

# CONTINUED AIRWORTHINESS

## 100-HOUR OR ANNUAL INSPECTION CHECKLIST

### 1. 100-Hour or Annual Inspection

#### NOTE:

This check sheet is designed to be used when performing 100-Hour or Annual inspections as defined under FAR, Part 43, Appendix D. This checklist, when completed, should be kept as a permanent part of the helicopter's records. Adherence to Maintenance Manual information is required, and the manual should be consulted when using the checklist.

- The Chap/Sect column of the following table is for reference unless a specific inspection requirement is called out. If there is only two numbers in the column, it refers to the Chapter. If there is three numbers, it refers to the Section the inspection is found.
- Refer to applicable Allison engine inspection check list for required engine maintenance.

Table 1. 100-Hour or Annual Inspection

Registration No. <u>N6254B</u>		Serial No. <u>RNO33</u>	
Helicopter Hours <u>2400</u>		Torque Events <u></u>	
Model	Requirement	Chap/Sect	Initial
<b>GENERAL</b>			
ALL	Thoroughly clean helicopter and engine prior to start of inspection.	20	<u>CAS</u>
ALL	Remove trim panels, covers and access panels as necessary.	52-50-00	<u>MB</u>
ALL	Ensure all placards and markings are installed.	11-00-00	<u>CAS</u>
ALL	Ensure compliance with component mandatory retirement schedule.	04-00-00	<u>CAS</u>
ALL	Calculate and record TE's or RIN's, of all affected components, in Table 2.	04-00-00	
ALL	Ensure compliance with component overhaul schedule.	05-10-00	<u>CAS</u>
ALL	Ensure compliance with all applicable airworthiness directives, service bulletins and special inspections.	N/A	<u>CAS</u>
ALL	Review aircraft maintenance records for recorded discrepancies and correct discrepancies as applicable.	N/A	<u>CAS</u>
ALL	Refer to related manufacturer's publications for detailed requirements on inspection of engine, starter/generator, battery and all installed STC equipment.	01-00-00	<u>CAS</u>
<b>EXTERIOR</b>			
ALL	* Air intake for cleanliness and foreign matter. * Visible portion of engine compressor inlet for foreign object damage.	71	<u>CAS</u>
<b>CAUTION:</b> Ensure that compressor cover is installed to prevent FOD.			<u>CAS</u>
ALL	Engine air plenum chamber for: * Damage and cleanliness. * Wear and security of internal components. * Particle separator mounting structure for cracks or damage.	71 53	<u>CAS</u> <u>CAS</u> <u>CAS</u>

Table 1. 100-Hour or Annual Inspection (Cont.)

Registration No. <u>N6253B</u>		Serial No. <u>RN033</u>	
Helicopter Hours <u>2400</u>		Torque Events _____	
Model	Requirement	Chap/Sect	Initial
ALL	<p>Fuselage upper surfaces for:</p> <ul style="list-style-type: none"> <li>* Damage and condition.</li> <li>* Mast base drain holes clean and free of debris (blow air thru holes to ensure no clogging).</li> <li>* Engine air inlet fairing free from damage. No delamination noted. Bypass door operationally checked. Seals free from damage.</li> <li>* Engine access doors for proper operation of latches and closure, distortion, damage, cracks and security.</li> </ul>	52 53	<p>GM</p> <p>GM</p>
ALL	<p>Fuselage for:</p> <ul style="list-style-type: none"> <li>* Damage and condition.</li> <li>* Compartment fresh air vents in doors and front of canopy for easy of operation and security.</li> <li>* Fuel cell vent fairings free of obstructions and obvious damage.</li> <li>* Pilot's and passenger/cargo compartment doors for condition of door glass, vents and proper operation of latching and locking mechanisms.</li> <li>* Door hinges and pins for play or wear. Ensure door pin locking tab is engaged with slot in frame.</li> <li>* No evidence of oil leakage around fuselage drain holes.</li> <li>* Aft fuselage internal skin surface, located directly above engine compartment, for evidence of cracks. Observe area through tail rotor control bellcrank access door.</li> </ul>	52 53	<p>GM</p> <p>GM</p>
369D/E/FF	Sta. 142.0 tail rotor control bellcrank support for cracking or damage, use bright light and mirror (Ref. Upper Fuselage and Tailboom Control Linkage Inspection).	67-20-10	N/A
500/600N	<p>Anti-torque fan inlet for:</p> <ul style="list-style-type: none"> <li>* Screen for cleanliness and damage.</li> <li>* Attaching hardware for security.</li> <li>* Interior of fan inlet for cleanliness and damage.</li> <li>* Driveshaft cover for damage.</li> </ul>	53	<p>CAS</p> <p>CAS</p>
ALL	<ul style="list-style-type: none"> <li>* Check for no gap between tailboom and fuselage at attach points.</li> <li>* Check tailboom skin around stabilizer fittings for cracks.</li> <li>* Tailboom attachment-to-fuselage for security, evidence of corrosion or cracks, loose rivets or buckling.</li> </ul>	53	<p>CAS</p> <p>CAS</p> <p>CAS</p>

Registration No. \_\_\_\_\_  
Helicopter Hour \_\_\_\_\_  
Model \_\_\_\_\_  
500/600N

Table 1. 100-Hour or Annual Inspection (Cont.)

