



# **CIVIL AVIATION AUTHORITY OF NEW ZEALAND**

## **AIRWORTHINESS DIRECTIVES**

**Amendment Nr 24-02**

**Effective date 29 February 2024**

*These Airworthiness Directives are issued pursuant to sections 72I(3A) and (3B) of the Civil Aviation Act 1990 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 24-02****29 February 2024**


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<b>AD Schedule</b>	<b>AD Number</b>	<b>AD Title</b>	<b>Eff Date</b>
Airbus Helicopters EC 130 Series	EASA AD 2023-0190R1	Tail Rotor Drive Shaft - Inspection	29-Feb-24
Airbus Helicopters EC 135 Series	EASA AD 2024-0028-E	Tail Rotor Blades - Inspection	29-Jan-24
Austro E4 Series Engines	EASA AD 2024-0037R1	Engine Main Bearing / Studs – Replacement	6-Feb-24
Bell 505	TC AD CF-2024-03	Vertical Stabiliser Top End Cap Assembly - Inspection	29-Jan-24
GE Aviation Czech M601 Engines	EASA AD 2024-0040-E	Centrifugal Compressor Case - Inspection	12-Feb-24
Pratt & Whitney PT6 Series	TC AD CF-2024-05	Second Stage Power Turbine (PT2) Blades - Inspection	17-Feb-24
Robinson R22 Series	FAA AD 2024-04-02	Tail Rotor Blades - Inspection	2-Apr-24
Robinson R44 Series	FAA AD 2024-04-02	Tail Rotor Blades - Inspection	2-Apr-24
Robinson R66 Series	FAA AD 2024-04-02	Tail Rotor Blades - Inspection	2-Apr-24

**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: <https://www.aviation.govt.nz/aircraft/airworthiness/airworthiness-directives/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)

**Notes on New and Revised Airworthiness Directives****Airbus Helicopters EC 130 Series EASA AD 2023-0190R1 Tail Rotor Drive Shaft - Inspection**

EASA AD 2023-0190R1 with effective date 29 February 2024 is applicable to EC 130 T2 helicopters, all S/N embodied with Airbus Helicopters Modification 079809 during manufacture.

This AD is prompted by an overseas occurrence where, during an inspection by ASB EC130-05A039 (ref. EASA AD 2021-0283R1), a crack was found on the tail boom of an EC130 T2 helicopter. During the preceding flight, the pilot experienced a humming sound and vibrations in the pedals. A subsequent balancing of the tail rotor drive shaft revealed a high vibration level.

This condition, if not detected and corrected, could lead to failure of the tail rotor drive shaft and subsequent loss of yaw control of the helicopter.

To address this potential unsafe condition, as a precautionary/protective measure, AH issued the ASB to provide measurement instructions. Consequently, EASA issued AD 2022-0251-E to require repetitive checks of the balancing of the tail rotor drive shaft by means of measurement of the vibration level. That AD also required the reporting of inspection results to AH.

After that AD was issued, it was identified that one of the vibration measurement tool, mentioned in maintenance task B, was providing different results than expected and the threshold must be changed. Consequently, AH published the ASB, as defined in this AD, providing amended checks instructions, and EASA issued AD 2023-0190-E retaining the requirements of AD 2022-0251-E, which was superseded, requiring additional work, and introducing balance correction prohibition.

Since that AD was issued, it has been determined that used spline sleeve equipped and sliding flange may be installed provided certain conditions are met. Subsequently, AH published ASB EC130-05A042 Revision 2 to specify the type of part to be used in case of replacement.

For the reason described above, this AD is revised accordingly. This AD is still considered an interim action and further AD action may follow.

The EASA AD can be obtained from the EASA AD webpage at: <http://ad.easa.europa.eu/>

**Austro E4 and E4P Engines EASA AD 2024-0037R1 Engine Main Bearing / Studs – Replacement**

EASA AD 2024-0037R1 with effective date 6 February 2024 is applicable to E4 and E4P engines, all S/N.

Occurrences of engines failures have been reported, where, during subsequent engine inspection, failure of one inner main bearing screw was identified. Subsequent investigation determined that certain screws, meeting the lower end of their design specification, could fail when installed on the inner main bearing position and the engine is operated in specific operating conditions.

This condition, if not corrected, could lead to engine failure, reduced control of the aeroplane and, for single engine aeroplanes, in emergency landing, possibly resulting in damage to the aeroplane and injury to occupants.

To address this potential unsafe condition, Austro Engine published the MSB, providing instructions to replace the affected part with screws of higher class, and EASA issued Emergency AD 2024-0037-E, requiring replacement of affected parts with serviceable parts, and providing additional criteria for installation of the affected parts and engines.

Since that AD was issued, requests for clarification about the compliance time for Group 2 engines have been received. This AD is revised accordingly, to provide clarifications, and to introduce an allowance for ferry flights for Group 2 engines.

The EASA AD can be obtained from the EASA AD webpage at: <http://ad.easa.europa.eu/>

**Bell 505 Helicopters Transport Canada AD CF-2024-03 Vertical Stabiliser Top End Cap Assembly - Inspection**

AD CF-2024-03 with effective date 29 January 2024 is applicable to Bell 505 helicopters, S/N 65011 and subsequent.

This AD is prompted by multiple occurrences of the vertical stabilizer top end cap assembly being found cracked, with some cases including the departure of the NAV/VOR/GS antenna and tuning weight from the helicopter during flight. Detailed investigation has identified that the stabilizer top end cap assembly was not designed for the full fatigue spectrum.

The investigation has determined that if no corrective actions are implemented, there is potential for the antenna and tuning weight to depart which could impact and damage the tail rotor, resulting in the loss of directional control of the helicopter.

This AD mandates an initial inspection, instructions for the replacement of the vertical stabilizer top end cap if required, and a recurring inspection of the top end cap for cracks. The corrective actions contained in this AD are interim actions until a permanent solution can be made available for the fleet.

**GE Aviation Czech M601 Engines EASA AD 2024-0040-E Centrifugal Compressor Case - Inspection**

EASA AD 2024-0040-E with effective date 12 February 2024 is applicable to M601D, M601D-1, M601D-2, M601D-11, M601D-11NZ, M601E, M601E-11, M601E-11A, M601E-11AS, M601E-11S, M601E-21, M601F, M601FS and M601Z engines, all S/N.

This AD is prompted by a crack on the centrifugal compressor case mount pad weld area was reported on an engine, leading to an unscheduled engine removal. Further investigation identified a non-conforming welding in the location of the failure (lack of welding penetration).

This condition, if not detected and corrected could lead to crack propagation, possibly resulting in engine separation and reduced control of the aeroplane.

To address this potential unsafe condition, GEAC issued the ASB to provide instructions for a one-time detailed visual inspection (DVI) of affected parts, and, depending on findings, accomplishment of applicable corrective action(s).

For the reason described above, this AD requires a DVI of the affected parts and, depending on findings, accomplishment of corrective action(s). This AD also provides requirements for reporting and for installation of affected parts.

This AD is considered to be an interim action and further AD action may follow.

**Pratt & Whitney PT6 Series Engines Transport Canada AD CF-2024-05 Second Stage Power Turbine (PT2) Blades - Inspection**

Transport Canada AD CF-2024-05 with effective date 17 February 2024 is applicable to all PT6A-64, PT6A-66, PT6A-66A, PT6A-66B, PT6A-66D, PT6A-66T, PT6A-67, PT6A-67A, PT6A-67AF, PT6A-67AG, PT6A-67B, PT6A-67D, PT6A-67F, PT6A-67P, PT6A-67R, PT6A-67RM, PT6A-67T, PT6A-68, PT6A-68B, PT6A-68C, PT6A-68D, PT6A-68T, PT6E-67XP and PT6E-66XT engine models.

This AD is prompted by one recent in-service report of PT2 blade failure on a PT6A-67 engine. In addition, there have been two other events of PT2 blade failures during testing at the manufacturer's facility. The blade failures in all cases were contained.

P&WC is still investigating the root cause of the blade failures, but preliminary investigation determined that the power turbine modules in all event engines contained newly manufactured Part Number (P/N) 3056693-01 blades from the same raw material.

In all cases, the blades had accumulated less than 25 hours air time since new. Failure of PT2 blades could lead to engine power loss or in-flight shut down, potentially resulting in reduced control of the aeroplane.

This AD mandates removal of the suspect blades prior to next flight.

The corrective actions contained in this AD are considered interim actions until the root cause investigation is completed. Further AD action may follow.

# CIVIL AVIATION AUTHORITY OF NEW ZEALAND

A/L 24-02

## AIRWORTHINESS DIRECTIVE SCHEDULE REVISION STATUS

29 February 2024

Schedule	Date		
AD Schedule Cover Page	29 FEB 24		
AD Schedule Revision Status	29 FEB 24		
List of New or Revised ADs	29 FEB 24		
<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	27 JULY 23		
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	24 APR 08		
Cessna 560 Series	27 MAY 10		
Cirrus SR20 and SR22 Aircraft	28 JAN 10		
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)	31 AUG 17
		De Havilland DHC-1 Series (Chipmunk)	22 FEB 18
		De Havilland DHC-2 Series (Beaver)	30 MAR 23
		De Havilland DHC-3 Series (Otter)	24 NOV 22
		Diamond DA 20 Series	28 FEB 08
		Diamond DA 40 Series	21 DEC 23
		Diamond DA 42 Series	26 JAN 23
		Diamond DA 62 Series	18 JAN 24
		Douglas DC3C-S1C3G	18 APR 19
		Dornier Do 228 Series	27 SEP 07
		Eagle X-TS & 150 Series	30 AUG 07
		Embraer EMB-500	26 NOV 20
		Embraer EMB-820 Series	25 FEB 21
		Erco 415-D Series (Ercoupe)	31 JAN 13
		Extra EA 300 Series	1 OCT 20
		Fairchild SA227	25 JUNE 09
		G-164 Ag-Cat Series	25 MAY 23
		Gippsland GA200 Fatman	27 SEP 12
		Gippsland GA8 Airvan	30 NOV 23
		Grumman American AA-1 & AA-5 Series	29 JUL 21
		Grumman G-44 Series	25 NOV 94
		Gulfstream Aerospace G-IV Series	27 SEP 07
		Gulfstream Aerospace GA-7	28 FEB 19
		Harvard 2, 2A and 3 Series	26 SEP 13
		Helio H-250 (Courier)	27 OCT 16
		Jabiru Aeroplane Series	27 MAY 21
		Kodiak 100	27 JULY 23
		Lake LA-4, LA-4-200 & Model 250	28 SEP 17
		Maule Series	30 JAN 14
		Mitsubishi MU-2B-26A/ -60 Series	28 JAN 21
		Mitsubishi MU-2B-30 Series	25 JUN 20
		Mooney M20 Series	23 FEB 23
		Moravan Zlin Z-50	28 JUL 05
		Moravan Zlin Z-137T	28 JUL 05
		Nanchang CJ-6 Series	23 FEB 17
		North American P-51 Series	30 MAY 13
		Nomad N22 and N24 Series	21 APR 11
		Pacific Aerospace CT/4 Series	29 APR 21
		Pacific Aerospace FBA-2C Series	29 SEP 22
		Pacific Aerospace Fletcher FU24 Series	28 JUL 16
		Pacific Aerospace Cresco 08-600	30 APR 20
		Pacific Aerospace 750XL	29 AUG 19
		Percival Proctor Mk1	26 JUL 07
		Percival Proctor Mk5	24 FEB 00
		Pilatus PC-6 Series	29 APR 21
		Pilatus PC-12 Series	26 OCT 23
		Piper J3 Series	28 MAY 15
		Piper PA-14 Series	26 JUL 18
		Piper PA-18 Series	25 JAN 18
		Piper PA-20 Series	28 MAY 15
		Piper PA-22 Series	25 MAY 17
		Piper PA-23 Series	27 JAN 22
		Piper PA-24 Series	28 JUN 18
		Piper PA-25 Series	25 FEB 16
		Piper PA-28 Series	28 JAN 21
		Piper PA-30 Series	28 JUN 18
		Piper PA-31 Series	29 JUL 21
		Piper PA-32 Series	28 JAN 21
		Piper PA-34 Series	28 APR 22
		Piper PA-38 Series	27 OCT 11
		Piper PA-39 Series	17 DEC 15
		Piper PA-42 Series	27 OCT 11
		Piper PA-44 Series	28 JAN 16
		Piper PA-46 Series	21 DEC 23
		Pitts S-1 & S-2 Series	26 SEP 19
		PZL-M18 Dromander Series	25 SEP 03
		PZL-104 Wilga 35 and 80	27 JUN 13
		Reims F406 Series	31 JAN 19
		Robin DR400 Series	30 MAR 23
		Robin R1180 Series	22 FEB 18
		Robin R3000 Series	27 NOV 14
		Rockwell Commander 112 & 114 Series	24 JUN 21
		Slingsby T67 Series	24 NOV 16
		Rallye, MS880 and MS890 Series	27 APR 23
		Socata TB9, TB10 and TB20 Series	21 NOV 19
		Sud Aviation Gardan Horizon GY 80	18 DEC 08

# CIVIL AVIATION AUTHORITY OF NEW ZEALAND

A/L 24-02

## AIRWORTHINESS DIRECTIVE SCHEDULE REVISION STATUS

29 February 2024

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	30 MAR 23	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 Phoebe 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	29 JUNE 23
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	24 FEB 22	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	29 JUNE 23	Balloons	31 AUG 23
Agusta Bell AB212	22 DEC 22	Ultramagic Balloons	25 FEB 16
Airbus Helicopters SA 315 & SA 316	27 OCT 11	<b>Engines</b>	
Airbus Helicopters AS 350	18 JAN 24	Austro E4 Series	29 FEB 24
Airbus Helicopters AS 355	31 AUG 23	Engines General – Reciprocating Engines	29 JUNE 23
Airbus Helicopters EC 120	18 JAN 24	Blackburn Cirrus	27 JUN 02
Airbus Helicopters EC 130	29 FEB 24	Continental 6-285-C Series	28 MAY 20
Airbus Helicopters EC 155 and SA 365	25 MAY 23	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	29 FEB 24	Continental 240 Series & RR O-240-A Series	28 MAY 20
Airbus Helicopters Deutschland MBB-BK 117	21 DEC 23	Continental 300 Series	28 SEP 23
Bell/Kawasaki-Bell 47 Series	25 JUN 09	Continental 360 Series	28 SEP 23
Bell 205 Series	24 NOV 22	Continental 470 Series	28 SEP 23
Bell 206 Series and Agusta Bell AB206 Series	24 NOV 22	Continental 520 Series	28 SEP 23
Bell 212 Series	24 NOV 22	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)	28 JAN 21
Bell 222 Series	28 JUL 22	De Havilland Gipsy	28 AUG 08
Bell 407 Series	31 AUG 23	Franklin	30 OCT 03
Bell 412 Series	24 NOV 22	GE Aviation Czech M601 Series (previously Walter Engines)	29 FEB 24
Bell 427 Series	28 JUN 18	General Electric T-58 Series	25 MAR 04
Bell 429 Series	24 FEB 22	Honeywell Int. LTS101 & T53 Series	30 JUN 22
Bell 505 Series	29 FEB 24	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	24 NOV 22	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	31 AUG 17
Guimbal Cabri G2	18 JAN 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 FEB 19
Kaman K-1200 Kmax	24 FEB 11	Lycoming Engines - FAA TC E-274	28 FEB 19
Kawasaki BK117 Series	26 JAN 23	Lycoming Engines - FAA TC 1E13	28 FEB 19
Leonardo A109 Series	18 JAN 24	Lycoming Engines - FAA TC E-279	28 FEB 19
Leonardo A119 & AW119 Series	30 NOV 23	Lycoming Engines - FAA TC 1E10	17 DEC 20
Leonardo AW169	30 NOV 23	Lycoming Engines - FAA TC E-286	27 OCT 22
MD 369, Kawasaki/Hughes 369 & 500N	23 DEC 21	Lycoming Engines - FAA TC 1E1	28 FEB 19
MD 600N	23 DEC 21	Lycoming Engines - FAA TC E26EA	27 OCT 22
MD 900N	22 OCT 15	Lycoming Engines - FAA TC E16EA	28 FEB 19
Robinson R22 Series	29 FEB 24	Lycoming Engines - FAA TC E-275	28 FEB 19
Robinson R44 Series	29 FEB 24	Lycoming Engines - FAA TC 1E4	28 FEB 19
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 FEB 19
Sikorsky Aircraft S-55 Series	25 AUG 05	Lycoming Engines - FAA TC E-295	28 FEB 19
Sikorsky Aircraft S-76 Series	24 JUN 21	Lycoming Engines - FAA TC E-304	28 FEB 19
<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-100 /-200 /-300 /-400 /-500 /-800 /-808 & /-1000 Series	26 SEP 19	Lycoming Engines - FAA TC E00004NY	28 FEB 19
DG-Flugzeugbau LS1, LS3, LS4, LS6 & LS8 Series	22 DEC 22	Lycoming Engines - FAA TC E00006NY	28 FEB 19
Diamond/Hoffmann H36 Dimona	30 JUN 11	Mikron III Series	28 JAN 16
Eiravion OY Pik 20 Series	11 JUN 93	Pratt & Whitney Piston Series	23 FEB 23
Elliot's Eon 463 Series	29 AUG 97	Pratt & Whitney JT8D Series	27 OCT 95
Glasflugel and HPH Glasflugel	28 OCT 21	Pratt & Whitney JT15D Series	30 JUN 22
Grob	25 JUN 20	Pratt & Whitney PT6 Series	29 FEB 24

# CIVIL AVIATION AUTHORITY OF NEW ZEALAND

A/L 24-02

## AIRWORTHINESS DIRECTIVE SCHEDULE REVISION STATUS

29 February 2024

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	31 AUG 23
Safran Helicopter Engines – Arriel 1 Series	29 JUNE 23
Safran Helicopter Engines – Arriel 2 Series	31 AUG 22
Safran Helicopter Engines – Arrius 1A Series	27 JAN 22
Safran Helicopter Engines – Arrius 2B1, 2B2 & 2K1 Series	27 OCT 22
Safran Helicopter Engines – Arrius 2F & 2R Series	26 JAN 23
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
Vedeneyev M-14, Ivchenko AI-14 & Housai	18 APR 19
HS-6 Series	
Williams International Turbofan Series	30 OCT 03

### 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	30 JUN 22
Avionics (previously Radio Communication & Navigation Equipment)	29 JUNE 23
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	24 FEB 22
Role Equipment - Aeroplanes	24 SEP 15
Role Equipment - Helicopters	27 OCT 22

# Airworthiness Directive Schedule

## Helicopters

### Airbus Helicopters EC 130 B4 and EC 130 T2

29 February 2024

- Notes:**
1. This AD schedule is applicable to Airbus Helicopters EC 130 B4 and EC 130 T2 (previously Eurocopter, Eurocopter France and Aerospatiale) manufactured under EASA Type Certificate No. R.008.
  2. The European Union Aviation Safety Agency (EASA) 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 EASA website at:  
<http://ad.easa.europa.eu/>  
The ADs in this schedule are aligned with Direction générale de l'Aviation civile (DGAC) and European Union Aviation Safety Agency (EASA) ADs.
  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/EC130/1    Hydraulic Fluid - Replacement**

**Applicability:**    Model EC 130B4 pre mod 073718

**Requirement:**    The use of hydraulic fluid MIL-H-5606 (NATO code H-515) is prohibited for servo-controls on these aircraft.

1. To prevent replenishment with this fluid, modify the labels on the hydraulic reservoirs per para 2.B.1 of Eurocopter Alert Telex 29A001.

2. If MIL-H-5606 hydraulic fluid has been used on the aircraft, drain, and flush the hydraulic system before replenishing them with MIL-H-83282 hydraulic fluid per the instructions in para 2.B.2 of Telex 29A001.

(DGAC AD 2001-501-001(A) R1 refers)

**Compliance:**    1. Before next flight.  
2. Within 50 hours TIS.

**Effective Date:**    28 November 2002

**DCA/EC130/2    Starflex Bush - Inspection**

**Applicability:**    EC 130B4 equipped with 'Starflex' P/N 350A31.1916.00 prior to incorporation of mod 076221.

**Requirement:**    1. To detect bonding failure of the metal bush installed in each 'Starflex' arm end, inspect adhesive bead of the metal bush bonded onto each starflex star arm end. Ensure there is no gap between the adhesive bead and the bush per para 2 of EC 130 Alert Telex 05A001 R2. If a gap is found, replace the starflex before further flight.

2. Install stop stud at the bottom of each frequency adapter (MOD 076221) per para 2 of EC130 ASB 62A001.

(DGAC AD 2001-559-002(A)R3 refers)

**Compliance:**    1. Before further flight and thereafter during each pre-flight inspection.  
2. By 28 November 2002

**Effective Date:**    28 November 2002

**DCA/EC130/3    HSI – Inspection**

**Applicability:**    EC130B4 equipped with HSI KI 525A

**Requirement:**    To prevent navigational errors due to incorrect installation of the HSI KI 525A, P/N 066-3046-07, accomplish the following:

Check the P/N of the HSI KI 525A installed on the aircraft. If the P/N is 066-3046-07, comply with the instructions of para 2.A.1 or 2.A.2 of EC130 Alert Telex 34A002 as appropriate to the aircraft installation.

(DGAC AD 2002-279-003(A) refers)

**Compliance:**    Before further flight.

**Effective Date:**    28 November 2002

**DCA/EC130/4 Hawker Pacific TRW-SAMM Main Servocontrols - Removal**

**Applicability:** Model EC130 B4 equipped with TRW-SAMM main servo controls P/N SC 8042 or SC 8043 which underwent their last complete overhaul or repair at Hawker Pacific Aerospace, USA, before 1 March 2002

**Requirement:** To prevent incorrect tightening torque on the end-fitting that attaches the servo control cylinder to the upper ball end-fitting from causing separation of the upper end-fitting and loss of control of the helicopter, remove the subject servo controls and return them to Hawker Pacific Aerospace for a check of the thread condition and application of the tightening torque per EC 130 Alert Telex 67A001.

(DGAC AD 2002-316-004(A) refers)

**Compliance:** For servo controls with less than 1000 hours TTIS, replace within next 550 hours TIS or by 27 June 2003, whichever occurs first.

For servo controls with between 1000 and 1300 hours TTIS, replace before 1550 hours TTIS or by 28 March 2003, whichever occurs first.

For servo controls with 1300 or more hours TTIS, replace within next 250 hours TIS or by 28 December 2002, whichever occurs first.

**Effective Date:** 28 November 2002

**DCA/EC130/5A Collective Friction – Modification and Inspection**

**Applicability:** Model EC 130 B4 aircraft not embodied with modification 07-3791.

**Note:** No action required if already in compliance with DCA/EC130/5. The applicability of this AD revised to exclude those aircraft embodied with modification 07-3791.

**Requirement:** To prevent possible binding of the collective in the full up position and possible loss of aircraft control accomplish the following:

1. Secure each pad and spherical bearing element to the lever using adhesive per paragraph 2.B.1 of Eurocopter EC 130 ASB No. 67A003 dated 25 November 2004.

2. Subsequent to the modification in requirement 1, reinspect per paragraph 2.B.2 of ASB No. 67A003 to check the bonding quality.

(DGAC AD 2002-607R1 refers)

**Compliance:** 1. Within 100 hours TIS or by 27 February 2009 whichever occurs first, unless previously accomplished.

2. Reinspect within 100 hours TIS or 13 months following compliance with requirement 1 whichever occurs first, unless previously accomplished.

**Effective Date:** DCA/EC130/5 - 19 December 2002

DCA/EC130/5A - 27 November 2008

**DCA/EC130/6 Air Intake Cowling Attachment Fittings - Inspection**

**Applicability:** Model EC 130B4 equipped with air intake cowling attachment fittings 350A25-0405-00, -01, -02, -03, -04, -05.

**Requirement:** To prevent loss of air intake cowling in flight, accomplish the following:-

Visually check the condition of the two forward fittings per Eurocopter ASB EC 130 53A004. If one or two forward fittings are failed or cracked, check the condition of the centre and aft fittings. If any fittings are failed, replace them before further flight.

If one or more, (forward, centre or aft) fittings are cracked:

Before further flight, replace each cracked fitting if it has more than 2 cracks or a single crack that is longer than 10 mm.

A cracked fitting which has 1 or 2 cracks or a single crack equal to or less than 10 mm in length, may remain in service after stopping the crack(s). Repetitive inspections are required at intervals not to exceed 20 hours TIS.

(DGAC AD U2003-358(A) refers)

**Compliance:** At 100 hours TTIS or within next 10 hours TIS whichever is the later, and thereafter at intervals not to exceed 100 hours TIS.

**Effective Date:** 20 September 2003

**DCA/EC130/7A Flight Control Stops – Inspection and Modification**

**Applicability:** Model EC130 B4 aircraft which are not fitted with MOD 073206 or MOD 073102.

**Requirement:** To prevent loosening of the flight control stops which may restrict the travel of the flight controls, accomplish the following:

1. Check the flight control stop positions and adjust, if necessary, per paragraph 2.B.1 of Eurocopter EC130 ASB 67A004 revision 1 or later.

2. Double lock the flight control stop adjusting screws as per paragraph 2.B.2 of ASB 67A004.

(DGAC AD F-2003-322R1 refers)

**Compliance:**

1. Within 100 hours TIS.
2. Within 500 hours TIS.

**Effective Date:** DCA/EC130/7 - 18 December 2003  
DCA/EC130/7A - 28 July 2005

**DCA/EC130/8A Fuel Transfer Line – Inspection and Rework**

**Applicability:** Model EC130 B4 fitted with an engine flush system.

**Note 1:** The applicability of this AD revised to only include those aircraft fitted with the optional engine flush system.

**Requirement:** To prevent chafing damage between the fuel transfer line and the air bleed valve exhaust duct, inspect the condition of the fuel transfer line, the condition of the air exhaust duct and the clearances in the interference area per the instructions in paragraph 2.B.1 of Eurocopter EC 130 ASB No. 71A001.

If any wear marks are found accomplish the following:

If the wear marks are less than or equal to 0.05 mm, accomplish the maintenance procedure defined in the Engine Maintenance Manual.

If the depth of the deepest wear mark is more than 0.05 mm and less or equal to 0.2 mm, replace the fuel line within the next 50 hours TIS or within one month whichever occurs sooner.

If the depth of the deepest wear mark is more than 0.2 mm, replace the fuel line before further flight.

If insufficient clearance is found between the fuel transfer line and the air bleed valve exhaust duct, reposition the air exhaust duct per paragraph 2.B.2 of ASB No. 71A001 before further flight.

If the exhaust duct is found perforated, replace the duct before performing an engine flush.

**Note 2:** Position the air exhaust duct per paragraph 2.B.2 of of ASB No. 71A001 whenever a air bleed valve exhaust duct if fitted, or whenever work is carried out on a duct.  
(DGAC AD F-2003-209 refers)

**Compliance:** Within the next 50 hours TIS unless previously accomplished, and thereafter whenever work is performed on the air bleed valve exhaust duct.

**Effective Date:** DCA/EC130/8 - 18 December 2003  
DCA/EC130/8A - 27 August 2009

**DCA/EC130/9 Fuel Bleed Lever - Modification**

**Applicability:** EC 130 B4 helicopters pre-MOD 073239.

**Requirement:** To prevent the possible loss of the fuel bleed lever in flight, which may result in damage to the tail rotor, remove and modify the fuel bleed lever in compliance with Eurocopter EC 130 Alert Service Bulletin No. 28A001.

(DGAC AD F-2004-034 refers)

**Compliance:** Within 100 hours TIS

**Effective Date:** 25 March 2004

**DCA/EC130/10C Cabin Vibration Damper Assemblies – Inspection and Modification**

**Applicability:** All model EC 130 B4 aircraft fitted with all P/N cabin vibration damper blades with MOD 073565 not embodied.

**Requirement:** To prevent failure of the blades of the cabin vibration damper assemblies, which could lead to the jamming of the flight controls bellcrank, accomplish the following:

1. Inspect the visible areas of the blades of each of the cabin vibration damper assemblies which are installed on both the RH and LH sides of the aircraft for cracks, per Eurocopter EC 130 Alert Service Bulletin (ASB) No. 05A002.

Replace cracked blades per EC 130 ASB No. 05A002, before further flight.

**Note 1:** After blade replacement, continue inspecting the blades for cracks, per EC 130 ASB 05A002 at every daily post flight inspection, until accomplishment of requirement 2, which is a terminating action to the requirements of this AD.

2. For aircraft with MOD 073521 (SB No. 53-006) and MOD 073525 (SB No. 53-007) not embodied:

Install a vibration damper/casing assembly on the RH and LH side of the helicopter, per the instructions in paragraphs 2.B.1, 2.B.2. and 2.B.5. of Eurocopter EC 130 Alert Service Bulletin (ASB) No. 53A008.

3. For aircraft with MOD 073521 (SB No. 53-006) embodied or with MOD 073525 (SB No. 53-007) embodied:

Install a vibration damper/casing assembly on the RH and LH side of the aircraft, per the instructions in paragraphs 2.B.1, 2.B.3. and 2.B.5. of ASB No. 53A008.

(EASA AD 2006-0278 refers)

**Compliance:** 1. At every daily post flight inspection.

**Note 2:** Compliance with requirement 1 of this AD maybe accomplished by adding the daily post flight inspection to the tech log.

2. & 3. By 31 March 2007.

**Effective Date:** DCA/EC130/10A - 28 July 2005  
DCA/EC130/10B - 29 September 2005  
DCA/EC130/10C - 28 September 2006

**DCA/EC130/11A Engine Twist Grip Control – Inspection and Modification**

- Applicability:** All model EC 130B4 aircraft fitted with twist grips with MOD 073773 not embodied.
- Requirement:** To prevent the twist grip assembly jamming in the idle position, accomplish the following:
1. Inspect and functionally check the twist grip assembly, per the instructions in paragraph 2.B.2. of Eurocopter EC 130 Alert Service Bulletin (ASB) No. 05A003.
  2. Modify the twist grip assemblies per paragraph 2.B. of Eurocopter EC 130 Alert Service Bulletin (ASB) No. 67A009.
- (EASA 2006-0272 refers)
- Note 1:** Every time work is carried out in the area of the twist grip assembly, which may lead to ingress of foreign objects (e.g. chips), accomplish the instructions per paragraph 2.B.2. of ASB No. 05A003.
- Note 2:** Accomplishment of requirement 2 is a terminating action to the requirements of this AD.
- Note 3:** Before installing twist grip assemblies held as spares, accomplish the instructions in paragraph 2.B.6. of ASB No. 67A009.
- Compliance:**
1. Within the next 30 hours TIS, unless already accomplished within the last 100 hours TIS, and thereafter at intervals not exceeding 100 hours TIS.
  2. By 31 December 2006.
- Effective Date:** DCA/EC130/11 - 29 September 2005  
DCA/EC130/11A - 28 September 2006

**DCA/EC130/12 Lateral Cargo Hold Doors – Operation**

- Applicability:** Model EC 130 B4 helicopters fitted with one or two lateral cargo hold doors and not modified per MOD 073542.
- Requirement:** To prevent the loss of the cargo hold doors in flight, due to aerodynamic loads and the center lock of the cargo hold doors being unlocked, key-lock the center lock of the right and left lateral cargo hold doors, per the instructions given in paragraph 1.E.2.a. of Eurocopter EC 130 Alert Service Bulletin No. 04A001.
- (DGAC AD F-2004-066 R1 refers)
- Note 1:** The embodiment of MOD 073542 (i.e. compliance with Eurocopter EC 130 SB No. 52-005) on both lateral cargo hold doors, is a terminating action to the requirements of this AD.
- Compliance:** Before every flight.
- Note 2:** Certify AD compliance at time of raising tech log or equivalent.
- Effective Date:** 1 December 2005

**DCA/EC130/13 Tail Rotor Drive Tube/Flange Attachment – Inspection and Replacement**

**Applicability:** All EC 130 B4 aircraft delivered before 01 January 2005.

**Requirement:** To detect loosened rivets in the tube-to-flange attachment of the tail rotor drive center section shaft, inspect the tube-to-flange attachment of the tail rotor drive center section shaft for cracks and loose rivets, per the instructions given in paragraph 2.B. of Eurocopter Alert Service Bulletin (ASB) Bulletin No. 65A002.

