BEECHCRAFT
DUKE 60
100-HOUR OR ANNUAL LONG FORM INSPECTION GUIDE

OWNER'S NAME	ADDRESS

IDENTIFICATION NUMBER	SERIAL NUMBER	HOURS	DATE INSPECTION COMPLETED

SERVICING AGENCY	CITY	STATE

The time periods for the inspections noted in this schedule are based on normal usage under average environmental conditions. Airplanes operated in humid tropics, or in cold, damp climates, etc., may need more frequent inspections for wear, corrosion, lubrication, and/or lack of maintenance. Under these adverse conditions, perform periodic inspections in compliance with this guide at more frequent intervals until the owner or operator can set his own inspection periods based on the contingencies of field experience. Airplanes operated less than 100 hours a year must have a 100-Hour Inspection performed no later than 12 months following the date of the preceding 100-Hour Inspection. The 100-hour interval between performance of the procedures specified herein should NEVER be exceeded by more than 10 hours, which can be used only if the additional time is required to reach a place where the inspection can be satisfactorily accomplished. However, any extension of a 100-hour interval must be subtracted from the following 100-hour interval, with no time extension permitted. For example, if an inspection is done at 110 hours, the next inspection is due 90 hours later with no extension allowed.

NOTE

Ascertain that all placards are in place and legible whenever the airplane has been repainted or touched up after repairs. Replace any placards that have been inadvertently defaced or removed.

NOTE

Beech Aircraft's Recommended Inspection Program in accordance with FAR Parts 43 and 91 consists of, but is not limited to, inspection items listed in this Inspection Guide, any applicable Airworthiness Directives issued against the airframe or any equipment installed therein, conformity to Type Certificate Data Sheet and Maintenance Manual Airworthiness Limitations Chapter (Chapter 4) as applicable.

The owner or operator is primarily responsible for maintaining the airplane in an airworthy condition, including compliance with all applicable Airworthiness Directives as specified in Part 39 of the Federal Aviation Regulations. It is further the responsibility of the owner or operator to ensure that the airplane is inspected in conformity with the requirements of Parts 43 and 91 of the Federal Aviation Regulations. Beech Aircraft Corporation has prepared this inspection guide to assist the owner or operator in meeting the foregoing responsibilities. This inspection guide is not intended to be

all-inclusive, for no such guide can replace the good judgment of a certified airframe and power plant mechanic in the performance of his duties. As the one primarily responsible for the airworthiness of the airplane, the owner or operator should select only qualified personnel to maintain the airplane.

While this guide may be used as an outline, detailed information of the many systems and components in the airplane will be found in the various sections/chapters of the shop/maintenance manual and the pertinent vendor publications. It is also recommended that reference be made to the applicable Maintenance Handbooks, previously issued Service Instructions, Beechcraft Service Bulletins, applicable FAA Regulations and Publications, Vendors Bulletins and Specifications for torque values, clearances, settings, tolerances, and other requirements. It is the responsibility of the owner or operator to ensure that the airframe and power plant mechanic inspecting the airplane has access to the previously noted documents as well as to this inspection guide.

Beech Aircraft Corporation issues service information for the benefit of owners and operators in the form of two classes of Service Bulletins. MANDATORY (Red Border) Service Bulletins are changes, inspections or modifications that could affect safety. The factory considers compliance with these Service Bulletins mandatory. OPTIONAL (No Border) Service Bulletins cover changes, modifications, improvements or inspections which may benefit the owner. Due to the wide range of information covered by the OPTIONAL Service Bulletin, each owner or operator is responsible for conducting a thorough review of each Optional Service Bulletin to determine if compliance is required based on the applicability of the OPTIONAL Service Bulletin to his particular set of operating conditions.

In the final analysis it is the responsibility of the owner or operator to ensure that all previously issued Class I and II Service Instructions and Beechcraft Service Bulletins which are pertinent to his particular operation are complied with.

NOTE

In addition to the inspections prescribed by this schedule, the altimeter instrument and static system and all ATC transponders MUST be tested and inspected at 24-month intervals in compliance with the requirements specified in FAR Part 91.

A. OPERATIONAL INSPECTION	MECH		INSP
	L	R	
1. STARTERS - Check for proper operation, unusual noises and dragging. Check starter energized light (if installed) and/or loadmeter to ensure starter disengagement when the starter switch is released.			
2. CYLINDER HEAD TEMPERATURE - Check for proper operation, temperature and fluctuations.			
3. GENERATOR - Check the output.			

