

N: N420AT
S/N: 940648S
ENG SN: CAE-800953BA

Hobbs: 2,065.7
TTAF: 5,078.1
ENG TT: 8,153.2

Date: 4/1/2021
TE's: 9,324
CYC: 12,927

Complied with 100,300,600hr,Yearly airframe inspections. Complied with all applicable AD's checked AD Bi-weekly 2021-08 dated 3/29/2021-4/11/2021 no defects noted at this time. Complied with AD-2019-05-04 main rotor trim tab inspection no defects noted at this time. Complied with AD-89-02-01 main rotor blade retention strap inspection no defects noted at this time. Complied with AD-2005-21-02 torque event inspection no defects noted at this time net due @ ACFT TT: 5,113.1 or TE's 9,524. Complied with AD-94-24-04 tail rotor pitch control assy inspection no defects noted at this time. Complied with AD-2007-12-23 rivet hole inspection no defects noted at this time. Complied with ICAs for the equipment installed IAW STC service instructions. Checked and cleaned tail rotor transmission chip detectors main rotor transmission chip detectors and engine chip detectors no defects noted ant this time. Drained and flushed tail rotor transmission. Performed tail rotor dynamic balance to below .15 IPS within limit no defects at this time. All work performed IAW MDHI-CSP-H-4 chapter 12-00-00 and 5-00-00 table 1 and Rolls-Royce Allison 250-C20 series operation and maintenance manual chp 72-00-00 table 603.

I certify the aircraft/appliance identified above was inspected in accordance with 100hr,300hr,600hr,Yearly airframe inspections by the current inspection program recommended by the manufacture and with current maintenance requirements under 91.409(F)(3) and is determined to be in airworthy condition.

Sign



Geoff Campbell AP



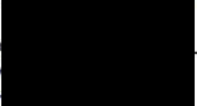
N: N420AT
S/N: 940648S
ENG SN: CAE-800953BA

Hobbs: 1,966.7
TTAF: 4,979.1
ENG TT: 8,054.2

Date: 4/15/2020
TE's: 9,265
CYC: 12,945

Complied with 100, 6 month, Yearly airframe inspections. Complied with all applicable AD's checked AD Bi-weekly 2020-08 dated 3/29/2020-4/11/2020 no defects noted at this time. Complied with AD-2019-05-04 main rotor trim tab inspection no defects noted at this time. Complied with AD-89-02-01 main rotor blade retention strap inspection no defects noted at this time. Complied with AD-2005-21-02 torque event inspection no defects noted at this time net due @ ACFT TT: 5,014.1 or TE's 9,465. Complied with AD-94-24-04 tail rotor pitch control assy inspection no defects noted at this time. Complied with AD-2007-12-23 rivet hole inspection no defects noted at this time. Complied with ICAs for the equipment installed IAW STC service instructions. Checked and cleaned tail rotor transmission chip detectors main rotor transmission chip detectors and engine chip detectors no defects noted ant this time. Drained and flushed tail rotor transmission. Performed tail rotor dynamic balance to below .15 IPS within limit no defects at this time. All work performed IAW MDHI-CSP-H-4 chapter 12-00-00 and 5-00-00 table 1 and Rolls-Royce Allison 250-C20 series operation and maintenance manual chp 72-00-00 table 603.

I certify the aircraft/appliance identified above was inspected in accordance with 100hr,300hr,600hr,Yearly airframe inspections by the current inspection program recommended by the manufacture and with current maintenance requirements under 91.409(F)(3) and is determined to be in airworthy condition.

Sign  Geoff Campbell AP 

MAINTENANCE RECORD

N: N420AT
S/N: 940648S
ENG SN: CAE800953BA

Hobbs: 1896.7
TTAF: 4909.1
ENG TT: 7984.2

Date: 8/1/2018
TE's: 9423
CYC: 12937

Complied with 100hr,300hr,600hr and Yearly Airframe Inspections and 150hr,300hr,600hr Engine Inspections. Complied with AD2018-13-01 (para g) figure 1 governor installed 2524769-14 s/n 20357 time remaining 44.1hrs/ Nov-14-2018. Complied with AD-90-19-02 overrunning clutch inspection no defects noted. Complied with ALL recurring AD's. Checked AD-Biweekly 2018-15 no defects at this time. Removed and cleaned tail rotor chip detector no defects drained and serviced. Removed main rotor transmission chip detectors cleaned and reinstalled no defects drained and serviced installed new filter element. Removed cleaned and inspected upper and lower chip plugs cleaned oil filter and changed Facet filter p/n 038088-08. Performed M/R drive shaft inspection. Preformed 600hr facet filter bypass check no defects noted. Complied with 2yr regrease on main rotor assy s/n3855. Performed 2yr regrease on main rotor swashplate p/n 369A27609-605 s/n N/A. Performed 2yr regrease on tail rotor swashplate. Installed 1ea new shaft p/n 369A1123-3 and 4ea new bearings p/n 369A1122-3 on vibration damper on red main rotor blade s/n 021C. Installed 1ea new battery p/n RG-500 s/n 40952863. Installed 1ea new fuel qty sensor p/n 369D296303-5 s/n 2858. Installed 4ea new exhaust cushions p/n 369X28237. All work performed IAW MDHI-CSP-H-4 and RR10W-2 no defects noted at this time. I certify this aircraft has been inspected IAW manufactures standard practices and maintenance manuals and is found to be in an airworthy condition.

Signed

Geoff Campbell

AP

N420AT
S/N: 9406485

DATE:
24-Jul-2018

HOBBS:
TTAF:

1896.7
4909.1

Tq Events @HOBBS
9423

CYCLES
12937

Engine Installed
CAE-800953BA

Transponder due:

ELT Batt due:

Last weight

Battery Installed:

Next inspections due:

MR Trans Oil AGL
TR Trans Oil AGL
Clutch Oil Mobil 254

RG-500

5009.1	(100hr)	100.0
5209.1	(300hr)	300.0
5509.1	(600HR)	600.0
Aug-2018	(annual)	

AD 89-02-01	100 hr insp of m/r blade retention straps	5009.1
AD 94-24-04	100 hr insp of t/r pitch control assembly	5009.1
AD 2005-21-02	m/r blade torque event inspection	
AD 2007-12-23	gear leg rivet holes -	5009.1
AD 90-19-02	300 hr insp of overrunning clutch	5209.1

DUE AGAIN:

