McDONNELL DOUGLAS 369A
CONTINUED AIRWORTHINESS 100/300-HOUR/ANNUAL CHECKLIST

A/C#	419IA	S/N	470050	Total Time	5660.7	WO #		Date	6-26-08

SCHEDULED MAINTENANCE CHECKS			
Hours	What To Inspect	Mech	Insp
	EXTERIOR		
300	Emergengy Release Mechanism For Positive Release Action	NA	[redacted]
300	Access And Inspection Doors For Positive Closure And Security	✓	[redacted]
100	Canopy and front exterior for obvious damage; windshields for cleanliness.	✓	
100	All exterior and interior skin and structure for damage and condition. Check for no gap between tailboom and fuselage at attach points. Check tailboom skin around stabilizer fittings for cracks.	✓	
100	Fuel cell vent fairing free of obstructions and obvious damage.	✓	
100	Aft fuselage internal skin surface, located directly above engine compartment, for evidence of cracks. Observe area through tail rotor control bellcrank access door.	✓	[redacted]
100	No evidence of oil leakage around fuselage drain holes.	✓	
100	Pitot and static system for freedom from foreign matter and moisture.	✓	
100	Check compartment fresh air vents in doors and front of canopy for ease of operation and security. Outside air temperature probe for security and obvious damage.	✓	
100	Pilot's and passenger/cargo compartment doors for condition of door glass, vents and proper operation of latching and locking mechanisms.	✓	
100	Door hinges and pins for play or wear. Ensure that door pin locking tab is engaged with slot in door frame.	✓	
100	Engine compartment doors for proper operation of latches and closure, distortion, damage, cracks and security		
100	All mast base drain holes clean and free of debris (blow air thru holes to ensure no clogging).	✓	
100	Engine air inlet fairing free from damage. No delamination noted. Access door operationally checked. Seals free from damage.	✓	
100	Plenum chamber and inlet screens for cleanliness, security and obvious damage. Clean air inlet screens as required.	✓	
100	Particle separator for condition and servicing.	NA	
100	Visible portion of engine compressor inlet for foreign object damage. Entire area of air intake for cleanliness and foreign matter.	✓	
300	**CAUTION**: Ensure that compressor cover is installed to prevent FOD. **NOTE**: If equipped with Donaldson Particle Separator, ensure O-rings for rubber boot are not deteriorated. Remove engine air inlet screen or particle separator filter assembly; inspect for damage and clean. Inspect engine air plenum chamber for cleanliness, damage, wear of internal components and security of internal components. Inspect particle separator mounting structure for cracks or damage.	NA	

[redacted] A&P [redacted] CA

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SCHEDULED MAINTENANCE CHECKS			
Hours	What To Inspect	Mech	Insp
	CABIN GROUP		
300	Free Air Temperature Gauge, Inspect And Test	✓	[redacted]
300	Remove Cyclic Control System One-Way Lock, Drain, Flush, And Refil	✓	[redacted]
300	Station 124 Canted Frame For Corrosion, Distortion, Breaks Or Cracks	✓	[redacted]
300	Push-pull rods for excessive bearing play, wear and security.	✓	
100	Instrument plumbing and electrical wiring for chafing, damage and security.	✓	
100	Instrument range markings for legibility. All gage lenses for cracks, cleanliness, looseness and slippage. Check for required placards and decals.	✓	
100	Compartment heat and anti-icing valve controls for easy and correct operation and rigging. Heat diffusers for security.	✓	[redacted]
100	Remove fuel cell vent hoses and clear vent system. Check vent hoses for deterioration.	✓	
100	Actuate and visually check fuel shutoff valve for proper operation.	✓	
100	Fuel cell sending unit electrical terminals and wiring for security and condition; check wiring harness between sending unit and instrument cluster. Using flashlight and pointed probe (wood or plastic), inspect interface of potting compound and sending unit mounting plate for voids, deterioration, corrosion and softening of potting compound.	✓	
300	Inspect crossover fittings for cracks, dents or corrosion; emergency shutoff valve for condition and operation. Check **FUEL LEVEL LOW** caution light for proper operation.	✓	
300	Clean, inspect, and maintain fuel lines, fuel cells, and other fuel system components.	✓	
300	Check oil tank for security and evidence of leakage and damage.	✓	
	MAIN ROTOR GROUP		
100	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.	✓	
100	Main rotor pitch control link assemblies, upper rod end bearing and lower rod end bearing at attach clevis 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.	✓	
100	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.	✓	
300	Swashplate bearing assembly for wear or damage. Rotate swashplate to check bearings. Check that bearings rotate smoothly without roughness and there is no binding when rotated 360 degrees. Check for wobble or play between rotating and stationary swashplate when rotating swashplate is rotated. Check that bearings are adequately greased.	✓	
100	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.	✓	