A. OPERATIONAL INSPECTION (Cont'd)	MECH		INSP
	L	R	
4. PROPELLER OPERATION - Cycle propeller and check for proper rpm drop and smoothness of operation.			
5. PROPELLER SYNCHRONIZER - Check for proper operation.			
6. PROPELLER DEICER - Check for proper operation and amperage drawn on ammeter.			
7. OIL PRESSURE AND TEMPERATURE - Check for proper pressure, temperature limits and unusual fluctuations.			
8. MAGNETOS - Check the performance of the magneto by performing the MAGNETO DROP-OFF CHECK specified in the applicable Pilot's Operating Manual.			
9. POWER CHECK - Check as outlined in the applicable Pilot's Operating Manual.			
10. ALL ENGINE CONTROLS - With the engine running, check for proper operational limits, engine response and rigging. Check friction locks for proper operation.			
11. PROPELLER GOVERNORS - Check for proper governor operation and feathering.			
12. AIR CONDITIONER - Operate the air conditioner and verify that the air scoop moves to the ground position when turned on and returns to the retracted position when turned off. Check for proper operation and unusual noise.			
13. FLIGHT INSTRUMENTS - Check for condition and proper operation. Check gages for proper reading.			
14. GYRO INSTRUMENTS - Check for erratic or noisy operation.			

A. OPERATIONAL INSPECTION (Cont'd)	MECH		INSP
	L	R	
15. DEICER (Surface) - Check for proper operation and cycling.			
16. IDLE RPM AND MIXTURE SETTINGS - Check for both proper rpm and mixture settings. Check controls for freedom of operation.			
17. IGNITION SWITCH - Rotate the ignition switch through the OFF position to the extreme limit of switch travel; if the engine stops firing, the switch is normal. If the engine continues to run with the switch held in the past OFF position, it is an indication that one magneto is still "hot" or ungrounded. When the switch is released from the past OFF position, it should automatically return to normal OFF and the engine should stop running. However, any ignition switch exhibiting this abnormal condition should be replaced.			
18. HEATING AND VENTILATING SYSTEM - Check for proper operation, heat and airflow output. Check controls for freedom of operation.			
19. PRESSURIZATION SYSTEM - Check for proper operation.			
20. FUEL QUANTITY AND FUEL FLOW GAGES - Check for proper operation and unusual fluctuations.			
21. FUEL BOOST PUMPS - Check for proper operation.			
22. FUEL TANK SELECTOR - Check for proper operation and feel for positive detent and proper placarding.			
23. ALL LIGHTS - Check for condition, attachment, cracked or broken lenses. Check switches, knobs and circuit breakers for looseness and operation.			
24. STALL WARNING SYSTEM - Check for proper operation.			

A. OPERATIONAL INSPECTION (Cont'd)	MECH		INSP
	L	R	
25. RADIO OPERATION - Check for proper operation, security of switches and knobs.			
26. FLAPS - Check for noisy operation, full travel and proper indication.			
27. PITOT HEAT - Check for proper heating of the unit.			
28. BRAKES - Check for ease of operation and proper release of the parking brake. Check for unusual brake chatter.			
29. EMERGENCY LOCATOR TRANSMITTER - Check for proper operation. Tune radio to 121.5 MHz on VHF or 243 MHz on UHF, then turn ELT switch to ON and monitor for one signal. Turn ELT switch OFF, then place in ARM position.			
30. OXYGEN SYSTEM - Functionally check the oxygen system for proper operation. Check the oxygen bottle shutoff valve for proper operation.			
31. SWITCHES, CIRCUIT BREAKERS - Check for proper operation.			
32. FLIGHT CONTROLS, TRIM CONTROLS AND TRIM INDICATOR - Check freedom of movement and proper operation through full travel with and without flaps extended. Check electric trim controls for operation.			
33. IDLE CUT-OFF - Check for proper operation and freedom of movement.			

