## **Airworthiness Directive Schedule**

### Helicopters MD Helicopters 600N 25 June 2020

Notes	1.	This AD schedule is applicable to MD Helicopters 600N aircraft manufactured under FAA Type Certificate Number H3WE.
	2.	The Federal Aviation Administration (FAA) is the National Airworthiness Authority (NAA) responsible for the issue of State of Design Airworthiness Directives (ADs) for these helicopters. State of Design ADs applicable to these aircraft can be obtained directly from the FAA website at <a href="http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAD.nsf/MainFrame?OpenFrameSet">http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAD.nsf/MainFrame?OpenFrameSet</a>
	3.	The date above indicates the amendment date of this schedule.

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

### Contents

	Main Datas Danlassmant
DCA/NOTAR/1	Main Rotor Blades - Replacement
DCA/NOTAR/2	Input Shaft Coupling Assembly – Inspection and Replacement
DCA/NOTAR/3	Engine Control and Warning System Relays – Inspection and Replacement2
DCA/NOTAR/4	Collective Control Components Time Life – Inspection and Replacement
DCA/NOTAR/5	Oil Cooler Blower Bracket - Replacement
DCA/NOTAR/6	Thruster Control Cables Conduit Cap – Inspection and Replacement4
DCA/NOTAR/7	Fuel Cell to Engine Fuel Hoses – Inspection and Rework5
DCA/NOTAR/8	Turbine Outlet Temperature (TOT) Indicating System - Calibration5
DCA/NOTAR/9	Main Rotor Drive Shaft Assembly Life Limit – Inspection and Replacement
DCA/NOTAR/10	Forward and Center Thruster Control Cables – Inspection and Replacement
DCA/NOTAR/11	Fuselage Station 75 Control Support Bracket Assembly Life Limit - Replacement6
DCA/NOTAR/12	Main Rotor Blade Torque Events – Inspection and Replacement7
DCA/NOTAR/13	Cancelled – DCA/NOTAR/15 refers
DCA/NOTAR/14	Mixer Links – Inspection and Replacement8
DCA/NOTAR/15	Cancelled – DCA/NOTAR/18 refers9
DCA/NOTAR/16	Cancelled – DCA/NOTAR/17 refers9
DCA/NOTAR/17	Cancelled – DCA/NOTAR/19 refers9
DCA/NOTAR/18	Tail Boom Attach Fittings – Inspection, Repair and Modification9
DCA/NOTAR/19	Yaw Stability Augmentation System – Turn OFF, Placard & AFM Amendment11
	ADs listed below are available directly from the National Airworthiness Authority
	nks to NAA websites are available on the CAA website at
	.nz/airworthiness-directives/states-of-design/ If additional NZ ADs need to be issued
	ndition is found to exist in an aircraft or aeronautical product in NZ, they will be added 12
2013-03-03	Tension Torsion Straps – Inspection
2013-05-03	Main Rotor Blade Link Assembly – Inspection
* 2020-00-11	
2020-11-07	Main Rotor Hub Lead-lag Bolt - Inspection12

### DCA/NOTAR/1 Main Rotor Blades - Replacement

DCANOTAR/T W	an Rotor Blades - Replacement
Applicability:	Model 600N aircraft fitted with the following main rotor blades:
	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, replace affected blades, per Boeing McDonnell Douglas Helicopter Systems Service Bulletin No. SB600N-007 revision 2. (FAA AD 98-15-26 refers)
Note:	Blades removed from service per the requirements of this AD are not to be fitted to any aircraft.
Compliance:	Replace affected blades before further flight, unless already accomplished.
Effective Date:	30 November 2006
DCA/NOTAR/2 In	put Shaft Coupling Assembly – Inspection and Replacement
Applicability:	Model 600N aircraft fitted 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, per Boeing McDonnell Douglas Helicopter Systems Service Bulletin No. SB600N-003.
	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 and per SB No. SB600N-003. (FAA AD 99-04-12 refers)
Compliance:	Within the next 100 hours TIS, unless already accomplished.
Effective Date:	30 November 2006
DCA/NOTAR/3 E	ngine Control and Warning System Relays – Inspection and Replacement
Applicability:	Model 600N aircraft, 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 (refer figure 1 in SB).
	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.
	Accomplish these instruction per Boeing McDonnell Douglas Helicopter Systems Service Bulletin No. SB600N-014. (FAA AD 99-08-07 refers)
Note:	Any replacement relay P/N HS4240, must be inspected per the requirements of this AD prior to further flight.
Compliance:	Within the next 30 days, unless already accomplished.
Effective Date:	30 November 2006

#### DCA/NOTAR/4 Collective Control Components Time Life – Inspection and Replacement

Applicability: All model 600N aircraft.