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SCHEDULED MAINTENANCE CHECKS			
Hours.	What To Inspect	Mech	Insp
	MAIN ROTOR GROUP		
300	Vibration Absorber Bracket For Cracks And Breaks Inspection	✓	[redacted]
300	Disconnect Collective Bungee Support Bracket And Inspect Controls Support Bracket Assembly And Matching Cap Critical Area For Cracks. Inspect Inboard Collective Torque Tube Bearing For Binding Or Roughness.	✓	[redacted]
100	Visually inspect outboard ends of main rotor hub retention strap assemblies for gaps between pack laminates.	✓	
300	Lead-lag bolts for corrosion, pitting or cracks, particularly in bore of bolt, use bright light and 5X magnifying glass.	✓	
100	Main rotor hub pitch housings for scratches, nicks, cracks and chafing wear. Inner surfaces of all pitch housing arm clevis lugs for wear.	✓	
100	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.	✓	[redacted]
100	Main rotor feathering bearings for excessive wear.	✓	
100	Main rotor droop stop ring for corrosion, dents and scratches.	✓	
100	Main rotor droop stop striker plate rollers for play and excessive wear.	✓	
300	Main rotor hub droop stop plungers for freedom of movement. Press down on opposite pitch housing to extend each roller and plunger from lower shoe. Check for free plunger movement and return when released. Clean plungers, where needed, to free-up.	✓	
100	Main rotor blade damper assemblies for security and excessive play in blade and pitch housing bearings, oil leakage and correct low friction stage torque.	✓	
100	Using a 5X to 10X magnifying glass, inspect area adjacent to root fitting attach lugs and doublers for cracks and security.	✓	
100	Main rotor hub bearings for roughness by rotating main rotor assembly several times by hand and listening for unusual noise. NOTE: Do not confuse with normal no-load transmission and overrunning clutch noise.	✓	
100	Main rotor blade and damper attach pins tight and levers properly locked.	✓	
300	Check main rotor blades for static droop angle within limits.	✓	
100	Visually inspect entire trailing edge and tabs for nicks, scratches and cracks generating from trailing edge; use bright light and 5X magnifying glass.	✓	
100	Using a bright light and 10X magnifying glass, inspect main rotor blade abrasion strips for security of bonding on lower surfaces and upper surfaces and by tapping at bond lines. Any blisters, bubbling or lifting of abrasion strip indicates a void.	✓	

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SCHEDULED MAINTENANCE CHECKS			
Hours	What To Inspect	Mech	Insp
	MAIN ROTOR GROUP		
100	Visually inspect 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.	✓	
100	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. Check condition and fit of blade attachment pins. Damper for obvious damage, security and proper attachment.	✓	
300	CAUTION: When using probe to inspect trailing edge bond separation, exercise care to prevent further damage to trailing edge. Inspect main rotor blades for evidence of damage; all visible bond lines for evidence of corrosion (none permissible). Visually check bonding of: root doublers, attachment fittings (no voids allowed) and entire trailing edge, especially in tab areas. When close visual inspection reveals evidence of trailing edge bond separation, lightly probe joint with 0.001 – 0.002 inch thick feeler gage. If feeler gage enters to depth of more than 1/2 inch, either above or below vee insert, excessive separation is evident. NOTE: Trailing edge structural bond line to vee strip insert starts 1/4 inch in (chordwise) from trailing edge joint; therefore, above tolerance allows up to 1/4 inch (partial) separation.	✓	[redacted]
300	Check main rotor mast, mast base 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.	✓	
300	Inspect hoisting eye-bolts for cracks or corrosion.	N/A	
300	Inspect all surfaces of main rotor drive shaft for dents, nicks, scratches and evidence of deformation. No damage of any kind is permissible in the area within 2 inches of the spline. Dents less than 0.05-inch deep and 0.50-inch diameter are permissible in other areas. Inspect all external surfaces of shaft for corrosion.	✓	
300	Check main rotor drive shaft spline for cracks, broken teeth and/or other damage. (Use 5X to 10X magnifying glass and bright side light, 45 degrees or less.) Visually inspect shaft for corrosion or pitting.	✓	
	DRIVE TRAIN GROUP		
100	Check tach generator and pressure switch for security and deterioration; wiring for chafing.	✓	
100	Main transmission case and oil cooling installation for evidence of leakage and security of attachment. Tail rotor drive shaft for security.	✓	
300	Remove, inspect and clean chip detector.	✓	
300	Drain oil; inspect and clean filter and refill.	✓	

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SCHEDULED MAINTENANCE CHECKS			
Hours	What To Inspect	Mech	Insp
	DRIVE TRAIN GROUP		
100	Main Transmission Oil Sample	N/A	[redacted]
300	Internal Inspection Transmission Ring Gear Bolts And Gear	✓	[redacted]
300	Retorque Stud Nuts Attaching Main Transmission To Main Rotor Mast Base. Retorque Tail Rotor Drive Shaft Coupling Bolts.	✓	[redacted]
300	**Belt-driven oil cooler blower:** Inspect oil cooler blower drive belt for tension, wear, damage and condition. Blower and drive components for smoothness and correct operation. Blower impeller for condition of blades. If blade damage is suspected, remove blower and inspect impeller blade root areas. Ducting and shroud for cracks and security; rubber connectors for condition; scroll drain tube for freedom from obstruction and proper positioning. **Shaft-driven oil cooler blower:** Remove blower scroll and inspect blower impeller for condition blades.	✓	[redacted]
100	Rotor brake pucks and disc for wear and general condition. Check hydraulic lines for security and leaks; master cylinder for leaks; check for air in system, spongy feel at brake actuating handle when force is applied.	N/A	
100	Overrunning clutch for 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. **NOTE:** Normal seal drag may be sufficient to rotate engine at low rpm.	✓	
100	Overrunning clutch for evidence of oil leakage.	✓	
300	**Without cargo hook** Perform overrunning clutch ball bearing inspection and grease repack. If bearing is dry or grease is caked, inspect bearing for roughness, pitting, scoring or discoloration from overheating. Clean and regrease ball bearing. Assemble and reinstall clutch. After installation, check oil level.	✓	
300	**With cargo hook** Clean and visually inspect overrunning clutch externally-splined shaft and mating engine power takeoff internal splines for wear. Remove overrunning clutch subassembly. Perform overrunning clutch ball bearing inspection and grease repack. If bearing is dry or grease is caked, inspect bearing for roughness, pitting, scoring or discoloration from overheating. Clean and regrease ball bearing. Inspect seal in retainer for cracks or wear. Regrease overrunning clutch splines. Assemble and reinstall clutch. After installation, check oil level.	N/A	
300	On helicopters equipped with any cargo hook, remove and inspect overrunning clutch sprag.	N/A	
100	Engine-to-main transmission drive shaft couplings and shaft for condition and security of attachment; shaft coupling diaphragms for scratches, nicks or cracks (Bendix).	✓	
100	Tail rotor drive shaft couplings (Bendix couplings only) by checking 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. (Not required for Kamatic couplings.)	✓	