B. POWER PLANT	MECH L	MECH R	INSP
NOTE After the first 25 hours of engine operating time, a new, remanufactured, or newly overhauled engine should be given a 100-hour inspection including draining and renewing of oil.			
1. COWLING - Check for condition and security. Remove the upper and lower cowling and clean. Inspect for cracks.			
2. COWL FLAPS - Check for travel, deformation and security. Inspect for cracks.			
3. SPARK PLUGS - Clean, inspect, regap, test and replace as necessary. Tighten spark plugs to proper torque and check ignition harness condition and for proper attachment.			
4. COMPRESSION - Perform differential compression test.			
5. PLUMBING - Inspect plumbing and associated accessories for condition (such as cracks) and attachment. Check plumbing clearance and secure against possible chafing.			
6. ENGINE OIL SUMP - Check for cracks, leaks, deformation and security.			
7. OIL DIPSTICK - Check the dipstick for rust and general condition. Inspect the dipstick tabs for security and that the tabs are not bent.			
8. OIL SUMP DRAINS AND FILTERS - Check for metal particles on filters. Check for proper torque after installation. Check drain plugs for leaks.			

B. POWER PLANT (Cont'd)	MECH		INSP
	L	R	
NOTE Change oil and oil filter per Lycoming T10-541 Series Operating Manual.			
9. OIL COOLER - Check oil cooler, lines and fittings for condition, security, chafing and leaks.			
10. PROPELLER AND MOUNTING BOLTS - Check for condition and security. Check the tip of the blades for evidence of lightning strikes. If there is evidence of lightning strikes, consult the propeller manufacturer, the engine manufacturer and Beech Aircraft Corporation. Inspect the blades for cracks, dents, nicks, scratches, erosion, corrosion, security and movement in the hub.			
11. PROPELLER SPINNER - Check for deformation, security and cracks.			
12. PROPELLER HUB - Check for cracks, excessively leaking seals and condition. Check propeller dome pressure.			
13. PROPELLER ACCUMULATOR - Check for proper operation.			
14. STARTER - Check for condition, attachment and chafed or loose wires.			
15. MAGNETOS - Check contact points for proper clearance. Points with deep pits or excessively burned areas must be discarded. Inspect the cam follower felt pad for proper lubrication and clean the compartment with a clean, dry cloth. Check timing.			
16. IGNITION HARNESS - Inspect for fraying and attachment.			

B. POWER PLANT (Cont'd)	MECH		INSP
	L	R	
17. CYLINDERS AND BAFFLES - Check cylinders and exhaust manifold for obvious leaks, security and cracks; check baffles for cracks and security. Check cylinders for broken cooling fins and loose or missing base nuts. NOTE Accomplish valve inspection every 400 hours of operation per Lycoming T10-541 Series Operating Manual.			
18. EXHAUST SYSTEM - Check for deformation, security, cracks, leaks, loose or missing nuts and clamps. Check for thin wall condition which may occur due to normal internal erosion on stacks which have long service time.			
19. FIREWALL - Check for wrinkles, damage or cracks. Check all electrical and control access holes for proper sealing.			
20. HOSE AND DUCTS - Check all fuel, oil and air hose or duct for leakage, cracks, deterioration and damage. Check fittings for security.			
21. ENGINE ACCESSORIES - Check for condition, security and leaks. Check wiring, hoses and tubes for chafing, security and leaks.			
22. GENERATOR - Check for condition, attachment and chafed or loose wires.			
23. ENGINE MOUNTS - Check for cracks, corrosion and security. Inspect rubber cushions, mount bolts and nuts, and grounding straps for condition and security.			
24. PROPELLER GOVERNOR - Check for leaks and control arm for security.			

B. POWER PLANT (Cont'd)	MECH		INSP
	L	R	
25. ENGINE CONTROLS - Check controls and associated equipment for condition, attachment, alignment and rigging.			
26. ELECTRICAL WIRING AND EQUIPMENT - Inspect electrical wiring and associated equipment and accessories for fraying and attachment.			
27. AIR CONDITIONER COMPRESSOR - Check for security and attachment. Check refrigerant and oil levels. Check belt for tension and worn or frayed condition.			
28. INDUCTION AIR FILTER - Check for condition, cleanliness and security.			
29. INDUCTION SYSTEM AND ALTERNATE AIR - Check flexible air ducts for delamination of the inner lining. Check the alternate air valve for blockage, security, cracks, operation and wear.			
30. FUEL INJECTION CONTROL VALVE - Clean the screen and check for damage. Install screen and check for leaks.			
31. FUEL INJECTION SYSTEM - Inspect all fuel injection components, lines and fittings for evidence of fuel leaks, fraying and cracking.			
32. TURBOCHARGERS - Check the compressor wheel for nicks and cracks. Check linkages for security and proper operation.			
33. TURBINE INLET TEMPERATURE INDICATOR - Check the indicator for accuracy and calibrate as outlined under the heading TIT INDICATOR CALIBRATION in Chapter 77-00-00 of the Duke 60 Series Maintenance Manual.			