**Requirement:** To prevent failure of the collective pitch control tubes, collective stick housings and collective pitch tube assemblies, which could cause loss of collective pitch control and subsequent loss of aircraft control, accomplish the following:

Identify and mark the S/N on the parts per McDonnell Douglas Helicopter Systems Service Bulletin No. 600N-009.

Add the the component P/Ns to the aircraft component log.

P/N	Component	Life-Limit
		(Hours TTIS)
369A7347	Housing, collective stick	450
369A7348	Tube, collective pitch control (pilot)	400
369H7354-3	Tube assembly, collective pitch	600
	(pilot)	
369A7809	Tube, collective pitch control (co-	1,800
	pilot)	
369A7820	Housing, collective stick	450
369H7837	Housing, collective stick	450
369H7838-3	Tube assembly, collective pitch	1,000
	(co-pilot)	

Replace the following flight control components within the stated life-limits:

(FAA AD 99-17-18 refers)

- **Note:** This AD revises the airworthiness limitations section of the maintenance manual by reducing the life-limits of the pilot collective pitch control tube, the collective stick housings, and the collective pitch tube assemblies and adding the co-pilot collective pitch control tube.
- **Compliance:** Within 400 hours TIS for the affected components add the affected component P/Ns to the aircraft component log, unless already accomplished.

Replace the affected flight control components within the stated life-limits.

Effective Date: 30 November 2006

#### DCA/NOTAR/5 Oil Cooler Blower Bracket - Replacement

Applicability: Model 600N aircraft fitted with oil cooler blower bracket P/N 369F5190-1.

**Requirement:** To prevent failure of the oil cooler blower bracket and subsequent loss of cooling of the engine and transmission oil, resulting in the possibility of a forced landing, remove the bracket P/N 369F5190-1 and replace with a bracket P/N 369F5194-1.

(FAA AD 99-20-12 refers)

- **Compliance:** Within next 100 hours TIS, unless already accomplished.
- Effective Date: 30 November 2006

#### DCA/NOTAR/6 Thruster Control Cables Conduit Cap – Inspection and Replacement

**Applicability:** Model 600N aircraft, S/Ns 003 through 074 with a prefix 'RN'.

**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:

1. Inspect the forward and centre thruster control cables P/Ns 500N7201-5, -7, -37, -45, or -51 for cracks, corrosion or damage in the cap at the telescopic swivel end per the following paragraphs of the accomplishment instructions in section 2 of MDHI SB600N-028. Inspect the forward thruster control cables per paragraphs A.(1) through (5) of SB600N-028. Install safety wire per paragraph A.(7) of SB600N-028.

Inspect the centre thruster control cable per paragraphs B.(1) through (4) and (6) of SB600-028. 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.

2. Inspect the forward and centre thruster control cables P/Ns 500N7201-5, -7, -37, -45, or -51 in the cap relieved areas for cracks, corrosion or damage per the accomplishment instructions in section 2 of MDHI SB600N-027 revision 1.

Inspect the forward thruster control cable for a cracks and corrosion per paragraphs B. (1) through (5) and (7) of SB600N-027 R1.

Inspect the centre thruster control cable for a crack or corrosion per paragraphs C(1) through (4), and (6) of SB600N-027 R1.

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

3. Replace the forward and centre thruster control cables P/Ns 500N7201-5, -7, -37, - 45 and -51 with P/Ns 500N7201-55 and -59, per SB600N-027 R1.

(FAA AD 99-25-08 refers)

# **Note:** Accomplishment of requirement 3 is terminating action for the requirements of this AD.

**Compliance:** 1. Within the next 5 hours TIS or by 31 December 2006, whichever occurs sooner, unless already accomplished, and thereafter at intervals not to exceed 100 hours TIS or 3 calendar months, whichever occurs sooner.

