# **Airworthiness Directive Schedule**

# Helicopters MD Helicopters 369 Series, 500N and Kawasaki-Hughes 369 Series 28 November 2024

Notes:	1.	This AD schedule is applicable to MD Helicopters Inc. 369D, 369E, 369FF, 369HE, 369HS and 500N helicopters manufactured by (formerly McDonnell Douglas Helicopter Systems) under Federal Aviation Administration (FAA) Type Certificate No. H3WE, and
		Kawasaki-Hughes 369D and 369HS helicopters manufactured under Japan Civil Aviation Bureau (JCAB) Type Certificate No. 26 and 29.
	2.	The Federal Aviation Administration (FAA) is the National Airworthiness Authority (NAA) responsible for the issue of State of Design Airworthiness Directives (ADs) for MD Helicopters 369D, 369E, 369FF, 369HE, 369HS and 500N aircraft.
		The Japanese Civil Aviation Bureau (JCAB) is the National Airworthiness Authority (NAA) responsible for the issue of State of Design Airworthiness Directives (ADs) for Kawasaki-Hughes 369D and 369HS aircraft.
		State of Design ADs applicable to these aircraft can be obtained directly from the FAA and JCAB websites. Links to these websites are available on the CAA website at: Links to state of design airworthiness directives   aviation.govt.nz
	3.	All parts and components fitted to Kawasaki-Hughes 369D and 369HS helicopters in accordance with an approved modification, or other applicable acceptable technical data must be maintained in an airworthy condition in accordance with the applicable Instructions for Continued Airworthiness (ICA's) issued by the manufacturer or supplier of the parts or components. This includes compliance with any related Airworthiness Directive and Airworthiness Limitation for the parts or components mandated by the National Airworthiness Authority of the State of Design.
	4.	The date above indicates the amendment date of this schedule.

5. New or amended ADs are shown with an asterisk \*

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DCA/HU369/1	Cancelled - Purpose Fulfilled						
DCA/HU369/2	New V <sub>NE</sub> Placards - Modification						
Applicability:	Model 369H series.						
Requirement:	Modify per SIN HN-45.						
	(FAA AD 72-18-04 refers)						
Compliance:	Next periodic inspection.						
DCA/HU369/3	Cancelled – SIN No. HN-33 no longer active						
Effective Date:	25 August 2011						
DCA/HU369/4	Rotor Brake, Installation and Alignment Check - Modification						
Applicability:	As detailed.						
Requirement:	Modify per Hughes SIN HN-48.						
Compliance:	As detailed.						
DCA/HU369/5 Cancelled - Purpose Fulfilled							
DCA/HU369/6	Cancelled - Purpose Fulfilled						
DCA/HU369/7	Main Rotor Blade Trailing Edge - Inspection						
Applicability:	All model 369, 369A, 369H, 369HE, 369HS and 369HM.						
Requirement:	Inspect per Hughes SIN HN-73.						
	(FAA AD 74-20-04 refers)						
Compliance:	Within the next 25 hours TIS and thereafter at intervals not to exceed 100 hours TIS.						
Effective Date:	26 September 1974						
DCA/HU369/8	Root Fittings Of Metal Tail Rotor Blades - Inspection						
Applicability:	All model 369, 369A, 369H, 369HM, 369HS and 369HE helicopters equipped with aluminium tail rotor blades, P/N 369A1613 or 369A1613-3.						
Requirement:	Inspect per Hughes SIN HN-83.						
	(AD 75-10-04 also refers)						
Compliance:	1. Part I of HN-83 - within the next 50 hours TIS.						
	2. Part II of HN-83 - prior to further flight.						
	3. Part III of HN-83 - daily.						
Effective Date:	29 April 1975						

Effective Date: 29 April 1975

## DCA/HU369/9 Tail Rotor Drive System - Inspection **Applicability:** All model 369 series with drive shafts not previously indexed and all model 369 series equipped with metal tail rotor blades. **Requirement:** Inspect per Hughes SIN HN-86. (FAA AD 75-22-03 refers) Compliance: 1. Part I - within the next 100 hours TIS. 2. Part II - within the next 100 hours TIS and thereafter at intervals not exceeding 100 hours TIS. 18 June 1975 Effective Date: DCA/HU369/10 Fibreglass Tail Rotor Blades - Inspection Applicability: All model 369 series with fiberglass tail rotor blades, P/N 369A1710, 369A1710-9, 369A1710-11, 369-6120, 369A1607 and 369CSK22. **Requirement:** Inspect per Hughes SIN HN-88. (FAA AD 75-22-04 refers) Compliance: 1. Tail rotor blades with 500 hours or more TIS, within the next 100 hours TIS or by 31 March 1976 whichever is the sooner. 2. Tail rotor blades with less than 500 hours TIS, prior to the accumulation of 600 hours TIS or by 31 March 1976 whichever is the sooner. 3. At 12 months intervals thereafter until retired from service. Effective Date: 30 September 1975 DCA/HU369/11 Stabiliser Strut - Inspection Applicability: All model 369 series with shock mounted strut assembly P/N 369A2001-601. **Requirement:** Inspect and replace per Hughes SIN HN-102.3. (FAA AD 76-19-03 refers) Compliance: Part 1 - within next 25 hours TIS. Part 2 - before further flight if cracks found, otherwise within 100 additional hours TIS, if applicable. Effective Date: 11 October 1976 DCA/HU369/12 Tail Rotor Output Shaft - Modification Model 369D S/N 0003 through to 0049. Applicability: Modify per FAA AD 77-05-03. **Requirement:** Compliance: Within the next 100 hours TIS or by 31 May 1977, whichever is the sooner. Effective Date: 22 April 1977 DCA/HU369/13 Cancelled - DCA/HU369/16A refers DCA/HU369/14 Cancelled – DCA/AL250/22C refers Effective Date: 25 August 2011

# DCA/HU369/15 Cancelled - DCA/HU369/46 refers

DCA/HU369/16B	Cancelled - DCA/HU369/46 refers				
DCA/HU369/17B	Overrunnning Clutch Assembly - Inspection				
Applicability:	All model 369 series with overrunning clutch assembly P/N 369A5350-603. Also, spare sub-assemblies P/N 369A5350-11.				
Requirement:	1. Inspect and rework as necessary per Part I of Hughes SIN HN-118.2 or DN-9.2.				
	2. Inspect and regrease as necessary per Part II of Hughes SIN HN-118.2 or DN-9.2.				
	(FAA AD 77-21-04 refers)				
Compliance:	Within next 10 hours TIS or prior to installation of spare assemblies.				
	At intervals not exceeding 300 hours TIS.				
Effective Date:	DCA/HU369/17A - 7 July DCA/HU369/17B - 23 February 1979				
DCA/HU369/18C	Tail Rotor Hub – Inspection				
Applicability:	Model 369D, 369H, 369HM, 369HS and 369HE aircraft, S/N 0001D through to 0324D and 0331D through to 0333D,				
	Fitted with tail rotor hub assembly P/N 369A1725, or tail rotor hub assembly P/N 369A1725-5, S/N 001 through to 862, or tail rotor hub assembly P/N 369A1725-501.				
Note:	DCA/HU369/18C revised to correct the AD applicability which inadvertently referred to inactive SIN No. DN-21.1. The AD applicability and requirements aligned with FAA AD 78-26-04. The repetitive inspection requirement mandated by this AD is not required for tail rotor hub P/N with a SP suffix.				
Requirement:	To prevent tail rotor hub assembly failure which could result in a loss of aircraft control, accomplish the following:				
	Inspect the tail rotor hub for cracks, corrosion or other damage and rework the tail rotor hub per the instructions in Part II, paragraphs A through to H of MD Helicopters/Hughes Service Information Notice (SIN) No. HN-128.1, dated 8 December 1978 for model 369H series aircraft, and per the instructions in Part II, paragraphs A through to H of SIN No. DN-27.1, dated 8 December 1978 for model 369D series aircraft, or later approved revisions of these documents				
	Replace cracked hubs with a serviceable part before further flight.				
	If the replacement part has a P/N with a SP suffix, no further AD action is required.				
	(FAA AD 78-26-04 refers)				
Compliance:	Within the next 100 hours TIS or by 25 February 2012 whichever occurs sooner, unless previously accomplished, and thereafter,				
	For hubs affected by this AD, re-inspect the tail rotor hub using a 10X magnifying glass at intervals not to exceed 300 hours TIS, or at every annual inspection whichever occurs sooner.				
	If pits, corrosion, or any other damage is found, inspect, and rework the hub per the requirements and corrective actions in this AD. Replace cracked hubs before further flight.				
Effective Date:	DCA/HU369/18A - 23 November 1979 DCA/HU369/18B - 12 September 1980 DCA/HU369/18C - 25 August 2011				

# DCA/HU369/19 Tail Rotor Pitch Control - Inspection

Applicability:	Model 369D with S/N prior to 0409.					
Requirement:	To prevent failure of the tail rotor pitch control assembly:-					
	1. Pull back non rotating boot P/N 369D 21806 from tail rotor pitch control assembly P/N 369D 21800 and check locknut P/N 369D 21803-3 and tang washer P/N MS 172209 or HS1551 S238 by hand for looseness. If locknut or tang washer found loose, remove and replace tail rotor pitch control assembly with serviceable assembly having a white dot on locknut before further flight.					
	<ol><li>If Hughes SIN DN-37 previously complied with and if tail rotor pitch control assembly was:-</li></ol>					
	(a) Repaired due to looseness of locknut or tang washer, check per 1. until tail rotor pitch control assembly is replaced, or					
	(b) If repaired per DN-37 with no looseness of locknuts or tang washers, no further action required.					
	3. Modify assemblies which do not have loose locknuts or tang washer per Hughes SIN DN-37.					
Note:	The inspection per requirement 1 may be accomplished by the pilot.					
	(FAA AD 79-10-09 refers)					
Compliance:	1. Inspect before further flight and prior to each engine start up until modified.					
	2. (a) Replace within next 150 hours TIS.					
	3. Modify within next 100 hours TIS.					
Effective Date:	1 May 1979					
DCA/HU369/20K	Main Rotor Assembly – Inspection					
Applicability:	All model 369 series helicopters fitted with the following:					
	Main rotor (M/R) blade assembly P/N 369A1100-BSC, -501, -503, -505, -601 or -603, and P/N 369D21100-BSC, -503, -505, -507, -509, -511, -513 or -515, or P/N 369D21102-BSC or -501, or					
	M/R hub lead-lag link assembly P/N 369A1203-BSC, -3, or -11, or P/N 369H1203- BSC, -11, -21 or -31, or P/N 369A1234.					
Note 1:	The applicability of DCA/HU369/20K expanded to include M/R hub lead-lag link assembly P/N 369A1234. There is no change to the AD requirement.					
Requirement:	To prevent failure of the M/R blade assembly or the M/R hub lead-lag link assembly which could result in loss of a M/R blade and aircraft control, accomplish the following:					
	1. Remove each blade assembly from the helicopter and accomplish the following:					
	<ul> <li>Inspect the attachment lugs of the M/R blade root fittings and the M/R lead- lag links for cracks and the lug bushes for looseness per the instructions in Part I of MD Helicopters/Hughes Service Information Notice (SIN) No. HN- 211.6, DN-51.8, EN-42.6 or FN-31.6 as applicable, all dated 3 January 2000 or later approved revisions of these documents.</li> </ul>					
	• Visually inspect the root fittings around the blade attachment lugs for cracks, and visually inspect the M/R blade doubler and blade skin adjacent to the root fittings for cracks.					

- If the slip marks have deteriorated or are missing, mark the root fittings and bushes per the instructions in Part I of the applicable SIN.
- Replace M/R blades or links found cracked before further flight.
- Replace M/R blades with loose bushes before further flight.
- 2. Accomplish the following with the M/R blades in situ:
  - Visually inspect the root fittings and links for cracks or loose bushes per the instructions in Part II of the applicable SIN.
  - Replace M/R blades or links found cracked before further flight.
  - Replace M/R blades with loose bushes before further flight.
- **Note 2:** Requirement 2 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.

(FAA AD 95-03-13 refers)

- **Compliance:** 1. Within the next 25 hours TIS unless previously accomplished, and thereafter at intervals not to exceed 100 hours TIS.
  - 2. Before the first flight of every day.
- Effective Date: DCA/HU369/20I 19 November 1999 DCA/HU369/20J - 25 August 2011 DCA/HU369/20K - 26 April 2012
- DCA/HU369/21 Cancelled Purpose Fulfilled
- DCA/HU369/22 Cancelled Purpose Fulfilled

#### DCA/HU369/23A Tail Rotor Drive Fork Hinge Bolt Installation – Inspection

- Applicability: All models 369D, 369E, 369FF series and 369H series aircraft.
- Note: DCA/HU369/23A revised to correct the AD requirement which referred to inactive SIN No. DN-33.1. Requirements 2 and 3 aligned with the manufacturer's continued airworthiness inspections in chapter 05-20-00 of CSP-HMI-2 and chapter 05-20-20 of CSP-H-4.
- **Requirement:** To prevent tail rotor vibration due to possible loss of tail rotor drive fork hinge bolt torque, accomplish the following:

1. For all models 369H, 369HS, 369HM and 369HE aircraft fitted with a tail rotor drive fork hinge bolt P/N 369A1602 and nut P/N 369A1603:

Replace the tail rotor drive fork bolt and nut per the instructions in part 1 of of MD Helicopters/Hughes Service Information Notice (SIN) No. HN-131.1 dated 2 September 1980, or later approved revisions of these documents.

2. For models 369D, 369E and 369H series aircraft fitted with conical type teetering bearings:

Inspect the conical bearings for axial play or radial play (no play allowed), and check the teeter bolt torque per the manufacturer's instructions.