B. POWER PLANT (Cont'd)	MECH		INSP
	L	R	
34. ELECTRIC PROPELLER DEICER - Check for service damage to the deicer heaters, brush rods, springs and brushes. Check the lead strap and all other clamps, connectors and wiring for electrical soundness. Check the slip rings for roughness, cracks, burned or discolored areas and for deposits of oil, grease or dirt. Check for security and attachment of all components. Check deicer boots for wrinkles, loose or torn areas.			
C. NACELLES	MECH		INSP
	L	R	
1. NACELLE SKIN - Check for deformation and obvious damage or cracks. Check for loose or missing rivets.			
2. NACELLE STRUCTURE - Check for cracks and deformation. Check for loose or missing rivets and concealed damage.			
3. PNEUMATIC PRESSURE REGULATORS - Check for condition, security and attachment.			
4. INLINE FILTERS - Clean or replace, as required, the filter in each nacelle as outlined under the heading SERVICING in Chapter 36-00-00 of the Duke 60 Series Maintenance Manual.			
5. BATTERY - Inspect for clean, tight connections and correct fluid level. Add distilled water as required. Inspect vent hose at battery box for obstructions. The battery box should be washed out thoroughly and dried each time the battery is removed and cleaned.			
6. FUEL QUANTITY TRANSMITTER - Check for attachment and electrical connection.			
7. FUEL CELLS AND VENTS - Inspect fuel cells for leakage and vent lines for security as outlined in Chapter 28-10-00 of the Duke 60 Series Maintenance Manual.			

C. NACELLES (Cont'd)	MECH		INSP
	L	R	
8. PLUMBING - Check for leakage, chafing, condition and security.			
9. ELECTRICAL WIRING AND EQUIPMENT - Inspect for chafing, damage, security and attachment.			
10. AIR CONDITIONING - Check for condition, security and attachment.			
D. WINGS AND CARRY-THROUGH STRUCTURE	MECH		INSP
	L	R	
1. SKIN - Check for deformation and obvious damage. Check for cracks, loose or missing rivets. If damage is found, check adjacent structure. Check for indications of hard landing or excessive flight loading.			
2. STRUCTURE - Check for cracks, deformation and concealed damage. Check for loose or missing rivets.			
3. ACCESS DOORS AND PANELS - Inspect for cracks, proper fit and attachment.			
4. CABLES, PULLEYS AND TURNBUCKLES AND PRESSURE SEALS - Check the wing flight control components, cables and pulleys. Replace control system components (push rods, turnbuckles, end fittings, castings, etc.) that have bulges, splits, bends, or cracks. Check control cables, pulleys, and associated equipment for condition, attachment, alignment, clearance, and proper operation. Replace cables that have broken strands or evidence of corrosion. Check cables for proper tension at the first inspection and every 100-hours thereafter.			
5. AILERONS - Check for condition and security. Check for cracks, loose or missing rivets and freedom of movement. Check hinge bearings and brackets for condition, push-pull rods for security and rod ends for corrosion.			

D. WINGS AND CARRY-THROUGH STRUCTURE (Cont'd)	MECH		INSP
	L	R	
6. AILERON TRIM TAB - Check for attachment and freedom of movement. Check free play as outlined under the heading CHECKING AILERON TAB FREE PLAY in Chapter 27-10-00 of the Duke 60 Series Maintenance Manual.			
7. FUEL CELLS AND VENTS - Inspect fuel cells for leakage and vent lines for security as outlined in Chapter 28-10-00 of the Duke 60 Series Maintenance Manual.			
8. PLUMBING - Check for leakage, chafing, condition and security.			
9. ELECTRICAL WIRING AND EQUIPMENT - Inspect for chafing, damage, security and attachment.			
10. FLAP LIMIT SWITCHES - Check for condition, security and freedom of operation.			
11. FLAPS AND ACTUATORS - Check for condition, security, binding or chafing of actuator cables. Check flap skin and structure for cracks, loose or missing rivets. Check roller bearings and tracks for condition. Check stop area for condition and damage.			
12. FLAP POSITION TRANSMITTER - Check for security and operation.			
13. DRAIN HOLES - Check the drain holes in the left and right upper wing attach fittings to assure that they are open and free of obstruction.			
14. WING SPAR CAP - Inspect the wing spar cap for corrosion as outlined in Chapter 57-00-00 of the Duke 60 Series Maintenance Manual.			

