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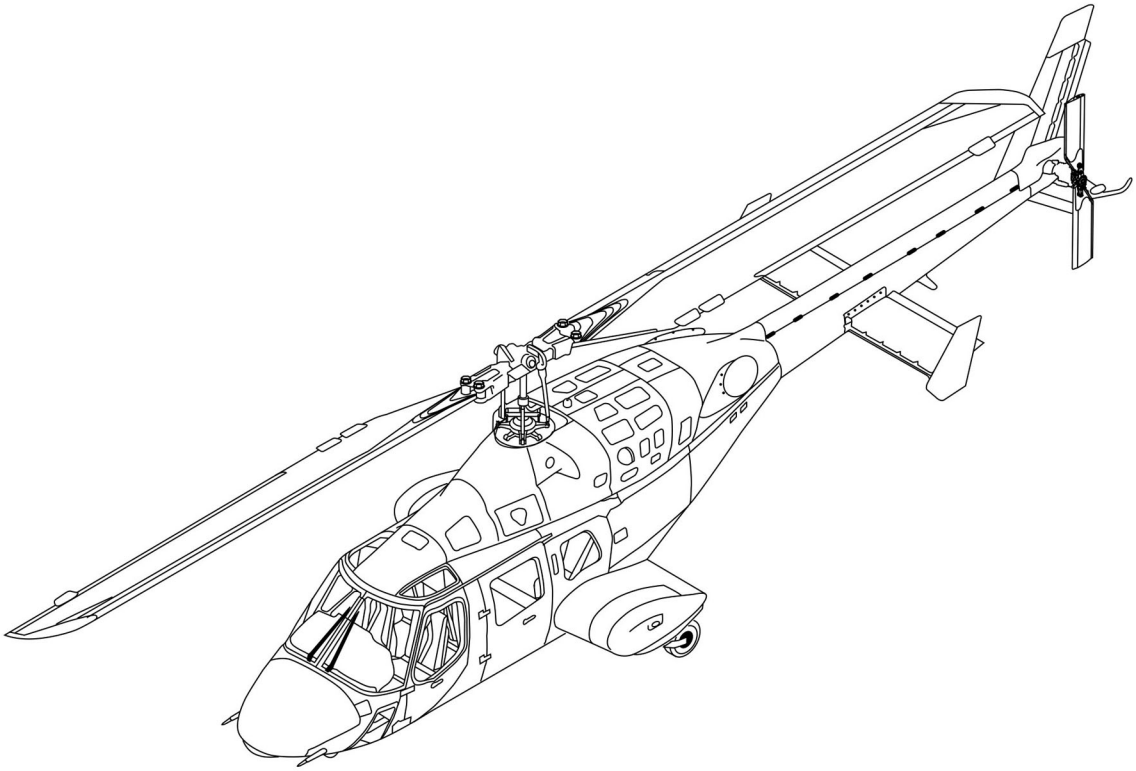

MAINTENANCE MANUAL

VOLUME 1

GENERAL INFORMATION

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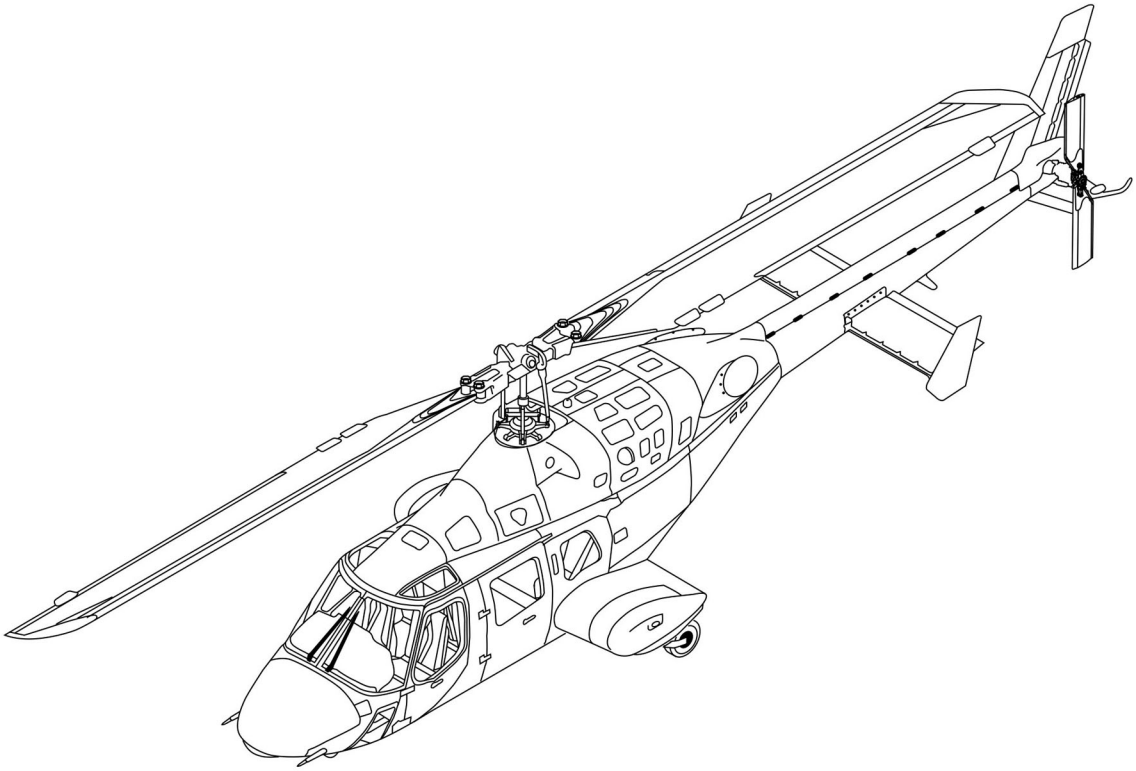

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VOLUME 1

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REVISION 8 — 10 FEBRUARY 2020

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January 2007

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This Bulletin Record provides a current listing of applicable bulletins that have been incorporated in this manual. Subsequent applicable bulletins will be incorporated in future revisions/reissues.

ALERT SERVICE BULLETINS

	ASB NUMBER	SUBJECT	DATE
1	222-17-114	Magnetic Brake Assembly 204-001-376-105 and 204-001-376-107, Inspection and Repair of	3 March 2017

1 This Alert Service Bulletin and all applicable bulletins issued prior to, have been incorporated.

TECHNICAL BULLETINS

	TB NUMBER	SUBJECT	DATE
2	222-15-177	New Tail Rotor Driveshaft Hanger Bearing 222-344-606-105 and Removal of Overhaul Interval, Introduction of	11 November 2015

2 This Technical Bulletin and all applicable bulletins issued prior to, have been incorporated.

TEMPORARY REVISION RECORD

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NOTE: For tracking purposes, Temporary Revisions are now being numbered (Example: TR-1).

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INTRODUCTION

1-1. SCOPE OF MANUAL.

This manual includes all necessary data to provide Bell Model 222/222B helicopter operators with field maintenance procedures. Maintenance data on instruments, electrical avionics and wiring diagrams are contained in BHT-222/222B-MM-2. Maintenance data on components or assemblies removed from the helicopter for maintenance are covered in BHT-222-CR&O-1.

1-2. ALERT SERVICE BULLETINS.

A list of Alert Service Bulletins issued against the Model 222/222B helicopter will be recorded in Bell Model 222/222B Alert Service Bulletin Index which is published as a separate document.

COMPLIANCE WITH ALL ALERT SERVICE BULLETINS IS MANDATORY.

1-3. TEMPORARY REVISIONS.

A list of Temporary Revisions issued against the Model 222/222B Maintenance Manual will be recorded on the Temporary Revisions page.

1-4. USE OF MANUAL.

1. Consult the List of Chapters in the front of this manual and determine the Chapter in which the required data is most likely to appear or find the subject in the alphabetical index.

2. Use the tab guides to turn to the desired Chapter and check the Table of Contents.

3. The Table of Contents lists the name and page number of all major paragraphs and all illustrations and tables.

1-5. DESCRIPTION OF THE MODEL 222/222B HELICOPTERS.

The fuselage consists of a forward fuselage section, an aft fuselage section and a tailboom. The forward section is constructed of frame-stringers of aluminum alloy material. The roof structure consists of two longitudinal beams with inner face sheets and honeycomb panels on the outer surface. Closed sections forward of the passenger doors form the primary interconnecting structure between the floor and roof structure.

The aft section provides compartments for the installation of the fuselage fuel cells. The main compartment is located behind the aft passenger seat and smaller compartments are located under the aft passenger seat on each side of a central tunnel. The structure surrounding the fuel cell compartment is of honeycomb construction.

The wing spar is supported by a primary bulkhead which also forms the aft surface of the main fuel compartment. The aft passenger seat back bulkhead separates the fuel compartments and supports the forward end of the wing. The transmission and engine support beams in the roof are backed up by several primary bulkheads which provide a structural load path to the lower portion of the fuselage. The semimonocoque constructed rearward portion of the aft section supports a tail rotor driveshaft bearing and the controls which enter the tailboom.

The semimonocoque tailboom is riveted to the aft fuselage section to form an integral part of the fuselage. Access doors in the aft fuselage, just forward of the tailboom splice and in the tailboom permit inspection and maintenance of the flight controls in the tailboom. The tailboom has provisions for the driveshaft cover, the driveshaft bearings and controls. A horizontal stabilizer surface extends from each side of the tailboom. The aft end of the tailboom supports the tail rotor and vertical fin.

The model 222 is powered by two Lycoming Model LTS101-650C-2/LTS101-650C-3 turboshaft engines. The Model 222B is powered by two Lycoming Model LTS101-750C-1 turboshaft engines. Refer to Chapter 71 for engine description and configuration requirements.

1-6. VNE 150 CONFIGURATION HELICOPTERS.

Model 222 helicopters, serial number 47081 and subsequent are Vne 150 knot configuration. In addition, helicopters, serial number 47006 through 47080 retrofitted by the 222-704-001 retrofit kit are Vne 150 knot configuration. This modification/production

incorporation includes an improved collective lever, beam assembly and idler link on the swashplate assembly. A rod end bearing on the lateral isolation mount for the transmission assembly is replaced with an increased length rod end. The pilot and copilot airspeed indicators and airspeed limitations decal are replaced. An improved bellcrank, support and link assembly are installed at the lateral hydraulic actuator control input location. The lateral cyclic control system incorporates an idler and support assembly and replacement of one or two cyclic system control tubes, depending on helicopter configuration.

The nodal beam assembly has been modified to add new off-set cams, tapered shims and aft arms. The PC-II hydraulic system pressure switch is removed from the system module and relocated with the addition of a tube assembly. The horizontal stabilizer trailing edge tabs are repositioned from the 3 degree up position to neutral (0 degree) trail position.

Text or figure insets coded Vne 150 configuration identify these additions or modifications.

1-7. DESIGNATOR SYMBOLS.

Designator symbols (222) and (222B) are used throughout the manual to show limited effectivity of the material. No designator symbols are used when the material applies to all models 222 and 222B.

DESIGNATOR	HELICOPTER SERIAL NO.
(222)	47001 through 47089
(222B)	47131 and subsequent

1-8. CONSUMABLE MATERIALS.

Consumable materials required while performing maintenance are listed in text by name and item number such as “MEK (C-309)”. The number refers to item 309 in table A-1 in BHT-ALL-SPM manual. This table provides full nomenclature, specifications applicable, and a recommended source.

AIRWORTHINESS LIMITATIONS SCHEDULE

CONTENTS — MAINTENANCE PROCEDURES

Paragraph Number	Title	Chapter/Section Number	Page Number
4-1	Airworthiness limitations schedule	4-00-00	4-3

NOTE

The Airworthiness Limitations Schedule is approved by the Minister and specifies maintenance required by any applicable airworthiness or operational rules unless an alternative program has been approved by the Minister.