2. Within the next 100 hours TIS or by 30 February 2007, whichever occurs sooner, unless already accomplished, and thereafter at intervals not to exceed 100 hours TIS or 3 calendar months, whichever occurs sooner.

3. By 30 December 2007, unless already accomplished.

Effective Date: 30 November 2006

#### DCA/NOTAR/7 Fuel Cell to Engine Fuel Hoses – Inspection and Rework

Applicability: Model MD600N aircraft, S/Ns 003 through 045 with a prefix 'RN'.

**Requirement:** To prevent engine fuel starvation while the fuel gauge indicates fuel remaining in the tank, possibly causing an engine flameout and resulting in a landing, accomplish the following:

Verify whether the internal fuel hose connections have been correctly installed in accordance with either method A or method B of the accomplishment instructions in MD Helicopters Service Bulletin SB 600N-025.

Correct any discrepencies per SB 600N-025, <u>before further flight</u>. (FAA AD 2000-04-21 refers)

- **Compliance:** Within the next 100 hours TIS unless already accomplished.
- Effective Date: 30 November 2006

#### DCA/NOTAR/8 Turbine Outlet Temperature (TOT) Indicating System - Calibration

- **Applicability:** 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:

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

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 of part 1 in SB600N-026, accomplish the actions in the instructions in part 3 of SB600N-026, <u>before further flight</u>. (FAA AD 2000-08-22 refers)

- **Compliance:** Within the next 50 hours TIS or by 31 December 2006, whichever occurs sooner, unless already accomplished, and thereafter repeat the test at intervals not to exceed 300 hours TIS.
- Effective Date: 30 November 2006

#### DCA/NOTAR/9 Main Rotor Drive Shaft Assembly Life Limit – Inspection and Replacement

- Applicability: All model 600N aircraft, fitted with main rotor drive shaft assembly (drive shaft) P/N 600N5510-1.
- **Requirement:** To prevent failure of the drive shaft, resulting in loss of drive of the main rotor system and subsequent loss of control of the aircraft, accomplish the following:

Amend the aircraft component log by changing the life limit of drive shaft P/N 600N5510-1 from 16,000 to 14,000 hours TIS.

Replace drive shafts that have 14,000 or more hours TIS, <u>before further flight</u>. (FAA AD 2003-16-11 refers)

- **Note:** This AD revises the limitations section of the maintenance manual by reducing the life limit of drive shaft P/N 600N5510-1 to 14,000 hours TIS.
- **Compliance:** Within the next 100 hours TIS, unless already accomplished.