Component	Part #	S/N	TBO R/T	Install TT/ Date	compt. Time at Install	rt/oh @ TT airframe	Torque Events	Remaining
Blade M/R red	500P2100-305	021C	2440 rt	4830.6	0	7270.6	314.0	2361.5
Blade M/R white	500P2100-305	666C	2440 rt	4830.6	0	7270.6	314	2361.5
Blade M/R blue	500P2100-305	667C	2440 rt	4830.6	0	7270.6	314	2361.5
Blade M/R yellow	500P2100-305	804C	2440 rt	4830.6	0	7270.6	314	2361.5
Folding Pin gr-te	369A1004-5	G556	5760 rt	4343.2	0	10103.2		5194.1
Folding Pin rd-te	369A1004-5	U439	5760 rt	2167.2	0	7927.2		3018.1
Folding Pin yl-te	369A1004-5	D095	5760 rt	4046.7	0	9806.7		4897.6
Folding Pin yl-le	369A1004-5	5638	5760 rt	3313.1	0	9073.1		4164.0
Folding Pin gr-le	369A1004-5	2790	5760 rt	0.0	0	5760		850.9
Folding Pin bl-te	369A1004-5	5484	5760 rt	3313.1	0	9073.1		4164.0
Folding Pin rd-le	369A1004-5	I916	5760 rt	4642.4	0	10402.4		5493.3
Folding Pin bl-le	369A1004-5	I786	5760 rt	4642.4	0	10402.4		5493.3
Hub, M/R	369A1200-501	3855	2650 oh	4804.4	0	7454.4		2545.3
2 yr / 2770 hr regrease due by:		1-Aug-2020						739
Swashplate, M/R	369A27609-605	NA	2770 oh	2756.5	0	5526.5		617.4
2 yr / 2770 hr regrease due by:		1-Aug-2020						739
Transmission, M/R	369A5100-709	640565	2400 oh	4537.1	0	6937.1	AGL Oil	2028.0
M/R Trans Oil change			600	4909.1		5509.1		600.0
Driveshaft, M/R	369A5500-901	0145	3960 rt	3949.6	0	7909.6		3000.5
Driveshaft Engine	369A5510	1433	10yr oh		4830.6		Recommended	
Mast assembly	369A2014-501	2885	5710 rt	0.0	0	5710		800.9
Transmission, T/R	369A5400-607	A488	1800 oh	3313.1	0	5113.1	AGL Oil	204.0
grshft, t/r-input	369A5425-5	341131	O/C	3313.1	3295.6			
grshft, t/r-output	369A5408-3	640959	O/C	3313.1	3295.6			
t/r driveshaft coup (fwd)	369D25501-3	1055	10yr oh				Recommended	
t/r driveshaft coup (aft)	369D25501-3	1697	10yr oh		0		Recommended	
Blade, T/R	369A1613-507	8894	5600 rt	4343.2	0	9943.2		5034.1
Blade, T/R	369A1613-507	8895	5600 rt	4343.2	0	9943.2		5034.1
Strap Pack, T/R	369A1706-509	003343-7509	5100 rt	4343.2	0	9443.2		4534.1
Driveshaft, T/R	369A5518-601	7230	8730 rt	0.0	0	8730		3820.9
pitch control, t/r	369H1800-501	NA	O/C		0	on condition		on condition
2 yr / 2770 hr regrease due by:		1-Aug-2020						739
Fork, T/R	369A1728-11		O/C oh		0	on condition		on condition
Tailboom	369A3500-505	5651-0148	2030 rt	4046.7	0.0	6076.7		1167.6
Bolts, tailboom	MS21250-05-014	N/A	2400 rt	4046.7	0	6446.7		1537.6
Stabilizer, horiz.	369A3600-603	5276	3450 rt	1769.5	0	5219.5		310.4
Stabilizer, vert. Upper	369A3625-601	4708	3840 rt	3199.9	124.5	6915.4		2006.3
Stabilizer, vert. Lower	369A3650-605	6034	O/C O/C	0.0	0			on condition
Clutch, overrunning	369A5350-51	6455	1800 oh	4642.4	931.8	5510.6		601.5
Starter / Generator	369A4550	12122	1200 oh	4510.5	0	5710.5		801.4
Blower Belt	369D25623		1200 rt	4317.8	0	5517.8		608.7
Blower Bearings	369H5655-3/5	unk	1200 rt	4642.3	0	5842.3		933.2
Cargo Hook	528-028-00	00784	1000 oh	4830.6	0	5830.6		921.5
Cargo Hook	528-028-00	00219	1000 oh	4830.6	0	5830.6		
Fire Extinguisher			1 year insp		0	Inspection		8/1/2019

CAE-800953BA
250-C20B

Engine Installed on N420AT
Engine Oil: mobil254

N420AT Hobbs: 1896.7
Hobbs @ Install: 1838.8
Engine TT: 7984.2
Total Cycles: 12937
100 hr due 100
300 hr due 300
600 hr due 600

	Retire Cycle	Cycle Count	Remaining
1st Stage:	3000	1819	1181
2nd Stage:	3000	1819	1181
3rd Stage:	6000	3142	2858
4th Stage:	6000	3825	2175
Tie bolt	9000	2732	6268
Impeller:	9150	4565	4585

Component	Part #	S/N	TBO/RT		Install TT Date	Comp Time at install	rt/oh @TT engine	Remaining
Compressor	6890550	CAC-32506	3500	oh	7926.3	20.6	11405.7	3421.5
case half inspection:	23057142	SET42448	1750	ins	7926.3	20.6	9655.7	1671.5
Impeller	6876873	KR90340	3550	rt	7926.3	1837.8	9638.5	1654.3
Gearbox (TT)	6894171	CAG-32639F	o/c		7926.3	3863.0		on condition
grbx - time since oh	3863.0							
grbx - time since 3500 hour case-split	3863.0							
grbx - time since installation	0.0							
Turbine	23038241	CAT-38388P	3500	oh	7926.3	2196.3	9230.0	1245.8
Mini-turbine (hot-section insp)			1750	ins	7926.3	962.9	8713.4	729.2
1st stage wheel	23073853	X545928	1775	rt	7926.3	962.9	8738.4	754.2
2nd stage wheel	23073854	X509554	1775	rt	7926.3	962.9	8738.4	754.2
3rd stage wheel	23001967	HX75669	4550	rt	7926.3	2196.3	10280.0	2295.8
4th stage wheel	6853279	H25014	4550	rt	7926.3	2878.2	9598.1	1613.9
Tie bolt	23068265	NH88247			7926.3	2145.3		
Fuel Control Unit	2524644-31	323485	2500	oh	7926.3	102.8	10323.5	2339.3
Fuel Control Strainer	2539508		1500	rt	7926.3	102.8	9323.5	1339.3
Governor	2524769-14	20357	2000	oh	7809.5	1282.2	8527.3	543.1
Fuel Nozzle	23077068	418	2500	oh	7172.7	0	9672.7	1688.5
Bleed Valve	23036668	FF49453	1500	oh	7926.3	1426.3	8000	15.8
Fuel Pump	6899253	T104652	4000	oh	6658.6	0	10658.6	2674.4

CONTINUED AIRWORTHINESS

100-HOUR OR ANNUAL INSPECTION CHECKLIST

1. 100-Hour or Annual Inspection

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 informa-

tion is required, and the manual should be consulted when using the checklist.

NOTE:

- Refer to applicable Allison engine inspection check list for required engine maintenance.
- Inspections in this table are for MDHI 369H helicopters only.

Table 1. 100-Hour or Annual Inspection

Registration No. <u>N420AT</u>	Serial No. <u>9406485</u>	Helicopter Hours <u>4909.1</u>
Requirement	Initial	
GENERAL		
Thoroughly clean helicopter and engine prior to start of inspection.		
Remove trim panels, covers and access panels as necessary.		
Ensure all placards and markings are installed.		
Ensure compliance with component mandatory retirement schedule.		
Calculate and record TE's, of all affected components, in Table 2.		
Ensure compliance with component overhaul schedule.		
Ensure compliance with all applicable airworthiness directives, service notices and special inspections.		
Review aircraft maintenance records for recorded discrepancies and correct discrepancies as applicable.		
Refer to related manufacturer's publications for detailed requirements on inspection of engine, starter/generator, battery and all installed STC equipment.		
EXTERIOR		
* Air intake for cleanliness and foreign matter.		
* Visible portion of engine compressor inlet for foreign object damage.		
CAUTION: Ensure that compressor cover is installed to prevent FOD.		
Engine air plenum chamber for:		
* Damage and cleanliness.		
* Wear and security of internal components.		
* Particle separator mounting structure for cracks or damage.		
Fuselage upper surfaces for:		
* Damage and condition.		
* Mast base drain holes clean and free of debris (blow air thru holes to ensure no clogging).		
* Engine air inlet fairing free from damage. No delamination noted. Access door operationally checked. Seals free from damage.		
* Engine compartment doors for proper operation of latches and closure, distortion, damage, cracks and security.		

Table 1. 100-Hour or Annual Inspection

Registration No. _____	Serial No. _____	Helicopter Hours _____
Requirement		Initial
Fuselage for:		
* Damage and condition.		
* Compartment fresh air vents in doors and front of canopy for easy of operation and security.		
* Fuel cell vent fairings free of obstructions and obvious damage.		
* Pilot's and passenger/cargo compartment doors for condition of door glass, vents and proper operation of latching and locking mechanisms.		
* Door hinges and pins for play or wear. Ensure door pin locking tab is engaged with slot in frame.		
* No evidence of oil leakage around fuselage drain holes.		
* Aft fuselage internal skin surface, located directly above engine compartment, for evidence of cracks. Observe area through tail rotor control bellcrank access door.		
Sta. 142.0 tail rotor control bellcrank support for cracking or damage, use bright light and mirror.		
* Check for no gap between tailboom and fuselage at attach points.		
* Check tailboom skin around stabilizer fittings for cracks.		
* Tailboom attachment-to-fuselage for security, evidence of corrosion or cracks, loose rivets or buckling.		
Vertical stabilizers for:		
* Damage to leading and trailing edges and damaged stressed side panels.		
* Mounting fittings for cracks and security.		
* Stabilizer attach bolts for security.		
* Tail skid for obvious damage and security.		
Horizontal stabilizer for:		
* Skin damage and loose rivets.		
* Lower surface drain holes for clogging.		
* Gaps between upper and lower doublers and stabilizer skin.		
Stabilizer strut for:		
* Skin damage and loose rivets.		
* Mounting fittings for cracks and security.		
LANDING GEAR		
Landing gear for:		
* Skid tubes and fairings for wear and damage in excess of permissible limits.		
* Upper fairing fillets for freedom of movement and general condition.		
* Strut attachment points for security and pivot (swivel) bearings for excessive play.		
* Landing gear dampers for correct extension, security of attachment and for signs of fluid leakage. Pivot bearings for excessive play.		
* Remove landing gear fairing fillets and visually inspect landing gear strut assemblies for cracks and damage.		
* Remove plug button from underside of fairing assembly. Using a bright light and 10X magnifying glass, inspect rivet hole in underside of strut for cracks. If crack is found, strut must be scrapped.		

