Airworthiness Directive Schedule

Aircraft

Helicopters General

21 December 2017

Notes:

1. This AD schedule is applicable to general equipment, components and parts installed on helicopters.
2. The Aeroplanes and Helicopters General AD schedule dated 27 April 2017 has been split into three AD schedules. There is now an AD schedule for Helicopters General, an AD schedule for Aeroplanes General – Small (Less than 5700 kg MCTOW) and an AD schedule for Aeroplanes General – Large (Greater than 5700 kg MCTOW).
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/HELI/1 Components - Removal from Service

Applicability All helicopters that are fitted with finite lifed or overhauled components not supplied directly by the manufacturer of the helicopter.

Requirement: To remove unairworthy components from service, accomplish the following:- Perform a documentation review to determine the source of all finite lifed or overhauled components fitted. Any components found that have been supplied either directly from Cherry Air Specialties (CAS International), or indirectly from Cherry Air Specialties via any other person or organisation, are considered unairworthy. These components must be removed from service before further flight and details reported to the CAA.

Compliance: By 24 May 1996.

Effective Date: 17 May 1996

DCA/HELI/2 Main and Tail Rotor Blades - Inspection for Unapproved Repairs.

Applicability All helicopter main or tail rotor blades that have not been supplied either directly from the helicopter manufacturer or from the manufacturer via their appointed service centres.

Requirement: To detect and remove from service main or tail rotor blades that have been subject to unapproved repairs, including the filling of cracks and holes with filler, accomplish the following:-

Clean and polish the entire surface of the blades per the manufacturer's instructions. Perform a close visual inspection of the complete surface of the blades, looking for any surface damage that may indicate any defect or the existence of any unapproved repairs.

This inspection is to be accomplished under differing lighting angles to highlight any surface irregularities. If no defects or evidence of unapproved repairs are found, the blades may be returned to service.

If indications of defects or evidence of unapproved repairs are found, remove the paint from the blade in that area per the manufacturer's instructions. If defects beyond the manufacturer's allowable limits or unapproved repairs are confirmed, remove the blade from service before further flight. Report findings to the CAA immediately.

Compliance: Within the next 5 hours TIS.

Effective Date: 12 July 1996

DCA/HELI/3 ELT Installation – Repositioning

Applicability: All helicopters

Requirement: To ensure that the ELT is positioned where it is least vulnerable to damage in an accident, reposition any ELT that is located within the nose section of the helicopter further aft in the airframe.

Note: This AD is prompted after an accident where the occupants survived the impact and the ELT (which was mounted forward of the pilot's seat) did not survive. For the purposes of this AD, the nose section of the helicopter is considered as that portion of the helicopter forward of the pilot's seat.

AC 43-14 Appendix 2 details acceptable standards, practices and procedures for the installation of ELTs.

Compliance: By 28 September 2001.

Effective Date: 28 September 2000

DCA/HELI/4 Cancelled – DCA/UH1/14 refers

DCA/HELI/5 Helicopter Seating Systems – Inspection

Applicability: Helicopter seats manufactured under ETSO-C127a, or TSO-C127a.

Seats manufactured to these technical standards may be installed in, but are not limited to AS350 B3, EC120B, EC130 B4 and EC130 T2 helicopters.

Note: This AD supersedes DCA/SEAT/13. Compliance with this AD is required by 30 November 2016.

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

Review the aircraft records and determine if the Original Equipment Manufacturer (OEM) seats have been repaired and/or modified.

If the seats in the helicopter are the OEM installation, and the seats have not been modified and/or repaired, then no further AD action is required.

If the seats have been repaired and/or modified in accordance with National Aircraft Interiors NAI-080709A; NTech MB 25.20.40; or a Flight Interiors Limited Release Note, then remove affected seats and/or seat cushions, and return the seats to the OEM configuration, or an equivalent as authorised by CAA through a new design change approval.

If the seats have been repaired and/or modified in accordance with any other design change, then notify the CAA.

Compliance: By 30 November 2016.

Effective Date: 29 July 2016

DCA/HELI/6 Engine Control Rod Eye Ends - Modification

Applicability: All single engine aircraft installations with components, which are actuated by control rods with eye ends.

Note: DCA/HELI/6 supersedes DCA/GEN/5A with no change to the AD requirements. No action required for those aircraft in compliance with DCA/GEN/5A.

Requirement: To prevent detachment in event of bearing failure, all rod end fittings in throttle and mixture control linkages shall be fitted with a retaining washer of such outside diameter that a rod eye end cannot pass over it.

Compliance: By 27 August 2017.

Effective Date: 27 July 2017

DCA/HELI/7 Cable End Assemblies - Proof Load

Applicability: Cable assemblies for all helicopters.

Note: DCA/HELI/7 supersedes DCA/GEN/6 with no change to the AD requirements or the compliance.