Check the perpendicularity of the No. 1 bearing, per the instructions given in paragraph 2.B. of ASB 65A002.

If a crack or loose rivet is found, replace the tail rotor drive center section shaft, prior further flight.

If the out-of-perpendicularity of the bearing is more than 0.1 mm, apply the corrective procedure per paragraph 2.B.2. of ASB 65A002.  
(DGAC AD F-2005-190 refers)

**Compliance:** Within 50 hours TIS or by 22 March 2006, whichever is the sooner.

**Effective Date:** 22 December 2005

**DCA/EC130/14A Battery Overheat Sensing Circuit - Modification**

**Applicability:** All model EC 130 B4 aircraft which do not have MOD 07 3572 embodied.

**Requirement:** To prevent fire in the event of thermal runaway of the battery, due to the battery overheat sensing function failing to operate, modify the wiring of the battery overheat sensing circuit, per paragraph 2.B. of Eurocopter Alert Service Bulletin (ASB) No. 24A001.  
(EASA 2006-0246 refers)

**Note:** This modification to the wiring of the battery overheat sensing circuit is to be embodied irrespective whether the battery is located in the RH side baggage hold or the tail boom.

**Compliance:** Within the next 100 hours TIS or by 31 October 2006, whichever is the sooner.

**Effective Date:** DCA/EC130/14 - 30 March 2006  
DCA/EC130/14A - 28 September 2006

**DCA/EC130/15 Cancelled – DCA/EC130/21 refers**

**Effective Date:** 30 October 2008

**DCA/EC130/16 Starter Generator – Load Limitation**

**Applicability:** Model EC 130 B4 aircraft fitted with APC 200 A starter generators P/N 200SGL130Q and not embodied with MOD 073345.

**Requirement:** To prevent excessive power consumption of the starter generator reducing the engine surge margin which could result in engine failure, the current draw for APC 200 A starter generators is limited to 180 Amp.

Install a label indicating this load limitation on the instrument panel below the VEMD, per the instructions in paragraph 2.B. of Eurocopter EC 130 Alert Service Bulletin No. 04A002.  
(EASA AD 2006-0337 refers)

**Compliance:** Within the next 100 hours TIS or by 30 November 2007, whichever occurs sooner.

**Effective Date:** 30 November 2006

**DCA/EC130/17A Emergency Flotation Gear Electrical Harnesses – Inspection & Modification**

**Applicability:** Model EC 130 B4 aircraft, all S/Ns embodied with MOD 073774 and not embodied with MOD 073591 (drawing 350A085340).

**Note 1:** This AD revised to clarify the applicability with no change to the AD requirement. This AD is not applicable to aircraft embodied with MOD 073591 (drawing 350A085340). MOD 073774 introduces screws and nuts in lieu of blind nuts for the attachment of the lower fairings and drawing 350A085342 is a temporary solution to ensure there is no interference between the electrical harness and the ends of the attachment screws.

**Requirement:** To prevent the lower fairing structure attachment screws interfering with the electrical harnesses and possibly causing short circuits and resulting in the inflation of the emergency floatation gear, accomplish the following:

1. Aircraft not embodied with drawing 350A085342:

Inspect the condition of the electrical harnesses and their attachment, and accomplish the corrective actions, as required per the instructions in paragraphs 2.B.1 through to 2.B.3 (drawing 350A085342) and 2.B.5 of Eurocopter EC 130 B4 ASB No. 88A001 revision 1 dated 17 April 2007 or later approved revisions.

2. All affected aircraft:

Inspect the condition of the electrical harnesses and accomplish the corrective actions per paragraphs 2.B.1., 2.B.2.a., 2.B.4. (MOD 073591 and drawing 350A085340) and paragraph 2.B.5. of ASB No. 88A001.

(EASA AD 2006-0344R1 refers)

**Note 2:** Accomplishing requirement 2 is a terminating action to this AD.

**Note 3:** Eurocopter EC 130 B4 ASB No. 88A001 pertains to drawings 350A085340 and 350A085342.

**Compliance:**

1. Within the next 10 hours TIS unless previously accomplished.
2. Within the next 500 hours TIS or by 25 September 2009, whichever occurs sooner.

**Effective Date:** DCA/EC130/17 - 22 November 2006  
DCA/EC130/17A - 25 June 2009

**DCA/EC130/18 Main & Tail Rotor Servo Controls – Inspection and Rework**

- Applicability:** Model EC 130 B4 aircraft, all S/N
- Fitted with Goodrich main or tail rotor servo-controls with the following P/N and S/N with no letter “R” marked in the inspection box of the servo-control identification plate:
- P/N SC8042, S/N 1590, 1591, 1592, 1593, 1616 or 1618.
- P/N SC8043, S/N 865, 866, 867 or 881.
- Requirement:** To prevent the incorrect installation of the servo-control cap from not mechanically limiting the rotation of the distributor, which could result in loss of aircraft rotor control, accomplish the following:
1. Inspect the aircraft and/or the aircraft log books to verify the P/N and S/N of the main rotor and tail rotor servo-controls in accordance with the instructions in paragraph 1.A of Eurocopter EC 130 Alert Service Bulletin (ASB) No. 67A010.
  2. Replace all affected servo-controls per the instructions in paragraph 2.B. of EC 130 ASB No. 67A010.
- Note:** Affected servo-controls may not be fitted to any aircraft unless they have been returned to conformity per the instructions in paragraph 2.B. of EC 130 ASB No. 67A010.
- (EASA AD 2007-0099 refers)
- Compliance:**
1. By 31 July 2007.
  2. At the next removal of the servo-controls or by 31 May 2009, whichever is the later.
- Effective Date:** 31 May 2007

**DCA/EC130/19A Cancelled – DCA/EC130/27 refers**

**Effective Date:** 23 December 2010

**DCA/EC130/20 Energy Absorbing Seats - Modification**

- Applicability:** Model EC 130 B4 aircraft, all S/N not embodied with modification 073380, fitted with SICMA Type 159 energy-absorbing seats.
- Requirement:** To prevent any degradation in operation of the “energy-absorbing” system of the seats, which could cause injury to passengers or flight crew in the event of an emergency landing, remove the metallization braid of SICMA Type 159 energy absorbing seats per the instructions in Eurocopter Alert Service Bulletin (ASB) No. 25A025.
- (EASA AD 2007-0311 refers)
- Compliance:** Within the next 100 hours TIS or by 30 April 2008, whichever occurs sooner.
- Effective Date:** 31 January 2008

**DCA/EC130/21 Twist Grip Assembly – Inspection and Replacement**

**Applicability:** All model EC 130 B4 aircraft, all S/N fitted with a twist grip assembly on the pilot side with P/N 350A27520900, 350A27520901, 350A27520902 or 350A27520903 with S/N up to 63, or

Fitted with a twist grip assembly on the co-pilot side with P/N 350A27521201 with S/N all through 10 and 22 all through 66, or

Fitted with a twist grip assembly on the co-pilot side with P/N 350A27521201 with S/N 11 through to 21 which does not have a letter “V” on the lever base.

**Note 1:** This AD supersedes DCA/EC130/15. The applicability and requirement of this AD revised to mandate the replacement of drive tubes of certain twist grip assemblies.

**Requirement:** To prevent the engine remaining at idle, even though the twist grip has been turned back to the “FLIGHT” position, which may be due to non-compliant surface preparation of the twist grip drive tube and the control pinion bonded attachment, accomplish the following:

1. For aircraft fitted with a twist grip assembly on the co-pilot side with P/N 350A27521201 with S/N 11 through to 21 which does not have a letter “V” on the lever base:

Amend the limitations section of the AFM to include the following limitation:

With autorotation training a full autorotation manoeuvre must be carried out until touchdown.

**Note 2:** Requirement 1 can be accomplished by inserting a copy of this AD into the limitations section of the AFM.

2. For aircraft fitted with a twist grip assembly on the co-pilot side with P/N 350A27521201 with S/N 11 through to 21 which does not have a letter “V” on the lever base:

Replace the drive tube and mark the collective lever per the instructions in paragraph 2.B. of Eurocopter EC 130 ASB No. 76A002 or later approved revisions, and remove the AFM amendment mandated by requirement 1.

3. A twist grip assembly P/N 350A27521201 with S/N 11 through to 21 which does not have a letter “V” on the lever shall not be fitted to any aircraft unless the drive tube is replaced and the collective lever marked per the instructions in paragraphs 2.B.2 and 2.B.3 of ASB No. 76A002.

4. A twist grip assembly P/N 350A27520900, 350A27520901, 350A27520902 or 350A27520903 with S/N up to 63 shall not be fitted on the pilot side of any aircraft, and a twist grip assembly P/N 350A27521201 with S/N all through 10 and 22 all through 66 shall not be fitted on the co-pilot side of any aircraft unless the bonding between the control pinion and the drive tube has been checked per paragraph 2.B.3. of Eurocopter EC 130 ASB No. 76A001 revision 1 or later approved revisions.

(EASA AD 2008-0184 refers)

**Compliance:**

1. By 30 November 2008.
2. Within 100 hours TIS or 30 July 2009 whichever occurs sooner.
3. From 30 October 2008.
4. From 30 October 2008.

**Effective Date:** 30 October 2008

**DCA/EC130/22 Cancelled – DCA/EC130/23 refers**

**Effective Date:** 4 March 2009

**DCA/EC130/23 Starter Generator Damping Assembly – Adjustment and Marking**

**Applicability:** Model EC 130 B4 aircraft, all S/N fitted with an Arriel engine and an Aircraft Parts Corporation (APC) starter generator P/N 150SG122Q or P/N 200SGL130Q without a “004” mark on the data plate.

**Note:** This AD supersedes DCA/EC130/22 and introduces a new adjustment procedure to improve the performance of the APC starter generator damping assembly.

**Requirement:** To prevent failure of the 41 tooth pinion in the engine accessory gear box due to an inoperative starter generator torque damping system which could result in loss of engine power, accomplish the following:

1. Adjust and mark the APC starter generator per the instructions in paragraph 2.B.2 of Eurocopter EC130 ASB No. 80A003 revision 1 dated 06 February 2009 or later approved revisions.
2. An affected starter generator shall not be fitted to any aircraft unless it has been adjusted and marked per EC130 ASB No. 80A003.

(EASA AD 2009-0027 refers)

**Compliance:**

1. Within the next 100 hours or by 4 June 2009, whichever occurs sooner.
2. From 4 March 2009.

**Effective Date:** 4 March 2009

**DCA/EC130/24 Cancelled – DCA/EC130/29 refers**

**Effective Date:** 27 October 2011

**DCA/EC130/25 Cancelled – EASA AD 2013-0061 refers**

**Effective Date:** 25 March 2013

**DCA/EC130/26 Emergency Flotation Gear Wiring – Inspection, Rework and Modification**

**Applicability:** Model EC 130 B4 helicopters, all S/N delivered before 15 April 2010 and fitted with a flotation gear unit "1G", P/N 350A63256300.

**Requirement:** To prevent uncontrolled in-flight deployment of the emergency flotation gear which could result in an aircraft pitch down attitude, unexpected aircraft deceleration and reduced aircraft control, accomplish the following:

1. Visually inspect the flotation gear unit "1G" to determine whether the flotation gear unit P/N 350A63256300 has an asterisk (\*) suffix per the instructions in paragraph 2.B.3.a. of Eurocopter EC130 ASB No 25A037 dated 27 April 2010 or later EASA approved revisions.

If the flotation gear unit P/N 350A63256300 has an asterisk (\*) suffix determine whether a rubber extrusion is fitted on the stringer per the instructions in paragraph 2.B.3.a. of the ASB before further flight. If a rubber extrusion is not found fitted accomplish requirement 2 of this AD.

If the flotation gear unit P/N 350A63256300 does not have an asterisk (\*) suffix accomplish requirement 3 of this AD before further flight.

2. For flotation gear units P/N 350A63256300 that have an asterisk (\*) suffix and do not have a rubber extrusion fitted:

Install a rubber extrusion per the instructions in paragraph 2.B.5.a. of ASB No 25A037 and accomplish a functional test per the instructions in paragraph 2.B.6. of ASB No 25A037.

3. For flotation gear units P/N 350A63256300 that do not have an asterisk (\*) suffix:

Inspect the internal condition of the flotation gear unit "1G" per the instructions in paragraph 2.B.3.b. of the ASB and accomplish corrective actions as required.

4. Install a manufacturer approved flotation gear unit "1G" per the instructions in paragraph 2.B.2.a of ASB No 25A037, install a rubber extrusion per the instructions in paragraph 2.B.5.a. of ASB No 25A037 and accomplish a functional test per the instructions in paragraph 2.B.6. of ASB No 25A037.

5. A flotation gear unit "1G", P/N 350A63256300 shall not be fitted to any aircraft unless it has been identified, modified and reconditioned per the requirements in this AD.

(EASA AD 2010-0088-E refers)

**Compliance:**

1. Within the next 15 hours TIS.
2. By 10 August 2010.
3. Before further flight after requirement 1 is accomplished, and thereafter analyse the results and perform the relevant corrective actions, either once or repetitively as required, per the criteria and the compliance times specified in the flow chart on page 4 of ASB No 25A037. Note: Page 4 of ASB No 25A037 provides the interpretation of results after compliance with the instructions given in paragraph 2.B.3.b. of ASB No 25A037.
4. By 10 January 2010 unless previously accomplished per requirement 3 of this AD.
5. From 10 May 2010.

**Effective Date:** 10 May 2010

**DCA/EC130/27A Centre Windscreen – AFM Amendment and Replacement**

**Applicability:** Model EC 130 B4 helicopters, all S/N not embodied with Eurocopter MOD 07 3590 approved 8 April 2009.

Affected centre windshield panels are P/N 350A259025.00, 350A259004.00 and 350A259041.20. These panels do not have MOD 07 3590 embodied.

**Note 1:** No AD action required for aircraft fitted with centre windshield panel P/N 350A259045.20 (MOD 07 3590). DCA/EC130/27A revised to introduce CAA AFM supplement 'Centre Windshield Inspection Requirements' dated 28 July 2011 which has been revised to introduce MOD 07 3590 as a terminating action for the limitations specified in the supplement. The supplement is applicable to aircraft not embodied with MOD 07 3590.

**Requirement:** To prevent failure of the centre windshield panel in flight, accomplish the following:

1. Amend the limitations section of the EC 130 B4 AFM (AIR 2782) and insert the CAA AFM supplement 'Centre Windshield Inspection Requirements' dated 28 July 2011 facing page 2-ii. Compliance with the limitations section is mandatory.
2. Replace the centre windshield panel with P/N 350A259045.20 per the instructions in paragraph 2.B.3 of the Eurocopter EC130 B4 ASB No. 05A005 revision 2, dated 22 November 2010 or later approved revisions, and remove the placard and the AFM amendment introduced by requirement 1 of this AD.

**Note 2:** The replacement of the centre windshield panel with P/N 350A259045.20 is a terminating action for the AFM limitations and repetitive inspections introduced by requirements 1 of this AD.

(EASA AD 2010-0258 refers)

**Compliance:**

1. Before further flight for aircraft not embodied with Eurocopter MOD 07 3590.
2. If centre windshield distortion is detected in flight, replace within the next 50 hours TIS, or within the next 15 days whichever occurs sooner.

**Effective Date:** DCA/EC130/27 - 23 December 2010  
DCA/EC130/27A - 28 July 2011

**DCA/EC130/28 Cancelled – EASA AD 2014-0114-E refers**

**Effective Date:** 12 May 2014

**DCA/EC130/29 Emergency Flotation Gear – Inspection and Modification**

- Applicability:** Model EC 130 B4 aircraft, all S/N fitted with the following emergency flotation gear:  
Left hand (LH) flotation gear P/N 217227-0 fitted with float P/N 217174-0, and  
Right hand (RH) flotation gear P/N 217228-0 fitted with float P/N 217195-0.
- Note 1:** This AD supersedes DCA/EC130/24 to introduce a terminating action to the repetitive inspections mandated by this AD.
- Requirement:** To prevent failure of the emergency floats due to possible compartment punctures/damage caused by protruding sections of the supply bars and banjo unions which could result in loss of flotation effectiveness in the event of an emergency ditching, accomplish the following:
1. Inspect the LH and RH emergency flotation gear per the instructions in paragraph 2 of Eurocopter EC 130 ASB No. 05A008 dated 8 June 2009 or later approved revisions.  
If any defects are found accomplish the associated inspections and corrective actions per paragraph 2 of Eurocopter EC 130 ASB No. 05A008 before further flight.
  2. Modify the emergency flotation gear installation per the instructions in paragraph 3.B.1 of Eurocopter EC130 ASB 25A042 dated 11 July 2011 or later approved revisions.
  3. Affected emergency flotation gear listed in the applicability of this AD shall not be fitted on any helicopter, unless it has been modified per the instructions in paragraph 3.B of EC130 ASB 25A042.
- Note 2:** The accomplishment of requirement 3 is a terminating action to the repetitive inspections mandated by this AD.  
(EASA AD 2011-0185 refers)
- Compliance:**
1. Before accumulating 300 hours TIS since initial installation, or last overhaul, or within the next 50 hours TIS or 30 days whichever occurs later since 24 September 2009 (the effective date of DCA/EC130/24), and thereafter at intervals not to exceed 300 hours TIS.
  2. Within the next 300 hours TIS or by 27 April 2013 whichever occurs sooner.
  3. From 27 October 2011.
- Effective Date:** 27 October 2011

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 <https://www.aviation.govt.nz/aircraft/airworthiness/airworthiness-directives/links-to-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.

**2013-0061      Cancelled – EASA AD 2013-0191-E refers**

**Effective Date:** 23 August 2013

**2013-0088      Cancelled – EASA AD 2015-0132 refers**

**Effective Date:** 22 July 2015

**2013-0093      Cancelled – EASA AD 2015-0020 refers**

**Effective Date:** 25 February 2015

**2013-0191-E      Cancelled – EASA AD 2017-0052 refers**

**Effective Date:** 7 April 2017

**2013-0287      Cancelled – EASA AD 2021-0195 Refers**

**Effective Date:** 3 September 2021

**2014-0114R2      Tail Boom Fenestron Junction Frame – Inspection and Repair**

**Applicability:** EC 130 B4 helicopters, all S/N except those helicopters embodied with modification (mod) 073880 or mod 074609 (Reinforcement of the tail boom/Fenestron junction), or mod 074775 (Reinforcement of the Fenestron frame by installing 4 carbon patches), and those helicopters which have been repaired in accordance with Repair Design Approval Sheet No. 350 53 522 07, or 350 53 521 10, or 350 53 524 10, or 350 53 525 10, or 350 53 526 10, or 350 53 511 11, or 350 53 512 11, or 350 53 523 11, or 350 53 504 12, or AE11-0205, or AE11-0380.

**Note:** Tail boom assembly S/N TB 7377 is not affected by this AD.

**Effective Date:** EASA AD 2014-0114 - 12 May 2014  
EASA AD 2014-0114R1 - 1 June 2016  
EASA AD 2014-0114R2 - 31 May 2018

**2014-0132R1      Rotating Star Swashplate – Inspection**

**Applicability:** EC130 B4 and T2 helicopters, all S/N fitted with a swashplate assembly comprising a rotating star with P/N 350A371003-04, 350A371003-05, 350A371003-06, 350A371003-07 or 350A371003-08.

**Effective Date:** 2014-0132 - 9 June 2014  
2014-0132R1 - 9 June 2014

**2014-0145R1      Cancelled – EASA AD 2015-0033-E refers**

**Effective Date:** 26 February 2015

**2014-0229R1      Main Gearbox Oil Cooler Fan Hopper – Inspection**

**Applicability:** EC130 T2 helicopters, all S/N except those helicopters embodied with modification (MOD) 074547 in production.

**Effective Date:** 2014-0229 - 22 October 2014  
2014-0229R1 - 19 January 2016

**2015-0020      Cancelled – EASA AD 2020-0095 refers****Effective Date:** 13 May 2020**2015-0033R1      Cancelled – EASA AD 2016-0240 refers****Effective Date:** 9 December 2016**2015-0094      Cancelled by EASA on 3 September 2021****Effective Date:** 3 September 2021**2015-0132      Cancelled – EASA AD 2021-0194 Refers****Effective Date:** 3 September 2021**2016-0023      Main Gearbox Casings – Inspection****Applicability:** EC 130 B4 helicopters, all S/N fitted with a main gearbox (MGB) main casing P/N 350A32-3156-21 (fitted on assembly 350A32-3156-01), or P/N 350A32-3156-22 (fitted on assembly 350A32-3156-02), or fitted with a MGB bottom casing (sump) P/N 350A32-3119-05.**Effective Date:** 5 February 2016**2016-0240      Cancelled – EASA AD 2017-0066-E****Effective Date:** 25 April 2017**2017-0032      Cancelled by EASA on 11 August 2021****Effective Date:** 11 August 2021**2017-0052      Cancelled – EASA AD 2017-0059 refers****Effective Date:** 13 April 2017**2017-0059      Cancelled – EASA AD 2023-0133 refers****Effective Date:** 27 July 2023**2017-0062      Collective Pitch Control – Inspection****Applicability:** EC 130 B4 and T2 helicopters, all S/N.**Effective Date:** 25 April 2017**2017-0066-E      Cancelled – EASA AD 2017-0080 refers****Effective Date:** 19 May 2017**2017-0080      Cancelled – EASA AD 2018-0104 refers****Effective Date:** 31 May 2018**2017-0089R1      Main Rotor Mast Upper Bearing - Inspection****Applicability:** EC 130 B4 and EC 130 T2 helicopters, all S/N.**Note:** This AD revised to introduce an amended OEM ASB to clarify affected parts identification.**Effective Date:** EASA AD 2017-0089 - 31 May 2017  
EASA AD 2017-0089R1 - 30 June 2020

**2018-0104R2 Tail Boom Fenestron Junction Frame - Inspection**

**Applicability:** EC 130 B4 and EC 130 T2 helicopters, all S/N, except those helicopters embodied with Airbus modification (mod) 074775, or mod 074581.

**Note:** Since EASA AD 2018-0104R1 was issued, EASA has determined that the compliance time to embody the modification on affected helicopters can be extended by an additional 12 months.

**Effective Date:** EASA AD 2018-0104 - 31 May 2018  
EASA AD 2018-0104R1 - 23 December 2021  
EASA AD 2018-0104R2 - 22 December 2022

**2018-0152 Cancelled – EASA AD 2022-0128 refers**

**Effective Date:** 28 July 2022

**2018-0182 Tail Rotor Blade - Reduced Life Limitation**

**Applicability:** EC 130 B4 and EC 130 T2 helicopters, all S/N.

**Effective Date:** 11 September 2018

**2018-0206 Mast Upper Bearing Sealant Bead/Inner Race Retaining Rings - Inspection**

**Applicability:** EC 130 B4 and EC 130 T2 helicopters, all S/N.

**Effective Date:** 4 October 2018

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

**Applicability:** EC130B4 helicopters fitted with an Air Comm air conditioning system P/N EC130-202-1, EC130-202-2, EC130-202-3, EC130-202-4, EC130-202-5, EC130-202-6, EC130-202-7, or EC130-202-8.

**Effective Date:** 22 January 2019

**2019-0001 Cancelled – EASA AD 2020-0069 refers**

**Effective Date:** 7 April 2020

**2019-0184 Main Rotor Servo Actuators – Inspection**

**Applicability:** EC 130 B4 and EC 130 T2 helicopters, all S/N.

**Effective Date:** 29 August 2019

**2019-0225-E MGB Drive Shaft / Engine Coupling – Inspection**

**Applicability:** EC 130 T2 helicopters, all S/N having accumulated (on the effective date of this AD) less than 300 hours TIS since first flight.

**Effective Date:** 13 September 2019

**2020-0064 Emergency Flotation System – Inspection**

**Applicability:** EC 130 B4 and EC 130 T2 helicopters, all S/N.

**Effective Date:** 2 April 2020

**2020-0069 Sliding Door Opening Mechanism – Inspection**

**Applicability:** EC 130 B4 helicopters, all S/N.

**Effective Date:** 7 April 2020

**2020-0095      Sliding Door Star Support – Inspection**

**Applicability:** EC 130 B4 helicopters, all S/N except those helicopters embodied with EC modification (MOD) 07 3796 or MOD 07 2921 in production.

**Effective Date:** 13 May 2020

**2020-0187      Tail Rotor Blades – Inspection**

**Applicability:** EC 130 B4 and EC 130 T2 helicopters, all S/N.

**Effective Date:** 4 September 2020

**2021-0048      Cancelled – EASA AD 2023-0064 refers**

**Effective Date:** 3 April 2023

**2021-0168      Cancelled – EASA AD 2024-0018 refers**

**Effective Date:** 25 January 2024

**2021-0194R1      Airworthiness Limitations**

**Applicability:** EC 130 B4 and EC 130 T2 helicopters, all S/N.

**Effective Date:** EASA AD 2021-0194 - 3 September 2021  
EASA AD 2021-0194R1 – 28 October 2021

**2021-0195      Engine Digital ECU Emergency Procedure – AFM Amendment**

**Applicability:** EC 130 T2 helicopters, all S/N fitted with an ARRIEL 2D engine.

**Effective Date:** 3 September 2021

**2021-0216      Engine to MGB Coupling Shaft – Inspection**

**Applicability:** EC 130 T2 helicopters, all S/N.

**Effective Date:** 7 October 2021

**2021-0235-E      Cancelled – EASA AD 2021-0283-E refers**

**Effective Date:** 21 December 2021

**2021-0283R1      Cancelled – EASA AD 2023-0028 refers**

**Effective Date:** 15 February 2023

**2022-0053      Skid Type Landing Gear – Inspection**

**Applicability:** EC 130 T2 and EC 130 B4 helicopters, all S/N.

**Effective Date:** 6 April 2022

**2022-0077-E      Flight Control Flexball Cables - Replacement**

**Applicability:** EC 130 B4 and EC 130 T2 helicopters, all S/N.

**Effective Date:** 2 May 2022

**2022-0128      Main Gearbox Bracket Bolts - Inspection**

**Applicability:** EC 130 B4 and EC 130 T2 helicopters, all S/N.

**Effective Date:** 28 July 2022

**2022-0150 Tail Rotor Blades - Inspection****Applicability:** EC 130 B4 and EC 130 T2 helicopters, all S/N.**Effective Date:** 4 August 2022**2022-0251-E Cancelled - EASA AD 2023-0190-E refers****Effective Date:** 6 November 2023**2023-0028 Cancelled - EASA AD 2023-0214 refers****Effective Date:** 21 December 2023**2023-0044 Main Gearbox Planet Gear - Inspection****Applicability:** EC 130 B4 and EC 130 T2 helicopters, all S/N.**Effective Date:** 30 March 2023**2023-0064 Main Rotor Pitch Rod Upper Links - Inspection****Applicability:** EC 130 B4 and EC 130 T2 helicopters, all S/N.

**Note:** The repetitive visual inspections required at intervals not to exceed 10 hours TIS per requirement (2) of EASA AD 2023-0064 may be accomplished by adding the inspection requirement to the helicopter 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.

If the markings on one, or both sides of a main rotor pitch rod upper link are found misaligned during the repetitive visual inspections, then an aircraft maintenance engineer must accomplish the corrective actions per requirement (3) of EASA AD 2023-0064 before further flight.

**Effective Date:** 3 April 2023**2023-0107 (Correction) Cargo Swing Frame - Inspection****Applicability:** EC 130 B4 helicopters fitted with an onboard cargo hook P/N 704A41811035 and with any P/N cargo swing frame.**Effective Date:** 29 June 2023**2023-0127 Main Gearbox Engine Coupling - Inspection****Applicability:** EC 130 T2 and EC 130 B4 helicopters, all S/N with a date of manufacture before 13 February 2023 as defined in EASA AD 2023-0127.**Effective Date:** 11 July 2023**2023-0133 Cancelled – EASA AD 2023-0187 refers****Effective Date:** 30 November 2023**2023-0166 Emergency Floatation System Supply Hose - Inspection****Applicability:** EC 130 B4 and EC 130 T2 helicopters, all S/N.**Effective Date:** 8 September 2023**\* 2023-0190R1 Tail Rotor Drive Shaft - Inspection****Applicability:** EC 130 T2 helicopters, all S/N embodied with Airbus Helicopters Modification 079809 during manufacture.

**Effective Date:** EASA AD 2023-0190 - 6 November 2023  
EASA AD 2023-0190R1 - 29 February 2024

**2023-0187      Microswitches - Inspection**

**Applicability:**      EC 130 B4 helicopters, all S/N.  
EC 130 T2 helicopters, all S/N.

**Effective Date:**    30 November 2023

**2023-0214      Rear Transmission Bearing Support - Inspection**

**Applicability:**      EC 130 T2 helicopters, all S/N embodied with Airbus Helicopters modification 074581 at production.

**Note 1:**              The requirements in paragraph 3.B.2.c and 3.B.2.d of Airbus Helicopters (AH) Emergency ASB EC130-05A039 revision 3, dated 30 January 2023, or later approved revision, may not be accomplished by a pilot.

**Note 2:**              The initial inspections of the rear transmission bearing support in accordance with requirements (1) and (2) of EASA AD 2023-0214 must be accomplished by an aircraft maintenance engineer.

The repetitive inspections every 10 hours in accordance with requirements (1) and (2) of EASA AD 2023-0214 may be accomplished by adding the inspection requirement to the helicopter 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.

If any defects are found during the repetitive inspections, then an aircraft maintenance engineer must inspect the rear transmission bearing support and accomplish the corrective actions in accordance with EASA AD 2023-0214 before further flight.