Registration No. <u>N6253B</u>		Serial No. <u>RND33</u>	
Helicopter Hours <u>2400</u>		Torque Events _____	
Model	Requirement	Chap/Sect	Initial
500/600N	<ul style="list-style-type: none"> <li>* Thruster cones and tip cap (500N only) for damage and security. Inspect for wear between thruster cones and tailboom at points of contact.</li> <li>* Using a flashlight and 10X magnifying glass, inspect horizontal stabilizer mounting brackets for cracks (pay particular attention to the forward inboard legs) (Ref. Tailboom Inspection).</li> <li>* Using a bright flashlight, inspect fore and aft radii of the lower portion of the three upper slot bridges for cracks, illuminate area under the flap. The flap may be raised slightly, using finger pressure only, to aid in checking this area (Ref. Tailboom Inspection).</li> <li>* Using a bright light and 10X magnifying glass, inspect the four tailboom attachment lugs for cracks and fiber damage. Pay particular attention to area on top of the lug from the radius block to 2 inches aft (Ref. Tailboom Inspection).</li> <li>* Tailboom closeout fairings for security of attachment hardware. Inspect for damage and chafing between closeout fairing and tailboom.</li> </ul>	53-40-30 53-50-30	<p>CAB</p> <p>CAB</p> <p>CAB</p> <p>CAB</p> <p>CAB</p>
369D/E/FF	Horizontal stabilizer for: <ul style="list-style-type: none"> <li>* Skin damage and loose rivets.</li> <li>* Tip plates for damage. Check for secure attachments (Ref. Horizontal Stabilizer and Tip Plates Inspection).</li> </ul>	53-50-10	N/A
500/600N	Horizontal stabilizer for: <ul style="list-style-type: none"> <li>* Skin damage and loose rivets.</li> <li>* Mounting fittings for cracks and security.</li> <li>* Stabilizer attach bolts for security.</li> </ul>	53	<p>CAB</p> <p>CAB</p> <p>CAB</p>
369D/E/FF	Vertical stabilizer for: <ul style="list-style-type: none"> <li>* Damage to leading and trailing edges and damaged stressed side panels (no repair of side panels permitted).</li> <li>* Mounting fittings for cracks and security.</li> <li>* Tail skid for obvious damage and security (Ref. Vertical Stabilizer Inspection).</li> </ul>	53-50-10	N/A
500/600N	Vertical stabilizers for: <ul style="list-style-type: none"> <li>* Damage to leading or trailing edges and damaged side panels.</li> <li>* Cracks in skin, no cracks permitted (pay particular attention to areas around mounting bolts).</li> <li>* Mounting fittings for cracks and security.</li> <li>* Stabilizer attach bolts for security.</li> <li>* Stabilizer mount bushings for wear.</li> <li>* Excess play in control linkage, bearings and security of attaching hardware.</li> </ul>	53	<p>CAB</p> <p>CAB</p> <p>CAB</p> <p>CAB</p> <p>CAB</p>

**NOTE:**

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Table 1. 100-Hour or Annual Inspection (Cont.)



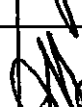
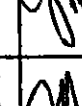

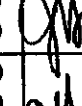

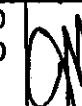
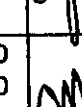

Registration No. <u>A16255B</u>		Serial No. <u>RN 033</u>	
Helicopter Hours <u>2400</u>		Torque Events _____	
Model	Requirement	Chap/Sect	Initial
<b>NOTE:</b> With main rotor blades stationary, some friction drag is felt in the cyclic. The collective also has some drag, plus resistance of the collective bungee spring. Heavy drag is an indication of droop stop deformation caused by droop stop pounding.			
ALL	Engine N <sub>1</sub> and N <sub>2</sub> (N/A 600N) power controls for: * Free movement, full travel, security, obvious damage and proper rigging. * Pilot's and copilot's throttle rigging checks at <b>FULL, GROUND IDLE</b> and <b>CUTOFF</b> positions.	76	CAB CAB
<b>MAIN ROTOR</b>			
ALL	Main rotor mixer control push-pull rods, links, scissors and bellcranks for excessive bearing play, bent rods or links, worn bushings and cracked bellcranks or brackets; all rodends centered.	62 67	
ALL	Main rotor pitch control rod assemblies, upper and lower rod end bearing for evidence of axial play and for any extrusion, displacement or damage to the bearing teflon liner. Check that all rodends are centered and security of lockwire (Ref. Pitch Control Rod Inspection).	62-30-00 62-30-60	
ALL	Swashplate for evidence of galling or corrosion of spherical bearing, and seals for deterioration and evidence of grease leakage. Upper and lower dust boots free from damage and security. Swashplate interrupters and magnetic pick-up secure.	62	
ALL	Main rotor hub retention strap assemblies for breaks or cracks in strap pack laminations. Check visible portions of both lead and lag legs of pack in each pitch housing (Ref. Main Rotor Strap Pack Lamination Inspection). Refer to 04-00-00 for strap pack lamination airworthiness requirements.	62-20-00 62-20-60	
ALL	Outboard ends of main rotor hub retention strap assemblies for gaps between pack laminates (Ref. Main Rotor Strap Pack Lamination Inspection).	62-20-00 62-20-60	
ALL	* Main rotor hub feathering bearings for excessive wear (Ref. Main Rotor Hub Inspection). * Main rotor droop stop ring for corrosion, dents and scratches. * Main rotor droop stop striker plate rollers for play and excessive wear.	62-20-00 62-20-60	
ALL	Main rotor blade damper assemblies for obvious damage, security and excessive play in blade and pitch housing bearings, bonding of elastomeric material and corrosion (Ref. Main Rotor Damper and Attachments Inspection).	62-20-00 62-20-60	
ALL	Using bright light and 5X magnifying glass, inspect all main rotor hub assembly lead-lag links for corrosion, discoloration, pitting, intergranular cracks or stress corrosion cracks. Any discoloration or pitting is evidence of more than superficial corrosion, and the main rotor hub must be removed for replacement of lead-lag links (Ref. Main Rotor Hub Inspection).	62-20-00 62-20-60	
ALL	Main rotor hub bearings for roughness by rotating main rotor assembly several times by hand and listening for unusual noise (Ref. Main Rotor Hub Inspection).	62-20-00 62-20-60	
<b>NOTE:</b> Do not confuse with normal no-load transmission and overrunning clutch noise.			
ALL	Main rotor blade and damper attach pins tight and levers properly locked.	62	

Table 1. 100-Hour or Annual Inspection (Cont.)