Table 1. 100-Hour or Annual Inspection

Registration No. _____	Serial No. _____	Helicopter Hours _____
Requirement		Initial
CABIN		
Compartment heat and anti-icing valve controls for:		
* Easy and correct operation and rigging.		
* Heating system heat diffusers for security.		
* Seat belts for condition and security.		
* Inertia reels for condition and proper extension/retraction.		
Pilot/copilot controls for:		
* Wear, looseness and general condition.		
* Quick-release pins for condition.		
* Cyclic, collective and anti-torque controls for free movement.		
* Cyclic trim actuators for security.		
* 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).		
* N ₁ power controls for obvious damage.		
* Check for minimum cyclic friction adjustment (resistance to turning spring with fingers).		
* Flight control system one-way lock (Uniloc) for oil leakage, condition and security. Fluid reservoir 1/2 – 3/4 full; replenish if low.		
NOTE: With main rotor blades stationary, some friction drag is felt in the cyclic. The collective also has some plus resistance of the collective bungee spring. Heavy drag is an indication of droop stop deformation or by droop stop pounding.		
Engine N ₁ and N ₂ power controls for:		
* Free movement, full travel, security, obvious damage and proper rigging.		
* Pilot's and copilot's throttle rigging checks at FULL , GROUND IDLE and CUTOFF positions.		
MAIN ROTOR		
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.		
Main rotor pitch control link 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.		
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.		
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.		
Outboard ends of main rotor hub retention strap assemblies for gaps between pack laminates.		
* 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.		
Main rotor blade damper assemblies for obvious damage, security and excessive play in blade and pitch housing bearings.		

Table 1. 100-Hour or Annual Inspection

Registration No. _____	Serial No. _____	Helicopter Hours _____
Requirement		Initial
Elastomeric dampers for bonding of elastomeric material and corrosion.		N/A
Friction dampers for oil leakage and correct low friction stage torque.		
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.		
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.		
Main rotor blade and damper attach pins tight and levers properly locked.		
Entire trailing edge and tabs for nicks, scratches and cracks generating from trailing edge (Ref. Main Rotor Blade Inspection).		
WARNING: Using a 5X to 10X magnifying glass, inspect area adjacent to root fitting attach lugs and doublers for cracks and security.		
Inspect lower blade root fittings 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) (Ref. Sec. 7).		
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.		
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.		
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.		
DRIVE TRAIN		
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.		
* Tach generator for security and deterioration; wiring for chafing.		
* Pressure switch for security and deterioration; wiring for chafing.		
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).		N/A
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.		

Table 1. 100-Hour or Annual Inspection

Registration No. _____	Serial No. _____	Helicopter Hours _____
Requirement		Initial
NOTE: Normal seal drag may be sufficient to rotate engine at low rpm.		
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. <i>N/A</i>		
<u>Bendix couplings only:</u> Check tail rotor blade tip movement in excess of 0.75 inch (19.05 mm), without main rotor blade movement, when tail rotor blades are rocked back and forth in plane of rotation.		
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.		
ANTI-TORQUE		
Tail rotor transmission for:		
* Corrosion, excessive oil leakage, cracks and other damage.		
* Check torque of mounting bolts. Safety and re-apply torque stripe.		
Tail rotor and pitch control assembly for:		
* Binding and unusual sounds (teeter blades to check for binding).		
* 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, visual inspection of torque stripe).		
* Pitch control for evidence of seal rotation or loss of grease.		
* Swashplate for security and obvious damage. Check slippage mark for alignment.		
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.		
NOTE: Light swelling, pock marks and crumbs are surface conditions and do not indicate bearing failure.		
If equipped with conical-type teetering bearings, torque check teeter bolt.		
* Conical bearings for axial or radial play (no play allowed).		<i>N/A</i>
Tail rotor blades for:		
* Evidence of damage, including leading edges, trailing edges, skin.		
* Open vent and drain holes.		
* Loose or damaged tip caps.		
* Rivets securing tip cap for installation and condition.		
* Abrasion strips free of damage, no excessive erosion noted and no separation in bond around edges or at tip end of blade.		
* 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).		

Table 1. 100-Hour or Annual Inspection

Registration No. _____	Serial No. _____	Helicopter Hours _____
Requirement		Initial
Perform Tail Rotor Balance.		
ELECTRICAL		
NOTE: When possible, use auxiliary power source, not battery, during POWER ON inspection.		
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.		
Push PRESS TO TEST switch: all caution and warning lights ON ; depress instrument light rheostat knob; verify CAUTION lights dim.		
Conduct operational check of automatic reignition system; igniter noise heard and reignition indicator light functions. Reset as required.		
CAUTION: Do not leave landing light ON for more that one minute during next check; lamp will overheat and lamp life will be shortened.		
Exterior lighting (landing, position and anti-collision lights) for proper operation; all switches OFF after check.		
WARNING: Do not leave pitot heater ON for more than one minute during next check; severe burns to personnel may result.		
PITOT HTR switch ON for a few seconds. Heated pitot tube will feel warm to the touch; turn switch to OFF after check.		
Clean battery and inspect for:		
* Connector pins for evidence of corrosion.		
* Leakage (if battery is leaking (wet), remove and replace battery).		
* Battery case for cracks in support flanges.		
* Dc wiring for chafing caused by wiring rubbing against battery case.		
* Deep cycle charge (recondition) battery every 100 hours or on conditional basis at operator's discretion.		
Functionally check and inspect all installed avionics, auxiliary or optional systems and equipment. Do not actuate hoist guillotine or emergency floats.		
ENGINE COMPARTMENT		
Exhaust stack(s) and exhaust supports for cracks, defects and improper attachment.		
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.		

Table 1. 100-Hour or Annual Inspection

Registration No. _____	Serial No. _____	Helicopter Hours _____
Requirement		Initial
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.		
* Engine mounts for cracks and play in mounting hardware at engine and airframe (retorque any loose mounting bolts).		
* Fuel control and compressor exterior for condition and security.		
* RPM governor lever control rod (replace if aluminum).		
Clean and lubricate drive splines of starter-generator drive shaft, and female splines in engine accessory gear case on dry spline installations.		
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.		
AFTER INSPECTION		
Touch-up all damaged paint and exterior markings, as necessary.		
Ensure all fluid levels are correct; service as required.		
Perform operational check of particle separator filter.		
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.		
CAUTION: Helicopter must not be flown unless controls access panel and fuel cell access panels in compartment are securely installed. These are stressed panels.		
POST INSPECTION RUN UP		
See applicable Pilot's Flight Manual for cockpit check and engine starting procedures. For troubleshooting procedures, refer to applicable section of this manual.		
100-HOUR OR ANNUAL INSPECTION CERTIFICATION		
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 _____

2. Torque Event Attachment

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

This record of TE's should be kept as a

permanent record.

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

Component must be scrapped when it reaches maximum TE's (Ref. Sec. 04-00-00).

Table 2. Permanent Record of Torque Events					
Component	Part No.	Serial No.	Hours	TE's	Signature

Section

05-20-10

Continued Airworthiness

CONTINUED AIRWORTHINESS

300-HOUR INSPECTION CHECKLIST

1. 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:

- Refer to applicable Allison engine inspection check list for required engine maintenance.
- Inspections in this table are for MDHI 369H helicopters only.