Effective Date: 30 November 2006

DCA/NOTAR/10 Replacement	Forward and Cent	ter Thruster Control Cables – Inspection and	
Applicability:		S/N 003 through 068 with a prefix of "RN" fitted v P/N 500N7201-55 and center cable assembly P	
Requirement:		thruster cable assembly and subsequent loss of ssibility of undetected corrosion-pitted or cracked p:	
		for corrosion pitting and cracking using a bright I g glass per the instructions in paragraph 2 of MD 500N-042.	
	If corrosion pitting or cra <u>flight</u> .	icks are found, replace the cable assembly, <u>befo</u>	ore further
	(FAA AD 2004-20-08 ref	fers)	
Note:	Replacing the cable assored requirements of this AD.	embly per SB600N-042 is a terminating action fo	or the
Compliance:	Within the next 10 hours unless already accompli	TIS or by 31 December 2006 whichever occurs shed.	sooner,
Effective Date:	30 November 2006		
DCA/NOTAR/11 Replacement	Fuselage Station	75 Control Support Bracket Assembly Life Li	mit -
	-	ls 025, 029, 032, 034 through 038, 040, 041, 04	
Replacement	Model 600N aircraft, S/N 067 with a prefix of "RN" Model 600N aircraft fitter	ls 025, 029, 032, 034 through 038, 040, 041, 04	5, 048 and
Replacement	Model 600N aircraft, S/N 067 with a prefix of "RN" Model 600N aircraft fitted control support bracket a To prevent failure of the	Is 025, 029, 032, 034 through 038, 040, 041, 04 ', and d with a yaw stability augmentation system (YSA	5, 048 and \S) and a
Replacement Applicability:	Model 600N aircraft, S/N 067 with a prefix of "RN" Model 600N aircraft fitter control support bracket a To prevent failure of the resulting in loss of contro 1. Replace the contro	As 025, 029, 032, 034 through 038, 040, 041, 049 ', and d with a yaw stability augmentation system (YSA assembly P/N 369N2608-11. fuselage station 75 control support bracket asse	5, 048 and (S) and a embly rol support
Replacement Applicability:	Model 600N aircraft, S/N 067 with a prefix of "RN" Model 600N aircraft fitter control support bracket a To prevent failure of the resulting in loss of contro 1. Replace the contro bracket assembly P/N 60	As 025, 029, 032, 034 through 038, 040, 041, 049 ', and d with a yaw stability augmentation system (YSA assembly P/N 369N2608-11. fuselage station 75 control support bracket asse of of the aircraft, accomplish the following: I support bracket, P/N 369N2608-11 with a contr	5, 048 and (S) and a embly rol support
Replacement Applicability:	Model 600N aircraft, S/N 067 with a prefix of "RN" Model 600N aircraft fitter control support bracket a To prevent failure of the resulting in loss of contro 1. Replace the contro bracket assembly P/N 60 SB600N-040.	As 025, 029, 032, 034 through 038, 040, 041, 049 ', and d with a yaw stability augmentation system (YSA assembly P/N 369N2608-11. fuselage station 75 control support bracket asse of of the aircraft, accomplish the following: I support bracket, P/N 369N2608-11 with a control 00N2608-1, per MD Helicopters, Inc. Service Bu	5, 048 and (S) and a embly rol support
Replacement Applicability:	Model 600N aircraft, S/N 067 with a prefix of "RN" Model 600N aircraft fitter control support bracket a To prevent failure of the resulting in loss of contro 1. Replace the contro bracket assembly P/N 60 SB600N-040. Helicopter S/N	As 025, 029, 032, 034 through 038, 040, 041, 049 ', and d with a yaw stability augmentation system (YSA assembly P/N 369N2608-11. fuselage station 75 control support bracket asse ol of the aircraft, accomplish the following: I support bracket, P/N 369N2608-11 with a contro 00N2608-1, per MD Helicopters, Inc. Service Bu Revised Finite Life (Hours TIS)	5, 048 and (S) and a embly rol support
Replacement Applicability:	Model 600N aircraft, S/N 067 with a prefix of "RN" Model 600N aircraft fitter control support bracket a To prevent failure of the resulting in loss of contro 1. Replace the contro bracket assembly P/N 60 SB600N-040. Helicopter S/N RN025	As 025, 029, 032, 034 through 038, 040, 041, 049 ', and d with a yaw stability augmentation system (YSA assembly P/N 369N2608-11. fuselage station 75 control support bracket asse of of the aircraft, accomplish the following: I support bracket, P/N 369N2608-11 with a contro 00N2608-1, per MD Helicopters, Inc. Service Bu Revised Finite Life (Hours TIS) 2556	5, 048 and (S) and a embly rol support
Replacement Applicability:	Model 600N aircraft, S/N 067 with a prefix of "RN" Model 600N aircraft fitter control support bracket a To prevent failure of the resulting in loss of contro 1. Replace the contro bracket assembly P/N 60 SB600N-040. Helicopter S/N RN025 RN029	As 025, 029, 032, 034 through 038, 040, 041, 044 ', and d with a yaw stability augmentation system (YSA assembly P/N 369N2608-11. fuselage station 75 control support bracket asse ol of the aircraft, accomplish the following: I support bracket, P/N 369N2608-11 with a contro 00N2608-1, per MD Helicopters, Inc. Service Bu Revised Finite Life (Hours TIS) 2556 2377	5, 048 and (S) and a embly rol support
Replacement Applicability:	Model 600N aircraft, S/N 067 with a prefix of "RN" Model 600N aircraft fitter control support bracket a To prevent failure of the resulting in loss of contro 1. Replace the contro bracket assembly P/N 60 SB600N-040. Helicopter S/N RN025 RN029 RN032 RN034 RN035	As 025, 029, 032, 034 through 038, 040, 041, 044 ', and d with a yaw stability augmentation system (YSA assembly P/N 369N2608-11. fuselage station 75 control support bracket asse ol of the aircraft, accomplish the following: I support bracket, P/N 369N2608-11 with a control 00N2608-1, per MD Helicopters, Inc. Service Bu Revised Finite Life (Hour sTIS) 2556 2377 2498 2456 2243	5, 048 and (S) and a embly rol support
Replacement Applicability:	Model 600N aircraft, S/N 067 with a prefix of "RN" Model 600N aircraft fitter control support bracket a To prevent failure of the resulting in loss of contro 1. Replace the contro bracket assembly P/N 60 SB600N-040. Helicopter S/N RN025 RN029 RN032 RN034	As 025, 029, 032, 034 through 038, 040, 041, 049 ', and d with a yaw stability augmentation system (YSA assembly P/N 369N2608-11. fuselage station 75 control support bracket assec ol of the aircraft, accomplish the following: I support bracket, P/N 369N2608-11 with a contro 00N2608-1, per MD Helicopters, Inc. Service Bu Revised Finite Life (Hours TIS) 2556 2377 2498 2456	5, 048 and (S) and a embly rol support
Replacement Applicability:	Model 600N aircraft, S/N 067 with a prefix of "RN" Model 600N aircraft fitter control support bracket a To prevent failure of the resulting in loss of contro 1. Replace the contro bracket assembly P/N 60 SB600N-040. Helicopter S/N RN025 RN029 RN032 RN034 RN035	As 025, 029, 032, 034 through 038, 040, 041, 044 ', and d with a yaw stability augmentation system (YSA assembly P/N 369N2608-11. fuselage station 75 control support bracket asse ol of the aircraft, accomplish the following: I support bracket, P/N 369N2608-11 with a control 00N2608-1, per MD Helicopters, Inc. Service Bu Revised Finite Life (Hour sTIS) 2556 2377 2498 2456 2243	5, 048 and (S) and a embly rol support