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CONTINUED AIRWORTHINESS 100/300-HOUR/ANNUAL CHECKLIST

SCHEDULED MAINTENANCE CHECKS			
Hours	What To Inspect	Mech	Insp
	DRIVE TRAIN GROUP		
100	Tail rotor drive shaft for visual evidence of buckling, dents, bulkhead chafing and obvious damage. Perform visual torsional twist inspection of tail rotor drive shaft to check for buckling or twisting. Align aft tail rotor drive shaft coupling index stripe with corresponding tail rotor transmission stripe. Verify that bulkhead-to-drive shaft index stripes align. Misaligned or missing stripes require replacement of drive shaft and couplings, and an overhaul inspection of tail rotor transmission.	✓	
300	Remove tail rotor drive shaft and check boom fairing and tail boom for buckles, dents, bulkhead chafing and obvious damage.	✓	[redacted]
300	Remove tailboom control rod and inspect for wear through hard anodized surface; inspect grommets for wear and deterioration.	✓	
300	Check shaft damper for proper friction drag. Inspect damper for damage and security.	✓	
300	Check forward and aft coupling bolt and socket for indication of contact, Bendix couplings only.	✓	
	ANTI-TORQUE SYSTEMS		
	Tail Rotor Group		
100	Tail rotor transmission for corrosion, excessive oil leakage, cracks and other damage, and security on mounting frame.	✓	
300	Remove, inspect and clean chip detectors.	✓	
100	Check torque of tail rotor transmission mounting bolts, safety and re-apply torque stripe.	✓	
100	Inspect tail rotor pitch control assembly for binding and unusual sounds. Tail rotor control rod, pitch control links, hub and drive fork for play. Fork hub for damage. Fork bolt for cracks. Boots for installation and deterioration. Retaining nut and lockwasher secure. No broken locking tangs noted; retaining nut has not rotated.	✓	
100	Check tail rotor swashplate for security and obvious damage. Check slippage mark on swashplate for alignment.	✓	
100	Pitch control for evidence of seal rotation or loss of grease.	✓	
100	**Spherical and Conical bearings:** Tail rotor fork bearings for axial or radial play (no play allowed for conical bearings). Teeter blades to check for binding. **Elastomeric bearings:** Drive fork for failure between metal cones and elastomeric elements in bearing assembly and bond failure between bearing and tail rotor fork. Apply teetering force by hand (stop-to-stop) to rotor blades. Inspect elastomers for radial-molded ridges on each bearing face as teetering takes place. Discontinuity in molded ridges indicates bearing failure. There should be no apparent motion between the cage and fork, observed motion indicates bond failure. NOTE: Light swelling, pock marks and crumbs are surface conditions and do not indicate bearing failure.	✓	
100	If equipped with conical-type teetering bearings, torque check teeter bolt.	N/A	

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SCHEDULED MAINTENANCE CHECKS			
Hours	What To Inspect	Mech	Insp
	ELECTRICAL GROUP (Power On)		
100	Oil Cooler Bypass Switch And Solenoid Valve Operational Check	N/A	[redacted]
300	Interior Lighting System (Compass, Panel, Console, And Utility) For Proper Operation	✓	[redacted]
300	RPM Governor Trim Actuator For Proper Operation	✓	[redacted]
300	Engine Filter BYPASS AIR Caution Light For Proper Operation By Application Of Suction: A. Barrier Filter: 3 +/- 0.25 In. H_2O B. Particle Separator: 4 +/- 0.4 In. H_2O	✓	[redacted]
100	Voltage Regulator Setting Check	✓	[redacted]
100	**Remove and clean battery. Inspect connector pins for evidence of corrosion. Inspect for leakage. If battery is leaking (wet), remove and replace battery.**	✓	
100	**Inspect battery case for cracks in support flanges. Check dc wiring for chafing caused by wiring rubbing against battery case.**	✓	
100	**Deep cycle charge (recondition) battery every 100 hours or on conditional basis at operator's discretion. Visually inspect battery electrolyte level after deep cycle charge.**	✓	
300	**Check wiring from battery connector to warning lights for continuity, use an ohmmeter.**	✓	[redacted]
300	**Check engine-driven fuel pump (Ref. Allison Engine Operation and Maintenance Manual).**	✓	
300	**Check TOT indicating system for proper calibration.**	N/A	
	ENGINE COMPARTMENT GROUP		
100	**Starter-generator for condition of brushes, electrical connections and commutator. Screens for clogging. Clean and lubricate drive splines of drive shaft, and female splines in engine accessory gear case on dry spline installations. Check condition of O-ring on wet spline installations**	✓	[redacted]
300	**Check damper backplate and clutch for condition.**	N/A	
100	**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.**	✓	
100	**Exhaust stacks and exhaust supports for cracks, defects and improper attachment.**	✓	
100	**Engine mounts for cracks and play in mounting hardware at engine and airframe. Check that adjustable mounts are secure and that slippage marks are not disturbed and safety wire is intact. Retorque any loose mounting bolts**	✓	
100	**Fuel control and compressor exterior for condition and security.**	✓	
100	**Firewall insulator panels for security and obvious damage.**	✓	
100	**Engine compressor firewall (plenum chamber) seal and overrunning clutch firewall seal for proper sealing and good condition.**	✓	
100	**Check 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.**	✓	

