE REVISION STATUS

24 April 2025

Sud Aviation Gardan Horizon GY 80	18 DEC 08	Grob	25 JUN 20
Supermarine Spitfire	26 AUG 20	KR-03A Puchatek	26 July 18
Taylorcraft BC12-D	26 AUG 20	Lange E1 Antares	28 AUG 14
Tecnam Aircraft	27 MAR 25	LET Blanik L-13 Series	31 AUG 17
Thrush S2R Series	26 OCT 17	M&D Gliders JS-MD Series	25 NOV 21
Transavia PL12 Series	23 DEC 94	MBB Phoebus Series	11 JUN 93
Twin Commander 500/600 Series	30 MAY 13	PW-5 Smyk	26 JUL 18
Univair Stinson 108 Series	22 FEB 18	PW-6U	26 JUL 18
Vulcanair P68B, P68C and P68C-TC	26 OCT 23	Schempp-Hirth Series	30 JAN 25
Yakovlev/Aerostar Series	27 OCT 16	Schleicher Series	28 JUL 22
Yeoman YA-1 Series	25 OCT 12	Schneider ES52/II Kookaburra	29 OCT 09
<b>Amateur Built</b>		Slingsby Series	22 FEB 18
Amateur Built Aircraft	30 MAY 24	Sportine Aviacija LAK-17 series	25 JUL 19
<b>Ex-military &amp; Vintage Factory</b>		Start & Flug	28 AUG 98
<b>Built Aircraft, not type certified</b>		Stemme S10 Series	31 AUG 22
Ex-military and Vintage Factory Built Aircraft	21 DEC 23	SZD Series (Allstar PZL)	31 JAN 19
<b>Microlight</b>		Technoflug Series	26 APR 02
Microlight	23 FEB 23	Vliegtuigbouw NV Sagitta	11 JUN 93
<b>Helicopters</b>		<b>Balloons</b>	
Helicopter - General	28 NOV 24	Balloons	24 APR 25
Agusta Bell AB212	30 MAY 24	Ultramagic Balloons	25 FEB 16
Airbus Helicopters SA 315 & SA 316	27 OCT 11	<b>Engines</b>	
Airbus Helicopters AS 350	27 MAR 25	Austro E4 Series	26 SEP 24
Airbus Helicopters AS 355	27 MAR 25	Engines General – Reciprocating Engines	29 JUNE 23
Airbus Helicopters EC 120	19 DEC 24	Blackburn Cirrus	27 JUN 02
Airbus Helicopters EC 130	27 MAR 25	Continental 6-285-C Series	28 MAY 20
Airbus Helicopters EC 155 and SA 365	27 MAR 25	Continental A-50, A-65, C-75 & C-85 Series	28 MAY 20
Airbus Helicopters Deutschland BO 105	26 JAN 23	Continental C-90 & O-200 Series & RR C-90 Series	28 MAY 20
Airbus Helicopters Deutschland EC 135	27 MAR 25	Continental 240 Series & RR O-240-A Series	28 MAY 20
Airbus Helicopters Deutschland MBB-BK 117	27 MAR 25	Continental 300 Series	28 SEP 23
Bell/Kawasaki-Bell 47 Series	25 JUN 09	Continental 360 Series	28 SEP 23
Bell 205 Series	31 OCT 24	Continental 470 Series	28 SEP 23
Bell 206 Series and Agusta Bell AB206 Series	25 JUL 24	Continental 520 Series	28 SEP 23
Bell 212 Series	31 OCT 24	Continental 550 Series	28 SEP 23
Bell 214 Series	26 JUN 14	Continental TAE 125-01 & TAE 125-02 Series (previously Technify Motors & Thielert Aircraft Engines)	19 DEC 24
Bell 222 Series	28 JUL 22	De Havilland Gipsy	28 AUG 08
Bell 407 Series	24 APR 25	Franklin	30 OCT 03
Bell 412 Series	31 OCT 24	GE Aviation Czech M601 Series (previously Walter Engines)	30 JAN 25
Bell 427 Series	24 APR 25	General Electric T-58 Series	25 MAR 04
Bell 429 Series	27 MAR 25	Honeywell Int. LTS101 & T53 Series	30 JUN 22
Bell 505 Series	27 MAR 25	Honeywell International T5508D	26 JUL 12
Bell OH-58 Series	27 NOV 14	Honeywell International TFE731 Series	30 APR 09
Bell UH-1, TH-1 and HH-1 Series	31 OCT 24	Honeywell International TPE331 Series	29 NOV 18
Boeing Vertol 107-II	31 AUG 06	Jabiru 2200 & 3300	27 SEP 12
Brantly Aircraft B-2 Series	23 DEC 21	Kinner R-55 (R-540-1)	29 NOV 07
Enstrom F-28, 280 & 480 Series	27 SEP 18	Limbach Engines	29 JUL 10
Fairchild FH-1100 Series	30 NOV 06	Lycoming Engines - FAA TC E-223	28 NOV 24
Guimbal Cabri G2	28 MAR 24	Lycoming Engines - FAA TC E-229	28 FEB 19
Hiller UH-12C & UH-12E Series	22 OCT 15	Lycoming Engines - FAA TC 1E12	28 NOV 24
Kaman K-1200 Kmax	24 FEB 11	Lycoming Engines - FAA TC E-274	28 NOV 24
Kawasaki BK117 Series	24 APR 25	Lycoming Engines - FAA TC 1E13	28 NOV 24
Leonardo A109 Series	27 MAR 25	Lycoming Engines - FAA TC E-279	28 NOV 24
Leonardo A119 & AW119 Series	30 NOV 23	Lycoming Engines - FAA TC 1E10	28 NOV 24
Leonardo AW169	27 MAR 25	Lycoming Engines - FAA TC E-286	28 NOV 24
MD 369, Kawasaki/Hughes 369 & 500N	28 NOV 24	Lycoming Engines - FAA TC 1E1	28 NOV 24
MD 600N	28 NOV 24	Lycoming Engines - FAA TC E26EA	28 NOV 24
MD 900N	22 OCT 15	Lycoming Engines - FAA TC E16EA	28 NOV 24
Robinson R22 Series	31 OCT 24	Lycoming Engines - FAA TC E-275	28 FEB 19
Robinson R44 Series	19 DEC 24	Lycoming Engines - FAA TC 1E4	28 NOV 24
Robinson R66 Series	29 FEB 24	Lycoming Engines - FAA TC 1E7	28 FEB 19
Sikorsky/Schweizer (Hughes) 269 Series	22 MAR 18	Lycoming Engines - FAA TC E14EA	28 NOV 24
Sikorsky Aircraft S-55 Series	25 AUG 05	Lycoming Engines - FAA TC E-295	28 NOV 24
Sikorsky Aircraft S-76 Series	24 JUN 21	Lycoming Engines - FAA TC E-304	28 NOV 24
<b>Gliders</b>		Lycoming Engines - FAA TC 1E15	28 FEB 19
Gliders General	25 NOV 21	Lycoming Engines - FAA TC 108	27 AUG 15
DG Aviation -100 /-200 /-300 /-400 /-500 /-800	27 MAR 25	Lycoming Engines - FAA TC E00004NY	28 NOV 24
/-808 & /-1000 Series		Lycoming Engines - FAA TC E00006NY	28 NOV 24
DG-Flugzeugbau LS1, LS3, LS4, LS6 & LS8 Series	22 DEC 22	Mikron III Series	28 JAN 16
Diamond/Hoffmann H36 Dimona	30 JUN 11	Pratt & Whitney Piston Series	23 FEB 23
Eiravion OY Pik 20 Series	11 JUN 93	Pratt & Whitney JT8D Series	27 OCT 95
Elliots Eon 463 Series	29 AUG 97	Pratt & Whitney JT15D Series	30 JUN 22
Glasflugel and HPH Glasflugel	28 OCT 21		

# CIVIL AVIATION AUTHORITY OF NEW ZEALAND

A/L 25-04

## AIRWORTHINESS DIRECTIVE SCHEDULE REVISION STATUS

24 April 2025

Pratt & Whitney PT6 Series	26 SEP 24
Pratt & Whitney PW200 Series	30 AUG 12
Pratt & Whitney PW615 Series	25 FEB 10
Pratt & Whitney PW617F Series	26 NOV 20
Rolls-Royce 250 Series	26 MAY 22
Rolls-Royce Avon Series	28 JUN 18
Rolls-Royce Deutschland Tay	25 MAR 04
Rolls-Royce Merlin & Packard Merlin	28 MAY 20
Rolls-Royce Viper MK522	31 AUG 17
Rolls-Royce Viper MK535	30 OCT 14
Rotax Engines	27 FEB 25
Safran Helicopter Engines – Arriel 1 Series	27 MAR 25
Safran Helicopter Engines – Arriel 2 Series	24 APR 25
Safran Helicopter Engines – Arrius 1A Series	28 AUG 24
Safran Helicopter Engines – Arrius 2B1, 2B2 & 2K1 Series	31 OCT 24
Safran Helicopter Engines – Arrius 2F & 2R Series	27 MAR 25
Safran Helicopter Engines – Artouste III	27 OCT 16
Solo 2350 Series	26 MAY 22
Solo 2625 Series	26 MAR 20
Superior Air Parts Engines	17 DEC 20
Technify Motors (previously Thielert)	25 JAN 18
Vedenyev M-14, Ivchenko AI-14 & Housai	18 APR 19
HS-6 Series	
Williams International FJ44 Series	31 OCT 24

### Propellers & Prop Governors

Propellers General AD Supplements (NZCAR III A6-3)	JUL 54
(NZCAR III A6-4)	JUL 54
Dowty Rotol Series	29 AUG 13
DUC Hélices H-FLR2 (FLAIR-2) Series	28 JUN 18
Fairey-Reed Series AD Supplements (NZCAR III A6-2)	AUG 64
Hamilton Standard Series	29 SEP 16
Hartzell Series	27 MAY 21
Hoffman Series	28 APR 22
McCauley Series	1 OCT 20
MT Propeller Series	28 JUL 22
Ontic Propeller Governors	29 JUL 10
PZL – Warszawa Series	25 SEP 03
Sensenich Series	26 JUL 07
Tarver F200	26 NOV 09
Woodward Propeller Governors	26 MAY 11

### Components & Equipment

Aircraft Seats & Harnesses	27 FEB 25
Avionics (previously Radio Communication & Navigation Equipment)	24 APR 25
Brakes and Wheels	28 FEB 02
Carburettors & Injection Systems	30 JUL 20
Electrical Equipment – Reciprocating Engines	27 OCT 22
Electrical Equipment – Aircraft General	29 SEP 16
Emergency Equipment	29 SEP 22
Fuel System Equipment	20 JAN 95
Instruments and Automatic Pilots	25 JUL 24
Role Equipment - Aeroplanes	24 SEP 15
Role Equipment - Helicopters	27 OCT 22

# Airworthiness Directive Schedule

## Components and Equipment

### Avionics (Formerly Radio Communication and Navigation Equipment)

24 April 2025

- 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: [Links to state of design airworthiness directives | aviation.govt.nz](#)
  3. The date above indicates the amendment date of this schedule.
  4. New or amended ADs are shown with an asterisk. \*

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**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 KNL 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 P/N 011-00280-00 with S/N:
- 9630001, 96300002, 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 990r, 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, accomplish the following:
- Modify and test the software for the Apollo GX50/55/60/65 TSO-C129a GPS navigation unit by accomplishing all 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 revision 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 flight crew 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 revision, 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.  
(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 revision 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.

<b>Table 1 – TDR-94 Transponders</b>		
<b>Current P/N</b>	<b>New P/N (options)</b>	<b>Modify transponder per Rockwell Collins SB:</b>
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

<b>Table 2 – TDR-94D Transponders</b>		
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 revision.
  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 revision.
- 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.  
(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 flight crew 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, or later approved revision.

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, or later approved revision.

**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:  
<https://www.aviation.govt.nz/about-us/forms/Filter/?SearchTerm=&Rule=8>

**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 revision.
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 622-0370-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:**

<b>TDR-94 Transponders Current P/N</b>	<b>New P/N (options)</b>	<b>Rockwell Collins Service Bulletin (SB) instructions to be used for modification</b>
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:**

<b>TDR-94D Transponders Current P/N</b>	<b>New P/N (options)</b>	<b>Rockwell Collins SB instructions to be used for modification</b>
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:**

<b>Affected Panels:</b>	<b>Digital Board Assemblies P/N:</b>
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 revision 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 ADT406<sup>2</sup>AF/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 revision 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 revision, 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 revision 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.  
(FAA AD 2012-02-08 refers)

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

**Effective Date:** 29 March 2012

The State of Design ADs listed below are available directly from the National Airworthiness Authority (NAA) websites. Links to NAA websites are available on the CAA website at: [Links to state of design airworthiness directives | aviation.govt.nz](#)  
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**

**Cancelled – FAA AD 2021-05-17 refers**

**Effective Date:** 29 April 2021

**FAA AD 2019-13-03  
Inspection**

**Trig Avionics, Avidyne & BendixKing/Honeywell Mode S Transponders –**

**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.

Bendix King/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

**FAA AD 2020-10-05**

**Rockwell Collins Pro Line 4 & 21 Flight Management Systems – Inspection**

**Applicability:** Rockwell Collins, Inc. (Rockwell Collins) Pro Line 4 and Pro Line 21 Flight Management Systems that have a flight management computer (FMC) with a Rockwell Collins P/N listed in (C)(1) of FAA AD 2020-10-05 and with a configuration strapping unit (CSU) listed in (C)(2) of FAA AD 2020-10-05.

(C)(1) FMC-3000 RCPN 822-0883-031, -036, -038, -040, -041, -053, -054, -056, -057, -058, -059, -060, -081, -082, -083, -084; FMC-4200 RCPN 822-0783-022, -025, -028, -032, -036, -039, -040; FMC-5000 RCPN 822-0891-021, -027, -028, -034, -040; or FMC-6000 RCPN 822-0868-074, -075, -082, -083, -084, -085, -087, -089, -090, -109, -110, -111, -112, -113, -114, -116, -117, -122, -123, -127, -130, -132, -133, -134, -139.

(C)(2) CSU-3100 RCPN 822-1363-002, CSU-4000 RCPN 822-0049-002, or CSU-4100 RCPN 822-1364-002.

**Note:** To determine the CSU and FMC unit P/N, refer to the aircraft manufacturer or applicable STC holder maintenance instructions for accessing them.

**Effective Date:** 24 June 2020



**FAA AD 2020-16-08 (Correction) Aspen Avionics Flight Displays – Inspection**

**Applicability:** Aspen Avionics Flight Display P/N 910-00001-011, EFD1000 Multi-Function Display P/N 910-00001-012 and EFD1000 Emergency Backup Display P/N 910-00001-017 units that meet both the following conditions:

Software version 2.10 or 2.10.1 is installed and

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

**Effective Date:** 17 August 2020

**FAA AD 2020-18-51 Sandia Attitude Indicators – Inspection**

**Applicability:** Sandia attitude indicators with P/N 306171-10 and P/N 306171-20.

These attitude indicators may be marked as BendixKing Model KI-300 or Sandia Model SAI-340A.

**Effective Date:** 28 September 2020

**FAA AD 2021-05-17 Rockwell Collins FDSA-6500 Flight Display System – Inspection**

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

These applications are installed on, but not limited to, Bombardier CL-600-2B16 (604 variant) aircraft and Beechcraft 525B, B200, B200C, B200CGT, B200GT, B300, B300C, and C90GTi aircraft.

**Effective Date:** 29 April 2021

**FAA AD 2021-08-07 Rockwell Collins GPS-4000S Global Positioning Systems – Inspection**

**Applicability:** Rockwell Collins GPS-4000S Global Positioning System (GPS) with P/N 822-2189-100.

**Effective Date:** 12 May 2021

**FAA AD 2021-08-15 Garmin GMN-00962 GTS Processor Units – Inspection**

**Applicability:** Garmin International GMN-00962 GTS processor units P/N 011-02571-0( ) with software version 3.13 or earlier, except software version 3.12.1.

These units are marketed as the GTS 825, GTS 855, or GTS 8000.

**Effective Date:** 17 May 2021

**EASA AD 2022-0024 Flight Management Computer 2 – Inspection**

**Applicability:** Thales Flight Management Computer (FMC) 2 Navigation Modules (NAVM), identified by P/N C13084CA03.

These FMC2 NAVM are known to be installed on, but not limited to, Dassault (formerly Bréguet) Br.1150 Atlantique 2 (ATL2) maritime patrol aeroplanes.

**Effective Date:** 24 February 2022

**FAA AD 2023-10-02      Aeroplane Radio Altimeters - Interference from 5G C-Band in the USA**

**Applicability:**     All aeroplanes fitted with a radio altimeter (also known as a radar altimeter).

**Note:**                FAA AD 2023-10-02 is only applicable to aeroplanes operating in USA airspace.

Certain USA airports/locations are exposed to 5G C-Band wireless broadband interference, which may affect the accuracy of radio altimeter systems.  
In order to ensure flight safety, air operations at certain airports/locations requiring reference to an operational radio altimeter are prohibited.

NOTAMS will be issued in the USA to state the specific airports/locations where the radio altimeter is unreliable due to the presence of 5G C-Band wireless broadband interference.

**Effective Date:**    29 June 2023

**FAA AD 2023-11-07      Helicopter Radio Altimeters - Interference from 5G C-Band in the USA**

**Applicability:**     All helicopters fitted with a radio altimeter (also known as a radar altimeter).

**Note:**                FAA AD 2023-11-07 AD is only applicable to helicopters operating in USA airspace.

Certain USA airports/locations are exposed to 5G C-Band wireless broadband interference, which may affect the accuracy of radio altimeter systems.  
In order to ensure flight safety, air operations at certain airports/locations requiring reference to an operational radio altimeter are prohibited.

NOTAMS will be issued in the USA to state the specific airports/locations where the radio altimeter is unreliable due to the presence of 5G C-Band wireless broadband interference.

**Effective Date:**    29 June 2023

**\* FAA AD 2025-07-01      Thommen AC32 Digital Air Data Computers (ADCs) - Inspection**

**Applicability:**     THOMMEN AC32 Digital Air Data Computers (ADCs) with a P/N AC32.10.21.10.XX, AC32.10.21.11.XX, AC32.11.21.10.XX, and AC32.11.21.11.XX (where XX represents any alpha/numerical sequence), and with a S/N listed in Appendix A of THOMMEN AIRCRAFT EQUIPMENT SB AC32/07, Revision 1.0, dated August 31, 2023 (THOMMEN SB AC32/07 Revision 1.0).

Affected ADCs may be installed on, but not limited to, the aircraft models specified in table 1 of paragraph (c)(2) in FAA AD 2025-07-01.