D. WINGS AND CARRY-THROUGH STRUCTURE (Cont'd)	MECH		INSP
	L	R	
15. WING BOLTS - Check wing bolts for proper torque at the first 100-hour inspection and at the first 100-hour inspection after each reinstallation of the wing attach bolts. Refer to Chapter 57-00-00 of the Duke 60 Series Maintenance Manual for wing bolt, nut and fitting inspection criterion and frequency.			
16. STALL WARNING VANE - Check for condition and obstructions.			
17. FUEL QUANTITY TRANSMITTER - Check for attachment and electrical connection.			
18. NAVIGATION LIGHTS AND ICE LIGHT - Check for cracked or broken lenses and replace bulbs as necessary.			
19. LANDING LIGHTS - Check for security and operation. Replace lens and bulbs as necessary.			
20. FUEL BOOST PUMPS AND FUEL LINES - Check for condition, security and leaks. Check lines for signs of chafing or cracks.			
21. FUEL SELECTOR VALVE - Check for security, operation and leakage.			
22. FUEL STRAINERS - Inspect and clean as outlined under the heading ENGINE FUEL FILTERS AND SCREENS in Chapter 12-10-00 of the Duke 60 Series Maintenance Manual.			

E. CABIN AND BAGGAGE COMPARTMENT	MECH	INSP
1. SKIN - Inspect skins for deformation, cracks and loose or missing rivets. If damage is found, check adjacent structure.		

E. CABIN AND BAGGAGE COMPARTMENT (Cont'd)	MECH	INSP
2. STRUCTURE - Check for cracks and deformation. Check for loose or missing rivets and concealed damage.		
3. CABLES AND PULLEYS AND PRESSURE SEALS - Check the flight control components, cables and pulleys. Replace control system components (push rods, turnbuckles, end fittings, castings, etc.) that have bulges, splits, bends, or cracks. Check control cables, pulleys, and associated equipment for condition, attachment, alignment, clearance and proper operation. Replace cables that have broken strands or evidence of corrosion. Check cables for proper tension at the first inspection and every 100-hours thereafter.		
4. PRESSURIZATION CONTROL VALVES - On airplane serials P-4 thru P-307, check the cabin pressurization safety valve and outflow valve differential adjustment every 300 hours of airplane operation or annually. On airplane serials P-308 and after, perform a functional test every 500 hours of airplane operation on the safety valve and outflow valve. On airplane serials P-308 and after, clean the cabin pressurization controller filter and orifice each 500 hours; clean the safety valve filter and orifice each 1000 hours. For checking, cleaning and testing procedures, refer to Chapter 21-30-00 of the Duke 60 Series Maintenance Manual.		
5. FLAP MOTOR AND SHAFTS - Check for condition, security and wear at all points. Check cable housing for security and check jam nuts for tightness.		
6. BRAKE MASTER CYLINDER AND PARKING BRAKE VALVE - Check for condition, security and leaks. Check lines for signs of chafing or cracks.		
7. RUDDER PEDALS - Check for freedom of movement. Check cables, push/pull rods, bell cranks, pulleys, turnbuckles, fairleads, for proper routing, condition and security. Check rudder pedal fore and aft positions for wear. Check locks and pins to ensure positive lock.		

E. CABIN AND BAGGAGE COMPARTMENT (Cont'd)	MECH	INSP
NOTE On airplane serials P-555 and after, and earlier airplanes with the noted replacement rudder pedal arms, the following inspection is accomplished at 300-hour intervals.		
8. RUDDER PEDAL ARMS - Check pedal arms for cracks and replace at 2000 hours or sooner if cracks are found. Replace P/N 50-524326-7 with P/N 50-524326-17 and P/N 50-524326-8 with P/N 50-524326-18.		
9. CONTROL COLUMN, TRIM CONTROL AND INDICATOR (Electric and Manual) - Check for freedom of movement. Inspect pulleys, sprockets, bearings, actuators, chains and turnbuckles for condition, security and operation. Check trim indicator for proper indication.		
10. ENGINE CONTROLS - Check for ease of operation through full travel. Check friction locks for proper operation.		
11. ELECTRICAL WIRING AND EQUIPMENT - Check for condition, security and signs of chafing.		
12. WINDSHIELD HEATER - Check the voltage as outlined under the heading ELECTRICALLY HEATED WINDSHIELD VOLTAGE CHECK in Chapter 30-40-00 of the Duke 60 Series Maintenance Manual.		
13. PLUMBING - Check all plumbing and connections for security, leakage and general condition.		
14. WINDOWS AND DOORS - Inspect windows for scratches, crazing and general condition. Check doors for condition and attachment. Check latching mechanism for proper engagement and ease of operation. Check that the CABIN DOOR warning light in the annunciator panel remains illuminated until the door is closed, latched and locked.		