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SCHEDULED MAINTENANCE CHECKS			
Hours	What To Inspect	Mech	Insp
	ENGINE COMPARTMENT GROUP		
100	Engine Oil Sample	N/A	[redacted]
300	Engine Compressor Liner TM55-2840-231-33	N/A	[redacted]
100	Bleed (Purge) Air From System At Engine Nozzle	✓	[redacted]
100	Inspect Fuel Pump Filter	✓	[redacted]
100	Test Engine Fuel Pump By-Pass Valve	✓	[redacted]
100	Bleed (Purge) Air From Entire Fuel System	✓	[redacted]
100	Scavenge oil filter for extended bypass indicator (if installed).	N/A	
100	Entire engine for: loose bolts; loose or broken connections; accessories for security and broken or missing lockwire; fuel and oil lines for chafing and kinking; fuel drain line valve for leakage; oil cooler and cooler deflector for security and obvious damage; accessible areas for obvious damage; evidence of fuel and oil leaks.	✓	
100	RPM governor lever control rod, replace if aluminum.	N/A	
300	CAUTION: When replacing fuel filter element, use only a 5-micron element. The 10-micron filter element is NOT to be used. Replace low pressure fuel pump filter element (Ref. Allison Engine Operation and Maintenance Manual).	N/A	[redacted]
300	Fuel and pneumatic connections for proper torque. Check re-connected lines for proper torque after 25 hours of operation (Ref. applicable Allison Engine Operation and Maintenance Manual).	✓	
300	Engine fuel pump filter pressure (bypass) switch. Perform operational check. NOTE: Also, perform this operational check whenever low pressure fuel pump filter element is replaced for any reason, or if contaminated.	✓	

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SCHEDULED MAINTENANCE CHECKS			
Hours	What To Inspect	Mech	Insp
	AFTER INSPECTION		
	Touch–up all damaged paint and exterior markings, as necessary.	✓	
	Perform operational check of particle separator filter installation.	N/A	
	CAUTION: Helicopter must not be flown unless controls access panel and two fuel cell access panels in cargo compartment are securely installed. These are stressed panels.		
	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.	✓	
	Rotor brake handle stowed.	N/A	
	Check all fluid levels; replenish if low. Filler caps secure.	✓	
	NOTE: Oil tank should be serviced only within 15 minutes of engine shutdown, replenish if low.		
	Drain fuel from fuel cell sump into a suitable container. Check for water and/or contaminants in fuel sample.	✓	
	CAUTION: If water and/or contaminants are present in fuel sample, refer to applicable airframe or engine manufacturer's manual for corrective action prior to next flight.		
	NOTE: Do not turn on the start pump when draining the fuel cell sump.		
	POST INSPECTION RUN UP		
	See applicable Pilot's Flight Manual for cockpit check and engine starting procedures. For troubleshooting procedures, refer to 500 Series – Basic HMI.		
	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		

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SCHEDULED MAINTENANCE CHECKS			
Hours	What To Inspect	Mech	Insp
	EXTERIOR		
300	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).	N/A	[redacted]
100	Stabilizers, stabilizer strut and tail skid for damage and loose rivets.	✓	
100	Vertical stabilizer for damage to leading or trailing edges and damaged stressed side panels. Mounting fittings for cracks and security. Check stabilizer attach bolts for security. Tail skid for obvious damage and security.	✓	
300	Check horizontal stabilizer, vertical stabilizer and strut attach bolts for proper torque.	✓	
300	Check lower surface of horizontal stabilizer for drain holes. Also check for gaps between upper and lower doublers and stabilizer skin.	✓	
100	Tailboom attachment to fuselage for security, evidence of corrosion or cracks.	✓	
100	Retorque tailboom attachment bolts.	✓	
100	Hoist installation (if installed) for condition and security.	N/A	
	LANDING GEAR		
100	Landing gear, skid tubes and fairings for wear or damage in excess of permissible limits. Landing gear upper fairing fillets for freedom of movement and for general condition. Abrasion strips secure. Floats for condition and security. Strut attachment points for security and pivot (swivel) bearings for excessive play.	✓	
100	Landing gear dampers for correct extension by observing stance of helicopter. Visually check dampers for leakage (replacement of damper is required if leakage is obvious, or if extension is beyond serviceable limitations). If dampers with Schrader valve are found low with no obvious oil leakage, dampers may be serviced with nitrogen. NOTE: It is normal for a thin hydraulic oil film to remain on damper as a result of wiping contact with piston seal. Newly installed dampers may have slight oil seepage from oil trapped in end cap threads during damper assembly. Neither of these should be considered damper leakage or cause for damper replacement.	✓	
100	Landing gear dampers for security of attachment and for signs of hard landing. Pivot bearings for excessive play.	✓	
100	Passenger steps secure and free from damage; condition of anti-skid material.	✓	
100	Remove landing gear fairing fillets and visually inspect landing gear strut assemblies for cracks and damage.	✓	
300	Remove landing gear lower fairings and visually inspect area around foot-to-strut attach bolts, not covered with sealant, for cracks and corrosion. Check with bright light and 10X magnifying glass. Removal of feet from struts are not required unless damage is suspect. Install landing gear lower fairings.	✓	
100	Landing Gear Struts - 2 Piece For Cracks And Loose Rivets Inspection	✓	[redacted]