Chief, Airworthiness Engineering
Transport Canada, Aviation

REVISION NO.	DATE OF SIGNATURE	F.A.A. SIGNATURE
Basic Manual	1 June 1979	
Revision 1	17 December 1979	
Revision 2	23 January 1980	
Revision 10	1 December 1980	
Revision 12	1 May 1981	
Revision 15	25 September 1982	
Revision 16	12 November 1982	
Revision 20	28 February 1983	
Revision 27	18 December 1984	
Revision 29	30 April 1987	
Revision 30	22 February 1989	
Revision 31	19 May 1989	
Revision 33	16 May 1991	D.O.T. Signature
Revision 35	28 February 1992	

REVISION NO.	DATE OF SIGNATURE	D.O.T. SIGNATURE
Revision 37	3 March 1993	03 MAR '93
Reissue	12 February 1998	12 FEB '98

AIRWORTHINESS LIMITATIONS SCHEDULE

4-1. AIRWORTHINESS LIMITATIONS SCHEDULE.

WARNING

ALL REPAIR AND OVERHAUL PROCEDURES LIVES PUBLISHED BY BELL HELICOPTER TEXTRON ARE BASED SOLELY ON THE USE OF BELL HELICOPTER APPROVED PARTS AND PROCESSES. IF PARTS OR PROCESSES DEVELOPED OR APPROVED BY PARTIES OTHER THAN BELL HELICOPTER ARE USED, THEN THE DATA PUBLISHED OR OTHERWISE SUPPLIED BY BELL HELICOPTER , ARE NOT APPLICABLE. THE USER IS WARNED TO NOT RELY ON BELL HELICOPTER DATA FOR PARTS AND PROCESSES NOT APPROVED BY BELL HELICOPTER. ALL APPLICABLE INSPECTIONS AND REPAIR METHODS MUST BE OBTAINED FROM THE SUPPLIER OF THE PARTS OR PROCESSES NOT APPROVED BY BELL HELICOPTER. BELL HELICOPTER IS NOT RESPONSIBLE FOR PARTS OR PROCESSES OTHER THAN THOSE WHICH IT HAS ITSELF DEVELOPED OR APPROVED.

The mandatory airworthiness schedule summarizes, in tabular form, the mandatory maximum hours life of various components before retiring from service. Parts not listed on the schedule have unlimited airworthiness life.

Prior to disposing of unsalvageable aircraft parts and materials, caution should be exercised to ensure that the parts and materials are disposed of in a manner that does not allow them to be returned to service. See FAA Advisory Circular 21-38 for guidance on the disposal of unsalvageable aircraft parts and materials.

Refer to engine manufacturer publications for power plant components airworthiness limitations.

NOTE

The operating time specified for retirement for any given part number contained in this schedule applies to all successive dash numbers for that component unless otherwise specified.

Airworthiness lives assigned to helicopter components and assemblies are based upon experience, testing and engineering judgement, and shall not be changed without approval by the Minister of Transport, Canada.

NOTE

Neither the assignment of a retirement life to a component nor failure to assign a retirement life constitutes a warranty of any kind. The only warranty applicable to the helicopter and any component is that warranty included in the Purchase Agreement for the helicopter or the component.

AIRWORTHINESS LIMITATIONS SCHEDULE

COMPONENT	PART NUMBER	AIRWORTHINESS LIFE (HOURS)
Main Rotor		
Main Rotor Blade	222-015-500-101	5000
Main Rotor Blade	222-015-500-105	6000
Main Rotor Blade	222-015-600-101	6000
Main Rotor Grip	222-010-104-105	5000
Main Rotor Grip	222-012-104-101	5000
Main Rotor Yoke	222-011-102-101	5000
Main Rotor Trunnion	222-010-154-101	2500
Main Rotor Trunnion	222-010-154-111	5000
Outboard Spindle	222-011-108-101	5000
Flapping Bearing	222-310-114-003	5000
Inboard Bearing Assembly	222-310-115-113	5000
Inboard Bearing Assembly	222-310-125-103	5000
Outboard Spindle Bolt	222-310-118-101	2500
Outboard Spindle Bolt	222-310-118-103	1200
Outboard Spindle Bolt	222-310-129-103	5000
Inboard Spindle Bolt	222-310-116-001	2500
Inboard Spindle Bolt	222-310-116-103	1200
Inboard Spindle Bolt	222-310-128-103	5000

AIRWORTHINESS LIMITATIONS SCHEDULE (Cont)

COMPONENT	PART NUMBER	AIRWORTHINESS LIFE (HOURS)
Pitch Horn	222-011-104-101	5000
Pitch Horn	222-012-102-101	5000
Support Pendulum Damper	222-011-114-101	5000
Main Rotor Pitch Link	222-010-429-101/-105	5000
Swashplate Drive Assembly		
Walking Beam Assembly	222-010-415-009	5000
Drive Hub Assembly	222-010-417-009	5000
Drive Hub Assembly	222-010-471-101	5000
Trunnion Assembly	222-011-417-101	5000
Drive Link Assemblies	222-011-416-101/-103	5000
Swashplate Outer Ring Assy	222-010-403-005	5000
Swashplate Inner Ring Assy	222-010-404-005	5000
Swashplate Inner Ring Assy	222-010-404-109	1200
Swashplate Inner Ring Assy	222-010-404-111	5000
Cyclic Links	222-010-419-101/102	5000
Swashplate Support	222-010-418-103	5000
Swashplate Ball Assembly	222-010-405-005	5000
Swashplate Ball Assembly	222-010-405-113	1200
Swashplate Ball Assembly	222-010-405-115	5000
Collective Lever Assembly	222-010-407-005	600
Collective Lever Assembly	222-010-497-101	1000
Collective Lever Assembly	222-010-497-105	5000
Idler Link Assembly	222-010-409-005	1800
Idler Link Assembly	222-010-409-105	5000
Collective Beam	222-010-410-005	5000
Collective Beam	222-011-402-101	5000
Cyclic Lever Assembly	222-010-408-109	5000
Actuator Support Assembly	222-040-125-001	5000
Tail Rotor and Controls		
Tail Rotor Blade	222-016-001-101	5000
Tail Rotor Blade	222-016-001-107	5000
Tail Rotor Yoke	222-012-702-005	5000

AIRWORTHINESS LIMITATIONS SCHEDULE (Cont)

COMPONENT	PART NUMBER	AIRWORTHINESS LIFE (HOURS)
Transmission and Drive System		
Main Rotor Mast Assembly (Torquemeter)	222-040-002-103	3600/5000 (1) (2) (3) (4)
Main Rotor Mast Assembly (Torquemeter)	222-040-002-107	5000 (4)
Tail Rotor Output Shaft	222-042-402-005	5000
Transmission Top Case	222-040-061-101	5000
Collector Gear (Transmission)	222-040-109-003	5000 (11)
Engine to Transmission Driveshaft Coupling Spring	222-044-613-101	300
Nodal Beam Aft Left Side Support Fitting	222-031-520-105	1200
Cartridge, Fire Extinguisher (HTL)	13083-5	4 yrs (5) in service (6 years total)
Emergency Float System		
Reservoir	222-325-021-101	15 years (6)
Reservoir	222-025-875-101	15 years (6)
Float Inflation Squibs	94455	5 years (7) (10) in service (10 years total)
Rescue Hoist		
Cable Cutter Cartridge	Y-1265-1-1 Y-1265-2-1	3 years (7) (8) in service (5 years total)
Cable Cutter Cartridge	BL-9280 (BL-11140-1)	3 years (7) (9) in service (9 years total)

(1) 3600 Hours with main rotor trunnion 222-010-154-101.

(2) 5000 Hours with main rotor trunnion 222-010-154-111.

(3) When used with 222-010-154-101 and -111 main rotor trunnion, the mast must be retired according to the following equation:

$$\frac{\text{Time (-101) Trunnion Used}}{0.72} + \text{Time (-111) Trunnion Used} = 5000 \text{ Hours}$$

4 Record the deflecting code letter from 222-040-130 mast I.D. plate on the historical record card for setting the torque controller.

5 Cartridge shall be replaced within six years of manufacture or four years of service whichever occurs first.

6 Life begins at manufacture date/first hydrostatic test date as marked on the reservoir.

7 Life is from date of manufacture.

8 Cartridge shall be replaced within 5 years of manufacture or 3 years of service, whichever occurs first.

9 Cartridge shall be replaced within 9 years of manufacture or 3 years of service, whichever occurs first. Service life is 3 years from the date cartridge P/N BL-9280 is removed from container P/N BL-11140-1.

10 Cartridge shall be replaced within 10 years of manufacture or 5 years of service, whichever occurs first.

11 Refer to Chapter 5-00-00, Overtorque Conditional Inspection, paragraph 5-44, steps 3. d. and 4. c. (1) for events affecting life limitations.

CHAPTER 5 — INSPECTIONS AND COMPONENT OVERHAUL SCHEDULE

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INSPECTIONS

5-1. GENERAL

This chapter contains the time limit intervals and the requirements for the Scheduled Inspection, Special Inspection, Conditional Inspection, and for the Component Overhaul Schedule.

WARNING

FAILURE TO CORRECT CONDITIONS SUCH AS, BUT NOT LIMITED TO, CORROSION, EROSION, MECHANICAL DAMAGE, OR OBVIOUS WEAR FOUND DURING A SCHEDULED INSPECTION COULD SERIOUSLY AFFECT THE AIRWORTHINESS OF THE HELICOPTER.

The inspection intervals given in this chapter are the maximum permitted. Do not exceed these intervals. The owner/operator is responsible for increasing the scope and the frequency of the inspections as necessary. Make sure the helicopter is maintained safely during all unusual local changes, such as environmental conditions, helicopter use, etc. You can request changes to the requirements in this chapter through the local aviation authority.

The inspection intervals and the Component Overhaul Schedule given in this chapter are applicable only to Bell Helicopter Textron approved parts.

NOTE

The time period given for the overhaul of a component (or the failure to give a time period for the overhaul of a component) does not constitute a warranty of any kind. The only warranty applicable to the helicopter or any component is the warranty included in the Purchase Agreement for the helicopter or the component.

The Time Between Overhaul (TBO) and the inspection periods are determined through experience, tests, Lead-The-Fleet (LTF), or any other special programs and the judgement of Bell Helicopter Textron engineers. They are subject to change only by Bell Helicopter Textron or an approved airworthiness authority.

Changes to TBO will be introduced by either revision to the Maintenance Manual Chapter 5 or a Technical Bulletin.

Every calendar and hourly inspection is a thorough visual inspection to determine the airworthiness of the helicopter and the components. Qualified persons must do the inspections in accordance with quality standard aircraft practices and the applicable maintenance manuals. Bell Helicopter Textron considers that it is mandatory to obey all the applicable Alert Service Bulletins (ASB) and the Airworthiness Directives (AD).

Component operating time records are necessary for components that have scheduled maintenance procedures which are different from those of the airframe. It is the owner/operator's responsibility to keep the Historical Service Records for the applicable component and to do the necessary maintenance procedures.

Before each inspection, remove or open the necessary cowlings, fairing, inspection doors, and panels.

5-2. ITEMS NOT COVERED IN THE INSPECTION

This manual does not include the specific inspection intervals for some components such as the compass calibration and the pitot static test. These specific inspection intervals are given by your government regulatory authority. Refer to their requirements for these specific inspections.

The owner/operator of the helicopter is responsible for the maintenance done on the helicopter. It is the owner/operator's responsibility to:

1. Establish and maintain the log books, and review them for discrepancies.

2. Make sure the Alert Service Bulletins (ASB), the Airworthiness Directives (AD), and the special inspections are done when they are required to be done.

3. Make sure the scheduled inspections, the special inspections, and the required tests for all of the installed kits are complied with.

4. Make sure all parts and components for which Historical Service Records are required have documented traceability to their original installation in the helicopter.

5. Make sure all limited life parts that have completed their published operating limits are replaced.

6. Make sure all of the components that have completed their published overhaul periods are overhauled.

7. Make sure all of the maintenance that is done on the helicopter is done by an approved maintenance organization.

The maintenance organization/person doing the maintenance is responsible for the quality of the maintenance done.

The owner/operator may choose to ask the maintenance organization/person doing the maintenance to perform the tasks listed by prior arrangement through a separate formal agreement.