Requirement: To ensure that cable end assemblies (terminals, end fittings and splices) comply with applicable strength requirements, proof load as follows:

Cable assemblies with approved components complying with the specifications or standards of:

1. U.S.A. - 60% of cable breaking strength specified in the applicable specification or standard.

2. U.K. - 50% of cable breaking strength specified in the applicable specification or standard.

3. Any other country - as specified or approved by country of origin, but not less than 50% of cable breaking strength as specified in the applicable specification or standard.

Compliance: Prior to installation.

Effective Date: 27 July 2017

DCA/HELI/8 Emergency Exits – Inspection

Applicability: All helicopters fitted with an emergency exit/s that are not used for normal entry or exit.

Note: DCA/HELI/8 supersedes DCA/GEN/19A. The applicability of DCA/HELI/8 revised to include all helicopters fitted with an emergency exit/s that are not used for normal entry or exit. Initial compliance with DCA/HELI/8 not required for those aircraft in compliance with the initial actions per requirement 1 of DCA/GEN/19A. For the repetitive AD requirements refer to DCA/HELI/8.

Requirement: With all interior trim, fittings and furnishings installed, operate the emergency exits per the placarded instructions. The exit must be capable of operation without exceptional effort. Breakable covers over operating mechanisms may be removed before conducting the test.
Any defects found must be rectified before further flight.

Compliance: 1. Within the next 100 hours TIS from 26 November 2009 (the effective date of DCA/GEN/19A), and thereafter at intervals not to exceed 12 months from 26 November 2009 (the effective date of DCA/GEN/19A).

2. Before further flight, following maintenance to the exit, maintenance to the operating mechanism or surrounding structure (including paint-work or upholstery), and also following any role equipment change which could inhibit exit operation.

Effective Date: 27 July 2017

DCA/HELI/9 Passenger and Crew Compartment Interiors – Inspection and Replacement

Applicability: All helicopters with a MCTOW of 5700 Kg or less and standard or restricted category airworthiness certificates.

Note 1: DCA/HELI/9 supersedes DCA/GEN/27A with no change to the AD requirements or the compliance. For any aircraft that compliance with requirements 1, 2 or 3 of DCA/GEN/27 or DCA/GEN/27A was certified per requirement 5, no further action required per this AD. Compliance with DCA/HELI/9 required with each interior refurbishment.

Requirement: To ensure that passenger and crew compartment interior materials meet the applicable safety standard, determine the history and origin of all interior materials used in the passenger and crew compartments, including seat foam and outer covers, carpets, side, roof and other panels, and accomplish the following:

1. If all compartment materials are the aircraft manufacturer's parts go to requirement 5 below.

Note 2: Where there is no supporting P/Ns, tags or other markings to verify if materials are the aircraft's manufacturer's, it will be acceptable to certify compliance with this paragraph by establishing to the satisfaction of the certifying engineer the materials are the manufacturer's by familiarity with the aircraft type and reference to the aircraft's IPC, and/or comparison with other aircraft of the same type whose interior has been verified. There must be no evidence in the aircraft itself or the maintenance records that any unauthorised material repair or replacement has been carried out.

2. If compartment materials have been repaired or replaced in accordance with data listed as acceptable in Part 21 Appendix D (eg an approved modification, a PMA or an STC) with corresponding certified entries in the aircraft maintenance records including a copy of or reference to that acceptable data, go to requirement 5 below.

3. If compartment materials have been repaired or replaced as maintenance in accordance with Part 43 by using materials of the correct flammability specifications (see attachment below) to return the aircraft to its original or properly modified condition, with corresponding certified entries in the aircraft maintenance records including a copy of or reference to the flammability test results, go to requirement 5 below.

4. If compartment materials have been repaired or replaced and do not meet the requirements 1 to 3 above, or their history and origin is unable to be determined, go to requirement 6 below.

5. Make a certified entry in the aircraft maintenance records certifying compliance with this AD including full details of how compliance was determined. This must include details of how it was established that the materials were installed by the aircraft manufacturer, in the case of requirement 1 above, or copies of all other relevant data used to establish compliance with requirements 2 or 3 above. Compliance with requirement 6 is not required.

<u>Any future cabin refurbishment must use interior materials</u>, including seat foam and outer covers, carpets, side, roof and other panels, <u>that they comply with requirements 1, 2 or 3 of this AD</u>.

6. <u>Accomplish the following</u>:

Ensure a fire extinguisher is installed in the aircraft in compliance with CAR Part 91 Appendix A.13.

7. Replace as necessary all interior materials used in the passenger and crew compartments, including seat foam and outer covers, carpets, side, roof and other panels, so that they comply with requirements 1, 2 or 3 of this AD.

Compliance: Requirements 1 through to 6:

By 28 February 1999 (five months after the effective date of DCA/GEN/27), or before initial issue of New Zealand Airworthiness Certificate.

Requirement 7:

For air transport aircraft except open cockpit aircraft - comply with requirements 1, 2 or 3 of this AD at the next interior refurbishment, or within 2 years after 25 September 1998 (the effective date of DCA/GEN/27), whichever is the sooner, and thereafter at each interior refurbishment.