Table 1. 300-Hour Inspection

Registration No. _____	Serial No. _____	Helicopter Hours _____	
Requirement		Initial	
EXTERIOR			
Retorque tailboom attachment bolts.			
Remove engine inlet bypass door and check latches, hinges and hardware for wear and security (Ref. Sec. 12, Engine Air Inlet By-Pass Door 300-Hour Inspection).			
Remove and replace the latch retention cotter pin (located inside the attach "U" clamp).			
Check horizontal and vertical stabilizer attach bolts for proper torque.			
Check lower surface of horizontal stabilizer for drain holes. Also check for gaps between upper and lower doublers and stabilizer skin.			
LANDING GEAR			
Perform Landing Gear Inspection.			
Perform Cabin Entry Step Inspection.			
CABIN			
Remove instrument console base covers and inspect anti-torque pedal crossover torque tube and bellcrank for cracks, damage and security.			
Push-pull rods for excessive bearing play, wear and security.			
Inspect fuel vent system rollover valve for condition and operation.			
NOTE: The 369H8108-505, 369H8108M, 369H8108-501M and 503M rollover valves do not require a 300-hour inspection.			
Check oil tank for security and evidence of leakage and damage.			
MAIN ROTOR			
Perform Swashplate Inspection.			
Perform Lead-Lag Bolt Inspection.			
Perform Main Rotor Hub Droop Angle Check.			
Perform Main Rotor Blade Inspection.			
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 hoisting eye-bolts for cracks or corrosion.			
Perform Main Rotor Drive Shaft Inspection.			

Table 1. 300-Hour Inspection (Cont.)

Registration No. _____	Serial No. _____	Helicopter Hours _____
Requirement		Initial
DRIVE TRAIN		
Remove, inspect and clean main transmission chip detectors.		[Redacted]
Without cargo hook:		
* Perform overrunning clutch Ball Bearing Inspection and Grease Repack.		
With cargo hook:		
* Perform overrunning clutch Ball Bearing Inspection and Grease Repack.		
* Clean and visually inspect clutch externally-splined shaft and mating engine power takeoff internal splines for wear.		N/A
* Inspect overrunning clutch sprag.		
Remove tail rotor drive shaft and check boom fairing and tail boom for buckles, dents, bulkhead chafing and obvious damage.		[Redacted]
Remove tailboom control rod and inspect for wear though hard anodized surface.		[Redacted]
Check shaft damper for proper friction drag. Inspect damper for damage and security.		[Redacted]
Check forward and aft coupling bolt and socket for indication of contact, Bendix couplings only.		N/A
ANTI-TORQUE		
Remove, inspect and clean chip detectors.		[Redacted]
Check for contact between tail rotor bellcrank and tail rotor transmission housing at extreme right pedal travel.		[Redacted]
Tail rotor assembly: Elastomeric teeter bearings for wear; bond between concentric metal cones and elastomer rings of bearing assembly.		[Redacted]
Remove blade stop for thorough inspection; in particular, check for cracks or splits in stem area.		[Redacted]
ELECTRICAL		
NOTE: When possible, use auxiliary power source during POWER ON inspection, not battery.		
Perform Battery Temperature Sensing Switches – Testing.		N/A
Check TOT indicating system for proper calibration.		[Redacted]
ENGINE COMPARTMENT		
Inspect starter/generator for:		[Redacted]
* Condition of brushes, electrical connections and commutator.		
* Screens for clogging.		
* Condition of O-ring on drive spline.		
* Damper backplate and clutch for condition.		
Perform Fuel Filter (Bypass) Caution Light Pressure Switch Test.		[Redacted]
NOTE: Also, perform this operational check whenever low pressure fuel pump filter element is replaced for any reason, or if contaminated.		[Redacted]

Section

05-20-15

Continued Airworthiness

CONTINUED AIRWORTHINESS YEARLY INSPECTION CHECKLIST

1. Yearly Inspection

This check sheet is designed to be used when performing special 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:

- Refer to applicable Allison engine inspection check list for required engine maintenance.
- Inspections in this table are for MDHI 369H helicopters only.

Table 1. Yearly Inspections

Registration No. _____	Serial No. _____	Helicopter Hours _____
Requirement		Initial
1 YEAR		
EXTERIOR		
Perform Pitot Static System Inspection.		
Check outside air temperature probe for security and obvious damage.		
Particle separator for condition and servicing.		
NOTE: If equipped with a Donaldson Particle Separator, ensure O-rings for rubber boot are not deteriorated. ✓		
LANDING GEAR		
Perform Landing Gear Strut Inspection (Ref. Section 6).		
CABIN		
* First aid kit contents and security of attachment.		
* Fire extinguisher for charge pressure and security of attachment.		
* Inspect seats, interior trim, panels and covers for damage and security.		
* Inspect seat base structure for evidence of deformation.		
* Perform Tank Vent System Inspection.		
* Actuate and visually inspect fuel shutoff valve for proper operation.		
* Inspect fuel cell sending unit for electrical terminals and wiring for security and condition.		
* Inspect wiring harness between sending unit and instrument cluster.		
* Check FUEL LEVEL LOW caution light for proper operation.		
Inspect instrument plumbing and electrical wiring for chafing, damage and security.		
NOTE: In the following inspection, do not pull on torque or oil pressure lines.		
Inspect torque and oil pressure lines from the firewall forward to the instruments for seepage, chafing, cracking, damage and security.		
ANTI-TORQUE		
Drain tail rotor transmission. Flush with sufficient new oil to remove sludge accumulation. Refill with new oil.		
Do Tail Rotor Blade Assembly Pitch Control Arm Inspection (Ref. CSP-H-2, Section 8).		
ELECTRICAL		
NOTE: When possible, use auxiliary power source, not battery, during POWER ON inspection.		
Check wiring from battery connector to warning lights for continuity, use an ohmmeter.		

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:

- Refer to applicable Allison engine inspection check list for required engine maintenance.
- Inspections in this table are for MDHI 369H helicopters only.

Table 1. Special Inspections Hourly

What to Inspect
EVERY 15 HOURS
For 369A1234, 369H1203-BSC and -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 369A1234, 369H1203-BSC and -21 Lead-Lag Link Assembly. (Reference AD 95-03-13).
25 HOURS AFTER REPLACEMENT OF TAIL ROTOR DRIVE FORK HINGE BOLT
Check rotational torque of bolt by applying 125 inch-pounds (14.12 Nm) with torque wrench. If 125 inch-pounds (14.12 Nm) torque does not rotate bolt, preload is correct (Ref. COM, Tail Rotor Pitch Control Assembly).
25 HOURS AFTER INSTALLATION OF OIL COOLER BLOWER
With two pounds of force applied, check belt tension for 0.17 – 0.20 inch (4.318 – 5.08 mm) deflection. Check pulley. Check pulley shaft and splines for condition. Check oil cooler blower driven pulley retaining nut for minimum torque of 160 inch-pounds (18.08 Nm) . If loss of torque is noted, remove pulley nut and inspect pulley shaft and splines for condition. Reinstall nut and torque to 160 – 190 inch-pounds (18.08 – 21.47 Nm) plus drag torque.
EVERY 25 HOURS
NOTE: This inspection does not apply to 369A1100-507/511 main rotor blades or the 369H1203-51/61 lead-lag links. 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. Sec. 04-00-00, Component Mandatory Replacement Schedule).
EVERY 50 HOURS
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.
EVERY 100 HOURS WITH 2 FAILED LAMINATES IN MAIN ROTOR STRAP ASSEMBLY
Inspect in accordance with Main Rotor Strap Pack Lamination Inspection at 50-hours 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.
EVERY 300 HOURS OR ONE YEAR (Whichever occurs first)
For main transmission serviced with MIL-L-23699 oil, drain main transmission oil system; Flush with sufficient new oil to remove sludge accumulation. Replace filter if paper or clean filter if metal, and refill with new oil.

Table 1. Special Inspections Hourly (Cont.)