RN040

RN041

RN045

RN048

RN067

2562

2763

2015

2125

1600

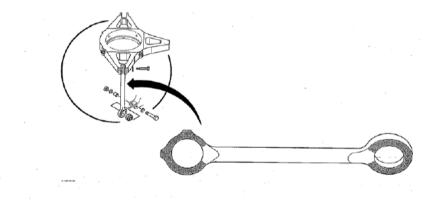
	2. <u>For aircraft fitted with a YSAS and not listed in the above table</u> , replace the control support bracket P/N 369N2608-11 with a control support bracket P/N 600N2608-1.
	3. For aircraft not fitted with a YSAS and fitted with a control support bracket P/N <u>369N26080-11</u> , replace the control support bracket with a control support bracket, P/N 600N2608-1 prior to the installation of a YSAS. (FAA AD 2004-22-12 refers)
Note:	This AD revises the limitations section of the maintenance manual by reducing the life limit of the control support bracket assembly P/N 369N2608-11 to the life limits stated in the table of this AD or to 1600 hours TIS, whichever occurs sooner.
Compliance:	<ol> <li>By 30 November 2007 or within the aircraft hours TIS stated in the table, whichever occurs sooner, unless already accomplished.</li> <li>By 30 November 2007 or within 1600 hours TIS since the installation of the YSAS, whichever occurs sooner.</li> <li>Before further flight.</li> </ol>
Effective Date:	30 November 2006
DCA/NOTAR/12 Applicability:	Main Rotor Blade Torque Events – Inspection and Replacement Model 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 HTC blades fitted as listed in the following table: MDHI blade (P/N) HTC blade P/N STC No Model 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. To detect fatigue cracking of the blade to prevent blade failure and subsequent loss of Requirement: control of the aircraft, accomplish the following: Determine and record the number of torque events accumulated on each blade. 1. 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 torgue event inspection per MD Helicopters, Inc.

2. Perform a main rotor blade torque event inspection per MD Helicopters, Inc. Maintenance Manual CSP-HMI-2, revision 36, section 62-10-00, paragraph 8, Main Rotor Blade Torque Event Inspection. If a crack is found, replace the blade with an airworthy blade, <u>before further flight</u>.