5-3. CRASH DAMAGE

Because of the many possible combinations that can result from crash damage, it is not possible to include the specific repair tasks in this category. The helicopter mechanic must make an analysis of the crash damage for each situation. Do the repair in accordance with the degree of damage to the specific part and the applicable repair procedures in this manual. Call Bell Helicopter Textron Product Support Engineering with your analysis of the crash damage.

5-4. TYPES OF INSPECTIONS

1. The maintenance procedures may include scheduled inspections, special inspections, conditional inspections, component interim inspections, and component overhaul inspections.

a. Scheduled inspections must occur at specified operating intervals. The intervals may be in operating time (hours), cycles, torque events (RIN), calendar (days, months, years) or other assigned units. This makes sure that the helicopter is airworthy.

b. Special inspections are of a temporary nature or of a special interval that is not consistent with the scheduled inspections.

c. Conditional inspections do not occur at a specified time. A conditional inspection is the result of known or suspected unusual event, known or suspected malfunctions, or defects.

d. An interim inspection occurs between overhauls.

e. The component overhaul schedule gives the elapsed operating time at which a component must be removed, disassembled, examined for condition, and overhauled, in accordance with data approved by Bell Helicopter Textron.

2. Lubrication and servicing requirements are in addition to those stated in this chapter (Chapter 12).

3. For corrosion control refer to the Corrosion Control Guide, CSSD-PSE-87-001 and the BHT-ALL-SPM.

4. For the 101-650C/750C series engine, refer to the Honeywell Operation and Maintenance Manual (LTS 101-2.2) for the scheduled inspection, special inspection, conditional inspection, and component overhaul schedule.

5. For the common Bell Helicopter Textron approved optional equipment that is integrated into this maintenance manual, refer to this chapter for the scheduled inspection, conditional inspection, component interim inspection, and component overhaul inspection.

6. For all other Bell Helicopter Textron approved equipment, refer to the applicable Supplement in Chapter 99 of this manual for the scheduled inspection, special inspection, conditional inspection, component interim inspection, and component overhaul inspection.

7. For the inspection requirements for optional equipment approved under Supplement Type Approval/Certificate (STA/STC), refer to the applicable STA/STC documentation. Maintenance and inspection

of these items are the responsibility of the owner/ operator.

5-5. DEFINITIONS

- Examine — Look carefully to find the condition of the component. Find how that condition relates to a specific standard.

- Condition — The state of an item compared to a known standard.

- Security — The presence of attaching parts that are properly tightened or appear to be, and the presence of properly installed (as required) locking devices such as lockwire, cotter pins, or other.

- Standard — A specified rule or measure that you use to find the condition of a component.

- Damage — Physical deterioration of a component.

- Discard — Reject a component that has damage that cannot be repaired. To permanently remove from service.

- Inspection — A procedure that includes checking, inspecting, and examining a system or a component.

- Non scheduled inspection — An inspection that has not been scheduled.

- Periodic inspection — An inspection which is repeated at equal time intervals.

- Progressive inspection — A scheduled inspection that is divided into smaller segments. This makes the best use of the time and the resources available.

- Maintenance — The servicing and/or the repair of a helicopter, a system, or a component that keeps it serviceable.

- Preventive maintenance — To do small maintenance action(s) on a regular basis to prevent non scheduled maintenance.

- Operating time — Actual flight or calendar time that must be recorded in the Historical Service Records or in the helicopter logs. The operating time is specified as:

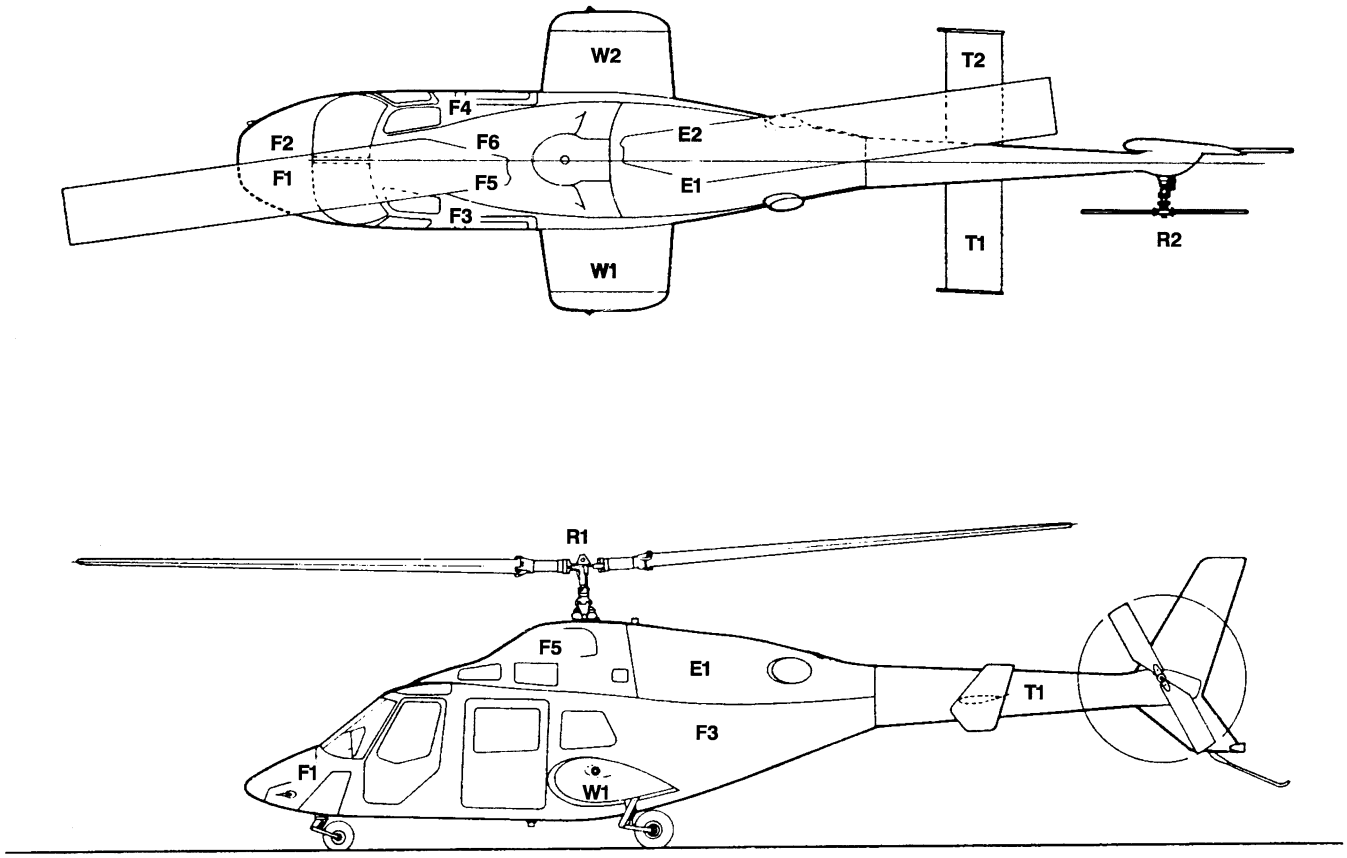
  - Time in service (flight time) — The measured time which starts the moment the helicopter leaves the ground and continues until it touches the ground at the next point of landing. The time when the helicopter is on the ground, with the engine and the rotor turning, is not included.

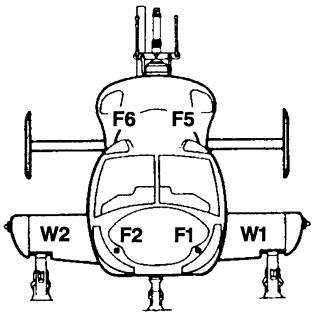
  - Calendar time — The elapsed time starts on the day the inspection is completed, the component is installed, or the rotor is turned for the first time and ends on the last day of the month that the time limit expires. Calendar time is continuous. Calendar time does not stop when you remove a component, put the helicopter in storage, etc.

- Maintenance zone — A specified area of the helicopter, which may contain more than one system or more than one group of related components. Maintenance zones (Figure 5-1) are used when you do a progressive inspection.

- Lead-the-Fleet (LTF) Program — This is a program to validate the performance of an approved product improvement or a change to a maintenance interval. The engineering aspects of this change are approved. The program is closely monitored by Bell Helicopter Textron in an operational environment with selected operators.

- Special Programs — These are approved programs that may be initiated under certain special conditions to meet specific requirements. These programs will be clearly defined through a plan and the engineering and maintenance aspects will be approved by the regulatory authorities.





E1 Left engine
E2 Right engine
F1 Left forward fuselage
F2 Right forward fuselage
F3 Left aft fuselage
F4 Right aft fuselage
F5 Left pylon
F6 Right pylon
R1 Main rotor
R2 Tail rotor
T1 Left tailboom
T2 Right tailboom
W1 Left wing
W2 Right wing

(Illustration is Model 222)

222B-M-5-1

Figure 5-1. Maintenance Zones

5-6. INSPECTION AND OVERHAUL TOLERANCE

WARNING

DO NOT APPLY THESE TOLERANCES TO PARTS WITH A LIMITED AIRWORTHINESS LIFE (CHAPTER 4).

The Bell Helicopter Textron approved tolerance for scheduled inspections, special inspections, interim inspections, and overhaul intervals, unless otherwise stated, is 10% or up to a maximum of 100 hours operating time/30 days calendar time, whichever is less. The tolerances are established for maintenance scheduling convenience only.

Scheduled inspections, special inspections, interim inspections, or overhaul intervals required beyond the stated tolerances must be approved by Product Support Engineering.

NOTE

The following is only applicable for those operators whose governing aviation authority requires to specifically approve the inspection and overhaul tolerance.

If approval of the inspection and overhaul tolerance is required by the applicable governing aviation authority, this is the responsibility of the owner/operator.

Refer to the Honeywell 101-650C/750C Series Operation and Maintenance Manual (LTS 101-2.2) for inspection and overhaul tolerances.

SCHEDULED INSPECTIONS

5-7. SCHEDULED INSPECTIONS

Scheduled inspections include airframe and component inspections. The scheduled airframe inspection intervals are based on the airframe operating time. The scheduled component inspection intervals are based on the component operating time.

5-8. SCHEDULED AIRFRAME INSPECTIONS

Bell Helicopter Textron developed two scheduled airframe inspection programs to give flexibility for maximum helicopter use. An operator can choose one of the Bell programs or design their own program. The selection of an alternative inspection program and its approval by the governing civil aviation authority is the responsibility of the owner/operator.

5-9. Airframe Periodic

Do the inspections at intervals of 50 hours, 150 hours, and 600 hours. A minimum of one complete 50-hour, 150-hour, and 600-hour inspection must be accomplished within 12 months.

5-10. Airframe Progressive

The requirements of the airframe periodic 50-hour, 150-hour, and 600-hour inspections are combined in 12 separate events of similar workload, and are done at 50-hour intervals. The events must be accomplished in the sequence shown in Table 5-1. After Event 12 is completed, the progressive cycle begins again with Event 1. A minimum of one complete cycle (12 events) must be accomplished within 12 months.

5-11. Inspection Program Selection

You must establish the airframe periodic or the airframe progressive program to maintain the helicopter from new. To change between the periodic and progressive programs, you must first do the 50-hour, 150-hour, and 600-hour inspections. The owner/operator is responsible to not exceed the time interval of any scheduled airframe inspection procedure.

Table 5-1. Progressive Inspection Events

AIRFRAME HOURS	EVENT NUMBER
50	1
100	2
150	3
200	4
250	5
300	6
350	7
400	8
450	9
500	10
550	11
600	12

5-12. SCHEDULED COMPONENT INSPECTION

Scheduled component inspections have been established for those items to be inspected at intervals other than those established for helicopter periodic inspections. Do the scheduled component inspections at the intervals that follow:

- Every 100 hours
- Every 150 hours
- Every 300 hours or 6 months
- After first 300 hours and each 50 hours thereafter
- Every 300 hours
- (Model 222) 300 and 900 hours after initial installation (springless driveshaft only)
- Every 600 hours or 6 months
- Every 600 hours or 12 months

- Every 600 hours
- Every 1200 hours
- Every 2500 hours
- Every 6 months
- Every 2 years
- Every 3 years
- Every 5 years
- Every 10 years

SCHEDULED INSPECTIONS

5-12A. 3-HOURS INSPECTION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____ To be performed every 3 hours of operating time.		
Chapter 65 ASB 222-04-100	**INSPECTION OF TAIL ROTOR BLADES** **NOTE** If tail rotor blades are annotated with “R”, no need of following 3 flight hours repetitive inspection. **1.** Clean both surfaces of each blade around the blade feathering bearings using aliphatic naphtha (C-305) or detergent (C-318) or equivalent. **2.** Using a 10X power magnifying glass, closely examine the cleaned surface, on both sides of the blade, paying particular attention to the area around both bearings. **3.** If a crack or damage is detected, remove the tail rotor blade from helicopter and contact Product Support Engineering for repair procedure.		