What to Inspect
EVERY 300 HOURS
For 369D21400–503 lead-lag dampers with at least 4200 hours, inspect for deterioration until deterioration is sufficient to retire assembly.
EVERY 600 HOURS OR ONE YEAR (Whichever comes first)
For main transmission serviced with Mobil SHC 626 oil, drain main transmission oil system; Flush with sufficient new oil to remove sludge accumulation. Replace filter if paper or clean filter if metal, and refill with new oil.
EVERY 600 HOURS
Cyclic control system for excessive slack or free play. Cyclic control stick, at grip, for play in excess of 3/8 inch (9.525 mm).
For 369D21400–503 lead-lag dampers with less than 4200 hours, inspect for deterioration until deterioration is sufficient to retire assembly.
EVERY 1200 HOURS
Remove and test battery over temperature sensor unit for proper operation and accuracy (Ref. Operational Check – Battery Temperature Sensing Equipment).
EVERY 6000 HOURS
Replace the 369H6414 Edgelighted Panel (Ref. CSP-H-3).
EVERY 2 YEARS OR 2770 HOURS (WHICHEVER OCCURS FIRST)
Clean, inspect and relubricate (repack) main rotor swashplate bearings and main rotor hub tapered bearings (Ref. COM).
Clean, inspect and relubricate (repack) tail rotor swashplate bearings (Ref. COM).

Table 2. Special Inspections Calendar

What to Inspect
(DAILY) BEFORE FINAL SHUTDOWN IN CORROSIVE ENVIRONMENT
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)).
EVERY 6 MONTHS OR 5 INFLATIONS
Inflate emergency floats to 4.5 psi (31 kPa) for one hour. Check for leaks and condition. Continue inflation to 5.5 psi (38 kPa) and check that chamber pressure relief valves operate. Pressure-test float compartments.
AFTER COMPRESSOR WATER WASH/RINSE WITH PARTICLE SEPARATOR INSTALLED
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.
BEFORE OPERATION OF BREEZE HOIST SYSTEM
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).

Service Accessory Record



Rolls-Royce

Nomenclature FUEL NOZZLE Part I
 Page No. 1
 Component serial number AG71004 Engine Model 250- SERIES II

Installed					Removed			
Date	Engine S/N	A/C S/N	Accy. Time		Date	Accy. Time		Reason
		Reg. #	Since OH	Total		Since OH	Total	
29 MAR '05	CAE-821981	0648\$ N20AT	0.0	UNK	4/15/20	917.0	UNK	move to CAE-800953BA
4/15/2020	CAE-800953BA	0648\$ N20AT	917.0	UNK				

GT-11778(F) 5/00

FORM 2785 A (BACK)

ASSEMBLY RECORD
ENGINE ASSEMBLY

Part V
Page No. _____

Fuel Control 2524644-31 318492 04 Apr 2017 7893.5 437.5 17 Jul 2017 7926.3 470.3 return to owner									
Nomenclature	Part Number	Serial Number	INSTALLED			REMOVED			Reason
			Date	Engine Total Time	TSO This Item	Date	Engine Total Time	TSO This Item	
Fuel Control	2524644-31	BA56802	12 Mar 2016	7760.2	1113.1	27 APR 2016	7790.7	1143.6	Starting Hot will not adjust
Case Helves	23057142	28605	9 Mar 2016	7760.1	0				
Fuel Control	2524644-31	323485	27 Apr 2016	7790.7	0	04 Apr 2017	7893.5	102.8	Poor starting
Governor	2524769-14	20357	3 June 2016	7809.5	1282.2	4/15/20	8087.6	1560.3	Lower stiff
Turbine	23038741	58388P	13 APRIL 2017	7893.5	2163.5				
Compressor	6890550	32506	17 Jul 2017	7926.3	20.6				
Bleed Valve	23036668	FF49453	17 Jul 2017	7926.3	1426.3	4/15/2020	8087.6	1587.6	Due O/H
Fuel Control	2524644-31	323485	17 Jul 2017	7926.3	102.8				
Bleed valve	23053176	FF16284	4/15/2020	8087.6	987.6	4/15/2021	8153.2	1033.2	stiff
Governor	2524769-15	24531	4/15/2020	8087.6	0.0				
Fuel Nozzle	23077068	AG71004	4/15/2020	8087.6	917.0				
Bleed Valve	23053176	FF49453	4/15/2021	8153.2	0.0				

N420AT
S/N: 9406485

DATE:
1-Sep-2021

HOBBS:
TTAF:

2165.9
5178.3

Tq Events @HOBBS
9823

CYCLES
12950

Engine Installed
CAE-800953BA

Transponder due:

ELT Batt due:

Last weight

Battery Installed:

Next inspections due:

MR Trans Oil AGL

TR Trans Oil AGL

Clutch Oil Mobil 254

RG-500

5269.6	(100hr)	91.3
5312.5	(300hr)	134.2
5612.5	(600HR)	434.2
Apr-2022	yearly	

DUE AGAIN:

AD 89-02-01	100 hr insp of m/r blade retention straps	5269.6
AD 94-24-04	100 hr insp of t/r pitch control assembly	5269.6
AD 2005-21-02	m/r blade torque event inspection	
AD 2007-12-23	gear leg rivet holes -	5269.6
AD 90-19-02	300 hr insp of overrunning clutch	5312.5

Component	Part #	S/N	TBO R/T		Install TT/ Date	compt. Time at Install	rt/oh @ TT airframe	Torque Events	Remaining
Blade M/R red	500P2100-305	804C	2440	rt	5012.5	181.9	7270.6	1390.8	2092.3
Blade M/R white	500P2100-305	021C	2440	rt	5012.5	181.9	7270.6	1390.8	2092.3
Blade M/R blue	500P2100-305	666C	2440	rt	5012.5	181.9	7270.6	1390.8	2092.3
Blade M/R yellow	500P2100-305	667C	2440	rt	5012.5	181.9	7270.6	1390.8	2092.3
Folding Pin gr-te	369X1004-5	D882	5760	rt	5012.5	1043	9729.5		4551.2
Folding Pin rd-te	369X1004-5	D883	5760	rt	5012.5	1043	9729.5		4551.2
Folding Pin yl-te	369X1004-5	E148	5760	rt	5012.5	1043	9729.5		4551.2
Folding Pin yl-le	369X1004-5	E214	5760	rt	5012.5	1043	9729.5		4551.2
Folding Pin gr-le	369X1004-5	D880	5760	rt	5012.5	1043	9729.5		4551.2
Folding Pin bl-te	369X1004-5	D871	5760	rt	5012.5	1043	9729.5		4551.2
Folding Pin rd-le	369X1004-5	D551	5760	rt	5012.5	1043	9729.5		4551.2
Folding Pin bl-le	369X1004-5	D537	5760	rt	5012.5	1043	9729.5		4551.2
Hub, M/R	369A1200-501	3855	2650	oh	4804.4	0	7454.4		2276.1
2 yr / 2770 hr regrease due by:		1-Sep-2022							365
Swashplate, M/R	369A27609-605	NA	2770	oh	2756.5	0	5526.5		348.2
2 yr / 2770 hr regrease due by:		1-Sep-2022							365
Transmission, M/R	369A5100-709	640565	2400	oh	4537.1	0	6937.1	AGL Oil	1758.8
M/R Trans Oil change			600		5012.5		5612.5		434.2
Driveshaft, M/R	369A5500	0011	3960	rt	5012.5	1365.3	7607.2		2428.9
Driveshaft Engine	369A5510	5096U	3700	rt	14-Jul-05	2922.9			777
Mast assembly	369A2014-501	2885	5710	rt	0.0	0	5710		531.7
Transmission, T/R	369A5400-607	B200	1800	oh	5012.5	725.5	6087	AGL Oil	908.7
grshft, t/r-input	369A5425-5	772485	O/C		5012.5				
grshft, t/r-output	369A5408-3	173050	O/C		5012.5				
t/r driveshaft coup (fwd)	369D25501-9	3337	10yr	oh					
t/r driveshaft coup (aft)	369D5501	493506U	4980	rt	5012.5	1885.5			3095
Blade, T/R	500P3300-505	P672	5600	rt	5012.5	70	10542.5		5364.2
Blade, T/R	500P3300-505	P635	5600	rt	5012.5	234	10378.5		5200.2
Strap Pack, T/R	369A1706-509	A547	5100	rt	5012.5	93.2	10019.3		4841.0
Driveshaft, T/R	369A5518-601	7230	8730	rt	0.0	0	8730		3551.7
pitch control, t/r	369H1800-501	NA	O/C			0	on condition		on condition
2 yr / 2770 hr regrease due by:		1-Sep-2022							365
Fork, T/R	369A1728-11		O/C	oh		0	on condition		on condition
Tailboom	369A3500-505	5651-0148	2030	rt	4046.7	0.0	6076.7		898.4
Bolts, tailboom	MS21250-05-014	N/A	2400	rt	4046.7	0	6446.7		1268.4
Stabilizer, horiz.	369A3600-603	5276	3450	rt	1769.5	0	5219.5		41.2
Stabilizer, vert. Upper	369A3625-601	4708	3840	rt	3199.9	124.5	6915.4		1737.1
Stabilizer, vert. Lower	369A3650-605	6034	O/C	O/C	0.0	0			on condition
Clutch, overrunning	369A5350-51	6455	1800	oh	4642.4	931.8	5510.6		332.3
Starter / Generator	150SG117Q	6689	1200	oh	5012.5	224	5988.5		810.2
Blower Belt	369D25623		1200	rt	4317.8	0	5517.8		339.5
Blower Bearings	369H5655-3/5	unk	1200	rt	4642.3	0	5842.3		664.0
Cargo Hook	528-028-00	00784	1000	oh	4830.6	0	5830.6		652.3
Cargo Hook	528-028-00	00219	1000	oh	4830.6	0	5830.6		
Fire Extinguisher			1 year insp			0	Inspection		4/15/2021