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SCHEDULED MAINTENANCE CHECKS			
Hours	What To Inspect	Mech	Insp
	CABIN GROUP		
300	Free Air Temperature Gauge, Inspect And Test	✓	[redacted]
300	Remove Cyclic Control System One-Way Lock, Drain, Flush, And Refil	✓	[redacted]
300	Station 124 Canted Frame For Corrosion, Distortion, Breaks Or Cracks	✓	[redacted]
100	First aid kit contents and security of attachment. Fire extinguisher for charge pressure and security of attachment.	✓	
100	Magnetic compass correction and V_{NE} cards in place and legible; helicopter checklist and Pilot's Flight Manual in helicopter. Airworthiness, registration and related certification in aircraft.	✓	[redacted]
100	Seats, interior trim, panels and covers for damage and security. Seat base structure for evidence of deformation.	✓	
100	Check seat belts for condition and proper extension/retraction; If repair, replacement or modification of seat belt is required, use load-test procedures specified in FAA AC43.13-1A. All belts securely fastened when not in use.	✓	
100	Battery compartment for condition and security.	✓	
100	Engine N_1 and N_2 power controls for free movement, full travel, security, obvious damage and proper rigging.	✓	
100	Pilot's and copilot's throttle rigging checks at **FULL, GROUND IDLE** and **CUTOFF** positions.	✓	
100	Pilot/copilot controls for wear, looseness and general condition. Quick-release pins for condition. Check for minimum cyclic friction adjustment (resistance to turning spring with fingers). NOTE: 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.	✓	
100	Cyclic, collective and anti-torque controls for free movement. Cyclic trim actuators for security and proper operation.	✓	
100	Flight control system one-way lock (Uniloc) for oil leakage, condition and security. Fluid reservoir 1/2 – 3/4 full; replenish if low.	✓	
100	Collective torque tube support bracket and bungee support bracket for evidence of cracks, gouges or other visible damage in attach lug areas; gaps between bracket and cradle cap of collective torque tube. Use bright light and mirror.	✓	
300	Remove instrument console base covers and inspect tail rotor pedal crossover torque tube and bellcrank for cracks, damage and security.	✓	
100	Station 142.0 tail rotor control bellcrank support for cracking or damage, use bright light and mirror.	✓	

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PARA 1. (cont)

B. Scheduled Inspections

Scheduled inspections are made at periodic intervals in an effort to prevent engine malfunction and serve in the role of preventative maintenance for the engine. The component to be inspected, the nature of the inspection, and the elapsed time after which the inspection is to be performed are given in the Inspection Checksheet, Table 602. The inspection times are hours of engine operation.

Table 602

Scheduled Inspections

Inspection Checksheet

Owner Charlotte Helicopters Flight Academy Inc Date 6-26-08

A/C Make/Model Hughes 369A S/N 470050 Reg No 4191A TSN 4009.7

Engine S/N 403239BCEF TSN 4009.7 TSO _____

This inspection checksheet is to be used when performing scheduled inspections. This form may be locally reproduced and/or expanded to reflect the aircraft operating environment. Keep the completed sheets as a permanent part of the aircraft engine records. Detailed information regarding each inspection item is contained in the referenced Operation and Maintenance Manual paragraphs.

CAUTION: BEFORE UNDERTAKING ANY INSPECTION OR MAINTENANCE ACTION, CONSULT THE REFERENCED PARAGRAPHS OF THE OPERATION AND MAINTENANCE MANUAL. FAILURE TO FOLLOW THE RECOMMENDED INSTRUCTIONS IN THE MANUAL COULD RESULT IN EQUIPMENT DAMAGE OR DESTRUCTION, POSSIBLY RESULTING IN PERSONNEL DEATH OR INJURY.

Item	Inspection/Maintenance Action	REF PARA	✓	Initial
	100 Hour Inspection			
1 —	Inspect the entire engine for loose or missing bolts, broken or loose connections, security of mounting accessory and broken or missing lockwire. Check accessible areas for obvious damage and evidence of fuel or oil leakage.	N/A	✓	[redacted]
2 —	Inspect all "B" nuts for application and alignment of torque paint. If missing, loosen "B" nut, retighten, and apply torque paint.	PARA 9.B., 72–00–00, Engine–Servicing	✓	[redacted]
3 —	Check mounting and support bolts to be sure they are tight, lockwired and in good condition. Check security of screws and rivets. Remove all foreign material which might be drawn into the compressor inlet.	N/A	✓	[redacted]
4 —	Check accessible fuel system components, lines, and connections for security, damage or leakage. Accomplish with the boost pump on, if available. Remove, visually inspect and clean if visual condition dictates.	PARA 2., 73–00–00	✓	[redacted]