3. For all models 369D, 369E and 369FF series and 369H series aircraft:

Check the rotational torque of the tail rotor drive fork hinge bolt by applying 125 inchpounds (14.12 Nm) torque. If the applied torque does not rotate the bolt, then the bolt preload is correct. If the applied torque rotates the bolt, retorque the bolt per the manufacturer's instructions.

**Compliance:** 1. Within the next 100 hours TIS, unless previously accomplished.

2. At intervals not to exceed 100 hours TIS, or at every annual inspection whichever occurs sooner.

3. Within 25 hours TIS after replacement of tail rotor drive fork hinge bolt.

Effective Date: DCA/HU369/23 - 24 October 1980 DCA/HU369/23A - 25 August 2011

#### DCA/HU369/24 Tail Rotor Drive Shaft - Inspection

- Applicability: All model 369 Series with tail rotor drive shaft couplings P/N 369H92564 or P/N 369A5501.
- **Requirement:** To prevent possible fatigue failure, inspect couplings, Hughes P/N 369H92564 and 369A5501 and before further flight permanently remove from service those with following S/N's 0883U, 0932U, 0933U, 0935U, 0940U, 0950U, 0957U, 0961U, 0971U and 10670U or 10672U respectively.

(FAA AD 80-25-01 refers)

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

Effective Date: 18 December 1980

#### DCA/HU369/25A Overrunning Clutch Assembly - Inspection

Applicability: All model 369 Series equipped with a cargo hook.

Requirement: To prevent an overrunning clutch assembly failure accomplish the following:-

1. Modify overrunning clutch assemblies, P/N 369A5350-BSC, -601, or -603, whichever is installed, per Part I of MDHC SINs HN-222, DN-164.1, EN-54.1, FN-44.1 as applicable, or replace clutch assemblies with P/N 369A5350-605.

2. Re-identify converted overrunning clutches per Part II of the SINs.

3. Inspect the overrunning clutch assembly inner race P/N 369A5353-3, outer race P/N 369A5352, and sprag assembly P/N 369D5351 for condition. Rectify any defects found before further flight.

4. Replace sprag assemblies, P/N 369D25351 and P/N 369A5364, with an airworthy part on or before attaining 1800 hours TTIS.

(FAA AD 90-19-02 refers)

- **Compliance:** 1. Modify within next 300 hours TIS or 12 months, whichever is the sooner.
  - 2. Re-identify at the next engine removal.

3. Inspect at intervals not to exceed 300 hours TIS or 12 months, whichever is the sooner.

4. Replacement at 1800 hours TTIS or within next 50 hours TIS, whichever is the later.

Effective Date: DCA/HU369/25 - 29 May DCA/HU369/25A - 26 October 1990

# DCA/HU369/26 Cancelled - Purpose fulfilled

# DCA/HU369/27 Cancelled - DCA/HU369/46 refers.

DCA/HU369/28A	Automatic Engine Reignition System - Placard				
Applicability:	The following models with automatic engine reignition system: All model 369, 369A, 369H, 369HM, 369HS and 369HE. Model 369D, S/N up to 989D.				
Requirement:	To prevent possibility of middle front seat occupant accidentally deactivating the automatic engine reignition system and also blocking the crew's view of "armed" and "reign" advisory lights, accomplish the following:-				
	In close proximity to automatic engine reignition arming switch and in clear view of pilot, affix placard which reads:-				
	"Middle front seat not to be occupied during flight in falling and/or blowing snow".				
	(FAA AD 80-24-04 refers)				
Compliance:	Prior to next flight in falling and/or blowing snow.				
Effective Date:	DCA/HU369/28 - 10 July 1981 DCA/HU369/28A - 25 March 2004				
DCA/HU369/29 C	ancelled – DCA/HU369/96 refers				
Effective Date:	25 August 2011				
DCA/HU369/30 G	overnor Lever Control Rod - Replacement				
Applicability:	All model 369H series and 369D.				
Requirement:	Replace rod per Hughes SIN DN-87 or HN-169 as applicable.				
	(FAA AD 82-01-08 refers)				
Compliance:	Within next 50 hours TIS or by 31 March 1982 whichever is the sooner.				
Effective Date:	12 February 1982				
DCA/HU369/31B	Main Rotor Drive Shaft – Inspection				
Applicability:	All model 369 series aircraft fitted with a main rotor drive shaft P/N 369D25510.				
Note 1:	This AD revised to introduce the main rotor drive shaft life limitation of 3675 hours TTIS for 369F and FF aircraft specified in the limitations schedule, chapter 04-00-00 of CSP-HMI-2 revision 42.				
Requirement:	To prevent failure of the main rotor drive shaft P/N 369D25510, accomplish the following:				
	1. Inspect the spherical spline and adjacent shaft area of the main rotor drive shaft per the instructions in MD Helicopters/Hughes Service Information Notice (SIN) No. DN-99, dated 30 November 1981, SIN No. FN-4, dated 29 July 1983, or SIN No. EN-4, dated 29 April 1983 as applicable. Replace cracked parts before further flight.				
	2. For model 369F and FF aircraft replace the drive shaft at 3675 hours TTIS, and for model 369D and E aircraft replace the drive shaft at 5020 hours TTIS.				

**Note 2:** The actions mandated by this AD shall be accomplished per the instructions in the referenced MD Helicopters/Hughes Service Information Notices or later approved revisions of these documents

(FAA AD 81-26-01R1 refers)

**Compliance:** 1. At 300 hours TTIS or within the next 50 hours TIS whichever occurs later, unless previously accomplished, and thereafter at intervals not to exceed 300 hours TIS.

2. At 3675 or 5020 hours TTIS as applicable, or within the next 50 hours TIS whichever occurs later.

Effective Date: DCA/HU369/31A - 23 November 1990 DCA/HU369/31B - 25 August 2011

#### DCA/HU369/32 Tail Rotor Drive Shaft - Inspection

**Applicability:** All model 369D detailed in Hughes SIN DN-95.

- **Requirement:** Modify per Part I and inspect per Part II of Hughes SIN DN-95.
- **Compliance:** Modification within next 100 hours TIS or by 31 August 1982 whichever is the sooner, unless already accomplished.

Inspection - as prescribed in SIN DN-95 Part II, before each flight and at intervals not exceeding 300 hours TIS or 12 months whichever is the sooner.

Effective Date: 26 February 1982

## DCA/HU369/33 Cancelled - DCA/HU369/44C refers

Effective Date: 20 December 1991

DCA/HU369/34B Main Rotor Transmission Cooling Installation - Inspection

Applicability: All model 369D, 369E and 500N aircraft.

- **Note:** DCA/HU369/34B revised to expand the AD applicability to include 369E helicopters with no change to the AD requirements, or the compliance.
- **Requirement:** To prevent transmission failure due to loss of lubricating oil and damage to aircraft structure, accomplish the following:

Inspect tube assembly P/N 369D25709 and 369D25710, associated structure and components for integrity.

Check tubes for chafing and 'P' clips for damage and security.

Check hose assembly P/N 369D25705-11 and -21 and adjacent structure for interference and resultant damage.

Renew defective parts and apply suitable packing to prevent further damage before further flight.

**Compliance:** Within the next 50 hours TIS unless previously accomplished, and thereafter at intervals not to exceed 300 hours TIS.

Effective Date: DCA/HU369/34 - 30 July 1982 DCA/HU369/34A - 30 August 2012 DCA/HU369/34B - 1 October 2020

DCA/HU369/35A	Engine Fuel Filters – Inspection			
Applicability:	All 369 and 500N series aircraft fitted with an electric start pump.			
Note:	DCA/HU369/35A revised to expand the applicability to include all model 369 series and 500N aircraft. Model 369F/FF aircraft may be fitted with an optional maintenance pump (electric start pump).			
Requirement:	To prevent possible engine power loss due to blocked fuel filters, accomplish the following:			
	Inspect the fuel filters including the primary fuel filter at the fuel pick-up inlet. Remove any contamination found before further flight.			
	<u>For aircraft fitted with an electric start pump</u> , remove the start pump assembly and inspect the fuel filters. Remove any contamination found before further flight. Reinstall the pump assembly and perform a function check.			
Compliance:	Within the next 100 hours TIS unless previously accomplished, and thereafter at intervals not to exceed 600 hours TIS or 12 months, whichever occurs sooner.			
Effective Date:	DCA/HU369/35 - 13 August 1982 DCA/HU369/35A - 25 August 2011			
DCA/HU369/36 C	ollective Control Installation - Modification			
Applicability:	All model 369H series and 369D.			
Requirement:	Modify per Hughes SIN HN-187.1 or DN-119.1 as applicable.			
Compliance:	By 31 January 1984.			
Effective Date:	7 October 1983			
DCA/HU369/37 M	lain Rotor Swashplate Bearing Installation - Inspection And Replacement			
Applicability:	Models 369HE, HS and 369D with P/N 369A7003-3 swashplate bearing assembly, P/N 369A1000-502 main rotor installation or P/N 369A7609-501 and -605 main rotor swashplate installations received between 1 June and 20 December 1983.			
Requirement:	Inspect per Hughes SIN's HN-191 or DN-125 as applicable. Remove assemblies with missing bearing cage before further flight. Assemblies with S/N in 9000 series or with blue dot identification are not affected.			
	(FAA AD 84-01-02R1 refers)			
Compliance:	By 30 April 1984 unless already accomplished.			
Effective Date:	6 April 1984			
DCA/HU369/38 M	lain Rotor Blades - Inspection			
Applicability:	All model 369D with main rotor blades which have been obtained from sources other than Hughes Helicopters Inc., or a Hughes authorised service centre.			
Requirement:	To detect unapproved blades and prevent possible rotor blade failure in flight, inspect per Hughes SIL DL-57. Any blade with four ribs only and a filled trailing edge hole is incorrect and must be replaced with an airworthy correct P/N 369D21100 blade before further flight.			
	(FAA AD 84-12-01R1 refers)			
Compliance:	Before further flight.			
Effective Date:	27 June 1984			

# DCA/HU369/39 Tail Rotor Blades - Inspection

Applicability:	Models 369HE, HS and 369D with tail rotor blades detailed in Hughes SIN HN- 195/DN-129.			
Requirement:	Inspect and modify per Hughes SIN HN-195/DN-129. Blades with visual evidence of tip cap bond failure shall be removed from service before further flight.			
	(FAA AD 86-01-04 refers)			
Compliance:	Prior to 100 hours TTIS or within next 5 hours TIS for blades which have exceeded 100 hours TIS.			
Effective Date:	8 October 1984			
DCA/HU369/40A	Tail Rotor Blades - Inspection			
Applicability:	Models 369D, 369HE and 369HS with tail rotor blades specified in Hughes SIN DN-132.1/HN-199.1.			
Requirement:	Inspect and modify tail rotor blades per Hughes SIN DN-132.1/HN-199.1.			
Compliance:	Blades in service - within next 100 hours TIS unless already accomplished.			
	Replacement blades - prior to installation.			
Effective Date:	DCA/HU369/40 - 12 July 1985 DCA/HU369/40A - 13 December 1985			
DCA/HU369/41D	Cancelled - Purpose Fulfilled			
DCA/HU369/42 C	ancelled – DCA/HU369/96 refers			
Effective Date:	28 June 2012			
DCA/HU369/43A	Main Transmission Tail Rotor Output Drive Pinion Shaft - Inspection			
Applicability:	All model 369D, 369E and 369F/FF with transmission assemblies P/N 369D25100- BSC or -501. Also, all spare tail rotor output drive pinion shafts.			
Requirement:	Visually inspect per MDHC SIN DN-147.1, EN-35.1 or FN-24.1 as applicable and remove parts from service or rework as prescribed before further flight.			
	(FAA AD 87-18-11 refers)			
Compliance:	1. Assemblies with S/N's detailed in "Time of Compliance" Section of SIN's referred to above, within next 25 hours TIS, unless already accomplished.			
	<ol><li>All other assemblies, within next 100 hours TIS, or prior to installation (as appropriate).</li></ol>			
Effective Date:	DCA/HU369/43 - 9 October 1987 DCA/HU369/43A - 19 February 1988			

DCA/HU369/44D	Main Transmission Output Shaft Assembly – Inspection				
Applicability:	All model 369D, 369E, 369F and 369FF helicopters fitted with a main transmission assembly P/N 369D25100-BSC, -501 or -503 with a main rotor transmission output shaft assembly ring gear carrier P/N 369D25132-BSC or -5, and				
	Spare main transmission assemblies P/N 369D25100-BSC, -501 or -503, and				
	Spare main rotor transmission output shaft assembly ring gear carriers P/N 369D25132-BSC or -5.				
Note 1:	DCA/HU369/44D revised to clarify the requirement and introduce note 3 with no change to the AD applicability or the compliance.				
Requirement:	To prevent main transmission failure accomplish the following:				
	Accomplish a dye penetrant and visual inspection on affected ring gear carriers per the instructions in paragraphs A through to G in the "Periodic Visual Inspection" section of McDonnell Douglas Helicopter Company Mandatory Service Information Notice (SIN) No. DN-148.1, EN-36.1 or FN-25.1, all dated 30 October 1987.				
	Replace output shafts found with bulges or a raised surface in the upper disc surface before further flight (refer to figure 2 in the applicable SIN for the inspection area).				
	Replace output shafts found with cracks in the lower and upper disc surfaces before further flight (refer to figure 3 in the applicable SIN for the inspection area).				
Note 2:	The repetitive inspections mandated by this AD may be terminated when a main rotor transmission output shaft assembly ring gear carrier P/N 369D25132-3 is installed and the main transmission assembly is re-identified as P/N 369D25100-505.				
Note 3:	Accomplish the actions mandated by this AD per the instructions in MDHC Mandatory Service Information Notice (SIN) No. DN-148.1, EN-36.1 or FN-25.1, all dated 30 October 1987 or later approved revisions of these documents.				
	(FAA AD 87-18-12R1 refers)				
Compliance:	Within the next 300 hours TIS unless previously accomplished, and thereafter at intervals not to exceed 300 hours TIS.				
Effective Date:	DCA/HU369/44C - 20 December 1991 DCA/HU369/44D - 25 August 2011				
DCA/HU369/45 Tail Rotor Transmission Attachment - Inspection					
Applicability:	All model 369D, 369E and 369F/FF.				
Requirement:	Inspect and rework per Parts III and IV of MDHC SIN DN-151, EN-39 or FN-28 as applicable.				
Compliance:	Part III - Within next 25 hours TIS unless already accomplished.				
	Part IV - At intervals not exceeding 100 hours TIS following compliance with Part III.				