CAE-800953BA
250-C20B

N420AT Hobbs: 2165.9
Hobbs @ Install: 1838.8
Engine TT: 8253.4
Total Cycles: 12950
100 hr due 91.3
300 hr due 134.2
600 hr due 434.2

Engine Installed on N420AT
Engine Oil: mobil254

	Retire Cycle	Cycle Count	Remaining
1st Stage:	3000	1832	1168
2nd Stage:	3000	1832	1168
3rd Stage:	6000	3155	2845
4th Stage:	6000	3838	2162
Tie bolt	9000	2745	6255
Impeller:	9150	4578	4572

Component	Part #	S/N	TBO/RT		Install TT Date	Comp Time at install	rt/oh @TT engine	Remaining
Compressor	6890550	CAC-32506	3500	oh	7926.3	20.6	11405.7	3152.3
case half inspection:	23057142	SET42448	1750	ins	7926.3	20.6	9655.7	1402.3
Impeller	6876873	KR90340	3550	rt	7926.3	1837.8	9638.5	1385.1
Gearbox (TT)	6894171	CAG-32639F	o/c		7926.3	3863.0		on condition
grbx - time since oh	3863.0							
grbx - time since 3500 hour case-split	3863.0							
grbx - time since installation	0.0							
Turbine	23038241	CAT-38388P	3500	oh	7893.5	2163.5	9230.0	976.6
Mini-turbine (hot-section insp)			1750	ins	7926.3	962.9	8713.4	460.0
1st stage wheel	23073853	X545928	1775	rt	7926.3	962.9	8738.4	485.0
2nd stage wheel	23073854	X509554	1775	rt	7926.3	962.9	8738.4	485.0
3rd stage wheel	23001967	HX75669	4550	rt	7926.3	2196.3	10280.0	2026.6
4th stage wheel	6853279	H25014	4550	rt	7926.3	2878.2	9598.1	1344.7
Tie bolt	23068265	NH88247			7926.3	2145.3		
Fuel Control Unit	2524644-31	323485	2500	oh	7926.3	102.8	10323.5	2070.1
Fuel Control Strainer	2539508		1500	rt	7926.3	102.8	9323.5	1070.1
Governor	2524769-15	24531	2000	oh	8087.6	0	10087.6	1834.2
Fuel Nozzle	23077068	AG71004	2500	oh	8087.6	917	9670.6	1417.2
Bleed Valve	23053176	FF48297	1500	oh	8244.7	0	9744.7	1491.3
Fuel Pump	6899253	T104652	4000	oh	6658.6	0	10658.6	2405.2

N: N420AT
S/N: 9406485
ENG SN: CAE-800953BA

Hobbs: 2,065.7
TTAF: 5,078.1
ENG TT: 8,153.2

Date: 4/1/2021
TE's: 9,324
CYC: 12,927

Complied with 100,300,600hr,Yearly airframe inspections. Complied with all applicable AD's checked AD Bi-weekly 2021-08 dated 3/29/2021-4/11/2021 no defects noted at this time. Complied with AD-2019-05-04 main rotor trim tab inspection no defects noted at this time. Complied with AD-89-02-01 main rotor blade retention strap inspection no defects noted at this time. Complied with AD-2005-21-02 torque event inspection no defects noted at this time net due @ ACFT TT: 5,113.1 or TE's 9,524. Complied with AD-94-24-04 tail rotor pitch control assy inspection no defects noted at this time. Complied with AD-2007-12-23 rivet hole inspection no defects noted at this time. Complied with ICAs for the equipment installed IAW STC service instructions. Checked and cleaned tail rotor transmission chip detectors main rotor transmission chip detectors and engine chip detectors no defects noted ant this time. Drained and flushed tail rotor transmission. Performed tail rotor dynamic balance to below .15 IPS within limit no defects at this time. All work performed IAW MDHI-CSP-H-4 chapter 12-00-00 and 5-00-00 table 1 and Rolls-Royce Allison 250-C20 series operation and maintenance manual chp 72-00-00 table 603.

I certify the aircraft/appliance identified above was inspected in accordance with 100hr,300hr,600hr,Yearly airframe inspections by the current inspection program recommended by the manufacture and with current maintenance requirements under 91.409(F)(3) and is determined to be in airworthy condition.

Sign

Geoff Campbell AF

Service Accessory Record

Nomenclature Governor

Part I

Page No. _____

Component serial number 24531

Engine Model 250-

[illegible]

N: N420AT
S/N: 9406485
ENG SN: CAE-800953BA

Hobbs: 1,966.7
TTAF: 4,979.1
ENG TT: 8,054.2

Date: 4/15/2020
TE's: 9,265
CYC: 12,945

Complied with 100, 6 month, Yearly airframe inspections. Complied with all applicable AD's checked AD Bi-weekly 2020-08 dated 3/29/2020-4/11/2020 no defects noted at this time. Complied with AD-2019-05-04 main rotor trim tab inspection no defects noted at this time. Complied with AD-89-02-01 main rotor blade retention strap inspection no defects noted at this time. Complied with AD-2005-21-02 torque event inspection no defects noted at this time net due @ ACFT TT: 5,014.1 or TE's 9,465. Complied with AD-94-24-04 tail rotor pitch control assy inspection no defects noted at this time. Complied with AD-2007-12-23 rivet hole inspection no defects noted at this time. Complied with ICAs for the equipment installed IAW STC service instructions. Checked and cleaned tail rotor transmission chip detectors main rotor transmission chip detectors and engine chip detectors no defects noted ant this time. Drained and flushed tail rotor transmission. Performed tail rotor dynamic balance to below .15 IPS within limit no defects at this time. All work performed IAW MDHI-CSP-H-4 chapter 12-00-00 and 5-00-00 table 1 and Rolls-Royce Allison 250-C20 series operation and maintenance manual chp 72-00-00 table 603.

I certify the aircraft/appliance identified above was inspected in accordance with 100hr,300hr,600hr,Yearly airframe inspections by the current inspection program recommended by the manufacture and with current maintenance requirements under 91.409(F)(3) and is determined to be in airworthy condition.

Sign

Geoff Campbell AP3

MAINTENANCE RECORD

N: N420AT
S/N: 940648S
ENG SN: CAE800953BA

Hobbs: 1896.7
TTAF: 4909.1
ENG TT: 7984.2

Date: 8/1/2018
TE's: 9423
CYC: 12937

Complied with 100hr,300hr,600hr and Yearly Airframe Inspections and 150hr,300hr,600hr Engine Inspections. Complied with AD2018-13-01 (para g) figure 1 governor installed 2524769-14 s/n 20357 time remaining 44.1hrs/ Nov-14-2018. Complied with AD-90-19-02 overrunning clutch inspection no defects noted. Complied with ALL recurring AD's. Checked AD-Biweekly 2018-15 no defects at this time. Removed and cleaned tail rotor chip detector no defects drained and serviced. Removed main rotor transmission chip detectors cleaned and reinstalled no defects drained and serviced installed new filter element. Removed cleaned and inspected upper and lower chip plugs cleaned oil filter and changed Facet filter p/n 038088-08. Performed M/R drive shaft inspection. Preformed 600hr facet filter bypass check no defects noted. Complied with 2yr regrease on main rotor assy s/n3855. Performed 2yr regrease on main rotor swashplate p/n 369A27609-605 s/n N/A. Performed 2yr regrease on tail rotor swashplate. Installed 1ea new shaft p/n 369A1123-3 and 4ea new bearings p/n 369A1122-3 on vibration damper on red main rotor blade s/n 021C. Installed 1ea new battery p/n RG-500 s/n 40952863. Installed 1ea new fuel qty sensor p/n 369D296303-5 s/n 2858. Installed 4ea new exhaust cushions p/n 369X28237. All work performed IAW MDHI-CSP-H-4 and RR10W-2 no defects noted at this time. I certify this aircraft has been inspected IAW manufactures standard practices and maintenance manuals and is found to be in an airworthy condition.