Registration No. N6253BSerial No. RN033Helicopter Hours 2400

Torque Events \_\_\_\_\_

Registration No.  
Helicopter H  
Model  
NOT

Model	Requirement	Chap/Sect	Initial
ALL	Entire trailing edge and tabs for nicks, scratches and cracks generating from trailing edge (Ref. Main Rotor Blade Inspection).	62-10-00	<i>PK</i>
<b>WARNING: Using a bright light and 5X to 10X magnifying glass, inspect root fitting, attach lugs and doublers for cracks and security.</b>			
ALL	Inspect main rotor blade root fittings, attach lug and lead-lag link attach lug every 100 hours in accordance with Main Rotor Blade Upper and Lower Root Fitting, Attach Lug and Lead-Lag Link Attach Lug Inspection (100 Hour). Pay particular attention to the lower side of the root fitting.	62-10-00	<i>PK</i>
ALL	Using a bright light and 10X magnifying glass, inspect main rotor blade abrasion strips for security of bonding on lower and upper surfaces, and by tapping at bond lines. Any blisters, bubbling or lifting of abrasion strip indicates a void (Ref. Main Rotor Blade Inspection).	62-10-00	<i>PK</i>
ALL	Tip area of main rotor blades for evidence of corrosion; pay particular attention to mating area of blade skin-to-tip weight interface; verify integrity of sealant coating (Ref. Main Rotor Blade Forward Tip Cap Inspection and Corrosion Protection).	62-10-00	<i>PK</i>
ALL	Drain holes in main rotor blade aft tip cap and vent holes in lower skin for clogging. Main rotor tip caps for security and evidence of corrosion.	62	<i>PK</i>
369D/E/FF 500N	Main rotor hub fairing for cracks, damage and security.	62	N/A
<b>DRIVE TRAIN</b>			
ALL	Main transmission lubrication and cooling system for: * Main transmission case and cooling installation for evidence of leakage and security of attachment. * Oil cooler blower, mount, ducting and hardware for security and damage. * Oil lines for chafing damage. * Clamps attached to oil lines for evidence of cushion wear or deterioration (if noted, remove clamp and inspect tube under clamp for chafing damage). * Pressure switch for security and deterioration; wiring for chafing.	63	<i>PK</i>
369D/E/FF 500N	Tach generator for security and deterioration; wiring for chafing.	63	N/A
ALL	Rotor brake for: * Pucks and disc for wear and general condition. * Hydraulic lines for security and leaks. * Master cylinder for leaks. * Air in system (spongy feel at brake actuating handle when force is applied).	63	<i>PK</i>
ALL	Overrunning clutch for: * Evidence of oil leakage. * Proper operation: turn rotor in forward direction by hand - engine must decouple; turn rotor in reverse direction - engine must rotate (listen for turbine noise during reverse rotation). Rotor brake disc should not drag.	63	<i>PK</i>

Table 1. 100-Hour or Annual Inspection (Cont.)

Registration No. <u>N6255B</u>		Serial No. <u>RN 033</u>	
Helicopter Hours <u>2400</u>		Torque Events _____	
Model	Requirement	Chap/Sect	Initial
<b>NOTE:</b> Normal seal drag may be sufficient to rotate engine at low rpm.			
369D/E/FF 500N	With 369A5350 overrunning clutch installed, regrease clutch splines.	63	N/A
ALL	Engine-to-main transmission drive shaft couplings and shaft for condition and security of attachment. <u>Bendix couplings only:</u> inspect shaft coupling diaphragms for scratches, nicks or cracks (Ref. Main Transmission Drive Shaft Inspection (Bendix)).	63-10-00	DPY
500/600N	* Main transmission-to-fan transmission drive shaft for dents, bulkhead chafing and obvious damage. * Inter-Connect drive shaft for dents and obvious damage. * Free movement of control rod thru interconnect drive shaft.	63	CRS ROR Fan Shaft
369D/E	<u>Bendix couplings only:</u> Check tail rotor blade tip movement in excess of 0.75 inch, without main rotor blade movement, when tail rotor blades are rocked back and forth in plane of rotation.	63	N/A
369D/E/FF	Tail rotor drive shaft for: * Evidence of buckling, dents, bulkhead chafing and obvious damage. * Align aft coupling index stripe with corresponding tail rotor transmission stripe and verify that bulkhead-to-drive shaft index stripes align (Ref. Tail Rotor Drive Shaft Twist Inspection).	63-15-10	N/A
<b>ANTI-TORQUE</b>			
<b>Tail Rotor System</b>			
369D/E/FF	Tail rotor transmission for: * Corrosion, excessive oil leakage, cracks and other damage. * Check torque of mounting nuts (also tailboom extension hardware on 369FF helicopters) (Ref. Tail Rotor Transmission Installation).	63-25-10	N/A
369D/E/FF	Tail rotor pitch control assembly for: * Binding and unusual sounds (teeter blades to check for binding). * Teeter bearings for axial or radial play (no play allowed). * Control rod, pitch control links, hub and drive fork for play or damage. * Boots for installation and deterioration. * Retaining nut and lockwasher secure (no broken tangs noted and nut has not rotated). * Pitch control for evidence of seal rotation or loss of grease.	64	N/A
369D/E/FF	Drive fork for; * Elastomeric bearing elements for bond failure. * Apply teetering force by hand (stop-to-stop) to rotor blades and inspect elastomers for radial-molded ridges on each bearing face. Discontinuity in molded ridges indicates bearing failure. There should be no apparent motion between the cage and fork, observed motion indicates bond failure.	64	N/A
<b>NOTE:</b> Light swelling, pock marks and crumbs are surface conditions and do not indicate bearing failure.			
369D/E	If equipped with conical-type teetering bearings, torque check teeter bolt.	64	N/A

MD Helicopters, Inc.  
MAINTENANCE MANUAL

Table 1. 100-Hour or Annual Inspection (Cont.)