Effective Date: 19 February 1988

# DCA/HU369/46A Main Rotor Hub Assembly - Inspection

- Applicability: All model 369D, 369E, 369F, 369FF, 369HE, 369HS and 500N helicopters fitted with main rotor hub retention straps P/N 369D21210-BSC or -501.
- Note 1: DCA/HU369/46A revised to expand the AD applicability to include 500N aircraft and reduce the AD applicability to those aircraft fitted with main rotor hub retention straps P/N 369D21210-BSC or -501, and the AD requirement and compliance aligned with FAA AD 89-02-01R1.
- **Requirement:** To prevent main rotor hub retention strap failure, accomplish the requirements in FAA AD 89-02-01R1.
- Note 2: McDonnell Douglas Helicopter Company (MDHC) Service Information Notices (SIN) DN-154, EN-44, FN-33 and HN-214 or later FAA approved revisions pertains to the subject of this AD.

(FAA AD 89-02-01R1 refers)

**Compliance:** At the compliance times specified in FAA AD 89-02-01R1.

- Effective Date: DCA/HU369/46 8 April 1988 DCA/HU369/46A - 30 August 2012
- DCA/HU369/47 Cancelled Purpose fulfilled
- DCA/HU369/48A Cancelled Purpose fulfilled
- DCA/HU369/49 Cancelled Purpose fulfilled

# DCA/HU369/50 Cancelled - Purpose fulfilled

#### DCA/HU369/51 Main & Tail Rotor Control Tubes - Inspection

Applicability: All model 369D, 369E, 369F/F1, 369HE and 369HS.

**Requirement:** To preclude fatigue failure of the control tubes:

1. Inspect control tubes per Part 1 of MDHC SINs HN-217.1, DN-158.1, EN-48.1, FN-36.1 as applicable. Remove cracked control tubes before further flight.

- 2. Rework per Part II of the above MDHC SINs.
- (FAA AD 89-23-14 refers)
- **Compliance:** 1. Within next 100 hours TIS and thereafter at intervals not exceeding 100 hours TIS until Part II is accomplished.
  - 2. Within next 600 hours TIS.
- Effective Date: 30 March 1990

## DCA/HU369/52 Tail Rotor Strap Pack Assembly - Retirement

- Applicability: All model 369A and H Series with strap pack assemblies, P/N 369A1706-BSC and have, or have had, fibreglass tail rotor blades P/N 369A1607-BSC, 369A1710-BSC, 9, -11, or -13 installed.
- **Requirement:** Retire from service strap pack assemblies P/N 369A1706-BSC which have been equipped with a fibreglass tail rotor blade or if the blade type fitted previously cannot be determined.

(FAA AD 89-11-05 refers)

**Compliance:** 1. For strap pack assemblies which have 3,200 hours or more TIS, replace the strap pack with a serviceable unit within the next 50 hours TIS.

2. For strap pack assemblies which have less than 3,200 hours TIS, replace with a serviceable unit before the accumulation of 3,250 hours TIS.

Effective Date: 30 March 1990

#### DCA/HU369/53 Oil Pressure Sensing Lines - Modification

- Applicability: All model 369A, 369H Series, 369D, 369E, S/N 0001E through 0304E and 369FF, S/N 0001F through 0059F not equipped with oil flow restricting devices in the engine oil and torque pressure sensing lines.
- **Requirement:** To restrict oil flow in the event of an engine oil or torque pressure sensing system failure, install restricting devices (snubbers) per MDHC SINs HN-221, DN-165, EN-55 or FN-43 as applicable.
- **Compliance:** Within next 100 hours TIS.

Effective Date: 4 May 1990

#### DCA/HU369/54 Tail Rotor Swashplate Bearing - Inspection

- Applicability: All model 369D, 369E and 369F/FF.
- **Requirement:** To prevent tail rotor malfunction and possible loss of helicopter control, accomplish check required by Part I of MDHC SIN DN-167, EN-58 or FN-46 as applicable. Bearings with black seals must be inspected per Part II of the SIN until removed from service.
  - (FAA AD 90-12-03 refers)
- **Compliance:** Part I Within next 10 hours TIS.
  - Part II Within next 10 hours TIS and thereafter at intervals not to exceed 10 hours TIS and then remove bearings from service at 300 hours TTIS or within next 10 hours TIS whichever is the later.

Effective Date: 22 June 1990

#### DCA/HU369/55 Rotor Blades - Inspection

Applicability: All model 369D, 369E, 369F, 369HE and 369HS aircraft fitted with main rotor blades P/N 369A1100-501, -501M, -503, -503A and -503M; 369D21100, -501, -501M, -505, - 509, -509M, -513 and -513M; 369D21600-505, -505M; 369D21613-11 with S/N listed in the AD requirement, and/or

Tail rotor blades P/N 369A1613-3, -3M, -501, -501M, -503M and -505; 369D21613, -1M, -11, -11M, -41 and -51 with S/N 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/N and S/N detailed herein, accomplish the following:

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:

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 M4240	M2842 M4369	M3668 M4499	M3819	M3901	M4137	
Main rotor blade P/N 369D21100-501, -501M Serial Numbers:						
3799 Y641	3863	3929	5303	AL12	AL41	
Main rotor b Serial Numb	lade P/N 369 ers:	D21600-505	, -505M			
0278 3787 6059 M3846	0321 3789 6537 M4119	0693 4889 6705 M42	1949 5076 8539 M4377	1954 5303 M3461	3679 5932 M3615	
Main rotor b Serial Numb	lade P/N 369 bers:	D21100-505				
3010 3985 5938 AL41	3289 4411 6111 Y641	3799 4711 6782	3829 4794 7906	3863 5930 8019	3929 5933 AL12	
Main rotor b Serial Numb	lade P/N 369 ers:	D21100-509	, -509M			
0145 0641 1663 2639 3980 5162 7766 M3910	0156 0798 1792 2842 4573 5303 8042 M4100	0200 0996 1798 3200 5043 5491 8168 M4369	0219 1310 1858 3238 5076 5901 8495 M4499	0243 1391 1891 3910 5120M 5977 8684	0278 1645 2482 3819 5121 6298 M3668	
Main rotor b Serial Numb	lade P/N 369 bers:	D21100-513	, -513M			
0073 0641 1560 2716 3353 3931 5901 8270 B470 B760	0278 0649 1663 2719 3339 4139 6537 8495 B511 D526	0576 0815 1837 2956 3479 4230 6851 A431 B530 D539	0583 0920 1858 3082 3782 4411 7766 A549 B713 D543	0587 0986 1975 3238 3816 4499 8019 B004 B727 D544	0602 1211 2423 3299 3864 4794 8168 B449 B738 D549	
Main rotor b Serial Numb	lade P/N 369 ber: 2070	D21613-11				
Tail rotor bla Serial Numb	ade P/N 369E bers:	021613, -1M,	-11, -11M, -4	1, and -51.		
0045 0281 0500 0655 0820 1037 1357 1460 1578 1613	0049 0375 0503 0701 0829 1165 1358 1461 1583 1614	0161 0376 0507 0702 0849 1175 1368 1495 1584 1636	0252 0381 0508 0809 0850 1176 1370 1496 1591 1637	0253 0393 0551 0810 0965 1342 1376 1531 1592 1638	0280 0394 0576 0812 1036 1343 1383 1577 1609 1663	

			1728 1808 1905 2391 2917 3507 3943 6001 9A1613-3, -3	1729 1809 1906 2603 2918 3508 3947 6052 M, -501, -501	1730 1821 2069 2771 2958 3653 3995 M, -503M, an	1745 1823 2070 2772 3387 3726 3996
	Serial Num 0852 1498 1812 1916 2030 2316 2764 2893 3037 3111 3278 4782	bers: 0854 1618 1813 1920 2033 2630 2766 2894 3038 3141 4004 5956	0991 1621 1829 1978 2061 2631 2860 2962 3081 3148 4008 5957	1188 1622 1855 2010 2156 2676 2862 2963 3085 3163 4062 7037	1336 1751 1867 2011 2242 2738 3000 3099 3164 4779 AE57	1469 1809 1868 2025 2294 2752 3009 3109 3251 4780 AE96
		lade P/N 36	9A1100-501,		AEST	AE90
	AC10	AM10	Y249	Y268		
		d main rotor				
	DN-146, EI	Visually inspect for leading edge abrasion strip attachment integrity per MDHC SI DN-146, EN-34, FN-23 or HN-208 as applicable, or later approved revisions of the documents.				
	3. Affected	tail rotor bl	ades:			
	19.2, docun (b) Vi	<ul> <li>(a) Dye-penetrant inspect and tap test per Part I of MDHC SINs DN-130.2, 19.2, FN-17.1 or HN-197.2 as applicable, or later approved revisions of the documents.</li> <li>(b) Visually inspect per Part II of MDHC SINs DN-130.2, EN-19.2, FN-17.1 HN-197.2 as applicable, or later approved revisions of these documents.</li> </ul>				
			void or bond		eyond prescr	ibed limits must be
Compliance:	<ol> <li>Within the Also before</li> <li>(a) With TIS.</li> <li>(b) With</li> </ol>	e the first flig nin the next	ours TIS and t ht of every da 5 hours TIS a 5 hours TIS a	ay the helicop and thereafter	oter is to be op at intervals r	o exceed 50 hours TIS. perated. not to exceed 50 hours rst flight of every day
Note 1:	<ul> <li>Adequate</li> <li>Maintena</li> <li>Copy of I</li> </ul>	e instruction ance Releas MDHC SINs	by LAME res		he aircraft. ection require	ement. 7.2 as applicable, to be
Note 2:		y an approv				des have been g notified to CAA,
Effective Date:	28 Novemb					

## DCA/HU369/56 Main Transmission Bolts - Inspection

Applicability: All model 369D, 369E S/N 0001E through 0352E, and 369F/FF S/N 0001F through 0067FF.

**Requirement:** To prevent possible failure of the main rotor transmission drive assembly inspect per MDHC SINs DN-166.1, EN-57.1, or FN-45.1 as applicable. Replace unacceptable bolts per the SINs.

(FAA AD 90-24-07 refers)

**Compliance:** Within next 300 hours TIS, next annual inspection, or the next time the transmission is removed, whichever is the sooner.

Effective Date: 22 February 1991

# DCA/HU369/57 Tail Rotor Blade Root Fitting - Inspection

Applicability: All model 369 series with tail rotor blade assemblies P/N 369A1613 (all dash numbers) with S/N less than 7959; P/N 369D21613 (all dash numbers) with S/N less than 6482; P/N 369D21615 (all dash numbers) with S/N less than 1358; P/N 369D21606 (all dash numbers) with S/N less than 0538 and P/N 421-088 (all dash numbers) with S/N less than 0218. Tail rotor blades with yellow dots applied to the aft edge of the root fitting, have been inspected and do not have to comply with the requirement of this airworthiness directive.

# **Requirement:** To detect or prevent cracks in the tail rotor blade root fitting, which could result in tail rotor blade failure, accomplish the following:-

1. Visually inspect per Part I of MDHC SINs HN-230.1, DN-177.1, EN-68.1, FN-55.1 as applicable. Any tail rotor blades found cracked must be removed from service before further flight.

2. Inspect the tail rotor blade root fitting area for proper wall thickness using the MDHC inspection tools per Part II of the SINs. Unacceptable tail rotor blades must be removed from service before further flight. Mark acceptable blades with a yellow dot per the SINs.

(FAA AD 91-08-02 refers)

- **Compliance:** 1. Within next 8 hours TIS and thereafter at intervals not to exceed 50 hours TIS, until 2. is accomplished. Also prior to the first flight of each day the helicopter is to be operated.
  - 2. By 1 September 1991.

Effective Date: 3 May 1991

#### DCA/HU369/58B Tail Rotor Blades - Inspection

Applicability Model 369 series with tail rotor blade assemblies P/N 369A1613-7, 369A1613-503, 369A1613-505, 369A1613-509, 369D21606, 369D21606-509, 369D21613-11, 369D21613-31, 369D21613-41, 369D21613-51, 369D21613-71, 369D21615, 369D21615-21, 369D21615-41, or 421-088 installed.

**Requirement:** To prevent loss of the abrasion strip, separation of a tail rotor blade and subsequent separation of the tail rotor gearbox, accomplish the following:-

1. Inspect the tail rotor blade abrasion strip for debonding from the tail rotor blade. Prior to conducting the repetitive inspections, remove any abrasion tape from the tail rotor blade.

(a) If inspection reveals debonding, replace the tail rotor blade with an airworthy blade that has been modified by the installation of rivets, and install 304 stainless steel abrasion tape (0.0027 inch thick) over the inboard end of the abrasion strip per MDHC SINs HN-238, DN-187, EN-80, FN-66.

(b) If inspection reveals no debonding, install 304 stainless steel abrasion tape (0.0027 inch thick) over the inboard end of the abrasion strip per steps B through H of Part I of MDHC SINs HN-238, DN-187, EN-80, FN-66.