Signed

Geoff Campbe

AP

MODULE SERVICE RECORD

Module: Turbine

Page No. _____

Serial No. _____

		INSTALLED				REMOVED				
		Engine Data		Component Data		Engine Data		Component Data		
A/C Serial No.	Date	TSO	TSN	TSO	TSN	Date	TSO	TSN	TSO	TSN
Engine Serial No.		CSO	CSN	CSO	CSN		CSO	CSN	CSO	CSN
CAE-										
CAE-										
CAE-										
CAE-										
CAE-										
CAE-										
CAE-										
CAE-										

INSPECTION-MAINTENANCE-OVERHAUL RECORD

Engine Model. RRM250 C20

Serial No. CAE800953BA

Date: 7/25/2018

Engine Assembly				
TSO	TSN	CSO	CSN	WO #
N/P	7984.2	N/P	12937	N/A

Page No. 2

Remarks

Engine Assembly Inspected In Accordance With RRM250 O&M 10W2, 6th Edition, Rev. 22 Dated 6/1/2017, 72.00.00 1.B, Table 603 Alternate Scheduled Inspections, 150/300/600 Hour Inspection Items only unless otherwise noted below:

Cleaned and Inspected Fuel Nozzle. Cleaned and Inspected Burner Drain Valve. Cleaned and Inspected Engine Oil Filter. Cleaned and Operationally Checked Engine Chip Detectors. Cleaned and Inspected No. 1 Bearing Oil Reducer. Starter brushes checked - 80% life remaining. Replaced Engine Scavenge Oil Filter Element, Engine Serviced with **Mobil 254**.

All Work Performed In Accordance With RRM250 Operation and Maintenance Instruction 10W2, 6th Edition, Rev. 22 Dated 6/1/2017, and current Federal Aviation Regulations. I certify that this engine has been inspected In accordance with a 150/300/600 hour inspections is approved for return to service.

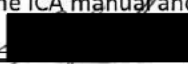
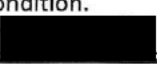
Signed _____ 7-25-2018.

Gregory P. Parsons AP

Helicopter Field Service & Inspections 704-608-9589

A	B	C	D	E	F	G	H	I	J	K	M
1	N420AT										
2	RECURRING A.D. SB & DN LISTING										
3			A/C TT	4909.1							
4	A.D. NUMBER	SUBJECT	METHOD OF COMPLIANCE	C/W DATE	A/C TT C/W	RECUR	NEXT DUE	TIME REMAINING	SIGNATURE TYPE/CERTIFICATE NUMBER		
5	74-20-04	M/R BLADE T/E INSP	Visual		4909.1	100 HR	5009.1	100 hr			
6	75-10-04	T/R Blade Root Fittings	Visual		4909.1		Each Daily				
7	86-20-07	T/R Blade D/S Couplings	VISUAL		4909.1	300 HR	5209.1	300 hr			
8	90-19-02 Para (b)	O/R Clutch Sprag Insp	Visual/ Regrease		4909.1	300 HR	5209.1	300 hr			
9	95-05-13	M/R Blade & Lead Lag Links	Visual		4909.1	100 HR	5009.1	100 hr			
10	96-10-09	M/R Blade Root End Insp	Visual		4909.1	100 HR	5009.1	100 hr			
11	07-12-23	L/G Strut for cracks	Visual		4909.1	100 HR	5009.1	100 hr			
12											
13											
14											
15											
16											
17	Damper P/N	Damper Serial #	Damper Posit Results	Results	Results	Results	Results	Comments			
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											

ICA INSPECTION COMPLIANCE RECORD

A/C N#: 420AT		Date: 8/1/2018	A/C TT: 4909.1
Initial each item when inspected if it applies.		N/A those that are not required.	
REFERENCE:	ITEM:	INITIALS	
HTCM001	M/R Blades		
HTCM002	T/R Blades	NA	
Aerometals	T/R Hub	NA	
Aerometals	Tailboom	NA	
Aerometals	Vertical Stabilizer	NA	
Aerometals	Horizontal Stabilizer	NA	
Aerometals	Exhaust Hanger Assembly	NA	
Concorde	RG-500 Battery	NA	
OnBoard Systems	Cargo Hook	NA	
Rotor Blade	Collective Head Cover	NA	
Diamond J, Inc	T.O.T. Exceedance Indicator	NA	
AFS	Inlet Barrier Filter System	NA	
Tyler	Dual Cargo Platforms	NA	
Colo. Helicopters	Side-Puller Kit	NA	
Rotor Blade	H-500 Side Pull	NA	
Artex	Artex G-406 ELT	NA	
Pointer	Pointer ELT	NA	
Integra	406AF-H	NA	
Rotor Blade	Door Mounted Gauges	NA	
Garmin 496	GPS Mount	NA	
Rotor Blade	Trapeze	NA	
I certify that the above initialed items were inspected in accordance with the appropriate sections of the ICA manual and were found to be in an airworthy condition.			
Technician: 		License # <u>AP</u> 	

Rolls-Royce Allison

250-C20 SERIES OPERATION AND MAINTENANCE

C. Alternate Inspection Schedule

Based on current engine configuration and the use of modern oils, operators may use this alternate inspection schedule. Prerequisites for this include:

- (1) The use of a wet spline starter/generator drive shaft (new production or those replaced in accordance with the Rolls-Royce Allison Commercial Engine Bulletin 250-C20 CEB-1082).
- (2) The use of High Thermal Stability (third generation) oils. Reference PARA 4.C., 72-00-00, Engine-Description and Operation, for oil specifications and mixing cautions.
- (3) The engine must have an external oil filter installed that has a valid STC (Supplemental Type Certificate).

Table 603
Alternate Scheduled Inspections

Inspection Checksheet

Owner Blue Water Date 7-23-18
 A/C Make/Model MD-300HS S/N 9406463 Reg No. H420AT TSN 4909.1
 Engine S/N 800953BA TSN 7984.2 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
	<u>150 Hour Inspection</u>			
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	✓	
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	✓	
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	✓	
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	✓	

72-00-00

Table 603(cont)
Alternate Scheduled Inspections

Item	Inspection/Maintenance Action	REF PARA	✓	Initial
<u>150 Hour Inspection (cont)</u>				
5	Inspect P _c filter for proper clamping.	N/A	✓	
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	✓	
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	✓	
	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	✓	
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	✓	
10	Inspect compressor inlet guide vanes and visible blades and vanes for foreign object damage.	N/A	✓	
11	Clean compressor with chemical wash solution as required if operating in a smoggy area, conditions with airborne pollutants or with water alcohol.	PARA 6., 72-30-00		
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	✓	
13	Clean the 200 mesh screen, if equipped with water-alcohol injection kit.	N/A	✓	

*FILTER CLAMP
BOLT LOOSE*

72-00-00

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Table 603(cont) Alternate Scheduled Inspections				
Item	Inspection/Maintenance Action	REF PARA	✓	Initial
	<u>150 Hour Inspection (cont)</u>			
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	✓	
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. Check air tubes for cracks.	N/A	✓	
16	Check compressor discharge air tubes for damage or deterioration.	PARA 4.A., 72-40-00	✓	
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	✓	
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	✓	
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	✓	
20	Inspect the starter-generator brushes for wear in accordance with the Aircraft Manual at the same time the spline inspection is made.	PARA 4.B., 72-60-00	✓	
21	Lubrication system inspection		✓	
	a. 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 36a, 37, 38 and 39 below if carbon particles are found.	PARA 1.C., 72-60-00	✓	
	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) filler elements to facilitate this inspection. If chips, debris or carbon particles are found, proceed with additional inspection/maintenance as outlined in item 21b. above.		✓	