**Effective Date:**    21 December 2023

**2024-0018      Indicating / Recording Systems Control Unit – Inspection**

**Applicability:**      EC 130 B4 helicopters, all S/N.

**Effective Date:**    25 January 2024

# Airworthiness Directive Schedule

## Helicopters

### Airbus Helicopters Deutschland EC 135 Series

29 February 2024

- Notes:**
1. This AD schedule is applicable to Airbus Helicopters Deutschland EC 135 P1, EC 135 P2, EC 135 P2+, EC 135 T1, EC 135 T2 and EC 135 T2+ helicopters manufactured under EASA Type Certificate (TC) No. R.009 (previously LBA TC No. 3061).
  2. The European Union Aviation Safety Agency (EASA) 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 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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**DCA/EC135/1A Airworthiness Directive Compliance at Initial Airworthiness Certificate Issue****Applicability:** Model EC 135 aircraft.**Requirement:** Compliance with the following LBA Airworthiness Directives (as applicable) is required:

<u>LBA AD Nr:</u>	<u>AD Subject:</u>
1998-033/7	Bearing supports of the tail rotor drive shaft. Inspection of the bolt connections for loose bolts and damage
1998-109	Oil cooling system - Fan - Replacement of Shaft with Spline
1998-389	Fuselage - Tail Boom - Replacement of Bearing Support
1999-102/2	Fuselage - Tail Boom - Bearing-Location No. 1 of the Tail Rotor Shaft

**Note:** Each part of this AD (each individual LBA AD) shall be certified in the aircraft log book separately.**Compliance:** Before issue of New Zealand Airworthiness Certificate.  
Repetitive inspections to be accomplished at intervals not to exceed the times specified in the LBA Airworthiness Directives.**Effective Date:** DCA/EC135/1 - 30 July 1999  
DCA/EC135/1A - 30 March 2006**DCA/EC135/2A Main Rotor Hub Shaft - Inspection****Applicability:** Model EC 135 series**Requirement:** To prevent fracture of the main rotor hub-shaft, which could result in loss of control of the helicopter, accomplish the following per Eurocopter Deutschland Alert SB EC 135-62A-004 Revision 2:

1. Visual inspection of the main rotor hub-shaft.
2. Dye Penetrant Inspection of the main rotor hub-shaft.

Replace main rotor hub-shaft before further flight if any cracks are found.

(LBA AD 1999-185/3 refers)

**Compliance:** Initial Inspection:

1. Visual inspection before further flight.
2. Dye penetrant inspection within 10 hours TIS.

Following the initial inspections, accomplish either:-

1. Visual inspections at intervals not to exceed 15 hours TIS, or
2. Dye penetrant inspections at intervals not to exceed 100 hours TIS.

**Effective Date:** DCA/EC135/2 - 30 July 1999  
DCA/EC135/2A - 17 December 1999

**DCA/EC135/3A Tail Rotor Drive Shaft Bearing Attachment Flange - Inspection**

**Applicability:** Model EC 135 series S/N 0005 through S/N 0120.

**Requirement:** To prevent a fracture of the bearing attachment flange of the tail rotor drive shaft, accomplish the following per Eurocopter Deutschland Alert SB EC 135-53A-010 Revision 2:

1. Inspect the bearing attachment flange for cracks. Replace the bearing attachment flange before further flight, if any cracks are found.
2. Install additional bearing support bracket.

(LBA AD 1999-199/3 refers)

**Compliance:**

1. Before further flight and thereafter at intervals not to exceed 15 hours TIS until modified, and then inspect (visual inspection only) at intervals not to exceed 50 hours TIS.
2. By 14 October 1999.

**Effective Date:** DCA/EC135/3 - 30 July 1999  
DCA/EC135/3A - 7 October 1999

**DCA/EC135/4 Main Rotor Blade Lead-Lag Damper Attachment – Inspection**

**Applicability:** Model EC 135 series

**Requirement:** To ensure proper screw connection of the nut of the expansion bolt which serves as bearing support attachment for the main rotor blade lead-lag damper, accomplish the following:-

Inspect the lockwire and of the head of the expansion bolt per Eurocopter Deutschland Alert SB EC 135-62A-005.

(LBA AD 1999-264 refers)

**Compliance:** The inspection must be accomplished after the last flight of the day and must be repeated every 15 flight hours until the replacement of nuts and bearing pins by modified nuts and bearing pins has been accomplished.

**Effective Date:** 30 July 1999

**DCA/EC135/5 Air Conditioning System - Modification**

**Applicability:** Model EC 135 series S/N 0005 through 0169 equipped with air conditioning system, except; S/N 0030, 0076, 0093, 0098, 0102, 0104, 0106, 0108, 0110, 0111, 0113, 0114, 0116, 0117, 0119, 0121, 0145, 0146, 0148, 0150, 0152, 0155.

**Requirement:** To prevent a short circuit following a failure of the spring resistor located in the compressor/condenser unit of the air conditioning system, and possible smoke and fire in the helicopter, accomplish the following:-

Install an insulating mat in the area of the spring resistor per Eurocopter SB EC135-21A-002 Revision 1.

Alternatively, the air conditioning system may be deactivated and placarded per Eurocopter SB EC135-21A-002 Revision 1.

(LBA AD 2000-270 refers)

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

**Effective Date:** 10 August 2000

**DCA/EC135/6A Main Rotor Drive Torque Struts - Inspection**

**Applicability:** Model EC 135 series

**Requirement:** To prevent failure of the torque struts, accomplish the following:-

1. Inspect, mark, exchange and observe life limitation limits of the LH and RH torque struts per ASB ECD 135-63A-002 Revision 4.
2. Brief all pilots:-  
During flight if a thump-like sound occurs followed by an unusual vibration (similar to faulty Aris);
  - continue flight with reduced power
  - land at the nearest suitable airfield.

(LBA AD 2001-107/3 refers)

**Compliance:**

1. At the times specified in ASB ECD 135-63A-002 Revision 4.
2. Before the next flight.

**Effective Date:** DCA/EC135/6 - 22 March 2001  
DCA/EC135/6A - 28 August 2003

**DCA/EC135/7 Primary Flight and Navigation Displays - Replacement**

**Applicability:** Model EC 135 Series S/N 0005 through 0216 equipped with SMD45H Smart Multifunction Display.

**Requirement:** To prevent loss of primary flight display information check that the S/N of the SMD45H unit is not one of the faulty units listed in Eurocopter ASB EC135-31A-002 Revision 1. If the S/N is one of the listed units, operation of the helicopter is restricted to VFR conditions until the SMD45H is replaced with a serviceable unit. Placard instrument panel accordingly.

(LBA AD 2001-306 refers)

**Compliance:** Within next 50 hours TIS.

**Effective Date:** 29 November 2001

**DCA/EC135/8 Automatic Engine Control – Software Improvement**

**Applicability:** Model EC 135T1 S/N 0005 through 0187 with Turbomeca Arrius 2B1 engines

**Requirement:** To prevent loss of automatic engine control, accomplish Eurocopter ASB EC135-71A-016 in combination with Turbomeca SB 319 73 2019.

(LBA AD 2001-304 refers)

**Compliance:** By 28 February 2002

**Effective Date:** 29 November 2001

**DCA/EC135/9 Cancelled – Purpose Fulfilled**

**Effective Date:** 28 August 2003

**DCA/EC135/10 FADEC Fail – AFM Revision**

**Applicability:** Model EC135 T1

**Requirement:** To maintain automatic engine control in the event of possibly spurious FADEC FAIL caution indications, comply with Eurocopter Deutschland ASB No. EC135-71A-024. This ASB requires the insertion of pages into the AFM.  
(LBA AD 2002-333 refers)

**Compliance:** Within 50 hours TIS.

**Effective Date:** 28 August 2003

**DCA/EC135/11 Cancelled – DCA/EC135/27 refers**

**Effective Date:** 22 January 2010

**DCA/EC135/12 Emergency Flotation System - Modification**

**Applicability:** All model EC 135 aircraft fitted with removable and/or fixed parts of ECD Emergency Flotation System Version 1.

**Requirement:** Due to the increased admissible maximum take-off weight of EC135 aircraft, the ECD Emergency Flotation System Version I no longer meets requirements, and the removable parts of the emergency flotation system version I must be replaced.

Remove the removable parts of ECD Emergency Flotation System Version I. Install all removable parts and components of ECD Emergency Flotation System Version II.

These actions must be accomplished per the instructions in Eurocopter Deutschland EC135 Alert Service Bulletin No. EC135-32A-010 dated 13 September 2004.

(LBA AD D-2005-414 refers)

**Compliance:** By 23 March 2006.

**Effective Date:** 23 February 2006

**DCA/EC135/13A Cancelled – EASA AD 2006-0318R2 refers**

**Effective Date:** 25 April 2017

**DCA/EC135/14 LH and RH Cable Channel Wire Harnesses – Inspection**

**Applicability:** All model EC135 aircraft, S/Ns 0005 through 0654.

**Requirement:** To prevent short circuits in the wiring harnesses due to the possibility of damage/chafing caused by the side channel cover attachment hardware, accomplish the following:

Inspect the wire harnesses in both the LH and RH cable channels, per the instructions in Eurocopter Deutschland EC135 ASB No. EC135-53A-017. If the wire harnesses are damaged, accomplish a manufacturer approved repair scheme, before further flight.

Modify the LH and RH side channel cover attachments and attach chafing protection to the wire harnesses, per the instructions in EC135 ASB No. EC135-53A-017.

For aircraft fitted with a co-pilot collective lever, modify the cover attachments per the instructions in EC135 ASB No. EC135-53A-017.

(EASA AD 2007-0021-E refers)

**Compliance:** Within the next 25 hours TIS or by 21 March 2007, whichever is the sooner.

**Effective Date:** 9 February 2007

**DCA/EC135/15 Direct Current Power Distribution – Modification**

**Applicability:** Model EC135 aircraft, S/N 0005 all through 0497, excluding 0028, 0473, 0484, 0492 and 0496.

**Requirement:** To prevent energy sources interfering with each other due to the possibility of power lines being routed too close to each other and too close to signal lines, modify and separate the direct-current (DC) power supply lines per the instructions in Eurocopter Deutschland EC135 Alert Service Bulletin (ASB) No. EC135-24A-013.  
(EASA AD 2007-0165 refers)

**Compliance:** Within the next 100 hours TIS, or at the next annual inspection, or by 31 December 2007, whichever is the sooner.

**Effective Date:** 28 June 2007

**DCA/EC135/16 Cancelled – DCA/EC135/17 refers**

**Effective Date:** 31 January 2008

**DCA/EC135/17 Cancelled – DCA/EC135/18 refers**

**Effective Date:** 24 April 2008

**DCA/EC135/18A Cancelled – DCA/EC135/31 refers**

**Effective Date:** 25 November 2010

**DCA/EC135/19 Cancelled – DCA/EC135/20 refers**

**Effective Date:** 26 June 2008

**DCA/EC135/20 Cancelled – DCA/EC135/26 refers**

**Effective Date:** 28 May 2009

**DCA/EC135/21 Cancelled – DCA/EC135/28 refers**

**Effective Date:** 29 April 2010

**DCA/EC135/22 Cyclic Stick Locking Device – Modification and AFM Amendment**

**Applicability:** Model EC135 aircraft, S/N 0005 through to 0699, except S/N 0028, 0076, 0093, 0098, 0099, 0102, 0104, 0106, 0108, 0110, 0111, 0113, 0114, 0116, 0117 and 0119.

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

1. Modify the cyclic stick locking/centering device by removing the slide and spring from the cyclic stick cantilever per the instructions in ECD Alert Service Bulletin (ASB) No. ASB EC135-67A-015, dated 14 April 2008 or later approved revisions.
2. Amend the AFM by inserting the following note into the AFM:

**NOTE:** Before starting the engines, the cyclic stick must be moved to its neutral position. By folding the cantilever towards the pin, it is possible to move the cyclic stick into its neutral position and to center it. Locking the cyclic stick is no longer possible.

**Note:** Requirement 2 may be accomplished by inserting a copy of this AD into the AFM, or by inserting the ECD supplied AFM page(s) into the AFM.  
(EASA AD 2008-0113 refers)

**Compliance:** 1. & 2. By 15 September 2008.

**Effective Date:** 31 July 2008

**DCA/EC135/23 Main Rotor Lower Mast Bearing – Inspection**

**Applicability:** Model EC135 P1, EC135 P2, EC135 P2+, EC135 T1, EC135 T2 and EC135 T2+ aircraft, all S/N.

**Requirement:** To prevent the outer race of the lower hub shaft bearing dislocating due to the retaining bolts becoming loose, accomplish the following:

1. Inspect the lower mast bearing attachment hardware and install lock washers per section 3.B of Eurocopter ASB No. EC135-63A-013 revision 02 or later approved revisions.
2. For aircraft which have previously been modified per Eurocopter ASB No. EC135-63A-013 original issue or revision 01, inspect the lower mast bearing attachment hardware and install lock washers per section 3.B of ASB No. EC135-63A-013 revision 02.
3. A main rotor gearbox shall not be fitted to any aircraft unless the instructions in section 3.B of ASB No. EC135-63A-013 revision 02 has been accomplished.

(EASA AD 2008-0175-E refers)

**Compliance:**

1. Within 3 flight cycles after detecting any unusual vibration during main rotor startup, or within 3 flight cycles after detecting any unusual vibration at the end of the main rotor rundown, or within the next 50 hours TIS, or by 31 March 2009, whichever occurs sooner.
2. Within the next 400 hours TIS.
3. From 20 September 2008.

**Effective Date:** 20 September 2008

**DCA/EC135/24 Cancelled – DCA/EC135/25 refers**

**Effective Date:** 27 March 2009

**DCA/EC135/25A Cancelled – DCA/EC135/33 refers**

**Effective Date:** 23 December 2010

**DCA/EC135/26A Main Gearbox – Inspection**

**Applicability:** Model EC135 P1(CDS), EC135 P1(CPDS), EC135 P2(CPDS), EC135 P2+, EC135 T1(CDS), EC135 T1(CPDS), EC135 T2(CPDS) and EC135 T2+, all S/N fitted with a MGB P/N 4649 010 003, 4649 010 005, 4649 010 006, 4649 010 006X, 4649 010 008, 4649 010 008X, 4649 001 007, 4649 010 010 or 4649 010 013.

**Note 1:** This AD retains the requirements in superseded DCA/EC135/26. The AD applicability revised to exclude those aircraft fitted with a modified MGB. Aircraft fitted with a MGB P/N not listed in the applicability of this AD is not affected by this AD.

**Requirement:** To prevent tooth failure of the MGB drive pinion due to wear, accomplish the following:

1. For aircraft S/N all through to 504 which have not been modified (to use a more efficient lubricating oil) per Eurocopter Deutschland (ECD) SB EC135-63-011, take an oil sample per the instructions in ASB EC135-63A-012 revision 4, dated 27 April 2009 or later EASA approved revisions. After taking the oil sample and before the aircraft accumulates 25 hours TIS, accomplish the analysis per the instructions in ASB EC135-63A-012 and depending on the results accomplish the instructions at the time(s) specified in ASB EC135-63A-012 revision 04, dated 27 April 2009 or later approved revisions.

2. For aircraft S/N all through to 504 which have been modified per SB EC135-63-011 take an oil sample per the instructions in ASB EC135-63A-012. After taking the oil sample and before the aircraft accumulates 25 hours TIS, accomplish the analysis per the instructions in ASB EC135-63A-012 and depending on the results accomplish the instructions at the time(s) specified in ASB EC135-63A-012 revision 04, dated 27 April 2009 or later approved revisions.

3. For aircraft S/N 505 onwards, take an oil sample per the instructions in ASB EC135-63A-012. After taking the oil sample and before the aircraft accumulates 25 hours TIS, accomplish the analysis per the instructions in ASB EC135-63A-012 and depending on the results accomplish the instructions at the time(s) specified in ASB EC135-63A-012 revision 04, dated 27 April 2009 or later approved revisions.

**Note 2:** The first oil change must be accomplished at 50 hours TSN.

4. If the chip warning indicator illuminates, accomplish the instructions and the corrective action at the time(s) specified in ASB EC135-63A-012 revision 04, dated 27 April 2009 or later approved revisions.

5. For a MGB that has accumulated 300 hours or more TTIS, TSN, TSO or TSR (Time Since Repair): Inspect the MGB log card and/or the aircraft log book and determine if any chip indication log entries are recorded. Depending on the findings accomplish the instructions and corrective actions at the time(s) specified in ASB EC135-63A-012 revision 04, dated 27 April 2009 or later approved revisions.

**Note 3:** Oil sampling, analysis and corrective actions accomplished prior to the effective date of this AD per the instructions in ECD ASB EC135-63A-012 original issue or revision 01, revision 02 or revision 03 is acceptable to comply with the initial requirements of this AD. After 28 May 2009 (the effective date of DCA/EC135/26) oil sampling, analysis and corrective actions must be accomplished per the instructions in ECD ASB EC135-63A-012 revision 04 or later approved revisions.

**Note 4:** The installation of a MGB with a P/N not listed in the applicability section of this AD is a terminating action to the requirements of this AD.  
(EASA AD 2009-0106R1-E refers)

**Compliance:**

1. Within the next 100 hours TIS, unless previously accomplished and thereafter at intervals not to exceed 100 hours TIS or 12 months, whichever occurs sooner.
2. Not before 100 hours TIS after the aircraft has been modified per ECD SB EC135-63-011, or within the next 100 hours TIS for aircraft that have already been modified per ECD SB EC135-63-011 unless previously accomplished and thereafter at intervals not to exceed 100 hours TIS or 12 months, whichever occurs sooner.
3. Not before 90 hours TIS after the first oil change, or within the next 100 hours TIS, whichever occurs later unless previously accomplished and thereafter at intervals not to exceed 100 hours TIS or 12 months, whichever occurs sooner.
4. From 28 May 2009 (the effective date of DCA/EC135/26).
5. Before further flight unless previously accomplished.

**Effective Date:** DCA/EC135/26 - 28 May 2009  
DCA/EC135/26A - 8 December 2011

**DCA/EC135/27 Main Rotor Sliding Sleeve – Inspection and AFM Amendment**

**Applicability:** Model EC 135 P1(CDS), EC 135 P1(CPDS), EC 135 P2(CPDS), EC 135 T1(CDS), EC 135 T1(CPDS), EC 135 T2(CPDS) and EC 635 T1(CPDS) helicopters, all S/N.

**Note 1:** This AD retains the requirements of superseded DCA/EC135/11 and introduces an AFM amendment which contains the requirements of that AD.

**Note 2:** This AD is not applicable to EC 135 P2+, EC 135 T2+, EC 635 P2+ and EC 635 T2+ helicopters as these aircraft have been certificated and delivered with the appropriate AFM preflight check instructions.

**Requirement:** To prevent dislocation of the plain journal bearing towards the inside or outside of the main rotor sliding sleeve resulting in limited movement of the collective controls and reduced helicopter control, accomplish the following:

1. Amend the AFM by inserting a copy of the applicable AFM page which is attached to Eurocopter ASB EC135-62A-021 initial issue dated 23 June 2005 or later EASA approved revisions into the AFM.

2. Visually inspect the position of the upper and lower plain journal bearings in the sliding sleeve for dislocated plain journal bearings per the instructions in the applicable AFM page which is attached to Eurocopter ASB EC135-62A-021. If the plain journal bearings have moved and found in the incorrect position contact the aircraft manufacturer for corrective action instructions which must be accomplished before further flight.

**Note 3:** The visual 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.

3. Amend the AFM with the applicable revision level indicated in the following table or later approved revision which contains the requirements of this AD. Remove the copy of the AFM page which was introduced by requirement 1 of this AD.

Model	AFM revision or later approved revisions
EC135 P1(CDS)	15
EC135 P1(CPDS)	15
EC135 P2(CPDS)	13
EC135 T1(CDS)	18
EC135 T1(CPDS)	19
EC135 T2(CPDS)	9
EC635 T1(CPDS)	19

**Note 4:** The accomplishment of corrective actions is not a terminating action for the preflight inspections of the main rotor sliding sleeve.

(EASA AD 2009-0272 refers)

**Compliance:**

- Before further flight unless previously accomplished and until requirement 3 of this AD is accomplished.
- Before further flight and thereafter at every preflight inspection until requirement 3 of this AD is accomplished.
- By 22 February 2010.

**Effective Date:** 22 January 2010

**DCA/EC135/28 Cancelled – EASA AD 2010-0058R1 refers****Effective Date:** 7 April 2017**DCA/EC135/29A Instrument Control Panel – Flight Limitation, Placard and Modification**

**Applicability:** Model EC 135 P1(CDS), EC 135 P1(CPDS), EC 135 P2(CPDS), EC 135 P2+, EC 135 T1(CDS), EC 135 T1(CPDS), EC 135 T2(CPDS) and EC 135 T2+ aircraft, all S/N fitted with Instrument Control Panel (ICP) P/N C19269AA, S/N E0034, E0055, E0066, E0081, E0097, E0252, E0456, E0467, E1029, E1117, E1179, E1271, E1391, E1434, E1462, E1486, E1490, E1529, E1582, E1730, E1849, E1874, E1891, E1972, E2041, E2117 and E2156 through to E2400.

**Note 1:** No action required if the aircraft is already in compliance with DCA/EC135/29. This AD revised to introduce the option to replace affected ICP with an ICP embodied with modification standard 'Amdt. C' as an acceptable method of compliance with the modification requirements of this AD.

**Requirement:** To prevent unintentional turning of BARO rotary knobs on certain Instrument Control Panels (ICP) due to insufficient turn resistance which can result in erroneous altitude information and increase the risk of flight into terrain during IFR operation, accomplish the following:

1. Review the aircraft records or inspect the aircraft and determine the S/N of the ICP P/N C19269AA installed on the aircraft.

If an affected ICP is found installed on the aircraft, install a placard with text "**Single Pilot IFR Operation Prohibited**" on the instrument panel in full view of the pilots before further flight per the instructions in ECD ASB EC135-31A-053 revision 2, dated 23 May 2011 or later approved revisions and inform the flight crew.

2. Modify the ICP per the instructions in ASB EC135-31A-053 or replace the ICP with a unit embodied with modification standard 'Amdt. C' or higher, and remove the placard introduced by requirement 1 of this AD

3. An affected ICP shall not be fitted to any aircraft unless the ICP has been modified per the instructions in ASB EC135-31A-053 or unless the ICP is embodied with modification standard 'Amdt. C' or higher.

**Note 2:** ICP P/N C19269AA with S/N E2401 through to E2999 have been modified by ECD per the requirements of this AD prior to installation on an aircraft, or prior to despatch as a replacement unit. The ICP manufacturer (Thale) has informed ECD that ICP units from S/N E3000 onwards have been embodied with modification standard 'Amdt. C' at production. Existing units can be returned to Thales for modification to this standard.

**Note 3:** Eurocopter Deutschland GmbH (ECD) ASB EC135-31A-053 revision 2, dated 23 May 2011 or later approved revisions is acceptable to comply with the requirements of this AD.

(EASA AD 2010-0207R1 refers)

- Compliance:**
1. By 23 October 2010 (ten days after the effective date of DCA/EC135/29).
  2. By 13 December 2010 (two months after the effective date of DCA/EC135/29).
  3. From 13 October 2010 (the effective date of DCA/EC135/29).

**Effective Date:** DCA/EC135/29 - 13 October 2010  
DCA/EC135/29A - 30 June 2011

**DCA/EC135/30A Cancelled – EASA AD 2017-0002 refers****Effective Date:** 23 January 2017

**DCA/EC135/31 Cancelled – EASA AD 2010-0227R1****Effective Date:** 7 April 2017**DCA/EC135/32 Cancelled – DCA/EC135/35 refers****Effective Date:** 29 September 2011**DCA/EC135/33 Tailboom Fenestron Ring Frame – Inspection and AFM Amendment**

**Applicability:** Model EC 135 P1(CDS), EC 135 P1(CPDS), EC 135 P2(CPDS), EC 135 P2+, EC 135 T1(CDS), EC 135 T1(CPDS), EC 135 T2(CPDS) and EC 135 T2+ helicopters, all S/N fitted with ring frame P/N L535A3501230.

**Note 1:** This AD retains the requirements of superseded DCA/EC135/25A, reduces the repetitive inspection intervals and requires the modification of the aft ring frame as a terminating action to the repetitive inspection requirements of this AD.

**Requirement:** To prevent structural failure of the tailboom to fenestron ring frame attachment which could result in loss of aircraft control, accomplish the following:

1. Revise the preflight check in section 4 of the AFM by inserting a copy of pages 6 or 7 (as applicable to the aircraft model) of Eurocopter Deutschland ASB EC135-53A-022 revision 2 dated 30 November 2010, or later approved revisions into the AFM, and advise the flight crew of this amendment.

Accomplish a visual inspection of the rear structure tube per the instructions in ECD ASB EC135-53A-022. If any cracks are detected in the ring frame, replace with a serviceable part before further flight.

**Note 2:** The AFM amendment and the preflight inspection of the ring frame for cracks per 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 3:** The amendment of the AFM to a revision level as indicated in appendix 1 of EASA AD 2010-0254 (as applicable to helicopter model) is acceptable to comply with the AFM amendment per requirement 1 of this AD.

2. Accomplish a visual inspection per the instructions in ECD ASB EC135-53A-022. revision 2, or later approved revisions. If any cracks are detected in the ring frame, replace with a serviceable part before further flight.

3. Modify the aft ring frame and change the ring frame P/N to L535H2120302 per the instructions in Eurocopter Deutschland SB EC135-53-023 original issue, dated 19 August 2009 or later EASA approved revisions.

4. An aft ring frame with P/N L535A3501230 shall not be fitted to any helicopter which already has ring frame P/N to L535H2120302 fitted or is in compliance with requirement 3 of this AD.

**Note 4:** The installation of a P/N L535A3501230 ring frame as replacement part is not a terminating action for the repetitive inspection requirements of this AD.

**Note 5:** The modification of a helicopter per requirement 3 of this AD is a terminating action for the repetitive inspection requirements of this AD.  
(EASA AD 2010-0254 refers)

**Compliance:**

1. Before further flight after 24 September 2009 (the effective date of DCA/EC135/25A) unless previously accomplished, and thereafter before the first flight of every day accomplish a visual inspection of the rear structure per requirement 1.
2. Within the next 25 hours TIS, or within 100 hours TIS since the last inspection per DCA/EC135/25A whichever occurs sooner, and thereafter at intervals not to exceed 25 hours TIS.
3. By 23 December 2011.
4. From 23 December 2010.

**Effective Date:** 23 December 2010

**DCA/EC135/34A      Mechanical Air Conditioning System – Inspection**

**Applicability:** Model EC 135 P2+ and EC 135 T2+ aircraft, S/N 870, 872, 873, 879, 883, 884, 888, 893, 900, 905, 911, 914, 916, 917, 923 and 926 fitted with a mechanical air condition system with compressor bearing block P/N L210M1872105.

**Note 1:** This AD revised to introduce an optional terminating action to the repetitive inspections per note 2 of this AD.

**Requirement:** To prevent bearing cage debris entering the engine inlet due to possible failure of a bearing in the air conditioning compressor bearing block which could result in engine compressor damage and loss of engine power, accomplish the following:

Inspect the upper bearing in the bearing block of the mechanical air conditioning system compressor, per the instructions in Eurocopter Deutschland (ECD) ASB EC135-21A-013 original issue, dated 06 June 2011 or later approved revisions.

If water, corrosion or grease leaks are found deactivate the air conditioning system per the instructions in ECD ASB EC135-21A-013 before further flight.

**Note 2:** The repetitive inspections mandated by this AD may be terminated when the mechanical air conditioning system compressor bearing block P/N L210M1872105 is replaced with an improved block P/N L210M1872107 or P/N L210M1872886 per the instructions in of ECD SB EC135-21-015 original issue, dated 12 July 2011 or later approved revisions.

(EASA AD 2011-0111R1 refers)

**Compliance:** Within 25 hours TIS or 14 days after 30 June 2011 (the effective date of DCA/EC135/34), whichever occurs sooner, and

If condensation is found accomplish the AD requirements thereafter at intervals not to exceed 25 hours TIS or 28 days whichever occurs sooner, and

If no water, corrosion or grease leaks are found, accomplish the AD requirements thereafter at intervals not to exceed 100 hours TIS or 3 months whichever occurs sooner.

**Effective Date:** DCA/EC135/34 - 30 June 2011  
DCA/EC135/34A - 27 October 2011

**DCA/EC135/35 Cancelled – EASA AD 2011-0168R1 refers**

**Effective Date:** 26 April 2018

**DCA/EC135/36 Fire Extinguishing System Injection Tubes – Replacement**

**Applicability:** Model EC 135 P1(CDS), EC 135 P1(CPDS), EC 135 P2(CPDS), EC 135 P2+, EC 135 T1(CDS), EC 135 T1(CPDS), EC 135 T2(CPDS) and EC 135 T2+ helicopters, all S/N fitted with a single engine fire extinguishing system P/N L262M1808101, L262M1812101 or P/N L262M1812102, or fitted with a dual engine fire extinguishing system P/N L262M1813102.

**Requirement:** To prevent failure of the fire extinguishing system due to non-compliant injection tubes accomplish the following:

1. Modify or replace RH and LH injection tubes and elbow (if installed) listed in table 1 of this AD per the instructions in Eurocopter Deutschland GmbH (ECD) ASB EC135-26A-003 revision 01 dated 16 May 2011 or later approved revisions.

**Table 1 – Parts to be modified or replaced:**

<b>For single engine fire extinguishing systems:</b>	RH tube P/N L262M1810101; LH tube P/N L262M1811801 and/or P/N L262M1809101.
<b>For dual engine fire extinguishing systems:</b>	RH tube P/N L262M1814101; RH tube P/N L262M1808212; LH tube elbow P/N L262M1815101 and LH tube P/N L262M1808211.

2. An injection tube or elbow listed in table 1 of this AD shall not be installed on any helicopter unless the part has been modified per the instructions in ECD ASB EC135-26A-003.

(EASA AD 2011-0172 refers)

**Compliance:** 1. For single engine fire extinguishing systems P/N L262M1808101, P/N L262M1812101 and P/N L262M1812102:

By 29 June 2012.

For dual engine fire extinguishing system P/N L262M1813102:

By 29 March 2012.

2. From 29 September 2011.

**Effective Date:** 29 September 2011

**DCA/EC135/37 Emergency Float Kit – Inspection**

**Applicability:** Model EC-135 aircraft fitted with Apical emergency float kit P/N 644.1801, S/N all through to 031 (embodied under FAA STC SR01855LA).

**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

**DCA/EC135/38 Cancelled – DCA/EC135/39 refers**

**Effective Date:** 19 May 2012

**DCA/EC135/39B Cancelled – EASA AD 2012-0085R4 refers**

**Effective Date:** 4 October 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 <https://www.aviation.govt.nz/aircraft/airworthiness/airworthiness-directives/links-to-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.