SCHEDULED INSPECTIONS

5-13. 50-HOUR INSPECTION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
	To be performed every 50 hours of operating time or a minimum of once every 12 months, whichever comes first.		
	GENERAL		
	1. Log book — Review for recorded discrepancies. Correct discrepancies on installed equipment.		
	2. Make sure all applicable and required special instructions, Alert Service Bulletins (ASB), and Airworthiness Directives (AD) are accomplished.		
Chapter 99 Applicable Service Instruction	**3.** Comply with Scheduled Inspections, Special Inspections, and required tests for all installed kits (refer to appropriate kit).		
Chapter 4	**4.** Replace all limited life components that have completed published operating limits.		
Paragraph 5-59	**5.** Overhaul all components that have completed published overhaul periods.		
	6. Check all exposed electrical wiring for worn or frayed cables, loose or broken clamps, and fasteners.		

SCHEDULED INSPECTIONS

5-13. 50-HOUR INSPECTION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Honeywell 101-650C/750C Series Operation and Maintenance Manual, LTS 101-2.2	**7.** Perform applicable engine inspection.		
Chapter 12	**8.** Lubricate helicopter components.		
	DETAIL		
Chapter 28 Chapter 53	**1.** Inspect airframe exterior surfaces for cracks and damage. Inspect underside of fuselage and wing for evidence of fuel leaks.		
	2. Inspect nose wheel stiffener 222-031-110-081 for cracks. Clean stiffener thoroughly prior to inspection. Pay particular attention to horizontal leg. If crack is found in any part of stiffener, TB 222-83-57 shall be accomplished.		
Chapter 32	**3.** Inspect nose landing gear doors for visible damage or deformation. Inspect tubes and linkages for security of attachment to door fitting and inspect for cracks in skin at door hinges.		
Chapter 32 BHT-222-CR&O-V.1	**4.** Inspect nose landing gear for condition, extend-retract and downlock actuators for leakage, and tire for proper inflation and serviceability. Inspect wheel for cracks and serviceability.		
Chapter 32 BHT-222-CR&O-V.1	**5.** Inspect main landing gear for condition, brake assemblies for hydraulic leaks and excessive lining wear, brake disc and torque keys for condition, and tire for proper inflation and serviceability. Inspect wheel for cracks and serviceability.		
Chapter 12 BHT-222-CR&O-V.2	**6.** Inspect battery for cracks and signs of electrolyte leakage and corrosion. F1/F2		
Chapter 29 BHT-222-CR&O-4	**7.** Inspect cyclic and collective control actuators for evidence of bearing wear and security of attachment at transmission mount. Inspect piston rods for scoring, pitting, or wear, and excessive hydraulic leakage. R1		
Chapter 65	**8.** Inspect main rotor pitch link universal bearings for axial and radial wear and wear between inner races and housing. R1		

SCHEDULED INSPECTIONS

5-13. 50-HOUR INSPECTION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	NOTE Retorque is not required if flapping springs 222-310-117-105 are installed.		
BHT-222-CR&O-2	**9.** Verify torque of main rotor trunnion bolts in the tightening direction, minimum 45 foot-pounds (61 Nm). Provided 45 foot-pounds (61 Nm) is reached without movement of bolts, torque bolts to 53 foot-pounds (72 Nm). If any bolt moves before 45 foot-pounds (61 Nm) is reached, remove all six bolts and visually inspect for cracks or signs of yielding. If any defective bolts are found, replace all six bolts. If no defect(s) are found, reinstall bolts. R1		
Chapter 65 BHT-222-CR&O-2	**10.** For all main rotor hub assemblies, verify torque of main rotor flapping bearing(s) retaining bolt/nuts. Apply 100 foot-pounds (135 Nm) of torque to the nut, in the tightening direction. Provided 100 foot-pounds (135 Nm) of torque is reached without movement of the nut, torque the bolt/nut to 125 foot-pounds (169 Nm). If any nut moves before 100 foot-pounds (135 Nm) of torque is reached, remove flapping bearing from main rotor hub assembly. Inspect/repair flapping bearing and main rotor yoke assemblies. R1		
Chapter 65	**11.** (Model 222) Inspect main rotor blade 222-015-500-101/-105 upper and lower center spar doublers for debonding.		
Chapter 71	**12.** If installed, inspect external engine oil filters for impending bypass. E1/E2		
Chapter 29	**13.** Inspect tail rotor control actuator for evidence of bearing wear, security of attachment, and evidence of leakage. F3/F4		
Chapter 65 BHT-ALL-SPM	**14.** Inspect tail rotor pitch links for worn bearings and freedom of operation. R2		
	15. Remove all chip detectors from engine oil systems; i.e., flow, accessory gearbox, and the No. 2 and No. 3 bearing scavenge line. F5/F6, E1/E2		
Honeywell Service Bulletin LT 101-77-30-0104	**a.** Inspect each chip detector for metal contamination.		

SCHEDULED INSPECTIONS

5-13. 50-HOUR INSPECTION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	b. With electrical power ON, use a small length of wire and bridge gap at a tip of each detector. Verify corresponding engine chip light segment on caution panel illuminates. If caution lights fail to illuminate, correct fault prior to operation of helicopter. **c.** Reinstall all chip detectors in both engines. **d.** Press ENGINE CHIP TEST SWITCH. Make sure all engine chip light segments illuminate. **NOTE** Clean more frequently if operating in a corrosive environment or if deemed necessary due to extreme environmental conditions.		
Chapter 65	**16.** Clean main and tail rotor blades. R1/R2 **CAUTION** ON BLADES THAT HAVE EROSION PROTECTION TAPE INSTALLED, CARE MUST BE TAKEN TO PREVENT PRESERVATIVE OIL FROM CONTACTING THE TAPE. CORROSION PREVENTIVE COMPOUND (C-125) WILL DETERIORATE THE TAPE ADHESION. **NOTE** It is not necessary to apply preservative oil to the blade fiberglass skin. One inch of the fiberglass skin adjacent to the metal components may be coated with corrosion preventive compound (C-125) to ensure complete protection. **17.** When dry, apply corrosion preventive compound (C-125) to grip plates, doublers, abrasive strips, spar doublers, and trailing edge doublers on upper and lower surfaces of blades. R1/R2		

SCHEDULED INSPECTIONS

5-13. 50-HOUR INSPECTION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 65 ASB 222-04-100	**18.** Inspection of tail rotor blades: **NOTE** If tail rotor blades are annotated with “R”, no need of following 50 hour repetitive inspection. **a.** Clean both surfaces of each blade around the blade feathering bearings using aliphatic naphtha (C-305) or detergent (C-318) or equivalent. **b.** Using a 10X power magnifying glass, closely examine the cleaned surface, on both sides of the blade, paying particular attention to the area around both bearings. **c.** If a crack or damage is detected, remove the tail rotor blade from helicopter and contact Product Support Engineering for repair procedure.		

SCHEDULED INSPECTIONS

5-14. 150-HOUR INSPECTION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
	To be performed every 150 hours of operating time or a minimum of once every 12 months, whichever comes first.		
	GENERAL		
	1. Log book — Review for recorded discrepancies. Correct discrepancies on installed equipment.		
	2. Make sure all applicable and required special inspections, Alert Service Bulletins (ASB), and Airworthiness Directives (AD) are accomplished.		
Chapter 99 Applicable Service Instructions	**3.** Comply with Scheduled Inspections, Special Inspections, and required tests for all installed kits (refer to appropriate kit).		
Chapter 4	**4.** Replace all limited life components that have completed published operating limits.		
Paragraph 5-59	**5.** Overhaul all components that have completed published overhaul periods.		
	6. Check all exposed electrical wiring for worn or frayed cables, loose or broken clamps, and fasteners.		

SCHEDULED INSPECTIONS

5-14. 150-HOUR INSPECTION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Honeywell 101-650C/750C Series Operation and Maintenance Manual, LTS 101-2.2	**7.** Perform applicable engine inspection.		
Chapter 12	**8.** Lubricate helicopter components.		
	DETAIL		
Chapter 25	**1.** Inspect seat cushions and seat backs for tears, excessive deterioration, and security of attachment. F1/F2, F3/F4		
Chapter 25	**2.** Inspect seat assemblies for security of attachment. F1/F2, F3/F4		
Chapter 25	**3.** Inspect safety belts and shoulder harnesses for deterioration and security of attachment. F1/F2, F3/F4		
Chapter 52	**4.** Inspect crew doors, passenger doors, and baggage compartment doors for corrosion damage, distortion, positive locking mechanisms, seals for tears or separations, and doors for security of attachment. F1/F2, F3/F4		
Chapter 26	**5.** Inspect cabin fire extinguisher for security and condition, damage, corrosion, and quick opening clamp for operation and security. F1/F2		
Chapter 11 Chapter 95 Applicable Flight Manual	**6.** Inspect placards and instrument panel decals, and all instrument markings for appearance and legibility. F1/F2		
Chapter 96	**7.** Remove battery. Inspect vent lines for obstructions or damage, and clean battery mounting area prior to installing a serviceable battery. F1/F2		
Chapter 52 Chapter 96	**8.** Inspect nose compartment electrical components for condition and security of mounting, all electrical harnesses and cables for frayed wires, loose or broken clamps, and fasteners. Inspect nose door for obvious damage and security of latching. F1/F2		
Chapter 95	**9.** Inspect pitot tube(s) for security of attachment. F1/F2		

SCHEDULED INSPECTIONS

5-14. 150-HOUR INSPECTION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 27 BHT-ALL-SPM	**10.** Inspect roof mounted cyclic and collective shaft assemblies and control tubes for bearing binding, corrosion or mechanical damage, wear, and security of attachment. F5/F6 **NOTE** Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 29	**11.** Inspect hydraulic lines for leaks, system PC-1 and PC-2 reservoirs for proper level and discoloration of fluid, and module for differential pressure indication. Check for chafe guard deterioration, and verify flexible hoses are in satisfactory condition and exhibit no indications of chafing. F5/F6		
Chapter 66	**12.** Visually inspect the outboard and inboard collective lever idler link attachment points for condition in area of lugs in transmission top case. R1		
BHT-222-CR&O-2	**13.** Inspect hydraulic actuator support attaching nuts for proper torque. R1		
Chapter 65	**14.** Inspect cyclic and collective control levers, swashplate assembly, drive assembly, and links for evidence of damage, security, and corrosion. Inspect walking beam pitch change bearings, ensuring that seals and shields are in place and pitch link clevis is properly aligned with walking beam. If seals and/or shields are missing or loose, bearing must be replaced. R1		
BHT-222-CR&O-2	**15.** Inspect main rotor hub for damage and security, static stops for damage from hard mast contact, and trunnion shims for condition. Inspect yoke for condition in area around flapping bearing attachment bushings. Inspect pendulum dampers for freedom of movement. R1		

