September

2016

Aircraft Records

Key Lime Air

13252 E. Control Tower Road, Englewood, CO 80112

SA22X Task Card

SA226/SA227 Series MIP

Task Number:	Rev:	Date:	Page:
27.920	Orig.	05/03/2013	1 of 6

Task Description

☐ Aileron Cable Inspection/Tension Adjustment (Complete Section A)
☐ Elevator Cable Inspection/Tension Adjustment (Complete Section B)
☐ Rudder Cable Inspection/Tension Adjustment (Complete Section C)

Position: < Check at Left

Task Type: RII

Effectivity	Personnel Required	Man Hours
ALL	Varies	Varies

Aircraft Zone(s)	Panel Access
Varies	Varies

Required Equipment and Tools	Required Consumables, Supplies, and Parts
1. Tensiometer	None

Manual References

27-00-00

Aircraft Registration	Component S/N (Off –Wing Only)	W/O # or Log Page #	Discrepancy Number
N765FA		26306	4

Part Number Off	Serial Number Off	Position	Remarks

Part Number On	Serial Number On

Task Completion Date	Completed By (Initials)
9-13-16	[redacted]

Mechanic/AW Inspector/RII Inspector – Print Name		Signature	Initials
Derek Adamson	☐ RII	[redacted]	
Jason P Davis	☒ RII	[redacted]	
	☐ RII		
	☐ RII		
	☐ RII		

Prerequisites/Reference Procedures/Safety Conditions/Warnings/Considerations

Required Conditions

A. The aircraft must be safe for maintenance.

Safety Conditions

A. Obey the general maintenance practices.

SECTION A – AILERON CABLE INSPECTION/TENSION ADJUSTMENT

Task Description (Refer To Figures As Indicated)	Mech/ AW Insp. Initials	Disc. #	RII Inspection Result Insp. Initials		RII Buyback	RII Buyback Re-Inspect Insp. Initials	
			Pass	Fail →	Disc #	Pass	Fail
1) Prepare the aircraft for this task in accordance with the prerequisites above. Read all considerations, warnings, and notes above and ensure that each item is addressed as applicable.							
NOTE: Turnbuckles and terminals are available in different lengths. If a cable has stretched to the point that proper cable tension cannot be obtained, select a turnbuckle or terminal of shorter length. Verify that cable is, in fact, stretched and not off a pulley before changing end fittings.							
2) Locate aileron cable turnbuckles under floorboard between forward and aft wing spar. Release tension on each control cable.							
3) Pass a clean, DRY cloth along the entire length of cable to clean and detect broken wires. Use NO cleaning compounds or solvents.							
4) Visually inspect ENTIRE length of cable, using mirrors and/or other inspection tools as required to verify the integrity and condition of the cables. Visually check each cable for corrosion. **Pay particular attention to hidden cable paths and critical fatigue areas.**							
ROTATE THE CABLES 180° WHERE CABLES CONTACT ANY PULLEYS/FAIRLEADS OR PRESSURE SEALS, BIRDCAGE CABLES (SLIGHTLY UNTWIST). MAKE CAREFUL INSPECTION IN CRITICAL FATIGUE AREAS FOR WEAR AND BROKEN WIRES. IF A BROKEN WIRE IS SUSPECTED, FURTHER INSPECTION WITH A MAGNIFYING GLASS OF AT LEAST 7 POWER IS REQUIRED. REFER TO MAINTENANCE MANUAL FOR ACCEPTABLE LIMITS.							
5) Inspect the entire length of each cable for correct cable routing.							
6) Inspect all cable fittings for cable slippage and broken strands at the terminals. Insure that all bearings and swivel fittings pivot freely. Check turnbuckles for proper thread exposure and broken or missing safety wires/clips (on all turnbuckles not loosened in step 1).							
7) Inspect all pressure seals for wear and/or material deterioration.							
8) Inspect all pulleys for general condition. Check bearings for binding or catching, excess looseness and presence of corrosion. Inspect each pulley for proper alignment, cracks or broken flanges, excess wear, rough or sharp edges, any flattened surfaces, and presence of foreign matter embedded in pulley grooves.							
9) Check pulley brackets and guards for alignment, security and cracks.							
10) Tension cables between control column and aileron bellcrank as follows:							
a) Engage gust lock.							

Task Description (Refer To Figures As Indicated)	Mech/ AW Insp. Initials	Disc. #	RII Inspection Result Insp. Initials		RII Buyback	RII Buyback Re-Inspect Insp. Initials	
			Pass	Fail →	Disc #	Pass	Fail
b) Move aileron bellcrank (by hand) into locked position.							
c) Install control wheel alignment tool.							
d) Adjust aileron turnbuckles to attain correct cable tension. Check tension with a tensiometer. Use Table 202 to obtain correct tension. Record ambient temperature, starting tension, and final tension below: AMBIENT TEMP: 70 °F INITIAL TENSION: 0 LBS FINAL TENSION: 46 LBS **RII→**							
11) Remove clamp on copilot side of control wheel alignment tool.							
12) Disengage gust lock.							
13) To ensure the pilot and copilot control wheels are coordinated, adjust the cable section between the control yokes as follows:							
a) Install control wheel alignment tool (clamp installed on pilot's wheel, and clamp to copilot's wheel removed). One side of copilot's control wheel will come in contact with the tool. Measure gap between opposite side of control wheel and control wheel alignment tool.							
b) Adjust turnbuckle to align copilot's control wheel to ensure gap between control wheel and alignment tool does not exceed 0.030 inch (0.762 mm).							
14) Safety all turnbuckles. **RII→**							
15) Remove control wheel alignment tool.							

SECTION B – ELEVATOR CABLE INSPECTION/TENSION ADJUSTMENT

Task Description (Refer To Figures As Indicated)	Mech/ AW Insp. Initials	Disc. #	RII Inspection Result Insp. Initials		RII Buyback	RII Buyback Re-Inspect Insp. Initials	
			Pass	Fail →	Disc #	Pass	Fail
1) Prepare the aircraft for this task in accordance with the prerequisites above. Read all considerations, warnings, and notes above and ensure that each item is addressed as applicable.							
NOTE: Turnbuckles and terminals are available in different lengths. If a cable has stretched to the point that proper cable tension cannot be obtained, select a turnbuckle or terminal of shorter length. Verify that cable is, in fact, stretched and not off a pulley before changing end fittings.							
2) Remove aft interior bulkhead and locate elevator cable turnbuckles.							
3) If aircraft is autopilot equipped, disconnect autopilot bridle. Elevator cable tension cannot be properly adjusted if autopilot is connected. No Autopilot							

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SA226/SA227 Series MIP

Task Description (Refer To Figures As Indicated)	Mech/ AW Insp. Initials	Disc. #	RII Inspection Result Insp. Initials		RII Buyback	RII Buyback Re-Inspect Insp. Initials	
			Pass	Fail →	Disc #	Pass	Fail
4) Remove large access panel on right side of vertical stabilizer and install 3/16 rigging pin through elevator control quadrant, and quadrant lock.							
5) Remove pilot's seat, carpet, and floorboard.							
6) Install 3/16 rig pin through elevator walking beam and bracket to position elevator in neutral relieving elevator bob weight tension.							
7) Release tension on each control cable.							
8) Pass a clean, DRY cloth along the entire length of cable to clean and detect broken wires. Use NO cleaning compounds or solvents.							
9) Visually inspect ENTIRE length of cable, using mirrors and/or other inspection tools as required to verify the integrity and condition of the cables. Visually check each cable for corrosion. **Pay particular attention to hidden cable paths and critical fatigue areas.**							
ROTATE THE CABLES 180° WHERE CABLES CONTACT ANY PULLEYS/FAIRLEADS OR PRESSURE SEALS, BIRDCAGE CABLES (SLIGHTLY UNTWIST). MAKE CAREFUL INSPECTION IN CRITICAL FATIGUE AREAS FOR WEAR AND BROKEN WIRES. IF A BROKEN WIRE IS SUSPECTED, FURTHER INSPECTION WITH A MAGNIFYING GLASS OF AT LEAST 7 POWER IS REQUIRED. REFER TO MAINTENANCE MANUAL FOR ACCEPTABLE LIMITS.							
10) Adjust Elevator turnbuckles to attain correct cable tension. Check tension with a tensiometer. Use Table 202 to obtain correct tension. Record ambient temperature, starting tension, and final tension below: AMBIENT TEMP: 67 °F INITIAL TENSION: [redacted] LBS FINAL TENSION: 38 LBS **RII→**							
11) Connect autopilot bridle and tension bridle IAW specifications for autopilot system (IF EQUIPPED). Elevator cable tensions change from recommended values when autopilot bridle has been tensioned. Bridle cable preload increases cable tension aft of bridle splice as much as 40% while tension decreases as much as 15% forward of bridle splice. No Autopilot							
12) Safety all turnbuckles. **RII→**							
13) Remove elevator walking beam and elevator quadrant rig pins. CAUTION: SUPPORT CONTROL WHEEL WHEN REMOVING RIG PIN TO AVOID DAMAGE TO FLIGHT INSTRUMENTS.							
14) When rigging is satisfactory, verify distance between control column and instrument panel is 2.25 ± 0.25 inches (5.715 ± 0.635 cm) with column in forward position. If necessary, adjust control rod located under RH cockpit floorboard, F.S. 98.56.							
15) Perform Elevator Travel Check.							

SECTION C – RUDDER CABLE INSPECTION/TENSION ADJUSTMENT

Task Description (Refer To Figures As Indicated)	Mech/ AW Insp. Initials	Disc. #	RII Inspection Result Insp. Initials		RII Buyback	RII Buyback Re-Inspect Insp. Initials	
			Pass	Fail →	Disc #	Pass	Fail
1) Prepare the aircraft for this task in accordance with the prerequisites above. Read all considerations, warnings, and notes above and ensure that each item is addressed as applicable.	[redacted]						
NOTE: Turnbuckles and terminals are available in different lengths. If a cable has stretched to the point that proper cable tension cannot be obtained, select a turnbuckle or terminal of shorter length. Verify that cable is, in fact, stretched and not off a pulley before changing end fittings.							
2) Engage gust lock and operate rudder pedals to lock rudder.							
3) Remove center isle floor boards and aft interior bulkhead.							
4) Locate rudder cable turnbuckles.							
5) Release tension on each control cable.							
6) Pass a clean, DRY cloth along the entire length of cable to clean and detect broken wires. Use NO cleaning compounds or solvents.							
7) Visually inspect ENTIRE length of cable, using mirrors and/or other inspection tools as required to verify the integrity and condition of the cables. Visually check each cable for corrosion. **Pay particular attention to hidden cable paths and critical fatigue areas.**							
ROTATE THE CABLES 180° WHERE CABLES CONTACT ANY PULLEYS/FAIRLEADS OR PRESSURE SEALS, BIRDCAGE CABLES (SLIGHTLY UNTWIST). MAKE CAREFUL INSPECTION IN CRITICAL FATIGUE AREAS FOR WEAR AND BROKEN WIRES. IF A BROKEN WIRE IS SUSPECTED, FURTHER INSPECTION WITH A MAGNIFYING GLASS OF AT LEAST 7 POWER IS REQUIRED. REFER TO MAINTENANCE MANUAL FOR ACCEPTABLE LIMITS.							
8) Adjust rudder turnbuckles to attain correct cable tension. Check tension with a tensiometer. Use Table 202 to obtain correct tension. Record ambient temperature, starting tension, and final tension below: **RII→** AMBIENT TEMP: 67 °F INITIAL TENSION: 0 LBS FINAL TENSION: 44 LBS			[redacted]				
NOTE: Adjust cables evenly so that when correct tension is met rudder is streamlined and pilot and copilot rudder pedals are aligned. If pedals need alignment see Rudder Pedal Operational Check, this MM 27-00-00.							
9) Disengage gust lock.							
10) Safety all turnbuckles. **RII→**							

END OF TASK

H. Operational Test – Actuator Time Check (Figure 208)

(1) Time between overhaul (TBO) for pitch trim actuators P/N DL5040M2-4, and DL5040M2-6 is 2,000 flight hours.

(2) All actuators require 400 hour travel time check.

NOTE: Make written record of time check every 400 hours. Figure 208 is a sample form for recording actuator travel time.

(3) Clear tail of all personnel and equipment.

(4) Connect GPU to aircraft.

NOTE: Adjust GPU to 29.0 VDC, plus 0.0 or minus 0.5 volt.

Actuator S/N 334 Installed in aircraft S/N AC765

Date of actuator Time Check 09-15-16

PILOT PITCH TRIM ACTUATOR TRAVEL TIME

Full nose down to full nose up 22.68 Seconds

Full nose up to full nose down 22.55 Seconds

Difference between up travel and down travel 0.13 Seconds

COPILOT PITCH TRIM ACTUATOR TRAVEL TIME

Full nose down to full nose up 22.25 Seconds

Full nose up to full nose down 21.80 Seconds

Difference between up travel and down travel 0.45 Seconds

7M274010208

Actuator Travel Time Check
Sample Form
Figure 208

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SA22X Task Card

SA226/SA227 Series MIP

Task Number:	Rev:	Date:	Page:
34.901	Orig.	04/30/2012	1 of 2

Task Description	Position
Pitot Static System Maintenance – Post-Maintenance Checks	N/A
	Task Type
	RII

Effectivity	Personnel Required	Man Hours
ALL	1	.25

Aircraft Zone(s)	Panel Access
Varies	None

Required Equipment and Tools	Required Consumables, Supplies, and Parts
None	None

Manual References

MM 34

Aircraft Registration	Component S/N (Off –Wing Only)	W/O # or Log Page #	Discrepancy Number
N765FA		26306	18

Part Number Off	Serial Number Off	Position	Remarks

Part Number On	Serial Number On

Task Completion Date	Completed By (Initials)
9-14-16	[redacted]

Mechanic/AW Inspector/RII Inspector – Print Name		Signature	Initials
Jason Taylor	☐ RII	[redacted]	
Mechanic/AW Inspector/RII Inspector – Print Name		Signature	Initials
Robert [redacted]	☐ RII	[redacted]	
Mechanic/AW Inspector/RII Inspector – Print Name		Signature	Initials
	☐ RII		
Mechanic/AW Inspector/RII Inspector – Print Name		Signature	Initials
	☐ RII		
Mechanic/AW Inspector/RII Inspector – Print Name		Signature	Initials
	☐ RII		

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SA22X Task Card
SA226/SA227 Series MIP

Task Number:	Rev:	Date:	Page:
34.901	Orig.	04/30/2012	2 of 2

Task Description (Refer To Figures As Indicated)	Mech/ AW Insp. Initials	Disc. #	RII Inspection Result Insp. Initials		RII Buyback	RII Buyback Re-Inspect Insp. Initials	
			Pass	Fail →	Disc #	Pass	Fail
(1) Remove all test equipment, plugs, tape, adapters, etc. from all static ports and pitot masts. RII→	[redacted]						

END OF TASK

Key Lime Air

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SA22X Task Card

SA226/SA227 Series MIP

Task Number:	Rev:	Date:	Page:
61.901	Orig.	04/30/2012	1 of 3

Task Description	Position
Propeller Blade Angle (Flight Idle) Adjustment (McCauley)	Record Below
	Task Type
	RII

Effectivity	Personnel Required	Man Hours
MCCAULEY – EQUIPPED AIRCRAFT	2	1.0

Aircraft Zone(s)	Panel Access
900	None

Required Equipment and Tools	Required Consumables, Supplies, and Parts
1. Protractor	None