Registration No. 162536 Serial No. 21033  
 Helicopter Hours 2400 Torque Events \_\_\_\_\_

Registration No. 162536  
 Helicopter Hours \_\_\_\_\_  
 Model \_\_\_\_\_  
 WARNING: per \_\_\_\_\_

Model	Requirement	Chap/Sect	Initial
369D/E/FF	Tail rotor blades for: <ul style="list-style-type: none"> <li>* Evidence of damage, including leading edges, trailing edges, skin.</li> <li>* Open vent and drain holes.</li> <li>* Loose or damaged tip caps.</li> <li>* Rivets securing tip cap for installation and condition.</li> <li>* Abrasion strips free of damage, no excessive erosion noted and no separation in bond around edges or at tip end of blade (Ref. Tail Rotor Blade Inspection).</li> <li>* While holding hub stationary, check tail rotor blade pitch bearings for lead-lag play in excess of 0.250 inch (6.35 mm) at blade tip. If excess play is found, remove blades, replace pitch bearings and inspect hub-to-pitch bearing contact surface of hub (Ref. COM).</li> </ul>	64-10-00	N/A
369D/E/FF	Perform Tail Rotor Balance.	18	N/A
<b>NOTAR® Anti-Torque System</b>			
500/600N	<ul style="list-style-type: none"> <li>* Rotate rotor system and check for unusual noises.</li> <li>* Fan assembly for cleanliness and damage.</li> <li>* Fan blades for excessive play.</li> <li>* Fan seal for cleanliness, cracks, damage and corrosion.</li> <li>* Check gap between fan blades and tip seal.</li> <li>* Check gap between fan blades and hub.</li> </ul>	64	CMB CMB CMB CMB
<b>NOTE:</b> If any of these gaps for any blade exceeds the average gap of the other blades by more than 0.10 inch (2.54 mm), remove and inspect the tension-torsion strap for that blade.			
500/600N	Perform Fan Blade Inspection (100-Hour).		
500/600N	Fan Transmission for corrosion, excessive oil leakage, cracks, damage and security on mounting frame. Drain line for cracks and security.	64-25-30	CMB
500/600N	Rotating cone control tubes and cables for freedom of movement and unusual sounds.	63	CMB
		67	
<b>ELECTRICAL</b>			
<b>NOTE:</b> When possible, use auxiliary power source, not battery, during <b>POWER ON</b> inspection.			
ALL	XMSN OIL TEMP, FUEL FILTER and CHIPS warning lights; electrical circuits for continuity to lamps by connecting jumper wire from each sender or chip detector terminal stud to an unpainted grounding surface; check each light for illumination (Ref. Caution/Warning System Operational Check).	95-00-00	CMB
ALL	Push <b>PRESS TO TEST</b> switch: all caution and warning lights <b>ON</b> ; depress instrument light rheostat knob; verify <b>CAUTION</b> lights dim.	95	CMB
369D/E/FF 500N	Conduct operational check of automatic reignition system; igniter noise heard and reignition indicator light functions. Reset as required.	PFM	N/A
<b>CAUTION:</b> Do not leave landing light <b>ON</b> for more that one minute during next check; lamp will overheat and lamp life will be shortened.			
ALL	Exterior lighting (landing, position and anti-collision lights) for proper operation; all switches <b>OFF</b> after check.	96	CMB



Table 1. 100-Hour or Annual Inspection (Cont.)

Registration No. <u>N62530</u>		Serial No. <u>RN033</u>	
Helicopter Hours <u>2400</u>		Torque Events _____	
Model	Requirement	Chap/Sect	Initial
<b>WARNING: Do not leave pitot heater ON for more than one minute during next check; severe burns to personnel may result.</b>			
ALL	PITOT HTR switch ON for a few seconds. Heated pitot tube will feel warm to the touch; turn switch to OFF after check.	95	OP
600N	Apply power to aircraft and disconnect CIT sensor (Ref. CIT (Compressor Inlet Temperature) Sensor Replacement); Verify ECU FAIL light illuminates. Re-connect CIT sensor.	76-00-00	OP
ALL	Clean battery and inspect for: <ul style="list-style-type: none"> <li>* Connector pins for evidence of corrosion.</li> <li>* Leakage (if battery is leaking (wet), remove and replace battery).</li> <li>* Battery case for cracks in support flanges.</li> <li>* Dc wiring for chafing caused by wiring rubbing against battery case.</li> <li>* Deep cycle charge (recondition) battery every 100 hours or on conditional basis at operator's discretion.</li> </ul>	96	OP CB CB CB CB
ALL	Functionally check and inspect all installed avionics, auxiliary or optional systems and equipment. Do not actuate hoist guillotine or emergency floats.	97	OP
<b>ENGINE COMPARTMENT</b>			
ALL	Exhaust stack(s) and exhaust supports for cracks, defects and improper attachment.	78	CB
ALL	Engine compartment plumbing and electrical relay installation on left or right side oleo (landing gear damper) support fitting for good condition and security of mounting. Diodes for broken terminals and wires. Diode bracket for security and corrosion.	96	OP
ALL	Entire engine for: <ul style="list-style-type: none"> <li>* Loose bolts; loose or broken connections.</li> <li>* Accessories for security and broken or missing lockwire.</li> <li>* Fuel and oil lines for chafing and kinking.</li> <li>* Fuel drain line valve for leakage.</li> <li>* Oil cooler and cooler deflector for security and obvious damage.</li> <li>* Accessible areas for obvious damage; evidence of fuel and oil leaks.</li> <li>* Engine mounts for cracks and play in mounting hardware at engine and airframe (retorque any loose mounting bolts).</li> <li>* Fuel control and compressor exterior for condition and security.</li> </ul>	71 75 76	OP CB CB CB CB CB CB CB
369D/E/FF 500N	RPM governor lever control rod (replace if aluminum).	76-10-00	N/A
369D/E/FF 500N	Clean and lubricate drive splines of starter-generator drive shaft, and female splines in engine accessory gear case on dry spline installations.	96	N/A
369D/E/FF 500N	Anti-ice air tubes and compressor scroll for cracks or breaks at the anti-ice air valve and bleed port. If cracks exist, check engine for possible vibration causes (Ref. Engine Anti-icing System and applicable Allison Engine Operation and Maintenance Manual).	75-10-00	N/A

Table 1. 100-Hour or Annual Inspection (Cont.)