Table 602 (cont)
Scheduled Inspections

Item	Inspection/Maintenance Action	REF PARA	✓	Initial
	100 Hour Inspection (cont)			
5	Inspect P_c filter for proper clamping.	N/A	✓	[redacted]
6	Until CEB–A–1233 is complied with, inspect P_c filter assembly as follows: Without disassembly or removal of the P_c filter assembly from the mounting bracket, inspect using a 10x magnification glass and a bright light to detect any signs of cracks, paying particular attention to both of the end fittings at their junction with the end walls. If cracks are detected, remove assembly and comply with CEB–A–1233.	N/A	N/A	[redacted]
7	Remove the Scroll–to–P_c Filter Tube Assembly at both ends and inspect for cracks using 10x power glass. Pay particular attention to the flared ends of the tube for cracks, and to the areas beneath the floating ferrules for fretting damage. Tubes–found to contain cracks and/or excessive fretting damage are to be replaced by new parts of the same part number as removed.	N/A	N/A	[redacted]
	NOTE: Excessive fretting is present when the ferrule has chafed the tube sufficiently to wear a step in the tube that can be felt with a thumbnail or other inspection aid.			
8	With the Scroll–to–P_c Tube Assembly still removed and using a 10x power glass, inspect the elbow in the compressor scroll for distress/cracks/proper alignment. No cracks are permissible.	N/A	N/A	[redacted]
9	Check fuel control and power turbine governor linkage for freedom of operation, full travel and proper rigging. Check security of linkage for loose or worn linkage and linkage bolts.	PARA 3.C., 73–20–02, 3.B., 73–20–03, 3.C., 73–20–04 and PARA 2.C., 73–20–01	✓	[redacted]
10	Inspect compressor inlet guide vanes and visible blades and vanes for foreign object damage.	N/A	✓	[redacted]
11	Clean compressor with chemical wash solution as required if operating in a smoggy area, conditions with airborn pollutants or with water alcohol.	PARA 6., 72–30–00	✓	[redacted]
12	Visually inspect the water–alcohol nozzles for build–up of contaminants which could restrict flow or alter the spray pattern. Ultrasonic clean nozzles if equipment is available.	N/A	N/A	[redacted]
13	Clean the 200 mesh screen (if equipped with water–alcohol injection kit).	N/A	N/A	[redacted]

Table 602 (cont)
Scheduled Inspections

Item	Inspection/Maintenance Action	REF PARA	✓	Initial
	100 Hour Inspection (cont)			
14	Inspect the compressor scroll for cracks or breaks at the anti–ice air valve and customer bleed port. If cracks or breaks are detected, check engine for possible vibration causes.	PARA 1.D.(2), this section	✓	[redacted]
15	Inspect for discharge air tube inserts that are cocked or backing out of the scroll. If cocked or loose inserts are detected, check engine for possible vibration causes.	N/A	✓	[redacted]
16	Check compressor discharge air tubes for damage or deterioration.	PARA 4.A., 72–40–00	✓	[redacted]
17	Check anti–ice valve for security, worn parts and proper operation. Valve need not be removed or disassembled unless a problem is detected.	PARA 4., 75–10–01	✓	[redacted]
18	Inspect compressor mount inserts, bolts and nuts for looseness, fretting or oil leakage. Replace or retighten as required. Check engine for possible vibration causes.	PARA 4.D., 72–60–00 and PARA 1.D.(2), this section	✓	[redacted]
19	Inspect the turbine support assemblies and engine exhaust ducts for condition of welded joints, for cracks and buckling. Check exhaust duct clamps for proper installation, condition and torque.	PARA 8.A., 72–50–00	✓	[redacted]
20	Wet spline starter–generator gearshafts, new production or those replaced in accordance with the Rolls–Royce Commercial Engine Bulletin 250–C20 CEB–1082, do not need periodic inspection and lubrication. Clean and inspect any other starter–generator gearshaft. Clean the female splines of the starter–generator gearshafts and the male splines of the starter–generator with mineral spirits and a soft brush. Inspect splines. Refer to Starter–generator Gearshaft Female Spline Inspection paragraph.	PARA 4.B., 72–60–00	N/A	[redacted]
	Inspect the starter–generator brushes for wear in accordance with the Aircraft Manual at the same time the spline inspection is made.	N/A	✓	[redacted]
	Lubricate acceptable splines with grease, Aeroshell No. 22, or equivalent. Before reinstallation of the starter–generator, make sure torsional damper members of the starter–generator driveshaft are in hard contact with each other.	N/A	✓	[redacted]

Table 602 (cont)
Scheduled Inspections

Item	Inspection/Maintenance Action	REF PARA	✓	Initial
	100 Hour Inspection (cont)			
21	Lubrication system inspection		✓	[redacted]
	NOTE: Maximum interval between oil change is 100 hours or 6 months whichever occurs first. This time period may be extended to 200 hr intervals for those items indicated by an asterisk (*) if an external oil filter of a type that has a valid STC (Supplemental Type Certificate) is installed on the engine.			
–	*a. Drain oil system.	PARA 11.C., 72–00–00, Engine–Servicing	✓	[redacted]
–	b. Remove, inspect and clean the oil filter. Note any accumulation of metal chips, debris or carbon particles. Conduct further inspection of the lube system and/or engine gear train/bearings if metal chips or debris are found. See Items 21a, 21e, 38, 39 and 40 below if carbon particles are found.	PARA 1.C., 72–60–00	✓	[redacted]
	NOTE: Follow STC manufacturer's recommendations regarding replacement/cleaning of external oil filter elements. Inspect removed elements for any accumulations of metal chips, debris or carbon particles. It may prove helpful to cut apart disposable (paper) filter elements to facilitate this inspection. If chips, debris or carbon particles are found, proceed with additional inspection/maintenance as outlined in item 21b. above.			
–	*c. Inspect and clean turbine pressure oil check valve.	PARA 7.K., 72–50–00	✓	[redacted]
–	*d. Turbine pressure oil tube screen assembly. Detach clamp; then disconnect the power turbine pressure oil tube at the connector (tee). Loosen the tube coupling nut at the fireshield elbow only enough to allow sufficient movement of the tube to enable removal of the screen. At assembly, tighten connector coupling nut to 200–250 lb in. (23–28 N·m). Tighten fireshield elbow coupling nut to 80–120 lb in. (9–14 N·m). Tighten clamp nut to 35–40 lb in. (3.9–4.5 N·m).	N/A	✓	[redacted]
–	*e. Measure oil flow from the scavenge passage of the external sump and from the scavenge passage of the gas producer support. It is recommended that the external sump is not removed for this check.	PARA 7.D., 72–50–00	✓	[redacted]
	NOTE: This step must be performed before draining oil or after the oil system has been refilled.			