Manual References

61-10-00

Aircraft Registration	Component S/N (Off –Wing Only)	W/O # or Log Page #	Discrepancy Number
N765FA		26306	21

Part Number Off	Serial Number Off	Position	Remarks
		P2.	DT-018 Protractor.
Part Number On	**Serial Number On**		

Task Completion Date	Completed By (Initials)
09-12-2016.	[redacted]

Mechanic/AW Inspector/RII Inspector – Print Name		Signature	Initials
Dan Anderson	☐ RII	[redacted]	[redacted]
Mechanic/AW Inspector/RII Inspector – Print Name		Signature	Initials
Tom Allard	☑ RII	[redacted]	
Mechanic/AW Inspector/RII Inspector – Print Name		Signature	Initials
	☐ RII		
Mechanic/AW Inspector/RII Inspector – Print Name		Signature	Initials
	☐ RII		
Mechanic/AW Inspector/RII Inspector – Print Name		Signature	Initials
	☐ RII		

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SA226/SA227 Series MIP

Task Number:	Rev:	Date:	Page:
61.901	Orig.	04/30/2012	2 of 3

Prerequisites/Reference Procedures/Safety Conditions/Warnings/Considerations

Required Conditions

A. The aircraft must be safe for maintenance.

Safety Conditions

A. Obey the general maintenance practices.

Task Description (Refer To Figures As Indicated)	Mech/ AW Insp. Initials	Disc. #	RII Inspection Result Insp. Initials		RII Buyback	RII Buyback Re-Inspect Insp. Initials	
			Pass	Fail →	Disc #	Pass	Fail
Prepare the aircraft for this task in accordance with the prerequisites above. Read all considerations, warnings, and notes above and ensure that each item is addressed as applicable.							
(1) Open engine cowling.							
(2) Remove propeller spinner.							
(3) Ensure that engine controls are properly rigged.							
(4) Ensure oil tank is full.							
(5) Release start locks as follows:							
(5a) Activate unfeathering pump. Lift power lever over flight idle gate and place lever in full aft (reverse) position. NOTE: Do not operate unfeathering pump in excess of 60 seconds when oil is cold or 30 seconds when oil is hot.							
(5b) Insert two (2) start lock release tools (McCauley P/N B-5021), into the four (4) release holes on front end of piston and cylinder assembly.							
(5c) Push tools in until bottomed out, releasing start locks.							
(5d) Position power lever against flight idle gate and switch off unfeathering pump.							
(6) Zero (0) propeller protractor by placing base of protractor on top of propeller hub cylinder and aligning protractor longitudinally.							
(7) Flight Idle Blade Angle Test/Adjustment.							
(7a) Position power lever against flight idle gate.							
(7b) Activate unfeathering pump. As oil pressure increases through propeller governor the propeller blades will rotate from feather toward flight idle. NOTE: Do not operate unfeathering pump in excess of 60 seconds when oil is cold or 30 seconds when the oil is hot.							
(7c) When propeller blades have stopped in flight idle position, move blade to be tested to right horizontal (three o'clock) position.							

Task Description (Refer To Figures As Indicated)	Mech/ AW Insp. Initials	Disc. #	RII Inspection Result Insp. Initials		RII Buyback	RII Buyback Re-Inspect Insp. Initials	
			Pass	Fail →	Disc #	Pass	Fail
(7d) Using a zeroed propeller protractor, measure propeller blade angle at the 30 inch (76.92 cm) station (white or yellow mark on rear surface of blade). Flight idle blade angle must be: P/N P6525322-0307, + 15.0°, + 0.2° (see Table 201). P/N P6525322-0407, + 15.0°, + 0.2° (see Table 202). P/N P6636401-0107, + 16.0°, ± 1.0° (see Table 203). **RII→** [redacted]			TA				
(7e) Using beta tube adjustment tool (McCauley P/N B-5378), adjust Beta tube counterclockwise to increase blade angle and clockwise to decrease blade angle. NOTE: One turn clockwise of beta tube decreases blade angle approximately 2° and one turn counterclockwise increases angle approximately 2°. **RII→** [redacted]			TA				
(7f) Install beta tube locking pin and secure with screw. **RII→** [redacted]			TA				

END OF TASK

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SA22X Task Card

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Task Number:	Rev:	Date:	Page:
61.902	Orig.	04/30/2012	1 of 4

Task Description	Position
Propeller Installation (McCauley)	Record Below
	Task Type
	RII

Effectivity	Personnel Required	Man Hours
MCCAULEY – EQUIPPED AIRCRAFT	2	2.0

Aircraft Zone(s)	Panel Access
900	None

Required Equipment and Tools	Required Consumables, Supplies, and Parts
None	1. Lock Wire

Manual References

61-10-00

Aircraft Registration	Component S/N (Off –Wing Only)	W/O # or Log Page #	Discrepancy Number
N765FA		26306.	[redacted]

Part Number Off	Serial Number Off	Position	Remarks
4HFR34C52-F6AT	661802.	P2.	TA004.
Part Number On	**Serial Number On**		
4HFR34C52-K	992827.		

Task Completion Date	Completed By (Initials)
9-15-16	[redacted]

Mechanic/AW Inspector/RII Inspector – Print Name		Signature	Initials
Dean Andrew	☐ RII	[redacted]	
Tom Allard	☑ RII	[redacted]	
John Fyle	☒ RII	[redacted]	
	☐ RII		
	☐ RII		

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Task Number:	Rev:	Date:	Page:
61.902	Orig.	04/30/2012	2 of 4

Prerequisites/Reference Procedures/Safety Conditions/Warnings/Considerations

Required Conditions

A. The aircraft must be safe for maintenance.

Safety Conditions

A. Obey the general maintenance practices.

Task Description (Refer To Figures As Indicated)	Mech/ AW Insp. Initials	Disc. #	RII Inspection Result Insp. Initials		RII Buyback	RII Buyback Re-Inspect Insp. Initials	
			Pass	Fail →	Disc #	Pass	Fail
Prepare the aircraft for this task in accordance with the prerequisites above. Read all considerations, warnings, and notes above and ensure that each item is addressed as applicable.	[redacted]						
(1) Remove protective cover from end of engine propeller shaft.							
(2) Ensure shaft is clean, undamaged, and free of nicks and burrs.							
(3) Ensure engine propeller shaft flange, dowels, and mounting stud holes are clean, dry, undamaged, and free of foreign material.							
(4) Remove protective cover from propeller hub mounting flange.							
(5) Ensure that propeller hub mounting flange, dowel pin holes, and mounting studs are clean, dry, undamaged, and free of foreign material.							
(6) Lightly lubricate O-ring and crankshaft pilot with clean engine oil and install O-ring in groove of propeller hub mounting flange. Ensure all other surfaces are clean and dry.							
(7) Ensure threads of nuts and studs are free of burrs and nicks, and clean and free of foreign material. Apply MIL-T-83483 or equivalent grease liberally to threads of nuts, mounting studs, and nut faces.							
(8) Position propeller close to the engine propeller shaft and align engine shaft dowel pins with dowel pin holes on propeller hub mounting flange. Rotate engine propeller shaft to align dowel pin holes.							
(9) Mount propeller on engine propeller shaft. CAUTION: SEAT PROPELLER SQUARELY AGAINST OUTPUT SHAFT FLANGE. ROTATION, COCKING, OR WIGGLING PROPELLER ONTO SHAFT MAY DAMAGE O-RING GROOVE AND CAUSE OIL LEAKAGE.							
(10) Install prop attaching nuts on hub mounting studs and torque nuts 68 to 72 foot-pounds (92.48 to 97.92 N·m). Torque hub mounting nuts in sequence: 1-2-3-4-5-6-7-8. Retorque mounting nuts in counterclockwise sequence: 1-5-3-8-2-6-4-7 (see Figure 203). **RII→**			TA				
(11) Check propeller deice brush installation and adjust as required.							
(12) Ensure proper rigging of engine controls.							
(13) Install beta tube using McCauley tool P/N #B-5378. Lubricate O-ring with engine oil and install on beta tube. Insert beta tube into forward end of propeller piston rod. Ensure Oring is not sheared during beta tube installation. Do not secure locking pin until after adjusting flight idle blade angles.							
(14) Set propeller flight idle blade angle IAW task 61.901.							

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Task Description (Refer To Figures As Indicated)	Mech/ AW Insp. Initials	Disc. #	RII Inspection Result Insp. Initials		RII Buyback	RII Buyback Re-Inspect Insp. Initials	
			Pass	Fail →	Disc #	Pass	Fail
(15) Secure locking pin on beta tube. **RII→**	[redacted]		TA				
(16) Perform operational check of propeller deice boots.	[redacted]						
(17) Install fillet assemblies with screws and washers.	[redacted]						
(18) Install shims and spinner support on piston rod. If shims are not mechanically centered, center visually and hold until support is firmly in place.	[redacted]						
(19) Ensure that alignment marks on spinner and propeller blade match. Lightly press shell against support and check alignment of holes in shell with holes in bulkhead. Adjust number of shims until spinner mounting holes are aligned with forward half of bulkhead mounting hole diameters.	[redacted]						
(20) Push on spinner shell until spinner mounting holes are fully aligned with bulkhead holes and install eight (8) equally spaced screws and washers. After installation of screws and washers, release pressure on the spinner, and install remaining screws and washers. **RII→**	[redacted]		[redacted]				
(21) Install lower forward engine cowl.	[redacted]						

END OF TASK

Key Lime Air

TPE331 Performance Run

Form: 87-500
Date: 08/23/2010
Revision: Original

Aircraft Registration	Engine S/N	Date	A/C TT	A/C Landings
N765FA	E1: P-44149C E2: P-44309C	9-16-16	24169,7	39961.
Press. Altitude	**Ambient OAT C**	**Target Torque**	**Location**	**Technician**
5800	22	70	APA	John Frye

	ETSN	ECSN	TSCAM	CSCAM	TSHSI	CSHSI
E1						
E2						

Ground Run Parameters

Indication	E1	E2	Indication	E1	E2
1- Overspeed Gov. – 104 to 105%	104	104	6- RPM – 99 to 101%	100	100
2- Flight Idle ON Locks - RPM	90	91	6- Fuel Flow	440	470
2- Flight Idle ON Locks – F/F	170	180	7- RPM Prop Gov. Low – 93.5 to 96%	93,5	94.5
3- RPM USG Low – 70 to 72%	70.5	71	8- Flight Idle OFF Locks - RPM	90	89
4- RPM Rev Low – 90% ±2.5	92,5	92	8- Flight Idle OFF Locks – F/F	180	180
5- RPM USG High – 96 to 97%	96,5	96	9- Rev High – 95.5% Min	96	95.7
6- Max Temp – 650° SRL ON	650	650	10- *Oil Temperature – 55° to 110°	80	80
6- Torque – 100% Max	73	72	11- Oil Pressure – 40 psig Min	70	70
*Normal Continuous ground operation. All temps are in Centigrade			Bleed Air Off	X	

Notes and/or Adjustments	Parameter	-10 Limits	-11 & -12 Limits
EGT Compensator: E1: -20 E2: -30	Max Temp 650		

Prepared By:

Printed Name	Signature	Date
John Frye	[redacted]	9-16-16

Key Lime Air
13252 E. Control Tower Road, Englewood, CO 80112

Airframe Inspection Package

Date: **09/07/2016**	A/C Reg. No. **N765FA**	A/C Serial No. **AC765**
A/C Total Time: 24169.7	A/C Total Landings: 39961	Station: **APA**
Airframe Work Order #: **26306**	E1 Work Order #: **26308**	E2 Work Order #: **26309**

SIGNATURE BLOCKS

This table lists the mechanics and Inspectors that will make initials on the inspection forms.

MECHANIC'S OR INSPECTOR'S PRINTED NAME	SIGNATURE	SAMPLE INITIALS
Jason P Davis	[redacted]	
Derek Adamson		
John Stephen Gripp		

Airframe Inspection Preparation and Service

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
Left Center Section Service and Inspection Preparation						
1	21	Remove panels as required to gain access to ACM.	MX	ALL		
2	21	Lube cooling air turbine.	MX	ALL		
3	21	Remove water condenser sock.	MX	ALL		
4	27	Remove required panels to gain access to flap and aileron push rods and interconnect.	MX	ALL		
Right Center Section Service and Inspection Preparation						
1	21	Remove panels as required to gain access to ACM.	MX	ALL		
2	21	Lube cooling air turbine.	MX	ALL		
3	21	Remove water condenser sock.	MX	ALL		
4	27	Remove required panels to gain access to flap and aileron push rods and interconnect.	MX	ALL		
Nose Gear Service						
1	32	Jack aircraft nose.	MX	ALL		
2	32	Remove NLG wheels and bearings. Clean and lubricate wheel bearings.	MX	ALL		
3	32	Clean nose wheel assemblies.	MX	ALL		
4	32	Balance nose wheel assemblies.	MX	ALL		
5	32	Service nose gear strut as with fluid per maintenance manual.	MX	ALL		
6	32	Reinstall nose wheel assemblies.	MX	ALL		
Deice Boot Service						
1	30	Clean all deice boots.	MX	ALL		
2	30	Treat all deice boots with PBS.	MX	ALL		

End of Airframe Inspection Preparation and Service

Airframe Inspection

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
Aircraft Operations Binder, Flight/Maintenance Logs, and Certificates						
1	25	Review Aircraft Dispatch Book and Flight / Maintenance Log for open MEL's, and or Non-MEL Carry-over's that may be repaired at this time. Check condition of binder covers and replace as necessary.	1	ALL		
2	25	Inspect aircraft Flight / Maintenance Log book to insure that adequate maintenance history is on board aircraft (The current Flight / Maintenance Log book plus the previous book shall be on board the aircraft)	1	ALL		
3	25	Verify that the aircraft's Airworthiness Certificate and Registration are onboard the aircraft, in good condition and that the Airworthiness Certificate is visible.	1	ALL		
Aircraft General Inspection						
1	--	Inspect left wing (upper and lower) for damage, loose or missing rivets, static wicks, fuel leaks and general condition.	1	ALL		
2	--	Inspect left wing (upper and lower) for damage, loose or missing rivets, static wicks, fuel leaks and general condition.	1	ALL		
3	--	Inspect horizontal stabilizer (upper and lower) for damage, loose or missing rivets, static wicks and general condition.	1	ALL		
4	--	Inspect rudder and vertical fin for damage, loose or missing rivets, static wicks and general condition.	1	ALL		
5	--	Inspect exterior fuselage for damage, loose or missing rivets, static wicks and general condition.	1	ALL		
6	--	Inspect all aerodynamic fairings for condition and security, condition and security of attaching hardware, and for condition of paint.	1	ALL		
7	--	Complete placard check/inspection in accordance with Key Lime Air Placard Check Form MIP-22X-PC.	1	ALL		
Left Center Section Inspection						
1	57	Check condition of skin, rivets and attachments at wing to fuselage junction.	1	ALL		
2	57	Inspect forward and aft wing-to-fuselage fairings for loose or missing screws.	1	ALL		
3	57	Inspect top of front and rear spars for loose rivets and general condition.	1	ALL		
4	57	Inspect top and bottom of wing center section for skin damage, loose rivets and general condition.	1	ALL		
5	57	Check top and bottom of wing center section for evidence of fuel leaks.	1	ALL		
6	28	Check fuel boost pump mounting pads for evidence of leaks.	1	ALL		
7	21	Check air conditioning cooling air turbine for general condition and security.	1	ALL		
8	21	Check ram air heat exchanger transition duct and operation of blow-in door and spring.	1	ALL		
9	21	Check ram air intake and duct to heat exchanger for security and condition.	1	ALL		
10	21	Check all ducts to cooling air turbine for condition and	1	ALL		