#### **2012-0085R6 Main Rotor Hub – Inspection**

**Applicability:** EC 135 P1(CDS), EC 135 P1(CPDS), EC 135 P2(CPDS), EC 135 P2+, EC 135 T1(CDS), EC 135 T1(CPDS), EC 135 T2(CPDS) and EC 135 T2 helicopters, all S/N.

**Effective Date:** 2012-0085R4 - 4 October 2012  
2012-0085R5 - 30 October 2012  
2012-0085R6 - 9 February 2016

#### **2013-0176 Flight System Actuators – Inspection**

**Applicability:** EC 135 P1 (CDS), EC 135 P1 (CPDS), EC 135 P2+, EC 135 P2 (CPDS), EC 135 T1 (CDS), EC 135 T1 (CPDS), EC 135 T2+ and EC 135 T2 helicopters, all S/N.

**Effective Date:** 21 August 2013

#### **2013-0178 Cancelled - EASA AD 2017-0243 refers**

**Effective Date:** 21 December 2017

#### **2013-0228-E Main Rotor Actuator – Replacement**

**Applicability:** EC 135 P1 (CDS), EC 135 P1 (CPDS), EC 135 P2 (CPDS), EC 135 P2+, EC 135 T1 (CDS), EC 135 T1 (CPDS), EC 135 T2 (CPDS) and EC 135 T2+ helicopters, all S/N.

**Effective Date:** 25 September 2013

#### **2013-0289-E Rear Structure / Ring Frame – Inspection**

**Applicability:** EC 135 P1 (CDS), EC 135 P1 (CPDS), EC 135 P2 (CPDS), EC 135 P2+, EC 135 T1 (CDS), EC 135 T1 (CPDS), EC 135 T2 (CPDS) and EC 135 T2+ helicopters, all S/N, if fitted with mounting ring frame X9227 P/N L535H2120301, or P/N L535H2120303, or P/N L535H2120304 without frame reinforcement.

**Note:** Ring frames X9227 with frame reinforcement P/N L535H2100201 are not affected by the requirements of this AD

**Effective Date:** 10 December 2013

#### **2013-0306-CN AD Cancelled by EASA – Purpose fulfilled**

**Effective Date:** EASA AD 2013-0306 - 27 December 2013  
EASA AD 2013-0306-CN - 26 April 2017

#### **2013-0307-E Fuel Quantity Indication – AFM Amendment**

**Applicability:** EC 135 P1 (CDS), EC 135 P1 (CPDS), EC 135 P2 (CPDS), EC 135 P2+, EC 135 T1 (CDS), EC 135 T1 (CPDS), EC 135 T2 (CPDS) and EC 135 T2+ helicopters, all S/N.

**Effective Date:** 21 December 2013

#### **2014-0226 Main Gearbox and Tail Gearbox Oil – Inspection**

**Applicability:** EC135 P2+ and EC135 T2+ helicopters, S/N as listed in Appendix 1 of this AD.

**Effective Date:** 24 October 2014

**2017-0002 Main Transmission Housing – Modification**

**Applicability:** EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+, EC135 T3 helicopters, all S/N.

**Effective Date:** 23 January 2017

**2010-0058R1 Tail Rotor, Cyclic and Collective Control Levers – Inspection**

**Applicability:** EC135 P1(CDS), EC135 P1(CPDS), EC135 P2(CPDS), EC135 P2+, EC135 T1(CDS), EC135 T1(CPDS), EC135 T2(CPDS) and EC135 T2+ helicopters, all S/N.

**Effective Date:** 7 April 2017

**2010-0227R1 Tail Rotor Rod and Ball Pivot – Inspection**

**Applicability:** EC135 P1(CDS), EC135 P1(CPDS), EC135 P2(CPDS), EC135 P2+, EC135 T1(CDS), EC135 T1(CPDS), EC135 T2(CPDS) and EC135 T2+ helicopters, all S/N.

**Effective Date:** 7 April 2017

**2006-0318R2 Tail Rotor Linear Control Transducer Bearing and Rod – Inspection**

**Applicability:** EC135 P1(CDS), EC135 P1(CPDS), EC135 P2(CPDS), EC135 P2+, EC135 T1(CDS), EC135 T1(CPDS), EC135 T2(CPDS) and EC135 T2+ helicopters, if fitted with bearing P/N LN9367GE6N2, or with an affected part (see Note of this AD).

**Note:** For the purpose of this AD, an affected part is a Floor P/N L533M1014101, or P/N L533M1014102, or P/N L533M1014103, or P/N L533M1014104, or P/N L533M1014105, or P/N L533M1014106, that has not been modified and re-identified in service in accordance with the instructions of ECD Alert Service Bulletin (ASB) EC135-67A-012, or in production in accordance with drawing L671M5040051, or a Rod P/N L671M5040205, or a Lever P/N L671M5040101.

**Effective Date:** 25 April 2017

**2017-0147 Tail Rotor Controls – Modification**

**Applicability:** EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+ and EC135 T3 helicopters, all S/N.

**Effective Date:** 31 August 2017

**2017-0199 Cancelled – EASA AD 2021-0011 refers**

**Effective Date:** 31 January 2021

**2017-0243 Cancelled – EASA AD 2022-0067 refers**

**Effective Date:** 28 April 2022

**2011-0168R1 Instrument Lighting Display Brightness – Inspection**

**Applicability:** EC135 P1(CPDS), EC135 P2(CPDS), EC135 P2+, EC135 T1(CPDS), EC135 T2(CPDS) and EC135 T2 helicopters, S/N 0642 through to 0999 inclusive, if fitted with an optional night vision goggle (NVG) system.

**Effective Date:** 26 April 2018

**2018-0063      Cyclic Stick – Modification**

**Applicability:** EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+ and EC135 T3 helicopters, all variants, all S/N up to 1263 inclusive and S/N 1265, if fitted with an autopilot, and S/N 2001 up to 2024 inclusive, except S/N 2006, 2008, 2013, 2017, 2019, 2020 and 2022.

**Effective Date:** 26 April 2018

**2018-0168R1      Cancelled – EASA AD 2022-0067 refers**

**Effective Date:** 28 April 2022

**2018-0210-E      Hoist Carrier Assembly – Inspection**

**Applicability:** EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+ and EC135 T3 helicopters, all S/N, except EC135 P3H and EC135 T3H variants.

**Effective Date:** 27 September 2018

**2018-0284      Cancelled – EASA AD 2022-0067 refers**

**Effective Date:** 28 April 2022

**2019-0087-E      Cancelled – EASA AD 2020-0105 refers**

**Effective Date:** 28 May 2020

**2019-0199      Tail Rotor Drive Ti-Bolts – Inspection**

**Applicability:** EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+, and EC135 T3 helicopters, all variants, all S/N.

**Effective Date:** 30 August 2019

**2020-0013      Hand Held Fire Extinguishers – Inspection**

**Applicability:** EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+, and EC135 T3 helicopters, all S/N.

**Effective Date:** 27 February 2020

**2020-0064      Emergency Flotation System – Inspection**

**Applicability:** EC 135 P1, EC 135 P2, EC 135 P2+, EC 135 P3, EC 135 T1, EC 135 T2, EC 135 T2+, EC 135 T33 helicopters, all variants, all S/N.

**Effective Date:** 2 April 2020

**2020-0099      Titanium Bolts – Inspection**

**Applicability:** EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+ and EC135 T3 helicopters, all variants, all S/N.

**Effective Date:** 28 May 2020

**2020-0102      Tail Rotor Control System – Inspection**

**Applicability:** EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+ and EC135 T3 helicopters, all S/N up to 1276 inclusive.

**Effective Date:** 28 May 2020

**2020-0105 Main Rotor Actuator Single-Axis Actuators – Inspection**

**Applicability:** EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+, and EC135 T3 helicopters, all variants, all S/N.

**Note:** This AD partially retains the requirements of superseded EASA AD 2019-0087-E, introduces repetitive inspections or replacement of all affected parts, and provides criteria to allow installation of affected parts.

**Effective Date:** 28 May 2020

**2020-0282 Tail Rotor Blades – Inspection**

**Applicability:** EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+, and EC135 T3 helicopters, all variants, all S/N.

**Effective Date:** 28 January 2021

**2021-0011 Outboard Load System – Inspection**

**Applicability:** EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+, and EC135 T3 helicopters, all S/N up to 1276 inclusive.

**Note:** This AD supersedes EASA AD 2017-0199 to introduce the installation of an updated hook assembly, which is a terminating action for the repetitive inspections.

**Effective Date:** 31 January 2021

**2021-0050 Tail Rotor Blades – Replacement**

**Applicability:** EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+, and EC135 T3 helicopters, all variants, all S/N.

**Effective Date:** 9 March 2021

**2021-0066 Outboard Load System Fittings – Inspection**

**Applicability:** EC135 P2+, EC135 P3, EC135 T2+ and EC135 T3 helicopters, S/N 0886 through to 1166, except S/N 1007, 1102 and 1145, and except helicopters embodied in service with Airbus Helicopters SB EC135-85-063.

**Effective Date:** 22 March 2021

**2021-0149 Emergency Flashlight – Inspection**

**Applicability:** EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+, EC135 T3, EC635 P2+, EC635 P3, EC635 T1, EC635 T2+ and EC635 T3 helicopters, all variants, all S/N up to 820 inclusive.

**Effective Date:** 5 July 2021

**2022-0023 Air Conditioning System – Inspection**

**Applicability:** EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+, and EC135 T3 helicopters, all variants, S/N from 0008 through to 0869 inclusive, except S/N 0831 and S/N 0864.

**Effective Date:** 24 February 2022

**2022-0067 Airworthiness Limitations – Amendment**

**Applicability:** EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+, and EC135 T3 helicopters, all variants, all S/N.

**Effective Date:** 28 April 2022

**2022-0077-E Flight Control Flexball Cables - Replacement**

**Applicability:** EC 135 T1, EC 135 T2, EC 135 T2+, EC 135 T3, EC 135 P1, EC 135 P2, EC 135 P2+, EC 135 P3, EC 635 T1, EC 635 T2+, EC 635 T3, EC 635 P2+ and EC 635 P3 helicopters, all S/N.

**Effective Date:** 2 May 2022

**2022-0097 Instrument Flight Rule Screens - Removal**

**Applicability:** EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+, EC135 T3, EC635 P2+, EC635 P3, EC635 T1, EC635 T2+ and EC635 T3 helicopters, all variants, all S/N.

**Effective Date:** 8 June 2022

**2022-0143 Cancelled – EASA AD 2022-0168 refers**

**Effective Date:** 31 August 2022

**2022-0168 Integrated Modular Avionics, Ethernet Network - Inspection**

**Applicability:** EC135 P3H and EC135 T3H helicopters, all S/N.

**Effective Date:** 31 August 2022

**2023-0066 Hoist Boom Assembly - Inspection**

**Applicability:** EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+ and EC135 T3 helicopters, all variants, all S/N.

**Effective Date:** 7 April 2023

**2023-0197 Tail Rotor Drive - Inspection**

**Applicability:** EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+ and EC135 T3 helicopters, all variants, all S/N.

**Effective Date:** 30 November 2023

**\* 2024-0028-E Tail Rotor Blades - Inspection**

**Applicability:** EC135 P1, EC135 P2, EC135 P2+, EC135 P3, EC135 T1, EC135 T2, EC135 T2+ and EC135 T3 helicopters, all variants, all S/N.

**Effective Date:** 29 January 2024

# Airworthiness Directive Schedule

## Engines

### Austro E4 Series

29 February 2024

- Notes:**
1. This AD schedule is applicable to Austro E4 and E4P series engines manufactured under EASA Type Certificate No. E.200.
  2. The European Union 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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**EASA AD 2011-0039 High Pressure Fuel Pump – Inspection**

**Applicability:** Model E4 engines, all S/N.

**Compliance:** Initial compliance required 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 required, are to be accomplished at intervals not to exceed the times specified in the EASA AD.

**Effective Date:** 25 June 2020

**EASA AD 2013-0213R1 Waste Gate Controller - Replacement**

**Applicability:** Model E4 engines, all S/N.

**Compliance:** Initial compliance required 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 required, are to be accomplished at intervals not to exceed the times specified in the EASA AD.

**Effective Date:** 25 June 2020

**EASA AD 2017-0103R1 Timing Chain – Replacement / AFM – Amendment**

**Applicability:** Model E4 engines, all S/N having configuration “-B” or “-C”; and  
Model E4P engines, all S/N installed on twin engine aeroplanes.

**Compliance:** Initial compliance required 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 required, are to be accomplished at intervals not to exceed the times specified in the EASA AD.

**Effective Date:** 25 June 2020

**EASA AD 2018-0125 Waste Gate Controller and Control Rod Circlip – Life Limit / Modification**

**Applicability:** Model E4 and E4P engines, all S/N.

**Compliance:** Initial compliance required 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 required, are to be accomplished at intervals not to exceed the times specified in the EASA AD.

**Effective Date:** 25 June 2020

**EASA AD 2019-0041 Airworthiness Limitations - Amendment**

**Applicability:** Model E4 and E4P engines, all S/N.

**Compliance:** Initial compliance required 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 required, are to be accomplished at intervals not to exceed the times specified in the EASA AD.

**Effective Date:** 25 June 2020

**EASA AD 2021-0055R1 Cancelled – EASA AD 2021-0094 refers**

**Effective Date:** 29 April 2021

**EASA AD 2021-0094 Oil Pump - Replacement**

**Applicability:** Model E4 and E4P engines, all S/N.

**Effective Date:** 29 April 2021

**EASA AD 2021-0143-E Cancelled – EASA AD 2021-0191-E Refers**

**Effective Date:** 20 August 2021

**EASA AD 2021-0191-E Oil Pump – Replacement**

**Applicability:** Model E4 and E4P engines, all S/N.

**Effective Date:** 20 August 2021

**EASA AD 2021-0203R1 Cancelled – EASA AD 2021-0274-E Refers**

**Effective Date:** 23 December 2021

**EASA AD 2021-0274-E High Pressure Pump Driving Gear – Inspection**

**Applicability:** Model E4 and E4P engines, all S/N.

**Note:** EASA AD 2021-0274-E partially retains the requirements in superseded EASA AD 2021-0203R1, requires replacement of the HPP driving gear on engines fitted with an affected cylinder head/HPP driving gear combination. This AD also provides requirements for the installation of a HPP driving gear.

**Effective Date:** 23 December 2021

**EASA AD 2022-0240R1 Cancelled – EASA AD 2023-0163 Refers**

**Effective Date:** 1 September 2023

**EASA AD 2023-0163 Pistons – Oil Analysis/Replacement**

**Applicability:** E4 and E4P engines, all S/N listed in Table 1, 2, 3 and 4 of Austro Engine MSB MSB-E4-039 Revision 2.

These engines are known to be installed on, but not limited to, Diamond Aircraft Industries DA 40 NG, DA 42 NG, DA 42 M-NG and DA 62 aircraft.

**Effective Date:** 1 September 2023

**\* EASA AD 2024-0037R1 Engine Main Bearing / Studs – Replacement**

**Applicability:** E4 and E4P engines, all S/N.

These engines are known to be installed on, but not limited to, Diamond Aircraft Industries DA 40 NG, DA 42 NG, DA 42 M-NG and DA 62 aircraft.

**Effective Date:** EASA AD 2024-0037 - 6 February 2024  
EASA AD 2024-0037R1 - 6 February 2024

# Airworthiness Directive Schedule

## Helicopters

### Bell 505 Series

29 February 2024

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- Notes:**
1. This AD schedule is applicable to Bell 505 helicopters manufactured by Bell Helicopter Textron Canada (BHTC) under Transport Canada Type Certificate No. H-112.
  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 \(tc.gc.ca\)](https://tc.gc.ca/AirworthinessDirectives-AdvancedSearch)  
FAA ADs can be obtained from the FAA website at: [Dynamic Regulatory System \(faa.gov\)](https://www.faa.gov/regulatory/policy/notifications/erg)
  4. Manufacturer service information referenced in Airworthiness Directives listed in this schedule may be at a later approved revision. Service information at later approved revisions can be used to accomplish the requirements of these Airworthiness Directives.
  5. The date above indicates the amendment date of this schedule.
  6. New or amended ADs are shown with an asterisk \*
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**CF-2017-36 Engine Chip Detector – Inspection**

**Applicability:** Bell 505 helicopters, S/N 65011 through to 65023, 65025 through to 65028, 65030 through to 65032, 65034 and 65036.

**Effective Date:** 29 December 2017

**CF-2019-08 Cancelled – CF-2023-16 refers**

**Effective Date:** 30 March 2023

**CF-2019-28 Swashplate Assembly – Improperly Staked Bearings**

**Applicability:** Bell 505 helicopters, S/N 65011 through to 65211.

**Effective Date:** 8 August 2019

**CF-2019-35 Airframe Truss Clevis Lower Lug – Inspection**

**Applicability:** Bell 505 helicopters, S/N 65011 and onwards.

**Effective Date:** 24 October 2019

**CF-2021-05R3 Pilot Collective Stick and Grip Assembly – Inspection**

**Applicability:** Bell 505 helicopters, S/N 65011 through to 65347.

**Effective Date:** CF-2021-05 - 23 February 2021  
CF-2021-05R1 - 1 March 2021  
CF-2021-05R2 - 8 March 2021  
CF-2021-05R3 - 2 April 2021

**FAA AD 2021-26-01 Stability Augmentation System and Autopilot – Inspection**

**Applicability:** Bell 505 helicopters, S/N 65011 through to 65234 inclusive, 65236 through to 65348 inclusive, 65350 and 65352 through to 65359 inclusive, embodied with a S-TEC Corporation HeliSAS stability augmentation system and autopilot installed under STC SR09758DS.

**Effective Date:** 28 December 2021

**CF-2022-62 Collective Lever and Swashplate Outer Ring – Inspection**

**Applicability:** Bell 505 helicopters, S/N 65011 through to 65412, 65414 through to 65416, 65419 through to 65426, 65428, 65430 and 65431.

**Effective Date:** 23 November 2022

**CF-2023-16R1 Fuel and Control – AFM Limitations**

**Applicability:** Bell 505 helicopters, S/N 65011 through to 65169 and 65171 through to 65300.

**Effective Date:** CF-2023-16 - 30 March 2023  
CF-2023-16R1 - 2 August 2023

**CF-2023-51 Fuel Drain Quick Disconnect Valve - Modification**

**Applicability:** Bell 505 helicopters, S/N 65011 through to 65291, 65294 through to 65302, 65306, 65307, 65312, 65314 through to 65332, 65334 through to 65339, 65341 through to 65343, 65345 and 65346.

**Effective Date:** 27 July 2023

**\* CF-2024-03 Vertical Stabiliser Top End Cap Assembly - Inspection**

**Applicability:** Bell 505 helicopters, S/N 65011 and subsequent.

**Effective Date:** 29 January 2024

# Airworthiness Directive Schedule

## Engines

### GE Aviation Czech (previously Walter Engines) M601 Series

29 February 2024

- Notes:**
1. This AD schedule is applicable to GE Aviation Czech (previously Walter Engines) M601 series engines manufactured under EASA Type Certificate E.070.
  2. These engines are known to be installed on, but not limited to:  
Pacific Aerospace Fletcher FU24-950 series aircraft embodied with STC 98/21E/15, Moravan Z-37T aircraft, Allied Ag Cat Productions Inc. (formerly Grumman) G-164 series aircraft, Aircraft Industries (formerly LET) L-410 series aircraft, Air Tractor AT-300, AT-400 and AT-500 series aircraft, PZL "Warszawa-Okęcie" PZL-106 (Kruk) aircraft, RUAG Aerospace Services (formerly Dornier) Do 28 series aircraft and Thrush Aircraft Inc. (formerly Quality, Ayres, Rockwell) S-2R series aircraft.
  3. The European Union 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/>
  4. The date above indicates the amendment date of this schedule.
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**DCA/WALT/1 Fuel Control Unit - Replacement**

**Applicability:** Model M 601 series listed in Appendix 1 of Walter Mandatory Bulletin A M601D/29a, A M601D-1/3a, A M601D-11NZ/3a, A M601E/23a, A M601E-11/4a, A M601E21/2a, A M601F/3a, A M601T/7a, A M601Z/15a.

**Requirement:** To prevent fuel control unit servomotor relief valve leakage due to the malfunction of the relief valve seal and possible sudden reduction in takeoff power, accomplish the following:-  
Replace the fuel control unit per the Walter Mandatory Bulletin detailed above.  
(Czech CAA-AD-T-095/2000 refers)

**Compliance:** Before further flight.  
For engines held as spares, before installation on an aircraft.

**Effective Date:** 19 October 2000

**DCA/WALT/2 Combustion Chamber Inner Liner - Replacement**

**Applicability:** Model M601 Series as listed in Appendix 1 of Walter Mandatory Bulletin No.: A M601D/33a, A M601D-1/7a A M601D-11NZ/7a, A M601E/29a or A M601E-21/7a

**Requirement:** To prevent engine power loss and/or increased inter-turbine temperatures, replace the combustion liners as listed by S/N (and engine S/N) in Appendix 1 of the appropriate SB listed above.  
(Czech CAA-AD-T-031/2003 refers)

**Compliance:** Before 31 December 2003

**Effective Date:** 24 April 2003

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 <https://www.aviation.govt.nz/aircraft/airworthiness/airworthiness-directives/links-to-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.

**2015-0014      Reduction Gearbox Quill Shaft and Supporting Cone – Inspection**

**Effective Date:** 13 February 2015

**2015-0015      Gas Generator Turbine Blades – Replacement**

**Effective Date:** 13 February 2015

**2016-0025-E (Correction)      Cancelled – EASA AD 2019-0061 refers**

**Effective Date:** 1 April 2019

**2017-0100      Cancelled - EASA AD 2019-0061 refers**

**Effective Date:** 1 April 2019

**2017-0151R1      Exhaust System – Modification**

**Applicability:** M601D, M601D-1, M601D-2, M601D-11, M601D-11NZ, M601E, M601E-11, M601E-11A, M601E-11AS, M601E-11S, M601E-21, M601F, M601FS, M601F-11, M601F-22, M601F-32, M601T, M601Z, H75-100, H75-200, H80, H80-100, H80-200 and H85-100 and H85-200 engines, all S/N.

**Note:** This AD revised to include the reference to the Engine Maintenance Manual (EMM) at revision 03.

**Effective Date:** 2017-0151 - 1 September 2017  
2017-0151R1 - 20 December 2018

**2019-0061      Cancelled – EASA AD 2019-0143 refers**

**Effective Date:** 27 June 2019

**2019-0143      Power Turbine Disc – Inspection**

**Applicability:** M601D, M601D-1, M601D-2, M601D-11, M601D-11NZ, M601E, M601E-11, M601E-11A, M601E-11AS, M601E-11S, M601E-21, M601F, M601FS, M601F-11, M601F-22, M601F-32, M601T and M601Z engines, all S/N.

**Note:** EASA AD 2019-0143 retains the requirements of superseded EASA AD 2019-0061 and introduces amended compliance times for Group 2 engines.

**Effective Date:** 27 June 2019

**2021-0052      Cancelled – EASA AD 2021-0154 refers**

**Effective Date:** 29 July 2021

**2021-0060      Cancelled – EASA AD 2023-0020 refers**

**Effective Date:** 6 February 2023

**2021-0125R1 Critical Parts - Replacement**

**Applicability:** M601E engines fitted with a centrifugal compressor case P/N M601-154.61.  
These engines are known to be installed on, but not limited to, Aircraft Industries (formerly LET) L-410 series.

**Effective Date:** 2021-0125-E - 11 May 2021  
2021-0125R1 - 23 February 2023

**2021-0154 Propeller Shaft - Replacement**

**Applicability:** M601D, M601D-1, M601D-2, M601D-11, M601D-11NZ, M601E, M601E-11, M601E-11A, M601E-11AS, M601E-11S, M601E-21, M601F, M601F-11, M601F-22, M601F-32, M601FS, M601T and M601Z engines, all S/N.

**Effective Date:** 29 July 2021

**2021-0264R1 Critical Parts - Replacement**

**Applicability:** M601E, M601E-11, M601E-11A, M601E-11AS, M601E-11S, M601E-21, M601F and M601FS engines, all S/N.

**Effective Date:** EASA AD 2021-0264 - 6 December 2021  
EASA AD 2021-0264R1 – 4 April 2023

**2022-0034 Outer Liner Dilution Tube - Inspection**

**Applicability:** M601D, M601D-1, M601D-2, M601D-11, M601D-11NZ, M601E, M601E-11, M601E-11A, M601E-11AS, M601E-11S, M601E-21, M601F, M601FS, M601Z, H75-100, H75-200, H80, H80-100, H80-200, H85-100 and H85-200 engines, all S/N.

**Effective Date:** 18 March 2022

**2022-0234 Propeller Governor - Inspection**

**Applicability:** M601E-11AS, M601E-11S and M601FS engines, all S/N installed on a single-engine aeroplane.

**Effective Date:** 22 December 2022

**2023-0020 Airworthiness Limitations**

**Applicability:** M601D, M601D-1, M601D-2, M601D-11, M601D-11NZ, M601E, M601E-11, M601E-11A, M601E-11AS, M601E-11S, M601E-21, M601F, M601FS and M601Z engines, all S/N.

**Effective Date:** 6 February 2023

**\* 2024-0040-E Centrifugal Compressor Case - Inspection**

**Applicability:** M601D, M601D-1, M601D-2, M601D-11, M601D-11NZ, M601E, M601E-11, M601E-11A, M601E-11AS, M601E-11S, M601E-21, M601F, M601FS and M601Z engines, all S/N.

**Effective Date:** 12 February 2024

# Airworthiness Directive Schedule

## Engines

### Pratt and Whitney PT6 Series

29 February 2024

- Notes:** 1. This AD schedule is applicable to Pratt & Whitney PT6 series engines manufactured under Transport Canada Type Certificate (TC) Numbers:

Engine:	Transport Canada TC Numbers:	Engine:	Transport Canada TC Numbers:
PT6A-11	E-13	PT6A-112	E-15
PT6A-15AG	E-6	PT6A-114/A	E-15
PT6A-20	E-6	PT6A-135A	E-15
PT6A-21	E-6	PT6A-140/A/AG	E-15
PT6A-27	E-6	PT6B-36	E-20
PT6A-28	E-6	PT6B-36A	E-20
PT6A-34 series	E-6	PT6B-36B	E-20
PT6A-41AG	E-6	PT6B-37A	E-20
PT6A-42	E-12	PT6C-67C	E-32
PT6A-52	E-12	PT6T-3 series	E-10
PT6A-60A	E-12		
PT6A-60AG	E-12		
PT6A-65AG	E-12		
PT6A-65AR	E-12		
PT6A-65B	E-12		
PT6A-65R	E-12		
PT6A-67 series	E-21		

2. Transport Canada (TC) is the National Airworthiness Authority (NAA) responsible for the issue of State of Design Airworthiness Directives (ADs) for these engines.
- State of Design ADs applicable to these engines can be obtained directly from the TC website at:  
[https://wwwapps.tc.gc.ca/Saf-Sec-Sur/2/cawis-swimn/AD\\_as.aspx](https://wwwapps.tc.gc.ca/Saf-Sec-Sur/2/cawis-swimn/AD_as.aspx)
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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<p>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 <a href="https://www.aviation.govt.nz/aircraft/airworthiness/airworthiness-directives/links-to-state-of-design-airworthiness-directives/">https://www.aviation.govt.nz/aircraft/airworthiness/airworthiness-directives/links-to-state-of-design-airworthiness-directives/</a> If additional NZ ADs need to be issued when an unsafe condition is found to exist in an aircraft or aeronautical product in NZ, they will be added to the list below.</p>		
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**DCA/PT6/2      Cancelled - Purpose Fulfilled**

(Transport Canada AD CF-69-17R1 refers)

**DCA/PT6/3A      Fuel Control Drive Coupling - Modification**

**Applicability:** All PT6A-6, -6A, -6B, -20, -27, -28, -34, PT6B-9 with S/N listed in SB 1165

**Requirement:** United Aircraft of Canada SB 1165

**Compliance:** At next overhaul, unless already accomplished

**Effective Date:** 30 June 1976

**DCA/PT6/4C      Cancelled – Transport Canada AD CF-78-03 refers**

**Effective date:** 29 January 2015

**DCA/PT6/5      Reduction Gearbox - Modification and Inspection**

**Applicability:** All PT6A-6, -6A, -6B, -6/C20, -20, -20A, -20B series turbo-prop engines incorporating an unmodified power turbine shaft housing assembly P/N 3010548

**Requirement:** FAA AD 75-11-04.  
(FAA AD 75-11-04 refers)

**Compliance:** As detailed

**Effective Date:** 1 August 1975

**DCA/PT6/6      Cancelled - Purpose Fulfilled****DCA/PT6/7      Fuel Control Unit - Modification**

**Applicability:** All model PT6T-3 and PT6T-6 fitted with Aviation Electric Ltd. AFCU P/L 2524381-5, 3244712-1 and -2, 3244717-1 through to -5, 3244721-1 through to -5, 3244735-1 through to -7 and 3244737-1 through to -7.

**Requirement:** Replace by-pass valve diaphragm per Pratt & Whitney Canada ASB 5153 dated 21 December 1977 or later Transport Canada approved revisions.  
(Transport Canada AD CF-78-15 refers)

**Compliance:** Within the next 50 hours TIS, unless previously accomplished.

**Effective Date:** 15 September 1978

**DCA/PT6/8A      P3 Air Filter - Modification**

**Applicability:** All PT6T-3 and PT6T-6 series engines.

**Requirement:** Install insulated air pressure tube assembly incorporating filter housing per Pratt and Whitney of Canada SB 5124 or SB 5206.  
(Transport Canada AD CF-83-04 refers)

**Compliance:** Not later than next power section removal unless already accomplished.

**Effective Date:** DCA/PT6/8 - 12 January 1979  
DCA/PT6/8A - 24 June 1983

**DCA/PT6/9 No. 2 Bearing Cover Assembly - Modification**

**Applicability:** PT6A-6, -6A, -6B, -20, -20A, -20B, -6/C20 and PT6B-9 engines with S/N prior to PCE-22659

**Requirement:** Modify per Pratt and Whitney of Canada SB 1188.  
(Transport Canada AD CF-78-14 refers)

**Compliance:** Not later than next overhaul

**Effective Date:** 12 January 1979

**DCA/PT6/10 Propeller Control Linkage - Inspection**

**Applicability:** All PT6A-6A, -6B, -6/C20 and -C20 engines

**Requirement:** Inspect and re-rig as necessary per FAA AD 80-04-02 amendment 39-3693.  
(FAA AD 80-04-02 refers)

**Compliance:** Within next 10 hours TIS and thereafter whenever propeller reversing interconnect linkage is disconnected

**Effective Date:** 29 February 1980

**DCA/PT6/11 Cancelled - Purpose Fulfilled**

(Transport Canada AD CF-80-14R1 refers)

**DCA/PT6/12 Compressor Hubs – Replacement**

**Applicability:** Model PT6A-42 engines S/N 93001 through to 93804

**Requirement:** To prevent hub and possible engine failure, remove from service first stage compressor hub P/N 3030356 per Pratt & Whitney Canada SB 3002 revision 12, dated 9 November 1983 or later Transport Canada approved revisions.  
(Transport Canada AD CF-83-28 and FAA AD 86-10-05 refer)

**Compliance:** Prior to 5000 total cycles in service

**Effective Date:** 1 August 1986

**DCA/PT6/13A Gas Generator Case - Inspection**

**Applicability:** Model PT6T-3, -3B and -6 engines not incorporating: gas generator case P/N 3112048-01 identified by P&WC SB 5249; or superseding parts incorporating the intent of SB 5249; or stiffening plates P/N 3102444-01; or repair per Part 2B of SB 5239R1.