2. Replace the tail rotor blades in shipsets with tail rotor blades that contain the newdesign abrasion strips per Part II of MDHC SINs HN-238, DN-187, EN-80, FN-66. Once the new-design abrasion strips are installed on the tail rotor blades, the tail rotor assembly P/N changes as follows:

Old Tail Rotor Assembly Number	New Tail Rotor Assembly Number
369A1613-7	369A1613-11
369A1613-503	369A1613-507
369A1613-505	369A1613-507
369A1613-509	369A1613-507
369D21606	369D21606-511
369D21606-509	369D21606-511
369D21613-11	369D21613-11N
369D21613-31	369D21613-31N
369D21613-41	369D21613-61
369D21613-51	369D21613-61
369D21613-71	369D21613-61
369D21615	369D21615-N
369D21615-21	369D21615-31
369D21615-41	369D21615-31
421-088	421-088-11

Installation of tail rotor blades with new-design abrasion strips installed per Part II of MDHC SINs HN-238, DN-187, EN-80, FN-66, constitutes terminating action for this airworthiness directive. (FAA AD 95-03-11 refers)

- **Compliance:** 1. Within next 50 hours TIS or 90 days, whichever occurs first, and thereafter at intervals not to exceed 100 hours TIS.
  - 2. Within next 1000 hours TIS.

Effective Date: 14 April 1995

#### DCA/HU369/59 Cancelled - Purpose fulfilled

## DCA/HU369/60 External Cargo Container Kit - Placard

- Applicability: Model 369D, 369E, 369F, 369HE and 369HS equipped with Gajon Associates Ltd (Viking Helicopters Limited) STC No. SH1134EA external cargo container kit (baggage pod).
- **Requirement:** To prevent hazardous yaw oscillations during descents which could result in loss of control of the helicopter install a placard on the instrument panel as close as practicable to the airspeed indicator and in clear view of the pilot that reads:-

# BAGGAGE POD INSTALLED V<sub>ne</sub> 90 KIAS IN POWERED DESCENT ( more than 1000 fpm) OR IN AUTOROTATION (FAA AD 93-07-10 refers)

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

Effective Date: 3 September 1993

#### DCA/HU369/61 Fuel Vent System - Inspection

- Applicability: Model 369D, 369E S/N 0001E through 0508E, 369F or 369FF S/N 0003 through 0091 and 369H, equipped with fuel vent line emergency shutoff valve assemblies, P/N 369H8108, 369H8108-501 or 369H8108-503.
- **Requirement:** To prevent erroneously high in-flight fuel quantity indications due to a blocked fuel vent line, accomplish the following:-

1. Inspect per McDonnell Douglas SIN HN-234.1, DN-181.1, EN-73.1, FN-60.1, Part I. Replace any incorrectly closed or obstructed valve with an airworthy valve before further flight.

2. Install a P/N 369H8108-505, 369H8108M, 369H8108-501M or 369H8108-503M fuel vent line emergency shutoff valve per McDonnell Douglas SIN HN-234.1, DN-181.1, EN-73.1, FN-60.1, Part II. (FAA AD 93-18-05 refers)

- Compliance: 1. At 2500 hours TTIS or within next 100 hours TIS, whichever is the later and thereafter at intervals not to exceed 100 hours TIS.
  2. At 3000 hours TTIS or within next 600 hours TIS, whichever is the later.
- Effective Date: 21 January 1994

#### DCA/HU369/62 Tail Rotor Swashplate Lockwasher - Inspection

- Applicability Model 369D, E, F, and FF fitted with pitch control assembly P/N 369D21800 or P/N 369D21820.
- **Requirement:** To prevent failure of the inner tang of the pitch control assembly lockwasher and loss of tail rotor control, accomplish the following:-

1. Inspect the lockwasher per McDonnell Douglas Helicopter Systems SIN DN-185, EN-78, or FN-64. Scrap unacceptable lockwashers. Apply torque stripe per SIN DN-185, EN-78, or FN-64.

2. Inspect torque stripe for slippage per SIN DN-185, EN-78, or FN-64. If any slippage is detected, replace the lockwasher with an airworthy lockwasher per the applicable maintenance manual. Reapply the torque stripe per SIN DN-185, EN-78, or FN-64.

(FAA AD 94-24-04 refers)

- Compliance: 1. Within next 25 hours TIS or 90 calendar days, whichever is the sooner.2. At intervals not to exceed 100 hours TIS.
- Effective Date: 20 January 1995

#### DCA/HU369/63 Hardpoint Assembly - Removal

- Applicability Model 369D, 369E, 369F, 369FF and 500N that are fitted with a Flight Trails Helicopters, Inc hardpoint assembly in accordance with STC SH6080NM or any other modification.
- Requirement: To prevent failure of the hardpoint assembly, accomplish the following:-

Remove any Flight Trails Helicopters, Inc hardpoint assembly not marked with a P/N and S/N. Accomplish this by removing the NAS 1351-3 cap screw that secures the hardpoint assembly to the jacking fitting, P/N 369H2521-1 and -2, and slipping the hardpoint assembly out of the step mount.

The only Flight Trails Helicopters, Inc hardpoint assemblies that are considered airworthy and eligible for installation are those hardpoint assemblies marked with a S/N and either P/N FTH 105 LH Mod 1 or P/N FTH 105 RH Mod 1.

(FAA AD 96-08-03 refers)

**Compliance:** Within next 5 hours TIS.

Effective Date: 7 June 1996

#### DCA/HU369/64 Main Rotor Blade Root End - Inspection

Applicability Model 369, 369A, 369D, 369E, 369F, 369FF, 369H, 369HE, 369HM, 369HS, and 500N. . This AD is not applicable to models 369D and 369E modified by Helicopter Technology Company STC SR09074RC.

This AD is not applicable to models 369A, 369H, 369HE, 369HM and 369HS modified by Helicopter Technology Company STC SR09184RC.

**Requirement:** To prevent failure of a main rotor blade, separation of the blade and loss of the helicopter, accomplish the following:-

1. Perform a visual inspection of each blade root end for cracking and paint or sealant cracking per Part I of McDonnell Douglas SIN HN-239, DN-188, EN-81, FN-67, or NN-008. If any blade crack is noted, before further flight, remove the blade and replace it with an airworthy blade. If paint or sealant cracking or separation is noted, accomplish the inspection per paragraph 3E of Part II of SIN HN-239, DN-188, EN-81, FN-67, or NN-008. If any corner of the Mylar can be inserted between the lower surface root end fitting and doubler surface to a depth of 0.1 inch or greater, remove the blade from service and replace it with an airworthy blade before further flight.

2. Remove the main rotor blades and inspect for cracking per Part II of McDonnell Douglas SIN HN-239, DN-188, EN-81, FN-67, or NN-008. If missing or cracked adhesive or paint is detected at the lower surface root end fitting to doubler bonding line, accomplish the inspection per paragraph 3E of Part II of SIN HN-239, DN-188, EN-81, FN-67, or NN-008. If any corner of the Mylar can be inserted between the lower surface root end fitting and doubler surface to a depth of 0.1 inch or greater, remove the blade from service and replace it with an airworthy blade before further flight.

(FAA AD 96-10-09 refers)

**Compliance:** 1. Within next 10 hours TIS.

2. Within 100 hours TIS of accomplishing inspection per part 1 of this airworthiness directive, and thereafter at intervals not to exceed 100 hours TIS.

#### Effective Date: 7 June 1996

#### Unapproved Components - Removal DCA/HU369/65C

nlicability Aı

Model 360 series fitted with any of the following

Applicability:	Model 369 series fitted with any of the following components.
	, s i

Driven Gear		P/	N 369	A5108-3		
Serial Number:	82402					
Folding Pin		P/	N 369	A1004-3		
Serial Number:	4-0-15	597	4-0-1	17933	4-0-18070	
4-0-18173	4-0-18	192	4-0-1	18212	4-0-18235	
73-1693						
Horizontal Stabilis	er	P/	N 369	A3600-60 <sup>2</sup>	1	
Serial Number:						
Horizontal Stabilis	er	P/	N 369	A3600-603	3	
Serial Number:	3051	6933	26	118206	1282160	
Main Rotor Blade		P/	N 369	A1100-50		
Serial Number:				,		
Main Rotor Blade				A1100-503	3	
Serial Number:						
	BW62					
Main Rotor Blade						
Serial Number:						
Y992	S 667					
Main Rotor Blade		P/	N 369	D21100-5 <sup>-</sup>	13	
Serial Number:	C530					
Main Rotor Blade		36	9D21	100-516		
Serial Number:	F124	F23	5	F254	F264	
Main Rotor Drives	haft	P/	N 369	A5500		
Serial Number:	1446					
Main Rotor Hub		P/	N 369	A1200-501		
Serial Number:	78-0940					
Main Rotor Mast		P/	N 369	A2014-50 <sup>2</sup>		
Serial Number:	2580					
Ring Gear		P/	N			
International Helip	arts Releas	se Note	Num	ber:	143	
Strap Pack		P/	N 369	A1706		
Serial Number:	3280	15B	149	38C857	38C860	
74A-662	74A721	84A	866	85B389	94A981	

	Tail Rotor Blade P/N 369A1613-3
	Serial Number: 406 1064
	Tail Rotor Blade P/N 369A1613-503
	Serial Number: 3971 6870 7474
	Tail Rotor Pinion P/N 369A5109-17
	Serial Number: 26192
	Tail Rotor Transmission P/N 369A1706-507
	Serial Number: 710
	Tail boom P/N 369A3550-505
	Serial Number: 66-1212
	Upper Vertical Stabiliser P/N 369A3625-601
	Serial Number: 39-2681
	Vertical Stabiliser P/N 369A3625-601
	Serial Number: 49-0842
Requirement:	To prevent possible in-service failure of unapproved components, remove the components listed from service.
	Any of the components listed held as spares must not be fitted to any helicopter.
Compliance:	Before further flight.
Effective Date:	DCA/HU369/65B - 14 February 1997 DCA/HU369/65C - 1 August 1997
DCA/HU369/66 Tr	ansmission Output Drive Gear - Inspection
Applicability:	Model 369D, E, F, FF, and 500N with main rotor transmission, P/N 369D25100, installed.
Requirement:	To prevent failure of the transmission output drive gear, P/N 369D25127-11, accomplish the following:-
	1. Determine through an inspection of records, contact with the manufacturer, or using a bright light and viewing through the open liquid level plug port, if the installed gear serial number is S/N 005570-0646 through S/N 005570-0765, or S/N 005570-0876 through S/N 005570-0998. McDonnell Douglas Helicopter Service Information Notice DN-189, EN-82, FN-69 and NN-009 refer.
	2. If the gear has a listed S/N, remove the gear and replace it with an airworthy gear, that has a S/N other than the S/Ns listed.
Note:	Replacement of the affected gear with an airworthy gear having a S/N other than those S/Ns listed is considered terminating action for the requirements of this AD. (FAA AD 97-15-08 refers)
Compliance:	1. Determine the installed gear S/N within the next 10 hours TIS.
	2. Remove the gear and replace it with an airworthy gear as follows;
	(a) For helicopters equipped with a cargo hook assembly, with a separate, permanently-maintained log of actual hours TIS of external load operation, remove and replace the gear within the next 25 hours TIS for external load operations, or within the next 400 hours TIS for non-external load operation, whichever occurs first.

(b) For helicopters equipped with a cargo hook assembly, with no separate, permanently- maintained log of actual external load operation, remove and replace the gear within the next 25 hours TIS.

(c) For helicopters without cargo hook assemblies, remove and replace the gear within the next 400 hours TIS.

Effective Date: 31 July 1997

## DCA/HU369/67 Spray System Dump Weight – Replacement

Applicability: Model 369 series fitted with Marine Helicopters Ltd MH86001 Spray System

- **Requirement:** To ensure ability to jettison the load in an emergency, fit a modified dump weight per instructions from Marine Helicopters Ltd.
- **Note:** The original dump weight supplied with the spray system may not release from those aircraft fitted with Eastern Rotorcraft cargo hooks. The modified weight has been designed to ensure correct operation with all cargo hooks.

Compliance: By 31 October 1997

Effective Date: 26 September 1997

#### DCA/HU369/68 Main Rotor Hub - Removal from Service

- Applicability: Model 369 series fitted with main rotor hub P/N 369A1200-501 with S/N plate indicating a S/N of 4049.
- **Requirement:** To prevent possible in-service failure of unapproved main rotor hub P/N 369A1200-501 that has been re-identified with serial number plate 4049, remove this hub from service before further flight.
- **Compliance:** Before further flight
- Effective Date: 19 December 1997

#### DCA/HU369/69B Main Rotor Blade - Inspection

Applicability: Model 369A, 369D, 369E, 369F, 369FF, 369H, 369HE, 369HM, 369HS, 500N, and OH-6A helicopters with the following main rotor blades installed;

P/N 369A1100-507 with S/N D139 through D203, D209 through D223; or

P/N 369D21100-517 with S/N H664, H665, H667, H669, H671, H672, H674, H676, H679, H680, H683 through H724, H726 through H999, J000 through J039, J041 through J055; or

P/N 369D21102-517 with S/N 1976 through 2100, 2106 through 2115.

**Requirement:** To detect cracks that could lead to failure of the blade and subsequent loss of the helicopter, accomplish the following:-

#### 1. Inspection

For any affected main rotor blade (blade) that has 600 or more hours TIS.

**A.** With each blade lifted off the droop stop, using a 10X or higher magnifying glass, visually inspect the blade for any chordwise cracking starting at the root fitting edge on the blade lower surface doubler and skin or cracks on the doubler adjacent to the root end fitting. If any cracking is discovered, remove the blade and replace it with an airworthy blade.