**Effective Date:**    15 May 2025

# Airworthiness Directive Schedule

## Helicopters

### Bell 407 Series

24 April 2025

- Notes:**
1. This AD schedule is applicable to Bell 407 and 407GX series helicopters manufactured by Bell Helicopter Textron (BHT) under Transport Canada Type Certificate No. H-92.
  2. Transport Canada (TC) is the National Airworthiness Authority (NAA) responsible for the issue of State of Design Airworthiness Directives (ADs) for these helicopters.  
State of Design ADs can be obtained directly from the TC website at:  
[Airworthiness Directives - Advanced Search](#)
  3. The date above indicates the amendment date of this schedule.
  4. New or amended ADs are shown with an asterisk \*

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**DCA/BELL407/1            Airworthiness Directive Compliance at Initial C of A Issue**

**Applicability:** Model 407 helicopters

**Requirement:** Comply with Canadian airworthiness directive CF-96-19R4.

**Compliance:** Before issue of New Zealand Airworthiness Certificate.  
(Transport Canada CF-96-19R4 refers)

**Effective Date:** 4 July 1997

**DCA/BELL407/2            Tail Rotor Drive - Shimming**

**Applicability:** Model 407 S/N 53000, 53002 through 53065, 53067, and 53069 through 53075.

**Requirement:** To prevent failure of the tail rotor drive shaft, perform shimming procedure per BHTC ASB 407-97-7.  
(Transport Canada AD CF-97-08 refers)

**Compliance:** By 1 September 1997

**Effective Date:** 4 July 1997

**DCA/BELL407/3            Cancelled - Purpose Fulfilled****DCA/BELL407/4            Minimum Fuel Flow Overspeed Valve - Flight Manual Amendment**

**Applicability:** Model 407 S/N 53001 through 53166

**Requirement:** Allison Commercial Engine Bulletin CEB A-73-6015 introduces a modified hydro-mechanical unit and a new electronic control unit. These modifications require a change to the approved Rotorcraft Flight Manual instructions. Accomplish the following measures at the time of embodiment of CEB A-73-6015:-  
  
Incorporate Revision No. 5, dated 24 June 1997, into the approved Rotorcraft Flight Manual BHT-407-FM-1; and remove Temporary Revision FOR FADEC FAULT ANNUNCIATION INTERPRETATION, revised 3 December 1996, and Temporary Revision FOR NP OVERSPEED TRIP INCREASE, dated 3 December 1996.  
  
Ensure that all pilots are aware of the contents of the above revision and of the Manufacturer's Data BHT-407-MD-1 Revision 2, dated 24 June 1997.  
(Transport Canada AD CF-97-15 refers)

**Compliance:** At the time of embodiment of Allison Commercial Engine Bulletin CEB A-73-6015.

**Effective Date:** 24 October 1997

**DCA/BELL407/5            Cancelled - Purpose Fulfilled****DCA/BELL407/6            Cargo Hook System - Modification**

**Applicability:** Model 407 S/N 53000 through 53152, and 53154 through 53165.

**Requirement:** To ensure correct functioning of the cargo hook system, modify per Bell Alert SB 407-98-16.  
(Transport Canada AD CF-98-06 refers)

**Compliance:** For helicopters with the cargo hook installed, by 5 July 1998.  
For helicopters with cargo hook provisions only, by 30 September 1998.

**Effective Date:** 5 June 1998

**DCA/BELL407/7A Tail Rotor Gearbox Attachment – Re-installation**

- Applicability:** Model 407 aircraft, all S/N.
- Note:** This AD revised to mandate a tail rotor gearbox re-installation.
- Requirement:** To prevent tail rotor vibration loosening the tail rotor assembly, remove the tail rotor gearbox from the aircraft and accomplish a gearbox re-installation per the instructions in part I of Bell Helicopter Textron Canada Alert Service Bulletin (ASB) 407-97-14 revision C.  
(Transport Canada AD CF-1998-09R1 refers)
- Compliance:** Within the next 300 hours TIS or by 27 July 2008, whichever occurs sooner, unless already accomplished.
- Effective Date:** DCA/BELL407/7 - 5 June 1998  
DCA/BELL407/7A - 27 September 2007

**DCA/BELL407/8A Vertical Fin Assembly - Inspection**

- Applicability:** Model 407 S/N 53000 through 53273 inclusive with vertical fin assembly S/N BP2266 and prior, except BP2260, BP2262 and BP2265.
- Requirement:** To ensure the structural integrity of the vertical fin assembly, accomplish the following:-  
  
Remove the fin assembly P/N 206-020-113-221 or -229, as applicable, from the tail boom and perform a one-time visual inspection of the fin per Part I of Bell Alert SB 407-98-17 Rev A.  
  
(a) If no damage is found as a result of the inspection above, reinstall the fin assembly to its original configuration.  
  
(b) If any damage is found, accomplish the corrective action per Part II of SB 407-98-17 Rev A.  
  
(c) Upon completion of Part II of the SB, install a nameplate indicating P/N 206-070-113-223FM together with the applicable S/N, per Part III of SB 407-98-17 Rev A.  
  
For those aircraft that have already complied with paragraph (b) per the original directive (DCA/BELL407/8), install the nameplate per paragraph (c) at the next 300-hour inspection.  
(Transport Canada AD CF-98-10R1 refers)
- Compliance:** Within next 100 hours TIS.
- Effective Date:** DCA/BELL407/8 - 31 July 1998  
DCA/BELL407/8A - 20 November 1998

**DCA/BELL407/9            Warning Horns - Replacement**

- Applicability:** Model 407 helicopters, serial numbers 53000 through 53194 inclusive.
- Requirement:** To facilitate appropriate flight crew reactions to flight situations by providing more distinct and conspicuous warnings, accomplish the following:-  
  
Replace existing FADEC FAIL, ENGINE OUT and LOW ROTOR RPM horns with new ones, P/N VSB628CP, SC628NP and SC628N, respectively, or later P/N, per Bell Alert SB 407-97-12.  
(Transport Canada AD CF-98-13 refers)
- Compliance:** By 15 December 1998
- Effective Date:** 31 July 1998

**DCA/BELL407/10A        Engine-to-Transmission Driveshaft - Replacement**

- Applicability:** Model 407 S/N 53000, and 53002 through 53066.
- Requirement:** To ensure the continuing airworthiness of the aircraft, replace the engine-to-transmission driveshaft P/N 206-340-300-103 with driveshaft P/N 206-340-300-105 per Bell Alert SB 407-98-19.  
  
Superseded driveshafts P/N 206-340-3000-103 shall be either rendered unusable or identified as un-airworthy and kept segregated from airworthy parts.  
(Transport Canada AD CF-98-25R1 refers)
- Compliance:** Within next 50 hours TIS or by 30 September 1998, whichever is the sooner.
- Effective Date:** DCA/BELL407/10 - 3 September 1998  
DCA/BELL407/10A - 20 November 1998

**DCA/BELL407/11        Door Latch Assemblies - Modification**

- Applicability:** Model 407 S/N 53000 through 53228.
- Requirement:** To ensure proper functioning of each door, modify door assemblies P/N 20898-401, -402, -405 and -406, per Bell Alert SB 407-98-18.  
(Transport Canada AD CF-98-19 refers)
- Compliance:** Within the next 100 hours TIS or by 31 October 1998, whichever is the sooner.
- Effective Date:** 25 September 1998

**DCA/BELL407/12G      Pedal Stop Modification and Removal of Operating Limitations**

**Applicability:** Model 407 S/N 53000 through 53399, except 53397.

**Requirement:** To reinstate the original type certified VNE of 140 KIAS, accomplish the following:-  
Install an airspeed-actuated pedal stop per BHT ASB 407-99-33 dated 17 December 1999.

Replace the VNE placards per ASB 407-99-33. The maximum VNE is 140 KIAS except in autorotation where it remains 100 KIAS maximum or where the basic flight manual or optional installation limitations indicate less than these values.

Remove the temporary instrument markings and install the new airspeed limitation decals per Part II of ASB 407-99-33.

Remove Temporary Revision titled "VNE Increase to 130 KIAS" dated 3 June 1999 from the applicable Rotorcraft Flight Manual:

- (a) BHT-407-FM-1,
- (b) BHT-407-FMS-25, Quiet Cruise Mode,
- (c) BHT-407-FMS-28, Increased Internal Gross Weight, and insert Temporary Revision titled "VNE Increase to 140 KIAS" dated 17 December 1999.

Remove Temporary Revision titled "Hover Performance Correction for Temporary Tail Rotor Pedal Stop" dated 10 March 1999 from the applicable Rotorcraft Flight Manual:

- (a) BHT-407-FM-1,
- (b) BHT-407-FMS-3, Particle Separator,
- (c) BHT-407-FMS-4, Snow Deflector,
- (d) BHT-407-FMS-28, Increased Internal Gross Weight.

Remove all earlier editions of this directive from the Rotorcraft Flight Manual (BHT-407-FM-1) and brief the pilots of the content of this directive.

The accomplishment of the above provides terminating action for the requirements of all previous issues of this directive.  
(Transport Canada AD CF-1998-36R7 refers)

**Compliance:** By 31 January 2001

**Effective Date:** DCA/BELL407/12F – 27 August 1999  
DCA/BELL407/12G - 30 March 2000

**DCA/BELL407/13      Hydraulic Relief Valve - Replacement**

**Applicability:** Model 407 S/N 53000 through 53266.

**Requirement:** To ensure proper functioning of the flight controls, replace the hydraulic relief valve P/N 206-076-036-101 with P/N 206-076-036-105, per Bell Alert SB 407-98-20.  
(Transport Canada AD CF-98-28 refers)

**Compliance:** By 20 December 1998

**Effective Date:** 20 November 1998



**DCA/BELL407/14 Main Rotor Pitch Horn Assembly - Inspection**

**Applicability:** Model 407 S/N 53000 through 53321 and 53323 through 53326.

**Requirement:** To ensure that the main rotor pitch horn assembly floating bushing has been installed correctly, inspect per Bell Alert SB 407-99-25.

If any bushing is found to be installed incorrectly, replace the affected pitch horn and the bolt that attaches the pitch change link to the pitch horn.  
(Transport Canada AD CF-99-02 refers)

**Compliance:** Within next 25 hours TIS.

**Effective Date:** 18 February 1999

**DCA/BELL407/15 Cancelled – Transport Canada AD CF-1999-04R1 refers**

**Effective Date:** 11 February 2016

**DCA/BELL407/16 Oil Cooler Blower Assembly – Bearing Replacement**

**Applicability:** Model 407 S/N 53000 through 5332.

**Requirement:** To prevent power train seizure, replace bearings P/N 406-040-339 of the oil cooler blower assembly with new ones P/N 407-340-339-101/-103 and lubricate with Royco 13 grease, MIL-G-25013, per ASB 407-98-23.  
(Transport Canada AD CF-99-08 refers)

**Compliance:** Within the next 300 hours TIS or by 31 July 1999, whichever is the sooner.

**Effective Date:** 7 May 1999

**DCA/BELL407/17A Cancelled – DCA/BELL407/42 refers**

**Effective Date:** 31 July 2008

**DCA/BELL407/18 Door Locking Mechanism - Modification**

**Applicability:** Model 407 S/N 53000 through 53334.

**Requirement:** To ensure proper functioning of each door locking mechanism, replace the baseplate and rod assemblies by incorporating hardware kit CA-407-99-30 as outlined in BHTC ASB 407-99-30.  
(Transport Canada AD CF-99-19 refers)

**Compliance:** By 31 October 1999

**Effective Date:** 27 August 1999

**DCA/BELL407/19      Crew Seat Restraint Assemblies - Replacement**

**Applicability:** Model 407 S/N 53000 through 53342 and 53344.

**Requirement:** To ensure the safety of the crew, replace the crew seat restraint assemblies with new ones, P/N 222-320-823-129 and -130, per BHTC ASB 407-99-29. (Transport Canada AD CF-1999-25)

**Compliance:** By 31 January 2000

**Effective Date:** 19 November 1999

**DCA/BELL407/20      Cancelled – DCA/BELL407/40 refers**

**Effective Date:** 31 July 2008

**DCA/BELL407/21A      Horizontal Stabiliser Slats - Replacement**

**Applicability:** Model 407 aircraft, S/N 53000 through to 53498 and 53500 through to 53512.

**Note 1:** This AD mandates a visual inspection prior to modification and the replacing of the slats together, per an improved installation procedure.

**Requirement:** To prevent in-flight slat separation, accomplish the following:

1. For aircraft S/N 53000 through to 53498 and 53500 through to 53503 inspect per part I of Bell Helicopter Textron Canada ASB 407-02-52.

**Note 2:** The daily visual inspection outlined in part I of ASB 407-02-52 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). Sign logbook for AD compliance at time of adding the daily visual inspection requirement to the aircraft tech log.

2. For aircraft S/N 53000 through to 53498 install segmented slats P/N 407-023-001-103 per part II of ASB 407-02-52.

3. For aircraft S/N 53500 through to 53503 fitted with factory installed slats, re-install and identify existing factory installed segmented slats P/N 407-023-001-103 per part III of ASB 407-02-52.

4. For aircraft S/N 53504 through 53512 with the new factory installed slats, install identification plates on the existing factory installed segmented slats P/N 407-023-001-103 per part IV of ASB 407-02-52.  
(Transport Canada AD CF-2000-09R1 refers)

**Compliance:** 1. At every daily inspection until installation of segmented slats P/N 407-023-001-103 per ASB 407-02-52.

2. 3. & 4. By 27 February 2008, unless already accomplished.

**Effective Date:** DCA/BELL407/21 - 27 April 2000  
DCA/BELL407/21A - 27 September 2007

**DCA/BELL407/22      Cancelled – Purpose Fulfilled**

**DCA/BELL407/23      Engine to Transmission Driveshaft - Inspection**

**Applicability:** Model 407 series helicopters with engine to transmission driveshaft P/N 206-340-300-105 fitted.

**Requirement:** To prevent failure of driveshaft visually inspect each driveshaft for a crack, loose bolt or nut, or red powder residue per Bell ASB 407-01-43.

Replace driveshaft before further flight if a crack, loose bolt or nut, or red powder residue is found.

(Transport Canada AD CF-2001-24)

**Compliance:** For driveshafts with 1000 or more hours TIS and all driveshafts with less than 1000 hours TIS that have been removed or installed since factory delivery, inspect within 25 TIS.

For driveshafts with less than 1000 hours TIS, that have never been removed or installed since factory delivery, accomplish Service Bulletin within 300 hours TIS.

**Effective Date:** 26 July 2001

**DCA/BELL407/24      Forward Bearing Hanger Support - Inspection**

**Applicability:** Model 407 helicopters S/N 53000 through 53442 with flywheel P/N 407-040-316-101 installed.

**Requirement:** To detect cracks in the forward bearing hanger support, visually inspect forward bearing hanger support P/N 407-040-316-101 per BHTC ASB 407-01-39. If a crack is detected, replace the affected support before further flight.  
(Transport Canada AD CF-2001-32 refers)

**Compliance:** Within next 25 hours TIS and thereafter at intervals not to exceed 25 hours TIS.

**Effective Date:** 27 September 2001

**DCA/BELL407/25      Fuel Line - Inspection**

**Applicability:** Model 407 helicopters S/N 53000 through 53174

**Requirement:** To prevent chafing damage to the main fuel feed line, which could cause fuel leakage and/or air to enter the fuel supply to the engine and an engine flameout, accomplish the following:

1. Inspect per BHTC ASB 407-01-42 and replace if necessary.

2. Replace standpipe and tube assembly per ASB 407-01-42.

(Transport Canada AD CF-2001-30R1 refers)

**Compliance:** 1. Inspect within next 50 hours TIS.

2. Replace within 300 hours TIS.

**Effective Date:** 27 September 2001

**DCA/BELL407/26 Fuel Filter Cap - Electrical Bonding**

**Applicability:** Model 407 helicopters S/N 53000 through 53479.

**Requirement:** To prevent static discharge while refueling that could potentially ignite the fuel vapor, ensure fuel filler cap and adapter assembly has adequate electrical bonding per BHTC ASB 407-01-41.  
(Transport Canada AD CF-2001-34 refers)

**Compliance:** By 31 March 2002

**Effective Date:** 29 November 2001

**DCA/BELL407/27A Tail Rotor Blades – Inspection**

**Applicability:** Model 407 aircraft, all S/N.

**Note:** This AD supersedes DCA/BELL407/27 to introduce Bell Helicopter Textron Canada (BHTC) ASB No. 407-07-81 revision B, dated 29 November 2010 which lists additional affected tail rotor blades.

**Requirement:** To prevent balance weights departing from the tail rotor blades during flight, inspect the aircraft log books and determine if any affected tail rotor blades are fitted to the aircraft per Bell Helicopter Textron Canada (BHTC) ASB No. 407-07-81 revision B, dated 29 November 2010 or later Transport Canada approved revisions. If an affected tail rotor blade is found fitted, replace with an airworthy part before further flight.  
(Transport Canada AD CF-2007-21R1 refers)

**Compliance:** Before further flight.

**Effective Date:** DCA/BELL407/27 - 18 September 2007

DCA/BELL407/27A - 4 December 2010

**DCA/BELL407/28 Tail Rotor Driveshaft Disc Assembly – Inspection**

**Applicability:** Model 407 aircraft, S/N all through 53709, 53711 through to 53716, 53718, 53720 through to 53722.

**Requirement:** To prevent failure of the disc assemblies fitted to the tail rotor driveshaft, accomplish the following:

1. Inspect the aircraft log book and disc assemblies P/N 407-340-340-103 fitted to the aircraft, and establish the manufacturing date, the thickness and indexing, per the instructions in part 2 of Bell Helicopter Textron Alert Service Bulletin (ASB) No. 407-07-76.
- Note 1:** If the manufacturing date is not between 1 November 2005 and 30 November 2006, no further action is required.
2. Replace any disc assembly that is not within the required thickness 0.115 - 0.127 inch (2.921 - 3.225 mm) per ASB No. 407-07-76.
3. Replace any disc assembly that is not correctly indexed per ASB No. 407-07-76.
4. For disc assemblies held as spares confirm the manufacture date. If the manufactured date is between 1 November 2005 and 30 November 2006 establish the thickness and indexing per the instructions in part 1 of ASB No. 407-07-76. If required adjust the thickness of the disc assembly by removing or adding new discs, and re-index if necessary, per the applicable Maintenance Manual. Attach a serviceable tag stating compliance with the requirements of this AD.
- Note 2:** If the manufacturing date is not between 1 November 2005 and 30 November 2006, no further action is required.  
(Transport Canada AD CF-2007-14 refers)

**Compliance:**

1. Within the next 25 hours TIS, or by 21 October 2007 whichever is the sooner.
2. Within the next 10 hours TIS.
3. Within the next 300 hours TIS, or next scheduled inspection, whichever comes sooner.
4. From 21 September 2007.

**Effective Date:** 21 September 2007

**DCA/BELL407/29 V<sub>NE</sub> Reduction – AFM Amendment****Applicability:** Model 407 aircraft, all S/N.**Requirement:** The requirement to continue with the V<sub>NE</sub> restriction imposed after a Bell 407 aircraft flying at approximately 140 knots was destroyed is no longer necessary.

Remove the copy of Transport Canada AD CF-2001-01 from the Aircraft Flight Manual (AFM).

Remove the V<sub>NE</sub> limitation placard and airspeed indicator redline limits which were incorporated by AD CF-2001-01.**Note 1:** Accomplishment of these requirements is a terminating action to the requirements of this AD.**Note 2:** The V<sub>NE</sub> restriction requirements imposed by DCA/BELL407/12G (Transport Canada AD CF-1998-36R7 refers), remains in effect until the terminating requirements of that AD have been met.  
(Transport Canada AD CF-2001-01R1 refers)**Compliance:** By 27 November 2007**Effective Date:** 27 September 2007**DCA/BELL407/30 Cancelled – CF-2002-03R3 refers****Effective Date:** 10 October 2013**DCA/BELL407/31 Tail Rotor Gearbox Support Casting – Inspection****Applicability:** Model 407 aircraft, S/N 53000 through to 53475 fitted with tail boom assemblies P/N 407-030-801-105, -107 or 407-530-014-103 with S/N 53390 through to 53440, 53449, BP921 or BP1014 and tail rotor gearbox support casting P/N 406-030-121-105 with S/N 980867/01-2, -3, -4, -5, -8, -9 or -10.**Requirement:** To prevent failure of the tail rotor gearbox due to the possibility of cracks in the tail rotor gearbox support casting that is part of the tail boom assembly, accomplish the following:

1. Inspect the aircraft and aircraft logbook and determine if an affected part is installed on the aircraft per part I of Bell Helicopter Textron Canada Alert Service Bulletin 407-02-53.