**Requirement:** To detect possible cracks in gas generator case longitudinal seam weld, inspect per P&WC SB 5239R1, Part 2A. Repair cracks per SB 5239R1 Part 2B, before further flight.  
(Transport Canada AD CF-87-14R2 refers)

**Compliance:** Prior to 1200 hours TTIS, or within next 100 hours TIS whichever is the later, and thereafter at intervals not exceeding 600 hours TIS.

**Effective Date:** DCA/PT6/13 - 19 February 1988  
DCA/PT6/13A - 11 June 1993

**DCA/PT6/14 P3 Air Filter Assembly - Removal**

**Applicability:** PT6A-6, PT6A-6/C20, PT6A-20, PT6A-20A, PT6A-21, PT6A-27, PT6A-28, PT6A-34, PT6A-34B and PT6A-36 engines installed on Beech Models 65-90, 65-A90, 65-A90-1, 65-A90-2, 65-A90-3, 65-A90-4, 99, 100, 99A, B90, C90, C90A, E90, H90, A99, A99A, B99 and C99

**Requirement:** To prevent excessive engine acceleration time that could result in an aircraft's inability to safely perform an aborted landing (go-around), remove from service. If in stalled, the P3 filter assembly.

**Note:** The engine compressor delivery air line assembly can be returned to an approved configuration without a P3 filter. For information refer to the applicable PWC Maintenance Manual and Parts Catalogue.

(FAA AD 92-15-11 refers)

**Compliance:** By 1 April 1993

**Effective Date:** 2 October 1992

**DCA/PT6/15 Cancelled – Purpose Fulfilled**

**Effective Date:** 31 July 2008

**DCA/ PT6/16A Exhaust Ducts - Inspection**

**Applicability:** Model PT6A-6, PT6A-6A, PT6A-6B, PT6A-11, PT6A-11AG, PT6A-15AG, PT6A-20, PT6A-20A, PT6A-20B, PT6A-21, PT6A-25, PT6A-25A, PT6A-25C, PT6A-27, PT6A-28, PT6A-34, PT6A-34AG, PT6A-34B, PT6A-36, PT6A-110, PT6A-112, PT6A-135, PT6A-135A engines

**Requirement:** In order to minimize the possibility of an in-flight shutdown due to a cracked exhaust duct, accomplish the following:-

A. Review the maintenance records to determine whether the subject exhaust ducts were modified or repaired. If the exhaust ducts have not yet been subject to a shop visit for repair, no further action is required by this directive.

B. Inspect the exhaust duct in accordance with P&WC SB 1610 R2 dated 1 October 2002 for PT6A-6, PT6A-6A, PT6A-6B, PT6A-20, PT6A-20A, PT6A-20B, PT6A-21, PT6A-25, PT6A-25A, PT6A-25C, PT6A-27, PT6A-28, PT6A-34, PT6A-34AG, PT6A-34B, PT6A-36, PT6A-135, PT6A-135A engines, or SB 12173 R1 dated 19 July 2002 for PT6A-11, PT6A-11AG, PT6A-15AG, PT6A-110, and PT6A-112 engines, per the following instructions:

C. If the welds are found acceptable as specified in the applicable SB referenced in paragraph B above, perform an internal examination of the weld at the next overhaul. For instructions on how to carry out the internal examination of the weld, refer to the applicable engine overhaul manual. Once this internal examination is satisfactorily completed, no further action is required by this directive.

D. If the welds are not found to be acceptable as specified in the applicable SB referenced in paragraph B above, inspect the exhaust ducts in accordance with the following instructions:

1. Using 5X magnification, visually inspect the forward area of the exhaust duct from the propeller reduction gearbox mounting flange to 2 inches aft for any crack indications around the entire circumference of the duct.
2. If no cracks are found, the exhaust duct may remain in service.
3. If cracking is found, the following limitations shall be applied to assess suitability for continued service. A maximum of 3 cracks is allowed. The total length of all cracks shall not exceed 2 inches. No individual crack may

exceed 1 inch. Cracks must be separated by a minimum of 6L (where L is the length of the longest crack) or 3 inches, whichever is the more stringent criteria.

4. Cracks shall be marked with a suitable metal marking pencil (ref: P&WC Engine Maintenance Manual) on the duct, and the length, location and duct hours, TSO recorded. Operation may continue until the limits stated above are reached or the crack growth rate exceeds 0.015 inch/hour.

E. Ducts that exhibit cracks exceeding the limitation stated in part D.3 above must be replaced with a serviceable one before further flight. Replacement of an affected duct with an exhaust duct that has acceptable welds as per paragraph B above, constitutes terminating action to this directive.  
(Transport Canada AD CF-2002-47 refers)

**Compliance:** Within 150 hours TIS or next scheduled shop visit whichever occurs first, unless already accomplished per DCA/PT6/16.

**Note:** Engines that are in full compliance with P&WC SBs 1610, 1610R1 or 12173 are deemed to be in compliance with this directive.

**Effective Date:** DCA/PT6/16                      12 March 2003  
DCA/PT6/16A                      25 September 2003

#### **DCA/PT6/17 Compressor Bleed Off Valve - Inspection**

**Applicability:** Models PT6A-25C and PT6A-114A which incorporate P&WC SB 1510; and all engines converted to Model PT6A-114A which incorporate P&WC SB 1510. These engines may be installed on, but not limited to Cessna 208 aircraft.

**Requirement:** To prevent failure of the compressor bleed off valve (BOV) cotter pin and possible failure of the engine to accelerate from a low power condition, accomplish the following:-

Inspect the compressor BOV convergent-divergent orifice (for signs of blockage), cover/guide shaft, cotter pin and diaphragm for signs of wear per P&WC SB 1574, rev 1. Any BOV found unserviceable must be replaced with a serviceable one before further flight.

**Note:** A 600 hour repetitive inspection schedule for the subject BOV is specified in the applicable maintenance manual.  
(Transport Canada AD CF-99-23 refers)

**Compliance:** Within next 150 hours TIS or before 30 November 1999, whichever is the sooner.

**Effective Date:** 22 October 1999

#### **DCA/PT6/18 Woodward Fuel Control Unit - Inspection**

**Applicability:** Models PT6A-64, PT6A-65AG, PT6A-65B, PT6A-66A, PT6A-67AG and PT6A-67B

**Requirement:** To prevent in-flight shutdown due to a bearing failure in the governing section of the fuel control unit, inspect per P&WC ASB A13341R1 (Woodward SB 60073-73-1) or A14305R1 (Woodward SB 60054-73-8 or 60068-73-5). If the FCU P/N and S/N are not listed in the applicable SB, no further action is required. If the FCU is listed, conduct the inspection and disposition per the applicable P&WC ASB.  
(Transport Canada AD CF-2002-04 refers)

**Compliance:** Within 200 hours TIS, unless already accomplished.

**Effective Date:** 30 May 2002

**DCA/PT6/19 Propeller Governor - Replacement**

- Applicability:** Model PT6A-60A and PT6A-65B fitted with Woodward propeller governor assemblies P/N 8210-212H.
- Requirement:** To prevent an asymmetric thrust situation from occurring during the landing roll, replace Woodward propeller governor units P/N 8210-212H installed on the above engines with a P/N 8210-310 governor per P&WC SB 13354.  
(Transport Canada AD CF-2002-02 refers)
- Compliance:** By 31 October 2002
- Effective Date:** 30 May 2002

**DCA/PT6/20 High Pressure Oil Leak – Rework**

- Applicability:** Model PT6A-38, PT6A-41, PT6A-45 and PT6A-45A engines
- Requirement:** To reduce the possibility of an external high pressure oil leak, accomplish the instructions in Pratt & Whitney Canada SB 3099 revision 1, dated 24 October 1977 or later Transport Canada approved revisions.  
(Transport Canada AD CF-78-05 refers)
- Compliance:** Within the next 50 hours TIS unless previously accomplished.
- Effective Date:** 27 May 2010

**DCA/PT6/21 FCU Bypass Valve Diaphragm – Replacement**

- Applicability:** Model PT6A-38, PT6A-41 and PT6A-45A engines fitted with a fuel control unit Aviation Electric P/N 3244723-3 through to -10, 3244738-5, 3244738-6, 3244752-6 through to -10, and 3244755-7 through to -11.
- Requirement:** To prevent rupture of the bypass valve diaphragm in the fuel control unit, replace diaphragm P/N 2526477 with a diaphragm P/N 343451 per the instructions in paragraph 2 of Pratt & Whitney Canada SB 3103, dated 5 January 1978 or later Transport Canada approved revisions.  
(Transport Canada AD CF-78-16 refers)
- Compliance:** Within the next 100 hours TIS unless previously accomplished.
- Effective Date:** 27 May 2010

**DCA/PT6/22 First Stage Sun Gears – Inspection and Replacement**

- Applicability:** Model PT6A-15AG, -27, -28, -34, -34AG, -34B and -36 series turboprop engines fitted with a TAATI manufactured first stage reduction sun gear P/N E3024765, S/N PC5-091 through to PC5-176.
- Note:** Affected first stage reduction sun gears were manufactured under a part manufacturer approval (PMA) by Timken Alcor Aerospace Technologies, Inc. (TAATI) as replacement parts. Affected engines that have had maintenance done to the power section module since 3 February 2010 may have had the first stage reduction gear replaced with affected TAATI parts.
- Requirement:** To prevent failure of the sun gear shaft which could result in an in-flight engine shut down, possible uncontained engine failure, aircraft damage and serious injuries, accomplish the following:
1. Review the aircraft records and determine if a TAATI PMA first stage reduction sun gear P/N E3024765, S/N PC5-091 through to PC5-176 is fitted to the aircraft engine/s. Replace affected first stage reduction sun gears and the interacting planet gears in the propeller reduction gearbox assembly before further flight.

2. TAATI PMA first stage reduction sun gear P/N E3024765, S/N PC5-091 through to PC5-176 shall not be fitted to any engine or power section module.  
(FAA AD 2011-20-51 refers)

**Compliance:** 1. Within the next 15 hours TIS or by 4 October 2011 whichever occurs sooner, unless already accomplished.  
2. From 20 September 2011.

**Effective Date:** 20 September 2011

#### **DCA/PT6/23 First Stage Sun Gears and Planet Gear Sets – Replacement**

**Applicability:** Model PT6A-38, -41, -42, -42A, -61, -64, -66, -66B, -110, -112, -114, -114A, -121, -135 and -135A series turboprop engines that have had maintenance accomplished since 22 December 2008 on the power section module which included replacement of the first stage sun gear or planet gears, and

Fitted with any of the following Timken Alcor Aerospace Technologies, Inc. (TAATI) Part Manufacturer Approval (PMA) first stage sun gear or planet gear sets:

First stage sun gear P/N E3028456, all S/N,  
First stage sun gear P/N E3037304, all S/N,  
Planet gear sets P/N E3101455-02, all S/N,  
Planet gear sets P/N E3101525-02, all S/N.

**Requirement:** To prevent failure of the first stage sun gear or planet gears in the propeller reduction gearbox assembly which could result in an inflight loss of engine power, accomplish the corrective actions specified in FAA AD 2012-09-10.

(FAA AD 2012-09-10 refers)

**Compliance:** Within the next 40 hours TIS unless previously accomplished.

**Effective Date:** 25 May 2012

#### **DCA/PT6/24 Second Stage Power Turbine Disk – Inspection and Replacement**

**Applicability:** Model PT6C-67C engines not embodied with P&WC ASB 41056.

**Requirement:** To prevent failure of the second stage power turbine disk, accomplish the requirements in Transport Canada AD CF-2012-24.

**Note:** P&WC SB 41056 revision 4 dated 1 April 2012 and P&WC ASB A41060 revision 2 dated 10 February 2012 or later Transport Canada approved revisions of these documents are acceptable to comply with the requirements of this AD.

(Transport Canada AD CF-2012-24 refers)

**Compliance:** At the compliance times specified in Transport Canada AD CF-2012-24.

**Effective Date:** 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 <https://www.aviation.govt.nz/aircraft/airworthiness/airworthiness-directives/links-to-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-2013-21R1 Compressor Turbine Blades – Inspection**

**Effective Date:** CF-2013-21 - 15 August 2013  
CF-2013-21R1 – 13 November 2013

#### **CF-2013-33R1 Cancelled – CF-2014-33 refers**

**Effective Date:** 16 October 2014

#### **CF-2014-33 Power Turbine Containment Ring – Inspection**

**Effective Date:** 16 October 2014

#### **FAA AD 2011-25-12 First Stage Reduction Sun Gears – Inspection**

**Note:** This AD mandates the replacement of certain part manufacturer approval (PMA) Timken Alcor Aerospace Technologies, Inc. (TAATI) first stage reduction sun gears, and/or the interacting planetary gear sets installed in the propeller reduction gearbox assembly.

**Effective Date:** 28 December 2011

#### **FAA AD 2014-17-08 Compressor Turbine Blades – Inspection**

**Note 1:** FAA AD 2014-17-08 is applicable to PT6A-114 and PT6A-114A turboprop engines fitted with part manufacturer approval (PMA) compressor turbine blades. This AD mandates the installation of P&WC single crystal compressor turbine blades P/N 3072791-01 or 3072791-02.

**Note 2:** This AD is related to Transport Canada AD CF-2013-21R1.

**Effective Date:** 8 October 2014

#### **CF-78-03 Power Turbine & 2nd Stage Pinion Shaft – Modifications**

**Note:** Transport Canada AD CF-78-03 supersedes DCA/PT6/4C. The applicability of DCA/PT6/4C did not align with the applicability of Transport Canada AD. The Canadian AD is applicable to all PT6A-6, PT6A-6A, PT6A-6B, PT6A-6/C20, PT6A-20, PT6A-20A, PT6A-20B, PT6A-21, PT6A-27, PT6A-28, PT6A-34 and PT6B-9 series engines. No action required for those engines already in compliance with the terminating actions specified in superseded AD DCA/PT6/4C.

**Effective date:** 28 February 1978

#### **CF-2015-01R2 Engine Torque Indication – Inspection**

**Applicability:** PT6B-37A engines, fitted with pre-SB 39117 configuration Reduction Gearbox (RGB).

**Effective Date:** CF-2015-01 - 3 February 2015  
CF-2015-01R1 - 2 December 2016  
CF-2015-01R2 - 29 October 2020

#### **CF-2015-23 Fuel Control Unit – Inspection**

**Effective Date:** 6 August 2015

**DCA/PT6/25A SOAR 98 Engine Escalation Program**

**Applicability:** All PT6A series engines maintained in accordance with the SOAR 98 Engine Escalation Program.

**Note 1:** DCA/PT6/25A revised to clarify the AD requirements and introduce Notes 2, 3 and 4.

**Requirement:** To prevent a reduction of the level of operational safety from that provided by the manufacturer, accomplish the following:

1. Within the next 30 days from 31 May 2018 (the effective date of DCA/PT6/25), review the aircraft records and determine if the engine is maintained in accordance with the SOAR 98 Engine Escalation Program.

If the aircraft has an engine maintained in accordance with the SOAR 98 Engine Escalation Program, then notify the CAA by emailing:

[airworthinessdirectives@caa.govt.nz](mailto:airworthinessdirectives@caa.govt.nz)

In the email notification please provide the aircraft registration, the engine model, the engine S/N, the engine hours TSN and the engine hours TSO.

2. For aircraft on air operation:

At the next scheduled 100 hour maintenance inspection, or within the next 30 days from 31 May 2018 (the effective date of DCA/PT6/25), whichever is the later, review the engine maintenance records and accomplish all required maintenance to ensure compliance with the engine manufacturer requirements, or accomplish all required maintenance in accordance with escalation procedures approved under rule 91.603(d), other than the SOAR 98 Engine Escalation Program.

3. For aircraft on operation under Part 91 and  
For aircraft on agricultural operation under Part 137:

Within the next six months after 31 May 2018 (the effective date of DCA/PT6/25), review the engine maintenance records and accomplish all required maintenance to ensure compliance with the engine manufacturer requirements, or accomplish all required maintenance in accordance with escalation procedures approved under rule 91.603(d), other than the SOAR 98 Engine Escalation Program.

4. For affected uninstalled engines:

Prior to the installation of an affected engine into any aircraft, review the engine maintenance records and accomplish all required maintenance to ensure compliance with the engine manufacturer requirements, or accomplish all required maintenance in accordance with escalation procedures approved under rule 91.603(d), other than the SOAR 98 Engine Escalation Program.

**Note 2:** Rule 91.603(c) requires the operator of an aircraft to comply with the manufacturer's recommended overhaul intervals.

**Note 3:** Per rule 91.603(d) products and components may be operated beyond the manufacturer's recommended TBO, if the operator complies with TBO escalation procedures that are detailed in a maintenance programme that is approved under Part 115, or 119, or 91.607.

**Note 4:** Per rule 1 *air operation* means an adventure aviation operation under Part 115, an air transport operation (ATO) under Part 119, or a commercial transport operation (CTO) under Part 119.

**Compliance:** Refer to the requirements section of the AD.

**Effective Date:** DCA/PT6/25 - 31 May 2018  
DCA/PT6/25A - 28 June 2018

**CF-2019-05 Fuel Control Unit Galvanic Corrosion – Inspection****Applicability:** PT6B-37A engines, S/N PCE-PU0289 and earlier engines.**Effective Date:** 28 February 2019**CF-87-17R1 Third Stage Stator Vane – Inspection****Applicability:** PT6B-36A engines, S/N 36043 through to S/N 36112 inclusive including those engines embodied with Pratt & Whitney Canada Service Bulletin No. 11022.**Compliance:** Before issue of a New Zealand Certificate of Airworthiness, or at the next RA inspection after the effective date of this AD, whichever is the sooner, unless previously accomplished and thereafter (if applicable) at intervals not exceeding the times specified in the Transport Canada Airworthiness Directive.**Effective Date:** 30 May 2019**CF-88-01R1 Gas Generator Case – Inspection****Applicability:** PT6B-36 and PT6B-36A engines not embodied with:A gas generator case P/N 3112048-01 identified in P&WC SB 11041; orSuperseding parts incorporating the intent of SB 11041, or

Stiffening plates P/N 3102444-01.

**Compliance:** Before issue of a New Zealand Certificate of Airworthiness, or at the next RA inspection after the effective date of this AD, whichever is the sooner, unless previously accomplished and thereafter (if applicable) at intervals not exceeding the times specified in the Transport Canada Airworthiness Directive.**Effective Date:** 30 May 2019**CF-2003-16 Review of Critical Part Life Limits****Applicability:** All PT6B-36A and PT6B-36B engines.**Compliance:** Before issue of a New Zealand Certificate of Airworthiness, or at the next RA inspection after the effective date of this AD, whichever is the sooner, unless previously accomplished and thereafter (if applicable) at intervals not exceeding the times specified in the Transport Canada Airworthiness Directive.**Effective Date:** 30 May 2019**CF-2019-30R1 Compressor Turbine Blades - Inspection****Applicability:** All PT6A-34, -34B, -34AG, -114, and -114A engines.**Note:** CF-2019-30R1 revised to expand the background information and to clarify the affected P&WC compressor turbine blade part numbers.**Effective Date:** CF-2019-30 - 2 September 2019  
CF-2019-30R1 - 30 January 2020**\* CF-2024-05 Second Stage Power Turbine (PT2) Blades - Inspection****Applicability:** All PT6A-64, PT6A-66, PT6A-66A, PT6A-66B, PT6A-66D, PT6A-66T, PT6A-67, PT6A-67A, PT6A-67AF, PT6A-67AG, PT6A-67B, PT6A-67D, PT6A-67F, PT6A-67P, PT6A-67R, PT6A-67RM, PT6A-67T, PT6A-68, PT6A-68B, PT6A-68C, PT6A-68D, PT6A-68T, PT6E-67XP and PT6E-66XT engine models.**Effective Date:** 17 February 2024

# Airworthiness Directive Schedule

## Helicopters

### Robinson R22 Series

29 February 2024

- Notes:**
1. This AD schedule is applicable to Robinson R22, R22 Alpha, R22 Beta and R22 Mariner helicopters manufactured under FAA Type Certificate No. H10WE.
  2. The Federal Aviation Administration (FAA) 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 FAA website at: [Dynamic Regulatory System \(faa.gov\)](https://www.faa.gov/regulatory/policy/airworthiness/ad)
  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/R22/1 Main Rotor Blades - Inspection**

**Applicability:** All model R22 series

**Requirement:** Visually inspect rotor blades per Robinson SB's B-1 and B-2. If any delamination is detected, blades must be replaced with like serviceable parts before further flight  
(FAA AD 80-08-08 refers)

**Compliance:** Daily

**Effective Date:** 5 December 1980

*Note: May be accomplished by pilot subject to:*

*(a) Adequate instruction by LAME responsible for aircraft*

*(b) Maintenance Release endorsed to refer to inspection requirement*

*(c) Copy of requirement document(s) attached to Maintenance Release*

**DCA/R22/2 Airframe Structure - Inspection**

**Applicability:** Model R22 S/N 0002 through 0082

**Requirement:** Inspect tubular structure per Robinson SB B-4. Before further flight rectify any defects found and renew all attachment nuts, bolts and PAL nuts  
(FAA AD 80-24-01 refers)

**Compliance:** Within the next 100 hours TIS and thereafter at intervals not exceeding 100 hours TIS

**DCA/R22/3B Main Gear Box Coupling - Inspection**

**Applicability:** Model R22 S/N 0002 through 0107

**Requirement:** Inspect flex coupling yokes P/N A192 and A194 per Robinson SB 11 and remove from service any found cracked

**Compliance:** At intervals not exceeding 10 hours TIS until replaced with yokes P/N A907 and A908

**Effective Date:** DCA/R22/3A - 20 March 1981  
DCA/R22/3B - 21 August 1981

**DCA/R22/4 Safety Harness Latch - Rework**

**Applicability:** All model R22 S/N 0002 through 0153

**Requirement:** Rework harness latch per Robinson SB 12

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

**Effective Date:** 17 June 1981

*Note: Requirement notified to registered owner(s) on effective date*

**DCA/R22/5B Main Rotor Blades - Retirement**

**Applicability:** All model R22 with main rotor blades P/N A016-1 Rev A through Rev W S/N 0100 through 0810

**Requirement:** 1. Before further flight retire from service all main rotor blades P/N A016-1 Rev A through Rev V S/N 0100 through 0593 and using letters at least ½ inch high, mark as "UNAIRWORTHY". Also mark data plate "UNAIRWORTHY" using metal stamp.  
2. Retire from service main rotor blades P/N A016-1 Rev W S/N 0600 through 0810 at 1000 hours TTIS  
(FAA AD 82-03-07 refers)

**Effective Date:** DCA/R22/5A - 26 November 1981  
DCA/R22/5B - 26 February 1982

**DCA/R22/6 Control rod Ends - Modification**

**Applicability:** Model R22 S/N 0002 through 0180

**Requirement:** Install safety washers per Robinson SL 9

**Compliance:** Within the next 100 hours TIS

**Effective Date:** 2 October 1981

**DCA/R22/7 Clutch Shaft Plug Installation - Inspection**

**Applicability:** Model R22 S/N 002 through 0226

**Requirement:** Inspect shaft plug per Robinson SB 16 and rectify installation as necessary before further flight

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

**Effective Date:** 11 December 1981

*Note: Requirement notified to registered owner(s) on effective date*

**DCA/R22/8A Upper Frame Structure - Inspection**

**Applicability:** Model R22 S/N 0002 through 0311 with P/N A020-2 frames S/N 0002 through 0361

**Requirement:** Inspect frames S/N 0002 through 0287 per Robinson SB 18 and frames S/N 0002 through 0361 per Robinson SB 23. Remove cracked frames from service before further flight

**Compliance:** At intervals not exceeding 50 hours TIS

**Effective Date:** DCA/R22/8 - 16 April 1982  
DCA/R22/8A - 21 October 1983

**DCA/R22/9 Tail Rotor Drive Shaft - Replacement**

**Applicability:** Model R22 S/N 0002 through 0282

**Requirement:** Remove from service tail rotor drive shaft assemblies P/N A197 through Rev P and install P/N A197 Rev Q and subsequent per Robinson SB 21

Ensure that dash number of replacement A197 shaft is the same as that of the shaft removed

(FAA AD 82-15-07 refers)

**Compliance:** Within the next 100 hours TIS

**Effective Date:** 27 August 1982

**DCA/R22/10 Superseded by DCA/R22/32****DCA/R22/11 Main Rotor Blade - Inspection/Retirement**

**Applicability:** All model R22 with blade P/N A016-1 Rev W S/N 0600 through 0810

**Requirement:**

1. Inspect main rotor blades for part and serial numbers
2. Retire from service all main rotor blades P/N A016-1 Rev W S/N 0600 through 0810 and using letters at least 2 inches high mark 'UNAIRWORTHY'

(FAA AD 83-15-07 R1 refers)

**Compliance:** Before further flight

**Effective Date:** 12 August 1983

*Note: Requirement notified to registered owner(s) on effective date*

**DCA/R22/12 Actuator Drive Screw - Replacement**

**Applicability:** All model R22 with P/N A051 actuator S/N 152 through 346

**Requirement:** Remove incorrectly heat treated drive screws from service per Robinson SB 32

**Compliance:** Within the next 25 hours TIS or by 30 November whichever is the sooner

**Effective Date:** 21 October 1983

**DCA/R22/13 Control Tubes - Inspection**

**Applicability:** Model R22 S/N 0002 through 0369

**Requirement:** Inspect push-pull tubes P/N A121-7 and guide bushes per Robinson SB 36. Rectify or renew worn parts as prescribed before further flight

**Compliance:** Within the next 50 hours TIS or by 29 February 1984 whichever is the sooner

**Effective Date:** 16 December 1983

**DCA/R22/14 Main rotor Gear Box - Inspection and Modification**

- Applicability:** All model R22 series with main rotor gear box P/N A006-1 Rev A through V
- Requirement:** To prevent hazards resulting from ring gear bolt failure, inspection and modification per FAA AD 84-18-04 is required.
- Compliance:**
1. Inspection per AD 84-18-04 para (a) - within next 15 hours TIS and thereafter at intervals not exceeding 50 hours TIS until modified per para (c).
  2. Inspection also required before further flight if gear box oil chip detector light illuminates during ground or flight operations.
  3. Modification per para (c) - within next 200 hours TIS.
- Effective Date:** 22 September 1984

*Note: Requirement notified to registered owner(s) on effective date*

**DCA/R22/15 Lower Vertical Fin - Inspection**

- Applicability:** Model R22 series S/N 0002 through 0598.
- Requirement:** To preclude possibility of in-flight failure inspect, rectify as necessary and re-install vertical fins per Robinson SB 53.
- Compliance:** Within the next 25 hours TIS or by 30 November 1986, whichever is the sooner.
- Effective Date:** 30 October 1986

*Note: Requirement notified to registered owner(s) on effective date.*

**DCA/R22/16 Main Rotor Pitch Link - Inspection and Removal**

- Applicability:** Model R22 series S/N 0580 through 0644 and all pitch link spare parts P/N A258-1, -2 or -4 received from RHC between 15 August 1986 and 7 May 1987.
- Requirement:** Inspect pitch link assemblies and remove from service per Robinson SB 57, Parts A and B respectively.  
(FAA AD 87-18-03 refers)
- Compliance:** Part A - Prior to each flight until Part B accomplished.  
Part B - Within the next 10 hours TIS or by 31 October 1987 whichever is the sooner.
- Effective Date:** 21 September 1987

*Note: Requirement notified to registered owner(s) on effective date*

**DCA/R22/17A Cancelled – FAA AD 88-26-01R2 refers**

**Effective Date:** 30 April 2020

**DCA/R22/18 Cancelled – FAA AD 88-26-01R2 refers**

**Effective Date:** 30 April 2020

**DCA/R22/19 Cancelled – Purpose Fulfilled****DCA/R22/20 Carburettor Air Box - Modification**

- Applicability:** All model R22 with carburetor air box latches
- Requirement:** To prevent carburettor air box latches coming loose in flight, which could result in engine power loss, replace the latches with bolts per Robinson SB 61  
(FAA AD 90-17-01 refers)
- Compliance:** By 31 October 1990
- Effective Date:** 21 September 1990

**DCA/R22/21 NAS1304-16 AF Bolts - Replacement**

**Applicability:** Model R22 series S/N 1880 through 2060 and 2073. Also, any R22 which have been overhauled or repaired by RHC between 9 July 1991 and 1 March 1992, and all NAS1304-16 AF bolts shipped from RHC as spares after 9 July 1991.

**Requirement:** Visually inspect per Robinson SB 69, the heads of all NAS1304-16 bolts for the raised identifying markings "AF". Remove from service before further flight any bolts with the above markings which have been installed by or obtained from the RHC factory after 9 July 1991.

Replace with NAS1304-16 bolts with head markings other than "AF", or replace with NAS6604-16 bolts. Suspect NAS1304-16 AF bolts not returned to RHC, must be destroyed.  
(FAA AD 92-06-17 refers)

**Compliance:** Within the next 10 hours TIS or by 30 March 1992, whichever is the sooner.

**Effective Date:** 13 March 1992

*Note: Requirement notified to registered owner(s) on effective date.*

**DCA/R22/22 Tailcone Skin Doubler - Installation**

**Applicability:** Model R22 series S/N 0002 through S/N 2060 and 2073 equipped with Tail Rotor Visual Warning Guards (with either two or three red stripes)

**Requirement:** 1. Remove tail rotor visual warning guard per Robinson SB 68.  
2. Install KI-73 doubler kit and guard per kit instructions.

**Compliance:** 1. Within the next 50 hours TIS, or within the next 20 hours TIS if the aircraft has been in service over 400 hours since guard installation.  
2. Within 14 days of receipt of kit, or by 30 September 1992 whichever is the sooner

**Effective Date:** 13 March 1992

*Note: Requirement notified to registered owner(s) on effective date*

**DCA/R22/23D Main Rotor Blades - Inspection**

**Applicability:** Model R22 equipped with main rotor blades, P/N A016-2, with S/N up to and including 7569 (including any suffixes).