E. CABIN AND BAGGAGE COMPARTMENT (Cont'd)	MECH	INSP
15. INSTRUMENTS AND INSTRUMENT PANEL - Inspect instrument panel, subpanels, placards and instruments for condition and attachment. Check all knobs for security. Inspect shock mounts, ground straps for cracks and security.		
16. SEATS, SEAT BELTS AND SHOULDER HARNESSES - Inspect cabin seats, seat belts and shoulder harnesses for proper operation, condition and security of attachment. Inspect floorboards for condition and seat attachment. Check for operation of the seat stops.		
17. OXYGEN - Check the oxygen masks for cleanliness and stowage.		
18. VENTILATING SYSTEM - Check all fresh air and heat outlet vents for proper movement and operation.		
19. FUEL SELECTOR VALVE - Inspect for security, freedom of movement, proper detent feel and condition. Check for proper placarding.		
20. FILTERS - Replace individual instrument air filters.		
21. EMERGENCY EXIT HATCH - Check the emergency release handle and latch assembly for proper operation. Check that the hatch moves out freely. Check the complete hatch assembly for condition and all moving parts for proper operation. With the hatch installed, check for proper latching and seal.		
22. STATIC SYSTEM - Check and drain water from the static lines.		
F. NOSE SECTION	MECH	INSP
1. SKIN - Inspect skin for corrosion, condition, and loose or missing rivets. If damage is found, check adjacent structure.		

F. NOSE SECTION (Cont'd)	MECH	INSP
2. STRUCTURE - Check for corrosion, cracks, loose or missing rivets, and concealed damage.		
3. RADAR ANTENNA COVER - Check the fiberglass for security, attachment and cracks.		
4. BRAKE FLUID RESERVOIR - Check reservoir for security, attachment, open vent, proper fluid level and for leaks.		
5. ELECTRICAL WIRING AND EQUIPMENT - Inspect electrical wiring and associated equipment and accessories for condition, fraying, and attachment.		
6. HEATER FUEL SYSTEM - Check lines for connection and chafing.		
7. HEATER DUCTING AND WIRING - Check security and chafing.		
8. AIR CONDITIONER EVAPORATOR - Check for condition and attachment.		
9. OXYGEN (If applicable) - Inspect the oxygen cylinder and valves for condition and security of attachment. Check the valves for proper operation.		
10. TAXI LIGHT - Check for security and operation. Replace if necessary.		
11. BAGGAGE DOOR - Check for condition and proper latching.		
12. PITOT MAST - Check for condition and obstruction. Check heating if applicable.		

G. REAR FUSELAGE AND EMPENNAGE	MECH	INSP
1. SKIN - Check for deformation, cracks and obvious damage. Check for loose or missing rivets. If damage is found, check adjacent structure.		
2. STRUCTURE - Inspect the two most aft bulkheads for cracks, distortion, loose rivets or other obvious damage.		
3. CABLES, PULLEYS AND TURNBUCKLES AND PRESSURE SEALS -Check the elevator and rudder flight control components, cables and pulleys. Replace control system components (push rods, turnbuckles, end fittings, castings, etc.) that have bulges, splits, bends, or cracks. Check control cables, pulleys, and associated equipment for condition, attachment, alignment, clearance, and proper operation. Replace cables that have broken strands or evidence of corrosion. Check cables for proper tension at the first inspection and every 100-hours thereafter.		
4. CONTROL SURFACES - Check for deformation, cracks and security. Check for loose or missing rivets. Check for freedom of movement and travel limits. Check for security of hinges, torque fittings and bond cable.		
5. STRUCTURE - Check for cracks, deformation and concealed damage. Check for loose or missing rivets.		
6. TRIM TABS AND ACTUATORS - Check for security and wear. Check allowable free play as outlined in Chapter 27-20-00 and 27-30-00 of the Duke 60 Series Maintenance Manual. Check hinges and trim tab actuator for security and wear. Check trim tabs for cracks and control rods for attachment. Lubricate the trim tab hinges as outlined in Chapter 12-20-00 of the Duke 60 Series Maintenance Manual.		
7. RUDDER TORQUE TUBE (P-4 thru P-533 if S.I. 1115 has not been complied with) - Inspect the rudder torque tube for possible elongated taper pin holes and corrosion as outlined in BEECHCRAFT Service Instruction No. 1115.		