2. Inspect affected tail rotor support castings for cracks per part II of ASB 407-02-53. If a crack is found, replace the tail boom before further flight.

3. Remove affected tail rotor support castings by replacing the tail boom or the tail rotor gearbox support casting per ASB 407-02-53.

(Transport Canada AD CF-2002-32R1 refers)

**Compliance:** 1. Within the next 25 hours TIS, unless already accomplished.

2. Within the next 25 hours TIS and thereafter at intervals not to exceed 25 hours TIS until requirement 3 is accomplished.

3. By 27 November 2007, unless already accomplished.

**Effective Date:** 27 September 2007**DCA/BELL407/32 Swashplate Drive Links – Inspection****Applicability:** Model 407 aircraft, all S/N.**Requirement:** To prevent failure of both swashplate drive link studs possibly resulting in loss of control of the aircraft, inspect both cup washers P/N 406-010-412-101 for correct installation per Bell Helicopter Textron Canada Alert Service Bulletin (ASB) 407-02-55.

If the cup washers are installed correctly, no further action is required.

If one or both cup washers are installed upside down, replace the parts per part II of ASB 407-02-55, before further flight.

(Transport Canada AD CF-2002-46 refers)

**Compliance:** Before further flight, unless already accomplished.**Effective Date:** 27 September 2007

**DCA/BELL407/33      Tail Rotor Gearbox Oil Feed Gallery – Inspection**

**Applicability:** Model 407 aircraft, S/N 53000 through to 53498, 53500 through to 53522, 53524 and 53526 fitted with tail rotor gearbox case P/N 406-040-406-109 or 406-040-406-113.

**Requirement:** To prevent failure of the tail rotor gearbox duplex bearing P/N 406-040-432-103 due to the possibility of the gearbox lacking the required oil feed gallery, accomplish the following:

1. Inspect the aircraft and aircraft logbook and identify the tail rotor gearbox case installed on the helicopter and inspect for the presence of oil feed gallery per the instructions in part I of Bell Helicopter Textron Canada Alert Service Bulletin 407-03-57 revision B. If an oil feed gallery is present, re-identify the gearbox case assembly per the instructions in ASB 407-03-57. If an oil feed gallery is not present, accomplish requirement 2 of this AD.
2. Create an oil feed gallery per the instructions in part II of ASB 407-03-57.

**Note:** Before installing affected tail rotor gearbox cases held as spares accomplish the instructions in this AD.  
(Transport Canada AD CF-2003-10 refers)

**Compliance:** 1. Within the next 50 hours TIS or by 27 October 2007, whichever occurs sooner, unless already accomplished.

2. For tail rotor gearboxes with less than 1800 hours TTIS since new or last overhaul, rework within 1800 hours TTIS.

For tail rotor gearboxes with 1800 hours or more TTIS since new or last overhaul, rework within the next 50 hours TIS or within 30 days, whichever occurs sooner.

**Effective Date:** 27 September 2007

**DCA/BELL407/34      Tail Boom and Tail Rotor Drive – Inspection**

**Applicability:** Model 407 aircraft, S/N 53003 through to 53213.

**Requirement:** To allow the manufacturer to determine the scope of problems with the tail boom and tail rotor drive system, accomplish the following:

Inspect the outer discs of all tail rotor drive assembly couplings for cracks using a magnifying glass. Dismantling of the disc packs is not required unless their condition dictates otherwise. Inspect the support brackets of the oil cooler blower and oil tank, and associated airframe structure for cracks or damage.

Visually inspect the tail rotor assembly for damage and general condition. This includes the controls, the tail rotor gearbox and drive assembly, and the tail boom. Accomplish these inspections per Bell Alert Service Bulletin No. 407-97-7 and the Maintenance Manual BHT-407-MM, chapter 5, zones 2, 4, 5 and 6 of the progressive inspection schedule.

Report the inspection results to the CAA by completing and submitting a defect report CA005D. Include both positive and negative cases of cracking or damage. Reports should specify the helicopter serial number, the airframe time since new and the location of damage (plus, in the case of disc packs, the number of discs that formed that pack). Unless already reported, advise the CAA if coupling disc have been found cracked during the 300 hour mandatory inspections accomplished prior to this AD including any remedial action accomplished per Bell Alert Service Bulletin No. 407-97-7 (DCA/BELL407/2 refers).

(Transport Canada AD CF-97-19 refers)

**Compliance:** Within the next 25 hours TIS or by 27 October 2007, unless already accomplished.

**Effective Date:** 27 September 2007

**DCA/BELL407/35 Swashplate Duplex Bearing – Replacement**

- Applicability:** Model 407 aircraft, S/N 53000 through to 53059, 53062, 53063 and 53071.
- Requirement:** To bring the aircraft into conformance with its type certification basis, install a swashplate duplex bearing P/N 406-310-402-103 per Bell Helicopter Textron Canada Alert Service Bulletin 407-97-11.
- Note:** The installation of this bearing eliminates the need for the inspection limitation of BHT-407-MM-1, Chapter 4, Table 4-2.  
(Transport Canada AD CF-97-22 refers)
- Compliance:** At the next swashplate overhaul inspection, or by 27 August 2008, whichever occurs sooner, unless already accomplished.
- Effective Date:** 27 September 2007

**DCA/BELL407/36 Horizontal Stabilizer – Inspection**

- Applicability:** Model 407 aircraft, all S/N.
- Requirement:** To prevent failure of the horizontal stabiliser due to the possibility of manufacturing defects causing cracks to develop in the skin which may result in loss of aircraft control, accomplish the following:
1. Inspect the aircraft and aircraft log books and determine the S/N of the horizontal stabiliser per the instructions in Part I of Alert Service Bulletin (ASB) No. 407-06-72.  
  
If an affected S/N horizontal stabiliser is not fitted to the aircraft, no further action is required.  
  
If an affected S/N horizontal stabiliser is fitted to the aircraft, inspect the horizontal stabiliser per the instructions in Part II of ASB No. 407-06-72.  
  
If any defects are found replace the horizontal stabiliser per the instructions in Part III of ASB No. 407-06-72, before further flight.
  2. Replace affected horizontal stabilisers per the instructions in Part III of ASB No. 407-06-72.  
(Transport Canada AD CF-2007-03 refers)
- Compliance:**
1. Within the next 100 hours TIS or by 27 October 2007, whichever is the sooner, and thereafter inspect affected parts at intervals not to exceed 600 hours TIS or annual inspection, whichever is the sooner, until requirement 2 of this AD is accomplished.
  2. By 27 February 2009, unless already accomplished.
- Effective Date:** 27 September 2007

**DCA/BELL407/37 FADEC Manual Mode Overspeed – AFM Amendment**

- Applicability:** Model 407 aircraft, all S/N 53000 through to 53655.
- Requirement:** Rolls Royce has determined that a restriction in the P1 nozzle screen can result in main rotor overspeed when the FADEC is switched to manual mode. The selection of the FADEC to manual mode at ground idle will identify a contaminated P1 nozzle screen if the gas producer speed increases beyond specified limits as identified in the AFM. Amend the AFM by inserting flight manual revision BHT-407-FM-1, revision 4, dated 29 June 2005.  
(Transport Canada AD CF-2005-32 refers)
- Compliance:** By 15 October 2007, unless already accomplished.
- Effective Date:** 27 September 2007

**DCA/BELL407/38 Turbine Steady State Operation – AFM Amendment & Placard****Applicability:** Model 407 aircraft, S/N 53000 through to 53644.**Requirement:** To prevent failure of the third stage turbine wheel due to certain steady-state turbine operations causing detrimental vibrations within a particular range of turbine speeds, amend the AFM by inserting flight manual supplement BHT-407-FM-1, revision 3 and advise the pilot of this change. Also install a placard as per Bell Helicopter Textron Canada Alert Service Bulletin 407-05-67.  
(Transport Canada AD CF-2004-09R1 refers)**Compliance:** By 15 October 2007, unless already accomplished.**Effective Date:** 27 September 2007**DCA/BELL407/39 Freewheel Assembly – Inspection****Applicability:** Model 407 aircraft, all S/N fitted with a freewheel aft bearing cap P/N 406-040-509-101, S/N A-1833 through to A-1912.**Requirement:** To prevent failure of the freewheel unit due to the possibility of there not being a machined oil lubrication channel in the aft bearing cap resulting in a lack of bearing lubrication, accomplish the following:

1. Identify the S/N of the aft bearing cap fitted to the aircraft per Part I of Bell Helicopter Textron Canada Alert Service Bulletin 407-04-66 revision A. If an affected bearing cap is fitted to the aircraft, accomplish requirement 2 and 3 of this AD.
2. Rework affected freewheel assemblies as stipulated by the calculated average engine start cycle count per Part II or III of Alert Service Bulletin 407-04-66.
3. Rework affected freewheel assemblies per Part IV of Alert Service Bulletin 407-04-66.

**Note:** Accomplishment of requirement 3 is a terminating action to the requirements of this AD.

(Transport Canada AD CF-2004-17R1 refers)

**Compliance:**

1. Before further flight, unless already accomplished.
2. Within the next 50 hours TIS, unless already accomplished.
3. Within the next 300 hours TIS or by 27 January 2008, unless already accomplished.

**Effective Date:** 27 September 2007**DCA/BELL407/40 Tail Rotor Drive Shaft bearings – Inspection****Applicability:** Model 407 aircraft, all S/N.**Note 1:** This AD mandates the removal of bearings 407-340-339-101 and -103 at all tail rotor drive shaft locations, which includes the oil cooler blower locations.**Requirement:** To prevent failure of tail rotor drive shaft bearings, accomplish the requirements in accordance with Transport Canada Airworthiness Directive CF-2002-18R3.**Note 2:** An in-flight failure of a bearing P/N 407-340-339-101 located on the segmented tail rotor drive shaft contributed to the separation of the tail rotor drive shaft. Recent flight-testing has revealed that under certain hover and vertical flight conditions, exhaust gases can be ingested into the aft fairing inlet resulting in higher than expected zonal temperatures. Exposure to higher temperatures will adversely affect the bearing lubricant resulting in premature failure. Exhaust gas ingestion can also result in an engine and transmission oil temperature exceedance. Recent research has also determined that overgreasing of the bearing can result in elevated bearing temperatures.

(Transport Canada AD CF-2002-18R3 refers)

**Compliance:** At the initial and repetitive compliance times specified in Transport Canada AD CF-2002-18R3.**Effective Date:** 27 September 2007



**DCA/BELL407/41      Landing Gear Cross Tubes – Life Limitation**

**Applicability:** Model 407 aircraft, all S/N

**Requirement:** To prevent possible cross tube failure create a historical service record for each identified cross tube assembly, indicating the life limitation of 5,000 RIN (Retirement Index Number), and assign a RIN to each existing and new cross tube assembly in accordance with Bell Helicopter Textron Alert Service Bulletin 407-03-59. (Transport Canada AD CF-2004-03 refers)

**Compliance:** Within the next 100 hours TIS, or by 27 October 2007, whichever occurs sooner, unless already accomplished.

**Effective Date:** 27 September 2007

**DCA/BELL407/42      Tail Boom – Inspection**

**Applicability:** Model 407 aircraft, all S/N fitted with tail booms P/N 407-030-801-107, 407-530-014-101 or 407-530-014-103.

**Note 1:** This AD supersedes DCA/BELL407/17A and mandates new inspection requirements.

**Requirement:** To ensure the structural integrity of the tail boom, accomplish the following:

1. Determine the P/N of the tail boom fitted to the aircraft and record the P/N in the aircraft logbook.

**Note 2:** No further action is required, if the aircraft has a tail boom fitted other than P/N 407-030-801-107, 407-530-014-101 or 407-530-014-103.

2. Prepare the tail boom surface for the “Daily Visual Check” in accordance with part II, paragraph (1), items (a) through to (e) of Bell Helicopter Textron (BHT) Alert Service Bulletin ASB 407-07-80 dated 27 August 2007 or later approved revisions.

Inspect both the tail boom surface areas in figure 2 of ASB 407-07-80 for cracks using a 10X magnifying glass. If any cracks are found, replace the tail boom before further flight. If no crack is found, dry and protect each reworked area with a thin coat of clear coating per part II of ASB 407-07-80.

3. Inspect the tail boom in accordance with part III, paragraphs (1) and (2) of ASB 407-07-80. If any cracks are found, replace the tail boom with a serviceable part before further flight.

**Note 3:** Requirement 3 of this AD may be accomplished by adding the inspection requirement to the tech log. The visual inspection 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.

4. Inspect the tail boom in accordance with part IV of ASB 407-07-80. If a crack is found, replace the tail boom with a serviceable part before further flight. (Transport Canada AD CF-2008-04 refers)

**Note 4:** The inspection in accordance with requirement 3 and 4 must be continued if the replacement tail boom is identified in the applicability section of this AD.

**Note 5:** Replacing an affected tail boom with a tail boom P/N 407-030-801-201/-203/-205 or later numbers is a terminating action to the requirements of this AD.

**Compliance:**

1. Within the next 10 hours TIS.
2. Within the next 25 hours TIS or by 31 August 2008, whichever occurs sooner.
3. Before the first flight of the day at the pre-flight inspection.
4. Within the next 100 hours TIS and thereafter at intervals no to exceed 100 hours TIS.

**Effective Date:** 31 July 2008

**DCA/BELL407/43A      Cyclic Control Lever Installation – Inspection**

**Applicability:** Model 407 aircraft, all S/N with less than 50 hours TSN and aircraft fitted with a cyclic lever assembly within the last 50 hours TIS.

**Note:** No action required if already in compliance with DCA/BELL407/43. Revision A of this AD now references Transport Canada AD CF-2009-10R1. The revised Transport Canada AD only affects Bell 206A and 206B series helicopters.

**Requirement:** To prevent failure of the cyclic control lever assembly which could result in loss of aircraft control, inspect the cyclic lever assembly installation per Bell Helicopter Textron Canada (BHTC) ASB 407-09-85 dated 10 March 2009 or later Transport Canada approved revisions.

Correct any defects found per ASB 407-09-85 before further flight.  
(Transport Canada AD CF-2009-10R1 refers)

**Compliance:** Before further flight, unless previously accomplished.

**Effective Date:** DCA/BELL206/103 - 18 March 2009  
DCA/BELL206/103A - 29 October 2009

**DCA/BELL407/44      Hydraulic Pump Driveshaft – Inspection**

**Applicability:** Model 407 aircraft, S/N 53000 through 53408 and 53421 through 53459.

**Note:** This AD does not affect aircraft fitted with input shaft P/N 407-340-107-101 and adapter P/N 407-340-108-101 per Technical Bulletin (TB) 407-01-30 revision A dated 21 May 2003.

**Requirement:** To prevent failure of the hydraulic pump driveshaft which could result in loss of hydraulic pressure and reduced aircraft control, accomplish the following:

1. Inspect the hydraulic pump and determine whether an internal plug and fastening rivet is fitted per Bell Helicopter Textron Company ASB No. 407-08-83 dated 22 May 2008, or later revisions.

If any parts are found missing fit an airworthy input shaft and adapter before further flight.

2. A hydraulic pump driveshaft assembly P/N 406-040-072-105 shall not be fitted to any aircraft unless part 1 of ASB No. 407-08-83 is accomplished.  
(Transport Canada AD CF-2009-03 refers)

**Compliance:** 1. Within the next 50 hours TIS, or at the next driveshaft lubrication, or by 26 April 2009, whichever occurs sooner.

2. From 26 March 2009.

**Effective Date:** 26 March 2009

**DCA/BELL407/45 Tail Boom Skin – Inspection**

**Applicability:** Model 407 aircraft fitted with tail boom P/N 407-030-801-201, -203 or -205.

**Requirement:** To prevent serious damage to the tail boom due to possible skin cracks, accomplish the following:

1. Tail boom P/N and TTIS Determination:

Inspect the aircraft logbooks or the aircraft and determine if a tail boom P/N 407-030-801-201, -203 or -205 is fitted to the aircraft. Record the tail boom P/N and the hours TTIS into the aircraft logbook. For the purpose of this AD if the hours TTIS of the tail boom is unknown consider the tail boom to have accumulated more than 8600 hours TTIS.

2. Inspection Schedule Determination:

Determine the inspection schedule applicable to the affected tail boom fitted to the aircraft using the following table:

Inspection Schedule Determination			
	Tail boom Hours TTIS:		
	Less than 6900 hours TTIS	Between 6900 and 8599 hours TTIS	8600 or more hours TTIS
Applicable part in ASB 407-08-84	Part II	Part II & III	Part II, III & IV

3. Inspection:

Accomplish the applicable tail boom inspections determined by requirement 2 of this AD per the applicable part in ASB 407-08-84 dated 18 August 2008 or later approved revisions.

(Transport Canada AD CF-2009-07 refers)

**Compliance:**

1. Within the next 25 hours TIS.
2. Within the next 25 hours TIS.
3. Part II of ASB 407-08-84:

Within the next 300 hours TIS and thereafter at intervals not to exceed 300 hours TIS accomplish part II using a 10x magnifying glass.

Part III of ASB 407-08-84:

Within the next 150 hours TIS accomplish part III using a 10x magnifying glass and thereafter at intervals not to exceed 150 hours accomplish part III using a 10x magnifying glass, or

Thereafter at intervals not to exceed 500 hours TIS accomplish part III using an eddy current inspection method.

Part IV of ASB 407-08-84:

Within the next 50 hours TIS and thereafter at intervals not to exceed 50 hours TIS accomplish part IV using a 10x magnifying glass, or

At every preflight inspection accomplish the daily visual inspection in part IV and accomplish the inspection in part IV using a 10x magnifying glass at the next scheduled maintenance inspection.

**Note:**

The daily visual inspection in part IV of ASB 407-08-84 may be accomplished by adding the inspection requirement to the tech log. The visual inspection 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.

**Effective Date:** 6 April 2009

**DCA/BELL407/46      Gas Producer RPM (NG) Limitation – AFM Amendment & Placard**

- Applicability:** Model 407 aircraft, S/N 53000 through to 53862.
- Requirement:** To alert the pilot of the gas producer RPM (NG) limitation amend the AFM (BHT-407-FM-1) by inserting revision 7, dated 30 July 2008, and install decal P/N 407-070-008-101 per the instructions in BHTC ASB 407-08-82, revision A, dated 17 November 2008 or later Transport Canada approved revisions.
- Note:** Compliance with ASB 407-08-82 dated 19 May 2008 satisfies the requirements of this AD.  
(Transport Canada AD CF-2009-06 refers)
- Compliance:** Within the next 50 hours TIS, or by 30 May 2009 whichever occurs sooner, unless previously accomplished.
- Effective Date:** 30 April 2009

**DCA/BELL407/47      Anti-drive Link Assembly – Inspection**

- Applicability:** Model 407 aircraft, S/N 53000 through to 53887, 53890 through to 53916, 53918, 53920, 53921, 53923 through to 53926 and 53928 fitted with anti-drive link assembly P/N 406-010-432-101 with a S/N prefix TI or TIFS.
- Requirement:** To prevent failure of the anti-drive link assembly P/N 406-010-432-101 due to possible movement of bearing P/N 406-310-403-101 which could result in loss of aircraft control, accomplish the following:  
  
Inspect the anti-drive link assembly P/N 406-010-432-101 to ensure the bearing P/N 406-310-403-101 is correctly staked in the link assembly per Bell Helicopter ASB 407-09-87 dated 27 March 2009 or later Transport Canada approved revisions.  
  
