

McDonnell Douglas (Hughes) and Kawasaki 369 Series Helicopters

AD/HU 369/82

Rotor Blades

**2/91
DM**

Applicability: All model 369D, 369E, 369F, 369HE and 369HS with main rotor blades P/N 369A1100-501, -501M, -503, -503A, 503M; 369D21100, -501, -501M, -505, -509, -509M, -513, -513M; 369D21600-505, -505M; 369D21613-11 and/or tail rotor blades P/N 369A1613-3, -3M, -501, -501M, -503M, -505; 369D21613, -505, -505M; 369D21613-11 and/or tail rotor blades P/N 369A1613-3, -3M, -501, -501M, -503M, -505; 369D21613, -1M, -11, -11M, -41, -51, with the S/Nos listed in the AD Requirement.

Requirement: Pending completion of an investigation currently being undertaken to confirm the airworthiness of certain overhauled/repaired main/tail rotor blades with P/Nos and S/Nos detailed herein, accomplishment of the following is required:

1. Main and tail rotor blades. Inspect and determine whether installed blades have affected P/N and S/N. Blades not affected require no further action.

Main rotor blade P/N 369A1100-501, -501M

Serial numbers:

1991 20-2380 20Z406 2217 2218 29B075 49B936 7888 7964 88-7008
AC10 AD59 AD68 AD74 AD98 AE55 AF47 AF57 AG66 AH28
AH82 AH92 AJ72 AK49 AL07 AL12 AL34 AL41 AL49 AM10
BC84 BC86 DC97 N579 N701 T667 U537 U762 V129 V297 V305
W314 W705 Y249 WW784 Y268 Y607 Y608 Y641 Y653 Y666
Y681 Y734 Y845.

Main rotor blade P/N 369A1100-503, -503A, -503M

Serial numbers:

0321 1991 7845 AB81 AC10 AC52 AC70 AH97 AK28 AL34 AL43
AM10 AM11 AM74 AM76 AN24 AN90 AP64 AS81 AV03 AV51
AV81 AV85 AY25 B214 BB43 BC84 BC86 BC97 BD52 BE42 BE74
BE92 BN27 BN88 BS25 BS64 BT36 BT79 BY24 BY76 BY88 CB04
CF14 CF31 CH19 CH25 D850 T655 T661 T705 T716 U546 V673
VB08 W673 Y249 Y268 Y845 YO29.

Main rotor blade P/N 369D21100

Serial numbers:

CIVIL AVIATION SAFETY AUTHORITY

SCHEDULE OF AIRWORTHINESS DIRECTIVES

0046 0049 0051 0052 0056 0145 0156 0164 0219 0239 0243 0278
 0321 0371 0618 0650 0658 0935 0939 0959 0960 0975 0996 1010
 1560 1584 1645 1663 1668 1728 1740 1792M 1798M 1824 1837M
 1891 2255 2285 2423 2482 2639 2701 2716 2719M 2783 2907 2911
 2931 2964 3073M 3082 321 3299 3430 3437 3479 3550 3591 3627
 3627M 3657 3721 3781 3782 3789 3799 3816 3843 3867 3871
 3880 3904 3929 3931M 3946 3947 3978 3980M 4010 4071M 4100
 4139 4234 4252 4265 4293 4403M 4477 4484M 4488 4495M 4694
 4743 4758 4780 4827 5969 6111 614 618 693 7683 7751 7755 7764
 M1858 M1949 M1954 M2568 M2842 M3668 M3819 M3901 M4137
 M4240 M4369 M4499.

Main rotor blade P/N 369D21100-501, -501M

Serial numbers:

3799 3863 3929 5303 AL12 AL41 Y641.

Main rotor blade P/N 396D21600-505, 505M

Serial numbers:

0278 0321 0693 1949 1954 3679 3787 3789 4889 5076 5303 5932
 6059 6537 6705 8539 M3461 M3615 M3846 M4119 M42 M4377.

Main rotor blade P/N 369D21100-505

Serial numbers:

3010 3289 3799 3829 3863 3929 3985 4411 4711 4794 5930 5933
 5938 6111 6782 7906 8019 AL12 AL41 Y641.

Main rotor blade P/N 369D21100-509, -509M

Serial numbers:

0145 0156 0200 0219 0243 0278 0641 0798 0996 1310 1391 1645
 1663 1792 1798 1858 1891 2482 2639 2842 3200 3238 3910 3819
 3980 4573 5043 5076 5120M 5121 5162 5303 5491 901 5977 6298
 7766 8042 8168 8495 8684 M3668 M3910 M4100 M4369 M4499.