D Mithe and black lifted off the descent stem in mark the lawsen surface for mission on
<b>B.</b> With each blade lifted off the droop stop, inspect the lower surface for missing or
cracked adhesive or paint at the root end fitting-to-doubler bond line. If any missing or
cracked adhesive or paint is discovered, remove and inspect the blade in accordance
with paragraph 3E of Part II of the Accomplishment Instructions in McDonnell Douglas
Helicopter Systems SIN HN-239, DN-188, EN-81, FN-67, NN-008. If there is any
disbonding in excess of the allowable margins specified in paragraph 3E of Part II of
the SIN, replace the blade with an airworthy blade.
· · ·

Boeing McDonnell Douglas Helicopter Systems SB369H-243R3, SB369E-088R3, SB500N-015R3, SB369D-195R3, SB369F-075R3, SB600N-007R2, refers to the subject of this AD.

#### 2. Retirement

Note:

**A.** Blades are to be removed from service on or before reaching either of the applicable new life limits. The new life limits are determined by hours TIS or number of torque events (TE). A torque event is defined as the transition to a hover from forward flight. For this definition of TE, forward flight is considered to be flight at any airspeed after attaining translational lift.

For blades that do not have TE logged, log the TE in the rotorcraft log or equivalent record as follows:

(i) Log the number of TE, if known.

(ii) For non-cargo hook operations, if the number of TE is unknown, log 6 TE for each hour TIS.

(iii) For cargo hook (external load) operations, or for any combination of non-cargo hook operations and cargo hook (external load) operations, if the number of TE is unknown, log 20 TE for each hour TIS.

**B.** Make an entry into the component record or equivalent record to reflect new life limits for blade P/Ns as follows.

(i) For P/N 369A1100-507, Models 369A, 369H, 369HE, 369HM, 369HS, and OH-6A, enter 1,750 hours TIS or 10,600 TE, whichever occurs first.

(ii) For P/N 369D21100-517, Models 369D and 369E, enter 2,500 hours TIS or 15,000 TE, whichever occurs first.

(iii) For P/N 369D21102-517, Model 369F, 369FF, and 500N, enter 2,500 hours TIS or 15,000 TE, whichever occurs first.

# 3. Record Keeping

After compliance with paragraph 2 of this AD, during each operation thereafter, maintain a count of TE performed and additional hours TIS accumulated, and, add those counts to the accumulated number of TE and hours TIS on the rotorcraft log or equivalent record.

Note: The blades are no longer retired based upon only hours TIS. This AD revises the Airworthiness Limitations Section of the maintenance manual by establishing a new retirement life for certain blades based on hours TIS or a number of TE, whichever occurs first.

(FAA AD 98-15-26 refers)

**Compliance: 1.** At 600 (blade) hours TIS, before further flight, and thereafter at intervals not to exceed 25 hours TIS.

# **Note:** The inspections required between the scheduled 100 hour inspections may be accomplished by pilot subject to:

(a) Adequate instruction by LAME responsible for the aircraft.

- (b) Certificate of Release to Service endorsed to refer to inspection requirement.
- 2. By 28 September 1998 unless already accomplished.
- 3. After compliance with part 2 of this AD.

#### Effective Date: DCA/HU369/69A - 13 March 1998 DCA/HU369/69B - 28 August 1998

# DCA/HU369/70 Tail Rotor Control Rod - Replacement

- Applicability: Model 369F and 369FF
- **Requirement:** To prevent buckling of the tail rotor control rod assembly when subjected to ultimate jam loads, loss of tail rotor control, and subsequent loss of control of the helicopter, remove the tail rotor control rod assembly, P/N 369D27516, and replace it with an airworthy rod assembly, P/N 369D27516-5. Replacement of the rod assembly with P/N 369D27516-5, constitutes a terminating action for the requirements of this AD. (FAA AD 98-07-19 refers)
- **Compliance:** Within next 300 hours TIS.
- Effective Date: 8 May 1998

#### DCA/HU369/71 Overrunning Clutch Outer Race - Removal

- Applicability: Model 369, 369A, 369D, 369E, 369F, 369FF, 369H, 369HE, 369HM, 369HS and 500N.
- **Requirement:** To prevent failure of the overrunning clutch assembly outer race, which could result in loss of engine drive to the rotor system and a subsequent forced landing, inspect the overrunning clutch outer race, P/N 369A5352, to determine its S/N per paragraphs A through C of the Accomplishment Instructions contained in McDonnell Douglas Helicopter Systems SIN HN-215.2, DN-156.2, EN-46.2, FN-34.2, NN-010. Remove any overrunning clutch outer race, P/N 369A5352, having a S/N of 0692 through 0927, and replace it with an airworthy overrunning clutch outer race, P/N 369A5352, to gether with a wave washer, P/N W1593-018, per SIN HN-215.2, DN-156.2, EN-46.2, FN-34.2, NN-010. (FAA AD 98-09-02 refers)
- **Compliance:** Within next 50 hours TIS.
- Effective Date: 8 May 1998

#### DCA/HU369/72A Engine Control and Warning System Relays - Inspection

- Applicability: Model 369E S/N 384E through 0539E, model 369FF S/N 076FF through 0128FF, model 500N S/N up to and including LN085 and model 600N S/N RN002 through RN039.
- **Requirement:** To prevent undetected loss of engine control or warning systems, accomplish the following:

Access relays K1, K2, K3, K5, K104, and K200 (relays, P/N HS4240).

Remove each relay from its relay receptacle, P/N HS4256-1.

Using a No. 60 drill bit or a 0.040-in. diameter wire as a gauge, attempt to insert the gauge into every contact socket of each relay. Ensure the gauge is inserted perpendicular to the face of the receptacle, to prevent damage to the receptacle and the socket (Figure 1). If the gauge can be inserted into a socket, it is unairworthy and must be replaced with an airworthy socket, P/N 019-0075-002.

Any replacement relay, P/N HS4240, must be inspected prior to further flight per this AD.

- Note: Boeing MDHS SB369E-090, SB369F-077, SB500N-017, SB600N-014, dated July 6, 1998, pertains to the subject of this AD. (FAA AD 99-08-07 refers)
- **Compliance:** Within next 30 days, unless already accomplished

Effective Date: DCA/HU369/72 - 20 August 1998 DCA/HU369/72A - 7 May 1999

#### DCA/HU369/73 Overrunning Clutch - Inspection

- Applicability: Model 369D, 369E, 369FF, 500N, AH-6, and MH-6 helicopters, with overrunning clutch assembly, P/N 369F5450-501, installed.
- **Requirement:** To detect wear of clutch components and excessive vibration which could lead to failure of the overrunning clutch, and subsequent loss of power to the helicopter rotor drive system, accomplish the following:-

Visually inspect the overrunning clutch retainer, P/N 369F5460-1, carrier, P/N 369F5461-1, housing, P/N 369F5451-1, and pin, P/N MS16556-801, for clutch or carrier wear or pin damage per the Accomplishment Instructions in McDonnell Douglas Helicopter Systems SIN DN-190, EN-83, FN-70, NN-011.

If wear or damage to components is found, replace those components with airworthy components prior to further flight.

(FAA AD 98-21-12 refers)

- **Compliance:** At 100 (clutch assembly) hours TTIS or within next 25 hours TIS, whichever is the later, and thereafter at intervals not to exceed 100 hours TIS.
- Effective Date: 5 November 1998

#### DCA/HU369/74 Input Shaft Coupling Assembly - Inspection

- Applicability: Model 369D, 369E, 369FF, 369H, 500N and 600N with input shaft coupling assemblies, P/N 369F5133-1, S/N 030829-0126 through 030829-0207, installed on main transmission, P/N 369F5100-503, and on overrunning clutch, P/N 369F5450.
- **Requirement:** To prevent failure of the spline teeth in each input shaft coupling assembly and loss of drive to the main rotor system, accomplish the following:-

Visually inspect the coupling assemblies, P/N 369F5133-1, installed on main transmission, P/N 369F5100-503, and on overrunning clutch, P/N 369F5450, for pitting under the solid film lubricant in the spline area of the coupling.

If there is pitting in the splines, replace the coupling assembly with an airworthy coupling assembly, P/N 369F5133-1, that has been inspected as required by this AD.

(FAA AD 99-04-12 refers)

- Note: Boeing SB369H-240, SB369E-085, SB500N-013, SB369D-192, SB369F-072, and SB600N-003 also refer.
- **Compliance:** Within next 100 hours TIS.
- Effective Date: 9 April 1999

# DCA/HU369/75 Tail Rotor Blade Leading Edge - Inspection

- Applicability: Model 369A, 369D, 369E, 369FF, 369H, 369HE, 369HS and 369HM.
- **Requirement:** To prevent failure of the tail rotor blades, inspect the leading edges per Boeing SB369H-241, SB369E-086, SB369D-193, SB369F-073. Tail rotor blades with evidence of cracking must be removed from service before further flight.
- **Compliance:** Within next 100 hours TIS and thereafter at intervals not to exceed 100 hours TIS.
- **Note:** This AD is still applicable to tail rotor blades after they have been inspected for leading edge skin thickness by Boeing approved blade repair stations.

Effective Date: 9 April 1999

## DCA/HU369/76 Tail Rotor Fork Assembly - Inspection

Applicability: Model 369D and E helicopters, with four-bladed tail rotor fork assemblies, P/N 369D21701-21, installed.

**Requirement:** To prevent failure of the fork assembly, P/N 369D21701-21, which can result in loss of a tail rotor blade and subsequent loss of control of the helicopter, accomplish the following:-

1. Inspect each fork assembly, P/N 369D21701-21, for the presence of ridges on the arms. See Figure 1, sheets 1 and 2. MD Helicopters SB369D-198 and SB369E-092, pertains to the subject of this AD.

If ridges are found, no further action is required by this AD.

If no ridges are found, chemically remove paint from the machined areas, inspect the fork assembly for a crack using the dye-penetrant procedure of MIL-STD-6866 or ASTM-E1417, and conduct a visual inspection using a 10X or higher magnifying glass. (See Figure 1, sheets 1 and 2.) Replace a cracked fork assembly with an airworthy fork assembly before further flight. A fork assembly without ridges, P/N 369D21701-21, may not be installed.

2. Visually inspect each fork assembly without ridges, P/N 369D21701-21, for a crack using a 10X or higher magnifying glass. (See Figure 1, sheets 1 and 2.) If a crack is found, replace the cracked fork assembly with an airworthy fork assembly before further flight. A fork assembly without ridges, P/N 369D21701-21, may not be installed.

**Note:** The fork assembly is titanium, which requires dwell times for the dye penetrant inspection that are appropriate for titanium.

Replacing an unairworthy fork assembly with an airworthy fork assembly other than P/N 369D21701-21 without ridges constitutes terminating action for this AD.

(FAA Priority Letter AD 99-13-09 refers)

Compliance: 1. Before further flight.

2. Within 50 hours TIS after the initial inspection and thereafter at intervals not to exceed 50 hours TIS.

Effective Date: 24 June 1999

#### DCA/HU369/77E Kawasaki-Hughes 369HS – Continuing Airworthiness

**Applicability:** Kawasaki-Hughes 369HS helicopters, S/N 6601 through to 6650.

- **Note 1:** All parts and components fitted to Kawasaki-Hughes 369HS helicopters must be as specified in the Kawasaki-Hughes 369HS Illustrated Parts Catalogue HS055, or fitted in accordance with an approved modification, or other applicable acceptable technical data. Requirement 2 revised to include compliance with applicable Instructions for Continued Airworthiness (ICA's) for parts and components fitted in accordance with an approved modification, or other applicable technical data, and includes compliance with any related Airworthiness Directive and Airworthiness Limitation for the parts or components mandated by the National Airworthiness Authority of the State of Design.
- **Requirement:** The Kawasaki-Hughes 369HS helicopter is a license-manufactured version of the MDHI 369HS produced under JCAB Type Certificate No. 26-9. To ensure the continuing airworthiness of the type in New Zealand, comply with the following:

1. <u>Kawasaki-Hughes 369HS helicopters shall be maintained/operated using the following manuals</u>:

- a) Maintain aircraft per the <u>MDHI 369H Basic Handbook of Maintenance</u> <u>Instructions (Basic HMI) CSP-H-2</u>.
- b) Components made by Kawasaki Heavy Industries (KHI) shall be overhauled using the overhaul procedure in the <u>KHI Component Overhaul Manual</u> at the TBO intervals specified in the inspection section of the <u>KHI Maintenance</u> <u>Instructions.</u>
- c) <u>The approved flight manual</u> for the Kawasaki-Hughes 369HS helicopter is AIR no. 3106 (CSP-HE/HS-1) and is referred to on the helicopter Airworthiness Certificate.
- d) Maintain aircraft avionics per the KHI Maintenance Instructions.
- e) Aircraft structure shall be repaired per the <u>MDHI 369H Structure Repair</u> <u>Manual CSP-H-6 (Basic HMI Appendix D)</u>.
- f) Aircraft corrosion shall be repaired per the <u>MDHI 369H Corrosion Control</u> <u>Manual CSP-A-3.</u>
- g) Periodic inspections shall be accomplished per <u>MDHI 369H Periodic</u> <u>Inspections Manual CSP-H-4 (Basic HMI Appendix B)</u>, where applicable.
- h) <u>Maintain aircraft per KHI service bulletins</u>. Future KHI mandatory service bulletins will be available in English.
- 2. Parts to be fitted:

All parts and components fitted to Kawasaki-Hughes 369HS helicopters must be as specified in the Kawasaki-Hughes 369HS Illustrated Parts Catalogue HS055, or fitted in accordance with an approved modification, or other applicable acceptable technical data.