Airframe Inspection

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
		security.				
11	21	Check water separator and ensure that water drain is clear.	1	ALL		
12	21	Inspect condition of water condenser sock.	1	ALL		
13	21	Check condition of poppet valve and spring.	1	SA227		
14	27	Check aileron bowtie and push-pull tubes for condition and security – verify that bolts cannot be rotated.	1	ALL		
		Warning: **Verify aileron bellcrank push-pull rod attaching bolts are installed with bolt heads up and a minimum clearance of 0.250 inch exists between tip of bolts and access panel. Failure to comply with this warning may result in loss of aileron control in-flight.**				
Right Center Section Inspection						
1	57	Check condition of skin, rivets and attachments at wing to fuselage junction.	1	ALL		
2	57	Inspect forward and aft wing-to-fuselage fairings for loose or missing screws.	1	ALL		
3	57	Inspect top of front and rear spars for loose rivets and general condition.	1	ALL		
4	57	Inspect top and bottom of wing center section for skin damage, loose rivets and general condition.	1	ALL		
5	57	Check top and bottom of wing center section for evidence of fuel leaks.	1	ALL		
6	28	Check fuel boost pump mounting pads for evidence of leaks.	1	ALL		
7	21	Check air conditioning cooling air turbine for general condition and security.	1	ALL		
8	21	Check ram air heat exchanger transition duct and operation of blow-in door and spring.	1	ALL		
9	21	Check ram air intake and duct to heat exchanger for security and condition.	1	ALL		
10	21	Check all ducts to cooling air turbine for condition and security.	1	ALL		
11	21	Check water separator and ensure that water drain is clear.	1	ALL		
12	21	Inspect condition of water condenser sock.	1	ALL		
13	21	Check condition of poppet valve and spring.	1	SA227		
14	27	Conduct an operational check of flaps. Ensure that both flaps extend and retract equally.	1	ALL		
15	27	Check aileron bowtie and push-pull tubes for condition and security – verify that bolts cannot be rotated.	1	ALL		
		Warning: **Verify aileron bellcrank push-pull rod attaching bolts are installed with bolt heads up and a minimum clearance of 0.250 inch exists between tip of bolts and access panel. Failure to comply with this warning may result in loss of aileron control in-flight.**				

End of Airframe Inspection

Airframe Post-Inspection						
Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
Left Center Section Post Inspection and Service						
1	21	Clean or replace water condenser sock as necessary and reinstall.	MX	ALL	[redacted]	
2	21	Reinstall ACM panels.	MX	ALL		
3	57	Install all removed plates and covers. Check for security and condition.	MX	ALL		
Right Center Section Post Inspection and Service						
1	21	Clean or replace water condenser sock as necessary and reinstall.	MX	ALL		
2	21	Reinstall ACM panels.	MX	ALL		
3	57	Install all removed plates and covers. Check for security and condition.	MX	ALL		
End of Airframe Post-Inspection						

Airframe Inspection Package

Date: 09/07/2016	A/C Reg. No. N765FA	A/C Serial No. AC765
A/C Total Time: 24169.7	A/C Total Landings: 39961	Station: APA
Airframe Work Order #: 26306		

SIGNATURE BLOCKS

This table lists the mechanics and Inspectors that will make initials on the inspection forms.

MECHANIC'S OR INSPECTOR'S PRINTED NAME	SIGNATURE	SAMPLE INITIALS
Jason P Davis	[redacted]	
Derek Adamson		
John Stephen Gripp		

Airframe Inspection Preparation and Service						
Item #	**ATA Ref.**	**Description**	**Method**	**Applicability**	**Mech/ Insp**	**Disc.**
Flight Compartment Inspection Preparation and Service						
1	27	Lubricate rudder pedals.	MX	ALL	[redacted]	
2	25	Lubricate seat rollers and height adjustment columns.	MX	ALL		
3	56	Clean inside of all cockpit windows.	MX	ALL		
Cabin Section Inspection Preparation and Service						
1	52	Clean and lube passenger door click-clacks. (SA226 and SA227 Series equipped with click-clacks) Baynets	MX	ALL		
2	52	Clean and lube cargo door click-clacks.	MX	ALL		
End of Airframe Inspection Preparation and Service						

Airframe Inspection						
Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
Flight Compartment Inspection						
1	25	Inspect condition, operation and accessibility of cockpit flashlight. Install new batteries.	1	ALL	[redacted]	
2	25	Inspect the Aircraft Flight Manual for presence, condition, and accessibility. Check condition of binder cover and replace if necessary.	1	ALL	[redacted]	
3	25	Inspect the aircraft's Company Operations Manual for current revision status and condition. Check condition of binder cover and replace if necessary.	1	ALL	[redacted]	
4	25	Inspect smoke goggles (if installed) for condition and security of container.	1	ALL	[redacted]	
5	33	Turn on all interior and exterior lights, verify proper condition and operation	2	ALL	[redacted]	32,34,36.
6	30	Check condition of windshield wiper blades and arms.	1	ALL	[redacted]	
7	56	Inspect Left, Right and Center windshields. Check for evidence of cracks, delamination and other damage.	1	ALL	[redacted]	
8	30	Check operation of windshield heat.	2	ALL	[redacted]	
9	26	Inspect cockpit fire extinguisher for security, condition, current inspection status and evidence of discharge.	1	ALL	[redacted]	
10	31	Inspect instrument panel, avionics, flight and engine instruments for general condition and security.	1	ALL	[redacted]	
11	34	Check operation of alternate Static source selector.	2	ALL	[redacted]	
12	31	Check instrument panel and sub panels for condition, security, clearance of shock mounts, instrument plumbing lines, electrical wiring/connectors, required placards and legibility of placards.	1	ALL	[redacted]	
13	32	Check brake system pedals and linkage for proper operation and condition.	2	ALL	[redacted]	
14	32	Check parking brake valve control cable for security, proper operation and condition.	2	ALL	[redacted]	
15	29	Inspect flammable fluid containment bag for condition, operation of closing mechanism and proper drain attachment.	1	SA227-AC; TT; AT; BC	[redacted]	
16	56	Check general condition of cockpit windows for evidence of crazing, cracks or other damage.	1	ALL	[redacted]	
17	21	Check dump valve for security and condition.	2	ALL	[redacted]	
18	33	Conduct operational check of cockpit lighting.	2	ALL	[redacted]	
19	33	Check supply of spare light bulbs.	1	ALL	[redacted]	35
20	27	Check operation of gust lock system.	2	ALL	[redacted]	
21	27	Inspect control column for condition, security and operation. Check condition of control wheel switches and wiring. Verify smooth operation of flight controls	2	ALL	[redacted]	

Airframe Inspection

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
22	24	Conduct operational check of pitch trim system. Check for proper indications.	2	ALL		
23	27	Check operation of rudder and aileron trim system.	2	ALL		
24	32	Check emergency gear extension pump handle, valve, PIP pin, and uplock release handle for proper stowage and condition.	2	ALL		
25	32	Verify smooth operation of emergency gear extension uplock release handle and verify handle is stowed in forward postion.	2	ALL		
26	27	Check for "Audible Click" of Flap override switch (flap handle).	2	ALL		
27	32	Visually inspect flight compartment nose gear steering components for condition and security (pots, switches, control rods). Inspect nose gear steering cables if electric steering is installed.	2	ALL		
28	---	Inspect components on forward pressure bulkhead for general condition and security.	1	ALL		
29	25	Sit in each cockpit seat and check seat belts for condition and proper orientation of set belt components.	2	ALL		
30	25	Inspect seats for condition and security. Sit in each cockpit seat and check operation of all seat adjustments..	2	ALL		
31	35	Check flight crew oxygen regulators and outlets for condition.	1	ALL		
32	35	Check oxygen masks and plumbing for condition and proper operation.	2	ALL		
Cabin Section Inspection						
1	56	Inspect condition of cabin windows. Check for evidence of crazing, distortion and cracks. Clean as required.	1	ALL		
2	27	Check passenger seats and seat belts for general condition. (Crew seat if in cargo configuration)	1	ALL		
3	26	Inspect cabin fire extinguisher, if installed, for security, condition, current inspection status and evidence of discharge.	1	ALL		
4	31	Conduct an operational check of cabin overhead lights and aisle lights (aisle lights as applicable – passenger carrying aircraft).	2	ALL		
5	35	Actuate oxygen system switch. Inspect general condition and availability of passenger oxygen masks, hoses and valves. Check at crew seat position if in cargo configuration.	2	ALL		
6	25	Inspect carpet, upholstery, trim, and moldings for cleanliness, security, and cosmetic condition. Ensure there are no loose or damaged furnishings.	1	ALL		
7	52	Check operation of passenger door warning system. Check each passenger door warning switch individually, note warning light indicators illumination.	2	ALL		

Airframe Inspection

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
8	52	Check operation of passenger door latching mechanism.	2	ALL	[redacted]	
9	52	Inspect general condition of passenger door, and door steps.	1	ALL	[redacted]	
10	52	Inspect passenger door hinge for proper position of pin and for missing lugs.	1	ALL	[redacted]	
11	52	Inspect passenger door cables for general condition, kinks, and frays. Pay particular attention to areas near ferrules, physically bending the cable at the ferrule to check for frays and/or broken wires.	2	ALL	[redacted]	
12	52	Check passenger door seal supply line for cracks, kinks and security.	1	ALL	[redacted]	
13	52	Check passenger door seal for punctures, cracks, leaks, security and condition.	1	ALL	[redacted]	
14	52	Check door structure for cracks, loose rivets and condition.	2	ALL	[redacted]	
15	52	Check bayonets for nicks, burrs, alignment , condition, and operation. (When equipped with bayonets on cabin door)	1	SA227	[redacted]	
16	52	Inspect passenger door click-clacks. (When equipped with click-clacks) Bayonets	1	ALL	[redacted]	
17	52	Check inner and outer handles for adjustment, fit, security and operation.	1	ALL	[redacted]	
18	52	Check door gas spring for leaks, security and operation.	2	ALL	[redacted]	
19	52	Check entrance handrail cables for security and condition if installed. Ensure handrails do not rotate – tighten jam nuts if required.	2	ALL	[redacted]	
20	52	Check Teflon door guide blocks for condition and security.	1	ALL	[redacted]	
21	52	Check plastic inspection cover ports for condition and security.	1	ALL	[redacted]	
22	33	Perform an operational check of cargo compartment lighting.	1	ALL	[redacted]	
23	25	Check cargo compartment paneling and bulkheads for condition and security.	2	ALL	[redacted]	
24	52	Inspect condition and security of cargo door.	1	ALL	[redacted]	
25	52	Inspect cargo door hinge for proper position of pin and for missing lugs.	1	ALL	[redacted]	
26	52	Check cargo door seal supply line for cracks, kinks and security.	1	ALL	[redacted]	
27	52	Conduct operational check of cargo door locking mechanism.	1	ALL	[redacted]	
28	52	Inspect cargo door click-clacks.		ALL	[redacted]	
29	52	Check operation of cargo door warning system. Check each cargo door warning switch individually, note warning light indicators illumination.	2	ALL	[redacted]	
30	25	Check condition, availability and security of cabin mounted emergency equipment. (Fire extinguishers, Lighted Signs,	2	ALL	[redacted]	

Airframe Inspection

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
		Life Rafts/Vests, O2 Masks, Etc.)				
31	25	Inspect condition of cargo liner if installed	1	ALL		33.
32	25	Inspect condition of cargo floor. Note such things as missing screws, bent floorboards, dents, condition of tie-downs and attach points, etc.	1	ALL		
33	25	Inspect all cargo barriers and associated restraints, if installed, for condition of material and corresponding attach points, functionality, and proper operation. (See Cargo Systems, Inc. Inspection and Repair Procedures document dated 07/02/2001 for inspection criteria)	1,2	ALL		
34	25	Inspect all cargo rollers or conveyors for condition and security	1	ALL		
Control Cable Tension Check						
1	27	Remove large access panel on right side of vertical stabilizer and install 0.1875 (3/16) inch rigging pin through elevator control quadrant and quadrant lock.	MX	ALL		
2	27	Remove pilot's seat, carpet, and floorboard. Install 0.1875 (3/16) inch rigging pin through elevator walking beam and bracket to position elevator in neutral, and relieve tension of elevator bob weight.	MX	ALL		
3	27	Engage gust lock. Ensure aileron bellcrank and rudder pedals are locked.	MX	ALL		
4	27	Install control wheel alignment tool to ensure pilot and copilot control wheels remain even and in a neutral position while measuring cable tension.	MX	ALL		
5	27	Measure aileron cable tension between forward and aft wing spar. Refer to MM 27-00-00 for applicable rigging tension/temperature chart.	1	ALL		
6	27	Measure elevator cable tension (both up and down cables) aft of the aft interior bulkhead. Refer to MM 27-00-00 for applicable rigging tension/temperature chart.	1	ALL		
7	27	Measure rudder cable tension of the aft interior bulkhead. Refer to MM 27-00-00 for applicable rigging tension/temperature chart.	1	ALL		
8	27	Disengage gust lock.	MX	ALL		
9	27	Remove control wheel alignment tool.	MX	ALL		
10	27	Remove elevator walking beam rigging pin. Reinstall floorboard, carpet, and pilot's seat.	MX	ALL		
11	27	Remove elevator quadrant rigging pin and reinstall panel.	MX	ALL		
12	27	Perform functional check of all flight controls to assure freedom of movement, and proper travel.	1,2	ALL		

End of Airframe Inspection

Airframe Post-Inspection and Return to Service						
Item #	**ATA Ref.**	**Description**	**Method**	**Applicability**	**Mech/ Insp**	**Disc.**
Flight Compartment Inspection Preparation and Service						
1	53	Reinstall center aisle floorboards, cargo floor and or carpet.	MX	ALL	[redacted]	
Cabin Section Inspection Preparation and Service						
1	--	Complete post-maintenance engine run in accordance with Post-Maintenance Engine Run Checklist (Form MIP-227-EN).	MX	ALL	[redacted]	
2	--	Complete post-maintenance preflight check in accordance with Post Maintenance Preflight Check Checklist (Form MIP-227-PF).	MX	ALL	[redacted]	
3	--	Complete aircraft records.	MX	ALL	[redacted]	
End of Airframe Post-Inspection and Return to Service						

Airframe Inspection Package

Date: **09/07/2016**	A/C Reg. No. **N765FA**	A/C Serial No. **AC765**
A/C Total Time: 24169.7	A/C Total Landings: 39961	Station: **APA**
Airframe Work Order #: **26306**	E1 Work Order #: **26308**	E2 Work Order #: **26309**

SIGNATURE BLOCKS

This table lists the mechanics and Inspectors that will make initials on the inspection forms.