Correct any defects found per ASB 407-09-87 before further flight.  
(Transport Canada AD CF-2009-14 refers)
- Compliance:** Within the next 10 hours TIS or by 6 June 2009 whichever is the sooner, unless previously accomplished.
- Effective Date:** 6 May 2009

**DCA/BELL407/48      Staked Bearings – Inspection**

- Applicability:** Model 407 aircraft, S/N 53000 through to 53887, 53890 through to 53916, 53918, 53920, 53921, 53923 through to 53926 and 53928
- Requirement:** To prevent failure of flight control bellcranks, levers and supports of the flight control system due to possible bearing migration which could result in loss of aircraft control, accomplish the following:  
  
Inspect flight control bearings per the instructions in Bell Helicopter ASB No. 407-09-88 dated 7 April 2009 or later Transport Canada approved revisions.  
  
If any defects are found replace affected parts before further flight.
- Note:** Bell Helicopter Operations Safety Notice (OSN) GEN-09-38 dated 7 April 2009 provides further information on the subject of this AD.  
(Transport Canada AD CF-2009-32 refers)
- Compliance:** Within the next 10 hours TIS or by 13 September 2009 whichever is the sooner, unless previously accomplished.
- Effective Date:** 13 August 2009

**DCA/BELL407/49      Tail Boom Attach Hardware – Inspection**

**Applicability:** Model 407 aircraft, S/N 53000 through to 53990.

**Requirement:** To prevent tail boom detachment due to possible bolt failure which could result in loss of the tail boom and aircraft control, accomplish the following:

Replace the tail boom attachment hardware and accomplish a torque check of all the tail boom attachment bolts/nuts at all four attachment positions at intervals of 5 hours TIS but not less than 1 hour TIS following hardware replacement until the torque stabilises at all positions.

Accomplish these corrective actions per the instructions in Bell Helicopter ASB 407-10-93 revision A, dated 30 August 2010 or later Transport Canada approved revisions.

(Transport Canada AD CF-2010-33 refers)

**Compliance:** For aircraft with more than 7000 hours TTIS:

Within the next 150 hours TIS, or the next 90 days whichever occurs sooner.

For aircraft with 7000 or less hours TTIS:

At the next scheduled 600 hour inspection, or 31 December 2010 whichever occurs sooner.

**Effective Date:** 28 October 2010

**DCA/BELL407/50A      Hydraulic Servo Actuators – Inspection**

**Applicability:** Model 407 aircraft, S/N 53000 through to 53900, 53911 through to 53999 and 54000 through to 54081 fitted with servo actuators P/N 206-076-062-105 or P/N 206-076-062-107.

**Note 1:** This AD revised to expand the applicability to include additional aircraft S/N.

**Requirement:** To prevent hydraulic servo actuator failure, accomplish the following:

1. Inspect the hydraulic servo actuators and accomplish the applicable corrective actions per the instructions in BHT ASB 407-11-96 revision B, dated 22 August 2011 or later revisions approved by Transport Canada.

**Note 2:** Inspections and corrective actions previously accomplished per DCA/BELL407/50 satisfies requirement 1 of this AD.

2. For actuators in compliance with requirement 1 of this AD and actuators already in compliance with DCA/BELL407/50, re-identify the actuator data plate by adding the letter "V" at the end of the P/N per the instructions in ASB 407-11-96.

3. Servo actuators with a P/N listed in the applicability section of this AD shall not be installed on any Bell 407 helicopter unless the actuator complies with the requirements of this AD and is re-identified with the letter "V" after the P/N. (Transport Canada AD CF-2011-17R1 refers)

**Compliance:** 1. Before further flight.

2. Within the next 100 hours TIS.

3. From 28 December 2011.

**Effective Date:** DCA/BELL407/50 – 2 July 2011  
DCA/BELL407/50A – 28 December 2011

**DCA/BELL407/51      Cancelled – Transport Canada AD CF-2011-42R1 refers**

**Effective Date:** 27 June 2019

**DCA/BELL407/52      Emergency Float Kit – Inspection**

**Applicability:** Model 407 aircraft fitted with Apical emergency float kit P/N 614.3001, S/N all through to 080 (embodied under FAA STC SR01535LA).

**Requirement:** To prevent an unsafe condition accomplish the inspections and corrective actions specified in FAA AD 2011-25-01.  
(FAA AD 2011-25-01 refers)

**Compliance:** By 26 July 2012.

**Effective Date:** 26 January 2012.

The State of Design ADs listed below are available directly from the National Airworthiness Authority (NAA) websites. Links to NAA websites are available on the CAA website at: [Links to state of design airworthiness directives | aviation.govt.nz](https://aviation.govt.nz/state-of-design-airworthiness-directives)  
 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.

**CF-2002-03R3 KAflex Shaft – Replacement**

**Effective Date:** 10 October 2013

**FAA AD 2013-22-21 Emergency Floatation Gear - Inspection**

**Effective Date:** 13 December 2013

**CF-1999-04R1 Components – Life Limitations**

**Effective Date:** 11 February 2016

**CF-2016-13R1 Freewheel Lubrication System – Inspection**

**Applicability:** Bell 407 helicopters, all S/N.

**Effective Date:** TC AD CF-2016-13 - 16 May 2016  
 TC AD CF-2016-13R1 - 26 September 2019

**CF-2016-21 Tail Rotor Drive Shaft – Inspection**

**Effective Date:** 7 July 2016

**CF-2018-16 Seat Belt Comfort Clips – Inspection**

**Applicability:** Bell 407 helicopters, all S/N.

**Effective Date:** 28 June 2018

**FAA AD 2018-25-17 Air Comm Corp Air Conditioning System – Inspection**

**Applicability:** Bell 407 helicopters fitted with an Air Comm air conditioning system P/N 407 EC-201, 407 EC-202 or 407 EC-203.

**Effective Date:** 22 January 2019

**CF-2019-01 Helicopter External Transport System (HETS) STC SH98-35**

**Applicability:** HETS™ certified under Transport Canada Supplemental Type Certificate (STC) SH98-35, Issue 1 and Issue 2 installed on the following helicopter models:  
 Bell Helicopter Textron Canada Ltd. model 407.

**Note:** HETS™ approved under SH98-35 are only eligible for installation on helicopter models listed above and they are not eligible for any other models not specifically listed above (Example: not eligible for installation on AS 355 N or AS 355 NP).

**Effective Date:** 22 January 2019

**CF-2011-42R1 Longerons Structure - Inspection**

**Applicability:** Bell 407 helicopters, S/N 53000 through to 53900, 53911 through to 54061 and 54300 fitted with upper left longeron assembly P/N 206-031-314-037, P/N 206-031-314-177, or spare assembly P/N 206-031-314-219B.

**Effective Date:** CF-2011-42 (superseded DCA/BELL407/51) - 8 December 2011  
 CF-2011-42R1 - 27 June 2019

**CF-2021-34 Tail Boom Lower Skin Cracking - Inspection**

**Applicability:** Bell 407 helicopters, S/N 53000 through to 53900, 53911 through to 54166, 54300 and onwards.

**Effective Date:** 5 November 2021

**CF-2022-68 Tail Boom - Inspection**

**Applicability:** Bell 407 helicopters, S/N 53000 through to 53900, 53911 through to 53999, 54000 through to 54166, 54300 through to 54800, 54805 through to 54954, 54956 through to 54997, 54999, and 56300 through to 56304.

**Effective Date:** 29 December 2022

**CF-2023-11 Fuel System Standpipe Assembly and FQIS Harness - Inspection**

**Applicability:** Bell 407 helicopters, S/N 54832 through to 54931, 54933 through to 54939, and 54942 through to 54954.

**Effective Date:** 30 March 2023

**CF-2023-63 Tail Rotor Blades - Inspection**

**Applicability:** Bell 407 helicopters, S/N 53000 through to 53900, 53911 through to 53999, 54000 through to 54166, 54300 through to 54800 and 54805 through to 54999.

**Effective Date:** 19 August 2023

**CF-2024-18 Cyclic Stick Tube - Inspection**

**Applicability:** Bell 407 helicopters, S/N 53000 through to 53900, 53911 through to 53999, 54000 through to 54166, 54300 through to 54800, 54805 through to 54999, 56300 through to 56305, and 56311 through to 56315, fitted with cyclic stick tube assembly P/N 206-001-342-101, or 206-001-342-101FM.

**Effective Date:** 25 July 2024

**\* CF-2025-21 Main Rotor Expandable Blade Bolts - Inspection**

**Applicability:** Bell 407 helicopters, all S/N fitted with main rotor blade bolts PN 406-310-103-103, with a S/N listed in Table 1 of Transport Canada AD CF-2025-21.

**Effective Date:** 6 May 2025



# Airworthiness Directive Schedule

## Helicopters

### Bell 427 Series

24 April 2025

- Notes:**
1. This AD schedule is applicable to Bell 427 helicopters manufactured by Bell Helicopter Textron Canada (BHTC) under Transport Canada Type Certificate No. H-103.
  2. Transport Canada (TC) is the National Airworthiness Authority (NAA) responsible for the issue of State of Design Airworthiness Directives (ADs) for these helicopters. State of Design ADs can be obtained directly from the TC website at: [Airworthiness Directives - Advanced Search](#)
  3. The date above indicates the amendment date of this schedule.
  4. New or amended ADs are shown with an asterisk \*

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**DCA/BELL427/1A AD Compliance at Initial Airworthiness Certificate Issue**

**Applicability:** Model Bell 427 aircraft, all S/N

**Note:** DCA/BELL427/1A revised to cancel CF-2002-03R2 which is superseded by CF-2002-03R3. TC AD CF-2011-17 is superseded by DCA/BELL427/2 (TC AD CF-2011-17R1 refers).

**Requirement:** Compliance with the following Transport Canada (TC) Airworthiness Directives (as applicable) is required:

<b>Transport Canada AD No:</b>	<b>Bell Helicopter Textron Canada (BHTC) Service Information:</b>	<b>Subject:</b>	<b>AD Requirement:</b>
CF-2002-11	ASB 427-01-02 dated 20 August 2001	Hydraulic Solenoid Tee Fitting	Tee fitting and tube replacement
* CF-2002-03R2	Cancelled – TC AD CF-2002-03R3 refers		
CF-2001-05R1	ASB 427-01-07 dated 16 November 2001	Main Rotor to Horizontal Stabiliser Endplate Clearance	Auxiliary Fin Mod and AFM Amendment
CF-2002-24	ASB 427-01-06 dated 5 November 2001	In-line Electrical Terminal Junctions	Replace M81714/65 series in-line electrical terminal junctions
CF-2002-45	ASB 427-02-08 dated 7 June 2002	Cyclic Centering Switch Relocation	Replace proximity switch bracket installation
CF-2003-11	ASB 427-03-09 dated 22 January 2003	TR Gearbox Case Oil Feed Gallery	Oil feed gallery mod (spare TR gearbox cases included)
CF-2007-14	ASB 427-07-17 dated 28 March 2007	Disc Assemblies – Tail Rotor Driveshaft (Thomas Couplings)	Rework affected disc assemblies (spare disc assemblies included)
CF-2009-04	ASB 427-08-22 dated 26 June 2008	Hydraulic Pump – Driveshaft Assembly	Conformity inspection (spare driveshaft assemblies included)
CF-2009-14	ASB 427-09-24 revision A dated 30 March 2009	Anti-drive Link Assembly – Incorrect Installation of Bearing	Inspection and rework
CF-2009-32	ASB 427-09-25 dated 7 April 2009	Bearings in Flight Controls	Inspection and rework
CF-2009-10R1	ASB 427-09-23 dated 10 March 2009	Cyclic Control Lever Assembly Installation	Inspection and rework
CF-2007-22R1	ASB 427-06-15 revision A dated 18 December 2009	Vertical Fin	Inspection and modification

CF-2010-17	ASB 427-09-29 revision A dated 17 November 2009	TR Driveshaft Hanger Bearing Bracket – cracks due to tooling mark	Inspection and rework
CF-2010-32	ASB 427-10-31 dated 1 March 2010	Over-torque of Tailboom Attach Hardware	Inspection and rework
CF-2007-21R1	ASB 427-07-18 revision B dated 29 November 2010	Tail Rotor Blades	Inspection and replacement
* CF-2011-17	Cancelled – DCA/BELL427/2 (TC AD CF-2011-17R1 refers)		

**Note 1:** Each part of this AD (each individual Transport Canada AD) shall be certified in the aircraft log book separately.

**Note 2:** Manufacturer service information at later Transport Canada approved revisions is acceptable to comply with the requirements of this AD.

**Compliance:** Before issue of a New Zealand Certificate of Airworthiness, or at the next ARA inspection after the effective date of this AD whichever is the sooner, unless previously accomplished.

**Effective Date:** DCA/BELL427/1 - 25 August 2011  
DCA/BELL427/1A - 31 October 2013

#### **DCA/BELL427/2          Hydraulic Servo Actuators – Inspection and Replacement**

**Applicability:** Model 427 aircraft, S/N 56001 through to 56077, 58001 and 58002 fitted with servo actuators P/N 206-076-062-109 or P/N 206-076-062-111.

**Requirement:** To prevent hydraulic servo actuator failure, accomplish the following:

1. Inspect the hydraulic servo actuators and accomplish the applicable corrective actions per the instructions in BHT ASB 427-11-35 revision B, dated 22 August 2011 or later revisions approved by Transport Canada.
2. For actuators in compliance with requirement 1 of this AD, re-identify the actuator data plate by adding the letter "V" at the end of the P/N per the instructions in ASB 427-11-35.
3. Servo actuators with a P/N listed in the applicability section of this AD shall not be installed on any Bell 427 helicopter unless the actuator complies with the requirements of this AD and is re-identified with the letter "V" after the P/N.

(Transport Canada AD CF-2011-17R1 refers)

**Compliance:**

1. Before further flight.
2. Within the next 100 hours TIS.
3. From 28 December 2011.

**Effective Date:** 28 December 2011

**DCA/BELL427/3            Emergency Float Kit – Inspection and Modification**

**Applicability:**     Model 427 aircraft fitted with Apical emergency float kit P/N 634.2901, S/N all through to 012 (embodied under FAA STC SR01813LA).

**Requirement:**    To prevent an unsafe condition accomplish the inspections and corrective actions specified in FAA AD 2011-25-01.

**Note:**             A copy of FAA AD 2011-25-01 can be obtained from  
[http://rgl.faa.gov/Regulatory\\_and\\_Guidance\\_Library/rgAD.nsf/MainFrame?OpenFrameSet](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAD.nsf/MainFrame?OpenFrameSet)  
(FAA AD 2011-25-01 refers)

**Compliance:**     By 26 July 2012

**Effective Date:**   26 January 2012

The State of Design ADs listed below are available directly from the National Airworthiness Authority (NAA) websites. Links to NAA websites are available on the CAA website at: [Links to state of design airworthiness directives | aviation.govt.nz](https://aviation.govt.nz/state-of-design-airworthiness-directives)  
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.

**CF-2002-03R3 KAflex Shaft – Replacement**

**Effective Date:** 10 October 2013

**CF-2015-29 Oil Check Valve - Inspection**

**Effective Date:** 21 December 2015

**CF-2017-03 Vertical Fin - Inspection**

**Effective Date:** 31 January 2017

**CF-2018-16 Seat Belt Comfort Clips – Inspection**

**Applicability:** Bell 427 helicopters, all S/N.

**Effective Date:** 28 June 2018

**CF-2024-42 Transmission Oil Check Valve – Inspection**

**Applicability:** Bell 427 helicopters, S/N 56001 through to 56084, 58001 and 58002.

**Effective Date:** 27 December 2024

**\* CF-2025-21 Main Rotor Expandable Blade Bolts - Inspection**

**Applicability:** Bell 427 helicopters, all S/N fitted with main rotor blade bolts PN 406-310-103-103, with a S/N listed in Table 1 of Transport Canada AD CF-2025-21.

**Effective Date:** 6 May 2025

# Airworthiness Directive Schedule

## Balloons

## Balloons

24 April 2025

- Notes:**
1. This AD schedule is applicable to all balloon makes and models.
  2. The foreign ADs listed in this schedule can be obtained directly from the applicable foreign National Airworthiness Authority (NAA) website.  
Links to NAA websites are available on the CAA website at: [Links to state of design airworthiness directives | aviation.govt.nz](#)
  3. The date above indicates the amendment date of this schedule.
  4. New or amended ADs are shown with an asterisk \*

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**DCA/BAL/1 Rego Blast Valves P/N 7553S Series - Inspection and Modification**

**Applicability:** All Don Piccard Hot Air Balloons Model AX-6 incorporating Rego blast valves, P/N 7553S series.

**Requirement:** To prevent fuel system failure or an in-flight fire, accomplish the following:-

1. Remove the valve actuating level roll pin P/N 7553S-8 from actuating level. (Be careful to remove any burrs in the stem area around the roll pin hole before removing the valve stem P/N 7553S-1 from the bonnet P/N 7553-5). Replace the "O" ring stem seal with a new Rego "O" ring P/N 1421-7. Lubricate the new "O" ring with a suitable lubricant before reassembly.
2. Check the torque of the valve seat retaining screw to 10 in-lbs. If it turns, the screw must be removed and reinstalled using MIL-S 22473 high strength thread locking compound or equivalent.

**CAUTION:** Do not permit the thread locking compound to adhere to the valve rubber seating surface.

3. Reinstall valve actuating lever on the valve body with roll pin 7553S-8. Install a number six machine screw and stop nut or a 3/32-inch stainless steel cotter pin through the hole in the roll pin holding the actuating handle to the valve body and secure.

**Compliance:** Before further flight unless previously accomplished within one year prior to the effective date of this AD, thereafter at intervals not to exceed 12 months or 100 hours TIS whichever occurs earlier.

**Effective Date:** 11 April 1975

**DCA/BAL/2 Triangular Rip Panels - Velcro Replacement**

**Applicability:** All Balloons with velcro closed triangular rip panels.

**Requirement:** Due to gradual deterioration, velcro fasteners are to be replaced.

**Compliance:** At intervals not exceeding 100 hours TIS.

**Effective Date:** 31 January 1978

**DCA/BAL/3 Ripping Panel - Modification**

**Applicability:** All Cameron and Thunder Balloons with velcro fastened panel.

**Requirement:** To prevent inadvertent complete opening of velcro fastened panel, accomplish the following:-

Cameron Balloons with triangular panel - embody.  
Cameron Balloons Ltd, Mod. No. 25.  
Cameron Balloons with circular panel - embody.  
Cameron Balloons Ltd, Mod. No. 26 or 27.  
Thunder Balloons with circular panel - embody.  
Thunder Balloons Ltd, Mod. No. 2/22.

**Compliance:** By 31 July 1978

**Effective Date:** 31 January 1978



**DCA/BAL/4     Deflation Panel - Inspection, Modification and Test**

**Applicability:** All Piccard Model AX-6 series balloons.

**Requirement:** Inspect, modify, and test deflation panel per FAA AD 81-09-02. Defective fastener tapes must be repaired per General Balloon Corporation S.L. 7 before further flight.

**Compliance:** Inspection - Prior to each flight.

Modification - Prior to next inflation unless already accomplished.

Test - At intervals not exceeding 100 hours TIS.

**Effective Date:** 23 October 1981

**DCA/BAL/5     Deflation Panel - Inspection and Test**

**Applicability:** All Raven Industries Model S-50A Balloons

**Requirement:** Inspect and test deflation panel per FAA AD 81-21-02. Fastener tape found defective when inspected must be tested or renewed as prescribed in Raven SB 112, before further flight.

**Compliance:** Inspection - Prior to each flight.

Test - At intervals not exceeding 100 hours TIS.

**Effective Date:** 23 October 1981

**DCA/BAL/6     Burner Installation - Modification**

**Applicability:** All Piccard model AX-6 series balloons

**Requirement:** Accomplish the following per General Balloon Corporation S.L. 8:

Incorporate P/N PSP705 quick shut-off valve at fuel tank and shut-off valve P/N PSP706 on pilot light system. Also blast valve handle P/N PSP608 and return spring P/N PSP607 in place of existing blast valve handle assembly.