All parts and components fitted in accordance with an approved modification, or other applicable acceptable technical data must be maintained in an airworthy condition in accordance with the applicable Instructions for Continued Airworthiness (ICA's) issued by the manufacturer or supplier of the parts or components. This includes compliance with any related Airworthiness Directive and Airworthiness Limitation for the parts or components mandated by the National Airworthiness Authority of the State of Design.

- **Note 2:** Supplemental Type Certificates (STC's) which refer to a FAA Type Certificate <u>are not</u> <u>to be fitted</u> without an approved modification.
- **Note 3:** Kawasaki-Hughes 369HS parts and components <u>may not</u> be fitted to MDHI 369HS helicopters.
- **Note 4:** The installation of abrasion-strips on Kawasaki tail rotor blades is not approved by the manufacturer.
  - 3. Parts Retirement lives:

The following parts, except those listed in part 4 of this AD, must be retired from service not later than the times specified in the JCAB-Approved Maintenance Manual for the Kawasaki-Hughes 369HS. All of the components and parts that were:

- a) manufactured by Kawasaki, or
- b) supplied by Kawasaki, or
- c) found fitted to a Kawasaki-Hughes 369HS and which cannot be shown to have been manufactured by Hughes or their successors.

	4. Parts - Extended retirement lives:					
		remain in service until the tin	nes listed:			
	,	Stabilizer, P/N 369A3625	3840 hours TTIS			
	b) Horizontal Stab	,	3450 hours TTIS			
Note 5:	ubsequent revisions are no	ces previously approved for D longer valid.	JCA/HU369/77 and			
Compliance:	rom 1 June 2006 (the effect	ive date of DCA/HU369/77C)				
Effective Date:	DCA/HU369/77C - 1 June 2 DCA/HU369/77D - 29 Octo DCA/HU369/77E - 28 Febru	ber 2009				
DCA/HU369/78C	Kawasaki-Hughes 369	D – Continuing Airworthine	SS			
Applicability:	awasaki-Hughes 369D S/N	6701 through to 6709.				
Note 1:	pecified in the Kawasaki-Hu n accordance with an approv- lata. Requirement 2 revised Continued Airworthiness (IC/ in approved modification, or ompliance with any related	ed to Kawasaki-Hughes 369D ghes 369D Illustrated Parts O ved modification, or other app to include compliance with ap N's) for parts and components other applicable acceptable t Airworthiness Directive and A idated by the National Airwort	Catalogue HD113, or fitted licable acceptable technical oplicable Instructions for s fitted in accordance with echnical data, and includes irworthiness Limitation for			
Requirement:	The Kawasaki-Hughes 369D helicopter is a license-manufactured version of the MDHI 369D produced under JCAB Type Certificate No. 29-5. To ensure the continuing airworthiness of the type in New Zealand comply with the following:					
	1. <u>Kawasaki-Hughes 369D helicopters shall be maintained/operated using the following manuals:</u>					
		r the <u>MDHI 369D Handbook c</u> tenance, HMI CSP-HMI-2.	of Maintenance Instructions,			
	using the overhaul	by Kawasaki Heavy Industrie procedure in the <u>KHI Compor</u> fied in the inspection section	nent Overhaul Manual at the			
		<u>manual</u> for the Kawasaki-Hu -D-1) and is referred to on the				
	d) Maintain aircraft av	onics per the <u>KHI Maintenan</u>	ce Instructions.			
	e) Aircraft structure sh <u>Manual CSP-COM</u>	all be repaired per the <u>MDHI</u> <u>6</u> .	369D Structure Repair			
	f) Aircraft corrosion s <u>Manual CSP-A-3.</u>	nall be repaired per the <u>MDHI</u>	369D Corrosion Control			
		s shall be accomplished per <u>N</u> <u>CSP-HMI-2</u> , where applicabl				
	h) <u>Maintain aircraft pe</u> bulletins will be ava	<u>r KHI service bulletins</u> . Future ilable in English.	e KHI mandatory service			

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	2.	Parts to	<u>b be fitted</u> :			
	i	as spec or fitted	s and components fitted to Kawasaki-Hughes 369D helicopters must be cified in the Kawasaki-Hughes 369D Illustrated Parts Catalogue HD113, I in accordance with an approved modification, or other applicable able technical data.			
		other a condition Airworth comport and Air	s and components fitted in accordance with an approved modification, or pplicable acceptable technical data must be maintained in an airworthy on in accordance with the applicable Instructions for Continued hiness (ICA's) issued by the manufacturer or supplier of the parts or nents. This includes compliance with any related Airworthiness Directive worthiness Limitation for the parts or components mandated by the al Airworthiness Authority of the State of Design.			
Note 2:		Supplemental Type Certificates (STC's) which refer to a FAA Type Certificate are no to be fitted without an approved modification.				
Note 3:	Kawa helico	ughes 369D parts and components <u>may not</u> be fitted to MDHI 369D				
	3.	Parts -	Retirement lives:			
	t	the time	lowing components and parts must be retired from service not later than es specified in the JCAB-Approved Maintenance Manual for the aki-Hughes 369D. All of the components and parts that were:			
	i	a)	manufactured by Kawasaki, or			
	I	b)	supplied by Kawasaki, or			
		c)	found fitted to a Kawasaki-Hughes 369D and which cannot be shown to have been manufactured by Hughes or their successors.			
Note 4:	Alternate means of compliances previously approved for DCA/HU369/78 and subsequent revisions are no longer valid.					
Compliance:	From	1 June	2006 (the effective date of DCA/HU369/78B)			
Effective Date:	e: DCA/HU369/78A - 25 March 2004 DCA/HU369/78B - 1 June 2006 DCA/HU369/78C - 28 February 2013					
DCA/HU369/79 O	il Cool	er Blov	wer Bracket - Replacement			
Applicability:			, 369E, 369FF, 500N, and 600N with oil cooler blower bracket P/N installed.			
Requirement:	transi	nission	ailure of the oil cooler blower bracket, loss of cooling of engine oil and oil, and a subsequent forced landing, remove the bracket, P/N and replace it with an airworthy bracket, P/N 369E5194-1			

369F5190-1, and replace it with an airworthy bracket, P/N 369F5194-1. (FAA AD 99-20-12 refers)

Compliance: Within next 100 hours TIS.

Effective Date: 22 October 1999

# DCA/HU369/80 Thruster Control Cables – Inspection

Applicability: Model 500N helicopters, S/N LN 001 through LN 099

**Requirement:** To prevent failure of the thruster control cable conduit cap at the telescopic swivel end or relieved area and subsequent loss of anti-torque directional control of the helicopter, accomplish the following:-

A. Inspect the forward and centre thruster control cables, P/N 500N7201-5, -7, -37, -45, or -51, installed in affected helicopters, for a crack, corrosion, or damage in the cap at the telescopic swivel end per the following paragraphs of the Accomplishment Instructions, Section 2, of MDHI SB500N-021 (SB 021).

1. Inspect the forward thruster control cables per paragraphs A.(1) through (5) of SB 021. Install safety wire per paragraph A.(7) of SB 021.

2. Inspect the centre thruster control cable per paragraphs B.(1) through (4) and (6) of SB 021.

3. If an unacceptable crack or ball separation from the cap is found, remove and replace the unairworthy forward or centre thruster control cable with an airworthy cable prior to further flight.

B. Inspect the forward and centre thruster control cables, P/N 500N7201-5, -7, -37, -45, or -51 installed in affected helicopters in the cap relieved area for a crack, corrosion, or damage per the Accomplishment Instructions, Section 2, of MDHI SB SB500N-020R1 (SB 020R1).

1. Inspect the forward thruster control cable for a crack or corrosion per paragraphs B. (1) through (5) and (7) of SB 020R1.

2. Inspect the centre thruster control cable for a crack or corrosion per paragraphs C(1) through (4), and (6) of SB 020R1.

3. If an unacceptable crack is found, remove and replace the unairworthy forward or centre thruster control cable with an airworthy cable prior to further flight.

C. Replace the forward and centre thruster control cables, P/N 500N7201-5, -7, -37, and -45, and -51, with P/N 500N7201-55 and -57. Accomplishment of the requirements of this paragraph is terminating action for the requirements of this AD. (FAA AD 99-25-08 refers)

**Compliance:** A. Within the next 5 hours TIS or by 31 December 1999, whichever occurs first. Thereafter at intervals not to exceed 100 hours TIS or 3 calendar months, whichever occurs first.

B. Within the next 100 hours TIS or by 19 February 2000, whichever occurs first. Thereafter at intervals not to exceed 100 hours TIS or 3 calendar months, whichever occurs first.

C. By 1 December 2000.

Effective Date: 2 December 1999

## DCA/HU369/81 TOT Indicating System - Calibration

Applicability: Model 369D, 369E, and 500N fitted with analog/digital turbine outlet temperature (TOT) indicator P/N 369D24513-1, and

Model 600N fitted with analog/digital TOT indicator P/N 9A3420.

**Requirement:** To prevent an erroneous TOT indication, damage to critical engine components, loss of engine power, and a subsequent forced landing, accomplish the following:

#### Model 369E, 369D, and 500N

Test the TOT indicating system to verify correct calibration per Part I of MDHI SB369D-199, SB369E-093, SB500N-019. If during any test the TOT indicator readings for the tester setting temperatures in Table 1, Part I, of the SB are not within the indicator reading range, before further flight, perform the actions in the Accomplishment Instructions, Part I, paragraph (6)(b) of the SB.

#### Model 600N

Test the TOT indicating system, including the electronic control unit (ECU) TOT sensing system, to verify correct calibration per Part I of MDHI SB600N-026. If during any calibration test the TOT indicator readings for the tester setting temperatures in Table 1, Part I, of the SB are not within the indicator reading range, before further flight, perform the actions in the Accomplishment Instructions, Part I, paragraph (7)(b) of the SB.

If during any test the Full Authority Digital Electronic Control (FADEC) maintenance lap-top terminal does not indicate ECU TOT within ± 5 degrees Celsius of the tester setting in Table 1, Part I, of the SB, before further flight, perform the actions in the Accomplishment Instructions, Part III, of the SB.

(FAA AD 2000-08-22 refers)

- **Compliance:** Within the next 50 hours TIS or by 25 June 2000, whichever occurs first. Thereafter repeat the test at intervals not to exceed 300 hours TIS.
- Effective Date: 25 May 2000

#### DCA/HU369/82A Helicopter Technology Co. Main Rotor Blades - Inspection

Applicability: Models 369A, H, HE, HM, HS, D, E, FF, and 500N fitted with the following Helicopter Technology Company main rotor blades;

P/N 500P2100-BSC (STC SR09172RC) S/N K101 through K562, P/N 500P2100-101 and –301 (STC SR09074RC and SRO9184RC), S/N A001 through A999 and B001 through B529, P/N 500P2300-501 (STC SR01050LA) S/N T101 through T107.

**Requirement:** To detect spar bonding voids that may allow the formation of corrosion and fatigue cracks and subsequent blade failure, perform a tap inspection on both the upper and lower surfaces of the main rotor blades per Helicopter Technology Co MSB 2100-2R2. If any voids are detected that exceed those identified as allowable per the MSB, the main rotor blades must be replaced before further flight.

#### (FAA AD 2000-25-52 refers)

- **Compliance:** Before further flight, unless already accomplished.
- Effective Date: DCA/HU369/82 16 November 2000 DCA/HU369/82A - 21 December 2000

# DCA/HU369/83 Magnesium Collective Pitch Mixer Bellcrank - Inspection

- Applicability: Kawasaki model 369HS and 369D helicopters fitted with magnesium collective pitch mixer bellcranks P/N 369A7602-W501.
- **Note:** This AD is not applicable to helicopters fitted with aluminium collective pitch mixer bellcranks (P/N 369N2664-501).
- **Requirement:** To prevent failure of the magnesium collective pitch mixer bellcrank during flight, perform a dye penetrant inspection per Kawasaki SB KSB-369-338 or KSB-369D-224, as applicable. Before further flight, replace per SB KSB-369-338 or KSB-369D-224 as applicable, any bellcrank found cracked.

(JCAB AD TCD-5588-2001 refers)

**Compliance:** Within next 10 hours TIS, and thereafter at intervals not to exceed 150 hours TIS.

Effective Date: 10 May 2001

# DCA/HU369/84 Cancelled – Purpose Fulfilled

#### DCA/HU369/85A Tail Rotor Gearbox Attachment Bolts – Inspection

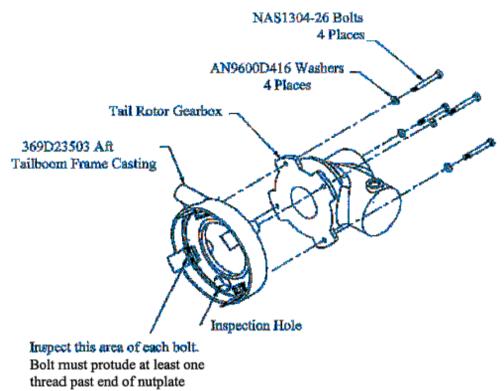
Applicability: Model 369D, 369E, 369F, 369FF with tailboom S/N 5001-5032, modified per Aerometals STC SH5055NM.

Model 369D and 369E with tail rotor gearbox attach bolts modified per Aerometals STC SH4801NM.

**Requirement:** To prevent loss of the tail rotor gearbox due to attaching bolts of inadequate grip length and subsequent loss of helicopter control, accomplish the following:

1. Determine the P/N of each tail rotor gearbox attaching bolt. If the P/N cannot be determined or if the bolt is not P/N NAS1304-26, replace with bolt, P/N NAS1304-26, before further flight. Torque the bolt to 100-110 in-lbs and apply a slippage mark.