**Requirement:** To prevent abnormal in-flight vibrations, failure of a main rotor blade (blade), and subsequent loss of the helicopter, accomplish the following:-

1. Visually inspect the blades' top and bottom skins for corrosion or cracks using a 5-power or higher magnifying glass per the applicable maintenance manual.
2. Visually check the blades' top and bottom skins for corrosion or cracks per Robinson SB 72.

If a suspected crack is found in a blade during any of the inspections or checks required by this AD, perform a dye penetrant inspection for crack verification. If any crack is found in the blade skins, replace the blade with an airworthy blade before further flight. If any corrosion is found in the blade skins, repair or replace the blade with an airworthy blade per the maintenance manual.

(FAA AD 94-15-08 refers)

**Compliance:** 1. Visual inspections at intervals not to exceed 100 hours TIS or 12 months, whichever is the sooner. Also, before further flight after the onset of abnormal vibrations of the main rotor system.

2. Visual checks at intervals not to exceed 25 hours TIS.

Note: This check may be accomplished by the pilot between scheduled inspections, 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).

**Effective Date:** DCA/R22/23C - 27 January 2000  
DCA/R22/23D - 28 February 2002

**DCA/R22/24B Forward Flexplate - Replacement**

- Applicability:** All model R22 not fitted with forward flexplate P/N A947-1E or subsequent FAA approved revisions to P/N A947-1.
- Requirement:** To prevent failure of the forward flexplate, failure of the main rotor drive and subsequent loss of control of the helicopter, replace the flexplate with a flexplate P/N A947-1E or a subsequent FAA-approved revision to P/N A947-1.  
(FAA AD 95-06-07 refers)
- Compliance:** By 11 June 1998
- Effective Date:** DCA/R22/24 - 15 April 1994  
DCA/R22/24A - 12 May 1995  
DCA/R22/24B - 4 June 1998

**DCA/R22/25B Tail Rotor Gearbox Input and Output Shaft Key - Inspection**

- Applicability:** Model R22 series with tail rotor (T/R) gearboxes which were overhauled or manufactured by RHC prior to 8 June 1992. This airworthiness directive is not applicable to helicopters where the installation of the T/R input and output key has been confirmed by inspection. FAA AD 95-23-05 (see note 2) lists tail rotor gearbox S/Ns that have already been determined to have the T/R input and output shaft keys installed.
- Requirement:** To prevent slippage of the tail rotor drive and loss of directional control, accomplish the following:-
- A. Install the alignment dots and inspect per Part A of Robinson SB #74. If slippage is detected, replace the tail rotor gearbox before further flight.
  - B. Check alignment dots per Part B of SB #74. If misalignment is detected, repeat inspection per Part A before further flight.
  - C. Verify installation of both the input and output shaft keys per FAA AD 95-23-05.  
(FAA AD 95-23-05 refers)
- Compliance:**
- A. Within next 5 hours TIS.
  - B. Prior to the first flight of each day the helicopter is to be operated, until Part C is accomplished.
  - C. Within next 100 hours TIS.
- Note 1: The daily inspection may be accomplished by pilot subject to:*
- (a) Adequate instruction by LAME responsible for the aircraft.
  - (b) Aircraft Technical Log to be endorsed to refer to inspection requirement.
  - (c) Copy of Robinson SB #74 to be attached to the Aircraft Technical Log.
  - (d) Pilot to certify inspection compliance, date and licence number on the copy of SB #74.
- Note 2: A copy of FAA AD 95-23-05 has been provided to Robinson Service Centres.*
- Effective Date:** DCA/R22/25A - 12 May 1995  
DCA/R22/25B - 16 February 1996

**DCA/R22/26A Main Rotor Shaft Retaining Nuts - Inspection**

**Applicability** All Model R22 series with main rotor gearboxes manufactured or overhauled by the Robinson Helicopter Company prior to 16 June 1992.

Gearboxes fitted to new helicopters S/N 2178 and on, were manufactured after 15 June 1992.

**Requirement:** To prevent failure of the mast support structure due to the rotor shaft nuts becoming loose and allowing the rotor shaft to pull through the retention bearing in the gearbox, accomplish the following:

Inspect main rotor shaft retaining nuts per Robinson SB 76. Remove, renew lockwashers and reinstall per SB 76.

**Compliance:** Within next 100 hours TIS or by 31 March 1995, whichever is the sooner.

*Notes: 1. This airworthiness directive must be accomplished by a Robinson Service Centre.*

*2. Report any defects or looseness of the shaft nuts to the CAA immediately.*

**Effective Date** DCA/R22/26 - 20 January 1995  
DCA/R22/26A - 23 January 1995

**DCA/R22/27C Cancelled – DCA/R22/48 refers**

**Effective Date:** 26 May 2016

**DCA/R22/28 Cancelled – Purpose Fulfilled****DCA/R22/29 Tail Rotor Blades - Inspection for Unapproved Parts**

**Applicability** All Model R22 series

**Requirement:** To detect bogus tail rotor blades and remove them from service, accomplish one of the following documentation checks:-

1. Compare your tail rotor (TR) blade S/Ns with the S/Ns listed in your aircraft log book or records to insure that the blades on your helicopter are either:-
  - (a) The blades installed when the helicopter was manufactured or overhauled by the Robinson Helicopter Company (RHC) factory, or
  - (b) Replacement blades that were purchased either directly from RHC, or from RHC via a New Zealand Robinson Service Centre.

If records show that the TR blades were installed on the helicopter by RHC, or the blades were purchased from RHC either directly or via a NZ Robinson Service Centre, no further action is required.

2. If the blades were replaced after the helicopter left RHC, determine the identity of the organisation and the name and license number of the maintenance person who installed the replacement blades. If available, obtain a copy of the FAA 8130-3 Airworthiness Tag, RHC yellow Maintenance Release Tag, and the invoice showing the purchase of the blades from RHC and fax this information to RHC Customer Service (Fax No. 001 310 539 5198) for verification.

If RHC verify the TR blades as approved parts no further action is required. If the history of any blade cannot be determined or RHC cannot verify the blades as approved parts, replace the blades before further flight. The finding of any bogus parts must be reported to the Civil Aviation Authority.

**Compliance:** Before further flight

**Effective Date:** 17 November 1995

**DCA/R22/30 Main Rotor Blades - Inspection for Unairworthy Parts****Applicability** All Model R22 series**Requirement:** To detect unairworthy main rotor blades and remove them from service, accomplish one of the following documentation checks:-

1. Compare your main rotor (MR) blade S/Ns with the S/Ns listed in your aircraft log book or records to insure that the blades on your helicopter are either:-
  - a) The blades installed when the helicopter was manufactured or overhauled by the Robinson Helicopter Company (RHC) factory, or b) Replacement blades that were purchased either directly from RHC, or from RHC via a New Zealand Robinson Service Centre.

If records show that the MR blades were installed on the helicopter by RHC, or the blades were purchased from RHC either directly or via a NZ Robinson Service Centre, no further action is required.

2. If the blades have been replaced since the helicopter left RHC, verify that the manufacturer's blade life limitations have not been exceeded by checking; the FAA 8130-3 Airworthiness Tag information, and all subsequent blade times in service as recorded in the helicopter log books. If this process cannot be followed completely and the actual blade time in service not positively established, the blades must be removed from service before further flight.

3. If MR blade S/Ns 2657 or 2653 are found fitted, they must be removed from service before further flight. The CAA has determined that these blades have been imported with zero time in service remaining.

Details of any unairworthy blades found must be reported to:

CIA  
Civil Aviation Authority  
P O Box 31-441  
LOWER HUTT

**Compliance:** Before further flight.**Effective Date:** 29 April 1996**DCA/R22/31 Upper V-Belt Sheaves - Replacement****Applicability** R22 series with upper V-belt sheave P/N A170-1I, A170-1J, or A170-2J installed.**Requirement:** To prevent failure of the sheave, which could result in damage to other drive system components, accomplish the following:-

Replace the sheave P/N A170-1I, A170-1J, or A170-2J with an airworthy sheave, P/N A170-1 or P/N A170-2 per Robinson R22 SB-77.

(FAA AD 96-09-29 refers)

**Compliance:** Within next 100 hours TIS or by 7 August 1996, whichever is the sooner.**Effective Date:** 7 June 1996

**DCA/R22/32A Main Rotor RPM Governor - Installation**

**Applicability:** All model R22 series

**Requirement:** To minimise the possibility of pilot mismanagement of the main rotor RPM, which could result in unrecoverable main rotor blade stall and subsequent loss of control of the helicopter, accomplish the following:-

Adjust the A569-1 or -5 low-RPM warning unit so that the warning horn and caution light activate when the main rotor RPM is between 96% and 97% rotor RPM per the procedures contained in the R22 maintenance manual.

For helicopters that do not have a governor currently installed, install a Robinson Helicopter Company KI-67-2 Governor Field Installation Kit per the kit instructions.

For helicopters that have a throttle/collective governor currently installed, upgrade the governor with a Robinson Helicopter Company KI-67-3 Governor Upgrade Kit per the kit instructions.

Upon installation of the governor, revise the R22 Flight Manual (AIR2140) to include the FAA-approved Flight Manual revision dated July 23, 1996.

(FAA AD 97-02-14 refers)

**Compliance:** Within next 60 days unless already accomplished.

**Effective Date:** DCA/R22/32 - 5 July 1996  
DCA/R22/32A - 14 March 1997

**DCA/R22/33 Main Rotor Blades - Removal**

**Applicability:** All model R22 series

**Requirement:** The CAA has determined that main rotor blades S/N 1838 and 1840 were removed from service time expired, but may have been refitted to a New Zealand registered R22. To prevent failure of these main rotor blades accomplish the following:-

Determine S/Ns of main rotor blades fitted. If main rotor blade S/N 1838 or 1840 is found fitted, remove from service and notify the CAA.

**Compliance:** Before further flight

**Effective Date:** 7 November 1996

**DCA/R22/34 Carburettor - Replacement**

**Applicability:** Model R22 series, S/N 2571 through 2664.

**Requirement:** To prevent inadvertent placement of the mixture control to the idle cut-off position during in-flight leaning of the engine, which could result in engine stoppage, accomplish the following:

Remove the MA-4-5 carburettor and carburettor air temperature (CAT) gauge, P/N C604-6, and replace them with an airworthy MA-4SPA carburettor and remarked CAT gauge, P/N A604-2, per Robinson R22 SB-82, and Robinson KI-114 O-360 Engine Carburettor Change Kit instructions, Revision A, dated March 6, 1997.

Upon completion of this, insert the FAA-approved R22 Pilot's Operating Handbook Section 9, Supplements 7 (R22 Beta II) and 8 (R22 Mariner II), revised February 6, 1997, into the R22 Rotorcraft Flight Manual.

(FAA AD 97-25-05 refers)

**Compliance:** Within next 50 hours TIS.

**Effective Date:** 13 February 1998

**DCA/R22/35 Fuel Tank Vent - Modifications**

**Applicability:** Part 1 - Model R22 manufactured prior to 1991 with fuel tank vent tube(s) in the mast fairing attached to both the mast tube and to the rain scupper on the fuel tank cowling. RHC R22 SB-83 refers.

Part 2 - Model R22 S/N 0002 through 1451, unless factory overhauled January 1991 or later. RHC R22 SB-84 refers.

**Requirement:** To prevent fuel starvation, loss of engine power, and subsequent forced landing, accomplish the following:-

Part 1.- Visually inspect the fuel tank vent tube(s) in the mast fairing. If each fuel tank vent tube is attached only to the mast tube at two locations, the helicopter complies with the requirements of Part 1 of this AD.

If each fuel tank vent tube is attached to the mast tube at one location, and to the rain scupper (channel), P/N A032-16, on the fuel tank cowling at another location accomplish the following per Robinson R22 SB-83:-

- a) For helicopters without an auxiliary fuel tank, install RHC upgrade kit KI-118-1.
- b) For helicopters with an auxiliary fuel tank, install RHC upgrade kit KI-118-2.

Part 2. - Visually inspect the fuel tank vents. If the helicopter is equipped with a main fuel tank (only) with dual vent tubes, or, if the helicopter is equipped with an auxiliary fuel tank and has a crossover vent tube between the tanks, no further action is required per Part 2 of this AD, otherwise springs must be installed as follows. (RHC R22 SB-84 refers)

Install springs into the flexible vent tubes leading to the main fuel tank; and the auxiliary fuel tank (if an auxiliary fuel tank is installed), per RHC kit instructions KI-140 R22 Fuel Tank Vent Upgrade For Fuel Tanks With Single Vent.

(FAA AD 98-21-09 refers)

**Compliance:** Within the next 50 hours TIS or by 20 November 1998, whichever is the sooner.

**Effective Date:** 15 October 1998

**DCA/R22/36 Special Pilot Caution – Flight Manual Revision**

**Applicability:** Model R22 helicopters, S/N 0002 through 2862, with sprag clutch, P/N A188-2, S/N 3708 through 3757, 3808 through 3893, and 3908 through 4207, installed.

**Requirement:** To alert pilots of the potential for the sprag clutch failing to overrun during autorotation due to failure of the sprags within the sprag clutch assembly, and loss of main rotor rpm, accomplish the following:

Insert either the Special Pilot Caution, which is contained in Robinson Helicopter Company R22 SB-85, dated March 22, 1999, or the following Special Pilot Caution paragraphs, into the Normal Procedures section of the Rotorcraft Flight Manual, between pages P.4-8 and P.4-9. Aircraft owners must ensure that all pilots are aware of this flight manual revision.

**SPECIAL PILOT CAUTION**

Some sprags in overrunning clutches have been found cracked in service. A broken sprag could conceivably prevent the clutch from overrunning when entering autorotation. Until the clutch in this aircraft has been replaced, do not enter practice autorotations by rapidly closing or "chopping" the throttle. "Chopping" the throttle could result in a sudden loss of rotor RPM if the clutch failed to disengage.

Enter autorotation by first lowering collective and then rolling off just enough throttle to produce a small visible split between the rotor and engine tachometer needles. If the clutch fails to disengage, immediately complete a power recovery. Perform hovering autos only after checking the function of the overrunning sprag clutch prior to lift-off, then smoothly rolling off the throttle from a low hover with the skids no more than two feet above the ground.

Be sure to perform the sprag clutch check (split tach needles) before every flight, not just the first flight of the day.

(FAA AD 99-07-17 refers)

**Compliance:** Before further flight.

**Effective Date:** 8 April 1999

**DCA/R22/37 Sprag Clutch - Replacement**

**Applicability:** Model R22, S/N 0002 through 2862, inclusive, fitted with sprag clutch, P/N A188-2, S/N 3708 through 3757, 3808 through 3893, and 3908 through 4207.

**Requirement:** To prevent sprag clutch failure, loss of main rotor RPM during autorotation, and subsequent loss of control of the helicopter, accomplish the following:-

Replace sprag clutch, P/N A188-2, S/N 3708 through 3757, 3808 through 3893, and 3908 through 4207, with sprag clutch, P/N A188-2, S/N 4208 or higher.

Remove from the Rotorcraft Flight Manual the Special Pilot Caution contained in Robinson Helicopter Company R22 SB-85, dated March 22, 1999, or the Special Pilot Caution insert in the Normal Procedures Section of the Rotorcraft Flight Manual between pages P.4-8 and P.4-9 required by airworthiness directive DCA/R22/36, as applicable.

(FAA AD 2000-08-09 refers)

**Compliance:** Within next 50 hours TIS or by 24 June 2000, whichever is the sooner.

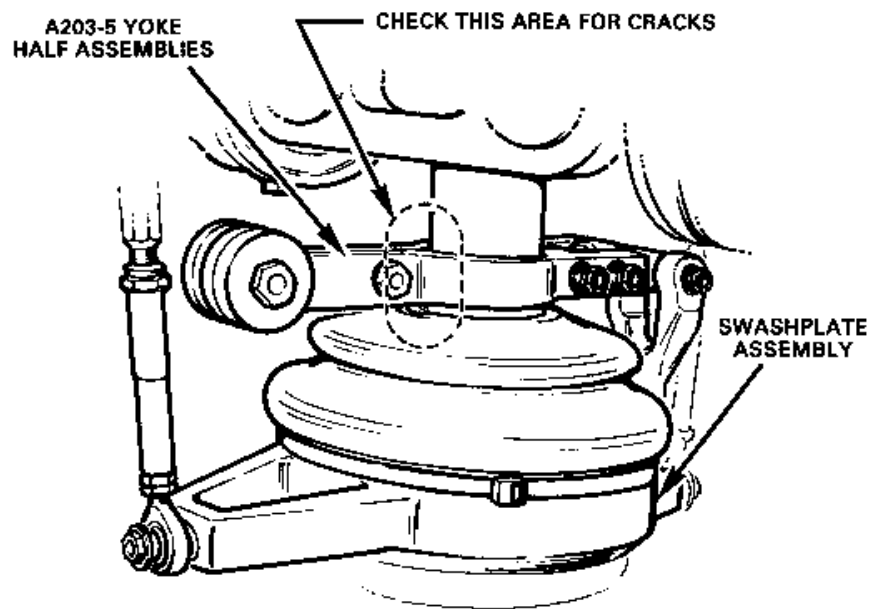
**Effective Date:** 25 May 2000

**DCA/R22/38 Yoke – Inspection and Replacement**

**Applicability:** Model R22 helicopters, with a yoke half assembly (yoke), P/N A203-5, installed.

**Requirement:** To prevent failure of a yoke, separation of a yoke from the main rotor drive shaft, and subsequent loss of control of the helicopter, accomplish the following:-

1. Inspect each yoke for cracks. The diagram shows the area to be inspected. If a yoke is found cracked, before further flight, replace the yokes with airworthy yokes, P/N A203-7. Both yokes must be replaced with P/N A203-7.



**Note 1:** The inspection 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 by the pilot must be provided (Part 43, Subpart C refers).

2. Determine the Lot identifier of each yoke. If the Lot identifier is from 24 through 43, if it is a letter code, or if it is illegible, replace yokes, P/N A203-5, with airworthy yokes, P/N A203-7. Yoke, P/N A203-7, cannot be installed with yoke, P/N A203-5.

**Note 2:** Robinson Helicopter Company R22 SB-88A, pertains to the subject of this AD. Determining that the installed yokes are not in the lots affected by this AD or replacing both yokes, P/N A203-5, with yokes, P/N A203-7, is terminating action for the requirements of this AD.

(FAA AD 2000-20-51 refers)

**Compliance:** 1. Before further flight and thereafter before the first flight of each day, until part 2 of this AD is accomplished.

2. By 1 January 2001

**Effective Date:** 12 October 2000

**DCA/R22/39 Tail Rotor Pitch Control – Inspection and Replacement**

**Applicability:** Model R22 helicopters, up to and including S/N 3328, except 3167, 3326, and 3327, with pitch control assembly, P/N A031-1, Revision J or prior.

**Requirement:** To detect corrosion of a tail rotor pitch control bearing and to prevent bearing failure and loss of directional control of the helicopter, inspect the pitch control assembly for roughness or binding of the pitch control bearings by hand-rotating the pitch control bearing housing in accordance with Robinson Helicopter Company SB-90A, Revision A. If the housing does not rotate freely, replace the unworthy pitch control assembly with an airworthy unit before further flight.  
(FAA AD 2003-04-04 refers)

**Compliance:** Within 50 hours TIS or by 31 March 2003 whichever occurs first. Thereafter inspect at intervals not to exceed 300 hours TIS or 12 months, whichever occurs first.

**Effective Date:** 27 February 2003

**DCA/R22/40A Main Rotor Blades – Placard and Inspections**

**Applicability:** All R22 series with main rotor blades P/N A016-1 or A016-2 installed.

**Requirement:** To prevent in-flight failure of a main rotor blade caused by fatigue cracking in the inboard end of the main rotor blades and subsequent loss of the helicopter, accomplish the following:-

Install in the helicopter a placard that is easily visible to the pilot and which says:

IF MAIN ROTOR VIBRATION INCREASES RAPIDLY OR BECOMES SEVERE DURING FLIGHT, LAND IMMEDIATELY.

**Note 1:** Operators must ensure that all pilots are aware of the requirements of this AD. In particular, main rotor vibration that increases rapidly or becomes severe during a flight could be warning signs of imminent blade failure and the helicopter must be landed immediately. Following any landing because of main rotor vibration, the helicopter requires mandatory inspections before any further flight.

If the pilot has landed the helicopter because main rotor vibration increased rapidly or became severe during a flight; or there is an unexplained main rotor unbalance, especially if the unbalance developed in only a few flights, accomplish the following two inspections:-

1. Using a 10x magnifying glass, visually inspect the inboard end of each main rotor blade per Robinson R22 SL- 53. In addition to the location of the crack shown in the SL, look for cracks in:

The leading edge in the same area; and the filler at the edge of the skin (as arrowed in the SL).

Robinson R22 SL-21A contains guidance on how to determine whether cracks in the filler are superficial or serious.

2. Perform an eddy current inspection of the most inboard bolt hole attaching the leading edge D-spar to the blade root fitting. This eddy current inspection must be performed in accordance with procedures approved by the CAA.

**Note 2:** If either main rotor unbalance or any inspection finding remains unexplained after doing all the inspections in this AD, contact the helicopter manufacturer for advice, before further flight.  
(Australian AD/R22/31 Amdt 4 also refers)

**Compliance:** Install placard by 11 July 2003.

**Effective Date:** DCA/R22/40 - 7 July 2003  
DCA/R22/40A - 29 July 2004

**DCA/ R22/41 Main Rotor Blades – Reduced Retirement Life**

**Applicability:** All R22 series helicopters.

**Requirement:** To prevent in-flight failure of a main rotor blade caused by fatigue cracking in the inboard end of the main rotor blades and subsequent loss of the helicopter, accomplish the following:

1. For main rotor blades which have been fitted to helicopters performing aerial mustering operations in Australia for more than 50 hours TIS, the blade retirement life is reduced to 1500 hours TTIS. Where used blades have been imported from Australia and it can not be determined whether or not the blades have been fitted to helicopters performing aerial mustering operations, the blade retirement life is reduced to 1500 hours TTIS.
2. Main rotor blades retired from service per Australian AD/R22/31 Amdt 7 are not to be fitted to any helicopter.

**Note:** MRBs that are removed at less than the time specified in the Airworthiness Limitations Section of the R22 Maintenance Manual should be retained as future developments may enable them to be placed back into service.

**Compliance:**

1. Retire blades at 1500 hours TTIS or within the next 25 hours TIS, whichever is the later.
2. From 13 August 2003.

**Effective Date:** 13 August 2003

**DCA/R22/42A Main Rotor Blades P/N A016-1 and A016-2 – Reduced Retirement Lives**

**Applicability:** All R22 series with a main rotor blade P/N A016-1 or A016-2 installed.

**Requirement:** To prevent a fatigue crack, blade failure, and subsequent loss of control of the helicopter, accomplish the following:

1. Within 10 hours TIS or 30 days, whichever occurs first, for helicopters with blades that have exceeded 5 years or 1,000 hours TIS, track-and-balance the blades. If an abnormal increase in vibration occurs within 5 hours TIS after the last track-and-balance, replace the blades before further flight with airworthy blades other than blades, P/N A016-1.
2. Within 10 hours TIS or 30 days, whichever occurs first, for helicopters with blades, P/N A016-1, replace the blades with airworthy blades other than blades, P/N A016-1. Compliance with the current life limit of 2,000 hours TIS for blade, P/N A016-1 is required.
3. For helicopters with blades, P/N A016-2, replace the blades with airworthy blades other than blades, P/N A016-1, on or before reaching 2,200 hours TTIS or 10 years, whichever occurs first. For those blades that have already exceeded 10 years, compliance is required within 10 hours TIS or 30 days, whichever occurs first.
4. Within 10 hours TIS or 30 days, whichever occurs first, unless accomplished previously, revise the component history card or equivalent maintenance record for blades, P/N A016-2, by adding a 10-year retirement life to the current 2,200 hours TTIS retirement life.

**Note:** The manufacturer has clarified from when the 10 year retirement life begins. For new MR blade(s) fitted to a new helicopter, the 10 year retirement life commences from the date stated on the initial Airworthiness Certificate. For blades shipped as spares, use the date on the original RHC-issued Airworthiness Approval tag. If this tag is not available, use the blade's date of manufacture. The manufacturer can provide blade manufacture date when the blade S/N is provided.

This AD revises the Airworthiness Limitations section of the applicable maintenance manual by adding a new retirement life of 10 years to the current 2,200 hours TTIS retirement life.

The blades must be retired upon reaching 2,200 hours TTIS or 10 years, whichever occurs first.

(FAA AD 2004-06-52 refers)

**Compliance:** Compliance is required at the times specified within the requirement of this airworthiness directive.

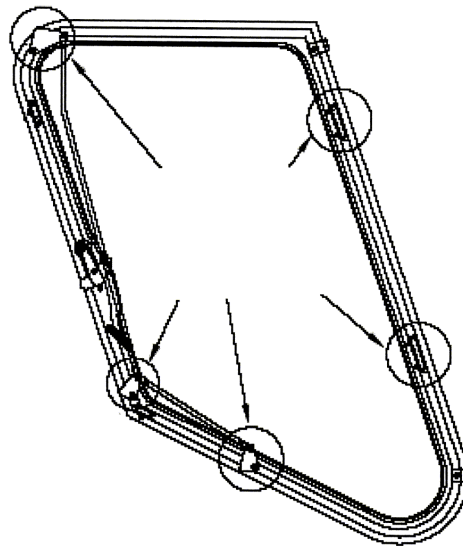
**Effective Date:** DCA/R22/42 - 22 March 2004  
DCA/R22/42A - 27 May 2004

#### **DCA/R22/43 LH and RH Door Assemblies – Inspection and Replacement**

**Applicability:** Model R22 aircraft, equipped with a door assembly manufactured by Tech-Tool Plastics, Inc, per STC No. SR09189RC.

**Requirement:** To prevent separation of the door window or door assembly from the helicopter, which could damage the tail rotor during flight, and result in loss of control of the aircraft, accomplish the following:

1. Visually inspect each pilot and copilot door assembly integral frame for cracks in the locations indicated in the figure below:



**If a crack is found** in any door assembly integral frame, replace LH door assembly P/N R-22-101-51 or P/N R-22- 101-53, and R/H door assembly P/N R-22-101-52 or P/N R-22- 101-54, per Tech-Tool Plastics, Inc. Installation Instructions TTP-1R, Revision A, and per the sections titled "Door Weather Seal Installation" and "Cotter Pin Installation" in Tech-Tool Plastics, Inc. Service Bulletin TTP2005-01, Revision A, prior to further flight.

2. Visually inspect each pilot and copilot door assembly integral frame for cracks in the locations depicted in Figure 1.

**If no crack is found** in any door assembly integral frame, visually inspect the weather seal set in each door assembly, to determine if it is airworthy and installed properly.

If the weather seal set is not airworthy, replace it with weather seal set, P/N 74418X14L and P/N 74814X12BL, supplied by Tech-Tool Plastics, Inc., per the "Door Weather Seal Installation" section of SB TTP2005-01, or with an airworthy door

weather seal set, per the applicable manufacturer approved installation instructions, prior to further flight.

If the weather seal set is not installed properly, reinstall per the "Door Weather Seal Installation" section of the SB TTP2005-01, prior to further flight.

If the improperly installed weather seal set is not the weather seal set supplied by Tech-Tool Plastics, Inc., reinstall per the applicable manufacturer approved installation instructions, prior to further flight.

Visually inspect each door hinge on each door assembly to determine if the cotter pins, P/N MS24665-136 are installed per the "Cotter Pin Installation" section of SB TTP2005-01.

If the cotter pins are not installed correctly, install the cotter pins per the "Cotter Pin Installation" section of the SB TTP2005-01, prior to further flight.

**Note 1:** The installation of nylon adjustment screws and the trimming of door assembly edges are important maintenance actions that may reduce the strength of a door assembly if not done properly.

**Note 2:** If any of the inspections required by this AD reveal a crack in any door assembly frame, report findings (i.e. the description of the crack and the helicopter model) to the CAA within 30 days after discovering the crack.

(FAA AD 2005-16-05 refers)

**Compliance:**

1. By 31 October 2005 and thereafter at intervals not to exceed 100 hours TIS.
2. By 31 October 2005.

**Effective Date:** 29 September 2005

**DCA/R22/44B Cancelled – DCA/R22/47 refers**

**Effective Date:** 7 July 2011

#### **DCA/R22/45C Door Hinge Security – Inspection and Installation**

**Applicability:** All model R22, R22 Alpha, R22 Beta, R22 Mariner aircraft.

**Note 1:** No action required if already in compliance with DCA/R22/45B. This AD revised to introduce Robinson SB-101 dated 30 April 2010 which provides instructions for the installation of lower hinge assemblies with a longer pin P/N A227-3 and -4 at revision N. These assemblies have drilled hinge pins with sufficient length to install a cotter pin.

**Requirement:** To prevent a cabin door separating from the aircraft, accomplish the following:

1. Inspect the upper and lower hinge assemblies P/N A227-1, A227-2, A227-3 and A227-4 on both the cabin doors for the installation of cotter pins.

If cotter pins are not fitted to all the door hinges assemblies, fit cotter pins P/N MS24665-151 (or an equivalent approved part), before further flight.

Older doors may only have provision for an upper cotter pin. The lower hinge pin may be too short for a cotter to be fitted. On these doors replace the lower hinge with a hinge which has a longer pin and provision for a cotter. Lower hinge assemblies with a longer pin are P/N A227-3 and -4 revision N or newer. These hinge assemblies have drilled hinge pins with sufficient length to install a cotter pin. Robinson SB-101 refers.

On some aircraft the hinges may be misaligned due to doors exchanged between aircraft. Doors are hand fitted and the hinges may be spaced differently between aircraft. Rework hinges to correct alignment and permit the installation of cotters in the upper and lower cabin door hinges.