Registration No. <u>16253B</u>		Serial No. <u>RN 033</u>	
Helicopter Hours <u>2400</u>		Torque Events _____	
Model	Requirement	Chap/Sect	Initial
<b>AFTER INSPECTION</b>			
ALL	Touch-up all damaged paint and exterior markings, as necessary.	20	<i>CMS</i>
ALL	Ensure all fluid levels are correct; service as required.	12	<i>CMS</i>
ALL	Perform operational check of particle separator filter (Ref. Scavenge Air Operational Check).	71-10-10	<i>CMS</i>
ALL	Install or close all stressed panels, covers and trim panels removed or opened for inspection. Check closure, fit and security. All loose equipment for proper stowage.	52-50-00	<i>CMS</i>
<b>CAUTION:</b> Helicopter must not be flown unless controls access panel and fuel cell access panels in cargo compartment are securely installed. These are stressed panels.			
<b>POST INSPECTION RUN UP</b>			
See applicable Pilot's Flight Manual for cockpit check and engine starting procedures. For troubleshooting procedures, refer to applicable section of this manual.			
<b>100-HOUR OR ANNUAL INSPECTION CERTIFICATION</b>			
It is certified that this helicopter has been thoroughly inspected as required by FAR, found to be airworthy, and appropriate entries made in the helicopter log book. It is further certified that the helicopter conforms to FAA specifications, that all FAA Airworthiness Directives and Manufacturer's Service Notices and Maintenance Manual data have been complied with, and the helicopter records are in proper order			

Signature \_\_\_\_\_

Rating Type or Certificate No. \_\_\_\_\_

Date 10-3-02**2. Retirement Index Numbers Attachment**

Table 2 is to be used for calculating and recording the Retirement Index Number (RIN) or Torque Events (TE) of components that are affected by Torque Events (TE).

This record of RINs/TE's should be kept as a permanent record.

Refer to Section 04-00-00 for components requiring calculation of RIN's/TE's and information pertaining to calculation of RIN's/TE's.

Component must be scrapped when it reaches 1,000,000 RIN's or maximum TE's (Ref. Sec. 04-00-00).

Table 2. Permanent Record of Retirement Index Numbers/Torque Events

Component	Part No.	Serial No.	Hours	TE's	RIN's	Signature

Chap/Sect	Initial

[illegible]

1. 300-4

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# CONTINUED AIRWORTHINESS 300-HOUR INSPECTION CHECKLIST

## 300-Hour Inspection

This check sheet is designed to be used when performing scheduled inspections as defined under FAR Part 91. This checklist, when completed, should be kept as a permanent part of the helicopter's records. Adherence to Maintenance Manual information is required, and the manual should be consulted when using the checklist.

### NOTE:

- The Chap/Sect column of the following table is for reference unless a specific inspection requirement is called out. If there is only two numbers in the column, it refers to the Chapter. If there is three numbers, it refers to the Section the inspection is found.
- Refer to applicable Allison engine inspection check list for required engine maintenance.

Table 1. 300-Hour Inspection

Table 1. 300-Hour Inspection					
Registration No. <u>N6253B</u>		Serial No. <u>RN033</u>		Helicopter Hours <u>2400</u>	
Requirement				Chap/Sect	Initial
Model					
EXTERIOR					
ALL	Retorque tailboom attachment bolts.			53	CAS
500/600N	Remove rotating cone and tip cap (500N) and inspect: <ul style="list-style-type: none"> <li>* Cables, cable ends and pulleys for condition and security. Perform Forward and Center Cable Assembly Inspection (Ref. Sec. 67-20-30).</li> <li>* Cone rollers for condition and security.</li> <li>* Four fasteners that attach 500N3760-1 upper input shaft to the stationary thruster for play (replace pins and collars if any play is found).</li> <li>* Three fasteners that attach 500N3759 support shaft assembly for play (if play is found in top bolt, retorque to <b>10 - 15 Inch-pounds (1.13 - 1.69 Nm)</b>. Replace pins and collars if any play is found in bottom fasteners).</li> </ul> Reinstall rotating cone and tip cap (500N).			53	CAS CAS CAS CAS
369D/E/FF	Remove engine inlet bypass door and check latches, hinges and hardware for wear and security. Remove and replace the latch retention cotter pin (located inside the attach "U" clamp) (Ref. Engine Air Inlet Bypass Door 300-Hour Inspection).			71-10-10	N/A
369D/E/FF	Check horizontal and vertical stabilizer attach bolts for proper torque (Ref. Horizontal Stabilizer Tip Plate Installation and Vertical Stabilizer Installation).			53-50-10	N/A
369D/E/FF	Check lower surface of horizontal stabilizer for drain holes. Also check for gaps between upper and lower doublers and stabilizer skin (Ref. Horizontal Stabilizer and Tip Plates Inspection).			53-50-10	N/A
500/600N	Control tubes and bellcranks in horizontal stabilizer for condition and security.			53	CAS

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Table 1. 300-Hour Inspection (Cont.)