2. Remove the tailboom control rod and determine the number of bolt threads protruding from each nutplate on the internal surface of the aft tailboom frame casting, P/N 369D23503, as shown in Figure 1 of this AD. At least one thread must protrude. If more than four threads protrude, add an additional washer, P/N AN960D416, under the bolt head. Torque the bolt to 100-110 in-lbs, and reapply a slippage mark.



4 places.

#### Figure 1 - Inspection Location

3. Between 2 and 10 hours TIS after accomplishing the requirements of paragraph 2 of this AD, inspect the torque on each bolt by applying 100 in-lbs. If any bolt movement occurs, retorque the bolt to 100 -110 in-lbs. Reapply a slippage mark after torque check and reinspect the torque between 2 and 10 hours TIS thereafter until no bolt movement occurs.

(FAA AD 2002-13-05R1 refers)

Compliance: Within 25 hours TIS

Effective Date: DCA/HU369/85 25 July 2002 DCA/HU369/85A 27 March 2003

### DCA/HU369/86A Cancelled – FAA AD 2013-19-24 refers

Effective Date: 5 December 2013

# DCA/HU369/87 Cancelled – Superseded by DCA/HU369/88

Effective Date: 1 December 2005

### DCA/HU369/88 Main Rotor Blade Torque Events - Inspection

Applicability: Models 369D, 369E, 369F, 369FF, 500N or 600N aircraft fitted with either a MD Helicopter, Inc. (MDHI) main rotor blade, or modified with Helicopter Technology Company, (HTC) STC No. SR09172RC, SR09074RC, or SR01050LA, with an HTC blade installed as listed in the following table:

Model	MDHI blade (P/N)	HTC blade P/N	STC No
369D	369D21100 Basic, –516, –517, –523	500P2100-BSC, -BSC-1	SR09172RC
369E	369D21120–501, –503	500P2100-101, -103	SR09074RC
369F, FF	369D21102 Basic, –503, –517, –523	500P2300-501, -503	SR01050LA
	369D21121–501, –503		
500N	369D21102–503, –517, –523	500P2300-501, -503	SR01050LA
	369D21121–501, –503		
600N	369D21102–517, –523	500P2300-501, -503	SR01050LA
	369D21121–501, –503		

**Note 1:** The terms "BSC" and "Basic" are interchangeable when identifying blades produced by MDHI and HTC.

**Requirement:** To detect fatigue cracking of the blade to prevent blade failure and subsequent loss of control of the helicopter, accomplish the following:

1. Determine and record the number of torque events accumulated on each blade. Continue to record the number of TEs accumulated throughout the life of the blades along with hours TIS. Before accumulating an additional 200 TEs or at the end of each day's operations, whichever occurs first, record and update the accumulated TEs total.

2. Perform a main rotor blade torque event inspection per MD Helicopters, Inc. Maintenance Manual CSP-HMI-2, latest approved revision, section 62-10-00, paragraph 8, Main Rotor Blade Torque Event Inspection. If a crack is found, replace the blade with an airworthy blade, before further flight.

- **Note 2:** A torque event (TE) is the transition to a hover from forward flight, or any external lift operation. Each transition to a hover from forward flight is recorded as one TE. An external lift operation is recorded as two TEs, (where an external lift operation is defined as the pick up and drop off of an external load and a return flight to the pick up point at greater than 30 knots). Forward flight is considered to be flight at any airspeed (or direction) after attaining translational lift. If you cannot determine the number of TEs, use 13720 TEs.
- Note 3: Complying with the inspection procedures in the Accomplishment Instructions, paragraphs 2.B.(2). and 2.B.(3)., of MD Helicopter Inc. Service Bulletin (SB) SB369H-245R2, SB369E-095R2, SB500N-023R2, SB369D-201R2, SB369F-079R2, SB600N-031R2, dated 4 February 2004, constitutes an approved alternative method of conducting the inspection required by paragraph 2 of this AD.
- **Note 4:** Complying with the Inspection Instructions procedures in paragraphs 2 and 3 of HTC Mandatory SB, Notice No. 2100-3R3, dated 5 January 2004, constitutes an approved alternative method of conducting the inspection required by paragraph 2 of this AD.
- Note 5: MDHI Maintenance Manual CSP-HMI-2, Section 20-30-00 Main Rotor Blade Painting pertains to the subject of this AD. This section of the maintenance manual recommends painting the inboard 24 inches (not to be exceeded) of the blade gloss white to aid in detecting a crack, and if this is done, painting all blades alike and rebalancing them.

Note 6:	TEs are used only to establish an additional inspection interval and not to establish an alternative retirement life.	
Note 7:	The pilot may accomplish the TE Inspection required by Part 2 of this AD in accordance with NZCAR Part 43 Appendix A. The pilot must be trained and authorized (Part 43 subpart B refers) and certification must be provided (Part 43 Subpart C refers). (FAA AD 2005-21-02 refers)	
Compliance:	<ol> <li>Within 50 hours TIS, unless already accomplished.</li> <li>For each blade that has accumulated 13720 or more TEs and 750 or more hours TIS, before further flight, unless accomplished previously, and thereafter at intervals</li> </ol>	

not to exceed 200 TEs or 35 hours TIS, whichever occurs first.

Effective Date: 1 December 2005

# DCA/HU369/89 Tail Rotor Blades – Inspection

Applicability: Model 369D, 369E, 369F, 369FF, 369H, 369HE, 369HM and 369HS aircraft fitted with tail rotor blade P/N 369A1613, 369D21606, 369D21613, 369D21615 or 421-088 all dash numbers.

Model Kawasaki-Hughes 369D and 369HS aircraft fitted with tail rotor blade P/N 369A1613, 369D21606, 369D21613, 369D21615 or 421-088 all dash numbers.

- Note: Kawasaki Service Bulletin No. KSB-369D-235 and KSB-369-339 dated May 7, 2007 or later approved revisions, applicable to Kawasaki-Hughes Industries (KHI) 369D and 369HS aircraft, <u>also pertain to this AD requirement</u>.
- **Requirement:** To prevent the loss of a tail rotor blade resulting in the loss of aircraft control, accomplish the following instructions per MD Helicopters Service Bulletin (SB) SB369H-247, SB369D-204, SB369E-099 or SB369F-084, as applicable:

Remove the tail rotor blade assembly per the instructions in paragraphs 2.B.(1) through to 2.B.(3) of the applicable SB.

Inspect the bore of the tail rotor blade root fitting on all tail rotor blade assemblies, per the instructions in paragraphs 2.B.(4) and 2.B.(5) and figures 1 & 2 of the applicable SB.

Replace tail rotor blade assemblies <u>that do not have a smooth bore radius</u>, per the instructions in paragraphs 2.B.(6) and (7) and figure 2 of the applicable SB.

Mark airworthy tail rotor blade assemblies per the instructions in paragraphs 3(1) through to 3(4) of the applicable SB. (FAA AD 2007-09-51 and JCAB AD TCD-7098-2007 refers)

**Compliance:** Before further flight.

Effective Date: 01 May 2007

### DCA/HU369/90 Landing Gear Struts – Inspection

Applicability: Model 369A, 369D, 369E, 369F, 369FF, 369HE, 369HE, 369HS, 369HM, 500N and OH-6A aircraft fitted with any of the components listed in the table below, excluding any aircraft fitted with Aerometals struts P/N 369XH6001-41, -42, -51 or -52 in accordance with Supplemental Type Certificate (STC) No. SR00981LA.

Component Name	Component Part Number (P/N)
Mid Aft Fairing Assembly	369H6200-61, -62, standard gear
Aft Support Assembly	369H6200-23, -24 (-23 to be reinstalled on the
	right-hand side and –24 to be reinstalled on the
	left-hand side, all configurations)
Aft Fairing Assembly	369H92113-91, -92, extended gear
Aft Filler Assembly	369H92113-131, -132, extended gear
Aft Fillet Assembly	369A6200-45, -46, standard gear
Aft Fillet Assembly	369H92113-111, -112, extended gear
Mid Fwd Fairing Assembly	369H6200-41, -42, standard gear
Fwd Fairing Assembly	369H92113-81, -82, extended gear
Fwd Support Assembly	369H6200-23, -24 (-23 becomes right-hand side
	and -24 becomes left-hand side)
Fwd Filler Assembly	369H92113-121, -122, extended gear
Fwd Fillet Assembly	369A6200-57, -58, standard gear
Fwd Fillet Assembly	369H92113-101, -102, extended gear

Requirement:

To prevent failure of a landing gear strut possibly resulting in loss of control of the aircraft during landing, remove all landing gear fairings and inspect each landing gear fairing support assembly to determine the number and location of the rivets attaching the support assembly to the landing gear strut assembly.

If three rivets (forward, aft and inboard) are used to attach the support assembly to the <u>FORWARD landing gear strut assembly</u>, remove the landing gear fillet assembly including the three rivets and the support assembly, and clean and dye-penetrant inspect the area in and around the 0.125 (3.18mm) diameter hole in the inboard surface of the strut assembly.

If the strut assembly is cracked, replace the strut assembly and install the other landing gear components in accordance with steps (6) through to (11) in paragraph C of MD Helicopters Service Bulletin SB369H-244, SB369E-094, SB500N-022, SB369D-200 and SB369F-078 as applicable.

If the strut assembly is not cracked, rework the landing gear assembly and install the other landing gear components in accordance with steps (5) through to (11) in paragraph C of the applicable SB.

<u>If three rivets (forward, aft and inboard) are used</u> to attach the support assembly to the <u>AFT landing gear strut assembly</u>, remove the fillet assembly, the three rivets, and the support assembly, and clean and dye-penetrant inspect the area in and around the 0.125 (3.18mm) diameter hole in the inboard surface of the strut assembly.

If the strut assembly is cracked, replace the cracked strut assembly and install the other landing gear components in accordance with steps (6) through to (13) in paragraph B of the applicable SB.

If the strut assembly is not cracked, rework the landing gear assembly and install the other landing gear components in accordance with steps (5) through to (13) in paragraph B of the applicable SB.

<u>If only two rivets (forward and aft) are used</u> to attach the support assembly to the landing gear strut assembly and a third rivet hole has not been drilled in the strut, no further action is required by the AD.

For any landing gear strut assembly that has a third rivet hole, remove the fairing inspection button plug and clean and inspect the area in and around the rivet hole for cracks using a bright light and a 10x or higher magnifying glass. If any FORWARD or AFT strut assembly is cracked, replace before further flight. (FAA AD 2007-12-23 refers) Note 1: For model 369D, 369E, 369F, 369FF and 500N aircraft, the Handbook of Maintenance Instruction, Servicing and Maintenance, HMI, CSP-HMI-2, Chapter 32, Section 32-10-00, "Landing Gear Strut Inspection" pertains to the subject of this AD. For model 369A (OH-6A), 369H, 369HE, 369HS, and 369HM aircraft, the Basic Note 2: Handbook of Maintenance Instructions CSP-H-2. Section 6. "Landing Gear" pertains to the subject of this AD. Compliance: By 30 November 2007, unless previously accomplished. Thereafter for landing gear strut assembly that has a third rivet hole inspect per the requirements of this AD at intervals not to exceed 100 hours TIS or during each annual inspection, whichever occurs first. Note 3: Installing a a landing gear strut assembly that has only 2 rivet holes is terminating action to the repetitive inspection requirements of this AD. Effective Date: 26 July 2007 DCA/HU369/91 Tail Rotor Blade Abrasion Strips – Inspection Model 369A, OH-6A, 369D, 369E, 369F, 369FF, 369H, 369HE, 369HM and 369HS Applicability: aircraft fitted with the following tail rotor (T/R) blades with all S/N, including those T/R blades with a "M" or an "I" painted on the root of the T/R blade: Helicopter Technology Company, LLC (HTC) P/N 500P3100-101 and -103, or MD Helicopters Inc. (MDHI) P/N 369D21640-501, -503 and -505, and HTC P/N 500P3100-301 and -303, or MDHI P/N 369D21641-501, -503 and -505, and HTC P/N 500P3300-501 and -503. or MDHI P/N 369D21643-501. -503 and -505. and HTC P/N 500P3500-701 and -703. or MDHI P/N 369D21642-501. -503 and -505. Note 1: A "M" or an "I" painted on the root of the T/R blade indicates compliance to an Alternate Method of Compliance (AMOC) to AD DCA/HU369/86A (FAA AD 2003-08-51 refers) which addressed shot peening of the T/R pitch horn assembly. **Requirement:** To prevent debonding and separation of the abrasion strip from a tail rotor blade, which could result in vibration, loss of the tail rotor and aircraft control, inspect the

- abrasion strip-to-skin bond integrity on each tail rotor blade using the tap test method per part 1 of Helicopter Technology Company, LLC Mandatory SB Notice No. 3100-4 revision 4, dated 10 May 2006.
- **Note 2:** A titanium rivet can be fitted at the outboard end of each tail rotor blade in accordance with a manufacturer approved instruction as a terminating action for the requirements of this AD. Once this modification has been embodied a letter "T" must be painted on the root end of each tail rotor blade.
- Note 3: MD Helicopters SBs SB369D-203R1, SB369E-097R1, SB369F-082R1, and SB369H-246R1 dated 23 January 2006 pertain to the subject of this AD. (FAA AD 2008-15-03 refers)
- **Compliance:** Within the next 25 hours TIS unless previously accomplished, and thereafter at intervals not to exceed 25 hours TIS.
- Effective Date: 28 August 2008

### DCA/HU369/92 Cancelled – DCA/HU369/93 refers

Effective Date: 1 September 2008

### DCA/HU369/93 Cancelled – DCA/HU369/94 refers

Effective Date: 5 November 2008

# DCA/HU369/94 Yaw Stability Augmentation System – Inspection

- Applicability: Model 500N aircraft fitted with Yaw Stability Augmentation System (YSAS) adapter tubes P/N 500N7218-1.
- **Note 1:** This AD supersedes DCA/HU369/93. The applicability revised to include all 500N aircraft fitted with YSAS adapter tubes P/N 500N7218-1. Adapter tubes with a production date code stamp are not affected by this AD.