MECHANIC'S OR INSPECTOR'S PRINTED NAME	SIGNATURE	SAMPLE INITIALS
Jason P Davis	[redacted]	
Dean Archer		
Derek Adamson		
John Frye		
John Stephen Griffith		

Airframe Inspection Preparation and Service

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
Left Wing and Wheel Well Service and Inspection Preparation						
1	27	Lubricate aileron hinges and actuator.	Mx	ALL		
2	32	Service tires to proper inflation.	Mx	ALL		
3	32	Service MLG strut if required. Clean strut tube.	Mx	ALL		
4	32	Grease landing gear assembly and retract mechanism.	Mx	ALL		
5	32	Lube up and down lock assemblies and all moving retract mechanism components with LPS 2.	Mx	ALL		
6	24	Remove battery box access panel.	Mx	All except short-body		
Right Wing and Wheel Well Service and Inspection Preparation						
1	27	Lubricate aileron hinges and actuator.	Mx	ALL		
2	32	Service tires to proper inflation.	Mx	ALL		
3	32	Service MLG strut if required. Clean strut tube.	Mx	ALL		
4	32	Grease landing gear assembly and retract mechanism.	Mx	ALL		
5	32	Lube up and down lock assemblies and all moving retract mechanism components with LPS 2.	Mx	ALL		
6	24	Remove battery box access panel.	Mx	All except short-body		
Nose Gear and Well Service and Inspection Preparation						
1	32	Jack aircraft nose.	Mx	ALL		
2	32	Perform nose strut leak check, amount of fluid 0 oz. (If >1 oz, strut requires reseal)	MX	ALL		
3	32	Remove NLG wheels and bearings. Clean and lubricate wheel bearings.	Mx	ALL		
4	32	Clean nose wheel assemblies.	Mx	ALL		
5	32	Balance nose wheel assemblies.	Mx	ALL		
6	32	Reinstall nose wheel assemblies.	Mx	ALL		
7	32	Service shimmy dampener as required. (Electric steering only) $1227	Mx	SA226		
8	31	Remove left and right pitot system moisture caps. Drain accumulated moisture. Reinstall caps.	Mx	SA227		
9	32	Grease landing gear assembly and retract mechanism.	Mx	ALL		
10	32	Lube up and down lock assemblies and all moving retract mechanism components with LPS 2.	Mx	ALL		

Airframe Inspection Preparation and Service						
Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
Deice Boot Service						
1	30	Clean all deice boots.	Mx	ALL	[redacted]	
2	30	Treat all deice boots with PBS.	Mx	ALL	[redacted]	
End of Airframe Inspection Preparation and Service						

Airframe Inspection

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
Aircraft Operations Binder, Flight/Maintenance Logs, and Certificates						
1	25	Review Aircraft Dispatch Book and Flight / Maintenance Log for open MEL's, and or Non-MEL Carry-over's that may be repaired at this time. Check condition of binder covers and replace as necessary.	1	ALL		
2	25	Inspect aircraft Flight / Maintenance Log book to insure that adequate maintenance history is on board aircraft (The current Flight / Maintenance Log book plus the previous book shall be on board the aircraft)	1	ALL		
3	25	Verify that the aircraft's Airworthiness Certificate and Registration are onboard the aircraft, in good condition and that the Airworthiness Certificate is visible.	1	ALL		
Aircraft General Inspection						
1	--	Inspect left wing (upper and lower) for damage, loose or missing rivets, static wicks, fuel leaks and general condition. Check forward and aft wing-to-fuselage fairings for missing or loose screws.	1	ALL		
2	--	Inspect right wing (upper and lower) for damage, loose or missing rivets, static wicks, fuel leaks and general condition. Check forward and aft wing-to-fuselage fairings for missing or loose screws.	1	ALL		
3	--	Inspect horizontal stabilizer (upper and lower) for damage, loose or missing rivets, static wicks and general condition.	1	ALL		
4	--	Inspect rudder and vertical fin for damage, loose or missing rivets, static wicks and general condition.	1	ALL		
5	--	Inspect exterior fuselage for damage, loose or missing rivets, static wicks and general condition.	1	ALL		
6	33	Turn on all interior and exterior lights, verify proper condition and operation	2	ALL		
7	--	Inspect all aerodynamic fairings for condition and security, condition and security of attaching hardware, and for condition of paint.	1	ALL		
Left Wing and Wheel Well Inspection						
1	57	Inspect general condition of wing skin. Check for evidence of cracks, deterioration, loose rivets, and fuel leaks. Per form structural inspection of all related structures for corrosion and integrity.	1	ALL		
2	24	Inspect battery installation. Check for general condition and security of battery, battery box, mounting tray, and electrical wiring. Check battery bulging and leakage. Check condition of battery ventilation.	1	All except short-body		
3	28	Check fuel cap and o-ring for condition, security and operation.	2	ALL		
4	28	Inspect condition of fuel vent air scoop check for obstruction.	1	ALL		
5	57 33	Inspect wing tip for general condition and security of navigation lights, strobe lights, lenses and wiring.	1	ALL		

Airframe Inspection						
Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
6	30	Inspect wing deice boot. Check for evidence of damage and deterioration.	1	ALL		
7	33	Inspect landing and recognition light components, deflector plates, and lens covers for condition and security.	1	SA227-AC; AT; BC; CC; DC		
8	33	Check wing ice lights for security, and condition.	1	ALL		
9	27	Check aileron for general condition, security, and evidence of damage.	1	ALL		
10	27	Check aileron free-play – verify within maintenance manual limits.	2	ALL		
11	23	Check aileron static wicks and bonding straps for condition and security.	1	ALL		
12	27	Inspect aileron push-pull tubes, rod end bearings and bellcranks for general condition, security and proper operation.	2	ALL		
13	27	Inspect fixed and movable aileron trim tabs for security and condition.	1	ALL		
14	27	Inspect trim tab hinge, actuator, chain, cable and stops for condition, security and operation.	1	ALL		
15	27	Inspect condition of wing flap, flap actuator, attachments, and bearings. Check flap actuator for evidence of leaks.	1	ALL		
16	27	Check inboard flap hinge for security and condition. Pay careful attention to any loose rivets on hinge or associated structures.	1	ALL		
17	23	Check flap static wicks and bonding straps for condition and security.	1	ALL		
18	27	Check flap free-play – verify within maintenance manual limits.	1	ALL		
19	57	Inspect general condition of rear spar. Check for evidence of fuel leaks, corrosion, and security of wire bundles and electrical connectors.	1	ALL		
20	32	Inspect hubs, wheels and tires.	1	ALL		
21	32	Inspect brake assemblies for evidence of fluid leaks and overheating. Ensure brake wear is within limits.	1	ALL		
22	32	Inspect main landing gear assembly for proper installation of braces, supports, trunnions, bellcranks, and bushings. Check for evidence of cracks or damage.	1	ALL		
23	32	Inspect MLG strut for evidence of leaks and wear.	1	ALL		
24	29	Check hydraulic accumulator for proper charge, security and condition.	1	ALL		
25	29	Inspect general condition of hydraulic power pack. Check for evidence of leaks.	1	ALL		
26	29	Check hydraulic power pack supply line check valve for leaks and condition.	1	ALL		
27	29	Check hydraulic pressure switches for leaks, condition and security.	1	ALL		
28	29	Check hydraulic shutoff valve for leaks, security and condition.	1	ALL		
29	29	Check hydraulic pressure transducer for security, condition and evidence of leaks.	1	SA227		
30	29	Check hydraulic reservoir filler for leaks and condition.	1	ALL		

Airframe Inspection

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
31	32	Check drag brace and trunnion for condition and security.	1	ALL		
32	21	Check flow control valve (P3) plumbing for leaks, condition and security. Inspect all lines for chaffing and wear.	1	ALL		
33	21	Check bleed air solenoid for security and condition. Inspect all lines for chaffing and wear.	1	ALL		
34	28	Check fuel lines for leaks, security and condition. Inspect all lines for chaffing and wear.	1	ALL		
35	78	Check tailpipe insulation blanket for security and condition.	1	ALL		
36	32	Check actuating cylinders for leaks, condition and security.	1	ALL		
37	32	Check operation and clearance of both landing gear uplock switches.	1	ALL		
38	32	Check all control links and rods for security, binding and freedom of operation.	1	ALL		
39	32	Check scissors assembly bushings for wear.	1	ALL		
40	32	Check condition of manual uplock release cable to bypass valve on power pack.	2	SA227		
41	32	Inspect condition of uplock hook, associated torque tube, springs, roller and positioning cams.	1	ALL		
42	32	Inspect condition, operation, and lubrication of manual release cable and mechanism.	1,2	ALL		
43	52	Inspect condition of landing gear doors and operating mechanism. Check for proper installation, adjustment, and evidence of damage or binding.	1	ALL		
44	52	Check gear door seals for security, condition, and integrity of associated rivets.	1	ALL		MCI
45	52	Check gear doors and operating mechanisms for free play.	1,2	ALL		
46	52	Check landing gear door clearance in accordance with AD 90-05-06R1. S/N AC 765	1	SA226 & SA227 (SNs THRU 729)		
47	52	Inspect MLG door release latches and door stops for condition and proper operation.	1	SA227		
48	52	Check condition and security of gear door indicator switches.	1	SA227		
49	28	Inspect condition and operation of the fuel shutoff valve.	1,2	ALL		
50	27	Check flap lock out valve for condition and security.	1	ALL		
51	26	Check wheel well overheat detector for condition and security.	1	ALL		
52	24	Check wheel well circuit breakers and moisture protection covers for condition and security.	1	ALL		
53	54	Check keelson for evidence of buckling, distortion, cracking, security of fasteners and condition.	1	ALL		
54	54	Check engine attach fitting assembly for evidence of loose bolts, fretting, condition and security.	1	ALL		

Airframe Inspection

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
Right Wing and Wheel Well Inspection						
1	57	Inspect general condition of wing skin. Check for evidence of cracks, deterioration, loose rivets, and fuel leaks. Per form structural inspection of all related structures for corrosion and integrity.	1	ALL		
2	24	Inspect battery installation. Check for general condition and security of battery, battery box, mounting tray, and electrical wiring. Check battery bulging and leakage. Check condition of battery ventilation.	1	All except short-body		
3	28	Check fuel cap and o-ring for condition, security and operation.	1	ALL		
4	28	Inspect condition of fuel vent air scoop check for obstruction.	1	ALL		
5	57 33	Inspect wing tip for general condition and security of navigation lights, strobe lights, lenses and wiring.	1	ALL		
6	30	Inspect wing deice boot. Check for evidence of damage and deterioration.	1	ALL		
7	33	Inspect landing and recognition light components, deflector plates, and lens covers for condition and security.	1	SA227-AC; AT; BC; CC; DC		
8	33	Check wing ice lights for security, and condition.	1	ALL		
9	27	Check aileron for general condition, security, and evidence of damage.	1	ALL		
10	27	Check aileron free-play – verify within maintenance manual limits.		ALL		
11	23	Check aileron static wicks and bonding straps for condition and security.	1	ALL		
12	27	Inspect aileron push-pull tubes, rod end bearings and bellcranks for general condition, security and proper operation.	2	ALL		
13	27	Inspect fixed and movable aileron trim tabs for security and condition.	1	ALL		
14	27	Inspect trim tab hinge, actuator, chain, cable and stops for condition, security and operation.	1	ALL		
15	27	Inspect condition of wing flap, flap actuator, attachments, and bearings. Check flap actuator for evidence of leaks.	1	ALL		
16	27	Check inboard flap hinge for security and condition. Pay careful attention to any loose rivets on hinge or associated structures.	1	ALL		
17	27	Check SAS vane for condition and operation. (Rosemont equipped aircraft only) Conrac	2	ALL		
18		Check SAS vane heat blanket for condition and operation. (Rosemont equipped aircraft only) Conrac	2	ALL		
19	23	Check flap static wicks and bonding straps for condition and security.	1	ALL		
20	27	Check flap free-play – verify within maintenance manual limits.	1	ALL		
21	57	Inspect general condition of rear spar. Check for evidence of fuel leaks, corrosion, and security of wire bundles and electrical connectors.	1	ALL		
22	32	Inspect hubs, wheels and tires.	1	ALL		

Airframe Inspection

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
23	32	Inspect brake assemblies for evidence of fluid leaks and overheating. Ensure brake wear is within limits.	1	ALL		
24	32	Inspect main landing gear assembly for proper installation of braces, supports, trunions, bellcranks, and bushings. Check for evidence of cracks or damage.	1	ALL		
25	32	Inspect MLG strut for evidence of leaks and wear.	1	ALL		
26	29	Check hydraulic pressure switches for leaks, condition and security.	1	ALL		
27	29	Check hydraulic shutoff valve for leaks, security and condition.	1	ALL		
28	29	Check hydraulic pressure transducer for security, condition and evidence of leaks.	1	SA227		
29	21	Check flow control valve (P3) plumbing for leaks, condition and security. Inspect all lines for chaffing and wear.	1	ALL		
30	21	Check bleed air solenoid for security and condition. Inspect all lines for chaffing and wear.	1	ALL		
31	28	Check fuel lines for leaks, security and condition. Inspect all lines for chaffing and wear.	1	ALL		
32	78	Check tailpipe insulation blanket for security and condition.	1	ALL		
33	32	Check actuating cylinders for leaks, condition and security.	1	ALL		
34	32	Check operation and clearance of both landing gear uplock switches.	1	ALL		
35	32	Check all control links and rods for security, binding and freedom of operation.	1	ALL		
36	32	Check scissors assembly bushings for wear.	1	ALL		
37	32	Inspect condition of uplock hook, associated torque tube, springs, roller and positioning cams.	1	ALL		
38	32	Inspect condition, operation, and lubrication of manual release cable and mechanism.	1,2	ALL		
39	52	Inspect condition of landing gear doors and operating mechanism. Check for proper installation, adjustment, and evidence of damage or binding.	1	ALL		
40	52	Check gear door seals for security, condition, and integrity of associated rivets.	1	ALL		
41	52	Check gear doors and operating mechanisms for free play.	1,2	ALL		
42	52	Check landing gear door clearance in accordance with AD 90-05-06R1. S/N AC 765	1	SA226 & SA227 (SNs THRU 729)	N	
43	52	Inspect MLG door release latches and door stops for condition and proper operation.	1	SA227		
44	52	Check condition and security of gear door indicator switches.	1	SA227		
45	28	Inspect condition and operation of the fuel shutoff valve.	1,2	ALL		
46	27	Check flap lock out valve for condition and security.	1	ALL		
47	26	Check wheel well overheat detector for condition and security.	1	ALL		
48	24	Check wheel well circuit breakers and moisture protection covers for condition and security.	1	ALL		

Airframe Inspection						
Item #	**ATA Ref.**	**Description**	**Method**	**Applicability**	**Mech/ Insp**	**Disc.**
49	54	Check keelson for evidence of buckling, distortion, cracking, security of fasteners and condition.	1	ALL	[redacted]	
50	54	Check engine attach fitting assembly for evidence of loose bolts, fretting, condition and security.	1	ALL		
Nose Gear and Well Inspection						
1	32	Check tires for damage, cuts, scuffs and wear.	1	ALL		28,29
2	32	Inspect nose wheel assemblies. For cracks, corrosion and missing hardware.	1	ALL		
3	32	Inspect nose landing gear assembly for proper installation of braces, supports, trunnions, bellcranks, and bushings. Check for evidence of cracks or damage.	1	ALL		
4	32	Check nose gear strut for evidence of leaks and wear.	1	ALL		
5	32	Inspect nose wheel steering assembly for condition and security. Check for evidence of leaks.	1	ALL		42
6	32	Check nose gear centering cam and assembly for condition and security.	1	ALL		
7	32	Inspect condition and security of shimmy dampener. (Electric steering only) $ A227	1	SA226		
8	32	Check condition of switches and wiring. Check for condition, security and evidence of damage.	2	ALL		
9	32	Check taxi light for condition and security.	1	ALL		
10	32	Check manual uplock release cable and components for condition, security and proper lubrication.	1	ALL		
11	52	Check condition of nose gear doors and operating mechanism. Check for proper installation, adjustment and evidence of damage or binding.	1	ALL		
12	52	Check gear door seals for security, condition, and integrity of associated rivets.	1	ALL		
13	52	Check gear doors and operating mechanisms for free play.	1,2	ALL		
14	53	Check general condition of wheel well structure and installed components.	1	ALL		
15	52	Inspect NLG Door aft seal for condition.	1	ALL		
End of Airframe Inspection						