SCHEDULED INSPECTIONS

5-14. 150-HOUR INSPECTION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 65 BHT-222-CR&O-2	**16.** For all main rotor hub assemblies, verify torque of main rotor grip(s) retaining bolts/nuts. Apply 100 foot-pounds (135 Nm) of torque to the nut, in the tightening direction. Provided 100 foot-pounds (135 Nm) of torque is reached without movement of the nut, torque the bolt/nut to 125 foot-pounds (169 Nm). If any nut moves before 100 foot-pounds (135 Nm) of torque is reached, remove grip from main rotor hub assembly. Inspect/repair pitch horn and grip assemblies. R1		
BHT-222-CR&O-2	**17.** Visually inspect the accessible portion of the main rotor elastomeric pitch axis bearings, trunnion bearings, and flapping springs for evidence of delamination or loss of elastomer.		
Chapter 65	**18.** Inspect main rotor blades for obvious damage and for cleanliness. R1 **NOTE** Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 66	**19.** Inspect transmission for evidence of oil leakage and correct fluid level. F5/F6		
Chapter 66	**20.** Remove transmission chip detectors. Inspect and clean detectors and test electrical circuits. Install chip detectors. R1		
Chapter 66 BHT-222-CR&O-3	**21.** Inspect main driveshafts overtemperature indicators (TEMP-PLATES) on transmission-end and engine-end driveshaft couplings for evidence of overheating (discoloration) and grease leakage. R1		
Chapter 66 BHT-222-CR&O-3	**22.** Inspect tail rotor driveshaft coupling overtemperature indicators (TEMP-PLATES) for evidence of overheating (discoloration) and grease leakage. R1		
Chapter 66	**23.** Inspect rotor brake assembly for evidence of hydraulic leakage, security of attachment, and excessive wear of brake linings. Check brake disc for damage. Check reservoir for fluid level and discoloration. R1/F6		

SCHEDULED INSPECTIONS

5-14. 150-HOUR INSPECTION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	NOTE Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 12 Chapter 79	**24.** Inspect right and left engine oil tanks and lines for evidence of leakage. Check for proper quantity of oil. F5/F6		
Chapter 66	**25.** Inspect right and left nodal beam assembly as follows: **a.** Flexure assembly for cracks in fiberglass, shear pad debond/delamination, and security. F5/F6 **b.** Cam bearing for evidence of grease loss, overheating, and grease seal condition. F5/F6 **c.** Weight and cam arms for indications of misalignment and chafing. F5/F6 **d.** Restraint arms and lift links for security, damage, and elastomeric bearings for obvious damage. F5/F6 **e.** Visually inspect the outside surfaces of station 270 bulkhead at and around the area of attachment fittings 222-031-592-103 to the bulkhead for cracks and damage.		
Chapter 66	**26.** Inspect the left longitudinal isolation mount and support for damage and security. F5		
Chapter 66	**27.** Inspect the right longitudinal isolation mount and support, and the lateral isolation mount and support for damage and security. F6		

SCHEDULED INSPECTIONS

5-14. 150-HOUR INSPECTION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	CAUTION INGESTION OF BROKEN INLET SCREEN SEGMENTS CAN CAUSE FOREIGN OBJECT DAMAGE TO ENGINE COMPRESSOR SECTION.		
Chapter 71	**28.** Inspect both engine inlet screens for damage. F5/F6		
Chapter 71	**29.** Inspect all firewalls and fireshields for cracks, distortion, loose or missing rivets, broken spot welds, deteriorating seals, and sealant. E1/E2		
Chapter 71	**30.** Inspect left power plant area for evidence of fuel and oil leaks, flexible and rigid fuel and oil lines for wear, chafing, damage, and security of attachment. E1		
Chapter 71	**31.** Inspect left engine mounts and accessories for damage and security of attachment. E1		
Chapter 76	**32.** Inspect left engine throttle control housing, push rod, and lever for wear or lost motion and for security of attachment. E1		
	33. Inspect left engine ejector for security of attachment at plenum and support link. E1		
Chapter 71	**34.** Remove left engine air inlet duct assembly. Inspect duct assembly for delamination. Inspect reverse flow baffle door for security of attachment and general condition. E1		
Chapter 66	**35.** Remove the left aft fairing assembly and inspect the forward tail rotor driveshaft hanger assembly for security of attachment, cracks at mounting ears, and corrosion or mechanical damage. Check bearing for evidence of grease seal leakage and discoloration caused by overheating. E1		
Chapter 66	**36.** Inspect forward tail rotor driveshaft hanger coupling disc assembly for cracks radiating from bolt holes, corrosion, wrinkles, or other evidence of overstress. E1		

SCHEDULED INSPECTIONS

5-14. 150-HOUR INSPECTION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 27 Chapter 29	**37.** Remove access panel from bottom of aft fuselage and inspect bellcrank and directional control hydraulic actuator supports for corrosion and mechanical damage. Inspect actuator for hydraulic leakage, bearing wear, and security of attachment. F3/F4 **NOTE** Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 26	**38.** Inspect right and left engine fire bottles for proper pressure indication. F3/F4		
Chapter 66	**39.** Remove forward and aft tail rotor driveshaft covers and inspect hanger assemblies for security of attachment, cracks at mounting ears, and corrosion or mechanical damage. Check bearings for evidence of grease seal leakage and discoloration caused by overheating. T1/T2		
Chapter 66	**40.** Inspect driveshaft hanger coupling discs and the disc at the tail rotor gearbox input quill for cracks radiating from bolt holes, corrosion, wrinkles, or other evidence of overstress. T1/T2		
Chapter 53	**41.** Visually inspect horizontal stabilizer auxiliary fins for obvious damage and security of attachment. T1/T2		
Chapter 53	**42.** Visually inspect upper and lower surface of stabilizer for crack(s) indications immediately adjacent to stabilizer support attaching stabilizer to tailboom. T1/T2		
Chapter 53	**43.** Inspect tail skid for obvious damage and security of attachment. T1/T2		
Chapter 53	**44.** Inspect vertical fin assembly for damage. T1/T2		

SCHEDULED INSPECTIONS

5-14. 150-HOUR INSPECTION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	CAUTION HARDWARE AND TORQUE REQUIREMENTS OF THE VERTICAL FIN INSTALLATION ARE AFFECTED BY ACCOMPLISHMENT OF TB 222-98-156. **45.** Inspect the vertical fin attachment bolts/nuts for proper torque as follows: **a.** For helicopters prior to TB 222-98-156, torque the nut in the tightening direction while restraining the bolt head. If 90 inch-pounds (10 Nm) of torque is reached without nut movement, increase the torque to 110 inch-pounds (12.5 Nm) of torque. If the nut moves below 90 inch-pounds (10 Nm) of torque, proceed with 2-year Inspection. **b.** For helicopters after TB 222-98-156, torque the nut in the tightening direction while restraining the bolt head. If 130 inch-pounds (14.5 Nm) of torque is reached without nut movement, increase torque to 160 inch-pounds (18 Nm) of torque. If the nut moves below 130 inch-pounds (14.5 Nm), proceed with 2-year Inspection. **NOTE** Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 12 Chapter 66	**46.** Remove tail rotor gearbox fairing and inspect tail rotor gearbox for oil leakage, mechanical or corrosion damage, and security of mounting. Check for proper oil level. T1/T2		
Chapter 66	**47.** Remove tail rotor gearbox chip detector, clean and inspect detector, and test electrical circuit. Install chip detector. R2 **48.** Inspect tail rotor gearbox retaining nuts for proper torque.		

SCHEDULED INSPECTIONS

5-14. 150-HOUR INSPECTION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	49. Inspect tail rotor pitch control assembly as follows: **a.** Check for excessive radial play between the pitch control assembly and the tail rotor gearbox output shaft due to a worn or debonded guide bearing. Radial play in excess of 0.018 inch (0.5080 mm) is considered excessive. **b.** Check for worn areas on the tail rotor gearbox output shaft wear sleeve. **c.** Check for worn or rough crosshead bearing set. **d.** Check for rough or worn counterweight bellcrank bearings. **e.** Check for worn inner race in the tail rotor idler assembly. **f.** Check for unbonded bearing in the upper leg of tail rotor input lever assembly. **g.** Check for worn bearings in the tail rotor pitch links.		
Chapter 65	**50.** Inspect tail rotor hub and blades for cleanliness, visible damage to blades, evidence of wear or excessive play in pitch change bearings and trunnion bearings, and pitch horn for security. R2		
Chapter 65	**51.** Inspect tail rotor hub and blades assembly retaining nut for proper torque. R2 **NOTE** This inspection is applicable to tail rotor hub and blades assembly prior to upgrade per TB 222-06-174 (Part II). **52.** Inspect tail rotor blades pitch change bearings as follows: **a.** Without removing the blade, clean exposed areas of pitch change bearings.		

SCHEDULED INSPECTIONS

5-14. 150-HOUR INSPECTION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
BHT-222-CR&O-3	**b.** With the blade bolts torqued to the highest value of torque range, visually inspect each bearing inner member neck area (full 360°) for cracks. If cracks are found, replace both bearings in blade.		
BHT-222-CR&O-3	**c.** Visually inspect chamfered washers installed in direct contact with the outboard surface of the yoke for deformation. Deformed washers must be replaced.		
Chapter 71	**53.** Inspect right power plant area for evidence of fuel and oil leaks, flexible and rigid fuel and oil lines for wear, chafing, damage, and security of attachment. E2		
Chapter 71	**54.** Inspect right engine mounts and accessories for damage and security of attachment. E2		
Chapter 76	**55.** Inspect right engine throttle control push rod, lever, and bellcrank for lost motion and security of attachment. E2		
	56. Inspect right engine ejector for security of attachment at plenum and support link. E2		
Chapter 71	**57.** Remove right engine air inlet duct assembly. Inspect duct assembly for delamination. Inspect reverse flow baffle door for security of attachment and general condition. E2		

SCHEDULED INSPECTIONS

5-15. 600-HOUR INSPECTION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
	To be performed every 600 hours of operating time or a minimum of once every 12 months, whichever comes first. **DETAIL**		
Chapter 7 Chapter 29 Chapter 32	**1.** Inspect landing gear as follows: **a.** Jack helicopter clear of ground and cycle landing gear. Check for binding, excessive cycle time, proper light operation, and proximity switch operation and adjustment. Check nose gear centering actuator for correct pressure. **b.** Perform emergency drop check. **c.** Remove oleo inflation valve and check for indication of hydraulic fluid.		
	2. Inspect first aid kit contents. Replace any items that are damaged or time expired. Replace any items with deteriorated packaging. F2		
Chapter 12 Chapter 27	**3.** Remove left, center, and right bottom access panels beneath the crew compartment. Inspect all installed control tubes, links, rod end bearings, bellcranks, supports, and attachment bolts for corrosion, evidence of wear, and security of attachment. Inspect spring cartridges and rotary actuators for security. F1/F2		

SCHEDULED INSPECTIONS

5-15. 600-HOUR INSPECTION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 27	**4.** Check cyclic stick, collective stick, and tail rotor pedal minimum friction. Adjust if necessary. F2		
Chapter 12	**5.** Remove access panels along bottom centerline of fuselage to FS 356.00. F3/F4		
Chapter 27	**a.** Inspect directional control tubes, rod end bearings, bellcranks, supports, and attachment bolts for corrosion, evidence of wear, and security of attachments. F3/F4		
	b. Check wiring bundles for security and evidence of chafing. Visually inspect all exposed structure for corrosion, distortion, or cracks. F3/F4		
Chapter 29	**c.** Inspect directional control actuator for leaks and security of attachment, and FS 340.00 bulkhead structure for distortion or cracks. F3/F4		
Chapter 27 BHT-ALL-SPM	**6.** Open control tunnel access in the canted bulkhead behind the pilot station. Inspect the lower and upper cyclic and collective pitch control bellcranks for bearing security of attachment, corrosion or mechanical damage to clevises, and security of attachment to supports and control tube bearings. F5/F6		
Chapter 25	**7.** On helicopters equipped with emergency exit windows in the passenger doors and/or aft window position, inspect as follows after removing interior trim from around windows: F3/F4		
	a. On passenger door only, visually inspect window retainer to door frame bond. Replace the retainer if it is not securely bonded to the frame at all points except at the two lower corners. F3/F4		
	b. Visually inspect the inboard side of all rubber retainers. Any nicks or cracks in the retainer is cause for replacement of the retainer. F3/F4		
	c. Check that all filler strips and pull tab are firmly seated in their retainer grooves. F3/F4		
Chapter 25	**d.** Install interior trim. F3/F4		