Table 602 (cont)
Scheduled Inspections

Item	Inspection/Maintenance Action	REF PARA	✓	Initial
	100 Hour Inspection (cont)			
—	f. Inspect magnetic chip detector plugs.	PARA 11.G., 72–00–00, Engine–Servicing	✓	[redacted]
—	g. Inspect quick disconnect magnetic chip detector plugs and flanged inserts for wear, if installed.	PARA 11.G., 72–00–00, Engine–Servicing	✓	[redacted]
—	*h. Refill oil system.	PARA 11.C., 72–00–00, Engine–Servicing	✓	[redacted]
21.A —	Remove, inspect and clean the fuel nozzle. If no airframe mounted fuel filter is installed, inspect the fuel nozzle filter.	PARA 2., 73–10–03	✓	[redacted]
	NOTE: Operators may find it necessary to inspect and clean the fuel nozzle more often depending on past experience or operating conditions.			
22	Inspect the start counter for proper operation, increase in count, and for loose, chafed,frayed or broken wires and loose connectors.	PARA 1., 74–20–03	N/A	[redacted]
23 —	Check the condition of the bleed valve gasket, without removing bleed valve. Replace gasket if air leaks (blowouts) can be detected.	PARA 2., 75–10–02	✓	[redacted]
24 —	Inspect the outer combustion case for condition. Inspect the weld joints of and in the brazed screen reinforcement in the armpit area.	PARA 2.B., 72–40–00	✓	[redacted]
25	Clean the burner drain valve.	PARA 3., 72–40–00	✓	[redacted]
26 —	Inspect the ignition lead for burning, chafing,or cracking of conduit and loose connectors and broken lockwire.	N/A	✓	[redacted]
27	On engines with CECO fuel system, clean or replace the high pressure fuel filter.	N/A	N/A	[redacted]
28	On engines with CECO fuel systems, visually inspect the bleed hole at the low point in the scroll–to–governor P_c tube for any obstruction. If the hole is not completely open, remove any contamination which could obstruct drainage of moisture from the tube using a piece of lockwire.	N/A	N/A	[redacted]
29	Review engine records for compliance with all mandatory bulletins, inspections and airworthiness directives.	N/A	✓	[redacted]
30	Review engine records for time limited parts components, accessory or modules.	N/A	✓	[redacted]
31	Enter component changes, inspection compliance, etc., in log book as required.	N/A	✓	[redacted]

Table 602 (cont)
Scheduled Inspections

Item	Inspection/Maintenance Action	REF PARA	✓	Initial
	200 Hour Inspection			
	In addition to the 100 hour inspection items, perform the following:			
	WARNING: MANDATORY COMPLIANCE DATE FOR ROLLS–ROYCE COMMERCIAL ENGINE BULLETIN 250–C20 CEB–1051 WAS AUGUST 30, 1980.			
32	Perform fuel pump backlash inspection on Sundstrand dual element pump P/N 6854292, 6857548, 6877719, 6856250, 6876803.	250–CSL–1007	N/A	[redacted]
	300 Hour Inspection			
	In addition to the 100 hour and applicable 200 hour inspection items, perform the following:		N/A	[redacted]
	CAUTION: INSPECTION FREQUENCY SHALL BE BASED ON THE NATURE OF THE EROSIVE AND/OR CORROSIVE ENVIRONMENT. THE OPERATING ENVIRONMENT MAY DICTATE A MORE FREQUENT INSPECTION INTERVAL. FOR NON–COATED COMPRESSOR WHEELS, THE INSPECTION SHALL NOT EXCEED 300 HOURS OR 6 MONTHS. FOR COATED COMPRESSOR WHEELS, INSPECTION SHALL NOT EXCEED 300 HOURS OR 12 MONTHS. IF ANY PARENT METAL IS EXPOSED DUE TO CORROSION AND/OR EROSION, THE INSPECTION REQUIREMENT SHALL REVERT BACK TO 300 HOURS OR 6 MONTHS.			
33	Inspect the compressor case when operating in an erosive and/or corrosive environment.	PARA 1.D.(9), this Section	N/A	[redacted]
	CAUTION: AIRCRAFT INSTALLED–ENGINE FUEL–PUMP FILTER DIFFERENTIAL PRESSURE WARNING SYSTEMS AND/OR OPERATING EXPERIENCE MAY DICTATE REPLACEMENT AT A LESSER TIME INTERVAL. IN NO INSTANCE SHOULD THE 300 HR REPLACEMENT INTERVAL BE EXCEEDED.			
34	Replace the fuel filter element. This filter is a throw–away item. It is not cleanable. Before discarding filter, inspect for signs of contaminants. If any are found, inspect the entire fuel system and clean if necessary.	PARA 2.C., 73–10–01	N/A	[redacted]
	CAUTION: WHEN THERE IS EVIDENCE THAT THE FUEL PUMP FILTER HAS BEEN BYPASSED, THE GAS PRODUCER FUEL CONTROL INLET FILTER, THE FUEL NOZZLE FILTER, THE GOVERNOR FILTER AND THE HIGH PRESSURE FUEL FILTER, IF APPLICABLE, MUST BE CLEANED. (REFER TO SPECIAL INSPECTIONS, 72–00–00, TABLE 604) IF ANY CONTAMINATION IS FOUND IN THE FUEL NOZZLE FILTER, THIS WILL REQUIRE THAT THE FUEL CONTROL BE SENT TO AN AUTHORIZED REPAIR FACILITY FOR INTERNAL CLEANING. REFERENCE MUST ALSO BE MADE TO THE AIRFRAME MAINTENANCE MANUAL FOR FUEL SYSTEM MAINTENANCE FOLLOWING FUEL CONTAMINATION.			
	CAUTION: PURGE AIR FROM THE FUEL SYSTEM.			
35	Perform a fuel pump bypass valve operational check whenever a fuel filter is replaced.	PARA 3.A., 73–10–01	N/A	[redacted]