Registration No.	Serial No.	Requirement	Helicopter Hours	Chap/Sect	Initials
500/600N		Inspect S.A.S. system for: * Actuator for security and damage (no damage allowed). * Wiring for condition and security (no wire chaffing, fraying or insulation cracking allowed). * Actuator mounting bracket for cracks, pay particular attention to area around four rivet attach holes (no cracks allowed). * Rate gyro and control box for security in mount and electrical connector secure. Inspect mount for security and condition (no corrosion or cracks allowed).		67	N/A
<b>LANDING GEAR</b>					
ALL		Perform Landing Gear Inspection.			
ALL		Perform Cabin Entry Step Inspection.		32-10-00	CAS
<b>CABIN</b>					
ALL		Remove instrument console base covers and inspect anti-torque pedal crossover torque tube and bellcrank for cracks, damage and security.		67	CAS
ALL		Push-pull rods for excessive bearing play, wear and security.		67	CAS
ALL		Perform Tunnel-Routed Control Rod Inspection.		67-10-00	CAS
ALL		Check oil tank for security and evidence of leakage and damage.		79	CAS
<b>MAIN ROTOR</b>					
ALL		Perform Swashplate Inspection.			
ALL		Perform Lead-Lag Bolt Inspection.		62	CAS
ALL		Perform Main Rotor Hub Droop Angle Check.		62	CAS
ALL		Perform Main Rotor Blade Inspection.		62	CAS
ALL		Inspect main rotor mast, mast base and mast base support structure for evidence of cracks. Check with bright light and 5X magnifying glass. Visually check mast support bolts for security and condition. Inspect internal bore for chipping, orange peeling or flaking paint (Ref. Main Rotor Static Mast Inspection and Repair).		63-30-00	CAS
ALL		Inspect hoisting eye-bolts for cracks or corrosion.		63	CAS
369D/E/FF 500N		369D25510 drive shaft only, perform Main Rotor Drive Shaft Inspection (300-Hour).		63-10-00	N/A
<b>DRIVE TRAIN</b>					
ALL		Remove, inspect and clean main transmission chip detectors.		63	CAS
369D/E/FF 500N		369A5350 Overrunning Clutch: Perform Ball Bearing Inspection and Grease Repack (300 Hour).		COM	N/A
ALL		369F5450 Overrunning Clutch: Perform Ball Bearing Grease Repack (300 Hour).		COM	HH
369D/E/FF		Remove tail rotor drive shaft and check boom fairing and tail boom for buckles, dents, bulkhead chafing and obvious damage.		53	N/A
369D/E/FF		Remove tailboom control rod and inspect for wear though hard anodized surface (Ref. Tailboom Control Rod Replacement); inspect grommets for wear and deterioration.		67-20-10	N/A

new  
bearing  
inspected  
by  
[signature]

Table 1. 300-Hour Inspection (Cont.)

Inspection No.	Serial No.	Helicopter Hours	Chap/Sect	Initial
<b>Requirement</b>				
		Check shaft damper for proper friction drag. Inspect damper for damage and security (Ref. Tail Rotor Drive Shaft Damper Inspection).	63-15-10	N/A
		Check forward and aft coupling bolt and socket for indication of contact, Bendix couplings only (Ref. Tail Rotor Drive Shaft Inspection).	63-15-10	N/A
<b>ANTI-TORQUE</b>				
<b>Tail Rotor System</b>				
369D/E/FF		Remove, inspect and clean chip detectors.	63	N/A
369D/E/FF		Check for contact between tail rotor bellcrank and tail rotor transmission housing at extreme right pedal travel.	67	N/A
369D/E/FF		Tail rotor assembly: Elastomeric teeter bearings for wear; bond between concentric metal cones and elastomer rings of bearing assembly (Ref. Elastomeric Bearing Inspection).	64-20-00	N/A
369D/E/FF		Remove blade stop for thorough inspection; in particular, check for cracks or splits in stem area (Ref. Tail Rotor Blade Stop Inspection).	64-30-00	N/A
<b>NOTAR® Anti-Torque System</b>				
500/600N		Check balance weights for security. If any balance weight stud is found to be loose, perform Fan Balance Stud Replacement.	64	CAB
500/600N		Remove, inspect and clean fan transmission chip detector.	63	CAB
500/600N		Remove tailboom: Perform visual inspection of fan assembly for: * Cracks, nicks or corrosion. * Blades for cracks, nicks or impact damage. * Gap between fan blade and tip seal and gap between fan blade and hub (inboard end of the blade). If any of these gaps for any blade exceeds the average gap of the other blades by more than 0.10 inch (2.54 mm), remove and inspect the tension-torsion strap for that blade. * Fan liner for cracks, debonding or corrosion of liner material. * P-seal for tears, deterioration and debonding. Reinstall tailboom (on 600N only, install new tailboom mounting bolts).	53 64	CAB CAB CAB CAB
<b>ELECTRICAL</b>				
<b>NOTE:</b> When possible, use auxiliary power source during <b>POWER ON</b> inspection, not battery.				
ALL		Perform Battery Temperature Sensing Switches - Testing.	96	
ALL		Check TOT indicating system for proper calibration (Ref. TOT Indicating System Calibration). <i>-20 ON COMPARISON WAS THE MOST</i>	95-30-00	
<b>ENGINE COMPARTMENT</b>				
ALL		Inspect starter/generator for: * Condition of brushes, electrical connections and commutator. * Screens for clogging. * Condition of O-ring on drive spline. * Damper backplate and clutch for condition.	96	CAB CAB CAB CAB

Table 1. 300-Hour Inspection (Cont.)

Registration No. _____		Serial No. _____		Helicopter Hours _____	
Model	Requirement			Chap/Sect	Initial
ALL	Perform Fuel Filter (Bypass) Caution Light Pressure Switch Test.			28-00-00 28-00-60	JH
<b>NOTE:</b> Also, perform this operational check whenever low pressure fuel pump filter element is replaced for any reason, or if contaminated.					

Clean, inspect and reassemble  
Swashplate Bearings  
EVERY 100 HOURS AFTER  
600N  
EVERY 60  
Remo  
Inc.



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Table 1. Special Inspections Hourly (Cont.)

What to Inspect	Chap/Sect
Inspect and relubricate (repack) tail rotor swashplate bearings (Ref. Tail Rotor Swashplate Bearing Regreasing).	64-30-00 N/A
<b>100 HOURS AFTER 6000 HOURS FLIGHT TIME</b>	
Remove interior trim from aft side of Sta. 78.50 bulkhead and tunnel control boot. Inspect interface between 369H2564 tunnel beams and 369D22508-7 web	25 N/A
<b>1000 HOURS</b>	
Replace the 369H6414 Edgelighted Panel (Ref. Instrument Panel Lights Description and Replacement).	96-40-00 N/A