For aircraft not used for air transport operations and all open cockpit aircraft - comply with requirements 1, 2 or 3 of this AD at next interior refurbishment, or within 5 years after 25 September 1998 (the effective date of DCA/GEN/27), whichever is the sooner, and thereafter at each interior refurbishment.

Note 3: Interior refurbishment refers to the replacement of any materials used in the passenger and crew compartments, including seat foam and outer covers, carpets, side, roof and other panels.

Effective Date: 27 July 2017

Attachment: **Flammability Specification**

The correct flammability specification is that which formed part of the design standards the aircraft model was originally type certificated against. These design standards are normally listed on the aircraft's type certificate data sheet and the CAA Aircraft Certification Unit can advise in the event of difficulty in identifying the applicable design standards or flammability specification.

For aircraft certificated in the USA after 1945 the specification is "flash resistant", or "flame resistant" if smoking was permitted in the aircraft at the time of original certification. (If an ashtray is provided in the aircraft it can be assumed that smoking was originally permitted.) For aircraft certificated in the USA after 1973 only "flame resistant" is applicable.

There is a specific test to determine if a material is "flash resistant" or "flame resistant", and only materials meeting this strict FAR definition of "flash resistant" or "flame-resistant" are acceptable. Materials meeting specifications from other industries such as automotive or cinema seating, and carrying ratings such as "fire-retardant", "flameproof" or even "flame-resistant", are not acceptable unless tested against the FAR specification.

Note 4: Where a different flammability specification was applicable, such as for non-US certificated aircraft, or for very old aircraft where the specification is difficult to determine, if "flame-resistant" is used this specification will automatically be acceptable for any aircraft covered by this AD.

DCA/HELI/10 Non-Conforming Dinitrol Products

Applicability: All aircraft using Corrosion Protection Compounds (CPCs).

Note 1: DCA/HELI/10 supersedes DCA/GEN/34A with no change to the AD requirements or the compliance.

Requirement: Do not apply any CPCs that have been purchased from:

"Angell Marketing Ltd, Angell Industries", and/or "Dinitrol NZ Ltd"

Investigations reveal NZ aircraft maintenance organizations have been supplied with numerous batches of CPC products that were either beyond their shelf lives or were re-labeled. Testing of the non-conforming product reveals it may have reduced corrosion protection properties.

Do not use CPC products which may have been supplied in either aerosol, plastic or bulk containers by the above mentioned companies. The products include Dinitrol-Brand, including but not limited to AV8, AV15, AV30 or AV 100D. As well as the corrosion inhibiting compounds, CPC removal products of unknown origin labeled, AV980 and AV980B may also have been supplied.

Product of suspect origin must be quarantined.

Chemetall New Zealand Pty Limited are the exclusive New Zealand manufacturer / distributor of Ardrox Dinitrol AV products. If you have Dinitrol or other CPC products of doubtful origin or require genuine Ardrox Dinitrol replacement product, contact:

Chemetall New Zealand
PO Box 15783, New Lynn, Auckland
Phone 09 820 3888
Fax 09 820 3979
Email nzsales@chemetall.com

Note 2: Although testing has revealed a reduced corrosion inhibiting efficiency, remedial action is still being discussed with the manufacturer. It is likely that an AD requiring removal of non-conforming product and re-application will be issued if maintenance inspection intervals take credit for CPC application.

Compliance: Effective on receipt.

Effective Date: 27 July 2017

*** DCA/HELI/11 Differential or Specialist GPS Installations – Confirm Approved Installation Data**

Applicability: All helicopters fitted with GPS units optimised for specialist applications, such as agriculture.

Requirement: To ensure affected GPS installations meet the applicable airworthiness design standards, accomplish the following:

1. Review the aircraft records and determine if the GPS installation has been installed in accordance with acceptable technical data, as defined under Part 21, Appendix D.
2. If the GPS system has been installed per an approved modification, then no further AD action is required.
3. If an approved modification has not been used for the GPS installation, then either remove the GPS installation from the aircraft, or get the GPS installation approved in accordance with the provisions of Part 21.

Note 1: GPS installations used for agricultural operations, and Differential GNSS (DGNSS) installations have always been specifically excluded from Advisory Circular 43-14 titled *Avionics, Installations - Acceptable Technical Data*, due to the complexity of these installations.

Note 2: This AD is applicable to any specialist GPS installation which is not covered by AC 43-14, or an approved modification, or a STC. This includes any Differential GPS, agricultural GPS or other GPS which are not used solely for en-route VFR navigation purposes.

(Occurrence 14/2659 refers)

Compliance: For helicopters on Air operations:

By 21 January 2018, remove any affected GPS installation from the aircraft.

Prior to the installation or re-installation of an affected GPS, obtain an approved modification per the requirements in Part 21.

For helicopters not used for Air operations:

By 21 June 2018 obtain an approved modification for any affected GPS installation per the requirements in Part 21, or remove the GPS installation from the aircraft.

Effective Date: 21 December 2017