72-00-00

Rolls-Royce Allison

250-C20 SERIES OPERATION AND MAINTENANCE

Table 603(cont)
Alternate Scheduled Inspections

Item	Inspection/Maintenance Action	REF PARA	✓	Initial
	<u>150 Hour Inspection (cont)</u>			
	b. Inspect magnetic chip detector plugs.	PARA 11.G., 72-00-00, Engine- Servicing	✓	
	c. Inspect quick disconnect magnetic chip detector plugs and flanged inserts for wear, if installed.	PARA 11.G., 72-00-00, Engine- Servicing	✓	
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 <i>NOT INSTALLED</i>	✓	
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	✓	
24	Inspect the outer combustion case for condition. In- spect the weld joints of and in the brazed screen rein- forcement in the armpit area.	PARA 2.B., 72-40-00	✓	
25	Clean the burner drain valve.	PARA 3., 72-40-00	✓	
26	Inspect the ignition lead for burning, chafing, or crack- ing of conduit and loose connectors and broken lock- wire.	N/A	✓	
27	On engines with CECO fuel system, clean or replace the high pressure fuel filter.	N/A	✓	
28	On engines with CECO fuel systems, visually inspect the bleed hole at the low point in the scroll-to-gover- nor P _c tube for any obstruction. If the hole is not com- pletely open, remove any contamination which could obstruct drainage of moisture from the tube using a piece of lockwire.	N/A	✓	
29	Review engine records for compliance with all manda- tory bulletins, inspections and airworthiness directives.	N/A	✓	
30	Review engine records for time limited parts compo- nents, accessory or modules.	N/A	✓	
31	Enter component changes, inspection compliance, etc., in log book as required.	N/A	✓	

72-00-00

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Rolls-Royce Allison

250-C20 SERIES OPERATION AND MAINTENANCE

Table 603(cont)
Alternate Scheduled Inspections

Item	Inspection/Maintenance Action	REF PARA	✓	Initial
	<u>300 Hour Inspection</u>			
	In addition to the 150 hour inspection items, perform the following:			
	WARNING: MANDATORY COMPLIANCE DATE FOR ROLLS-ROYCE ALLISON 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 <i>APPROX + 386500-5, KST.</i>	<i>N/A</i>	
	CAUTION: INSPECTION FREQUENCY SHALL BE BASED ON THE NATURE OF THE EROSION AND/OR CORROSIVE ENVIRONMENT. THIS ENVIRONMENT MAY DICTATE A MORE FREQUENT INSPECTION INTERVAL. IN NO CASE SHOULD THE INSPECTION INTERVAL EXCEED 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	✓	
	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.	PARA 2.C., 73-10-01	✓	
	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	✓	

72-00-00

Rolls-Royce Allison

250-C20 SERIES OPERATION AND MAINTENANCE

Table 603(cont)
Alternate Scheduled Inspections

Item	Inspection/Maintenance Action	REF PARA	✓	Initial
	<u>300 Hour Inspection (cont)</u>			
36	Lubrication system inspection		✓	
	<u>NOTE:</u> Maximum interval between oil change is 300 hours or 6 months whichever occurs first.			
	a. Drain oil system.	PARA 11.C., 72-00-00, Engine-Servicing	✓	
	b. Inspect and clean turbine pressure oil check valve.	PARA 7.K., 72-50-00	✓	
	c. 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	✓	
	d. 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	✓	
	<u>NOTE:</u> This step must be performed before draining oil or after the oil system has been refilled.			
	e. Refill oil system.	PARA 11.C., 72-00-00, Engine-Servicing	✓	
37	Visually inspect external sump. Clean internal carbonous deposits and build up from sump or replace if necessary.	N/A	✓	
38	Inspect scavenge oil strut in the power turbine support. Clean carbonous deposits from strut.	PARA 7.E., 72-50-00	✓	
39	Inspect No. 6 and 7 bearing pressure oil nozzle. Clean internal carbonous deposits from nozzle.	PARA 7.G., 72-50-00	✓	
40	Remove, inspect and clean the fuel nozzle exterior. If no airframe mounted fuel filter is installed, inspect the fuel nozzle filter.	PARA 2., 73-10-03	✓	
	<u>NOTE:</u> Operators may find it necessary to inspect and clean the fuel nozzle more often depending on past experience or operating conditions.			

72-00-00

Rolls-Royce Allison

250-C20 SERIES OPERATION AND MAINTENANCE

Table 603(cont) Alternate Scheduled Inspections				
Item	Inspection/Maintenance Action	REF PARA	✓	Initial
	<u>500 Hour/1 Year Inspection</u>			
41	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 Allison Commercial Engine Bulletin 250-C20 CEB-1120 and/or 250-C20 CEB-1158 removes this inspection requirement.			
	<u>600 Hour Inspection</u>			
	In addition to the 150 hour and 300 hour inspection items, perform the following:			
42	Remove, clean and inspect engine P _c filter every 600 hours or earlier as engine performance dictates.	PARA 3., 73-20-06	✓	
43	Inspect and clean the No. 1 bearing oil pressure reducer.	PARA 3., 72-30-00	✓	
44	Check the fuel pump driveshaft on Sundstrand single element pumps for spline wear.	N/A	✓	
	NOTE: This inspection is not required for <u>Agro-Tech</u> (TRW) fuel pumps or Sundstrand fuel pumps P/N 23003114 and subsequent.		✓	
45	Perform scavenge oil filter impending bypass functional test per Facet Service Bulletin No. 090589 (ref. Rolls-Royce Allison 250 CSL 1164) for aircraft equipped with this type of external scavenge filter system.	N/A		
46	Replace the fuel control strainer 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 <u>252464A-31</u>	✓	

72-00-00

CAE-800953BA
250-C20B

N420AT Hobbs: 1896.7
Hobbs @ Install: 1838.8
Engine TT: 7984.2
Total Cycles: 12937
100 hr due 100
300 hr due 300
600 hr due 600

Engine Installed on N420AT
Engine Oil: mobil254

	Retire Cycle	Cycle Count	Remaining
1st Stage:	3000	1819	1181
2nd Stage:	3000	1819	1181
3rd Stage:	6000	3142	2858
4th Stage:	6000	3825	2175
Tie bolt	9000	2732	6268
Impeller:	9150	4565	4585

Component	Part #	S/N	TBO/RT		Install TT Date	Comp Time at install	rt/oh @TT engine	Remaining
Compressor	6890550	CAC-32506	3500	oh	7926.3	20.6	11405.7	3421.5
case half inspection:	23057142	SET42448	1750	ins	7926.3	20.6	9655.7	1671.5
Impeller	6876873	KR90340	3550	rt	7926.3	1837.8	9638.5	1654.3
Gearbox (TT)	6894171	CAG-32639F	o/c		7926.3	3863.0		on condition
grbx - time since oh	3863.0							
grbx - time since 3500 hour case-split	3863.0							
grbx - time since installation	0.0							
Turbine	23038241	CAT-38388P	3500	oh	7926.3	2196.3	9230.0	1245.8
Mini-turbine (hot-section insp)			1750	ins	7926.3	962.9	8713.4	729.2
1st stage wheel	23073853	X545928	1775	rt	7926.3	962.9	8738.4	754.2
2nd stage wheel	23073854	X509554	1775	rt	7926.3	962.9	8738.4	754.2
3rd stage wheel	23001967	HX75669	4550	rt	7926.3	2196.3	10280.0	2295.8
4th stage wheel	6853279	H25014	4550	rt	7926.3	2878.2	9598.1	1613.9
Tie bolt	23068265	NH88247			7926.3	2145.3		
Fuel Control Unit	2524644-31	323485	2500	oh	7926.3	102.8	10323.5	2339.3
Fuel Control Strainer	2539508		1500	rt	7926.3	102.8	9323.5	1339.3
Governor	2524769-14	20357	2000	oh	7809.5	1282.2	8527.3	543.1
Fuel Nozzle	23077068	418	2500	oh	7172.7	0	9672.7	1688.5
Bleed Valve	23036668	FF49453	1500	oh	7926.3	1426.3	8000	15.8
Fuel Pump	6899253	T104652	4000	oh	6658.6	0	10658.6	2674.4