SCHEDULED INSPECTIONS

5-15. 600-HOUR INSPECTION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 53	**8.** Inspect horizontal stabilizer center area as follows: T1/T2 **a.** Remove upper support assembly. Save attaching hardware. **b.** Clean upper surface of stabilizer. **NOTE** Surface must be free of all dirt and residue. **c.** With bright light, inspect upper surface for any cracks, corrosion, or working rivets. **d.** If no cracks, corrosion, or working rivets are located, install support assembly. **e.** Remove lower support assembly. Save attaching hardware. **f.** Clean lower surface of stabilizer. **g.** With bright light, inspect lower surface for any cracks, corrosion, or working rivets. **h.** If no cracks, corrosion, or working rivets are located, install support assembly.		
Chapter 27	**9.** Remove aft right fuselage access panel and inspect control tube, bellcrank, and support assembly for security of attachment, corrosion or mechanical damage, and excessively worn bearings and clevises. F4		
Chapter 27 BHT-222-CR&O-4	**10.** Remove and inspect tail rotor control tube, nylatron sleeves, and heat shrink (if installed) at four areas where tube contacts tailboom fairleads. T1/T2		
Chapter 66	**11.** Inspect tail rotor driveshaft hanger bearings for roughness by disconnecting shaft from transmission and tail rotor gearbox. Rotate by hand while feeling hangers. Verify torque of tail rotor hanger splined adapter nut. T1/T2		
Chapter 65	**12.** Inspect tail rotor blade attaching bolts/nuts for proper torque. R2		

SCHEDULED INSPECTIONS

5-15. 600-HOUR INSPECTION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	13. Inspect tail rotor blades pitch change bearings as follows:		
Chapter 65	**a.** Without removing the blade, clean exposed areas of pitch change bearings.		
BHT-222-CR&O-3	**b.** With the blade bolts torqued to the highest value of torque range, visually inspect each bearing inner member neck area (full 360°) for cracks. If cracks are found, replace both bearings in blade.		
BHT-222-CR&O-3	**c.** Visually inspect chamfered washers installed in direct contact with the outboard surface of the yoke for deformation. Deformed washers must be replaced.		
	14. Inspect station 270 bulkhead for crack and damage as follows:		
	a. Remove equipment installed and interior trim to gain access to the underside of station 270 bulkhead.		
	b. Remove transmission drain pan from aft cabin.		
	c. Remove screws retaining the door 222-031-506-043 to the bottom side of the station 270 bulkhead. Remove the access door.		
	d. Using a bright light, inspect the outside and inside surfaces of the bulkhead assembly for cracks and damage, paying particular attention to the area around the rivets/ Hi-Locks attaching the aft nodal beam fittings 222-031-592-103 to the station 270 bulkhead.		
	e. If a crack or damage is detected, contact Product Support Engineering for repair procedure.		
	15. Remove the fairing cover plates and examine the wing(s) to fuselage attachment points for corrosion, looseness, and damage. Check torque of attaching bolts/nuts.		
	16. Remove baggage compartment floor and examine the following:		
	a. Examine surrounding aft fuselage structure for corrosion and damage.		

SCHEDULED INSPECTIONS

5-15. 600-HOUR INSPECTION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	b. Examine wiring bundles for chafing. Make sure they are correctly attached. **c.** Examine the environmental control unit for general condition. Make sure it is correctly attached. Examine bleed air tubing connection for leakage. Make sure all tubes and connectors are securely attached. **d.** If installed, examine auxiliary fuel system components, wiring and tubing for corrosion, chafing, and correct attachment.		

SCHEDULED INSPECTIONS

5-16. PROGRESSIVE INSPECTION — EVENT 1

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____		
	FACILITY: _____		
	HELICOPTER S/N: _____		
	REGISTRY NO.: _____		
	TOTAL TIME: _____		
	SIGNATURE: _____		
	GENERAL		
Paragraph 5-13	**1.** Perform a complete 50-hour inspection.		
	DETAIL		
	NOTE Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 26	**1.** Inspect right and left engine fire bottles for proper pressure indication. F3/F4		
Chapter 27 Chapter 29	**2.** Remove access panel from bottom of aft fuselage and inspect bellcrank and directional control hydraulic actuator supports for corrosion and mechanical damage. Inspect actuator for hydraulic leakage, bearing wear, and security of attachment. F3/F4		
Chapter 66	**3.** Remove the left aft fairing assembly and inspect the forward tail rotor driveshaft hanger assembly for security of attachment, cracks at mounting ears, and corrosion or mechanical damage. Check bearing for evidence of grease seal leakage, and discoloration caused by overheating. E1		

SCHEDULED INSPECTIONS

5-16. PROGRESSIVE INSPECTION — EVENT 1 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 66	**4.** Inspect forward tail rotor driveshaft hanger coupling disc assembly for cracks radiating from bolt holes, corrosion, wrinkles, or other evidence of overstress. E1		
Chapter 66	**5.** Remove forward and aft tail rotor driveshaft covers and inspect hanger assemblies for security of attachment, cracks at mounting ears, and corrosion or mechanical damage. Check bearings for evidence of grease seal leakage and discoloration caused by overheating. T1/T2		
Chapter 66	**6.** Inspect driveshaft hanger coupling discs and the disc at the tail rotor gearbox input quill for cracks radiating from bolt holes, corrosion, wrinkles, or other evidence of overstress. T1/T2		
Chapter 53	**7.** Visually inspect horizontal stabilizer auxiliary fins for obvious damage and security of attachment. T1/T2		
Chapter 53	**8.** Visually inspect upper and lower surface of stabilizer for indications of cracks immediately adjacent to stabilizer support attaching stabilizer to tailboom. T1/T2		
Chapter 53	**9.** Inspect tail skid for obvious damage and security of attachment. T1/T2		
Chapter 53	**10.** Inspect vertical fin assembly for damage. T1/T2		
	CAUTION HARDWARE AND TORQUE REQUIREMENTS OF THE VERTICAL FIN INSTALLATION ARE AFFECTED BY ACCOMPLISHMENT OF TB 222-98-156.		
Chapter 53	**11.** Inspect the vertical fin attachment bolts/nuts for proper torque as follows: **a.** For helicopters prior to TB 222-98-156, torque the nut in the tightening direction while restraining the bolt head. If 90 inch-pounds (10 Nm) of torque is reached without nut movement, increase the torque to 110 inch-pounds (12.5 Nm) of torque. If the nut moves below 90 inch-pounds (10 Nm) of torque, proceed with 2-year Inspection.		

SCHEDULED INSPECTIONS

5-16. PROGRESSIVE INSPECTION — EVENT 1 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	b. For helicopters after TB 222-98-156, torque the nut in the tightening direction while restraining the bolt head. If 130 inch-pounds (14.5 Nm) of torque is reached without nut movement, increase torque to 160 inch-pounds (18 Nm) of torque. If the nut moves below 130 inch-pounds (14.5 Nm), proceed with 2-year Inspection. **NOTE** Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 12 Chapter 66	**12.** Remove tail rotor gearbox fairing and inspect tail rotor gearbox for oil leakage, mechanical or corrosion damage, and security of mounting. Check for proper oil level. T1/T2		
Chapter 66	**13.** Remove tail rotor gearbox chip detector. Inspect and clean detector and test electrical circuit. Install chip detector. R2		
	14. Inspect tail rotor gearbox retaining nuts for proper torque.		
	15. Inspect tail rotor pitch control assembly as follows: **a.** Check for excessive radial play between the pitch control assembly and the tail rotor gearbox output shaft due to a worn or debonded guide bearing. Radial play in excess of 0.018 inch (0.5080 mm) is considered excessive. **b.** Check for worn areas on the tail rotor gearbox output shaft wear sleeve. **c.** Check for worn or rough crosshead bearing set. **d.** Check for rough or worn counterweight bellcrank bearings. **e.** Check for worn inner race in the tail rotor idler assembly. **f.** Check for unbonded bearing in the upper leg of tail rotor input lever assembly.		

SCHEDULED INSPECTIONS

5-16. PROGRESSIVE INSPECTION — EVENT 1 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	g. Check for worn bearings in the tail rotor pitch links.		
Chapter 65	**16.** Inspect tail rotor hub and blades for cleanliness, visible damage to blades, evidence of wear or excessive play in pitch change bearings, and trunnion bearings and pitch horn for security. R2		
Chapter 65	**17.** Inspect tail rotor hub and blades assembly retaining nut for proper torque. R2		
	NOTE This inspection is applicable to tail rotor hub and blades assembly prior to upgrade per TB 222-06-174 (Part II).		
	18. Inspect tail rotor blades pitch change bearings as follows:		
	a. Without removing the blade, clean exposed areas of pitch change bearings.		
BHT-222-CR&O-3	**b.** With the blade bolts torqued to the highest value of torque range, visually inspect each bearing inner member neck area (full 360°) for cracks. If cracks are found, replace both bearings in blade.		
BHT-222-CR&O-3	**c.** Visually inspect chamfered washers installed in direct contact with the outboard surface of the yoke for deformation. Deformed washers must be replaced.		

SCHEDULED INSPECTIONS

5-17. PROGRESSIVE INSPECTION — EVENT 2

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
	GENERAL		
Paragraph 5-13	**1.** Perform a complete 50-hour inspection.		
	DETAIL		
Chapter 66	**1.** Inspect right and left nodal beam assembly as follows: **a.** Flexure assembly for cracks in fiberglass, shear pad debond/delamination, and security. F5/F6 **b.** Cam bearing for evidence of grease loss, overheating, and grease seal condition. F5/F6 **c.** Weight and cam arms for indications of misalignment and chafing. F5/F6 **d.** Restraint arms and lift links for security, damage, and elastomeric bearings for obvious damage. F5/F6 **e.** Visually inspect the outside surfaces of station 270 bulkhead at and around the area of attachment fittings 222-031-592-103 to the bulkhead for cracks and damage.		

SCHEDULED INSPECTIONS

5-17. PROGRESSIVE INSPECTION — EVENT 2 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	NOTE Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 66	**2.** Inspect transmission for evidence of oil leakage and correct fluid level. F5/F6		
Chapter 66	**3.** Remove transmission chip detectors. Inspect and clean detectors and test electrical circuits. Install chip detectors. R1		
Chapter 66	**4.** Inspect the left longitudinal isolation mount and support for damage and security. F5/F6		
Chapter 66	**5.** Inspect the right longitudinal isolation mount and support, and the lateral isolation mount and support for damage and security. F6		
Chapter 66	**6.** Inspect rotor brake assembly for evidence of hydraulic leakage, security of attachment, and excessive wear of brake linings. Check brake disc for damage. Check reservoir for fluid level and discoloration. R1/F6		
Chapter 66 BHT-222-CR&O-3	**7.** Inspect tail rotor driveshaft coupling overtemperature indicators (TEMP-PLATES) for evidence of overheating (discoloration) and grease leakage. R1		
Chapter 66 BHT-222-CR&O-3	**8.** Inspect main driveshafts overtemperature indicators (TEMP-PLATES) on transmission-end and engine-end driveshaft couplings for evidence of overheating (discoloration) and grease leakage. R1		
	NOTE Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 12 Chapter 79	**9.** Inspect right and left engine oil tanks and lines for evidence of leakage. Check for proper quantity of oil. F5/F6		

SCHEDULED INSPECTIONS

5-17. PROGRESSIVE INSPECTION — EVENT 2 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 66	**10.** Visually inspect the outboard and inboard collective lever idler link attachment points for condition in area of lugs in transmission top case. R1		
BHT-222-CR&O-2	**11.** Inspect hydraulic actuator support attaching nuts for proper torque. R1		
Chapter 65	**12.** Inspect cyclic and collective control levers, swashplate assembly, drive assembly and links for evidence of damage, security, and corrosion. Inspect walking beam pitch change bearings, ensuring that seals and shields are in place and pitch link clevis is properly aligned with walking beam. If seals and/or shields are missing or loose, bearing must be replaced. R1		
BHT-222-CR&O-2	**13.** Inspect main rotor hub for damage and security, static stops for damage from hard mast contact, and trunnion shims for condition. Inspect yoke for condition in area around flapping bearing attachment bushings. Inspect pendulum dampers for freedom of movement. R1		
BHT-222-CR&O-2	**14.** Visually inspect the accessible portion of the main rotor elastomeric pitch axis bearings, trunnion bearings, and flapping springs for evidence of delamination or loss of elastomer. R1		
Chapter 65	**15.** Inspect main rotor blades for obvious damage and for cleanliness. R1		
Chapter 27 BHT-ALL-SPM	**16.** Inspect roof mounted cyclic and collective shaft assemblies and control tubes for bearing corrosion or mechanical damage, wear, and security of attachment. F5/F6 **NOTE** Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 29	**17.** Inspect hydraulic lines for leaks, system PC-1 and PC-2 reservoirs for proper level and discoloration of fluid, and module for differential pressure indication. Check for chafe guard deterioration, and verify flexible hoses are in satisfactory condition and exhibit no indications of chafing. F5/F6		

SCHEDULED INSPECTIONS

5-17. PROGRESSIVE INSPECTION — EVENT 2 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 7 Chapter 29 Chapter 32	**18.** Inspect landing gear as follows: **a.** Jack helicopter clear of ground and cycle landing gear. Check for binding, excessive cycle time, proper light operation, and proximity switch operation and adjustment. Check nose gear centering actuator for correct pressure. **b.** Perform emergency drop check. **c.** Remove oleo inflation valve and check for indication of hydraulic fluid.		