(FAA AD 82-13-02 refers)

**Compliance:** By 28 February 1983

**Effective Date:** 19 November 1982

**DCA/BAL/7     Burner Installation - Modification**

**Applicability:** All Piccard model AX-6 series balloons

**Requirement:** To reduce time for pilot light extinguishment after shut-off and prevent damage to main fuel systems modified per General Balloon Corporation S.L.8, modify per Don Piccard Balloons Inc. SLs 9 and 10.

(FAA AD 83-15-03 refers)

**Compliance:** By 31 March 1984

**Effective Date:** 16 December 1983

**DCA/BAL/8 Fuel Supply Hose - Removal**

**Applicability:** All Raven (Aerostar) model S-50A balloons

**Requirement:** To preclude propane fuel leakage which could result in uncontained fire in balloon basket, accomplish the following:

1. Visually inspect all fuel supply hose assemblies in balloon and determine whether any are identified by part number code 'FC321-06' followed by date of manufacture code '3Q84' or '4Q84'.
2. Prior to further use, remove all hose assemblies with marking specified in para 1 or which do not contain markings specifically identifying the date of manufacture, and replace with airworthy parts.
3. Balloons not containing hose assemblies specified in paras 1 or 2 may be returned to service.  
(FAA AD 86-10-11 refers)

**Compliance:** Before further flight.

**Effective Date:** 28 June 1986

**DCA/BAL/9 Envelope - Inspection**

**Applicability:** Thunder and Colt hot-air airships

**Requirement:** To prevent failure of the envelope caused by operation of the airship envelope at temperatures and pressures higher than the flight manual limitations, accomplish the following:

1. Visually inspect the top of the airship envelope per Thunder and Colt hot-air Airship SB 3, part A. If either discoloration or easy stretching are observed, perform a grab test per the SB. Repair per the SB before further flight.
2. Modify the envelope pressure gauge per Thunder and Colt hot-air airship SB 3, Part B.  
(UK CAA AD 004-10-92 refers)

**Compliance:** 1. Visually inspect before next flight. Perform grab test within next 10 hours TIS or at next annual inspection whichever is the sooner.  
2. Modify within next 10 hours TIS or at next annual inspection whichever is the sooner.

**Effective Date:** 15 October 1992

**DCA/BAL/10 Fuel Hose - Inspection and Replacement**

**Applicability:** Aerostar International balloons detailed in Aerostar SB 132 and fitted with the hoses listed.

**Requirement:** To prevent an uncontained fire in the balloon basket caused by a leaking fuel hose accomplish the following:-

1. Inspect each fuel hose per SB 132. If any sign of fuel leakage is found, prior to further flight replace the entire fuel hose/manifold assembly with an approved assembly per SB 132.
2. Replace the entire fuel hose/manifold assembly.  
(FAA AD 93-16-13 refers)

**Compliance:** 1. Before each flight.  
2. Replace within next 10 hours TIS.

**Effective Date:** 25 August 1993

**DCA/BAL/11 Turning Vents - Inspection**

**Applicability:** Thunder, Colt, and Thunder and Colt balloon envelopes fitted with turning vents and having a constructors number prior to 3550 (all Oswestry built envelopes)

**Requirement:** To ensure that all turning vents have adequate reinforcement at the upper and lower ends, accomplish the following:-

Inspect balloon envelope per Cameron Balloons (Thunder and Colt) SB2 Issue 1, Revision C. If the reinforcing tapes do not conform to the diagrams shown in the bulletin, then additional tapes must be fitted per SB2 Issue 1, Revision C within the next 20 hours TIS.  
(UK CAA AD 001-07-96 refers)

**Compliance:** Within next 10 hours TIS.

**Effective Date:** 27 September 1996

**DCA/BAL/12 Propane Cylinder Pressure Relief Valves – Inspection and Renewal**

**Applicability:** All fuel cylinders supplied for flight by Cameron Balloons Ltd, Thunder & Colt and Thunder & Colt Ltd.

**Requirement:** To prevent failure of the pressure relief valve, accomplish the following:-

1. Inspect pressure relief valves per Cameron Balloons (Thunder & Colt) SB 4. Replace valves if necessary before further flight per SB 4.
2. Renew the pressure relief valve per SB 4.  
(UK CAA AD 002-11-98 refers)

**Compliance:** 1. Inspect within next 12 months and thereafter at intervals not to exceed 12 months.  
2. At 10 years from the date stamped on the upper face of the valve.

**Effective Date:** 12 February 1999

**DCA/BAL/13 Burner Frame Cross Bar Welds – Inspection**

**Applicability:** Cameron Balloons Ltd (Thunder & Colt) triple burner frame. (Post Mod C252/T176)

**Requirement:** To prevent failure of the burner frame cross bar, accomplish the following:-

1. Inspect per Cameron Balloons (Thunder & Colt) SB 7. If cracking is found, the burner frame must be replaced before further flight.
2. Modify the burner frame per instructions from Cameron Balloons Ltd.  
(UK CAA AD 002-11-98 refers)

**Compliance:** 1. Before every flight.

This inspection may be accomplished by pilot subject to:

- (a) Adequate instruction by LAME responsible for the aircraft.
- (b) Certificate of Release to Service endorsed to refer to inspection requirement.
- (c) Copy of SB 7 to be attached to the Certificate of Release to Service.

2. Within next 30 hours TIS or 3 months, whichever is the sooner.

**Effective Date:** 12 February 1999

**DCA/BAL/14 Titanium Propane Cylinders – Removal from Service**

**Applicability:** Cameron Balloons Ltd (Thunder and Colt) titanium propane cylinders, P/N CB2380, S/Ns up to and including BT0143, and P/N CB2383, S/Ns up to and including BT0076.

**Requirement:** To prevent titanium propane cylinders from cracking and releasing propane gas vapour while the balloon is in service, which could result in a propane explosion and fire, accomplish the following:-

1. Remove from service titanium propane cylinders listed in the applicability of this AD and replace with an approved airworthy propane cylinder.
2. Titanium propane cylinders listed in the applicability of this AD must not be fitted to any balloon.

(UK CAA AD 001-01-2000 refers)

**Compliance:** 1. By 9 March 2000.  
2. From 2 March 2000

**Effective Date:** 2 March 2000

**DCA/BAL/15 Main Blast, Liquid Fire and Pilot Light Valve Stems – Replacement**

**Applicability:** Cameron Balloons Ltd (Sky Balloons) Mk 1 and Mk 2 (Mistral) burner fitted with 3 valve stems per valve block, S/N 001 through 098, 100 and 101. (The S/N is engraved on the mounting bracket between the cans of the burner unit)

**Requirement:** To prevent external fuel leak from the underside of the burner unit during flight, accomplish Cameron Balloons Ltd (Sky Balloons) SB 10.

(UK CAA AD 003-05-2000 refers)

**Compliance:** Within next 20 hours TIS or by 29 June 2001, whichever is the sooner.

**Effective Date:** 29 June 2000

**DCA/BAL/16A Cancelled – DCA/BAL/22 refers**

**Effective Date:** 28 January 2008

**DCA/BAL/17 Triple and Quad Burner Support - Inspection**

**Applicability:** All Cameron Shadow/Shadow Stealth – Triple, Quad and Stratus Triple, Quad gimbaled burner assemblies installed on but not limited to Cameron balloons Ltd A,N,O,Z Thunder S1, S2, and Colt A series hot air balloons.

**Requirement:** Inspect the burner support plate and mounting tube in accordance with Cameron Balloons Ltd Service Bulletin No 13 issue A. Any cracked or damaged items must be replaced with serviceable items before further flight.

(UK CAA AD G-2004-0026 refers)

**Compliance:** Before further flight.

**Effective Date:** 25 November 2004

**DCA/BAL/18 Cameron Solid Floor Basket - Inspection**

**Applicability:** All solid floor baskets manufactured by Cameron Balloons Limited, Thunder Balloons Ltd, Colt Balloons Ltd, Thunder and Colt Ltd and Sky Balloons Ltd.

**Requirement:** The manufacturer has identified several occurrences of damaged basket suspension wires on the underside of solid floor baskets. It is thought that damage to the basket occurs as a result of inappropriate handling when loading and unloading the basket from a vehicle or trailer. To identify and rectify damaged suspension wires and prevent failure of one or more wires that may result in the basket tipping and causing injury to its occupants, accomplish the following:

1. Revise the CAA approved Flight Manual for any balloon fitted with a Cameron solid floor basket by incorporating the following text into the Normal Procedures section of the FM.

**ADDITIONAL FLIGHT MANUAL INFORMATION (Section 4 – Normal Procedures)****Pre-Flight Check of Basket Suspension Wires**

**Solid floor baskets must have no damage to the rawhide wire protectors sufficient to expose the suspension wires. Check also for wire damage where the wires are visible between the protectors and the skids. Any such damage must be inspected by a qualified inspector and repaired, if necessary, before flight in accordance with Cameron Balloons Maintenance Manual section 6.16.4.**

**Note 1:** This may be accomplished by inserting a copy of this AD into the AFM.

**Note 2:** Balloons for which Issue 9 amendment 1 of Cameron Balloons Flight Manual is applicable, may use the manual as an acceptable means of compliance with paragraph 1 of this AD.

2. Inspect the basket suspension wires and rawhide protectors in accordance with Cameron Balloons Service Bulletin No 12 revision 0 or later EASA approved revision. If any damage in excess of that permitted by Cameron Balloons Maintenance Manual Issue 9 Section 6.16.4 or later EASA approved revision must be repaired in accordance manufacturers approved data before further flight.

**Note 3:** The action required by Paragraph 1 of this AD may be carried out by an owner/operator holding at least a private pilot's license. An entry must be made in the balloon's records showing compliance with this AD.  
(UK CAA AD G-2004-0028 refers)

**Compliance:**

1. By 7 December 2004.
2. By 31 December 2004.

**Effective Date:** 25 November 2004

**DCA/BAL/19 Envelope Thermometer - Replacement**

**Applicability:** All Kubicek model BB balloons.

**Requirement:** A precise envelope temperature reading is not possible due to visibility limitations of the graduations on the analogue thermometer.

Replace the envelope thermometer with a manufacturer approved thermometer or a thermometer approved for use on hot air balloons.  
(Czech Republic AD CAA-AD-2-049/98 refers)

**Compliance:** By 28 February 2007, unless already accomplished.

**Effective Date:** 30 November 2006

**DCA/BAL/20 Propane Cylinder Pilot Flame Pressure Reducers - Modification**

- Applicability:** Theo Schroeder fire balloons VA 50- and VA 70- propane cylinders and Worthington cylinders manufactured up until July 2001 fitted with Lorch pilot flame pressure reducers.
- Requirement:** To prevent the gas inlet pipe to the pilot flame pressure reducer breaking due to rough and improper handling of the propane cylinder, modify the pressure reducer per the instructions in Theo Schroeder Technical Note No. 8025-34 dated 17 June 2001. (Czech Republic CAA AD CAA-060/2001 and LBA AD 2001-229 refers)
- Compliance:** By 30 January 2007, unless already accomplished.
- Effective Date:** 30 November 2006

**DCA/BAL/21 Main Flight Burner Valve Seal – Replacement**

- Applicability:** All Kubicek model BB balloons fitted with H3, H3-D, HB1, HB2 and H4 burners.
- Requirement:** To prevent excessive wear of the valve sealing face causing the valve to leak, possibly due to inferior seal face quality, replace the seals per the instruction in Kubicek Balloons Mandatory Bulletin No. BB/23a, AB015a, dated 26 November 2002. (Czech Republic CAA AD CAA-T-111/2002 refers)
- Compliance:** Before further flight, unless already accomplished.
- Effective Date:** 30 November 2006

**DCA/BAL/22 Lindstrand 3/8" Fuel Hoses – Inspection**

- Applicability:** All Lindstrand balloons fitted with 3/8" bore hoses supplied by Lindstrand between 6 September 1998 and 5 September 2001 which have been manufactured by Flexquip Ltd as identified in Lindstrand Hot Air Balloons (LHAB) Service Bulletin (SB) No. 11.
- Note 1:** Since the issue of LHAB SB No. 7 and SB No. 8 there have been further hose failures. This AD supersedes DCA/BAL/16A.
- Requirement:** To prevent the escape of liquid propane through small flaws in the hose material, accomplish the following:
1. Inspect the balloon burners and establish whether any affected hoses are fitted as identified in LHAB SB No.11. Inspect and test affected hoses per the instructions in LHAB SB No.11. Replace defective hoses before further flight.
  2. Inspect and test affected hoses per the instructions in LHAB SB No.11. Replace defective hoses before further flight.
  3. Replace all affected hoses per the instructions in LHAB SB No.11.
- Note 2:** Affected hoses removed from service shall not be fitted to any aircraft.
- Note 3:** The accomplishment of requirement 3 is a terminating action to the requirements of this AD.  
(UK CAA AD G-2008-0001 refers)
- Compliance:**
1. Before further flight.
  2. Within the next 10 hours TIS and thereafter at intervals not to exceed 10 hours TIS until requirement 3 is accomplished.
  3. At the next annual inspection.
- Effective Date:** 28 January 2008

**DCA/BAL/23 Gas Cylinder Self-Seal Inlet Valves – Inspection & Replacement**

- Applicability:** All gas cylinders supplied by Cameron Balloons Ltd fitted with CB-0824-0001 Rego Type cylinder liquid valves which have a date stamp between December 2005 and August 2006.
- Requirement:** To prevent a partial or complete blockage of the burner supply due to a defective inlet self seal valve which could result in an uncontrolled descent, inspect gas cylinders to identify whether an affected cylinder liquid valve is fitted per the instructions in Cameron Balloons Ltd. (CBL) Service Bulletin (SB) No. 17.  
For single cylinder balloons replace affected cylinder liquid valves per CBL SB No. 16 and 17, before further flight.  
For multi cylinder hopper balloons modify all affected cylinder liquid valves per CBL SB No. 16 and 17 before further flight.  
For other multi cylinder balloons affected liquid valves may remain in service.
- Note:** The CAA and the manufacturer recommend that affected self-seal cylinder liquid valves on all multi cylinder balloons are replaced per the instructions in CBL SB No. 16.  
 (UK CAA AD G-2008-0002 refers)
- Compliance:** Before further flight.
- Effective Date:** 15 February 2008

**DCA/BAL/24A Hose Connectors - Inspection and Rework**

- Applicability:** All balloons fitted with connector P/N HS6139 (3/8" BSPP back nut) or P/N HS6144 (1/4"NPT back nut) with a S/N listed in Table 1 of EASA AD 2012-0142R1.  
 All balloons fitted with burners and manifolds with a S/N listed in Table 1 of EASA AD 2012-0142R1.  
 This type of equipment is known to be installed on, but not limited to balloons manufactured by 114 (714) ZO Svazarmu, Aviatik klub, Aerotechnik p.o.s., Aerotechnik s.r.o, Aerotechnik podnik ÚV Svazarmu, Altisph'air, Annonay Air Concept, Ballons Libert sprl, Ballons Chaize, Ballonservice & Technik, Balóny Kubíček spol. s.r.o., Cameron Balloons Ltd., Colt Balloons, Firma Johann Schön, Kubíček spol. s r.o., Lindstrand Balloons Ltd. (LBL), Lindstrand Hot Air Balloons Ltd., Llopis Balloons, Pilatre de Rozier S.I.G.A. S.A., Schroeder Fire Balloons GmbH, Sky Balloons, Thunder Balloons, Thunder & Colt, and Ultramagic S.A.
- Note 1:** This AD revised to introduce note 4 and extend the AD compliance.
- Requirement:** To prevent gas leaks due to possible insufficient fastening torque of hose connectors which could be a fire hazard, accomplish the requirements in EASA AD 2012-0142R1.
- Note 2:** Lindstrand Hot Air Balloons Ltd. SB N° 12 dated 10 February 2012 or later approved revisions are acceptable to comply with the requirements of this AD.
- Note 4:** The inspection requirements of this AD may be accomplished by adding the inspection requirement to the tech log. The visual inspection 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.  
 (EASA AD 2012-0142R1 refers)
- Compliance:** At the compliance times specified in EASA AD 2012-0142R1.
- Effective Date:** DCA/BAL/24 - 30 August 2012  
 DCA/BAL/24A - 27 September 2012

The State of Design ADs listed below are available directly from the National Airworthiness Authority (NAA) websites. Links to NAA websites are available on the CAA website at: [Links to state of design airworthiness directives | aviation.govt.nz](https://aviation.govt.nz/state-of-design-airworthiness-directives)  
 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.

#### **EASA AD 2016-0151 Burner and Fuel Hoses – Inspection**

**Applicability:** All balloon models and types listed in EASA AD 2016-0151 fitted with a Kubiček Burner with fuel hoses made of “EGEFLEX” material.

**Effective Date:** 9 August 2016

#### **FAA AD 2016-17-04R1 Burner and Fuel Hoses – Inspection**

**Applicability:** All balloon models and types fitted with a BALÓNY KUBÍČEK spol. s r.o. Model Kubíček burner and fuel hose(s) made of “EGEFLEX” material.

**Note:** This AD is applicable to FAA Type Certificated hot air balloons fitted with Kubicek fuel hoses made of “EGEFLEX” material.

**Effective Date:** FAA AD 2016-17-04 - 29 August 2016  
 FAA AD 2016-17-04R1 - 6 September 2016

#### **EASA AD 2018-0107 (Correction) Lindstrand T30 Propane Cylinders – Removal from Service**

**Applicability:** All balloon models and types listed in EASA AD 2018-0107 (Correction: 22 May 2018).

**Note:** EASA AD 2018-0107 was issued by EASA on 15 May 2018, and then corrected by EASA on 22 May 2018.

**Effective Date:** 31 May 2018

#### **EASA AD 2018-0181 Envelope Vertical Load Tapes – Inspection**

**Applicability:** Balóny Kubíček BB balloons, S/N 1292, 1331, 1360, 1364 and 1397.

**Effective Date:** 3 September 2018

#### **EASA AD 2019-0245 Schroeder Burners – Inspection**

**Applicability:** All balloon types and models listed in EASA AD 2019-0245 fitted with Schroeder Fire Balloons FB6 burners, all S/N and FB7 burners, all S/N,

Except those burners that have a screw on the side of the valve identified in accordance with the instructions in Schroeder Fire Balloons Technical Note (TN) No. EASA.BA.016-62, and

Except those burners that have been corrected and marked in accordance with the instructions in Schroeder Fire Balloons Technical Note (TN) No. EASA.BA.016-62.

**Effective Date:** 24 October 2019



**EASA AD 2021-0042 Burner Assembly and Hanger – Inspection**

**Applicability:** All balloon types and models fitted with Stratus double burner hangers P/N CB8504, issues A to C inclusive.

Affected hangers are part of Stratus double burner assemblies P/N CB8720 or P/N CB8721. These double burner assemblies use a doubler plate to reinforce the central part of the hanger bracket, as shown on figure 2 of Cameron Balloons SB 28.

**Note:** Cameron Balloons SB 28 original issue dated 15 January 2020, or Revision 1 dated 24 February 2020, or Revision 2 dated 04 March 2020, or later approved revision pertains to the subject of this AD.

**Effective Date:** 12 February 2021

**UK CAA AD G-2021-0010-E Cancelled - UK CAA AD G-2021-0014-E refers**

**Effective Date:** 4 November 2021

**UK CAA AD G-2021-0012 Burner Assembly and Hanger – Inspection**

**Applicability:** All balloon types and models, all S/N as listed in Type Certificate Data Sheets (TCDS) UK TC BA.00001, UK TC BA.00002, UK TC BA.00003, UK TC BA.00006 and EASA BA.028 and EASA BA.030.