Main rotor blade P/N 369D21100-513, -513M

Serial numbers:

0073 0278 0576 0583 0587 0602 0641 0649 0815 0920 0986 1211
 1560 1663 1837 1858 1975 2423 2716 2719 2956 3082 3238 3299
 3353 3339 3479 3782 3816 3864 3931 4139 4230 4411 4499 4794
 5901 6537 6851 7766 8019 8168 8270 8495 A431 A549 B004 B449
 B470 B511 B530 B713 B727 B738 B760 D526 D539 D543 D544 D549.

Main rotor blade P/N 369D21613-11

Serial number:

2070

Tail rotor blade P/N 369D21613, -1M, -11, -11M, -41, and -51

Serial numbers:

0045 0049 0161 0252 0253 0280 0281 0375 0376 0381 0393 0394
0500 0503 0507 0508 0551 0576 0655 0701 0702 0809 0810 0812
0820 0829 0849 0850 0965 1036 1037 1165 1175 1176 1342 1343
1357 1358 1368 1370 1376 1383 1460 1461 1495 1496 1531 1577
1578 1583 1584 1591 1592 1609 1613 1614 1636 1637 1638 1663
1713 1714 1728 1729 1730 1745 1762 1763 1808 1809 1821 1823
1865 1866 1905 1906 2069 2070 2284 2390 2391 2603 2771 2772
2903 2904 2917 2918 2958 3387 3445 3453 3507 3508 3653 3726
3829 3930 3943 3947 3995 3996 4227 5239 6001 6052.

Tail rotor blade P/N 369A1613-3, -3M, -501, -501M, -503M and -505

Serial numbers:

0852 0854 0991 1188 1336 1469 1498 1618 1621 1622 1751 1809
1812 1813 1829 1855 1867 1868 1916 1920 1978 2010 2011 2025
2030 2033 2061 2156 2242 2294 2316 2630 2631 2676 2738 2752
2764 2766 2860 2862 2893 2894 2962 2963 3000 3009 3037 3038
3081 3085 3099 3109 3111 3141 3148 3163 3164 3251 3278 4004
4008 4062 4779 4780 4782 5956 5957 7037 AE57 AE96.

Tail rotor blade P/N 369A1100-501, -503

Serial numbers: AC10 AM10 Y249 Y268.

2. Affected main rotor blades

Visually inspect leading edge abrasion strip attachment integrity. Any blisters, bubbling or lifting of the strip is cause for removal before further flight.

3. Affected tail rotor blades

- (a) Dye-penetrant inspect and tap test per Part 1 of MDHC SI Nos DN-130.2, EN-19.2, FN-17.1 or HN-197.2 as applicable.
- (b) Visually inspect each tail rotor blade abrasion strip for any evidence of bond failure along the abrasion strip/airfoil bond line.

Note: If evidence of separation along the abrasion strip/airfoil bond line is suspected; using a 10X magnifying glass, closely check along abrasion strip/airfoil bond line and at blade tip for any separation between epoxy adhesive and abrasion strip.

Any blade with void or bond separation beyond prescribed limits must be removed from service before further flight.

CIVIL AVIATION SAFETY AUTHORITY

SCHEDULE OF AIRWORTHINESS DIRECTIVES

- Compliance:
1. Within next 5 hours time in service after 14 December 1990.
 2. Within next 5 hours time in service after 14 December 1990 and thereafter at intervals not exceeding 50 hours time in service. Also prior to the first flight of each day the helicopter is to be operated.
 3. (a) Within next 5 hours time in service after 14 December 1990 and thereafter at intervals not exceeding 50 hours time in service.

(b) Within next 5 hours time in service after 14 December 1990 and thereafter prior to the first flight of each day the helicopter is to be operated.

Note: This Directive shall be entered on the Maintenance Release as maintenance required. The visual inspection required by Para 2 and 3 may be performed by the pilot in command in which case certification is to be made by entering AD/HU 369/82 against the daily inspection certification of the Maintenance Release. A copy of this Airworthiness Directive is to be kept in the aircraft.

Background: An investigation in New Zealand has revealed that certain main and tail rotor blades repaired in that country had not been repaired in accordance with proper procedures (eg time expired adhesives etc).

The New Zealand CAA believe this to be a potentially serious safety of flight issue and that some of these blades are in Australia.