Table 602 (cont)
Scheduled Inspections

Item	Inspection/Maintenance Action	REF PARA	✓	Initial
	300 Hour Inspection (cont)			
36	Remove, clean and inspect engine P_c filter every 300 hours or earlier as engine performance dictates.	PARA 3., 73–20–06		
37	Inspect and clean the No. 1 bearing oil pressure reducer.	PARA 3., 72–30–00		
38	Visually inspect external sump. Clean internal carbonous deposits and build up from sump or replace if necessary.	N/A		
39	Inspect scavenge oil strut in the power turbine support. Clean carbonous deposits from strut.	PARA 7.E., 72–50–00		
40	Inspect No. 6 and 7 bearing pressure oil nozzle. Clean internal carbonous deposits from nozzle.	PARA 7.G., 72–50–00		
41	Deleted			
	500 Hour/1 Year Inspection			
42	Inspect all uncoated and coated P/N 6846278 and 6871338 power turbine outer couplings nuts for corrosion.	250–C20 CSL–1060		
	NOTE: Compliance with Rolls–Royce Commercial Engine Bulletin 250–C20 CEB–1120 and/or 250–C20 CEB–1158 removes this inspection requirement.			
	600 Hour Inspection			
43	Check the fuel pump driveshaft on Sundstrand single element pumps for spline wear.	N/A		
	NOTE: This inspection is not required for Agro–Tech (TRW) fuel pumps or Sundstrand fuel pumps P/N 23003114 and subsequent.			
44	Perform scavenge oil filter impending bypass functional test per Facet Service Bulletin No. 090589 (ref. Rolls–Royce 250 CSL 1164) for aircraft equipped with this type of external scavenge filter system.	N/A		
45	Replace the fuel control filter assembly. Bendix fuel controls P/N 2524552–4 or 2524552–6 (less–5) and prior unless 250–C20 CEB–1089 has been accomplished.	PARA 4.A., 73–20–02, 4.A., 73–20–03		

Table 602 (cont)
Scheduled Inspections

Item	Inspection/Maintenance Action	REF PARA	✓	Initial
	1000 Hour Inspection			
46	Inspect Py port on Bendix power turbine governor per 250 CEB–A–1281. The governor must be removed from the engine to perform this inspection.	N/A		
	NOTE: If CEB–A–1289 or CEB 1330 have been accomplished, this inspection is not required.			
	1500 Hour Inspection			
47	Replace the fuel control filter assembly. Bendix fuel controls P/N 2524552–5 and subsequent and those earlier fuel controls which have had Rolls–Royce Commercial Engine Bulletin 250–C20 CEB–1089 accomplished.	PARA 4.A., 73–20–02, 4.A., 73–20–03		
48	Inspect fuel nozzle filter.	PARA 2.A., 73–10–03		
	1750 Hour Inspection			
49	Inspect the compressor case. Inspection frequency shall be as made necessary by operating environment. In erosive environment, inspect case at least every 300 hours. In any environment do not exceed 1750 hours without case inspection.	PARA 1.D., 72–00–00, 5., 72–30–00		
50	Heavy Maintenance Inspection (HMI). Heavy maintenance inspection shall consist of gas producer turbine wheels replacement and inspection of assembled components per Rolls–Royce published documents. It is the responsibility of the operator to assure that the total time and cycle life limits of specific parts listed in Section 05–10–00, Airworthiness Limitations, are not exceeded.	N/A		
	As Required Inspection			
51	Clean the bleed valve after each 10 hr of water–alcohol augmentation operation or after consumption of each 750 gallons (2840 liters) of water–alcohol mixture.	PARA 2.C., 75–10–02		

I certify this Engine has been inspected in accordance with 100HR inspection as per the requirements set forth in the Rolls Royce maintenance manual and was determined to be in an airworthy condition and approved for return to service this date: 6-26-08, A/C total time 10097 Hobbs

Signed [redacted] A&[redacted]EA

[redacted]

Blade 1 white

Blade 2 ~~Red~~ Blue Decrease On 1½ Flats

Blade 3 Green

Blade 4 ~~Blue~~ Red Inc up 1½ Flats

White ↓ A +Ab

Blue ↑ A +Ab

~~Green~~ ↑ A +AB

Red ↓ A +RB

- 26.4 Gr From Red

+ 100 Gr white

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* Safety RC links!