G. REAR FUSELAGE AND EMPENNAGE (Cont'd)	MECH	INSP
8. STATIC PORTS - Check for obstruction and clean as necessary.		
9. PLUMBING - Check for leakage, cracks, chafing, condition and security.		
10. ELECTRICAL WIRING AND EQUIPMENT - Inspect for chafing, damage, security and attachment.		
11. STATIC LINES - Check condition of static lines and drain.		
12. ASSIST STEP - Inspect for condition and attachment. The step may be adjusted as outlined under the heading STEP ADJUSTMENT (FOLDING POSITION) in Chapter 52-60-00 of the Duke 60 Series Maintenance Manual.		
13. ANTENNAS - Check for condition and security.		
14. SCUPPER DRAINS - Check that the drain guards are open facing aft and drain holes are free from obstruction.		
15. OXYGEN (If applicable) - Inspect the oxygen cylinder and valves for condition and security of attachment. Check the valves for proper operation.		

H. MAIN GEAR AND BRAKES	MECH		INSP
	L	R	
1. BRAKES, LINES, LINING AND DISCS - Check for condition, wear and security. Check lines for chafing and signs of leakage or cracks. Check discs for wear or warping. Check brake discs for cracks.			
2. WHEELS AND TIRES - Check wheels for cracks and tires for wear, damage, condition and proper inflation. Check wheel bearings for condition and wear.			

H. MAIN GEAR AND BRAKES (Cont'd)	MECH		INSP
	L	R	
3. LANDING GEAR STRUTS - Inspect the shock struts and components for cracks, attachment,corrosion, proper inflation and evidence of leakage.			
4. ACTUATING LINKAGE - Check for wear and cracks at attach points. Check for condition and security.			
5. GEAR DOORS AND LINKAGE - Check doors for damage and cracks to the structure and skins. Check linkage for wear and cracks at the attach points. Check for condition and security. Determine that all clevis retaining pins are in place and secured with cotter pins.			
6. STRUT FLUID LEVEL - Check and maintain the proper hydraulic fluid level in the struts as outlined in Chapter 12-20-00 of the Duke 60 Series Maintenance Manual.			
7. STRUT AND A-FRAME HINGE BOLTS - Inspect for cracks and security of attachment.			

I. NOSE GEAR	MECH	INSP
1. WHEEL AND TIRE - Check wheel for cracks and tire for wear, damage, condition and proper inflation. Check wheel bearings for condition and wear.		
2. LANDING GEAR STRUT - Inspect the shock strut and components for cracks, attachment, proper inflation and evidence of leakage.		
3. ACTUATING LINKAGE - Check for wear at attach points. Check for cracks and security.		
4. GEAR DOORS AND LINKAGE - Check doors for damage and cracks to the structure and skins. Check linkage for wear and cracks at the attach points. Check for condition and security.		

I. NOSE GEAR (Cont'd)	MECH	INSP
5. NOSE GEAR STEERING LINKAGE - Inspect linkages for tightness, condition and security. Check linkage boots for condition.		
6. SHIMMY DAMPER - Check for condition and attachment. Check attach points for cracks. Check fluid level as outlined in Chapter 12-20-00 of the Duke 60 Series Maintenance Manual.		
7. STRUT FLUID LEVEL - Check and maintain the proper hydraulic fluid level in the strut as outlined in Chapter 12 of the Duke 60 Series Maintenance Manual.		
8. STRUT AND A-FRAME HINGE BOLTS - Inspect for cracks, corrosion and security of attachment.		
9. NOSE GEAR UPLOCK PIN - Remove and inspect for corrosion. Lubricate with MIL-G-81322 prior to reinstallation.		
10. NOSE GEAR ASSEMBLY (P-3 thru P-296) - After the first 1000 flight hours and each 1200 flight hours thereafter, inspect the nose gear assembly as noted in BEECHCRAFT Service Instructions No. 0669-206, Rev. I (or subsequent).		
J. LANDING GEAR OPERATION CAUTION Under no circumstances should the landing gear be operated electrically while the handcrank is engaged. In the event of such an operation, a teardown and magnetic inspection should be performed for damage to engagement slot in worm shaft.	MECH	INSP