SCHEDULED INSPECTIONS

5-18. PROGRESSIVE INSPECTION — EVENT 3

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____		
	FACILITY: _____		
	HELICOPTER S/N: _____		
	REGISTRY NO.: _____		
	TOTAL TIME: _____		
	SIGNATURE: _____		
	GENERAL		
Paragraph 5-13	**1.** Perform a complete 50-hour inspection.		
	DETAIL		
Chapter 96	**1.** Remove battery. Inspect vent lines for obstructions or damage, and clean battery mounting area prior to installing a serviceable battery. F1/F2		
Chapter 52 Chapter 96	**2.** Inspect nose compartment electrical components for condition and security of mounting, all electrical harnesses and cables for frayed wires, loose or broken clamps and fasteners. Inspect nose door for obvious damage and security of latching. F1/F2		
Chapter 95	**3.** Inspect pitot tube(s) for security of attachment. F1/F2		
Chapter 52	**4.** Inspect crew doors, passenger doors, and baggage compartment doors for corrosion damage, distortion, positive locking mechanisms, seals for tears or separations, and doors for security of attachment. F1/F2, F3/F4		
Chapter 25	**5.** Inspect seat cushions and seat backs for tears, excessive deterioration, and security of attachment. F1/F2, F3/F4		
Chapter 25	**6.** Inspect seat assemblies for security of attachment. F1/F2, F3/F4		

SCHEDULED INSPECTIONS

5-18. PROGRESSIVE INSPECTION — EVENT 3 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 25	**7.** Inspect safety belts and shoulder harnesses for deterioration and security of attachment. F1/F2, F3/F4		
Chapter 26	**8.** Inspect cabin fire extinguisher for security and condition, damage, corrosion, and quick opening clamp for operation and security. F1/ F2		
Chapter 11 Chapter 95 Applicable Flight Manual	**9.** Inspect placards and instrument panel decals, and all instrument markings for appearance and legibility. F1/F2		
	CAUTION INGESTION OF BROKEN INLET SCREEN SEGMENTS CAN CAUSE FOREIGN OBJECT DAMAGE TO ENGINE COMPRESSOR SECTION.		
Chapter 71	**10.** Inspect both engine inlet screens for damage. F5/F6		
Chapter 71	**11.** Inspect all firewalls and fireshields for cracks, distortion, loose or missing rivets, broken spot welds, deteriorating seals, and sealant. E1/E2		
Chapter 71	**12.** Inspect left power plant area for evidence of fuel and oil leaks, flexible and rigid fuel and oil lines for wear, chafing, damage, and security of attachment. E1		
Chapter 71	**13.** Inspect left engine mounts and accessories for damage and security of attachment. E1		
Chapter 76	**14.** Inspect left engine throttle control housing, push rod, and lever for wear or lost motion and for security of attachment. E1		
Chapter 71	**15.** Inspect left engine ejector for security of attachment at plenum and support link.		
	16. Remove left engine air inlet duct assembly. Inspect duct assembly for delamination. Inspect reverse flow baffle door for security of attachment and general condition.		

SCHEDULED INSPECTIONS

5-18. PROGRESSIVE INSPECTION — EVENT 3 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 71	**17.** Inspect right power plant area for evidence of fuel and oil leaks, flexible and rigid fuel and oil lines for wear, chafing, damage, and security of attachment. E2		
Chapter 71	**18.** Inspect right engine mounts and accessories for damage and security of attachment. E2		
Chapter 76	**19.** Inspect right engine throttle control push rod, lever, and bellcrank for lost motion and security of attachment. E2		
	20. Inspect right engine ejector for security of attachment at plenum and support link.		
Chapter 71	**21.** Remove right engine air inlet duct assembly. Inspect duct assembly for delamination. Inspect reverse flow baffle door for security of attachment and general condition.		
Chapter 65 BHT-222-CR&O-2	**22.** For all main rotor hub assemblies, verify torque of main rotor grip(s) retaining bolts/nuts. Apply 100 foot-pounds (135 Nm) of torque to the nut, in the tightening direction. Provided 100 foot-pounds (135 Nm) of torque is reached without movement of the nut, torque the bolt/nut to 125 foot-pounds (169 Nm). If any nut moves before 100 foot-pounds (135 Nm) of torque is reached, remove grip from main rotor hub assembly. Inspect/repair pitch horn and grip assemblies. R1		

SCHEDULED INSPECTIONS

5-19. PROGRESSIVE INSPECTION — EVENT 4

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
	GENERAL		
Paragraph 5-13	**1.** Perform a complete 50-hour inspection.		
	DETAIL		
	NOTE Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 26	**1.** Inspect right and left engine fire bottles for proper pressure indication. F3/F4		
Chapter 27 Chapter 29	**2.** Remove access panel from bottom of aft fuselage and inspect bellcrank and directional control hydraulic actuator supports for corrosion and mechanical damage. Inspect actuator for hydraulic leakage, bearing wear, and security of attachment. F3/F4		
Chapter 66	**3.** Remove the left aft fairing assembly and inspect the forward tail rotor driveshaft hanger assembly for security of attachment, cracks at mounting ears, and corrosion or mechanical damage. Check bearing for evidence of grease seal leakage and discoloration caused by overheating. E1		

SCHEDULED INSPECTIONS

5-19. PROGRESSIVE INSPECTION — EVENT 4 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 66	**4.** Inspect forward tail rotor driveshaft hanger coupling disc assembly for cracks radiating from bolt holes, corrosion, wrinkles, or other evidence of overstress. E1		
Chapter 66	**5.** Remove forward and aft tail rotor driveshaft covers and inspect hanger assemblies for security of attachment, cracks at mounting ears, and corrosion or mechanical damage. Check bearings for evidence of grease seal leakage and discoloration caused by overheating. T1/T2		
Chapter 66	**6.** Inspect driveshaft hanger coupling discs and the disc at the tail rotor gearbox input quill for cracks radiating from bolt holes, corrosion, wrinkles, or other evidence of overstress. T1/T2		
Chapter 53	**7.** Visually inspect horizontal stabilizer auxiliary fins for obvious damage and security of attachment. T1/T2		
Chapter 53	**8.** Inspect horizontal stabilizer center area as follows: T1/T2 **a.** Remove upper support assembly. Save attaching hardware. **b.** Clean upper surface of stabilizer. **NOTE** Surface must be free of all dirt and residue. **c.** With bright light, inspect upper surface for any cracks, corrosion, or working rivets. **d.** If no cracks, corrosion, or working rivets are located, install upper support assembly. **e.** Remove lower support assembly. Save attaching hardware. **f.** Clean lower surface of stabilizer. **g.** With bright light, inspect lower surface for any cracks, corrosion, or working rivets. **h.** If no cracks, corrosion, or working rivets are located, install support assembly.		

SCHEDULED INSPECTIONS

5-19. PROGRESSIVE INSPECTION — EVENT 4 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 53	**9.** Inspect tail skid for obvious damage and security of attachment. T1/T2		
Chapter 53	**10.** Inspect vertical fin assembly for damage. T1/T2 **CAUTION** HARDWARE AND TORQUE REQUIREMENTS OF THE VERTICAL FIN INSTALLATION ARE AFFECTED BY ACCOMPLISHMENT OF TB 222-98-156.		
Chapter 53	**11.** Inspect the vertical fin attachment bolts/nuts for proper torque as follows: **a.** For helicopters prior to TB 222-98-156, torque the nut in the tightening direction while restraining the bolt head. If 90 inch-pounds (10 Nm) of torque is reached without nut movement, increase torque to 110 inch-pounds (12.5 Nm) of torque. If the nut moves below 90 inch-pounds (10 Nm) of torque, proceed with 2-year Inspection. **b.** For helicopters after TB 222-98-156, torque the nut in the tightening direction while restraining the bolt head. If 130 inch-pounds (14.5 Nm) of torque is reached without nut movement, increase torque to 160 inch-pounds (18 Nm) of torque. If the nut moves below 130 inch-pounds (14.5 Nm), proceed with 2-year Inspection. **NOTE** Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 12 Chapter 66	**12.** Remove tail rotor gearbox fairing and inspect tail rotor gearbox for oil leakage, mechanical or corrosion damage, and security of mounting. Check for proper oil level. T1/T2		
Chapter 66	**13.** Remove tail rotor gearbox chip detector. Inspect and clean detector and test electrical circuit. Install chip detector. R2		

SCHEDULED INSPECTIONS

5-19. PROGRESSIVE INSPECTION — EVENT 4 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	14. Inspect tail rotor gearbox retaining nuts for proper torque.		
	15. Inspect tail rotor pitch control assembly as follows:		
	a. Check for excessive radial play between the pitch control assembly and the tail rotor gearbox output shaft due to a worn or debonded guide bearing. Radial play in excess of 0.018 inch (0.5080 mm) is considered excessive.		
	b. Check for worn areas on the tail rotor gearbox output shaft wear sleeve.		
	c. Check for worn or rough crosshead bearing set.		
	d. Check for rough or worn counterweight bellcrank bearings.		
	e. Check for worn inner race in the tail rotor idler assembly.		
	f. Check for unbonded bearing in the upper leg of tail rotor input lever assembly.		
	g. Check for worn bearings in the tail rotor pitch links.		
Chapter 65	**16.** Inspect tail rotor hub and blades for cleanliness, visible damage to blades, evidence of wear or excessive play in pitch change bearings and trunnion bearings, and pitch horn for security. R2		
Chapter 65	**17.** Inspect tail rotor hub and blades assembly retaining nut for proper torque. R2		
Chapter 65	**18.** Inspect tail rotor blade attaching bolts/nuts for proper torque. R2		

SCHEDULED INSPECTIONS

5-19. PROGRESSIVE INSPECTION — EVENT 4 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	NOTE This inspection is applicable to tail rotor hub and blades assembly prior to upgrade per TB 222-06-174 (Part II).		
	19. Inspect tail rotor blades pitch change bearings as follows:		
Chapter 65	**a.** Without removing the blade, clean exposed areas of pitch change bearings.		
BHT-222-CR&O-3	**b.** With the blade bolts torqued to the highest value of torque range, visually inspect each bearing inner member neck area (full 360°) for cracks. If cracks are found, replace both bearings in blade.		
BHT-222-CR&O-3	**c.** Visually inspect chamfered washers installed in direct contact with the outboard surface of the yoke for deformation. Deformed washers must be replaced.		

SCHEDULED INSPECTIONS

5-20. PROGRESSIVE INSPECTION — EVENT 5

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
	GENERAL		
Paragraph 5-13	**1.** Perform a complete 50-hour inspection.		
	DETAIL		
Chapter 66	**1.** Inspect right and left nodal beam assembly as follows: **a.** Flexure assembly for cracks in fiberglass, shear pad debond/delamination, and security. F5/F6 **b.** Cam bearing for evidence of grease loss, overheating, and grease seal condition. F5/F6 **c.** Weight and cam arms for indications of misalignment and chafing. F5/F6 **d.** Restraint arms and lift links for security, damage, and elastomeric bearings for obvious damage. F5/F6 **e.** Visually inspect the outside surfaces of station 270 bulkhead at and around the area of attachment fittings 222-031-592-103 to the bulkhead for cracks and damage.		