Table 2. Special Inspections Calendar

Model	What to Inspect	Section
<b>(DAILY) BEFORE FINAL SHUTDOWN IN CORROSIVE ENVIRONMENT</b>		
ALL	It is recommended that before shutdown from the last flight of the day, for helicopters operating in a corrosive environment, a Tri-Flow wash be performed on the main rotor hub and strap pack assembly (Ref. Main Rotor Hub Corrosion Prevention (Tri-Flow Wash Procedure)).	20-40-00 N/A
<b>(DAILY) AFTER FINAL SHUTDOWN IN CORROSIVE ENVIRONMENT</b>		
500N	It is recommended that after shutdown from the last flight of the day, for helicopters operating in a corrosive environment, the splitter bungee spring be sprayed with Tri-Flow.	20 N/A
<b>EVERY 6 MONTHS OR 5 INFLATIONS</b>		
ALL	Inflate emergency floats to 4.5 psi (0.3164 kg/cm <sup>2</sup> ) for one hour. Check for leaks and condition. Continue inflation to 5.5 psi (0.3867 kg/cm <sup>2</sup> ) and check that chamber pressure relief valves operate. Pressure-test float compartments (Ref. Float Compartments Pressure Test).	32-82-00 N/A
<b>AFTER COMPRESSOR WATER WASH/RINSE WITH PARTICLE SEPARATOR INSTALLED</b>		
ALL	During engine run after compressor water wash with particle separator installed, it is recommended that scavenge air switch be switched on to remove any moisture that has accumulated in the solenoid air valve.	RFM
<b>BEFORE OPERATION OF BREEZE HOIST SYSTEM</b>		
ALL	Prior to daily hoisting operations: unreel and inspect entire length of hoist cable for broken strands (cluster of 7 wires), excessive broken wires, corrosion, and security of attachment to cable drums and swivel hook. Replace cable if broken strand or excessive broken wires are noted. (Refer to hoist manufacturer's handbook, Table 201.)	01 N/A

Table 1. Special Inspections Hourly (Cont.)

Model	What to Inspect	
ALL	Mist eliminator and access door for proper installation (attaching hardware for security).	
ALL	Hoist installation (if installed) for condition and security.	
<b>EVERY 600 HOURS OR ONE YEAR (Whichever occurs first)</b>		
ALL	For 369D25100 main transmission serviced with Mobil SHC 626 oil and 369F5100 main transmission, drain main transmission oil system; Flush with sufficient new oil to remove sludge accumulation. Replace filter and refill with new oil.	12 63-10-00
369D/E/FF 500N	For 369F5510 Main Rotor Drive Shaft, perform Main Rotor Drive Shaft Inspection.	63-10-00
600N	For 600N5510 Main Rotor Drive Shaft, perform 600N5510 Main Rotor Drive Shaft Inspection (Ref. 600N5510 and 369F5510 Main Rotor Drive Shaft Inspection).	63-10-00
<b>EVERY 600 HOURS</b>		
ALL	Cyclic control system for excessive slack or free play. Cyclic control stick, at grip, for play in excess of 3/8 inch (9.53 mm) (Ref. Main Rotor Flight Control System 600-Hour Inspection).	67-10-00
ALL	For 369D21400-503 (369D/E/FF - 500/600N) or M50452 (369D/E/FF - 500N) lead-lag dampers with less than 4200 hours, inspect for deterioration until deterioration is sufficient to retire assembly (Ref. Main Rotor Damper and Attachments Inspection and Main Rotor Damper Weight Loading and Extension Check).	62-20-00 62-20-60 NA 2400hrs
500/600N	Using a dial indicator, measure the rotation of the fan pitch control clevis mounted on the fan pitch control tube. If clevis rotation is more than 0.025 in. (0.635 mm), inspect splines on fan pitch control tube (Ref. Fan Pitch Control Tube Inspection) and splines in tube support (Ref. Tube Support Inspection). <i>out of tolerance tube support &amp; tubeassy worn beyond limits</i>	63-25-30 67-20-30
<b>EVERY 1200 HOURS</b>		
ALL	Test battery over temperature sensor unit for proper operation and accuracy (Ref. Battery Temperature Sensing Equipment Operational Check).	96-05-00
500/600N	Perform visual inspection, using a 10x magnifying glass, on horizontal stabilizer mounting brackets (pay particular attention to the forward inboard legs).	53 CAS
500N	Regrease YSAS actuator (Ref. YSAS Actuator Regrease Procedure).	67-20-30
<b>EVERY 1200 HOURS OR 2 YEARS (WHICHEVER OCCURS FIRST)</b>		
500/600N	Clean, inspect and relubricate (repack) fan support and pitch plate bearings (Ref. Anti-Torque Fan Bearing Regreasing).	64-25-30
500/600N	Perform Anti-Torque Fan Inspection.	64-25-30
500/600N	Check pitch bearing retainer for cracks or damage.	64
<b>EVERY 2700 HOURS OR 2 YEARS (WHICHEVER OCCURS FIRST)</b>		
600N	Main rotor lower thrust bearing assembly must be relubricated every 2 years or 2700 hours, whichever occurs first.	62-20-60
600N	Clean, inspect and relubricate (repack) main rotor swashplate bearings.	62-30-60
<b>EVERY 2770 HOURS OR 2 YEARS (WHICHEVER OCCURS FIRST)</b>		
369D/E/FF 500N	Clean, inspect and relubricate (repack) main rotor swashplate bearings and main rotor hub tapered bearings (Ref. Main Rotor Hub Tapered Bearing Replacement).	62-20-00

THIS INSPECTION DOES NOT COVER BLADES OR THE 369D/FF VISUALLY FITTING

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Table 1. Special Inspections Hourly (Cont.)