Landing Gear Operational Check

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
Landing Gear Operational Check Preparation						
1	32	Jack aircraft and prepare in accordance with the SA226 or SA227 Maintenance Manual as appropriate.	Mx	ALL	S	
2	32	Release landing gear doors and secure in the open position.	Mx	SA227	S	
3	32	Disconnect landing gear doors and secure in the open position. $A227	Mx	SA226	N	
Landing Gear Operational Check						
1	32	Retract landing gear and inspect uplock system. Insure that hydraulic pack is operating properly.	2	ALL	S	
2	32	Perform hydraulic power pack integrity check	2	ALL	S	
3	32	Check operation of gear warning system and position indication system.	2	ALL	S	
4	32	Physically check operation of landing gear switches for ease of actuation. Lube specific area/switch if necessary with LPS 2.	2	ALL	S	
5	32	Check clearance of landing gear in wheel wells.	2	ALL	S	
6	32	Extend landing gear and check downlock mechanism for proper operation and indication.	2	ALL	S	
7	32	Latch gear doors.	2	SA227	S	
8	32	Reconnect gear doors. $A227	2	SA226	N	
		INS INSPECTOR: Visually check gear door connections for proper installation and security. $A227	VIS	SA226	N	
9	32	Check gear doors for proper operation and fit in accordance with AD 90-05-06R1 with gear up and locked. Check for proper gear up indication.	2	ALL	S	
10	32	Perform emergency gear extension free fall on main hydraulic system. Check that 25 pounds maximum pull is required to lock the main gear. Check all gear downlocks for proper position,	2	ALL	S	
11	32	Actuate hydraulic hand pump system and check operation, pressure indication, and evidence of leaks.	2	ALL	S	
		INS INSPECTOR: Ensure hand pump system operates as properly.	FUNC	ALL		
12	32	Reset emergency gear system to normal and recycle gear to assure proper operation.	2	ALL	S	
		INS INSPECTOR: Ensure emergency gear extension system is returned to normal status; check all landing gear controls to ensure they are set to their normal positions.	VIS	ALL		

End of Landing Gear Operational Check

Airframe Inspection Package

Date: **09/07/2016**	A/C Reg. No. **N765FA**	A/C Serial No. **AC765**
A/C Total Time: 24169.7	A/C Total Landings: 39961	Station: **APA**
Airframe Work Order #: **26306**		

SIGNATURE BLOCKS

This table lists the mechanics and Inspectors that will make initials on the inspection forms.

MECHANIC'S OR INSPECTOR'S PRINTED NAME	SIGNATURE	SAMPLE INITIALS
Jason P Davis	[redacted]	
Derek Hamson		
John Stephen Gripp		

Airframe Inspection Preparation and Service						
Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
Empennage Service and Inspection Preparation						
7	27	Remove access panels as required.	Mx	ALL	[redacted]	
8	27	Lube horizontal stabilizer pivot bolt.	Mx	ALL		
9	27	Lube rudder hinges.	Mx	ALL		
10	27	Clean pitch trim limit switches with LPS CFC Free Contact Cleaner.	Mx	ALL		
11	27	Lubricate pitch trim limit switches with LPS 2.	Mx	ALL		
End of Airframe Inspection Preparation and Service						

Airframe Inspection

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
Nose Section Inspection						
1	24	Inspect batteries, wiring, connectors and racks for condition and security. $A227AC	1	SA227-TT	[redacted]	
2	53	Inspect skin around nose section. Check for evidence of damage, corrosion or loose/missing rivets.	1	ALL	[redacted]	
3	56	Check cockpit and cabin window frames for damage, loose or missing screws and signs of pressure leaks.	1	ALL	[redacted]	
4	34	Check OAT pickup on fuselage for condition and security.	1	ALL	[redacted]	
5	23	Check all external radio antennas for condition and security.	1	ALL	[redacted]	
6	52	Inspect left and right nose cargo compartment access doors for condition, proper clearance, security and operation of hinges, locks and condition of door seals.	2	ALL	[redacted]	
7	32	Check brake fluid reservoir for leaks, condition and security.	1	ALL	[redacted]	
8	53	Inspect radome for condition of gelcoat and paint, evidence of erosion or de-lamination and security.	1	ALL	[redacted]	
9	31	Check pitot heads, mast for security and general condition.	1	ALL	[redacted]	
10	27	Inspect SAS vane(s) for proper mounting and obvious damage.	1	CONRAC SAS SYSTEMS	[redacted]	
11	30	Inspect windshield wiper motor for condition and security.	1	SA227	[redacted]	
12	82	Inspect CAWI tank, filler and plumbing for condition and security.	1	ALL EXCEPT SA227-CC/DC	[redacted]	
13	35	Inspect oxygen cylinder, regulator, pressure transducer, filler valve and blowout disc for condition and security. $A227AC	1	SA226 SA227-TT	[redacted]	
14	35	Inspect oxygen pressure transducer for condition and security. $A227AC	1	SA227-TT	[redacted]	
Tail Section Inspection						
1	53	Inspect condition of tailcone. Check sheet metal for deformation, damage, and general condition.	1	ALL	[redacted]	
2	53	Inspect condition and orientation of navigation/strobe light assembly, lens, and wiring.	1	ALL	[redacted]	
Empennage Inspection						
1	30	Inspect stabilizer deice boots and leading edges. Check for evidence of damage/punctures.	1 2	ALL	[redacted]	
2	55	Check general condition of horizontal stabilizer and security of attaching parts.	1	ALL	[redacted]	
3	27	Inspect pitch trim actuator for general condition, security, and smoothness of operation.	1 2	ALL	[redacted]	
4	27	Inspect pitch trim limit switches for condition and smooth operation of plungers.	2	ALL	[redacted]	
5	55	Check condition of elevator and attaching parts.	1	ALL	[redacted]	
6	27	Inspect horizontal stabilizer pivot bolt for wear, security and condition of bushings.	2	ALL	[redacted]	

Airframe Inspection						
Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
7	27	Inspect elevator bellcrank, stops, bolts, and bearings for security, wear and general condition.	1	ALL	[redacted]	
8	27	Check elevator for proper operation and travel limits per maintenance manual.	2	ALL		
9	27	Inspect condition of vertical stabilizer. Check for evidence of damage and secure installation of attaching parts.	1	ALL		
10	27	Check rudder for damage, security, general condition, proper operation and travel limits per maintenance manual.	2	ALL		
11	27	Check rudder trim tab for condition, damage, security and travel limits per maintenance manual.	2	ALL		
12	27	Perform operational check of pitch trim system to verify proper operation of system and limit switches.	1 2	ALL		
End of Airframe Inspection						

Airframe Post Inspection and Preparation for Return to Service						
Item #	**ATA Ref.**	**Description**	**Method**	**Applicability**	**Mech/ Insp**	**Disc.**
Empennage Post Inspection and Service						
1	55	Install all removed panels. Check for proper fit and secure installation.	Mx	ALL	[redacted]	
Empennage Post Inspection and Service						
1		Complete post-maintenance engine run in accordance with Post-Maintenance Engine Run Checklist (Form MIP-227-ER).			[redacted]	
2		Complete post-maintenance preflight check in accordance with Post Maintenance Preflight Check Checklist (MIP-227-PF).			[redacted]	
3		Complete aircraft records.			[redacted]	
End of Airframe Post Inspection and Preparation for Return to Service						

Airframe Inspection Package

Date: **09/07/2016**	A/C Reg. No. **N765FA**	A/C Serial No. **AC765**
A/C Total Time: 24169.7	A/C Total Landings: 39961	Station: **APA**
Airframe Work Order #: **26306**		

SIGNATURE BLOCKS

This table lists the mechanics and Inspectors that will make initials on the inspection forms.

MECHANIC'S OR INSPECTOR'S PRINTED NAME	SIGNATURE	SAMPLE INITIALS
Jason P Davis	[redacted]	
Jason Taylor		
Derek Atkinson		
John Fyfe		
John Stephen Griffo		
Joshua Colon		
ROBERT BRAUCHT		

Airframe Inspection Preparation and Service

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
Flight Compartment Service and Inspection Preparation						
5	31	Remove instrument panel glareshield.	Mx	ALL		
6	25	Remove cockpit seats, and floor boards.	Mx	ALL		
7	24	Remove inspection panels on side consoles.	Mx	ALL		
8	27	Remove all control column covers.	Mx	ALL		
Cabin Section Service and Inspection Preparation						
5	53	Remove center aisle floorboards and cargo flooring.	Mx	ALL		
6	25	Remove passenger door trim and inspection panels.	Mx	ALL		
7	52	Clean and lubricate passenger door lock mechanism.	Mx	ALL		
8	52	Remove emergency exit hatches.	Mx	ALL		
9	53	Remove cargo compartment center floorboards.	Mx	ALL		
10	52	Remove cargo door liner.	Mx	ALL		
11	52	Clean and lubricate cargo door locking mechanism.	Mx	ALL		
12	25	Clean under all floorboards.	Mx	ALL		
Nose Section Service and Inspection Preparation						
7	32	Remove nose gear torque scissor link shafts and clean.	Mx	ALL		
Left Wing and Wheel Well Service and Inspection Preparation						
3	57	Remove all inspection plates and panels on nacelles and wheel wells.	Mx	ALL		
4	32	Remove MLG torque scissor link shafts and clean.	Mx	ALL		
5	57	Remove panels on wing tip.	Mx	SA227 EXCEPT TT		
6	57	Remove wing tip. SA227 A C	Mx	SA226 AND SA227-TT		
7	30	Remove cap from low point of deice plumbing system and drain any moisture. Reinstall cap.	Mx	SA227		
8	57	Remove inspection panel for wing extension attach bolts.	Mx	ALL		
9	57	Remove access panels on upper and lower wing extension.	Mx	SA227 EXCEPT TT		
Right Wing and Wheel Well Service and Inspection Preparation						
1	57	Remove all inspection plates and panels on nacelles and wheel wells.	Mx	ALL		
2	32	Remove MLG torque scissor link shafts and clean.	Mx	ALL		
3	57	Remove panels on wing tip.	Mx	SA227 EXCEPT TT		

Airframe Inspection Preparation and Service

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
4	57	Remove wing tip. SA227AC	Mx	SA226 AND SA227-TT		
5	30	Remove cap from low point of deice plumbing system and drain any moisture. Reinstall cap.	Mx	SA227		
6	57	Remove inspection panel for wing extension attach bolts.	Mx	ALL		
7	57	Remove access panels on upper and lower wing extension.	Mx	SA227 EXCEPT TT		
Left Center Section Service and Inspection Preparation						
1	57	Remove all inspection plates on top and bottom of wing center section.	Mx	ALL		
2	53	Remove forward and aft wing to fuselage fairings using hand screwdriver. Note condition of nutplates.	Mx	ALL		
3	53	Clean entire wing to fuselage area with alcohol.	Mx	ALL		
4	37	Clean filter on vacuum regulator valve and reinstall.	Mx	ALL		
5	27	Remove flap interconnect center bearing.	Mx	ALL		
Right Center Section Service and Inspection Preparation						
1	57	Remove all inspection plates on top and bottom of wing center section.	Mx	ALL		
2	53	Remove forward and aft wing to fuselage fairings using hand screwdriver. Note condition of nutplates.	Mx	ALL		
3	53	Clean entire wing to fuselage area with alcohol.	Mx	ALL		
Tail Section Service and Inspection Preparation						
1	53	Remove tail cone.	Mx	ALL		
2	21	Remove rear pressure bulkhead.	Mx	ALL		
3	21	Clean pressurization outflow valve.	Mx	ALL		
Empennage Service and Inspection Preparation						
1	55	Remove stabilizer trim actuator fairing.	Mx	ALL		
2	27	Lube horizontal stabilizer pivot bolt.	Mx	ALL		
3	27	Lube elevator hinges.	Mx	ALL		
4	27	Lube Rudder hinges.	Mx	ALL		
5	27	Lube stabilizer actuator rod ends.	Mx	ALL		
6	27	Lube rudder trim tab and mechanism.	Mx	ALL		

End of Airframe Inspection Preparation and Service

Airframe Inspection

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
Flight Compartment Inspection						
1	31	Inspect condition of wiring, plumbing and equipment behind instrument panel.	1	ALL		
2	34	Inspect general condition of Pitot/Static lines and manifolds. Check for evidence of kinks and breaks.	1	ALL		
3	25	Check condition of cockpit seats, seat tracks, and floor boards.	1	ALL		
4	24	Check side console circuit breakers, switches, wiring and plumbing for condition.	1	ALL		
5	73	Check fuel flow signal conditioner for condition and security.	1	SA227		
6	30	Check wing and prop deice timers, pressure indicator for security, wiring and condition.	1	ALL		
7	27	Check torque of nuts securing control column roller bearings. Nuts should not move with 60.0 inch-pounds torque applied clockwise.	5	SA227		
8	24	Check condition of wiring in center pedestal.	1	ALL		
9	---	Check general condition of all components under floorboards.	1	ALL		
10	---	Inspect FOD barrier installation under cockpit floor. Ensure barrier is intact and barrier installation is secure. Remove accumulated FOD as required.	1	ALL		
11	27	Inspect left and right control column pivot brackets outboard of bearing doubler for cracks around doubler mounting holes.	1	ALL		
12	32	Check landing gear emergency gear extension uplock release handle, cable and pulleys for condition.	2	ALL		
13	29	Check emergency hydraulic pump, plumbing, and valves for evidence of leaks and chaffing.	1	ALL		
Cabin Section Inspection						
1	24	Check all electrical wiring and connections for security and condition.	1	ALL		
2	53	Check passenger seat tracks for condition, wear and security.	1	PAX CONFIG		
3	53	Inspect condition of stringer, inside skin, and floor structure. Check for evidence of damage.	1	ALL		
4	31	Check all antenna leads and connections for security and condition.	1	ALL		
5	31	Conduct an operational check of passenger lighting.	1	ALL		
6	21	Check condition of conditioned air ducts and vents.	1	ALL		
7	52	Inspect passenger door lock mechanism, latching bellcranks, rods and rod ends for security, condition and wear.	2	ALL		
8	52	Check upper and lower bellcrank assemblies for alignment, wear, condition and operation.	1	ALL		