Affected balloons are those balloons manufactured by Cameron Balloons Ltd, Colt Balloons, Lindstrand Balloons Ltd., Lindstrand Hot Air Balloons Ltd, Sky Balloons, Thunder Balloons, Thunder & Colt Balloons, Lindstrand Technologies Ltd. listed in the aforementioned Type Certificate Data Sheets (TCDS).

**Effective Date:** 3 November 2021

**UK CAA AD G-2021-0014R1-E Cylinder Quick Shut-off Valve Mounting Flange – Inspection**

**Applicability:** Fuel cylinders Part No (P/N) CB2901, P/N CB2902 and P/N CB2903, having a serial number (s/n) as listed in **Appendix 1** of this AD, where the cylinder is equipped with a QSO valve (incorporating flanged adaptor P/N CB437 Issue F), and all P/N CB2901, P/N CB2902 and P/N CB2903 cylinders having a s/n not listed in Appendix 1 of this AD that have been fitted with a flanged adaptor P/N CB437 Issue F and released as spare parts under Invoice and Form 1 Numbers as listed in **Appendix 2** of this AD.

Stainless Steel cylinders CB426, CB497, CB599, CB959, CB2088, V20, V30, V40; Titanium cylinders CB2380, CB2383, CB2385, CB2387, T30 (CY-050-A-001) and “Worthington” Aluminium cylinders CB250, may also be affected if fitted with CB437 flanged adaptors supplied on invoice and Form 1 numbers listed in **Appendix 2** of this AD.

These fuel cylinders are known to be installed on, but not limited to, hot air balloons and airships manufactured by Cameron Balloons Ltd, Colt Balloons, Lindstrand Balloons Ltd (LBL), Lindstrand Hot Air Balloons Ltd, Sky Balloons, Thunder Balloons, Thunder & Colt, and Lindstrand Technologies Ltd.

**Note:** Since the issue of AD G-2021-0014-E additional information pertaining to the means of visual identification of the affected parts has been released by Cameron Balloons Ltd. It was also determined that the replacement part specified in the previous EADs, P/N CB437 ‘Issue G’ did not go into production and instead ‘Issue H’ was produced.

UK CAA AD G-2021-0014R1-E is revised to include additional information in the applicability, the inclusion of photos (figures 2, 3 and 4) and to reference the correct replacement P/N (an updated drawing issue). This revised AD also introduces editorial changes not affecting the requirements.

**Effective Date:** UK CAA AD 2021-0014-E - 4 November 2021  
UK CAA AD 2021-0014R1-E - 14 December 2021

**UK CAA AD G-2022-0010-E    Cancelled – UK CAA AD G-2023-0005-E refers****Effective Date:** 2 August 2023**UK CAA AD G-2023-0005-E    Fuel Cylinders – Inspection****Applicability:** Cameron fuel cylinders P/N CB2990 Issue A (Alugas) with S/N OC25001 to OC25202, and QI14001 to QI14496.**Note 1:** P/N CB2990 Issue B (Alugas) cylinders are not affected by this AD.**Note 2:** Affected fuel cylinders are known to be installed on, but not limited to, hot-air balloons and airships manufactured by Cameron Balloons Ltd, Colt Balloons, Lindstrand Balloons Ltd (LBL), Lindstrand Hot Air Balloons Ltd, Sky Balloons, Thunder Balloons, and Thunder & Colt.**Effective Date:** 2 August 2023**EASA AD 2024-0094    Occupant Restraint Harness – Inspection****Applicability:** Occupant restraint harnesses P/N CI-C-1302.

The affected (Ultramagic) occupant restraint harnesses are known to be installed on, but not limited to, certain Ultramagic hot air balloons.

Affected occupant restraint harnesses may however be eligible for installation on any (hot air) balloon and may have been installed during the balloon manufacturing process (production line), or during an in-service modification, either through using Type Certificate holder approved modification instructions, or a Supplemental Type Certificate (STC), or through a minor modification approval.

**Effective Date:** 30 May 2024**UK CAA AD G-2024-0001-E    Envelopes with Polyester Filled Aramid (Kevlar) Load Tapes – Removal from Service****Applicability:** All Lindstrand Technologies types/models of hot air balloon envelopes with a date of manufacture after March 2017.**Compliance:** Before further flight.**Effective Date:** 2 May 2024**\* UK CAA AD G-2025-0001R1-E Pressure Relief Valves (PRV) Adaptor CB8426 – Inspection****Applicability:** Cylinders fitted with PRV adaptor CB8426 including but not limited to cylinder models listed in UK CAA AD G-2025-0001R1-E.**Compliance:** All affected cylinders whether fitted in a balloon or not, should be inspected immediately, and thereafter before every flight if fitted in a balloon.**Note:** For cylinders fitted in a balloon, the initial inspection for cracks in PRV adaptors must be accomplished by a maintenance engineer.  
The repetitive inspections before every flight, may be accomplished by adding the inspection requirement to the tech log. The visual inspection 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.**Effective Date:** UK CAA AD G-2025-0001-E - 1 April 2025  
UK CAA AD G-2025-0001R1-E - 15 April 2025

# Airworthiness Directive Schedule

## Helicopters

### Kawasaki BK117, BK117 A-3, BK117 A-4, BK117 B-1, BK117 B-2 & BK117 C-1

24 April 2025

- Notes:**
1. This AD schedule is applicable to Kawasaki Heavy Industries Ltd. BK117, BK117 A-3, BK117 A-4, BK117 B-1, BK117 B-2 and BK117 C-1 helicopters manufactured under Japan Civil Aviation Bureau (JCAB) Type Certificate No. 32.
  2. The Japan Civil Aviation Bureau (JCAB) is the National Airworthiness Authority (NAA) responsible for the issue of State of Design Airworthiness Directives (ADs) for these helicopters.  
  
State of Design ADs can be obtained directly from the JCAB website at:  
[http://www.mlit.go.jp/koku/15\\_hf\\_000127.html](http://www.mlit.go.jp/koku/15_hf_000127.html)
  3. The date above indicates the amendment date of this schedule.
  4. New or amended ADs are shown with an asterisk \*.

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The State of Design ADs listed below are available directly from the National Airworthiness Authority (NAA) websites. Links to NAA websites are available on the CAA website at: [Links to state of design airworthiness directives | aviation.govt.nz](https://www.caa.govt.nz/aviation/state-of-design-airworthiness-directives/) 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. .... 13

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**DCA/BK117/1B                      Airworthiness Directive Compliance at Initial C of A Issue**

**Applicability:** Models BK117, BK117 A-3, BK117 A-4, BK117 B-1, BK117 B-2 and BK117 C-1.

**Note 1:** The applicability of this AD revised to include BK 117 A-3 and BK117 C-1 models.

**Requirement:** Compliance with the following Japan Civil Aviation Bureau (JCAB) Airworthiness Directives (as applicable) is required:

TCD-2421-1-85	Cargo Hook - Modification
TCD-2442-1-85	Vne - Restriction
TCD-2449-85	Tail Rotor Pitch Link Length - Inspection
TCD-2589-2-90	T/R Blade Erosion Protection - Inspection
TCD-2615-86	T/R Gearbox Attaching Bolts - Replacement
TCD-2651-1-87	Engine Fire Extinguishing System Check Valve - Inspection
TCD-2789-1-87	Main Rotor Blade Secondary Attachment Bolts - Inspection
TCD-2950-88	Vne - Restriction
TCD-3432-91	Static Discharge & Electrical Bonding - Modification
TCD-3374-91	LG Electrical Bonding - Modification & Fuel Vapour Return Lines – Removal

**Note 2:** Each part of this AD (each individual Japanese AD) shall be certified in the aircraft log book separately.

**Compliance:** Compliance is required with every individual AD before issue of a New Zealand Certificate of Airworthiness, or at the next ARA, whichever is the sooner, unless previously accomplished. Repetitive inspections to be accomplished at intervals not to exceed the times specified in the Japanese Airworthiness Directives.

**Effective Date:** DCA/BK117/1 - 12 May 1995  
DCA/BK117/1A - 26 September 1997  
DCA/BK117/1B - 26 May 2016

**DCA/BK117/2B                      Cancelled – DCA/BK117/18 refers**

**Effective Date:** 27 April 2006

**DCA/BK117/3                      Main Rotor Control Components - Retirement Lives**

**Applicability:** Model BK117 series, all S/N.

**Requirement:** To prevent fatigue failure of Bearing Bracket P/N 105-42123, and Hinged Support P/N 105-42124 and 105-42125 accomplish the following:-  
Change retirement time and re-identify the P/Ns per Kawasaki KSB-117-116.  
(JCAB AD TCD-4164-95 refers)

**Compliance:** By 12 June 1995

**Effective Date:** 12 May 1995

**DCA/BK117/4B Engine Mount Sideward Link - Inspection**

**Applicability** Models BK117, BK117A-3, BK117A-4, BK117B-1 and BK117B-2 that are not fitted with replacement engine mount sideward links per Kawasaki KSB-117-121.

**Requirement:** To prevent failure of the engine mount sideward link, accomplish the following:-

1. For helicopters with less than 1200 hours TTIS:

1.1 At 1200 hours TTIS inspect and replace defective parts per paragraphs 9.(2), 9.(3) and 9.(4) of Kawasaki KSB-117-120A.

1.2 After compliance with paragraph 1.1, repeat the inspection and replace defective parts per paragraphs 9.(2) and 9.(3) of KSB-117-120A at intervals not to exceed 1200 hours TIS until 3600 hours TTIS, and thereafter at intervals not to exceed 600 hours TIS.

2. For helicopters with more than 1200 hours TTIS:

2.1 Within next 50 hours TIS and thereafter at intervals not to exceed 100 hours TIS until next 600 hour inspection, inspect and replace defective parts per paragraphs 9.(1) and 9.(3) of KSB-117-120A.

2.2 At the next 600 hour inspection or at the next engine removal, whichever occurs first, inspect and replace defective parts per paragraphs 9.(2), 9.(3) and 9.(4) of KSB-117-120A.

2.3 After compliance with paragraph 2.2, repeat the inspection and replace defective parts per paragraphs 9.(2) and 9.(3) of KSB-117-120A at intervals not to exceed 1200 hours TIS until 3600 hours TTIS, and thereafter at intervals not to exceed 600 hours TIS.

(JCAB TCD-4358A-98 refers)

**Compliance:** As detailed within the requirement of this AD.

**Effective Date:** DCA/BK117/4A - 21 November 1997  
DCA/BK117/4B - 25 September 1998

**DCA/BK117/5B Cancelled – DCA/BK117/19 refers**

**Effective Date:** 27 April 2006

**DCA/BK117/6 Cancelled - JCAB AD TCD-4655A-2017**

**Effective Date:** 30 November 2017

**DCA/BK117/7 Engine Mount Truss Supports - Inspection**

**Applicability** Models BK117, BK117A-3, BK117A-4, BK117B-1 and BK117B-2.

**Requirement:** To prevent cracks caused by corrosion of the engine mount truss supports, inspect and if necessary replace defective parts per Kawasaki SB KSB-117-127.  
(JCAB TCD-4930-99 refers)

**Compliance:** At 1200 hours TTIS.  
For helicopters that have exceeded 1200 hours TTIS, at the next 600 hour inspection or at the next engine removal, whichever is the sooner.

**Effective Date:** 12 March 1999

**DCA/BK117/8 Tail Rotor Drive Shaft Hanger Bearing Attachment - Inspection**

**Applicability:** Model BK117 series, all S/N.

**Requirement:** To prevent excessive wear of the bearing support bolt holes used to attach the tail rotor drive long shaft hanger bearings, inspect per Kawasaki SB KSB-117-148. If any loose bolts are found, inspect the bearing support bolt holes for wear per KSB-117-148.

If any wear is detected, measure the diameter of the bolt hole and if any is greater than 6.5mm contact the manufacturer for repair instructions.  
(JCAB TCD-4975-99 refers)

**Compliance:** Before further flight

**Effective Date:** 18 March 1999

**DCA/BK117/9A Cancelled – JCAB AD TCD-5126B-2016 refers**

**Effective Date:** 16 March 2016

**DCA/BK117/10 Heating System / ECS – Limitation and Placard**

**Applicability:** Models BK117 B-1 and B-2 with fuel control unit (FCU), P/N 4-301-413-03 installed, except those equipped with FCU having a "T" stamped after the part list number on the FCU's name plate.

**Requirement:** To prevent insufficient one-engine inoperative power due to improper calibration of FCU fuel flow, accomplish the following:-

1. Install placard to prohibit the use of Heating System/ECS per Kawasaki KSB-117-152. The use of Heating System/ECS is prohibited until a cap is installed on the PA vent port of the pressure ratio switch per paragraph 3 of this AD. Revise the limitation section of the flight manual to include the following:

Heating System / ECS

Heating System / ECS operation is prohibited until cap is installed on the PA vent port per Kawasaki KSB-117-152.

The flight manual revision required above, may be accomplished by inserting a copy of this AD.

2. Install the placard to change the maximum operating altitude limitation per KSB-117-152, and revise the limitation section of the flight manual to include the following:

Maximum operating altitude (when AlliedSignal SB LTS101-73-20-0193 is not incorporated); 10,000 ft

The flight manual revision required above may be accomplished by inserting a copy of this AD.

Installation of the FCU which is calibrated per AlliedSignal SB LTS101-73-20-0193 constitutes terminating action of paragraph 2 of this AD.

3. Install a cap on the PA vent port of the pressure ratio switch per KSB-117-152. Installation of the cap constitutes terminating action of paragraph 1 of this AD.  
(JCAB TCD-5097-99 refers)

**Compliance:**

1. By 27 September 1999
2. By 27 September 1999
3. By 11 October 1999

**Effective Date:** 27 August 1999

**DCA/BK117/11A          Engine and Transmission Cowling Access Doors - Modification**

**Applicability:** Model BK117 series, all S/N.

**Requirement:** To prevent the separation of access doors of the engine and transmission cowlings due to incorrect latching and possible damage to the rotor blades, accomplish the following:

Install hooks in the transmission and engine cowling access doors and install hook retainers on the transmission/engine deck per Kawasaki KSB-117-154.  
(JCAB TCD-5190-99 refers)

**Compliance:** By 30 April 2001

**Effective Date:** DCA/BK117/11 - 24 February 2000  
DCA/BK117/11A - 21 December 2000

**DCA/BK117/12          Tail Boom - Modification**

**Applicability:** Model BK117 series, S/Ns up to 1058.

**Requirement:** To prevent cracking of the tail boom skin, install doublers P/N 117-30106.15.

**Compliance:** By 30 November 2002

**Effective Date:** 30 May 2002

**DCA/BK117/13          Tail Rotor Transmission and Intermediate Gearbox - Bearing Replacement**

**Applicability:** BK117 A-1 to C-1 equipped;  
with tail rotor transmission P/N 4639003001 or 4639003007, S/N 900 to 932 inclusive,  
or intermediate gearbox P/N 4639002001 or 6639002005 S/N 902 to 928 inclusive,  
or any tail rotor transmission or gearbox of the above P/N that has been overhauled  
or repaired since 16 July 2001.  
Any bearings P/N 4639310006 S/N 3426 to 3598 inclusive held as spares.

**Requirement:** To prevent production related cracking of the bearing cage cover from causing pieces of the cage to separate and enter the gearbox, accomplish the following:

1. Inspect the magnetic plug of affected transmissions for signs of bearing failure.
2. Inspect transmission to determine if one of the faulty bearings is fitted. If fitted with one of the faulty bearings, replace the bearing or transmission with an item known to be unaffected.  
(German LBA AD 2003-161 refers)

**Compliance:** 1. Before next flight  
2. Before 30 Sept 2003

**Effective Date:** 29 May 2003



**DCA/BK117/14                    Airwork Hoist – Inspection**

**Applicability:** Model BK117 series fitted with Airwork hoist modification ARD/721, ARD/741, ARD/752, ARD/977, ARD/999.STC or STC.AW.0003.

**Requirement:** To prevent uncommanded activation of the hoist pyrotechnic cable cutter, accomplish the following:

1. Check that the correct guard P/N MS25224-X is fitted to the CABLE CUT switch per Airwork SB AW.0001 Issue 1. If the incorrect guard is found fitted, replace the guard per SB AW.0001 Issue 1, before further operation of the hoist.
2. Replace the 2-position switch with a momentary action switch P/N MS24523-26 or MS24524-26, and fit guard P/N MS25224-3 per SB AW.0001 Issue 1.

**Compliance:** 1. Before next hoist operation.  
2. Within next 100 hours TIS.

**Effective Date:** 26 August 2004

**DCA/BK117/15                    Winch - Emergency Procedures**

**Applicability:** BK117 Series, except BK117 C-2 series, that are equipped with Kawasaki rescue winch system P/N 117-83500-01.

**Requirement:** To prevent uncontrolled raising or lowering of the rescue winch cable, accomplish the following:-

1. Insert a copy of either Appendix I or II of Japanese AD TCD-6482-1-2004 as applicable into the emergency procedures section of the flight manual supplement No.10-16, Rescue Winch System.
2. Modify the winch power supply system per Kawasaki KSB-117-235 and remove the copy of Appendix I or II of Japanese AD TCD-6482-1-2004 required by part 1 of this AD.  
(JCAB AD TCD-6482-1-2004 refers)

**Note:** This AD was initially mailed to BK117 owners on 29 August 2004 and incorrectly numbered as DCA/BK117/14. AD DCA/BK117/14 is in fact applicable to BK117 helicopters fitted with the Airwork Hoist.

**Compliance:** 1. By 31 October 2004  
2. By 31 March 2005

**Effective Date:** 30 September 2004

**DCA/BK117/16                      Main Rotor Blades Life Limit – Inspection**

**Applicability:** Model BK117 A-1 through C-1.

**Requirement:** To prevent the blade trailing edge cracking resulting in severe vibrations, accomplish the following:

1. Inspect the main rotor blades per ASB-MBB-BK117-10-125 and the aircraft log book. If a main rotor blade with bolted lead inner weights is detected by the visual inspection, or by an entry in the aircraft log book, the flight hours flown since the bolting of the lead inner weights must be determined and entered in the aircraft log book. If the visual inspection finds no sign of a main rotor blade with bolted lead inner weights and if no corresponding entry in the log card can be found, it must be assumed that the aircraft is fitted with blades which do not have bolted lead inner weights. Make an entry in the log book.
2. If a main rotor blade with lead inner weights is fitted to the aircraft, replace per ASB-MBB-BK117-10-125.  
(LBA AD D-2005-115 and JCAB AD TCD-6590-2005 refers)

**Compliance:**

1. By 31 May 2005.
2. At 2500 hours TTIS or within 200 hours TIS for aircraft with up to 3000 hours TTIS. Within 50 hours TIS for aircraft with more than 3200 TTIS.

**Effective Date:** 28 April 2005

**DCA/BK117/17                      External Loudspeaker for Ground Personnel - Modification**

**Applicability:** Model BK117 C-2 aircraft fitted with an external loudspeaker P/Ns B853K1801-051, B853K1801-053 or B853K1801-055.

**Requirement:** To prevent the loudspeaker from separating from the aircraft due to the support bracket being cracked, accomplish the following:

1. Inspect the external loudspeaker bracket for cracks per Kawasaki Service Bulletin No. KSB-117-254. If cracked replace per SB KSB-117-254 before further flight.
2. Replace the external loudspeaker bracket per SB KSB-117-254.  
(JCAB AD TCD-6771-2006 refers)

**Note:** Replacement of the external loudspeaker bracket per SB KSB-117-254 is a terminating action to the requirements of the AD.