- 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) SB600N-031 R2, 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 authorised (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 not to exceed 200 TEs or 35 hours TIS, whichever occurs first.</li> </ol>
Effective Date:	30 November 2006
DCA/NOTAR/13	Cancelled – DCA/NOTAR/15 refers
Effective Date:	16 April 2008
DCA/NOTAR/14	Mixer Links – Inspection and Replacement
Applicability:	All model MD600N aircraft fitted with a lateral mixer output link assembly (mixer link), P/N 600N7636-1, -3, -9 or -11.
Requirement:	To prevent cracks in the mixer link, which could result in failure of the mixer link and subsequent loss of control of the aircraft, accomplish the following:
	Remove each mixer link and visually inspect the shaded areas around the bearing bore for any crack as depicted in figure 1. Use a bright light and a 10x or higher magnifying glass.



Bearings have been removed for clarity.

Figure 1

Accomplish an eddy current inspection on each mixer link in the bearing end areas. Replace cracked mixer links, before further flight. Before installing mixer links held as spares, accomplish an eddy current inspection.

Accomplish these requirements per MDHI Service Bulletin No. SB600N-044, dated February 16, 2007.

(FAA AD 2007-05-51 refers)

**Compliance:** Before further flight.

Effective Date: 22 February 2007

DCA/NOTAR/15	Cancelled – DCA/NOTAR/18 refers
Compliance:	27 October 2008
DCA/NOTAR/16	Cancelled – DCA/NOTAR/17 refers
Effective Date:	1 September 2008
DCA/NOTAR/17	Cancelled – DCA/NOTAR/19 refers
Effective Date:	5 November 2008
DCA/NOTAR/18	Tail Boom Attach Fittings – Inspection, Repair and Modification
Applicability:	Model 600N aircraft, S/N 003 through to 058 with a prefix "RN" <u>that have not been</u> <u>modified</u> in the fuselage aft section to strengthen the tail boom attachments and longerons per MD Helicopters Technical Bulletin TB600N-007, dated 12 January 2004 or revision 1 dated 13 April 2006 or revision 2 dated 5 October 2006.
Note 1:	This AD supersedes DCA/NOTAR/15 and reintroduces the repetitive inspection requirements which were inadvertently omitted from that AD.
Requirement:	To prevent failure of the tail boom attach fittings which could result in separation of the tail boom from the helicopter and loss of aircraft control, accomplish the following:
	1. Tail Boom Attach Fittings - Inspection, Repair and Access Covers MOD
	Remove the tail boom fairing and tail boom. Remove both upper tail boom attachment access covers per the instructions in paragraph 2.B.(2) of MD Helicopters SB600N-036 dated 2 November 2001.
	With the aid of a light and a 10x or higher magnifying glass inspect the right and left upper tail boom attach fittings P/N 500N3422 and 500N3422-3 for cracks as shown in figure 1 of SB600N-036. Replace any cracked fittings before further flight.
	With the aid of a light and a 10x or higher magnifying glass inspect both upper tail boom attach nut plates for thread damage or cracks. Replace any damaged or cracked nut plates before further flight.
	With the aid of a light and a 10x or higher magnifying glass inspect both angles for cracks. If a crack is found on a right-hand angle P/N 500N3429-6 fit a new clip per the instructions in paragraph 2.B.(5)(c) of SB600N-036 before further flight. If the left hand angle P/N 500N3429-7 is cracked, either replace the angle or repair the angle in accordance with an approved repair before further flight.
	Replace the upper right (pilot side) tail boom attach bolt with a new bolt.
	If the removed upper right pilot side bolt is broken, replace the remaining three bolts with airworthy bolts before further flight.
	Add one washer P/N AN960C516 (NAS1149C0563R) or AN960C616 (NAS1149C0663R) as appropriate, to each tail boom bolt between the tail boom and the NAS1587 countersunk washer. A minimum of two threads must extend past the nut plate.
	Modify both access covers per the instructions in paragraph 2.B.(6) of SB600N-036.
	2. Tail boom Attach Fittings and Upper Longeron Inspection – Inspection, Repair and Inspection Access MOD
	Drill four additional inspection holes in the fuselage as shown for the left side of the fuselage in figure 1 of SB600N-039 dated 9 December 2003. Follow the instructions in paragraphs 2.A.(1)(a), (b) and (d) of SB600N-039 for inspection holes at L166 and R166, and follow the instructions in paragraphs 2.A.(2)(a), (b) and (d) of SB600N-039 for inspection holes at L153 and R153.
	Thoroughly clean the attach fittings and surrounding area. If the attach fittings and surrounding area cannot be satisfactorily cleaned to accomplish a borescope inspection, then accomplish requirement 3 of this AD.