Airframe Inspection

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
9	52	Check safety lock for freedom of operation, security and condition.	1	ALL		
10	52	Inspect condition of emergency exit hatches, seals, latch mechanisms and frames.	1	ALL		
11	21	Check outflow valve for condition and security.	1	ALL		
12	53	Inspect fuselage drains for evidence of deterioration, punctures or inflexibility of diaphragm. Ensure that area around drain is clean.	1	ALL		
13	52	Inspect cargo door locking mechanism, latching bellcranks, rods and rod ends for security, condition and wear.	2	ALL		
14	26	Verify operation of Wing duct 450° overtemp switch. Ref. MM 26-10-20.	2	ALL		
Nose Section Inspection						
1	32	Inspect nose gear torque scissor link shafts for condition and corrosion. Replace as necessary.	1	ALL		
Left Wing and Wheel Well Inspection						
1	57	Inspect general condition of wing skin. Check for evidence of cracks, deterioration, loose rivets, and fuel leaks.	1	ALL		
2	57	Inspect general condition of wingtip structure and check for evidence of loose rivets.	1	SA227		
3	28	Inspect condition of fuel vent air scoop and plumbing	1	ALL		
4	57	Inspect wing extension attach bolts, lugs, and surrounding areas for security and condition.	1	SA227 EXCEPT TT		
5	---	Inspect electrical wiring and ground for condition and security.	1	ALL		
6	30	Check propeller de-ice shunt and wiring for condition and security. SA227AC	1	SA227 CC/DC	N	
7	32	Inspect torque scissor link shafts for condition and corrosion. Replace as necessary.	1	ALL		
8	32	Inspect main landing gear trunnion pin retaining bolt nuts for security.	1	ALL		
Right Wing and Wheel Well Inspection						
1	57	Inspect general condition of wing skin. Check for evidence of cracks, deterioration, loose rivets, and fuel leaks.	1	ALL		
2	57	Inspect general condition of wingtip structure and check for evidence of loose rivets.	1	SA227		
3	28	Inspect condition of fuel vent air scoop and plumbing	1	ALL		
4	57	Inspect wing extension attach bolts, lugs, and surrounding areas for security and condition.	1	SA227 EXCEPT TT		
5	---	Inspect electrical wiring and ground for condition and security.	1	ALL		
6	30	Check propeller de-ice shunt and wiring for condition and security. SA227AC	1	SA227 CC/DC		
7	32	Inspect torque scissor link shafts for condition and corrosion. Replace as necessary.	1	ALL		
8	32	Inspect main landing gear trunnion pin retaining bolt nuts for security.	1	ALL		

Airframe Inspection

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
Left Center Section Inspection						
1	77	Inspect Delta P/P for condition, security, and chaffing at electrical and pneumatic connections.	1	SA227		
2	53	Check pressure seal fittings at fuselage and wing for evidence of leaks.	1	ALL		
3	24	Check electrical wiring and connectors between wing and fuselage for condition, security, and chaffing.	1	ALL		
4	57	Inspect wing-to-fuselage fairings for condition.	1	ALL		
5	32	Check condition of landing gear uplock release cable.	1	ALL		
6	21	Check cold and hot air ducts for condition and security.	1	ALL		
7	21	Check sensing lines and valves in cold air duct for condition and security. SA227	1	SA226	N	
8	21	Check hose assemblies and valves in cold air duct for condition and security.	1	ALL		
9	24	Check electrical wiring in center section for condition, security, and chaffing.	1	ALL		
10	21	Check all tube couplings and clamps in center section for security and condition.	1	ALL		
11	28	Check condition of jet pumps and plumbing for condition, security, and chaffing.	1	ALL		
12	29	Inspect hydraulic plumbing for condition, security, and chaffing.	1	ALL		
13	28	Check condition and operation of fuel crossflow valve, couplings, and tube.	1,2	ALL		
14	21	Inspect hot air mixing valve for security and condition. Check operation.	1,2	ALL		
15	37	Check filter on vacuum regulator valve.	1	ALL		
16	21	Inspect pneumatic system dryer. Replace dryer when blue crystals turn pink. (SA227-CC/DC) SA227AC	1	SA227 CC/DC	W	
17	36	Check pneumatic system filter. (SA2227-CC/DC) SA227AC	1	SA227 CC/DC	N	
18	37	Check vacuum pressure warning switch for security, condition, and wiring.	1	ALL		
19	37	Check condition of vacuum pressure regulator and lines for condition, security, and chaffing.	1	ALL		
20	37	Check condition of air ejector and vacuum and pressure lines for condition, security, and chaffing.	1	ALL		
21	27	Check condition of flap interconnect center bearing.	1	ALL		
22	27	Check flap position and 20 degree switch for condition and mounting security	1	ALL		
23	27	Disconnect flap and gear warning control box and functionally check flap "up" override system.	2	ALL		
24	27	Reconnect flap and gear warning control box and verify proper operation of system.	2	ALL		
25	28	Check fuel vent interconnect line for condition, security, and chaffing.	1	ALL		

Flight Center Section Inspection

1	77	Inspect Delta P/P for condition, security, and chaffing at electrical and pneumatic connections.	1	SA227		
2	53	Check pressure seal fittings at fuselage and wing for evidence of leaks.	1	ALL		
3	24	Check electrical wiring and connectors between wing and fuselage for condition, security, and chaffing.	1	ALL		
4	57	Inspect wing-to-fuselage fairings for condition.	1	ALL		
5	32	Check condition of landing gear uplock release cable.	1	ALL		
6	21	Check cold and hot air ducts for condition and security.	1	ALL		
7	21	Check sensing lines and valves in cold air duct for condition and security. SA227	1	SA226		
8	21	Check hose assemblies and valves in cold air duct for condition and security.	1	ALL		
9	24	Check electrical wiring in center section for condition, security, and chaffing.	1	ALL		
10	21	Check all tube couplings and clamps in center section for security and condition.	1	ALL		
11	28	Check condition of jet pumps and plumbing for condition, security, and chaffing.	1	ALL		
12	29	Inspect hydraulic plumbing for condition, security, and chaffing.	1	ALL		
13	28	Check condition and operation of fuel crossflow valve, couplings, and tube.	1,2	ALL		
14	21	Inspect hot air mixing valve for security and condition. Check operation.	1,2	ALL		
15	37	Check filter on vacuum regulator valve.	1	ALL		
16	21	Inspect pneumatic system dryer. Replace dryer when blue crystals turn pink. SA227AC	1	SA227 CC/DC		
17	36	Check pneumatic system filter. SA227AC	1	SA227 CC/DC		
18	37	Check vacuum pressure warning switch for security, condition, and wiring.	1	ALL		
19	37	Check condition of vacuum pressure regulator and lines for condition, security, and chaffing.	1	ALL		
20	37	Check condition of air ejector and vacuum and pressure lines for condition, security, and chaffing.	1	ALL		
21	27	Check SAS transmitter for condition and mounting security	1	ALL		
22	28	Check fuel vent interconnect line for condition, security, and chaffing.	1	ALL		

Tail Section Inspection

1	21	Inspect pressurization outflow valve. Inspect lines and fittings for condition, security, and chaffing.	1	ALL		
2	21	Inspect pressurization lines, fittings and components for security and condition.	1	ALL		
3	34	Check static ports, lines and fittings for obstructions, chaffing, cracks and security.	1	ALL		
4	30	Inspect deicer boot lines for condition, security, and chaffing.	1	ALL		
5	34	Check all radio antenna leads, attachments and connectors.	1	ALL		

6	24	Inspect electronic and avionics equipment located on the aft equipment shelf behind aft cargo compartment.	1	SA227	[redacted]	
7	35	Inspect oxygen cylinder, regulator, pressure transducer, filler valve and blowout disc for condition and security.	1	SA227 EXCEPT TT		
8	53	Inspect stringers, frames and skin in and around tail section. Check for damage, cracks, and corrosion.	1	ALL		
9	55	Inspect vertical stabilizer attach fittings for condition and security.	1	ALL		
10	27	Inspect rudder bellcrank and gust lock system for condition, security and proper operation.	2	ALL		
11	27	Inspect rudder torque tube and seal for corrosion and condition.	1	ALL		
12	27	Inspect rudder torque tube/rudder bellcrank attachment bolts for security.	1	ALL		
13	53	Inspect condition of tailcone, navigation/strobe light assembly, lens, and wiring. Check security of light assembly and lens. Ensure tail navigation light lens is properly oriented.	1	ALL		
Empennage Inspection						
1	30	Inspect stabilizer deice boots and leading edges. Check for evidence of damage/punctures.	1 2	ALL		
2	55	Check general condition of horizontal stabilizer and security of attaching parts.	1	ALL		
3	55	Check condition of elevator and attaching parts.	1	ALL		
4	27	Check trim actuator for general condition, security and operation.	2	ALL		
5	27	Inspect horizontal stabilizer pivot bolt for wear, security and condition of bushings.	2	ALL		
6	27	Inspect elevator bellcrank, stops, bolts, and bearings for corrosion, security, wear and general condition.	1	ALL		
7	27	Check elevator torque tubes, bearings and actuating rods for corrosion, security and condition.	2	ALL		
8	27	Inspect condition of vertical stabilizer. Check for evidence of damage and secure installation of attaching parts.	1	ALL		
9	27	Check rudder for damage, security, and general condition.	2	ALL		
10	27	Check rudder trim tab for condition, damage, security, freeplay and travel limits.	2	ALL		
11	27	Check rudder trim actuator chain, cables, actuator and rod for condition and proper operation.	2	ALL		
12	27	Inspect rod and rod end bearings for corrosion, scratches, gouges, deformation, security and condition.	2	ALL		
13	27	Inspect rod assembly for correct installation and operation. Ensure attach bolt at each end is in vertical position with bolt head up.	2	ALL		

Airframe Inspection						
Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
Rudder Control Cable Inspection						
1	27	Complete cable inspection per Task 27.920.	Mx	ALL	[redacted]	
Elevator Control Cable Inspection						
1	27	Complete cable inspection per Task 27.920.	Mx	ALL	[redacted]	
Aileron Control Cable Inspection						
1	27	Complete cable inspection per Task 27.920.	Mx	ALL	[redacted]	
End of Airframe Inspection						

Airframe Post Inspection and Preparation for Return to Service

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
Flight Compartment Post Inspection and Service						
1	27	Install control column covers.	Mx	ALL		
2	25	Install floorboards. Check for fit and security.	Mx	ALL		
3	25	Install crew seats.	Mx	ALL		
4	25	Sit in each cockpit seat and check seat belts for proper orientation of set belt components.	Mx	ALL		
5	25	Sit in each cockpit seat and check operation of all seat adjustments.	Mx	ALL		
6	25	Install Glareshield and verify proper SAS Gage operation	Mx	ALL		
Cabin Section Post Inspection and Service						
1	25	Install passenger door trim and inspection panels.	Mx	ALL		
2	52	Install escape hatches.	Mx	ALL		
3	25	Install all removed floor boards	Mx	ALL		
4	25	Install cargo door liner.	Mx	ALL		
5	25	Operate passenger door to ensure proper operation.	Mx	ALL		
6	25	Operate cargo door to ensure proper operation.	Mx	ALL		
Nose Section Post Inspection and Service						
1	32	Install nose gear torque scissor link shafts, seal roll pins and safety.	MX			
Left Wing and Wheel Well Post Inspection and Service						
1	57	Install all inspection plates and panels on nacelles and wheel wells.	Mx	ALL		
2	32	Install MLG torque scissor link shafts, seal roll pins and safety.	Mx	ALL		
3	57	Install all inspection panels on wing tip. (SA227 series except TT)	Mx	SA227 EXCEPT TT		
4	57	Install wing tip. SA227AC	Mx	SA226 AND SA227-TT		
5	57	Install all removed panels.	Mx	ALL		
Right Wing and Wheel Well Post Inspection and Service						
1	57	Install all inspection plates and panels on nacelles and wheel wells.	Mx	ALL		
2	32	Install MLG torque scissor link shafts, seal roll pins and safety.	Mx	ALL		
3	57	Install all inspection panels on wing tip. (SA227 series except TT)	Mx	SA227 EXCEPT TT		
4	57	Install wing tip. SA227AC	Mx	SA226 AND SA227-TT		

Airframe Post Inspection and Preparation for Return to Service

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
5	57	Install all removed panels.	Mx	ALL		
Left Center Section Post Inspection and Service						
1	27	Install flap interconnect center bearing.	Mx	ALL		
2		**INS** INSPECTOR: Ensure flap interconnect center bearing properly installed.	VIS	ALL		
3	57	Install wing-to-fuselage fairings using blue Loctite on screws.	Mx	ALL		
4	57	Install all removed plates and covers.	Mx	ALL		
Right Center Section Post Inspection and Service						
1	57	Install wing-to-fuselage fairings using blue Loctite on screws.	Mx	ALL		
2	57	Install all removed plates and covers.	Mx	ALL		
Tail Section Post Inspection and Service						
1	27	Install rear pressure bulkhead.	Mx	ALL		
2	33	Install tailcone and all removed panels and plates.	Mx	ALL		
Empennage Post Inspection and Service						
1	55	Install all removed inspection doors, fairings, panels and plates. Check for proper fit and secure installation.	Mx	ALL		
Left Wing and Wheel Well Post Inspection and Service						
1		Complete post-maintenance engine run in accordance with Post-Maintenance Engine Run Checklist (Form MIP-227-ER).		ALL		
2		Complete post-maintenance preflight check in accordance with Post Maintenance Preflight Check Checklist (Form MIP-227-PF).		ALL		
3		Complete aircraft records.		ALL		

End of Airframe Post Inspection and Preparation for Return to Service

Centennial Instruments, Inc.

7285 S. Revere Parkway Suite 705
Centennial, Colorado 80112

303-662-0692
FAA Repair Station # L5IR350Y

Altitude in Feet	Error	Altitude in Feet	Error
-1000	+10	16000	-10
0	0	18000	-5
500	-5	20000	+40
1000	0	22000	+50
1500	0	25000	-110
2000	+15	30000	+25
3000	+25	35000	-100
4000	+10	40000	
6000	+30	45000	
8000	+20	50000	
10000	+5	51000	
12000	-5	52000	
14000	-25	53000	

Tested by: [redacted] Date: 9-13-16

Part # 18702-502 S/N: 1771

FR

1. Approving Civil Aviation Authority/ Country:	2.	3. Form Tracking Number:
FAA/ UNITED STATES	**AUTHORIZED RELEASE CERTIFICATE** **FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG**	5001684

4. Organization Name and Address:	5. Work Order, Contract, or Invoice Number:
Centennial Instruments Inc. 7285 S. Revere Parkway, Suite 705 Centennial, CO 80112 303-662-0692 Fax 303-662-0690 **CRS L5IR350Y**	10383

6. Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status/ Work:
1	Encoding Altimeter (519)	28702-502	1	1771	Tested/ Inspected

12. Remarks:

Tested & Certified

C/W FAR 91-411 Part 43, Appendix "E" Par "D" & "C" TO 35,000 Feet.

13a. Certifies the items identified above were manufactured in conformity to:	14a. ☒ 14 CFR 43.9 Return to Service ☐ Other Regulation specified in Block 12
☐ Approved design data and are in condition for safe operation ☐ Non approved design data specified in Block 12	Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12, was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for Return to Service.

13b. Authorized Signature:	13c. Approval Authorization Number:	14b. Authorized Signature:	14c. Approval/ Certificate Number:
		[redacted]	[redacted]
13d. Name (Typed or Printed):	**13e. Date (dd/mm/yyyy)**	**14d. Name (Typed or Printed):**	**14e. Date (dd/mmm/yyyy)**
		Stephen H. Newton	13/SEP/2016

User/ Installer Responsibilities

It is important to understand that the existence of this document alone does not automatically constitute authority to install the aircraft engine/ propeller/ article.

Where the user/ installer performs work in accordance with national regulations of an airworthiness authority, different than the airworthiness authority of the country specified in Block 1, it is essential that the user/ installer ensures that his/ her airworthiness authority accepts aircraft engine(s)/ propeller(s)/ article(s) from airworthiness authority of the country specified in Block 1.

Statements in Blocks 13 (a) and 14 (a) do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/ installer before the aircraft may be flown.