- Note 2:** Ring cotters P/N B427-1 which are used on R44 helicopters are not approved for use on R22 helicopters. On R22 helicopters these ring cotters are damaged with the opening and closing of the doors as the door hinges are smaller than those fitted to the R44 helicopter.
2. Install cotter pins on the upper and lower hinge assemblies on both the cabin doors.
- Note 3:** Requirement 2 of this AD may be accomplished by adding the requirement to the tech log. Requirement 2 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:** With reference to the system description in section 7, page 7-1 of the AFM, both cabin doors may be removed by the pilot or maintenance personnel and cotters must be fitted to both the upper and lower hinges with the re-installation of a door. The Robinson R22 Illustrated Parts Catalogue shows the installation of two cotter pins P/N MS24665-151 per door assembly. One cotter is fitted on the upper door hinge and the second on the lower door hinge.
- Note 5:** Doors are known to pop open in flight due to turbulence. If the aircraft is descending, an open door could be forced upward by the airflow. If the lower hinge is a poor fit and the door is only secured by one pin (on the upper hinge), the door could depart the aircraft in flight. If a cabin door strikes the main or tail rotor, the resultant damage to a blade could cause severe out of balance vibration and a catastrophic accident. (NZ Occurrence 06/633 refers)
- Compliance:**
1. By 27 June 2010 unless previously accomplished, and thereafter at every annual inspection.
  2. Every time the cabin doors are refitted to the aircraft.
- Effective Date:** DCA/R22/45A - 28 January 2010  
DCA/R22/45B - 25 March 2010  
DCA/R22/45C - 27 May 2010

#### **DCA/R22/46 Tail Rotor Control Pedals – Inspection and Rework**

- Applicability:** Model R22, R22 Alpha, R22 Beta and R22 Mariner helicopters, S/N 0002 through to 3325 with more than 2200 hours TTIS.
- Requirement:** To prevent failure of the tail rotor (T/R) control pedal bearing block support which can bind the T/R control pedals and result in a reduction of yaw control and loss of aircraft control, accomplish the following:
1. Accomplish a visual inspection of the pedal support A359-1 (left) and A359-2 (right) for cracks per the figure in Robinson Helicopter Company (Robinson) SB No. SB-97, dated 22 February 2008.
- If any cracks are found in a support, replace the cracked support with an airworthy support that is at least 0.050-inch thick, before further flight.
- For every uncracked support, measure the thickness of the support. If the support is less than 0.050-inch thick, install a safety tab on the support per the compliance procedures section, steps 4 and 5 in SB-97, before further flight.
2. Replace all supports that are less than 0.050-inch thick with an airworthy support that is at least 0.050-inch thick per the instructions in SB No. SB-97. (FAA AD 2010-24-03 refers)
- Compliance:**
1. Within the next 100 hours TIS.
  2. At the next 2200 hours TIS overhaul.
- Effective Date:** 23 December 2010

**DCA/R22/47B Cancelled - FAA AD 2014-23-16 refers**

**Effective Date:** 9 January 2015

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 <https://www.aviation.govt.nz/aircraft/airworthiness/airworthiness-directives/links-to-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.

**2013-19-06 Fuel Shut-off Valve - Replacement**

**Effective Date:** 5 November 2013

**2014-23-16 Main Rotor Blade Skin - Inspection**

**Note:** The visual inspection required before the first flight of every day per requirement (f)(1) of FAA AD 2014-23-16 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. If any bare metal in the skin-to-spar bond line area is found, an engineer shall accomplish the corrective actions per the AD before further flight.

**Effective Date:** 9 January 2015

**DCA/R22/48 Cancelled - [CAA Notice NTC 61.365](#) refers**

**Effective Date:** 27 September 2018

**DCA/R22/49 Bladder Fuel Tanks – Retrofit**

**Applicability:** Robinson R22 helicopters, S/N 0002 through to 4620.

**Requirement:** To improve the fuel tanks resistance to post-accident rupture and fuel leaks which could result in a non survivable fire, accomplish the following:

Install bladder-type tanks per the instructions in Robinson Helicopter Company (RHC) R22 SB-109A dated 15 January 2018, or later approved revision.

**Note:** RHC R22 SB-109A introduces bladder tank retrofit kit KI-217-1 for R22 series aircraft not already fitted with bladder tanks. This kit is now included in the 2200 hour overhaul kits ordered from RHC, unless previously installed.

**Compliance:** At the next 2200 hour helicopter overhaul, the 12 year inspection, or by 15 January 2020 whichever occurs first, unless previously accomplished.

**Effective Date:** 22 March 2018

**DCA/R22/50 Helipod III Spray System STC 7/21E/9 – Removal from Service**

**Applicability:** All Robinson R22 helicopters fitted with a R22 Helipod III Spray System embodied per STC 7/21E/9.

**Note 1:** This AD is prompted by a review of the Helipod III Spray System STC 7/21E/9 designed and manufactured by Helipod NZ Limited. The CAA has determined that there are safety concerns with the STC weight and balance considerations. In addition Helipod NZ Limited no longer provides continued airworthiness support for STC 7/21E/9.

**Requirement:** To prevent a reduction of the level of operational safety from that provided by the helicopter manufacturer, accomplish the following:

Remove the Helipod III Spray System STC 7/21E/9 and return the helicopter to an approved configuration. Remove the Flight Manual Supplement applicable to STC 7/21E/9 from the AFM.

If the helicopter is embodied with STC 7/21E/9, notify the CAA by emailing [airworthinessdirectives@caa.govt.nz](mailto:airworthinessdirectives@caa.govt.nz). Please provide the AD number, the helicopter operator name, and the helicopter registration.

No installations of New Zealand STC 7/21E/9 are permitted on any New Zealand registered R22 helicopter.

**Note 2:** Before installing a spray system on a New Zealand registered R22 helicopter, the installer must have acceptable technical data and the written permission of spray system STC holder. Simplex Manufacturing Company in the USA is the STC holder of spray system STCs previously held by Helipod NZ Limited.

**Compliance:** By 23 April 2018.

**Effective Date:** 22 March 2018

#### **DCA/R22/51 Helipod NZ Limited STCs – Report of Installation**

**Applicability:** All Robinson R22 series helicopters.

**Requirements:** If the helicopter is embodied with any of the following Helipod NZ Limited Supplemental Type Certificates (STCs), notify the CAA by emailing [airworthinessdirectives@caa.govt.nz](mailto:airworthinessdirectives@caa.govt.nz). In the email notification please provide the AD number, the STC number, the number of STC systems in service, the helicopter operator name, and the helicopter registration.

<b><u>STC number:</u></b>	<b><u>STC description:</u></b>	<b><u>Eligible aircraft models:</u></b>
99/21E/4	Agricultural spray system	Robinson R22 series
0/21E/10	Remote engine oil filter system	Robinson R22 series
2/21E/22	Auxiliary baggage containers	Robinson R22 series
4/21E/3	Conversion of STC 2/21E/22 to a seed dispersing system	Robinson R22 series
5/21E/20	Conversion of STC 2/21E/22 with a top loading door	Robinson R22 series
5/21E/22	Conversion of STC 2/21E/22 with a top loading door	Robinson R22 series
7/21E/9	Agricultural spray system	Robinson R22 series

**Note:** This AD is prompted by a review of the STCs designed and manufactured by Helipod NZ Limited. The CAA is aware that these STCs no longer have continued airworthiness support by Helipod NZ Limited, or by a Part 146 Design Organization.

**Compliance:** By 23 April 2018.

**Effective Date:** 22 March 2018

#### **88-26-01R2 Main Rotor Spindle and Journals - Inspection**

**Applicability:** R22 series helicopters, all S/N fitted with A158-1 main rotor spindle and A106 journals.

**Effective Date:** 30 April 2020

**2022-12-08 Engine Governor and RPM Sensor - Inspection**

**Applicability:** R22 Beta helicopters, S/N 4825 through to 4857 inclusive, 4860 and 4861.

**Effective Date:** 29 June 2022

**\* 2024-04-02 Tail Rotor Blades - Inspection**

**Applicability:** R22, R22 Alpha, R22 Beta, and R22 Mariner helicopters fitted with tail rotor blade (TRB) P/N A029-2 with S/N up to 11279 inclusive (P/N A029-2 REV A through to U inclusive).

**Note:** The initial inspection of the tail rotor blades in accordance with requirement (g)(1) of FAA AD 2024-04-02 must be accomplished by an aircraft maintenance engineer.

The repetitive inspections before the first flight of each day in accordance with requirement (g)(1) of FAA AD 2024-04-02 may be accomplished by adding the inspection requirement to the helicopter 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.

If any defects are found during the daily repetitive inspections, then an aircraft maintenance engineer must inspect the tail rotor blades and accomplish the corrective actions in accordance with FAA AD 2024-04-02, before further flight.

**Effective Date:** 2 April 2024

# Airworthiness Directive Schedule

## Helicopters

### Robinson R44 Series

29 February 2024

- Notes:**
1. This AD schedule is applicable to Robinson R44 Raven and R44 Raven II helicopters manufactured under FAA Type Certificate No. H11NM.
  2. The Federal Aviation Administration (FAA) 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 FAA website at: [Dynamic Regulatory System \(faa.gov\)](https://www.faa.gov/regulatory/policy/airworthiness/ad)
  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/R44/1      Cyclic Stick Assembly - Removal of Parts**

**Applicability**      R44 series helicopters, S/N less than but not including 0017.

**Requirement:**      To prevent failure of the cyclic stick assembly and loss of control of the helicopter accomplish the following:

Remove the following cyclic control system parts and replace with the corresponding replacement parts per the applicable maintenance manual:

<b>Remove P/Ns:</b>	<b>Replace with P/Ns:</b>
A205-3	A205-5 Revision J or higher
C175-1	C175-2 Revision H or higher
C176-1	C176-2 Revision B or higher
C177-1	C177-2 Revision F or higher
C319-1	C319-3 Revision I or higher
C320-1	C320-1 Revision L or higher
C958-4	C958-5 Revision E or higher
A101-4	D173-1 Revision A or higher
C338-1	C338-4 Revision C or higher
A211-2	A211-3 Revision I or higher
A137-1	A137-2 Revision C or higher

(FAA AD 94-26-10 refers)

**Compliance:**      Before further flight

**Effective Date:**    16 September 1994

**DCA/R44/2B      Fanwheel and Shaft - Replacement**

**Applicability**      R44 series helicopters, S/Ns 0006 through to 0246, except S/N 0014, 0069, 0090, 0182, 0186, 0215, 0228, 0237 and 0239.

**Requirement:**      To prevent loss of engine cooling, replace the fanwheel and shaft assembly, per Robinson R44 SB -14.

**Note:**                With the replacement of the fanwheel and shaft assembly, Textron Lycoming recommends the installation of P/N 14W22647 counterweight rollers, per Textron Lycoming Service Instruction No. 1500. If this has not been accomplished, comply with DCA/LYC/211.

**Compliance:**      Within the next 100 hours TIS, unless already accomplished.

**Effective Date:**    DCA/R44/2A   -   7 June 1996  
DCA/R44/2B   -   31 August 2006

**DCA/R44/3C      Cancelled**

**Effective Date:**    25 November 2004

**DCA/R44/4      Cancelled - Purpose Fulfilled**

**DCA/R44/5     Cyclic Control System - Replacement and Inspection**

**Applicability**     R44 series helicopters, S/N 0001 through to 0150.

**Requirement:**     To prevent binding in the cyclic control system and subsequent loss of control of the helicopter, accomplish the following:

1. Replace, the existing push-pull tube sleeve guide assembly with a C439-7 assembly (included in the KI-88 push-pull tube guide kit) per Robinson SB-4. Inspect the C121-7 push-pull tube sleeve for signs of wear per SB-4. Replace if necessary using the sleeves and adhesive in the KI-88 kit before further flight.
2. Inspect the C121-7 push-pull tube sleeve for signs of wear per the applicable maintenance manual. Replace if necessary using the sleeves and adhesive in the KI-88 kit before further flight.

(FAA AD 95-09-07 refers)

**Compliance:**     1. Within next 25 hours TIS.  
2. At intervals not to exceed 100 hours TIS.

**Effective Date:**     7 July 1995

**DCA/R44/6A     Main Rotor RPM Warning Unit - Adjustment**

**Applicability**     All R44 series helicopters.

**Requirement:**     To minimise the possibility of pilot mismanagement of the main rotor RPM, which could result in unrecoverable main rotor blade stall and subsequent loss of control of the helicopter, accomplish the following:-

Adjust the A569-6 low-RPM warning unit so that the warning horn and caution light activate when the main rotor RPM is between 96% and 97% rotor RPM per the procedures contained in the R44 maintenance manual.

Revise the R44 Flight Manual (AIR2479) to include the FAA-approved Flight Manual revision dated July 25, 1996.

(FAA AD 97-02-15 refers)

**Compliance:**     Within next 30 days unless already accomplished.

**Effective Date:**     DCA/R44/6   - 5 July 1996  
DCA/R44/6A   - 14 March 1997

**DCA/R44/7     Main Rotor Gearbox Ring Gear Bolts - Inspection**

**Applicability**     All R44 series helicopters fitted with main rotor gearbox P/N C006-1, revisions A through to P.

**Requirement:**     To prevent loosening of the bolts securing the gear to the gear carrier which could lead to fatigue failure of the gear carrier, accomplish Robinson SB-15.

(FAA Priority Letter AD 96-18-22 refers)

**Compliance:**     Within next 5 hours TIS.

**Effective Date:**     4 September 1996

**DCA/R44/8 Main Rotor Clutch - Inspection and Replacement**

**Applicability:** R44 series helicopters, S/N 0001 through to 0332.

**Requirement:** To prevent failure of the sprag clutch to lock or unlock, accomplish the following:

1. Inspect both up-limit switches, P/N V3-1001, for proper operation per Robinson R44 SB-21. If the motor runs when the springs are depressed on one side, the switch on the OPPOSITE side is not functioning properly. If either up-limit switch does not function properly, before further flight replace the up-limit switch with an airworthy up-limit switch per SB-21.
2. Replace the clutch assembly, P/N C018-1, with a clutch assembly, P/N C018-2 or P/N C018-2A, per Robinson R44 SB-23.

(FAA AD 97-16-02 refers)

**Compliance:** 1. Inspect within next 25 hours TIS and thereafter at intervals not to exceed 100 hours TIS.  
2. Replace within next 50 hours TIS.

**Effective Date:** 14 August 1997

**DCA/R44/9 Cyclic Control System - Inspection**

**Applicability:** R44 series helicopters, S/N 0002 through to 0420, 0425, 0426, and 0427 fitted with a C056-1 Rev A through to G spring assembly.

**Requirement:** To detect excessive wear on the lateral cyclic trim spring shaft, which could allow the shaft to move from its lower mount and interfere with lateral cyclic control resulting in loss of control of the helicopter, accomplish the following:-

Measure the diameter of the shaft per the Compliance Procedure contained in Robinson R44 SB-26.

If the shaft diameter varies more than 0.004 inch in any 0.50 inch of length, in the measurement area shown in Figure 1 of SB-26, replace the C056-1 Rev. A through G spring assembly with a C056-1 Rev. H spring assembly before further flight.

Replacing the C056-1 Rev. A through G spring assembly with a C056-1 Rev. H spring assembly per SB-26 is considered terminating action for the requirements of this AD.

(FAA Priority Letter AD 98-04-12 refers)

**Compliance:** Within next 10 hours TIS, and thereafter at intervals not to exceed 20 hours TIS.

**Effective Date:** 13 February 1998

**DCA/R44/10 Oil Line Elbows - Replacement**

**Applicability:** R44 series helicopter, S/N 0001 through to 0330.

**Requirement:** To prevent failure of either the 45 degree or 90 degree aluminium elbows that connect the oil lines from the oil cooler to the engine accessory case, which would cause loss of engine oil, resulting in an engine failure, accomplish the following:-

Remove any aluminium (blue-coloured) AN823-8D (45 degree) or MS20822-8D (90 degree) elbows that connect the A723 oil cooler lines to the engine accessory case and replace them with airworthy MS20823-8 (45 degree) steel elbows or MS20822-8 (90 degree) steel elbows per Robinson R44 SB-25.

(FAA AD 98-05-10 refers)

**Compliance:** Within next 50 hours TIS.

**Effective Date:** 10 April 1998

**DCA/R44/11A Main Rotor Blades – Inspection and Replacement**

**Applicability:** R44 series helicopters, S/N 0002 through to 0486 fitted with main rotor blades P/N C016-1.

**Requirement:** To prevent failure of a main rotor blade and subsequent loss of the helicopter, accomplish the following:-

1. Perform a dye-penetrant inspection of the main rotor blade skin around both inboard trim tab alignment rivets as follows, referring to Figure 1.

a) Remove all paint around both rivets, exposing an area of approximately 3/4" in diameter, at the inboard trim tab on the top and bottom of each main rotor blade (4 places per main rotor blade). Use 180 grit or finer abrasive paper, followed by 600 grit or finer paper to eliminate course sanding marks. Sand only in a spanwise direction. Do not use chemical paint strippers.

b) Inspect the main rotor blade skin around the rivets on the upper and lower surfaces (4 locations) using a dye-penetrant inspection method.

**Note 1:** Chord-wise cracks in the paint up to 2 inches long which are located along either inboard or outboard edge of the trim tab are acceptable.

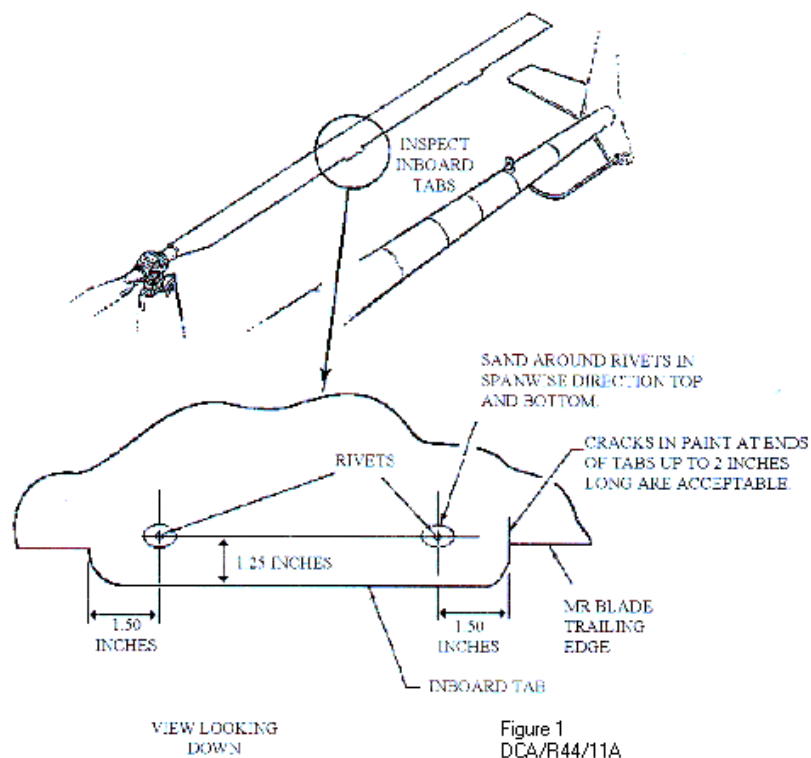
c) Clean the sanded areas prepared in accordance with paragraph a) of this AD with 111-Trichloroethane or methyl ethyl ketone (MEK) and then apply clear lacquer to seal the unpainted areas.

**Note 2:** Do not bend the inboard main rotor blade tabs from their present position or utilise them for any subsequent main rotor blade tracking adjustment.

2. Using a 5-power or higher magnifying glass, visually inspect both upper and lower main rotor blade skin surfaces around the inboard trim tab rivets (4 locations) for cracks. If a crack is found, replace the main rotor blade with an airworthy main rotor blade before further flight.

**Note 3:** The daily inspection may be accomplished by pilot subject to:  
Adequate instruction by LAME responsible for the aircraft.  
Aircraft Technical Log to be endorsed to refer to inspection requirement.

3. Install a set of main rotor blades, P/N C016-2. This constitutes terminating action for the inspections required by this AD.



**Note 4:** Robinson Helicopter Company R44 SB-27B, and SB-28, pertain to the subject of this AD.

(FAA AD 98-22-16 refers)

- Compliance:**
1. Within the next 5 hours TIS
  2. After accomplishing part 1, prior to the first flight of each day, or at intervals not to exceed 5 hours TIS, whichever occurs first.
  3. By 16 November 1998

**Effective Date:** DCA/R44/11 - 11 June 1998  
DCA/R44/11A - 5 November 1998

**DCA/R44/12A**      **FAA AD 98-21-36 Cancelled – FAA AD 99-23-01 now refers**

**Effective Date:** 28 April 2022

**DCA/R44/13**      **Cancelled – DCA/R44/17 refers.**

**DCA/R44/14 Auxiliary Fuel Tank Sump Drain - Modification**

**Applicability:** R44 series helicopters, S/N 0002 through to 0529, except S/N 0440, 0485, 0512, 0515, 0519, 0526, 0527 and 0528.

**Requirement:** To prevent fuel leaks from the auxiliary fuel tank sump drain, which could cause a fire and subsequent loss of the helicopter, accomplish the following:-

Install a shutoff clamp, P/N D663-1, by sliding it onto the auxiliary fuel tank sump drain tube, P/N A729-7, as shown.

Install placard decal, P/N A654-93, as shown.

(FAA AD 99-13-11 refers)

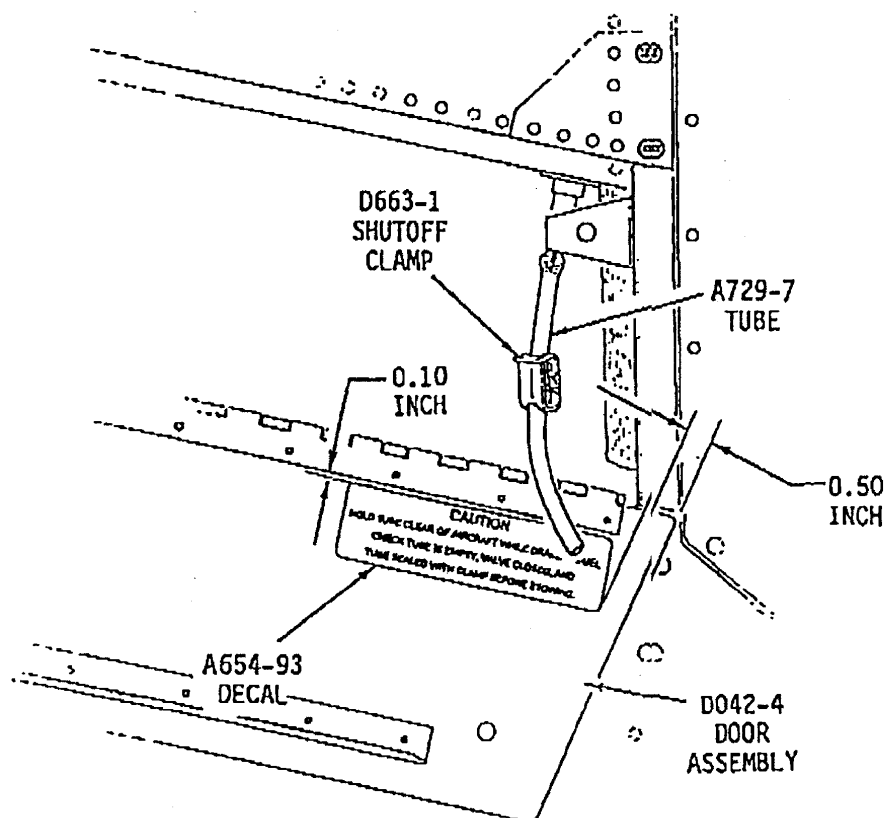


FIGURE 1  
AD 99-13-11

**Compliance:** Within 100 hours TIS or 3 months, whichever occurs first.

**Effective Date:** 30 July 1999

**DCA/R44/15 Yoke Assembly P/N C908-1 – Replacement**

**Applicability:** R44 series helicopters, S/N 0219 and 0535 through to 0608 (except S/N 0565, 0582, and 0592).

**Requirement:** To prevent failure of the yoke assembly, which could result in loss of main and tail rotor drive and subsequent loss of control of the helicopter, determine, if the yoke assembly, P/N C908-1C, from Lot No 36B, 37, or 38 is installed. Yoke assemblies, P/N C908-1C, from Lot Nos 36B, 37, and 38 were installed as original equipment in R44 helicopters, S/N 0219 and 0535 through 0608 (except S/N's 0565, 0582, and 0592). Replace any yoke assembly, P/N C908-1C, from Lot No 36B, 37, or 38, with an airworthy yoke assembly from a lot other than 36B, 37, or 38 per Robinson Helicopter Company R44 SB-35.  
(FAA AD 99-17-17 refers)

**Compliance:** Before further flight

**Effective Date:** 24 September 1999

**DCA/R44/16 Fuel Line Assembly – Inspection and Modification**

**Applicability:** R44 series helicopters, S/N 0002 through to 0462.

**Requirement:** To prevent contact between the wire harness and the fuel line assembly, which could result in chafing of the wire harness and a potential fire hazard, remove the cover, P/N C474-1, from between the rear seatbacks.

Inspect the wire harness, P/N C059, and the fuel line assembly, P/N C726-2, above the fuel shutoff valve for contact. If the wire harness contacts the fuel line assembly, inspect for chafing. If chafing has occurred between the wire harness and the fuel line assembly, replace the fuel line with an airworthy fuel line assembly. Torque the fuel line nuts to 110-130 in-lbs. Verify that clearance exists between the fuel line assembly and the wire harness.

Install a 3-inch section of spiral wrap tubing, P/N B161-8, on the fuel line assembly as shown in Robinson SB-31. Push the spiral wrap tubing down until it is against the fuel line fitting.

**Note:** *FAA AC 43.13-1B, Chapter 11, describes procedures acceptable for replacing the wire harness if required.*  
(FAA AD 2000-07-03 refers)

**Compliance:** Within next 100 hours TIS or by 31 July 2000, whichever is the sooner.

**Effective Date:** 27 April 2000

**DCA/R44/17 Sprag Clutch - Replacement**

**Applicability:** R44 series helicopters, S/N 0001 through to 0541, 0543, 0550, 0556 and 0565 fitted with sprag clutch P/N C188-3, S/N 0003 through to 0505.

**Requirement:** To prevent sprag clutch failure, loss of main rotor RPM during autorotation, and subsequent loss of control of the helicopter, replace sprag clutch, P/N C188-3, S/N 0003 through 0505, with sprag clutch P/N C188-3, S/N 0506 or higher.

Remove from the Rotorcraft Flight Manual the Special Pilot Caution contained in Robinson Helicopter Company R44 SB-32 dated March 22, 1999, or the Special Pilot Caution insert in the Normal Procedures Section of the Rotorcraft Flight Manual between pages P.4-8 and P.4-9 required by airworthiness directive DCA/R44/13, as applicable.  
(FAA AD 2000-08-04 refers)

**Compliance:** Within next 50 hours TIS or by 24 June 2000, whichever is the sooner.

**Effective Date:** 25 May 2000

**DCA/R44/18 Horizontal Stabilizer Assembly – Life Limit**

**Applicability:** All R44 series helicopters fitted with horizontal stabilizer assembly, P/N C044-1; and S/N 0009 through 0224, except S/N 0018, 0090, 0094, 0111, 0129, 0144, 0161, 0178, 0201, and 0223.

**Requirement:** To prevent a crack through a vertical-to-horizontal stabilizer attach channel (channel), which can cause separation of the stabilizers and subsequent loss of control of the helicopter, accomplish the following:-

Remove the vertical stabilizer and inspect the nutplate on channels, P/N D283-1 and -2. If the nutplates are P/N MS21086L4, no further action is required by this AD. If the nutplates are P/N NAS697A4, replace the channels with airworthy channels, P/N D296-1, or D296-2 before further flight.

Robinson SB-39 also refers to the subject of this AD.

This AD revises the Limitations section of the maintenance manual by establishing a retirement life of 2200 hours TIS for assembly, P/N CO44-1, with channels, P/N D283-1 or -2, with nutplates, P/N NAS697A4, installed.

(FAA AD 2001-20-18 refers)

**Compliance:** Before accumulating 2200 hours TIS on the assembly.

**Effective Date:** 29 November 2001

**DCA/R44/19 V-Belt Restraint Panel Assembly - Replacement**

**Applicability:** R44 series helicopters, S/N 0002 through to 0240.

**Requirement:** To prevent failure of the support structure for the right-hand V-belt restraint, replace the C309-1 panel assembly per Robinson Helicopter Company SB-16.

**Compliance:** By 31 August 2002

**Effective Date:** 30 May 2002

**DCA/R44/20 Tail Rotor Pitch Control - Inspection**

**Applicability:** R44 series helicopters, all S/N up to and including S/N 1208, except S/N 1143, 1165, 1183, 1189, 1192, 1196, 1197, 1198, 1200, 1203 and 1204 fitted with a pitch control assembly, P/N C031-1, revision G or prior.

**Requirement:** To detect corrosion of a tail rotor pitch control bearing and to prevent bearing failure and loss of directional control of the helicopter, accomplish the following:

Inspect the pitch control assembly for roughness or binding of the pitch control bearings by hand-rotating the pitch control bearing housing in accordance with Robinson Helicopter Company SB-43A, Revision A. If the housing does not rotate freely, replace the unairworthy pitch control assembly with an airworthy unit before further flight.

(FAA AD 2003-04-05 refers)

**Compliance:** Within 50 hours TIS or by 31 March 2003 whichever occurs first. Thereafter inspect at intervals not to exceed 300 hours TIS or 12 months, whichever occurs first.

**Effective Date:** 27 February 2003

**DCA/R44/21 Main Rotor Swashplate and Tail Rotor Blade Attachment Bolts - Replacement**

**Applicability:** All R44 and R44II helicopters.

**Requirement:** To prevent failure of the main rotor swashplate and tail rotor blade attachment bolts, and subsequent loss of control of the helicopter, accomplish the following:

1. For model R44 S/N 0210, 0565, 0641, 0987, and 1312 through 1349, except 1345 and 1346; and R44II helicopters, S/N 10010, 10062, and 10083 through 10212, except 10092, 10173, 10204, 10207, 10210, and 10211, accomplish the following:-

Visually inspect each bolt for fretting residue under the bolt head as indications of a loose or cracked bolt. Apply 10-15 ft-lb (13-20 Nm) torque to each bolt head and verify no rotation. See Figure 1 of Robinson SB-51. If residue or rotation of the bolt is found, before further flight, replace each unairworthy bolt with an airworthy bolt that does not have a vendor identification marking of 01DO.

Within 10 hours TIS or by 31 December 2003, whichever occurs first, replace each bolt, P/N NAS6605-31, which has vendor identification marking 01DO on the bolt head, with an airworthy bolt, P/N NAS6605-31, that has an alternate vendor identification marking.

2. For all other R44 and R44II helicopters accomplish the following:-

Determine if maintenance has been performed after 7 February 2003 on the areas specified in Figure 1 of Robinson SB-51, and determine if any bolt, P/N NAS6605-31, shown in Figure 1 has been replaced for any reason. If any bolt has been replaced, or if it is uncertain whether any bolt has been replaced after 7 February 2003, remove the paint from the bolt head to reveal the vendor identification marking. Determine if the bolt vendor identification is 01DO.

If the bolt vendor identification is 01DO before further flight accomplish the following:

Visually inspect each bolt for fretting residue under the bolt head as indications of a loose or cracked bolt. Apply 10-15 ft-lb (13-20 Nm) torque to each bolt head and verify no rotation. See Figure 1 of Robinson SB-51. If residue or rotation of the bolt is found, then before further flight, replace each unairworthy bolt with an airworthy bolt that does not have a vendor identification marking of 01DO.

Within 10 hours TIS or by 31 December 2003, whichever occurs first, replace each bolt, P/N NAS6605-31, which has vendor identification marking 01DO on the bolt head, with an airworthy bolt, P/N NAS6605-31, that has an alternate vendor identification marking.