Using a borescope with a light, inspect all four attach fittings and the surrounding area for cracks.

If the upper right attach fitting is cracked, accomplish requirement 3 of this AD before further flight.

If any of the other three attach fittings are cracked, modify the fuselage aft section to strengthen the tail boom attachments and the upper longerons per the instructions in paragraph 2 of TB600N-007, dated 12 January 2004 or revision 1 dated 13 April 2006 or revision 2 dated 5 October 2006 before further flight. There is no need to contact MDHI as this modification in a terminating action to the requirements of this AD.

Visually inspect the upper longerons for cracks per the instructions in paragraph 2.C. of SB600N-039. If a crack is found in an upper longeron, replace the cracked part or modify the fuselage aft section to strengthen the tail boom attachments and the upper longerons per the instructions in paragraph 2 of TB600N-007, dated 12 January 2004 or revision 1 dated 13 April 2006 or revision 2 dated 5 October 2006 before further flight. There is no requirement to contact MDHI as this modification in a terminating action to the requirements of this AD.

Note 2: The reference in figure 1 of SB600N-039 to the inspection hole at L167 mistakenly states that it was "Added by SB900-036." Inspection holes at L167 and R167 were originally specified by SB600N-036.

# 3. Tail boom Attach Fittings, Attach Bolts and Nutplates – Inspection and Replacement

Thoroughly clean all attach fittings and the surrounding areas and inspect the area for cracks. Replace the upper right attach fitting and all four nut plates, and paint the area inside of the attach fittings per the instructions in paragraph 2.B. of SB600N-043 dated 13 April 2006.

If any of the other three attach fittings are found cracked, modify the fuselage aft section to strengthen the tail boom attachments and the upper longerons per the instructions in paragraph 2 of TB600N-007, dated 12 January 2004 or revision 1 dated 13 April 2006 or revision 2 dated 5 October 2006 before further flight. There is no requirement to contact MDHI as this modification in a terminating action to the requirements of this AD.

With the aid of a 10x magnifying glass, inspect the threads and shanks of the attachment bolts for wear or damage in accordance with paragraph 2.B. of SB600N-043. If wear or damage is found, replace the attach bolts with airworthy bolts.

# 4. Upper and Lower, Left and Right Attach Fittings, Angles and Nutplates – Repetitive Inspection

Remove the plug buttons from the inspection holes, and with the aid of a bright light, inspect the upper and lower left and upper and lower right attach fittings, angles and nut plates for a cracks per the instructions in SB600N-039. This AD has no requirement to contact MDHI.

If a crack is found in the upper right attach fitting or in any angle, nut plate, longeron, or if thread wear or damage is found on any nut plate or bolt, replace the cracked or worn or damaged part, or modify the fuselage aft section to strengthen the tail boom attachments and the upper longerons per the instructions in paragraph 2 of TB600N-007, dated 12 January 2004 or revision 1 dated 13 April 2006 or revision 2 dated 5 October 2006 before further flight. There is no need to contact MDHI as this modification in a terminating action to the requirements of this AD.

5. Modify the fuselage aft section to strengthen the tailboom attachments and upper longerons per the instructions in paragraph 2 of TB600N-007 revision 2.

- **Note 3:** It is not necessary to contact the manufacturer per the instructions in the TB as the embodiment of the modification per the instructions in paragraph 2 of TB600N-007, revision 2 dated 5 October 2006 is terminating action to the requirements of this AD.
- Note 4: There is a slight discrepancy between SB600N-036 dated 2 November 2001 and SB600N-039 dated 9 December 2003 on the vertical location of the upper left inspection hole. Either location is acceptable for this AD.