**Compliance:**

1. At every pre-flight check.
2. Within the next 300 hours TIS.

**Effective Date:** 23 February 2006

**DCA/BK117/18A                      Cancelled – JCAB AD TCD-4114A-1-2008 refers**

**Effective Date:** 30 June 2016

**DCA/BK117/19 Tail Boom Vertical Fin – Inspection**

**Applicability:** Model BK117, BK117A-3, BK117A-4, BK117B-1, BK117B-2 and BK117C-1 aircraft, all S/Ns.

**Requirement:** To prevent failure of the vertical fin and subsequent loss of control of the aircraft, remove the vertical fin fairings and inspect the fairings, the camloc fasteners, the attachment angle brackets at the aft portion of the vertical fin, the tail rotor transmission fittings in the vertical fin and the end plates for cracks and other damage.

Accomplish inspections per Kawasaki Service Bulletin KSB-117-129C, dated 27 January 2006 and per the instructions in chapter 31, paragraph 31-2, steps 5 to 7 of KHI-BK117 Maintenance Manual (with at least revision number 14 incorporated), or the KHI-BK117C-1 Maintenance Manual (with at least revision 2 incorporated), as applicable.

If the inspection results exceed the allowable limits specified in the respective KHI-BK117 Maintenance Manual, contact the KHI Customer Service for further technical advice, before further flight.  
(JCAB TCD-4605B-2006 refers)

**Compliance:** Within 300 hours TIS, unless already accomplished, and thereafter at intervals not to exceed 300 hours TIS.

**Effective Date:** 27 April 2006

**DCA/BK117/20 Cancelled – JCAB AD TCD-6850A-2013 refers**

**Effective Date:** 6 August 2013

**DCA/BK117/21A Cancelled by JCAB AD TCD-6982A-2021**

**Note:** JCAB AD TCD-6982-2006 was adopted with the issue of AD DCA/BK117/21A.

DCA/BK117/21A (JCAB AD TCD-6982-2006 dated 15 September 2006 refers) is cancelled by JCAB AD TCD-6982A-2021 with effective date 13 April 2021.

Cancelled JCAB AD TCD-6982-2006 mandated the replacement of certain P/N flight control system parts, which the JCAB considers accomplished. The purpose of DCA/BK117/21A (JCAB AD TCD-6982-2006 refers) is now fulfilled.

**Effective Date:** 13 April 2021

**DCA/BK117/22 Tail Rotor Transmission Attachment Nuts - Inspection**

**Applicability:** Model BK117 series, all S/N.

**Requirement:** To prevent loss of control of aircraft due to failure of attachment nuts of the tail rotor transmission, accomplish the following.

- 1 Inspect for cracks on the attachment nuts of the tail rotor transmission in accordance with Kawasaki Service Bulletin No.KSB-117-291. If cracks are found, replace all attachment nuts with a set of new nuts.
- 2 If nuts are replaced with new nuts in accordance with part 1, inspect the new nuts for cracks after installation. If any cracks are found, replace all attachment nuts with a set of new nuts, and repeat the inspection per part 1.  
(JCAB AD TCD-7195-2007 refers)

**Compliance:**

1. Before further flight unless already accomplished.
2. Before further flight after accomplishment of part 1.

**Effective Date:** 20 December 2007

**DCA/BK117/23A Tail Rotor Balance Weights and Control Levers – Inspection**

**Applicability:** Model BK117 series aircraft, all S/N.

**Note 1:** The repetitive inspection interval for DCA/BK117/23A revised from 48 months to every 30 months to align with JCAB AD TCD-7416-2009 with no change to the AD requirement.

**Requirement:** To prevent failure of the tail rotor balance weights due to possible corrosion of the control lever threads which could result in loss of aircraft control, inspect the tail rotor balance weights and control levers per Kawasaki MSB KSB-117-297 dated 28 November 2008 or later JCAB approved revisions. If any damage is found which exceeds the acceptable limits specified in MSB KSB-117-297, replace the damaged parts before further flight.

**Note 2:** The replacement of parts is not a terminating action to the repetitive inspection requirements of this AD.  
(JCAB AD TCD-7416-2009 refers)

**Compliance:** Within the next 100 hours TIS or by 26 July 2014, whichever is the sooner, unless previously accomplished, and thereafter at intervals not to exceed 600 hours TIS or 30 months, whichever is the sooner.

**Effective Date:** DCA/BK117/23 - 29 January 2009  
DCA/BK117/23A - 26 June 2014

**DCA/BK117/24A Cyclic Stick Lock – Modification and AFM Amendment**

**Applicability:** Model BK117, BK117A-3, BK117A-4, BK117B-1, BK117-B-2 and BK117C-1 aircraft, all S/N.

**Note 1:** This AD revised to amend note 2. Kawasaki Helicopter Industries have issued an AFM amendment to satisfy requirement 2 of this AD.

**Requirement:** To prevent an unintended take-off with a locked cyclic stick which could result in loss of aircraft control, accomplish the following:

1. Modify the cyclic stick neutral holder per Kawasaki SB No. KSB-117-302 dated 6 April 2009 or later JCAB approved revisions.

2. Amend the AFM by inserting the following text into the normal procedures section:

“Before starting the engines, the cyclic stick must be moved to its neutral position. The centering of the cyclic stick can be achieved by positioning the cyclic pin into the neutral holder hole. Locking of the cyclic stick is no longer possible.”

**Note 2:** Kawasaki Heavy Industry (KHI) have issued AFM amendment revision 16, dated 24 March 2009 to satisfy requirement 2 of this AD.  
(JCAB AD TCD-7479-2009 refers)

**Compliance:** 1. & 2. By 5 November 2009.

**Effective Date:** DCA/BK117/24 - 5 May 2009  
DCA/BK117/24A - 30 July 2009

**DCA/BK117/25 Cancelled – Purpose Fulfilled**

**Effective Date:** 8 December 2011

**DCA/BK117/26 Cancelled – Purpose Fulfilled**

**Effective Date:** 8 December 2011

**DCA/BK117/27                    Exterior Door Handles – Inspection**

**Applicability:** Model BK117, BK117 A-3, BK117 A-4, BK117 B-1, BK117 B-2 and BK117 C-1 aircraft, all S/N.

**Requirement:** To prevent loss of the exterior door handles due to possible incorrect installation of the snap ring, accomplish the following:

1. Inspect the exterior door handles and determine that the handles are secure and cannot detach from the door. If a defective door handle is found, accomplish requirement 2 before further flight.
2. Inspect the snap ring on the door handles per the instructions in Kawasaki SB No. KSB-117-339 dated 4 August 2011 or later JCAB approved revisions.

If the inside edge of the snap ring is visible, or if the snap ring comes off, contact the manufacturer for further instructions and accomplish corrective actions before further flight.

**Note 1:** Requirement 1 of this AD may be accomplished by adding the inspection requirement to the tech log. The inspection 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 2:** The repetitive inspection mandated by requirement 1 of this AD may be terminated once requirement 2 has been accomplished.  
(JCAB AD TCD-7916-2011 refers)

**Compliance:**

1. Before every flight.
2. Within the next 50 hours TIS or by 25 October 2011, whichever occurs sooner.

**Effective Date:** 25 August 2011

**DCA/BK117/28                    Tail Rotor Head – Inspection**

**Applicability:** Model BK117 series helicopters, all S/N.

**Requirement:** To detect excess wear in the tail rotor head attachment bolt and nut accomplish the following:

Inspect the tail rotor flap hinge per the instructions in Kawasaki Service Bulletin No. KSB-117-346 dated 10 April 2012 or later JCAB approved revisions.

If any defects are found accomplish a detailed inspection of the close tolerance attachment bolt and nut per the instructions in Kawasaki SB No. KSB-117-346.

If cracks, deformation, mechanical damage or wear is found in the attach bolt which exceeds the allowable limits specified in Kawasaki SB No. KSB-117-346, repair or replace the bolt per the instructions in the SB before further flight.

If the attach bolt nut is found damaged or worn, replace with a new nut per the instructions in Kawasaki SB No. KSB-117-346 before further flight.

(JCAB AD TCD-8021-2012 refers)

**Compliance:** Before further flight and thereafter at intervals not to exceed 100 hours TIS.

**Effective Date:** 21 April 2012

**DCA/BK117/29                      Tail Rotor Pitch Links – Inspection**

**Applicability:** Model Kawasaki BK117, BK117A-3, BK117A-4, BK117B-1, BK117B-2 and BK117C-1 helicopters, all S/N.

Model BK117C-2 helicopters, S/N 4001 through 4021, 4023 and 4024.

**Requirement:** To prevent failure of the tail rotor pitch links due to possible spherical bearing migration out of the bearing bore which could result in loss of aircraft control, accomplish the requirements in JCAB AD TCD-8022-2012.

**Note:** Kawasaki SB No.KSB-117-345 dated 29 March 2012 or later approved revisions of this document pertains to the subject of this AD.  
(JCAB AD TCD-8022-2012 refers)

**Compliance:** Before further flight.

**Effective Date:** 9 August 2012

**DCA/BK117/30                      Cartridges and Pressure Bottles – Airworthiness Limitations**

**Applicability:** Model Kawasaki BK117, BK117A-3, BK117A-4, BK117B-1, BK117B-2 and BK117C-1 helicopters, all S/N.

**Requirement:** To prevent failure of the cartridge of the fire extinguishing bottle of the engine, the pressure bottle of the emergency float system, and the cable cutter cartridge of the rescue winch system and the gimbal assemblies of the searchlight due to possible non-compliance with the Airworthiness Limitations specified in the applicable Kawasaki BK117 Maintenance Manual, accomplish the requirements in JCAB AD TCD-8098-2012.

**Note:** Kawasaki BK117 Maintenance Manual Approved Pages, revision 26, dated 27 August 2012, and Kawasaki BK117C Maintenance Manual Approved Pages, revision 14 dated 27 August 2012 and later JCAB approved revisions pertain to this subject of this AD.  
(JCAB AD TCD-8098-2012 refers)

**Compliance:** Before further flight.

**Effective date:** 5 September 2012

The State of Design ADs listed below are available directly from the National Airworthiness Authority (NAA) websites. Links to NAA websites are available on the CAA website at: [Links to state of design airworthiness directives | aviation.govt.nz](#)  
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.

**TCD-6850A-2013            Cancelled – JCAB AD TCD-6850B-2015 refers**

**Effective Date:** 28 May 2015

**TCD-8201C-2-2022            Goodrich Rescue Hoists – Inspection**

**Applicability:** BK117 series helicopters fitted with a Goodrich rescue hoist assembly with a P/N listed in Table 2.1 of JCAB AD TCD-8201C-2-2022.

**Note:** TCD-8201C-2-2022 revised to clarify the determination of a serviceable hoist.

**Effective Date:** TCD-8201-2013 - 30 March 2013  
TCD-8201A-2014 - 11 November 2014  
TCD-8201B-2015 - 23 January 2015  
TCD-8201C-2016 - 17 June 2016  
TCD-8201C-1-2022 - 28 July 2022  
TCD-8201C-2-2022 - 26 January 2023

**TCD-8232-2013            N2 Control System – Inspection**

**Applicability:** BK117 series helicopters, all S/N.

**Effective Date:** 20 August 2013

**TCD-8488-2015            Swashplate Boot Clamps – Inspection**

**Applicability:** BK117 series helicopters, all S/N.

**Effective Date:** 31 March 2015

**TCD-6850B-2015            Electrical Power System – Inspection**

**Applicability:** BK117 series helicopters, all S/N.

**Effective Date:** 28 May 2015

**TCD-5126B-2016            Airworthiness Limitations – Revision**

**Applicability:** BK117, BK117A-3, BK117A-4, BK117B-1, BK117B-2, and BK117C-1, all S/N.

**Effective Date:** 16 March 2016

**TCD-6217-2003            Tail Rotor and Intermediate Gearbox - Inspection**

**Applicability:** BK117 series helicopters (except for BK117C-2 helicopters) fitted with an affected component listed in Table 1 of JCAB AD TCD-6217-2003.

**Compliance:** Before the issue of a New Zealand Certificate of Airworthiness, or at the next ARA, whichever is the sooner, unless previously accomplished. Repetitive inspections to be accomplished at intervals not to exceed the times specified in the JCAB AD.

**Effective Date:** 26 May 2016

**TCD-6273-2003            Vertical Fin Skin Panel – Inspection**

**Applicability:** BK117, BK117A-3, BK117A-4, BK117B-1, BK117B-2 and BK117C-1 helicopters, all S/N.

**Compliance:** Before the issue of a New Zealand Certificate of Airworthiness, or at the next ARA, whichever is the sooner, unless previously accomplished.

**Effective Date:** 26 May 2016

**TCD-4114-2-2004      Cancelled – JCAB AD TCD-4114A-1-2008 refers**

**Effective Date:** 30 June 2016

**TCD-7000-2006      One Engine Inoperative (OEI) – Operating Limitations**

**Applicability:** BK117C-1 and BK117C-2 helicopters, all S/N.

**Compliance:** Before the issue of a New Zealand Certificate of Airworthiness, or at the next ARA, whichever is the sooner, unless previously accomplished. Repetitive requirements to be accomplished as specified in the JCAB AD.

**Effective Date:** 26 May 2016

**TCD-7111-2007      Fire Extinguishing System – Inspection**

**Applicability:** BK117C-1 helicopters, all S/N and model BK117C-2 helicopters, S/N 4001 through to 4003, and 4005 through to 4010.

**Compliance:** Before the issue of a New Zealand Certificate of Airworthiness, or at the next ARA, whichever is the sooner, unless previously accomplished.

**Effective Date:** 26 May 2016

**TCD-7000-1-2008      One Engine Inoperative (OEI) – Operating Limitations**

**Applicability:** BK117C-1 and BK117C-2 helicopters, all S/N.

**Compliance:** Before the issue of a New Zealand Certificate of Airworthiness, or at the next ARA, whichever is the sooner, unless previously accomplished. Repetitive inspections to be accomplished at intervals not to exceed the times specified in the JCAB AD.

**Effective Date:** 26 May 2016

**TCD-4114A-1-2008      Main Rotor Blade Balance Weight – Inspection**

**Applicability:** BK117, BK117A-3, BK117A-4, BK117B-1, BK117B-2 and BK117C-1 fitted with Main Rotor Blade P/N 117-150041, 117-150051, 117-150071, 117-150081, 117-151311, 117-151331, 117-151371 or 117-151371V001.

**Compliance:** Before the issue of a New Zealand Certificate of Airworthiness, or at the next ARA, whichever is the sooner, unless previously accomplished. Repetitive inspections to be accomplished at intervals not to exceed the times specified in the JCAB AD.

**Effective Date:** 30 June 2016

**TCD-8811-2016      Tail Rotor Transmission Housing – Inspection**

**Applicability:** BK117, BK117A-3, BK117A-4, BK117B-1, BK117B-2, BK117C-1 and BK117C-2 helicopters, all S/N.

**Effective Date:** 22 August 2016

**TCD-4655A-2017      Main Rotor Mast – Inspection**

**Applicability:** BK117, BK117A-3, BK117A-4, BK117B-1, BK117B-2 and BK117C-1 helicopters, all S/N.

**Effective Date:** 30 November 2017

**TCD-9082-2018      Main Rotor Transmission Helical Gear Support – Inspection**

**Applicability:** BK117, BK117A-3, BK117A-4, BK117B-1, BK117B-2, BK117C-1 and BK117C-2 helicopters, all S/N.

**Effective Date:** 31 January 2018



**TCD-9106-2018            Tail Rotor Transmission Bellcrank Attach Arm – Inspection**

**Applicability:** BK117, BK117A-3, BK117A-4, BK117B-1, BK117B-2, BK117C-1 and BK117C-2 helicopters, all S/N.

**Effective Date:** 27 April 2018

**TCD-9114-2018            Main Rotor Blade Thimble – Inspection**

**Applicability:** BK117, BK117A-3, BK117A-4, BK117B-1, BK117B-2 and BK117C-1 helicopters, all S/N.

**Effective Date:** 31 May 2018

**TCD-9361-2019            Airworthiness Limitations – Revision**

**Applicability:** BK117, BK117A-3, BK117A-4, BK117B-1, BK117B-2 and BK117C-1 helicopters, all S/N.

**Effective Date:** 24 October 2019

**TCD-9687-2020            Airworthiness Limitations – Revision**

**Applicability:** BK117, BK117A-3, BK117A-4, BK117B-1, BK117B-2, BK117C-1 and BK117C-2 helicopters, all S/N.

**Effective Date:** 28 January 2021

**TCD-9876-2022 Tension Torsion Straps – Inspection**

**Applicability:** BK117, BK117A-3, BK117A-4, BK117B-1, BK117B-2, BK117C-1 and BK117C-2 helicopters, all S/N.

**Effective Date:** 3 March 2022

**TCD-10110-2022            (Correction) Swashplate Assembly – Inspection**

**Applicability:** BK117, BK117A-3, BK117A-4, BK117B-1, BK117B-2, BK117C-1 and BK117C-2 helicopters, all S/N.

**Effective Date:** 17 January 2023

**\* TCD-10427-2025            Main Rotor Head – Inspection**

**Applicability:** BK117, BK117 A-3, BK117 A-4, BK117 B-1, BK117 B-2, BK117 C-1 helicopters, all S/N, fitted with a Main Rotor Head (MRH) P/N 117-141071, or 117-141081, and BK117 C-2 helicopters, S/N 4001 through to 4005 inclusive, fitted with a MRH P/N 117-141071, or 117-141081.

**Effective Date:** 24 April 2025

# Airworthiness Directive Schedule

## Engines

### Arriel 2B, 2C, 2D, 2E and 2S Series

24 April 2025

- Notes:**
1. This AD schedule is applicable to Safran Helicopter Engines (previously Turbomeca) Arriel 2 series engines manufactured under EASA Type Certificate Number E.001.

Engine Model:	
Arriel 2B	Arriel 2C2
Arriel 2B1	Arriel 2D
Arriel 2B1A	Arriel 2E
Arriel 2B1B	Arriel 2S1
Arriel 2C	Arriel 2S2
Arriel 2C1	

2. The European Aviation Safety Agency (EASA) is the National Airworthiness Authority (NAA) responsible for the issue of State of Design Airworthiness Directives (ADs) for these engines.

State of Design ADs can be obtained directly from the EASA website at:

<http://ad.easa.europa.eu/>

3. The date above indicates the amendment date of this schedule.
4. New or amended ADs are shown with an asterisk \*

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The State of Design ADs listed below are available directly from the National Airworthiness Authority (NAA) websites. Links to NAA websites are available on the CAA website at: Links to state of design airworthiness directives | aviation.govt.nz 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. ....9

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**DCA/TUR/17 Fuel Pump Body - Inspection**

**Applicability:** Arriel 2S1, 2B and 2C, all S/N.

**Requirement:** To prevent fuel seepage from the fuel pump body and possible engine bay fire, accomplish the following:-

1. Inspect engine bay floor per Turbomeca SB 292 73 2803, for presence of fuel. If fuel is detected, refer to the Maintenance Manual for rectification and perform the inspection per part 2 of this AD.
2. Inspect the area specified by SB 292 73 2803 for fuel seepage. If fuel seepage is detected, remove and replace the HP/LP pump assembly before further flight.
3. Check the pump body material thickness per SB 292 73 2803. If the measured thickness is less than the criteria per the SB, replace the pump assembly with a pump body having correct thickness before further flight. This constitutes terminating action for this AD.

(DGAC AD 1999-285(A) refers)

**Compliance:**

1. After the last flight of each day, until part 3 of this AD is accomplished. This inspection may be accomplished by the pilot following instruction by the engineer responsible for the maintenance of the helicopter.
2. Within next 50 hours TIS and thereafter at intervals not to exceed 50 hours TIS, until part 3 of this AD is accomplished.
3. By 1 May 2000.