KEY LIME AIR
5001684
09/13/201
28702-502
Centennial Instruments, In

Centennial Instruments, Inc.

7285 S. Revere Parkway Suite 705 — 303-662-0692
Centennial, Colorado 80112 — FAA Repair Station # L5IR350Y

Altitude in Feet	Error	Altitude in Feet	Error
-1000	-20	16000	+20
0	-15	18000	+20
500	-5	20000	+20
1000	+10	22000	+10
1500	+10	25000	+20
2000	+10	30000	+70
3000	+15	35000	+90
4000	+20	40000	
6000	+30	45000	
8000	+20	50000	
10000	+20	51000	
12000	+10	52000	
14000	+20	53000	

Tested by: [redacted] Date: 9-13-16
Part # 101735-11807 S/N: 149403

TE

1. Approving Civil Aviation Authority/ Country:	2.	3. Form Tracking Number:
FAA/ UNITED STATES	**AUTHORIZED RELEASE CERTIFICATE** **FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG**	5001684

4. Organization Name and Address:	5. Work Order, Contract, or Invoice Number:
Centennial Instruments Inc. 7285 S. Revere Parkway, Suite 705 Centennial, CO 80112 303-662-0692 Fax 303-662-0690 **CRS L5IR350Y**	10384

6. Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status/ Work:
1	Altimeter	101735-11807	1	199403	Repaired

12. Remarks:

Tested and Certified. IAW Aerosonic ATP 147 Rev 1 Dated 1/1/83
C/W FAR 91-411 part 43 Appendix E Par "D" to 35,000 Feet.

13a. Certifies the items identified above were manufactured in conformity to:	14a. ☒ 14 CFR 43.9 Return to Service ☐ Other Regulation specified in Block 12
☐ Approved design data and are in condition for safe operation ☐ Non approved design data specified in Block 12	Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12, was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for Return to Service.

13b. Authorized Signature:	13c. Approval Authorization Number:	14b. Authorized Signature:	14c. Approval/ Certificate Number:
		[redacted]	[redacted]
13d. Name (Typed or Printed):	**13e. Date (dd/mm/yyyy)**	**14d. Name (Typed or Printed):**	**14e. Date (dd/mmm/yyyy)**
		Stephen H. Newton	13/Sep/2016

User/ Installer Responsibilities

It is important to understand that the existence of this document alone does not automatically constitute authority to install the aircraft engine/ propeller/ article.

Where the user/ installer performs work in accordance with national regulations of an airworthiness authority, different than the airworthiness authority of the country specified in Block 1, it is essential that the user/ installer ensures that his/ her airworthiness authority accepts aircraft engine(s)/ propeller(s)/ article(s) from airworthiness authority of the country specified in Block 1.

Statements in Blocks 13 (a) and 14 (a) do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/ installer before the aircraft may be flown.

Left Engine (E1) Inspection Package

Date: 9-7-16	A/C Reg. No. N765FA	A/C Serial No. AC765
A/C Total Time: 24169.7	A/C Total Landings: 39961	Station: APA
Airframe Work Order #: 26306	E1 Work Order #: 26308	E2 Work Order #: 26309

SIGNATURE BLOCKS

This table lists the mechanics and Inspectors that will make initials on the inspection forms.

MECHANIC'S OR INSPECTOR'S PRINTED NAME	SIGNATURE	SAMPLE INITIALS
Tom Allard	[redacted]	
John Stephen Gr[illegible]		

Left Engine (E1) Inspection Preparation and Service						
Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
1	71	Open or Remove engine cowlings.	MX	ALL	[redacted]	
2	61	Remove and clean spinner. $A227	MX	SA226	[redacted]	
3	24	Remove starter-generator and generator brush cover	MX	ALL	[redacted]	
4	GTEC	Replace fuel filter in pump body.	MX	ALL	[redacted]	
		INS INSPECTOR: Inspect fuel filter installation for proper installation and safety.	VIS	ALL	[redacted]	
5	GTEC	Replace engine oil filter and seal, and take S.O.A.P sample.	MX	ALL	[redacted]	
		INS INSPECTOR: Inspect oil filter installation for proper installation and safety.	VIS	ALL	[redacted]	
6	61	Dress propeller blades and paint if necessary.	MX	ALL	[redacted]	
End of Left Engine (E1) Inspection Preparation and Service						

Left Engine (E1) Inspection

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
1	79	Inspect oil tank assembly for condition, security, and evidence of leaks.	1	ALL	[redacted]	
2	79	Check oil cooler for condition, security and evidence of leaks.	1	ALL		
3	GTEC	Check input gearbox drain. Use air to ensure vent is open.	1	ALL		
4	GTEC	Check fuel heater for condition, security and evidence of leaks.	1	ALL		
5	24	Check all electrical wires, connectors and electrical units for security, chafing and general condition.	1	ALL		
6	73	Check fuel differential pressure switch for evidence of leaks and security. AC	1	SA227-CC; DC		
7	71	Inspect LH side engine truss and vibration isolation mounts for condition and security.	1	ALL		
8	79	Check oil pressure warning switch for evidence of leaks and security. (Aft of firewall on SA226 Series)	1	ALL		
9	79	Check oil pressure transducer for evidence of leaks and security. (Aft of firewall on SA226 Series)	1	ALL		
10	29	Check Hydraulic pressure warning switch for evidence of leaks and security. (Aft of firewall on SA226 Series)	1	ALL		
11	82	Check CAWI lines, valves and manifold for condition and security. Service and functionally check system. (If installed)	1, 2	ALL		
12	GTEC	Check condition of pressure/temperature sensor in engine inlet.	1	ALL		
13	72	Inspect engine inlet area. Check compressor impeller for damage, cracks and obstructions.	1	ALL		
14	61	Check propeller spinner and bulkhead for evidence of cracks and distortion.	1	ALL		
15	71	Check forward cowl bulkheads for evidence of chafing.	1	ALL		
16	61	Inspect condition of prop deicer slip ring.	1	ALL		
17	61	Check condition and operation of prop deicer boots.	1,2	ALL		
18	30	Check prop deicer brushes for evidence of wear.	1	ALL		
19	61	Check prop synchrophaser magnetic pick up for condition, security and proper clearance.	1	SA227		
20	61	Check prop mounting nuts or bolts for security.	1	ALL		
21	61	Check slippage marks on prop blade cuffs.	1	SA226		
22	61	Check start-locks for condition and security.	1	SA226		
23	61	Inspect prop hub for leaks and condition, grease as required.	1	SA226		
24	61	Check general condition of propeller blades. Inspect for nicks, scratches and other damage.	1	ALL		
25	71	Inspect engine truss and vibration isolation mounts for condition and security (RH side).	1	ALL		
26	26	Check engine fire detectors and associated wiring for condition, cracks and security. Pay particular attention to ceramic area around wire connector.	1	ALL		

Left Engine (E1) Inspection

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
27	24	Inspect starter-generator drive splines for condition and wear.	1	ALL	[redacted] A	
28	24	Inspect starter-generator brushes and armature for condition and wear. Record starter-generator serial number and brush wear percentage. SGEN S/N: 4347 Brush Wear 20 %	1	ALL	[redacted] A	
29	GTEC	Check for evidence of leaking seals at starter-generator drive.	1	ALL	[redacted] A	
30	29	Inspect hydraulic pump for security, evidence of leaks, and general condition.	1	ALL	[redacted] A	
31	77	Check tachometer generator for security, evidence of leaks, and general condition.	1	ALL	[redacted] A	
32	76	Check propeller governor and propeller pitch controls for condition, security and evidence of leaks.	1	ALL	[redacted] A	
33	76	Check all engine controls for freedom of operation and security.	1	ALL	[redacted] A	
34	76	Check engine controls (fuel shutoff valve, fuel control unit, propeller pitch control, Christmas tree, and prop governor) for missing or loose safety wire, cotter pins, loose jam nuts, and frozen rod end bearings.	1	ALL	[redacted] A	
35	76	Check screw "W" for proper thread tension.	1	ALL	[redacted] A	
36	77	Check thermocouple harness assembly for security and damage.	1	ALL	[redacted]	
37	21	Check engine bleed air lines for security and condition.	1	ALL	[redacted]	
38	78	Inspect exhaust duct assembly and vanes for cracks, condition, and security.	1	ALL	[redacted] A	
39	75	Inspect aspirator assembly and seals for condition and evidence of leaks.	1	ALL	[redacted]	
40	73	Check fuel pressure transducer for evidence of leaks and security. (Aft of Firewall on SA226)	1	ALL	[redacted]	
41	77	Test compensating resistor in accordance with GTEC Maintenance Manual.	1	ALL	[redacted]	
42	71	Check torque pressure transducer for security, condition and evidence of leaks.	1	SA226	[redacted] N/A	
43	73	Apply fuel boost pump pressure and inspect for fuel leaks.	1	ALL	[redacted] A	
44	71	Inspect engine cowlings for condition. Check for proper operation and security of hinge mechanisms on SA227 series.	1	ALL	[redacted]	

End of Left Engine (E1) Inspection

Key Lime Air
13252 E. Control Tower Road, Englewood, CO 80112

SA226/227 Letter Check A

Left Engine (E1) Post-Inspection and Service

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
1	61	Reinstall prop spinner and verify proper alignment. SA227	MX	SA226	[redacted]	
2	24	Lube starter generator splines (Only assemblies which DO NOT have Torlon insert). Torlon installed	MX	ALL	[redacted]	
3	24	Reinstall starter-generator brush cover.	MX	ALL	[redacted]	
4	24	Reinstall starter-generator.	MX	ALL	[redacted]	
5	71	Close all panels removed for inspection.	MX	ALL	[redacted]	

End of Left Engine (E1) Post-Inspection and Service

Left Engine (E1) Inspection Package

Date: **09/07/2016**	A/C Reg. No. **N765FA**	A/C Serial No. **AC765**
A/C Total Time: 24169.7	A/C Total Landings: 39961	Station: **APA**
Airframe Work Order #: **26306**	E1 Work Order #: **26308**	E2 Work Order #: **26309**

SIGNATURE BLOCKS

This table lists the mechanics and Inspectors that will make initials on the inspection forms.

MECHANIC'S OR INSPECTOR'S PRINTED NAME	SIGNATURE	SAMPLE INITIALS
Tom Allard	[redacted]	TA
Jason P Davis		

Left Engine (E1) Inspection Preparation and Service						
Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
1	71	Open or Remove engine cowlings.	Mx	ALL	[redacted]	
2	61	Remove and clean spinner. $A227	Mx	SA226	[redacted]	
3	24	Remove starter-generator and generator brush cover	Mx	ALL	[redacted]	
4	GTEC	Replace fuel filter in pump body.	Mx	ALL	[redacted]	
		INS INSPECTOR: Inspect fuel filter installation for proper installation and safety.	VIS	ALL	[redacted]	
5	GTEC	Replace engine oil filter and seal, and take S.O.A.P sample.	Mx	ALL	[redacted]	
		INS INSPECTOR: Inspect oil filter installation for proper installation and safety.	VIS	ALL	[redacted]	
6	26	Remove fire extinguisher access panel. (If installed)	Mx	ALL	[redacted]	
7	61	Dress propeller blades and paint if necessary.	Mx	ALL	[redacted]	
End of Left Engine (E1) Inspection Preparation and Service						

Left Engine (E1) Inspection						
Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
1	79	Inspect oil tank assembly for condition, security, and evidence of leaks.	1	ALL	[redacted]	
2	79	Check oil cooler for condition, security and evidence of leaks.	1	ALL	[redacted]	
3	GTEC	Check input gearbox drain. Use air to ensure vent is open.	1	ALL	[redacted]	
4	GTEC	Check fuel heater for condition, security and evidence of leaks.	1	ALL	[redacted]	
5	24	Check all electrical wires, connectors and electrical units for security, chafing and general condition.	1	ALL	[redacted]	
6	73	Check fuel differential pressure switch for evidence of leaks and security. (-12 Engines ONLY) AC	1	SA227 BC/DC	[redacted]	
7	71	Inspect LH side engine truss and vibration isolation mounts for condition and security.	1	ALL	[redacted]	
8	79	Check oil pressure warning switch for evidence of leaks and security. (Aft of firewall on SA226 Series)	1	ALL	[redacted]	
9	79	Check oil pressure transducer for evidence of leaks and security. (Aft of firewall on SA226 Series)	1	ALL	[redacted]	
10	29	Check Hydraulic pressure warning switch for evidence of leaks and security. (Aft of firewall on SA226 Series)	1	ALL	[redacted]	
11	82	Check CAWI lines, valves and manifold for condition and security. Functionally check system prior to operational use. (If installed)	1,2	ALL	[redacted]	
12	GTEC	Check condition of pressure/temperature sensor in engine inlet.	1	ALL	[redacted]	
13	72	Inspect engine inlet area. Check compressor impeller for damage, cracks and obstructions.	1	ALL	[redacted]	
14	61	Check propeller spinner and bulkhead for evidence of cracks and distortion.	1	ALL	[redacted]	
15	71	Check forward cowl bulkheads for evidence of chafing.	1	ALL	[redacted]	
16	26	Inspect general condition of fire extinguisher bottle and check pressure and mounting security. (SA227 Series, and SA226 series equipped with engine fire bottles)	1	ALL	[redacted]	
17	61	Inspect condition of prop deicer slip ring.	1	ALL	[redacted]	
18	61	Check condition and operation of prop deicer boots.	1,2	ALL	[redacted]	
19	30	Check prop deicer brushes for evidence of wear.	1	ALL	[redacted]	
20	61	Check prop synchronization actuator on left engine for condition and security. $A227	1	SA226	[redacted]	
21	61	Check prop synchrophaser magnetic pick up for condition, security and proper clearance.	1	SA227	[redacted]	
22	61	Check prop mounting nuts or bolts for security.	1	ALL	[redacted]	
23	61	Check slippage marks on prop blade cuffs.	1	SA226	[redacted]	
24	61	Check start-locks for condition and security. $A227	1	SA226	[redacted]	
25	61	Inspect prop hub for leaks and condition, grease as required.	1	SA226	[redacted]	

Left Engine (E1) Inspection						
Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
26	61	Check general condition of propeller blades. Inspect for nicks, scratches and other damage.	1	ALL	[redacted]	
27	71	Inspect engine truss and vibration isolation mounts for condition and security (RH side).	1	ALL	[redacted]	
28	26	Check engine fire detectors and associated wiring for condition, cracks and security. Pay particular attention to ceramic area around wire connector.	1	ALL	[redacted]	
29	24	Inspect starter-generator drive splines for condition and wear.	1	ALL	[redacted]	
30	24	Inspect starter-generator brushes and armature for condition and wear. Record starter-generator serial number and brush wear percentage. Replace at 80% wear. SGEN S/N: 4347 Brush Wear: 20 %	1	ALL	[redacted]	
31	GTEC	Check for evidence of leaking seals at starter-generator drive.	1	ALL	[redacted]	
32	29	Inspect hydraulic pump for security, evidence of leaks, and general condition.	1	ALL	[redacted]	
33	77	Check tachometer generator for security, evidence of leaks, and general condition.	1	ALL	[redacted]	
34	76	Check propeller governor and propeller pitch controls for condition, security and evidence of leaks.	1	ALL	[redacted]	
35	76	Check all engine controls for freedom of operation and security.	1	ALL	[redacted]	
36	76	Check engine controls (fuel shutoff valve, fuel control unit, propeller pitch control, Christmas tree, and prop governor) for missing or loose safety wire, cotter pins, loose jam nuts, and frozen rod end bearings.	1	ALL	[redacted]	
37	77	Check thermocouple harness assembly for security and damage.	1	ALL	[redacted]	
38	21	Check engine bleed air lines for security and condition.	1	ALL	[redacted]	
39	78	Inspect exhaust duct assembly and vanes for cracks, condition, and security.	1	ALL	[redacted]	
40	75	Inspect aspirator assembly and seals for condition and evidence of leaks.	1	ALL	[redacted]	
41	73	Check fuel pressure transducer for evidence of leaks and security. (Aft of Firewall on SA226 Series)	1	ALL	[redacted]	
42	77	Test compensating resistor in accordance with GTEC Maintenance Manual.	1	ALL	[redacted]	
43	71	Check torque pressure transducer for security, condition and evidence of leaks. $A227	1	SA226	[redacted]	
44	73	Apply fuel boost pump pressure and inspect for leaks. Conduct ground run of engine and inspect for fuel and oil leaks.	1	ALL	[redacted]	
45	71	Inspect engine cowling for condition and fit. Check for proper operation and security of hinge mechanisms on SA227 series.	1	ALL	[redacted]	
End of Left Engine (E1) Inspection						

Left Engine (E1) Post Inspection and Service						
Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
1	26	Reinstall fire extinguisher access panel.	Mx	ALL	[redacted]	
2	61	Reinstall prop spinner and verify proper alignment. SA227	Mx	SA226	N/A	
3	24	Lube starter generator splines (Only assemblies which DO NOT have Torlon insert). Torlon installed	Mx	ALL	N/A	
4	24	Reinstall starter-generator brush cover.	Mx	ALL	[redacted]	
5	24	Reinstall starter-generator.	Mx	ALL	[redacted]	
6	71	Close all panels removed for inspection.	Mx	ALL	[redacted]	
End of Left Engine (E1) Post Inspection and Service						

Right Engine (E2) Inspection Package

Date: **09/07/2016**	A/C Reg. No. **N765FA**	A/C Serial No. **AC765**
A/C Total Time: 24169.7	A/C Total Landings: 39961	Station: **APA**
Airframe Work Order #: **26306**	E1 Work Order #: **26308**	E2 Work Order #: **2630926309**

SIGNATURE BLOCKS

This table lists the mechanics and inspectors that will make initials on the inspection forms.