J. LANDING GEAR OPERATION (Cont'd)	MECH	INSP
NOTE Since the battery voltage is not sufficient to properly cycle the landing gear for this inspection, use only an external power source capable of delivering and maintaining 28.25 ± .25 VDC to the airplane's electrical system throughout the extension and retraction cycles when performing the landing gear retraction inspection. For more specific information which may be necessary to accomplish the following items, refer to the Duke 60 Series Maintenance Manual in Chapter 32.		
1. LANDING GEAR ACTUATOR ASSEMBLY - With the airplane on jacks and the retraction cycle started enough to break the downlock tension, apply a sharp load by hand in an aft direction against the nose gear strut. If this causes the main gear wheels to move approximately 1/2 to 1 inch, it is a good indication that the gear actuator assembly needs overhaul and/or adjustment.		
2. LANDING GEAR GEARBOX AND ACTUATING LINKAGE - Check for leakage, wear, condition and attachment. Check for unusual noise. Check oil level by engaging and turning the emergency handcrank 1/2 turn to determine that oil is being picked up on the worm gear. The oil level should be maintained no more than necessary to cover 1/2 of the diameter of the worm gear. Check actuator gearbox, motor and switches for leakage, condition and security.		
3. DOORS - Check door operation, fit and fair. Check for unusual noise.		
4. GENERAL OPERATION - Cycle the landing gear while checking to ascertain that the position light switches operate in conjunction with the landing gear position. Check the condition and operation of the complete landing gear system as outlined in Chapter 32-30-00 of the Duke 60 Series Maintenance Manual.		
5. POSITION LIGHTS - Check for security, adjustment, wiring for breaks, condition of insulation, loose connections and proper indication.		

J. LANDING GEAR OPERATION (Cont'd)	MECH	INSP
6. EMERGENCY EXTENSION - Check system for freedom of operation and positive engagement of the downlocks. Check for unusual noise.		
7. LIMIT SWITCH RIGGING - Check for security and proper adjustment of the limit switches. Refer to the Duke 60 Series Maintenance Manual, Chapter 32-60-00, for correct landing gear gearbox internal clearance.		
8. DYNAMIC BRAKING ACTION - Verify proper operation of dynamic brake relay.		
9. WARNING HORN - Check for proper operation.		
NOTE Downlock tension should be checked at the first 100-hour inspection and every 200 hours thereafter.		
10. UPLOCK CABLE TENSION - Check uplock cable mechanism for condition and security. Check uplock cable for proper tension and for possible fraying.		
11. DOWNLOCK TENSION (MAIN GEAR) - Check for proper deflection force on the main gear knee joints.		
12. DOWNLOCK TENSION (NOSE GEAR) - Check the downlock tension on the nose gear as outlined in Chapter 32-30-00 of the Duke 60 Series Maintenance Manual.		
13. UPLOCK ROLLERS - Check condition and clearance of uplock rollers per Chapter 32-30-00 and lubricate as outlined in Chapter 32-10-00 of the Duke 60 Series Maintenance Manual. Check for binding.		
14. SAFETY SWITCH - Check for security, proper rig and operation.		

J. LANDING GEAR OPERATION (Cont'd)	MECH	INSP
15. NOSE GEAR UP TENSION - Check the up-tension on the nose gear per Chapter 32-30-00 of the Duke 60 Series Maintenance Manual.		
16. NOSE GEAR STEERING - Check for condition and security.		
K. GENERAL	**MECH**	**INSP**
1. Airplane cleaned and serviced.		
2. Airplane lubricated, after cleaning, as outlined in Chapter 12-20-00 of the Duke 60 Series Maintenance Manual and BEECHCRAFT Safety Communique No. 57 dated June 3,1981.		
3. Inspect all placards to assure that they are easily readable and securely attached.		
4. Assure that all airworthiness Directives, BEECHCRAFT Serivce Bulletins and previously issued Service instructions are reviewed and complied with as required.		
For a complete or annual inspection of the airplane, all items on the airplane that are noted in this guide should be inspected.		

PILOT'S DISCREPANCIES	REMARKS