3. Bolt, P/N NAS6605-31, with vendor identification marking 01DO on the bolt head, is NOT ELIGIBLE for installation on any helicopter.

(FAA 2003-24-51 AD refers)

**Compliance:** Before further flight.

**Effective Date:** 4 December 2003

**DCA/R44/22A Fuel Control Unit – Modification**

**Applicability:** All R44 II series helicopters fitted with Lycoming engine model IO-540-AE1A5 not embodied with Robinson SB No. 55.

**Note 1:** This AD revised to mandate the fuel control unit modification per Robinson SB No. 55.

**Requirement:** To prevent corrosion inside the fuel control unit, which may lead to loss of engine power and in-flight engine failure, accomplish the following:

Modify the fuel control unit per Robinson SB No. 55 dated 20 July 2005.

**Note 2:** This modification rotates the fuel control through 90 degrees to reduce the possibility of water entering the fuel control unit intake.  
(NZ occurrences refer)

**Compliance:** Within the next 100 hours TIS or annual inspection whichever is the sooner, unless previously accomplished.

**Effective Date:** 30 July 2009

**DCA/R44/23B Sprag Clutch Assembly – Inspection**

**Applicability:** All R44 series helicopters fitted with a sprag clutch assembly P/N C188-3 revisions D, E, F, G or H.

**Note 1:** DCA/R44/23B revised to clarify the applicability and the requirements. The AD mandates lubricant inspections for sprag clutch assemblies P/N C188-3 revisions D, E, F, G and H.

**Requirement:** To prevent failure of the clutch assembly due to worn or broken parts which could either result in loss of the main rotor drive, or result in the clutch assembly failing to disengage during autorotation, accomplish the following:

1. Review the aircraft records, or inspect the sprag clutch assembly fitted to the aircraft and determined if both the forward and aft retainers P/N C168-X fitted to the sprag clutch have a screw P/N B289-3.

If both the forward and aft retainers P/N C168-X are found fitted with screws P/N B289-3, then accomplish requirement 2 of this AD.

If early revision retainers P/N C168-X are found fitted, which do not have screws P/N B289-3, then accomplish requirement 3 of this AD.

**Note 2:** Sprag clutches with retainers P/N C168-5 are fitted with a screw P/N B289-3. Older clutch assemblies may not have retainers fitted with screws P/N B289-3. To determine the dash number of the forward and aft retainers fitted to the sprag clutch refer to the RHC R44 IPC.

2. For a sprag clutch with retainers fitted with screws P/N B289-3:

Accomplish steps 4 through to 7 in Robinson R44 SB-79, dated 20 December 2010 or later approved revision.

If any evidence of metal contamination is found, remove the clutch assembly P/N C018-X from the aircraft, and replace with a new or overhauled clutch assembly per the instructions in the Robinson R44 MM.

If no metal contamination is found, service the sprag clutch assembly with lubricant per the instructions in steps 8 through to 11 in Robinson R44 SB-79.

3. For a sprag clutch with retainers not fitted with screws P/N B289-3:

Remove the clutch assembly P/N C018-X from the aircraft per the instructions in section 7.210 of Robinson R44 Maintenance Manual (MM), and remove the aft and forward seal retainers per the instructions in section 7.213 of the R44 MM to expose the bearing cavity, and inspect for metal particle contamination.

If any evidence of metal contamination is found or if any defective parts are found, replace with a new or overhauled clutch assembly per the instructions in the Robinson R44 MM.

If there is no evidence of metal contamination, rotate the sheave drive shaft in the free wheel direction and feel for momentary drag. As the rotation is continued in the free wheel direction inspect for a notchy feel, listen for unusual noises and roughness from the sprag clutch area.

If any of these symptoms are detected, or if any defective parts are found, replace with a new or overhauled clutch assembly per the instructions in the Robinson R44 MM.

Remove any light surface corrosion at the shaft-to-seal junctures and apply a suitable corrosion inhibitor, and replace all clutch assembly seals, o-rings and lubricant per the clutch assembly seal replacement instructions in section 7.213 of the Robinson R44 MM, before further flight.

Restore the actuator drive belt tension per the instructions in section 7.500 of the Robinson R44 MM. Adjust the actuator, as required, per the instructions in section 7.540 of the Robinson R44 MM.

(NZ occurrences refers)

- Note 3:** Older clutch assemblies fitted with early revision retainers can be retrofitted with retainers P/N C168-5 with the embodiment of RHC Kit KI-202.
- Note 4:** Symptoms of a worn clutch assembly or cracked sprag ends may include leaking clutch assembly oil seals, unusual noise from the upper sheave or unusual aircraft vibration on engine shutdown, or momentary drag with clutch overrun during autorotation.
- Note 5:** If metal contamination is found, submit a defect report form CA005D to the Civil Aviation Authority per Rule Part 12.57 and provide the clutch assembly hours TIS and the nature of the defects found.
- Compliance:** 1. 2. & 3. At 500 hours TTIS, or within the next 50 hours TIS, whichever is the later, unless previously accomplished, and thereafter at intervals not to exceed 500 hours TIS.
- Effective Date:** DCA/R44/23 - 31 May 2007  
DCA/R44/23A - 21 April 2011  
DCA/R44/23B - 30 August 2018

#### **DCA/R44/24 Seat Belt Buckle Assembly – Replacement**

- Applicability:** R44 helicopters, all S/N through to 1576.  
R44 II helicopters, all S/N through to 11107.  
Fitted with a seat belt buckle assembly P/N C628-4 revision M or earlier.
- Requirement:** To prevent cracks developing in the stainless support strap of the seat belt buckle assembly which could result in failure of a seat belt, remove the buckle assembly and the spacer, and replace with a buckle assembly P/N C628-4, revision N and a new buckle assembly spacer P/N A130-52, per the procedure in paragraph 3 of Robinson Helicopter Company Service Bulletin SB-56.  
(FAA AD 2007-11-01 refers)
- Note 1:** The new buckle assembly spacers have been redesigned to be slightly longer than the previous spacers to reduce friction in the joint.
- Note 2:** Inspecting the buckle assembly for cracks is not a requirement of this AD.
- Compliance:** Within the next 100 hours TIS unless already accomplished.
- Effective Date:** 28 June 2007

**DCA/R44/25 Helipod R44 5 Place Kit – Removal from Service**

**Applicability:** All R44 and R44 II helicopters fitted with Helipod R44 5 place kit P/N MHPR44BS25200.

**Requirement:** To prevent a reduction of the level of occupant safety, from that provided by the manufacturer, accomplish the following:

1. The carriage of a passenger in the centre rear seat position is prohibited. Insert a copy of this AD into the AFM, opposite the supplement for the Helipod 5 Place Kit.
2. Remove the rear seat P/N MHPR44BS25200 and return the aircraft to an approved configuration. Remove the Flight Manual Supplement and AD from the AFM.

**Note:** It has not been demonstrated that this modification kit maintains the existing level of occupant safety for the centre seat passenger in an emergency landing. The modification may also reduce the existing occupant safety features of the two other rear seats.

**Compliance:**

1. From 20 September 2007
2. By 20 October 2007

**Effective Date:** 20 September 2007

**DCA/R44/26B Cancelled – DCA/R44/29 refers**

**Effective Date:** 7 July 2011

**DCA/R44/27A Door Hinge Security – Inspection and Installation**

**Applicability:** All R44 and R44 II helicopters.

**Note 1:** This AD revised to introduce requirement 2 which requires the installation of cotter pins or ring-cotters on the upper and lower hinge assemblies every time any of the doors are refitted to the aircraft.

**Requirement:** To prevent a cabin door separating from the aircraft, accomplish the following:

1. Inspect the upper and lower hinge assemblies P/N C227-1, C227-2 C227-3, C227-4 on both the forward cabin doors for the installation of cotter pins or ring-cotters.

Also inspect the upper and lower hinge assemblies P/N C389-3, C389-4, C389-9 and C389-10 on both the aft cabin doors for the installation of cotter pins or ring-cotters.

If cotter pins or ring-cotters are not fitted to all door hinges assemblies, fit cotter pins P/N MS24665-151 or ring-cotters P/N B427-1 (or an approved equivalent part).

On doors where the lower hinge pin may be too short for a cotter to be fitted, replace the lower hinge with a hinge which has a longer pin and provision for a cotter.

On doors where the hinges may be misaligned, rework the hinges to correct alignment and permit the installation of cotters in the upper and lower cabin door hinges.

2. Install cotter pins or ring-cotters on the upper and lower hinge assemblies on both the aft and forward cabin doors.

**Note 2:** Requirement 2 of this AD may be accomplished by adding the requirement to the tech log. Requirement 2 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 Robinson R44 IPC specifies the installation of cotter pins P/N B427-1 on all the upper and lower door hinge assemblies.

**Note 4:** Doors are known to pop open in flight due to turbulence. If the aircraft is descending, an open door could be forced upward by the airflow. If the lower hinge is a poor fit and the door is only secured by one pin (on the upper hinge), the door could depart the aircraft in flight. If a cabin door strikes the main or tail rotor, the resultant damage to a blade could cause severe out of balance vibration and a catastrophic accident.

(NZ Occurrence 06/633 refers)

**Compliance:**

1. By 29 November 2009 and thereafter at every annual inspection.
2. Every time the aft or forward cabin doors are refitted to the aircraft.

**Effective Date:** DCA/R44/27 - 24 April 2008  
DCA/R44/27A - 29 October 2009

#### **DCA/R44/28 Tail Rotor Control Pedals – Inspection and Rework**

**Applicability:** R44 and R44 II helicopters, S/N 0001 through to 1200 with more than 2200 hours TTIS.

**Requirement:** To prevent failure of the tail rotor (T/R) control pedal bearing block support which can bind the T/R control pedals and result in a reduction of yaw control and loss of aircraft control, accomplish the following:

1. Accomplish a visual inspection of the pedal support A359-1 (left) and A359-2 (right) for cracks per the figure in Robinson Helicopter Company (Robinson) SB No. SB-63, dated 22 February 2008.

If any cracks are found in a support, replace the cracked support with an airworthy support that is at least 0.050-inch thick, before further flight.

For every uncracked support, measure the thickness of the support. If the support is less than 0.050-inch thick, install a safety tab on the support per the compliance procedures section, steps 4 and 5 in SB-63, before further flight.

2. Replace all supports that are less than 0.050-inch thick with an airworthy support that is at least 0.050-inch thick per the instructions in SB No. SB-63.

(FAA AD 2010-24-03 refers)

**Compliance:**

1. Within the next 100 hours TIS.
2. At the next 2200 hours TIS overhaul.

**Effective Date:** 23 December 2010

#### **DCA/R44/29B Cancelled - FAA AD 2014-23-16 refers**

**Effective Date:** 9 January 2015

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 <https://www.aviation.govt.nz/aircraft/airworthiness/airworthiness-directives/links-to-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.

**2013-05-15      Emergency Floats – Inspection**

**Effective Date:**    30 April 2013

**DCA/R44/30      Bladder Fuel Tanks – Retrofit**

**Applicability:**      All R44 and R44 II helicopters not fitted with bladder fuel tanks.

**Note 1:**                This AD mandates the installation of bladder fuel tanks to improve the fuel system's resistance to post accident fuel leaks, reduce the risk of post crash fires and increase the survivability in such an event. Overseas experience has revealed that post crash fires are the primary cause of fatalities and injuries in survivable helicopter accidents. The CAA considers that this airworthiness directive should be accomplished at the earliest opportunity but has allowed a 6 month compliance time to provide for maintenance planning.

**Requirement:**      To improve the fuel tanks resistance to post-accident rupture and fuel leaks which could result in a non survivable fire, accomplish the following:

Replace the aluminium fuel tanks with bladder-type tanks, per the instructions in Robinson Helicopter Company R44 SB-78B dated 28 September 2012.

**Note 2:**                Robinson Helicopter Company R44 SB-78B introduces bladder tank retrofit kits KI-196-1 and KI-196-2 for R44 series aircraft not already fitted with bladder tanks.

**Compliance:**        At the next helicopter overhaul, or by 27 December 2013 whichever occurs first.

**Effective Date:**      27 June 2013

**2014-23-16      Main Rotor Blade Skin - Inspection**

**Note:**                The visual inspection required before the first flight of every day per requirement (f)(1) of FAA AD 2014-23-16 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. If any bare metal in the skin-to-spar bond line area is found, an engineer shall accomplish the corrective actions per the AD before further flight.

**Effective Date:**      9 January 2015

**DCA/R44/31      Cancelled – Purpose Fulfilled**

**Effective Date:**      24 February 2015

**DCA/R44/32C Main Rotor Blades P/N C016-7**

**Applicability:** All Robinson R44 series helicopters fitted with main rotor blades P/N C016-7.

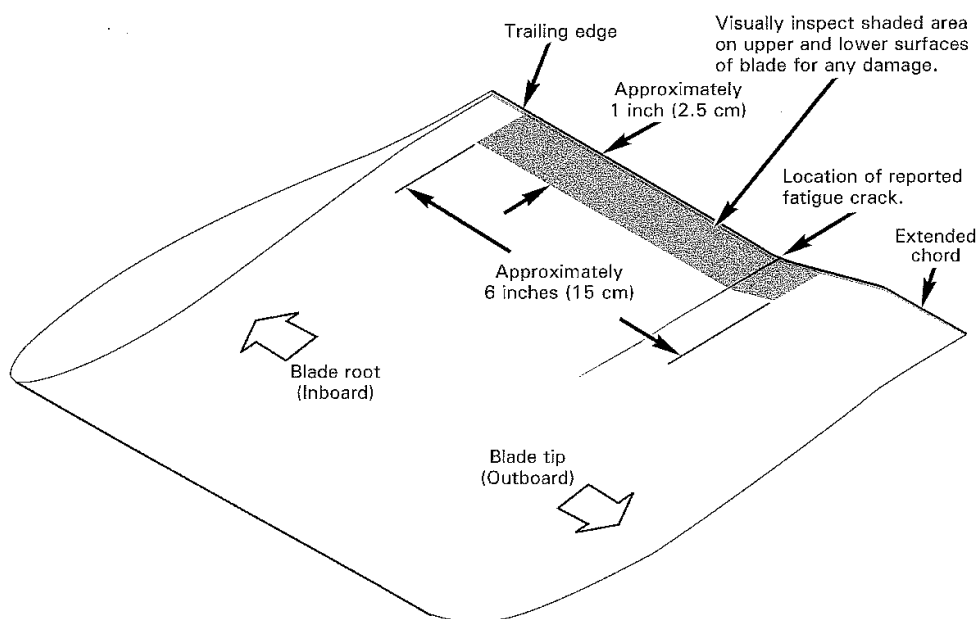
**Note 1:** DCA/R44/32C revised to clarify the visual inspection requirements and mandate the main rotor blade modification per the instructions in Robinson Helicopter Company R44 Service Bulletin SB-89 dated 30 March 2015.

**Requirement:** To prevent possible main rotor blade separation and loss of the helicopter, accomplish the following:

1. Inspect the upper and lower surfaces of each main rotor blade in the area shown in Figure 1. Inspect for any damage which may initiate a fatigue crack. A stepladder may be required to inspect the blades.

If the inspection reveals any damage or unusual marks, then the blades must be inspected by a maintenance engineer before further flight.

If any unusual rotor system vibration is detected in flight, land immediately and inspect the main rotor blades in the area shown in Figure 1. If the inspection reveals any damage or unusual marks, then the blades must be inspected by a maintenance engineer before further flight.



*Figure 1 – Section of MRB P/N C016-7 (View of blade lower surface)*

2. Modify the main rotor blades per the instructions in Robinson Helicopter Company R44 Service Bulletin SB-89 dated 30 March 2015.

**Note 2:** Requirement 1 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.

**Note 3:** Report any defects to the CAA by completing a CA005 Defect Report form and provide as much detail as possible. The form can be obtained from [http://www.caa.govt.nz/Forms/CA005D\\_Form.pdf](http://www.caa.govt.nz/Forms/CA005D_Form.pdf) The completed form can be emailed to the CAA at [CA005@caa.govt.nz](mailto:CA005@caa.govt.nz)

(Occurrence #15/390 refers)

- Compliance:**
1. At every daily preflight inspection and before every engine start if the aircraft is to be flown until requirement 2 is accomplished.
  2. By 30 March 2016.

**Effective Date:** DCA/R44/32A - 27 February 2015  
 DCA/R44/32B - 02 April 2015  
 DCA/R44/32C - 24 September 2015

### **DCA/R44/33 Clutch Shaft and Yoke Installation - Inspection**

**Applicability:** All Robinson R44 series helicopters.

**Note 1:** This AD is prompted by a recent crack found in a clutch shaft on a R44 reported to the CAA. The investigation revealed that at the last assembly of the clutch shaft P/N C166 and the yoke P/N C907 a non-approved jointing compound (Mastinox) was used, and the aft attach bolt of the installation was found under torqued. The torque of the bolt probably reduced due to breakdown of the Mastinox which resulted in fretting corrosion and initiation of a fatigue crack.

**Requirement:** To prevent possible failure of clutch shaft P/N C166-4 which could result in loss of engine power to the main rotor gearbox, inspect the clutch shaft P/N C166-4 and the yoke P/N C907 installation for the following:

1. Review the aircraft records and inspect the clutch shaft/yoke installation and determine that a Robinson Helicopter Company (RHC) approved primer has been used for the assembly of the mating portion of the clutch shaft with the yoke.

If the type of primer at last assembly of the parts cannot be determined, or if a non-approved joining compound has been used at last assembly of the parts, then remove/dis-assemble and inspect the parts for corrosion and cracks.

Accomplish corrective actions, as required, per the instructions in the RHC R44 Maintenance Manual (MM) before further flight.

If a RHC approved primer has been used for the assembly of the mating portion of the clutch shaft at the last assembly, or if the installation is factory original, then accomplish requirements 2 and 3 of the AD.

2. Inspect the clutch shaft and yoke installation for corrosion and cracks.

If any corrosion or cracks are found, accomplish corrective actions, as required, per the instructions in the R44 MM before further flight.

3. Check the torque of the attachment bolts P/N NAS6606-31 of the clutch shaft and yoke installation per the instructions in the R44 MM.

**Note 2:** RHC specify that the mating portion of the clutch shaft must be coated with zinc-chromate or epoxy primer, and the parts must be assembled while the primer is still wet. The RHC approved primers are listed in section 1.450 of the RHC R44 MM. The bolt torque is specified in section 1.320 of the RHC R44 MM.

**Note 3:** Report any defects found to the CAA by completing a CA005D defect report form and submit to the CAA at [CA005@caa.govt.nz](mailto:CA005@caa.govt.nz) Defect report form CA005D can be obtained from [http://www.caa.govt.nz/Forms/CA005D\\_Form.pdf](http://www.caa.govt.nz/Forms/CA005D_Form.pdf)

(Occurrence #15/5520 refers)

**Compliance:** 1. 2. & 3. At the next maintenance inspection, or within the next 50 hours TIS, whichever occurs sooner.

**Effective Date:** 14 December 2015

**DCA/R44/34** Cancelled - [CAA Notice NTC 61.365](#) refers

**Effective Date:** 27 September 2018

**DCA/R44/35 Revised Instrument Marking**

**Applicability:** R44 helicopters S/N 0004 through to S/N 2449, and  
R44 II helicopters S/N 10001 through to S/N 14026.

**Requirement:** To introduce a yellow arc above 110 knots to the Airspeed Indicator (ASI), accomplish the following:

1. For aircraft fitted with an analogue Airspeed Indicator (ASI):

By 31 December 2016 accomplish the requirements in paragraph 1. of Robinson Helicopter Company (RHC) R44 SB-90 dated 14 November 2016, or later approved revision.

2. For aircraft fitted with an Electronic Flight Display (EFD):

By 31 December 2016 accomplish the requirements in paragraph 2. of RHC R44 SB-90.

**Note:** R44 helicopters are capable of high cruise speeds especially when lightly loaded. A yellow precautionary operating range has been added to the R44 ASI as a reminder to slow down for safety. The yellow arc indicates the maximum recommended cruise speed is 110 knots. Speeds above 110 knots are not recommended except in smooth air with the pilot's attention fully focused on flying.

(RHC SB-90 dated 14 November 2016 refers)

**Compliance:** Refer requirements section of the AD.

**Effective Date:** 24 November 2016

**2016-26-04 Main Rotor Blades – Inspection**

**Effective Date:** 8 February 2017

**DCA/R44/36 Helipod NZ Limited STCs – Report of Installation****Applicability:** All R44 series helicopters.

**Requirements:** If the helicopter is embodied with any of the following Helipod NZ Limited Supplemental Type Certificates (STCs), notify the CAA by emailing [airworthinessdirectives@caa.govt.nz](mailto:airworthinessdirectives@caa.govt.nz)  
In the email notification please provide the AD number, the STC number, the number of STC systems in service, the helicopter operator name, and the helicopter registration.

<b><u>STC number:</u></b>	<b><u>STC description:</u></b>	<b><u>Eligible aircraft models:</u></b>
1/21E/18	Auxiliary baggage containers	Robinson R44 series
1/21E/19	Agricultural spray system	Robinson R44 series
4/21E/4	Agricultural spray system	Robinson R44 series
4/21E/7	Auxiliary baggage containers	Robinson R44 series
5/21E/11	Auxiliary baggage containers	Robinson R44 series
5/21E/21	Conversion of STC 5/21E/11 with a low profile door	Robinson R44 series
5/21E/23	Clipper pod installation	Robinson R44 series
6/21E/4	Ski pod installation	Robinson R44 series
6/21E/7	Auxiliary baggage containers	Robinson R44 series
6/21E/10	Conversion of STC 4/21E/7 with a top loading door	Robinson R44 series
6/21E/11	Conversion of STC 6/21E/7 with a top loading door	Robinson R44 series
8/21E/6	Conversion of STC 6/21E/10 and 6/21E/11 to a seed dispersing system	Robinson R44 series

**Note:** This AD is prompted by a review of the STCs designed and manufactured by Helipod NZ Limited. The CAA is aware that these STCs no longer have continued airworthiness support by Helipod NZ Limited, or a Part 146 Design Organization.

**Compliance:** By 23 April 2018.**Effective Date:** 22 March 2018**2019-12-18 Cancelled – FAA AD 2020-18-08 refers****Effective Date:** 29 August 2020

**2020-05-11      Agricultural Spray System STCs – Inspection**

**Applicability:** R44 and R44 II helicopters fitted with an agricultural spray system embodied by NZ STC 4/21E/4.

R44 and R44 II helicopters fitted with an agricultural spray system embodied by FAA STC SR00286BO with spray systems S/N 0045 through to 0178 inclusive.

**Note 1:** The requirements in FAA AD 2020-05-11 are also applicable to R44 and R44 II helicopters fitted with an agricultural spray system embodied by STC 4/21E/4.

**Note 2:** The repetitive inspection (i.e. before every flight) required by paragraph (g)(1) of FAA AD 2020-05-11, 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.  
If there are any signs of stress, cracking, fatigue, or evidence of leaking at the spray system pump fitting, then a maintenance engineer must accomplish paragraph (g)(2) of FAA AD 2020-05-11 before further flight.

**Effective Date:** 16 April 2020

**2020-08-10      Tail Rotor Blades – Inspection**

**Applicability:** R44 and R44 II helicopters fitted with a tail rotor blade P/N C029-1 or C029-2.

**Note:** The initial inspection per paragraph (e)(1) of FAA AD 2020-08-10 must be accomplished by an engineer.

The repetitive inspection (i.e. before every flight) required by paragraph (e)(1) of FAA AD 2020-08-10, 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.

If there are any signs of cracks in the tail rotor blade, then a maintenance engineer must replace the tail rotor blade per paragraph (e)(2) of FAA AD 2020-08-10 before further flight.

**Effective Date:** 22 May 2020

**2020-18-08      Engine Air Induction Hoses – Inspection**

**Applicability:** R44 II helicopters, all S/N fitted with an orange silicone engine air induction hose P/N A785-31.

**Note:** This AD does not apply to helicopters fitted with a black neoprene hose P/N A785-31.

**Effective Date:** 29 August 2020

**2021-19-08      Cancelled – FAA AD 2022-19-12 refers****Effective Date:** 20 October 2022**99-23-01      Cyclic Control Grip Assembly - Inspection****Applicability:** R44 helicopters, S/N 0001 through to 0159, (except S/N 0143, 0150, and 0156) fitted with a pilot cyclic control grip assembly (grip assembly) P/N A756-6, Revision N or prior revision.**Note:** FAA AD 99-23-01 introduces a revised AD applicability. This is because the FAA discovered an error in the grip assembly P/N listed in the applicability of superseded FAA AD 98-21-36. FAA AD 99-23-01 requires the same actions as superseded AD 98-21-36 and introduces a corrected applicability.**Compliance:** Within the next 50 hours TIS, or by 31 May 2022, whichever is first, unless previously accomplished.**Effective Date:** 28 April 2022**2022-12-08      Engine Governor and RPM Sensor - Inspection****Applicability:** R44 helicopters, S/N 2625 through to 2669 inclusive, 30061, 30071 through to 30080 inclusive, 30083 and 30084.

R44 II helicopters, S/N 14364, 14412 through to 14512 inclusive, 14514 through to 14517 inclusive, 14519 through to 14521 inclusive and 14525.

**Note:** Helicopters with a R44 Cadet designation are R44 helicopters.**Effective Date:** 29 June 2022**2022-19-12      Tail Rotor Blades – Inspection****Applicability:** R44 and R44 II helicopters, all S/N fitted with a tail rotor blade P/N C029-3 with S/N 9410 through to 9909 inclusive; and

R44 and R44 II helicopters, all S/N fitted with a tail rotor blade P/N C029-3 with S/N 9910 through to 10659 inclusive.

**Note:** The initial inspection per requirement (g)(1) of FAA AD 2022-19-12 must be accomplished by an aircraft maintenance engineer.

The inspection per requirement (g)(1) of FAA AD 2022-19-12 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.

If any defects, or cracks are found during any repetitive visual inspection, then an aircraft maintenance engineer must inspect the tail rotor blades and accomplish the corrective actions per requirement (g)(2) of FAA AD 2022-19-12, before further flight.

**Effective Date:** 20 October 2022

**\* 2024-04-02 Tail Rotor Blades - Inspection**

**Applicability:** R44 and R44 II helicopters with tail rotor blade (TRB) P/N C029–3 with S/N up to 14329 inclusive (P/N C029–3 REV A through to Q inclusive).

**Note:** The initial inspection of the tail rotor blades in accordance with requirement (g)(1) of FAA AD 2024-04-02 must be accomplished by an aircraft maintenance engineer.

The repetitive inspections before the first flight of each day in accordance with requirement (g)(1) of FAA AD 2024-04-02 may be accomplished by adding the inspection requirement to the helicopter 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.

If any defects are found during the daily repetitive inspections, then an aircraft maintenance engineer must inspect the tail rotor blades and accomplish the corrective actions in accordance with FAA AD 2024-04-02, before further flight.

**Effective Date:** 2 April 2024

# Airworthiness Directive Schedule

## Helicopters

### Robinson R66 Series

29 February 2024

- Notes:**
- 1. This AD schedule is applicable to Robinson R66 helicopters manufactured under FAA Type Certificate No. R00015LA.
  - 2. The Federal Aviation Administration (FAA) 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 FAA website at: [Dynamic Regulatory System \(faa.gov\)](https://www.faa.gov/regulatory)
  - 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/R66/1 Revised Instrument Markings**

**Applicability:** R66 helicopters S/N 0003 through to 0752.

**Requirement:** To introduce a revised N2 avoidance range of 75-88% to the Engine Tachometer (N2), and introduce a yellow arc above 110 knots to the Airspeed Indicator (ASI), accomplish the following:

1. Engine Tachometer (N2):

By 31 December 2016 accomplish the requirements in Part A 1. of Robinson Helicopter Company (RHC) R66 SB-19 dated 7 November 2016, or later approved revision.

2. For aircraft fitted with an analogue Airspeed Indicator (ASI):

By 31 December 2016 accomplish the requirements in Part A 2. of RHC R66 SB-19.

3. For aircraft fitted with an Electronic Flight Display (EFD):

By 31 December 2016 accomplish the requirements in Part A 3. of RHC R66 SB-19.

4. ASI replacement:

By 31 December 2017 replace the ASI per the instructions in Part B of RHC R66 SB-19.

**Note:** R66 helicopters are capable of high cruise speeds especially when lightly loaded. A yellow precautionary operating range has been added to the R66 ASI as a reminder to slow down for safety. The yellow arc indicates the maximum recommended cruise speed is 110 knots. Speeds above 110 knots are not recommended except in smooth air with the pilot's attention fully focused on flying.

(RHC SB-19 dated 7 November 2016 refers)

**Compliance:** Refer requirements section of the AD.

**Effective Date:** 24 November 2016

**2016-26-04 Main Rotor Blades – Inspection**

**Applicability:** R66 helicopters fitted with a MRB P/N F016-2, Revisions A through to E.

**Effective Date:** 8 February 2017

**2019-07-02 Oil Tank – Inspection**

**Applicability:** R66 helicopters, S/N 0003 through to 0789, 0791, 0794 and 0796.

**Effective Date:** 17 May 2019

**2021-04-12 Tail Rotor Drive Shaft Assembly – Inspection**

**Applicability:** R66 helicopters fitted with a tail rotor drive shaft assembly P/N D224-3 with modification B900-11 not embodied.

**Effective Date:** 12 April 2021

## **2022-19-12 Tail Rotor Blades – Inspection**

**Applicability:** R66 helicopters, all S/N fitted with a tail rotor blade P/N F029-1 with S/N 2410 through to 2589 inclusive.

**Note:** The initial inspection per requirement (g)(1) of FAA AD 2022-19-12 must be accomplished by an aircraft maintenance engineer.

The inspection per requirement (g)(1) of FAA AD 2022-19-12 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.

If any defects, or cracks are found during any repetitive visual inspection, then an aircraft maintenance engineer must inspect the tail rotor blades and accomplish the corrective actions per requirement (g)(2) of FAA AD 2022-19-12, before further flight.

**Effective Date:** 20 October 2022

## **\* 2024-04-02 Tail Rotor Blades - Inspection**

**Applicability:** R66 helicopters with tail rotor blade (TRB) P/N F029–1 with S/N up to 3099 inclusive (P/N F029–1 REV A through to F inclusive).

**Note:** The initial inspection of the tail rotor blades in accordance with requirement (g)(1) of FAA AD 2024-04-02 must be accomplished by an aircraft maintenance engineer.

The repetitive inspections before the first flight of each day in accordance with requirement (g)(1) of FAA AD 2024-04-02 may be accomplished by adding the inspection requirement to the helicopter 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.

If any defects are found during the daily repetitive inspections, then an aircraft maintenance engineer must inspect the tail rotor blades and accomplish the corrective actions in accordance with FAA AD 2024-04-02, before further flight.

**Effective Date:** 2 April 2024