MECHANIC'S OR INSPECTOR'S PRINTED NAME	SIGNATURE	SAMPLE INITIALS
Jason P Davis	[redacted]	
Dean C Anderson		

Right Engine (E2) Inspection Preparation and Service						
Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
1	71	Open or Remove engine cowlings.	MX	ALL	[redacted]	
2	61	Remove and clean spinner. SA227	MX	SA226	[redacted]	
3	24	Remove starter-generator and generator brush cover	MX	ALL	[redacted]	
4	GTEC	Replace fuel filter in pump body.	MX	ALL	[redacted]	
		INS INSPECTOR: Inspect fuel filter installation for proper installation and safety.	VIS	ALL	[redacted]	
5	GTEC	Replace engine oil filter and seal, and take S.O.A.P sample.	MX	ALL	[redacted]	
		INS INSPECTOR: Inspect oil filter installation for proper installation and safety.	VIS	ALL	[redacted]	
6	61	Dress propeller blades and paint if necessary.	MX	ALL	[redacted]	
End of Right Engine (E2) Inspection Preparation and Service						

Right Engine (E2) Inspection

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
1	79	Inspect oil tank assembly for condition, security, and evidence of leaks.	1	ALL		
2	79	Check oil cooler for condition, security and evidence of leaks.	1	ALL		
3	GTEC	Check input gearbox drain. Use air to ensure vent is open.	1	ALL		
4	GTEC	Check fuel heater for condition, security and evidence of leaks.	1	ALL		
5	24	Check all electrical wires, connectors and electrical units for security, chafing and general condition.	1	ALL		
6	73	Check fuel differential pressure switch for evidence of leaks and security. (-12 Engines ONLY) SA227AC -11	1	SA227 BC/DC		
7	71	Inspect LH side engine truss and vibration isolation mounts for condition and security.	1	ALL		
8	79	Check oil pressure warning switch for evidence of leaks and security. (Aft of firewall on SA226 Series)	1	ALL		
9	79	Check oil pressure transducer for evidence of leaks and security. (Aft of firewall on SA226 Series)	1	ALL		
10	29	Check Hydraulic pressure warning switch for evidence of leaks and security. (Aft of firewall on SA226 Series)	1	ALL		
11	82	Check CAWI lines, valves and manifold for condition and security. Service and functionally check system. (If installed)	1, 2	ALL		
12	GTEC	Check condition of pressure/temperature sensor in engine inlet.	1	ALL		
13	72	Inspect engine inlet area. Check compressor impeller for damage, cracks and obstructions.	1	ALL		
14	61	Check propeller spinner and bulkhead for evidence of cracks and distortion.	1	ALL		
15	71	Check forward cowl bulkheads for evidence of chafing.	1	ALL		
16	61	Inspect condition of prop deicer slip ring.	1	ALL		
17	61	Check condition and operation of prop deicer boots.	1,2	ALL		
18	30	Check prop deicer brushes for evidence of wear.	1	ALL		
19	61	Check prop synchrophaser magnetic pick up for condition, security and proper clearance.	1	SA227		
20	61	Check prop mounting nuts or bolts for security.	1	ALL		
21	61	Check slippage marks on prop blade cuffs. SA227	1	SA226		
22	61	Check start-locks for condition and security. SA227	1	SA226		
23	61	Inspect prop hub for leaks and condition, grease as required. SA227	1	SA226		
24	61	Check general condition of propeller blades. Inspect for nicks, scratches and other damage.	1	ALL		
25	71	Inspect engine truss and vibration isolation mounts for condition and security (RH side).	1	ALL		
26	26	Check engine fire detectors and associated wiring for condition, cracks and security. Pay particular attention to ceramic area around wire connector.	1	ALL		

Right Engine (E2) Inspection

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
27	24	Inspect starter-generator drive splines for condition and wear.	1	ALL		
28	24	Inspect starter-generator brushes and armature for condition and wear. Record starter-generator serial number and brush wear percentage. Replace at 80% wear. SGEN S/N: 86104 Brush Wear 20 %	1	ALL		
29	GTEC	Check for evidence of leaking seals at starter-generator drive.	1	ALL		
30	29	Inspect hydraulic pump for security, evidence of leaks, and general condition.	1	ALL		
31	77	Check tachometer generator for security, evidence of leaks, and general condition.	1	ALL		
32	76	Check propeller governor and propeller pitch controls for condition, security and evidence of leaks.	1	ALL		
33	76	Check all engine controls for freedom of operation and security.	1	ALL		
34	76	Check engine controls (fuel shutoff valve, fuel control unit, propeller pitch control, Christmas tree, and prop governor) for missing or loose safety wire, cotter pins, loose jam nuts, and frozen rod end bearings.	1	ALL		
35	76	Check screw "W" for proper thread tension.	1	ALL		
36	77	Check thermocouple harness assembly for security and damage.	1	ALL		
37	21	Check engine bleed air lines for security and condition.	1	ALL		
38	78	Inspect exhaust duct assembly and vanes for cracks, condition, and security.	1	ALL		
39	75	Inspect aspirator assembly and seals for condition and evidence of leaks.	1	ALL		
40	73	Check fuel pressure transducer for evidence of leaks and security. (Aft of Firewall on SA226)	1	ALL		
41	77	Test compensating resistor in accordance with GTEC Maintenance Manual.	1	ALL		
42	71	Check torque pressure transducer for security, condition and evidence of leaks. SA227	1	SA226		
43	73	Apply fuel boost pump pressure and inspect for fuel leaks.	1	ALL		
44	71	Inspect engine cowlings for condition. Check for proper operation and security of hinge mechanisms on SA227 series.	1	ALL		

End of Right Engine (E2) Inspection

Right Engine (E2) Post-Inspection and Service						
Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
1	61	Reinstall prop spinner and verify proper alignment. SA227	MX	SA226	[redacted]	
2	24	Lube starter generator splines (Only assemblies which DO NOT have Torlon insert). Torlon Installed	MX	ALL	[redacted]	
3	24	Reinstall starter-generator brush cover.	MX	ALL	[redacted]	
4	24	Reinstall starter-generator.	MX	ALL	[redacted]	
5	71	Close all panels removed for inspection.	MX	ALL	[redacted]	
End of Right Engine (E2) Post-Inspection and Service						

Right Engine (E2) Inspection Package

Date: 9-7-16	A/C Reg. No. N765FA	A/C Serial No. AC765
A/C Total Time: 24169.7	A/C Total Landings: 39961	Station: APA
Airframe Work Order #: 26306	E1 Work Order #: 26308	E2 Work Order #: 26309

SIGNATURE BLOCKS

This table lists the mechanics and Inspectors that will make initials on the inspection forms.

MECHANIC'S OR INSPECTOR'S PRINTED NAME	SIGNATURE	SAMPLE INITIALS
Jason P Davis	[redacted]	
Dean C Anderson		

Right Engine (E2) Inspection Preparation and Service						
Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
1	71	Open or Remove engine cowlings.	Mx	ALL		
2	61	Remove and clean spinner.	Mx	SA226		
3	24	Remove starter-generator and generator brush cover	Mx	ALL		
4	GTEC	Replace fuel filter in pump body.	Mx	ALL		
		INS INSPECTOR: Inspect fuel filter installation for proper installation and safety.	VIS	ALL		
5	GTEC	Replace engine oil filter and seal, and take S.O.A.P sample.	Mx	ALL		
		INS INSPECTOR: Inspect oil filter installation for proper installation and safety.	VIS	ALL		
6	26	Remove fire extinguisher access panel. (If installed)	Mx	ALL		
7	61	Dress propeller blades and paint if necessary.	Mx	ALL		
End of Right Engine (E2) Inspection Preparation and Service						

Right Engine (E2) Inspection						
Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
1	79	Inspect oil tank assembly for condition, security, and evidence of leaks.	1	ALL		
2	79	Check oil cooler for condition, security and evidence of leaks.	1	ALL		
3	GTEC	Check input gearbox drain. Use air to ensure vent is open.	1	ALL		
4	GTEC	Check fuel heater for condition, security and evidence of leaks.	1	ALL		
5	24	Check all electrical wires, connectors and electrical units for security, chafing and general condition. SA227AC	1	ALL		
6	73	Check fuel differential pressure switch for evidence of leaks and security.	1	SA227 CC/DC		
7	71	Inspect LH side engine truss and vibration isolation mounts for condition and security.	1	ALL		
8	79	Check oil pressure warning switch for evidence of leaks and security. (Aft of firewall on SA226 Series)	1	ALL		
9	79	Check oil pressure transducer for evidence of leaks and security. (Aft of firewall on SA226 Series)	1	ALL		
10	29	Check Hydraulic pressure warning switch for evidence of leaks and security. (Aft of firewall on SA226 Series)	1	ALL		
11	82	Check CAWI lines, valves and manifold for condition and security. Functionally check system prior to operational use. (If installed)	1,2	ALL		
12	GTEC	Check condition of pressure/temperature sensor in engine inlet.	1	ALL		
13	72	Inspect engine inlet area. Check compressor impeller for damage, cracks and obstructions.	1	ALL		
14	61	Check propeller spinner and bulkhead for evidence of cracks and distortion.	1	ALL		
15	71	Check forward cowl bulkheads for evidence of chafing.	1	ALL		
16	26	Inspect general condition of fire extinguisher bottle and check pressure and mounting security. (SA227 Series, and SA226 series equipped with engine fire bottles)	1	ALL		
17	61	Inspect condition of prop deicer slip ring.	1	ALL		
18	61	Check condition and operation of prop deicer boots.	1,2	ALL		
19	30	Check prop deicer brushes for evidence of wear.	1	ALL		
20	61	Check prop synchronization actuator on left engine for condition and security. SA227	1	SA226		
21	61	Check prop synchrophaser magnetic pick up for condition, security and proper clearance.	1	SA227		
22	61	Check prop mounting nuts or bolts for security.	1	ALL		
23	61	Check slippage marks on prop blade cuffs. SA227	1	SA226		
24	61	Check start-locks for condition and security. SA227	1	SA226		
25	61	Inspect prop hub for leaks and condition, grease as required. SA227	1	SA226		

Right Engine (E2) Inspection

Item #	ATA Ref.	Description	Method	Applicability	Mech/ Insp	Disc.
26	61	Check general condition of propeller blades. Inspect for nicks, scratches and other damage.	1	ALL		
27	71	Inspect engine truss and vibration isolation mounts for condition and security (RH side).	1	ALL		
28	26	Check engine fire detectors and associated wiring for condition, cracks and security. Pay particular attention to ceramic area around wire connector.	1	ALL		
29	24	Inspect starter-generator drive splines for condition and wear.	1	ALL		
30	24	Inspect starter-generator brushes and armature for condition and wear. Record starter-generator serial number and brush wear percentage. SGEN S/N: 86104 Brush Wear: 20 %	1	ALL		
31	GTEC	Check for evidence of leaking seals at starter-generator drive.	1	ALL		
32	29	Inspect hydraulic pump for security, evidence of leaks, and general condition.	1	ALL		
33	77	Check tachometer generator for security, evidence of leaks, and general condition.	1	ALL		
34	76	Check propeller governor and propeller pitch controls for condition, security and evidence of leaks.	1	ALL		
35	76	Check all engine controls for freedom of operation and security.	1	ALL		
36	76	Check engine controls (fuel shutoff valve, fuel control unit, propeller pitch control, Christmas tree, and prop governor) for missing or loose safety wire, cotter pins, loose jam nuts, and frozen rod end bearings.	1	ALL		
37	77	Check thermocouple harness assembly for security and damage.	1	ALL		
38	21	Check engine bleed air lines for security and condition.	1	ALL		
39	78	Inspect exhaust duct assembly and vanes for cracks, condition, and security.	1	ALL		
40	75	Inspect aspirator assembly and seals for condition and evidence of leaks.	1	ALL		
41	73	Check fuel pressure transducer for evidence of leaks and security. (Aft of Firewall on SA226 Series)	1	ALL		
42	77	Test compensating resistor in accordance with GTEC Maintenance Manual.	1	ALL		
43	71	Check torque pressure transducer for security, condition and evidence of leaks. SA227	1	SA226		
44	73	Apply fuel boost pump pressure and inspect for leaks. Conduct ground run of engine and inspect for fuel and oil leaks.	1	ALL		
45	71	Inspect engine cowling for condition and fit. Check for proper operation and security of hinge mechanisms on SA227 series.	1	ALL		

End of Right Engine (E2) Inspection

Right Engine (E2) Post Inspection and Service						
Item #	**ATA Ref.**	**Description**	**Method**	**Applicability**	**Mech/ Insp**	**Disc.**
1	26	Reinstall fire extinguisher access panel.	Mx	ALL	[redacted]	
2	61	Reinstall prop spinner and verify proper alignment.	Mx	SA226	[redacted]	
3	24	Lube starter generator splines (Only assemblies which DO NOT have Torlon insert).	Mx	ALL	[redacted]	
4	24	Reinstall starter-generator brush cover.	Mx	ALL	[redacted]	
5	24	Reinstall starter-generator.	Mx	ALL	[redacted]	
6	71	Close all panels removed for inspection.	Mx	ALL	[redacted]	
End of Right Engine (E2) Post Inspection and Service						