Note 5:	MDHI CSP-HMI-2 section 53-40-30 pertains to the subject of this AD. (FAA AD 2008-20-05 refers)
Compliance:	<ol> <li>&amp; 2. Within the next 5 hours TIS unless already accomplished.</li> <li>Within the next 25 hours TIS unless already accomplished.</li> <li>At intervals not to exceed 25 hours TIS inspect the upper left and upper right attach fittings, angles and nut plates through the inspection holes at L167 and R167 per the instructions in paragraphs 2.B.(2) through 2.B.(4) of SB600N-039.</li> <li>At intervals not to exceed 100 hours TIS inspect the lower left and lower right attach fittings, angles and nut plates through the inspection holes at L166 and R166 per instructions in paragraphs 2.B.(2) through 2.B.(4) of SB600N-039.</li> <li>By 27 October 2010</li> </ol>
Effective Date:	27 October 2008
DCA/NOTAR/19 Amendment	Yaw Stability Augmentation System – Turn OFF, Placard & AFM
Applicability:	Model 600N aircraft fitted with Yaw Stability Augmentation System (YSAS) adapter tubes P/N 500N7218-1.
Note 1:	This AD supersedes DCA/NOTAR/17. The applicability revised to include all 600N 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.
	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
	<ul> <li>AIR SPEED LIMIT 100 KIAS or VNE, WHICHEVER IS LESS.</li> <li>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".</li> <li>4. Replace affected adapter tubes with airworthy parts that have a production date</li> </ul>
	<ul> <li>AIR SPEED LIMIT 100 KIAS or VNE, WHICHEVER IS LESS.</li> <li>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".</li> <li>4. Replace affected adapter tubes with airworthy parts that have a production date code stamp.</li> <li>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</li> </ul>
Note 2:	<ul> <li>AIR SPEED LIMIT 100 KIAS or VNE, WHICHEVER IS LESS.</li> <li>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".</li> <li>4. Replace affected adapter tubes with airworthy parts that have a production date code stamp.</li> <li>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.</li> </ul>
Note 2: Note 3:	<ul> <li>AIR SPEED LIMIT 100 KIAS or VNE, WHICHEVER IS LESS.</li> <li>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".</li> <li>4. Replace affected adapter tubes with airworthy parts that have a production date code stamp.</li> <li>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.</li> <li>Return the YSAS switch to the normal position.</li> <li>MD Helicopters Inc. SB600N-047 revision 1, dated 27 August 2008 and section 96-00-</li> </ul>
	<ul> <li>AIR SPEED LIMIT 100 KIAS or VNE, WHICHEVER IS LESS.</li> <li>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".</li> <li>4. Replace affected adapter tubes with airworthy parts that have a production date code stamp.</li> <li>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.</li> <li>Return the YSAS switch to the normal position.</li> <li>MD Helicopters Inc. SB600N-047 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.</li> <li>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.</li> </ul>
Note 3:	<ul> <li>AIR SPEED LIMIT 100 KIAS or VNE, WHICHEVER IS LESS.</li> <li>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".</li> <li>4. Replace affected adapter tubes with airworthy parts that have a production date code stamp.</li> <li>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.</li> <li>Return the YSAS switch to the normal position.</li> <li>MD Helicopters Inc. SB600N-047 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.</li> <li>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.</li> </ul>
Note 3:	<ul> <li>AIR SPEED LIMIT 100 KIAS or VNE, WHICHEVER IS LESS.</li> <li>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".</li> <li>4. Replace affected adapter tubes with airworthy parts that have a production date code stamp.</li> <li>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.</li> <li>Return the YSAS switch to the normal position.</li> <li>MD Helicopters Inc. SB600N-047 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.</li> <li>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.</li> <li>1. Before further flight</li> </ul>
Note 3:	<ul> <li>AIR SPEED LIMIT 100 KIAS or VNE, WHICHEVER IS LESS.</li> <li>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".</li> <li>4. Replace affected adapter tubes with airworthy parts that have a production date code stamp.</li> <li>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.</li> <li>Return the YSAS switch to the normal position.</li> <li>MD Helicopters Inc. SB600N-047 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.</li> <li>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.</li> <li>1. Before further flight</li> <li>2. Before further flight</li> </ul>

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>http://www.caa.govt.nz/airworthiness-directives/states-of-design/</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

Effective Date: 15 March 2013

#### 2020-06-11 Main Rotor Blade Link Assembly – Inspection

- Applicability: MDHI 600N helicopters fitted with a yaw stability augmentation system and with a main rotor (M/R) blade upper control collective/longitudinal link assembly (link assembly) P/N 600N7617-1.
- Effective Date: 28 April 2020

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

- Applicability: Model 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