What to Inspect		Chap/Sect
<b>HOURLY</b>		
Inspection does not apply to 369D21100-516, -517, -523 and 369D21102-503, -517, -523 main rotor blades or the 369H1203-51 and -61 lead-lag links.		
369D/E/FF 600N	Visually inspect exposed portion of all installed main rotor blade upper and lower root fitting attach lugs and main rotor hub lead-lag link attach lugs for broken or cracked lugs, corrosion or other damage to the lug areas (Ref. Main Rotor Blade Upper and Lower Root Fitting Attach Lug and Lead-Lag Link Attach Lug Inspection (25-Hour)).	62-10-00 N/A
600N	Perform Tailboom Attach Fitting Inspection.	53-30-30
<b>EVERY 50 HOURS</b>		
369D/E/FF 600N	On models equipped with Rotorcraft Litter Kit: visually inspect litter doors for condition and security of quick-release fasteners. Rubber gasket between window glass and door for proper sealing.	CSP-026 N/A
<b>EVERY 50 HOURS IF CRACKS ARE FOUND IN FAN LINER</b>		
<b>NOTE:</b> If cracks protrude into Felt Metal Seal, replace seal.		
500/600N	Inspect fan liner to ensure cracks do not protrude into Felt Metal Seal (Ref. Anti-Torque Fan Liner (Felt Metal Seal) Inspection).	64-25-30 N/A
<b>EVERY 100 HOURS</b>		
ALL	If installed, floats and associated components for condition and security.	32-01-01
ALL	With 369F5450-501 overrunning clutch installed, remove clutch assembly and inspect clutch retainer, bearing carrier and housing at pin and shoulder for evidence of spinning and/or wear. If spinning and/or wear is observed, replace clutch assembly.	63-01-01
<b>EVERY 300 HOURS OR ONE YEAR (Whichever occurs first)</b>		
ALL	For 369D25100 main transmission serviced with MIL-L-23699 oil, drain main transmission oil system; Flush with sufficient new oil to remove sludge accumulation. Replace filter and refill with new oil.	12-01-01
<b>EVERY 300 HOURS OR TWO YEARS (Whichever occurs first)</b>		
600N	Main rotor upper thrust bearing assembly must be relubricated every 2 years or 300 hours, whichever occurs first (Ref. Main Rotor Hub Upper Bearing Grease Repack, Inspection and Replacement).	62-20-60
<b>EVERY 300 HOURS</b>		
ALL	For 369D21400-503 (369D/E/FF - 500/600N) or M50452 (369D/E/FF - 500N) lead-lag dampers with at least 4200 hours, inspect for deterioration until deterioration is sufficient to retire assembly (Ref. Main Rotor Damper and Attachments Inspection and Main Rotor Damper Weight Loading and Extension Check).	62-20-00 62-20-60 N/A 2400 hrs
<b>NOTE:</b> The following inspection does not apply to 369D25100-505 and -507 transmissions.		
369D/E/FF	Visually inspect upper surface of main transmission output shaft assembly (ring gear carrier) for bulging or raised surfaces. Using 10X magnifying glass, inspect upper surface of shaft for cracks. (Ref. COM, Output Drive Shaft Visual Inspection)	63-20-00 N/A
369D/E 500/600N	Replace anti-ice/airframe fuel filter element (if installed) (Ref. Anti-Ice Fuel Filter Replacement).	28-25-00 N/A

## CONTINUED AIRWORTHINESS SPECIAL INSPECTIONS

### 1. Special Inspection Hourly and Calendar

This table is a schedule of time-phase inspections that are contingent upon elapsed flight time or calendar time. These inspections require a Log Book entry. Adherence to Maintenance Manual information is required, and the manual should be consulted when using this checklist.

### NOTE:

- The Chap/Sect column of the following table is for reference unless a specific inspection requirement is called out. If there is only two numbers in the column, it refers to the Chapter. If there is three numbers, it refers to the Section the inspection is found.
- Refer to applicable Allison engine inspection check list for required engine maintenance.

Table 1. Special Inspections Hourly

Model	What to Inspect	Chap/Sect
<b>AFTER INSTALLATION OF NEW 369F5100 MAIN ROTOR TRANSMISSION</b>		
ALL	Perform transmission run-in (Ref. Main Transmission Run-In Procedure)	63-20-25
<b>2 - 10 HOURS AFTER INSTALLATION OF TAIL ROTOR TRANSMISSION</b>		
369D/E/FF	Using drag torque previously recorded, apply a torque load of <b>95 ±3 inch-pounds (10.73 ±0.34 Nm) plus the noted drag torque</b> (noted for each individual nut) to each mounting nut of the transmission (Ref. Tail Rotor Transmission Installation).	63-25-10 N/A
<b>EVERY 15 HOURS</b>		
369D/E/FF	For 369H1203-BSC or 369H1203-21 lead-lag link assemblies with at least 500 hours, perform Main Rotor Blade Upper and Lower Root Fitting Attach Lug and Lead-Lag Link Attach Lug Inspection (25 Hour) and every 100 hours in accordance with Main Rotor Blade Upper and Lower Root Fitting Attach Lug and Lead-Lag Link Attach Lug Inspection (100 Hour) until retirement of 369H1203-BSC or-21 Lead-Lag Link Assembly. (Reference AD 95-03-13).	62-10-00 N/A
<b>25 HOURS AFTER REPLACING TAIL ROTOR DRIVE FORK HINGE BOLT</b>		
369D/E/FF	Check rotational torque of bolt by applying <b>125 inch-pounds (14.12 Nm)</b> with torque wrench. If 125 inch-pounds (14.12 Nm) torque does not rotate bolt, preload is correct (Ref. COM, Hub and Fork Assembly).	64-20-10 64-20-20 N/A
<b>25 HOURS AFTER INSTALLATION OF OIL COOLER BLOWER</b>		
ALL	With two pounds of force applied, check belt tension for 0.17 to 0.20 inch (4.32 - 5.08 mm) deflection. Check pulley (Ref. Cooling Blower Belt Tension Check and Adjustment). Check oil cooler blower driven pulley retaining nut for minimum torque of <b>160 inch-pounds (18.08 Nm)</b> . If loss of torque is noted, remove pulley nut and inspect pulley shaft and splines for condition. Reinstall nut and torque to <b>160 - 190 inch-pounds (18.08 - 21.47 Nm) plus drag torque</b> .	63
<b>EVERY 25 HOURS WITH 2 FAILED LAMINATES IN MAIN ROTOR STRAP ASSEMBLY</b>		
ALL	Inspect in accordance with Main Rotor Strap Pack Lamination Inspection at 25-hour intervals if 2 laminates have failed in any one leg or tongue area of any strap assembly. A single cracked laminate between the shoes at the outboard end of a strap pack is cause for rejection of the hub assembly (Ref. Main Rotor Strap Pack Lamination Inspection).	62-20-00 62-20-60 OM