**Requirement:** To prevent loss of yaw control and possible loss of aircraft control, accomplish the following:

1. Turn the YSAS switch OFF.

2. Install a placard on the instrument panel as close as possible to the airspeed indicator in clear view of the pilot that states:

# YSAS SYSTEM IS OFF.

AIR SPEED LIMIT 100 KIAS or VNE, WHICHEVER IS LESS.

3. Amend the AFM by either inserting a copy of this AD into the airworthiness limitations section of the AFM or add the following text: "VNE is limited to 100 KIAS or less as indicated by the airspeed VNE placard installed on the instrument panel of the helicopter".

4. Replace affected adapter tubes with airworthy parts that have a production date code stamp. Once all affected adapter tubes have been replaced, remove the placard on the instrument panel and the amendment that was made to the limitations section of the AFM. Return the YSAS switch to the normal position.

- Note 2: MD Helicopters Inc. SB500N-040 revision 1, dated 27 August 2008 and section 96-00-00 in the MDHI maintenance manual CSP-HMI-3 pertains to the subject of this AD.
- Note 3: The replacement of affected adapter tubes with airworthy parts that have a production date code stamp is a terminating action to the requirements of this AD. (FAA AD 2008-22-52 refers)
- Compliance: 1. 2. & 3. Before further flight. 4. By 15 January 2009.
- Effective Date: 5 November 2008

# DCA/HU369/95 Forward and Center Thruster Control Cables – Inspection

- Applicability: All model 500N aircraft, S/N 001 through to 099 with a prefix of "LN" fitted with forward thruster cable assembly P/N 500N7201-55 and center cable assembly P/N 500N7201-57.
- **Requirement:** To prevent failure of the thruster cable assembly due to possible undetected corrosion-pitted or cracked connectors which could result in loss of aircraft control, accomplish the following:

Inspect every connector for corrosion pits and cracks using a bright light and a 10X or higher magnifying glass per the instructions in paragraph 2 of MD Helicopter Inc. Service Bulletin SB500N-027 dated 3 May 2004. If corrosion pitting or cracks are found, replace the cable assembly before further flight. (FAA AD 2004-20-08 refers)

- **Note:** Replacing the cable assembly per SB500N-027 is a terminating action for the requirements of this AD.
- **Compliance:** Within the next 50 hours TIS or by 30 July 2011 whichever occurs sooner, unless previously accomplished.
- Effective Date: 30 June 2011

# DCA/HU369/96 Tail Rotor Drive Shaft – Inspection

Applicability: Model 369, 369A, 369D, 369E, 369H, 369HE, 369HM and 369HS helicopters fitted with tail rotor drive shaft flexible couplings P/N 369A5501 or P/N 369H92564.

- Note 1: DCA/HU369/96 supersedes DCA/HU369/29 (FAA AD 81-17-02 refers).
- **Requirement:** To prevent tail rotor drive shaft failure and possible loss of the T/R and aircraft control, accomplish the following:

1. Install <u>aft coupling failsafe device</u> bolt P/N 369D25530 and socket P/N 369D25531 per the instructions in Part I of the applicable Service Information Notice (SIN) No. DN-143, HN-206 or EN-31, all dated 26 August 1986.

Install <u>forward coupling failsafe device</u> bolt P/N 369D25530 and socket P/N 369D25531 per the instructions in Part I of SIN No. DN-95, dated 7 August 1981, or Part III of SIN No. HN-173, dated 2 November 1981, as applicable.

**Note 2:** Model 369E helicopters, S/N 0135E onwards have the aft coupling failsafe device installed at production.

2. For all helicopters fitted with tail rotor driveshaft flexible coupling failsafe devices:

Inspect the T/R drive shaft forward and aft flexible couplings for T/R backlash or looseness by rocking the T/R back and forth in the plane of rotation. The T/R blade should not move more than 0.75 inches (1.93cm) at the blade tip with no rotational movement of the main rotor blades.

If the tail rotor blade tip movement exceeds the specified limits, an engineer must inspect both the fore and aft tail rotor drive shaft couplings and replace defective parts as required before further flight.

3. <u>For all helicopters fitted with tail rotor driveshaft flexible coupling failsafe devices</u>:

If thumping or rapping is heard from the T/R drive train during the final revolutions of the T/R, inspect the T/R to ensure that the T/R blade does not move more than 0.75 inches (1.93cm) at the blade tip with no rotational movement of main rotor blades.

	If the tail rotor blade tip movement exceeds the specified limits, an engineer must inspect both the fore and aft tail rotor drive shaft couplings and replace defective parts as required before further flight.	
Note 3:	Requirements 2 and 3 of this AD may be accomplished by adding the inspection requirements to the tech log. The inspections 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:	The actions mandated by this AD shall be accomplished in accordance with the instructions in the applicable parts of MD Helicopters/Hughes Service Information Notice (SIN) No. DN- 143, HN-206 and EN-31, all dated 26 August 1986, MDHC SIN No. DN-95, dated 7 August 1981, and MDHC SIN No. HN-173, dated 2 November 1981, or later approved revisions of these documents.	
	(FAA AD 86-20-07 refers)	
Compliance:	1. Within the next 100 hours TIS unless previously accomplished.	
	2. At every pre-flight inspection.	
	3. At every aircraft/engine shutdown.	

Effective Date: 25 August 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 <u>Links to</u> <u>state of design airworthiness directives | aviation.govt.nz</u>

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.

### 2013-03-03 Tension Torsion Straps – Inspection

- **Compliance:** Initial compliance required before the issue of a New Zealand Certificate of Airworthiness, or at the next Review of Airworthiness (RA), or at the next annual inspection, 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 FAA AD.
- Effective Date: 15 March 2013

### 2013-05-16 Tailboom Assembly – Inspection

- **Compliance:** Initial compliance required before the issue of a New Zealand Certificate of Airworthiness, or at the next Review of Airworthiness (RA), or at the next annual inspection, 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 FAA AD.
  - Effective Date: 30 April 2013

#### 2013-19-24 Tail Rotor Blades – Inspection

- **Compliance:** Initial compliance required before the issue of a New Zealand Certificate of Airworthiness, or at the next Review of Airworthiness (RA), or at the next annual inspection, 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 FAA AD.
- Effective Date: 5 December 2013

#### 2016-01-19 Rotating Cone Assembly – Inspection

- **Compliance:** Initial compliance required before the issue of a New Zealand Certificate of Airworthiness, or at the next Review of Airworthiness (RA), or at the next annual inspection, 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 FAA AD.
- Effective Date: 25 February 2016

# 2016-04-15 Main Rotor Blade Attach Pin – Inspection

- **Compliance:** Initial compliance required before the issue of a New Zealand Certificate of Airworthiness, or at the next Review of Airworthiness (RA), or at the next annual inspection, 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 FAA AD.
  - Effective Date: 31 March 2016

#### 2016-05-09 Auxiliary Fuel Pump – Inspection

- **Compliance:** Initial compliance required before the issue of a New Zealand Certificate of Airworthiness, or at the next Review of Airworthiness (RA), or at the next annual inspection, 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 FAA AD.
- Effective Date: 15 April 2016

# CF-2019-01 HETS STC SH98-35

**Applicability:** Helicopter External Transport System (HETS<sup>™</sup>) certified under Transport Canada Supplemental Type Certificate (STC) SH98-35, Issue 1 and Issue 2 installed on the following helicopter models:

Bell Helicopter Textron Canada Ltd. model 206B, 206L, 206L-1, 206L-3, 206L-4 and 407.

Airbus Helicopters (formerly Eurocopter France) model AS 350 B, AS 350 B1, AS 350 B2, AS 350 B3, AS 350 BA and AS 350 D.

Airbus Helicopters (formerly Eurocopter France) model AS 355 E, AS 355 F, AS 355 F1 and AS 355 F2.

MD Helicopter Inc. model 369, 369A, 369H, 369HM, 369HS, 369HE, 369D, 369E, 369F, 369FF and 500N. (Transport Canada AD CF-2019-01 refers)

- Note: HETS<sup>™</sup> approved under SH98-35 are only eligible for installation on helicopter models listed above and they are not eligible for any other models not specifically listed above (Example: not eligible for installation on AS 355 N or AS 355 NP).
- **Compliance:** Refer to Transport Canada AD CF-2019-01.
- Effective Date: 22 January 2019

#### 2019-05-04 Main Rotor Blades - Inspection

- Applicability: Model 369A, 369D, 369E, 369FF, 369H, 369HE, 369HM, 369HS, 500N and 600N helicopters, fitted with a main rotor blade (MRB) P/N 369A1100, 369D21100, 369D21102, 369D21120, 369D21121, 369D21123, 500P2100 or 500P2300, all dash numbers.
- Effective Date: 17 April 2019

### DCA/HU369/97A DG500 External Cargo Pod STC 11/21E/2 – Inspection

- Applicability: Model 369, 369A, 369D, 369E, 369F, 369FF, 369H, 369HE, 369HM, 369HS and 500N helicopters embodied with DG500 External Cargo Pod STC 11/21E/2 <u>before 26</u> <u>March 2020</u>.
- Note 1: DCA/HU269/97A revised to introduce Ntech Service Bulletin P0928-SB revision 3, dated 17 March 2020.
- **Requirements:** To prevent possible structural overload of the cargo hook attachment and/or the surrounding airframe structure when both the cargo pod and the cargo hook are loaded close to rated load limits, accomplish the following:
  - 1. Amend the aircraft flight manual (AFM) and replace AFM Supplement (AFMS) P928-1 revision 1, dated 17 May 2011 applicable to the DG500 External Cargo Pod with CAA approved AFMS P0928-1 revision 2, dated 24 January 2020, or later CAA approved revision.
  - 2. Inspect the cargo hook/pod attachment bolts and the helicopter structure per Ntech Service Bulletin P0928-SB revision 3, dated 17 March 2020. Accomplish all corrective actions per P0928-SB, before further flight.
- **Note 2:** AFMS P0928-1 revision 2, or later CAA approved revision and Ntech P0928-SB revision 3 can be obtained from:

NTech Limited Ardmore Airport PDC 14, Papakura, Auckland 2244 Tel: +64 9 296 1950 Fax: +64 9 296 1952 Email: info@ntech.co.nz

- Note 3: If any defects are found during the accomplishment of the requirements of this AD, complete a CA005 Defect Report form and submit the completed form to the CAA at <u>CA005@caa.govt.nz</u>,or report defects found via the online reporting system available at <u>https://occurrences.caa.govt.nz/ProdUl/</u> Please include all findings and any other relevant technical information. A CA005D Defect Report form can be obtained from <u>https://www.aviation.govt.nz/about-us/forms/Filter/?SearchTerm=&Rule=8</u>
- **Compliance:** 1. At the next maintenance inspection, or the next review of airworthiness, or the next annual inspection, whichever occurs first, unless previously accomplished.

2. At the next maintenance inspection, or the next review of airworthiness, or the next annual inspection, whichever occurs first

Effective Date: DCA/HU369/97 - 27 February 2020 DCA/HU369/97A - 26 March 2020

# 2020-11-07 Main Rotor Hub Lead-lag Bolt - Inspection

- Applicability: Model 369D, 369E, 369FF, 369H, 369HE, 369HM, 369HS, 500N and 600N helicopters fitted with a main rotor hub lead-lag bolt P/N 369D21220 with a S/N listed in paragraph 1.B. of MD Helicopters Service Bulletin No. SB369D-223, SB369E-122, SB369F-110, SB369H-259, SB500N-060, or SB600N-073, all dated 19 April 2019.
- Effective Date: 30 June 2020

### 2020-18-20 Main Rotor Blade Leading Edge Abrasion Strip - Inspection

- Applicability: Model 369A, 369D, 369E, 369FF, 369H, 369HE, 369HM, 369HS and 500N helicopters fitted with a main rotor blade P/N 500P2100-105, 500P2100-305, 500P2300-505, 369D21120-505, 369D21121-505, or 369D21123-505 with a 1.25 inch chord length nickel abrasion strip (abrasion strip) manufactured, or installed by Helicopter Technology Company, LLC (HTC), or where the manufacturer of the abrasion strip is unknown.
- **Note:** The initial inspection per paragraph (e) of FAA AD 2020-18-20 must be accomplished by a maintenance engineer.

The repetitive inspection (i.e. the first flight of every day) required by paragraph (e) of FAA AD 2020-18-20, 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 defects in any main rotor blade (MRB) leading edge abrasion strip, which includes blistering, or bubbling, or lifting, or if there is any indication of a void (i.e. a lowering tone change by tap testing is noticed), then a maintenance engineer must inspect the main rotor blades per the AD requirements, before further flight.

Effective Date: 28 October 2020

# 2021-22-11 Pilot to Co-pilot Tail Rotor Torque Tube - Inspection

Applicability: All 369D, 369E, 369F, 369FF, 369H, 369HE, 369HM, 369HS and 500N helicopters, fitted with a pilot-to-copilot tail rotor torque tube (torque tube) P/N 369H7531-9/-11/-13.

Effective Date: 10 January 2022

# \* 2024-23-06 Cyclic Torque Tube Assembly - Inspection

- Applicability: All 369, 369A, 369D, 369E, 369F, 369FF, 369H, 369HE, 369HM, 369HS and 500N helicopters fitted with a pilot interconnecting cyclic torque tube (torque tube) P/N 369H7133-7.
- Effective Date: 24 December 2024