**Effective Date:** 24 September 1999

**DCA/TUR/21 Centrifugal Impeller - Modification**

**Applicability:** Arriel 2 series engines, all S/N.

**Requirement:** To prevent excitation of the impeller vanes leading to release of a vane and possible engine failure, accomplish the following:-

1. Modify Arriel 2S1, 2B engines by installation of a sleeve in the bleed valve boss, per Turbomeca SB 292 72 2054.
2. For other Arriel engine variants, on which TU 54 modification is embodied, ensure the bonding of the sleeve in the bleed valve boss, per Turbomeca SB A 292 72 2070 Rev 1 (modification TU 70A).

(DGAC AD 2002-127(A) refers)

**Compliance:** Before 31 May 2002

**Effective Date:** 28 March 2002

**DCA/TUR/33 Free Turbine Containment Shield – Inspection**

**Applicability:** Arriel 2B and 2B1 engines fitted to Eurocopter AS 350 B3 and EC 130 helicopters and which do not have modification TU 22 embodied.

**Requirement:** Inspect the free turbine containment shield per paragraph 2 of Turbomeca Mandatory Service Bulletin No 292 72 2821. The free turbine containment shield must be replaced if the length or position of the crack(s) exceeds the criteria laid down in paragraph 2 of SB No. 292 72 2821.

(DGAC AD F-2005-162 refers)

**Compliance:** Within the next 10 hours TIS, and thereafter at intervals dependant on the inspection results per the inspection requirements of SB No. 292 72 2821.

**Effective Date:** 17 October 2005

### **DCA/TUR/50A Module 03 Turbine – Inspection**

**Applicability:** Arriel 2B, 2B1, 2B1A engines not embodied with modification TU166.

These engines are known to be installed on, but not limited to, Eurocopter AS 350 B3 and EC 130 B4 aircraft.

**Note:** Revision A of this AD limits the applicability to those engines not embodied with modification TU166. This modification introduces HP blade dampers between the HP disc and the HP blade platform.

**Requirement:** To prevent the loss of blades on the HP turbine due to blade displacement and eventual blade fatigue, accomplish the following:

Inspect the HP turbine per the instructions in Turbomeca MSB No. 292 72 2825 version B dated 21 September 2009 or later EASA approved revisions.

If the inspections reveal rearward displacement of the HP turbine blades, accomplish the instructions in paragraph 2.B of MSB No. 292 72 2825.

(EASA AD 2007-0109R1 refers)

**Compliance:** Within the next 600 hours TIS or 500 cycles on the engine, whichever occurs sooner since the last HP turbine borescope inspection, unless previously accomplished, or

Within the next 100 hours TIS for module 03 HP turbines that have logged more than 600 hours TIS or 500 cycles since new, repair or overhaul and on which a borescope inspection was last performed more than 600 hours or 500 cycles ago, and

Thereafter repeat the inspection at intervals not to exceed 600 hours TIS or 500 cycles, whichever occurs sooner.

**Effective Date:** DCA/TUR/50 - 31 May 2007  
DCA/TUR/50A - 26 November 2009

### **DCA/TUR/51 Cancelled – EASA AD Cancellation Notice 2007-0117-CN refers**

**Note:** The requirements in superseded DCA/TUR/51 (EASA AD 2007-0117 refers) have been introduced in a Note in EASA TCDS E.001.

The Note in TCDS E.001 is applicable to Arriel 2B, 2B1, 2B1A, 2C, 2C1, 2C2, 2S1 and 2S2 engines turboshaft engines, which have previously been used by an operator (such as the military, customs, police or similar services), which have not been operated under the control of a National Civil Authority.

Before installing an affected engine in a civil registered aircraft, the engine must comply with the applicable Safran Helicopter Engines requirements specified in EASA TCDS No. E.001.

**Effective Date:** 22 February 2018

#### **DCA/TUR/54 HMU Low Fuel Pressure Switch – Inspection**

**Applicability:** Arriel 2B, 2B1 and 2B1A engines, all S/N

These engines are known to be installed on, but not limited to Eurocopter AS 350 B3 and EC 130 B4 aircraft.

**Requirement:** To prevent failure of the Hydro Mechanical Unit (HMU) low fuel pressure switch which could result in the internal components from the failed switch to jam the HP-LP fuel pump and cause the pump drive pin to shear, accomplish the following:

1. Inspect the HMU per the instructions in paragraph 2 of Turboméca Mandatory Service Bulletin (MSB) No. 292 73 2826 and determine the P/N of the low fuel pressure switch fitted to the HMU.
2. If a Hydra-Electric low fuel pressure switch P/N 9 550 17 956 0 is fitted, inspect the low fuel pressure switch and chamber of the HMU body.

If any parts from the low fuel pressure switch are found missing, or found in the HMU chamber, replace the HMU with a new or overhauled HMU which is fitted with an IN-LHC low fuel pressure switch.

If no parts are found missing, replace the low fuel pressure switch with an IN-LHC low fuel pressure switch.

3. If a IN-LHC low fuel pressure switch P/N 9 550 17 199 0 or P/N 9 550 17 913 0 is fitted, inspect and determine if a Hydra-Electric switch P/N 9 550 17 956 0 is fitted.

If a Hydra-Electric switch P/N 9 550 17 956 0 has been or may have been fitted, inspect the chamber of the HMU body. If any parts are found in the HMU chamber, replace the HMU with a new or overhauled HMU which is fitted with an IN-LHC low fuel pressure switch.

If the IN-LHC low fuel pressure switch has been fitted since new, repair or overhaul, no further action is required.

**Note:** Accomplish these requirements per the instructions in Turboméca Mandatory Service Bulletin 292 73 2826 original issue, or later approved revisions.

(EASA AD 2008-0077 refers)

**Compliance:** 1. 2. & 3. By 30 September 2009.

**Effective Date:** 29 May 2008

#### **DCA/TUR/65A Module 04 Power Turbine – Life Limitation**

**Applicability:** Arriel 1B, 1D and 1D1 engines, fitted with Modules M04 (Power Turbine) listed in figure 1 of Turboméca MSB A292 72 0827 version C.

Model Arriel 2B, 2B1 and 2B1A turboshaft engines, fitted with Modules M04 listed in figure 1 of Turboméca MSB A292 72 2833 version C.

Affected engines are installed on single engine helicopters. Arriel 1B, 1D and 1D1 turboshaft engines are known to be installed on, but not limited to, Eurocopter AS 350 B, AS 350 BA, AS 350 BB, AS 350 B1 and AS 350 B2 helicopters, and

Arriel 2B, 2B1 and 2B1A turboshaft engines are known to be installed on, but not limited to, Eurocopter AS 350 B3 and EC 130 B4 helicopters.

**Note 1:** This AD revised to extend the life limit of the Module 04 power turbine blades from 2000 hours to 5000 hours TTIS and introduce later Turboméca MSB revisions which do not list any additional nonconforming turbine wheels.

**Requirement:** To prevent failure of the power turbine due to possible blade fatigue which could result in loss of engine power, accomplish the following:

1. For engines with 5000 or more cycles on the Module M04 Power Turbine (PT):

Replace the module M04, or the PT wheel assembly, or the PT blades per paragraph 2.B.(1)(b) of Turboméca MSB A292 72 0827 version C dated 15 July 2009 or later approved revisions for Arriel 1 engines and MSB A292 72 2833 version C dated 15 July 2009 or later approved revisions for Arriel 2 engines.

2. For engines with less than 5000 cycles on the Module M04 PT:

2.1 Change the cycle life limit of the PT blades in the engine log book to 5000 cycles per paragraph 2.B.(1)(a) of MSB A292 72 0827 for Arriel 1 engines and MSB A292 72 2833 for Arriel 2 engines.

2.2 Replace the module M04, or PT wheel assembly, or PT blades per paragraph 2.B.(1)(b) of MSB A292 72 0827 for Arriel 1 engines and A292 72 2833 for Arriel 2 engines.

**Note 2:** The S/N of affected PT wheel assemblies and Modules M04 (PT) are listed in figure 1 of the referenced MSB. These PT are known to be fitted with affected blades. The engine S/N are also provided where this information is available. If there is a conflict with S/N contact Turboméca for clarity.

(EASA AD 2009-0112R1 refers)

**Compliance:**

1. Before further flight unless previously accomplished
- 2.1 By 3 September 2009 unless previously accomplished.
- 2.2 Before accumulating 5000 cycles unless previously accomplished.

**Effective Date:** DCA/TUR/65 - 25 June 2009  
DCA/TUR/65A - 27 August 2009

#### **DCA/TUR/69 HMU Acceleration Control Axle – Inspection**

**Applicability:** Arriel 2B engines not embodied with modification TU149.

These engines are known to be installed on, but not limited to, Eurocopter AS 350 B3 helicopters.

**Note 1:** This AD supersedes DCA/TUR/44 to introduce modification TU149 per Turbomeca SB 292 73 2149 version D dated 16 October 2009 to prevent the acceleration controller axle from sticking in its bearing.

**Requirement:** To prevent the acceleration controller axle from sticking in its bearing, which can result in difficulty or failure to control the fuel flow rate in manual or mixed mode, leading to unpredictable engine running which can cause gas generator or power turbine overspeed and in-flight engine shutdown, accomplish the following:

1. Perform a ground check in the mixed mode operation until accomplishment of paragraph 3 in Turboméca MSB A292 73 2814 version D dated 16 October 2009 or later EASA approved revisions. For the control system mixed mode refer to section 8 task 3C in the AS350 B3 AFM.

2. Inspect the fuel metering system and perform maintenance procedures per paragraph 2 of Turbomeca MSB A292 73 2814.

**Note 2:** Requirement 1 of this AD may be accomplished by adding the inspection requirement to the tech log. The ground check 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 3:** The embodiment of modification TU149 is a terminating action to the requirements of this AD.

(EASA AD 2009-0246 refers)

**Compliance:** 1. Before the first flight of the day.  
2. Within 20 hours TIS of receiving parts from Turbomeca, and thereafter at intervals not to exceed 200 hours TIS.

**Effective Date:** 26 November 2009

#### **DCA/TUR/76 Hydromechanical Metering Unit (HMU) – Inspection**

**Applicability:** Arriel 2B engines, all S/N fitted with HMU listed in Turboméca MSB A292 73 2841 version A.

These engines are known to be installed on, but not limited to Eurocopter AS 350 B3 helicopters.

**Requirement:** To correct possible incorrectly adjusted HMU which could result in loss of engine power in flight, accomplish the following:

1. Review the aircraft records or inspect the AMU installed on the aircraft and determine the P/N and S/N of the AMU.

If a HMU with P/N and S/N listed in Turboméca MSB A292 73 2841 version A is found fitted to the aircraft and the HMU is not already in compliance with SB 292 73 2840 version A, then accomplish either requirement 2 or 3 of this AD.

2. Replace the affected HMU with a serviceable HMU per the instructions in MSB A292 73 2841 version A.

3. Accomplish an engine functional test per the instructions in paragraph 2.B.(1)(a) of Turboméca MSB A292 73 2841 version A.

If the engine fails the functional test, replace the HMU with a serviceable part.

If the engine passes the functional test, accomplish the following actions:

- Within the next 4 months after the effective date of this AD, install software modification TU143 on the Engine Electronic Control Unit (EECU) per the instructions in Turboméca SB 292 73 2143, and
- Within the next 12 months after the effective date of this AD, replace the affected HMU with a serviceable HMU.

4. A HMU shall not be fitted on any aircraft or engine, unless the HMU is in compliance with the requirements of this AD.

**Note 1:** A serviceable HMU is a part which is not listed in MSB A292 73 2841 version A, or a HMU which has passed the inspection per the instructions in Turboméca SB 292 73 2840 version A.

**Note 2:** The replacement of an HMU with a serviceable HMU is a terminating action to the requirements of this AD.

**Note 3:** Turboméca MSB A292 73 2841 version A dated 04 July 2011, SB 292 73 2840 version A dated 28 June 2011 and SB 292 73 2143 initial issue dated 24 July 2007 and later approved revisions of these documents are acceptable to comply with the requirements of this AD.

(EASA AD 2011-0128-E refers)

**Compliance:** 1. 2. & 3. Before further flight.  
4. From 9 July 2011.

**Effective Date:** 9 July 2011



**DCA/TUR/85 Digital Engine Control Unit – Software Modification**

**Applicability:** ARRIEL 2B1 and 2B1A engines, all S/N.

These engines are known to be installed on, but not limited to, Eurocopter AS 350 B3 and EC 130 B4 helicopters, and Changhe Aircraft Industries Corporation Z11 single-engine helicopters.

**Note 1:** This AD supersedes DCA/TUR/49 to expand the applicability to include ARRIEL 2B1A engines which require the embodiment of modification TU175 (software version 6). No AD action required for those ARRIEL 2B1 engines embodied with modification TU144C (software version 5.02).

**Requirement:** To prevent engine flame-out due to limitations of the Digital Engine Control Unit (DECU) software, accomplish the requirements in EASA AD 2012-0147.

**Note 2:** Turboméca MSB A292 73 2144 original issue, dated 05 January 2007, and Turboméca MSB A292 73 2175 version A, dated 06 July 2012 or later approved revisions of these documents is acceptable for compliance with the requirements of this AD.

(EASA AD 2012-0147 refers)

**Compliance:** At the compliance times specified in EASA AD 2012-0147 unless previously accomplished.

**Effective Date:** 30 August 2012

The State of Design ADs listed below are available directly from the National Airworthiness Authority (NAA) websites. Links to NAA websites are available on the CAA website at: [Links to state of design airworthiness directives | aviation.govt.nz](https://aviation.govt.nz/state-of-design-airworthiness-directives)  
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.

**2012-0124R1 Module M03 Gas Generator Turbine Blade – Modification**

**Effective Date:** 2012-0124 - 23 July 2012  
2012-0124R1 - 29 January 2013

**2013-0170R1 Hydro-mechanical Metering Unit – Inspection**

**Effective Date:** EASA AD 2013-0170 - 13 August 2013  
EASA AD 2013-0170R1 – 25 April 2017

**2013-0171 HMU Constant Delta Pressure Valve Diaphragm – Replacement**

**Effective Date:** 13 August 2013

**2014-0036 Accessory Gearbox (M01) – 41/23 Tooth Bevel Gear Assembly – Inspection**

**Effective Date:** 25 February 2014

**2015-0177 Cancelled – EASA AD 2017-0121 refers**

**Effective Date:** 31 July 2017

**2015-0213 Hydro Mechanical Unit - Inspection**

**Effective Date:** 30 October 2015

**2016-0004R1 Hydro-Mechanical Metering Unit – Inspection**

**Effective Date:** EASA AD 2016-0004 - 20 January 2016  
EASA AD 2016-0004 (Correction dated 5 Feb 2016) - 20 January 2016  
EASA AD 2016-0004R1 - 29 April 2022

**2010-0215R1 Cancelled – EASA AD 2017-0102 refers**

**Effective Date:** 29 June 2017

**2016-0055R1 Accessory Gearbox Module M01 – Inspection**

**Effective Date:** EASA AD 2016-0055 - 31 March 2016  
EASA AD 2016-0055R1 - 11 October 2016

**2011-0218R1 Power Turbine Blades – Life Limitation**

**Effective Date:** EASA AD 2011-0218 - 24 November 2011  
EASA AD 2011-0218R1 - 4 May 2016

**2016-0098 Hydro-Mechanical Metering Unit – Modification**

**Effective Date:** 6 June 2016

**F-2004-192 Torque Confirmation Box – Inspection**

**Compliance:** Before the issue of a New Zealand Certificate of Airworthiness, or at the next Review of Airworthiness (RA), whichever is the sooner, unless previously accomplished. Repetitive inspections (if applicable) to be accomplished at the intervals specified in the DGAC AD.

**Effective Date:** 27 October 2016

**2007-0063 Hydro-Mechanical Metering Unit Fuel Filter Drain Screw – Inspection**

**Compliance:** Before the issue of a New Zealand Certificate of Airworthiness, or at the next Review of Airworthiness (RA), whichever is the sooner, unless previously accomplished. Repetitive inspections (if applicable) to be accomplished at the intervals specified in the EASA AD.

**Effective Date:** 27 October 2016

**2009-0010R1 Digital Engine Control Unit (DECU) Software – Modification**

**Compliance:** Before the issue of a New Zealand Certificate of Airworthiness, or at the next Review of Airworthiness (RA), whichever is the sooner, unless previously accomplished. Repetitive inspections (if applicable) to be accomplished at the intervals specified in the EASA AD.

**Effective Date:** 27 October 2016

**2011-0249 Digital Engine Control Unit (DECU) – Inspection**

**Compliance:** Before the issue of a New Zealand Certificate of Airworthiness, or at the next Review of Airworthiness (RA), whichever is the sooner, unless previously accomplished. Repetitive inspections (if applicable) to be accomplished at the intervals specified in the EASA AD.

**Effective Date:** 27 October 2016

**2016-0235 Engine Front Support – Inspection**

**Effective Date:** 8 December 2016

**2017-0102R2 HP/LP Fuel Pump Metering Unit – Inspection**

**Applicability:** Arriel 2B, 2B1 and 2B1A engines, all S/N.

**Effective Date:** EASA AD 2017-0102 - 29 June 2017  
EASA AD 2017-0102R1 - 24 February 2022  
EASA AD 2017-0102R2 - 5 September 2022

**2017-0121 Airworthiness Limitations - Amendment**

**Applicability:** Arriel 2C, 2C1, 2C2, 2S1 and 2S2 engines, all S/N.

**Effective Date:** 31 July 2017

**2018-0273 Cancelled - EASA AD 2022-0083 refers**

**Effective Date:** 26 May 2022

**2019-0110 Torque Conformation Box - Inspection**

**Applicability:** Arriel 2C, 2C1, 2S1 and 2S2 engines, all S/N.

These engines are known to be installed on, but not limited to, Airbus Helicopters AS 365 N3, EC 155 B and Sikorsky S-76C helicopters.

**Effective Date:** 4 June 2019

**2019-0180 Fuel Filter Pre-blockage Pressure Switch - Inspection**

**Applicability:** Arriel 2B, 2B1, 2B1A, 2C, 2C1, 2C2, 2S1 and 2S2 engines, all S/N.

These engines are known to be installed on, but not limited to, Airbus Helicopters AS 350 B3, EC 130 B4, AS 365 N3, EC 155 B and Sikorsky S-76C helicopters.

**Note:** The visual check as required by paragraph (1) of EASA AD 2019-0180 may be accomplished by adding the inspection requirement to the tech log. The visual inspection 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.

**Effective Date:** 8 August 2019

**2020-0046 Digital Engine Control Unit – Inspection**

**Applicability:** Arriel 2C and 2S1 engines, all S/N.

These engines are known to be installed on, but not limited to, Airbus Helicopters AS 365 N3 and Sikorsky S-76C helicopters.

**Effective Date:** 26 March 2020

**\* 2022-0083 Cancelled – EASA AD 2025-0079 refers**

**Effective Date:** 24 April 2025

**\* 2025-0079 Airworthiness Limitations**

**Applicability:** Arriel 2D, 2E, 2H, 2L2 and 2N engines, all S/N.

These engines are known to be installed on, but not limited to, Airbus Helicopters (previously Eurocopter, Eurocopter France, Aerospatiale) AS 350 B3 (H125) and EC 130 T2 (H130) helicopters; Airbus Helicopters Deutschland GmbH MBB-BK117 D-2 (EC 145 T2 or H145) helicopters; Korea Aerospace Industries LAH and LCH helicopters; and AVIC Aircraft Industry Group AC312E helicopters.

**Effective Date:** 24 April 2025