SCHEDULED INSPECTIONS

5-20. PROGRESSIVE INSPECTION — EVENT 5 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	NOTE Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 66	**2.** Inspect transmission for evidence of oil leakage and correct oil level. F5/F6		
Chapter 66	**3.** Remove transmission chip detectors. Inspect and clean detectors and test electrical circuits. Install chip detectors. R1		
Chapter 66	**4.** Inspect the left longitudinal isolation mount and support for damage and security. F5		
Chapter 66	**5.** Inspect the right longitudinal isolation mount and support, and the lateral isolation mount and support for damage and security. F6		
Chapter 66	**6.** Inspect rotor brake assembly for evidence of hydraulic leakage, security of attachment, and excessive wear of brake linings. Check brake disc for damage. Check reservoir for fluid level and discoloration. R1/F6		
Chapter 66 BHT-222-CR&O-3	**7.** Inspect tail rotor driveshaft coupling overtemperature indicators (TEMP-PLATES) for evidence of overheating (discoloration) and grease leakage. R1		
Chapter 66 BHT-222-CR&O-3	**8.** Inspect main driveshafts overtemperature indicators (TEMP-PLATES) on transmission-end and engine-end driveshaft couplings for evidence of overheating (discoloration) and grease leakage. R1		
	NOTE Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 12 Chapter 79	**9.** Inspect right and left engine oil tanks and lines for evidence of leakage. Check for proper quantity of oil. F5/F6		

SCHEDULED INSPECTIONS

5-20. PROGRESSIVE INSPECTION — EVENT 5 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 66	**10.** Visually inspect the outboard and inboard collective lever idler link attachment points for condition in area of lugs in transmission top case. R1		
BHT-222-CR&O-2	**11.** Inspect hydraulic actuator support attaching nuts for proper torque. R1		
Chapter 65	**12.** Inspect cyclic and collective control levers, swashplate assembly, drive assembly, and links for evidence of damage, security, and corrosion. Inspect walking beam pitch change bearings, ensuring that seals and shields are in place and pitch link clevis is properly aligned with walking beam. If seals and/or shields are missing or loose, bearing must be replaced. R1		
BHT-222-CR&O-2	**13.** Inspect main rotor hub for damage and security, static stops for damage from hard mast contact, and trunnion shims for condition. Inspect yoke for condition in area around flapping bearing attachment bushings. Inspect pendulum dampers for freedom of movement. R1		
BHT-222-CR&O-2	**14.** Visually inspect the accessible portion of the main rotor elastomeric pitch axis bearings, trunnion bearings, and flapping springs for evidence of delamination or loss of elastomer. R1		
Chapter 65	**15.** Inspect main rotor blades for obvious damage and for cleanliness. R1		
Chapter 27 BHT-ALL-SPM	**16.** Inspect roof mounted cyclic and collective shaft assemblies and control tubes for bearing corrosion or mechanical damage, wear, and security of attachment. F5/F6 **NOTE** Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 29	**17.** Inspect hydraulic lines for leaks, system PC-1 and PC-2 reservoirs for proper level and discoloration of fluid, and module of differential pressure indication. Check for chafe guard deterioration, and verify flexible hoses are in satisfactory condition and exhibit no indications of chafing. F5/F6		

SCHEDULED INSPECTIONS

5-21. PROGRESSIVE INSPECTION — EVENT 6

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
Paragraph 5-13	**GENERAL** **1.** Perform a complete 50-hour inspection.		
	DETAIL		
Chapter 96	**1.** Remove battery. Inspect vent lines for obstructions or damage, and clean battery mounting area prior to installing a serviceable battery. F1/ F2		
Chapter 52 Chapter 96	**2.** Inspect nose compartment electrical components for condition and security of mounting, all electrical harnesses and cables for frayed wires, loose or broken clamps and fasteners. Inspect nose door for obvious damage and security of latching. F1/F2		
Chapter 95	**3.** Inspect pitot tube(s) for security of attachment. F1/F2		
Chapter 52	**4.** Inspect crew doors, passenger doors, and baggage compartment doors for corrosion damage, distortion, positive locking mechanisms, seals for tears or separations, and doors for security of attachment. F1/F2, F3/F4		
Chapter 25	**5.** Inspect seat cushions and seat backs for tears, excessive deterioration, and security of attachment. F1/F2, F3/F4		
Chapter 25	**6.** Inspect seat assemblies for security of attachment. F1/F2, F3/F4		

SCHEDULED INSPECTIONS

5-21. PROGRESSIVE INSPECTION — EVENT 6 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 25	**7.** Inspect safety belts and shoulder harnesses for deterioration and security of attachment. F1/F2, F3/F4		
Chapter 26	**8.** Inspect cabin fire extinguisher for security and condition, damage, corrosion, and quick opening clamp for operation and security. F1/F2		
Chapter 11 Chapter 95 Applicable Flight Manual	**9.** Inspect placards and instrument panel decals, and all instrument markings for appearance and legibility. F1/F2		
	CAUTION INGESTION OF BROKEN INLET SCREEN SEGMENTS CAN CAUSE FOREIGN OBJECT DAMAGE TO ENGINE COMPRESSOR SECTION.		
Chapter 71	**10.** Inspect both engine inlet screens for damage. F5/F6		
Chapter 71	**11.** Inspect all firewalls and fireshields for cracks, distortion, loose or missing rivets, broken spot welds, deteriorating seals and sealant. E1/E2		
Chapter 71	**12.** Inspect left power plant area for evidence of fuel and oil leaks, flexible and rigid fuel and oil lines for wear, chafing, damage, and security of attachment. E1		
Chapter 71	**13.** Inspect left engine mounts and accessories for damage and security of attachment. E1		
Chapter 76	**14.** Inspect left engine throttle control housing, push rod, and lever for wear or lost motion and for security of attachment. E1		
	15. Inspect left engine ejector for security of attachment at plenum and support link.		
Chapter 71	**16.** Remove left engine air inlet duct assembly. Inspect duct assembly for delamination. Inspect reverse flow baffle door for security of attachment and general condition.		

SCHEDULED INSPECTIONS

5-21. PROGRESSIVE INSPECTION — EVENT 6 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 71	**17.** Inspect right power plant area for evidence of fuel and oil leaks, flexible and rigid fuel and oil lines for wear, chafing, damage, and security of attachment. E2		
Chapter 71	**18.** Inspect right engine mounts and accessories for damage and security of attachment. E2		
Chapter 76	**19.** Inspect right engine throttle control push rod, lever, and bellcrank for lost motion and security of attachment. E2		
	20. Inspect right engine ejector for security of attachment at plenum and support link.		
Chapter 71	**21.** Remove right engine air inlet duct assembly. Inspect duct assembly for delamination. Inspect reverse flow baffle door for security of attachment and general condition.		
Chapter 65 BHT-222-CR&O-2	**22.** For all main rotor hub assemblies, verify torque of main rotor grip(s) retaining bolts/nuts. Apply 100 foot-pounds (135 Nm) of torque to the nut, in the tightening direction. Provided 100 foot-pounds (135 Nm) of torque is reached without movement of the nut, torque the bolt/nut to 125 foot-pounds (169 Nm). If any nut moves before 100 foot-pounds (135 Nm) of torque is reached, remove grip from main rotor hub assembly. Inspect/repair pitch horn and grip assemblies. R1		

SCHEDULED INSPECTIONS

5-22. PROGRESSIVE INSPECTION — EVENT 7

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____		
	FACILITY: _____		
	HELICOPTER S/N: _____		
	REGISTRY NO.: _____		
	TOTAL TIME: _____		
	SIGNATURE: _____		
	GENERAL		
Paragraph 5-13	**1.** Perform a complete 50-hour inspection.		
	DETAIL		
	NOTE Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 26	**1.** Inspect right and left engine fire bottles for proper pressure indication. F3/F4		
Chapter 27 Chapter 29	**2.** Remove access panel from bottom of aft fuselage and inspect bellcrank and directional control hydraulic actuator supports for corrosion and mechanical damage. Inspect actuator for hydraulic leakage, bearing wear, and security of attachment. F3/F4		
Chapter 66	**3.** Remove the left aft fairing assembly and inspect the forward tail rotor driveshaft hanger assembly for security of attachment, cracks at mounting ears, and corrosion or mechanical damage. Check bearing for evidence of grease seal leakage and discoloration caused by overheating. E1		

SCHEDULED INSPECTIONS

5-22. PROGRESSIVE INSPECTION — EVENT 7 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 66	**4.** Inspect forward tail rotor driveshaft hanger coupling disc assembly for cracks radiating from bolt holes, corrosion, wrinkles, or other evidence of overstress. E1		
Chapter 66	**5.** Remove forward and aft tail rotor driveshaft covers and inspect hanger assemblies for security of attachment, cracks at mounting ears, and corrosion or mechanical damage. Check bearings for evidence of grease seal leakage and discoloration caused by overheating. T1/T2		
Chapter 66	**6.** Inspect driveshaft hanger coupling discs and the disc at the tail rotor gearbox input quill for cracks radiating from bolt holes, corrosion, wrinkles, or other evidence of overstress. T1/T2		
Chapter 66	**7.** Inspect tail rotor driveshaft hanger bearings for roughness by disconnecting shaft from transmission and tail rotor gearbox. Rotate by hand while feeling hangers. Verify torque of tail rotor hanger splined adapter nut. T1/T2		
Chapter 53	**8.** Visually inspect horizontal stabilizer auxiliary fins for obvious damage and security of attachment. T1/T2		
Chapter 53	**9.** Visually inspect upper and lower surface of stabilizer for indications of cracks immediately adjacent to stabilizer support attaching stabilizer to tailboom. T1/T2		
Chapter 53	**10.** Inspect tail skid for obvious damage and security of attachment. T1/T2		
Chapter 53	**11.** Inspect vertical fin assembly for damage. T1/T2		

SCHEDULED INSPECTIONS

5-22. PROGRESSIVE INSPECTION — EVENT 7 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	CAUTION HARDWARE AND TORQUE REQUIREMENTS OF THE VERTICAL FIN INSTALLATION ARE AFFECTED BY ACCOMPLISHMENT OF TB 222-98-156.		
Chapter 53	**12.** Inspect vertical fin attachment bolts/nuts for proper torque as follows: **a.** For helicopters prior to TB 222-98-156, torque the nut in the tightening direction while restraining the bolt head. If 90 inch-pounds (10 Nm) of torque is reached without nut movement, increase torque to 110 inch-pounds (12.5 Nm) of torque. If the nut moves below 90 inch-pounds (10 Nm) of torque, proceed with 2-year Inspection. **b.** For helicopters after TB 222-98-156, torque the nut in the tightening direction while restraining the bolt head. If 130 inch-pounds (14.5 Nm) of torque is reached without nut movement, increase torque to 160 inch-pounds (18 Nm) of torque. If the nut moves below 130 inch-pounds (14.5 Nm), proceed with 2-year Inspection.		
Chapter 27	**13.** Remove aft right fuselage access panel and inspect control tube, bellcrank, and support assembly for security of attachment, corrosion or mechanical damage, and excessively worn bearings and clevises. F4		
Chapter 27 BHT-222-CR&O-4	**14.** Remove and inspect tail rotor control tube, nylatron sleeves, and heat shrink (if installed) at four areas where tube contacts tailboom fairleads. T1/T2		

SCHEDULED INSPECTIONS

5-22. PROGRESSIVE INSPECTION — EVENT 7 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	NOTE Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 12 Chapter 66	**15.** Remove tail rotor gearbox fairing and inspect tail rotor gearbox for oil leakage, mechanical or corrosion damage, and security of mounting. Check for proper oil level. T1/T2		
Chapter 66	**16.** Remove tail rotor gearbox chip detector. Inspect and clean detector and test electrical circuit. Install chip detector. R2		
	17. Inspect tail rotor gearbox retaining nuts for proper torque.		
	18. Inspect tail rotor pitch control assembly as follows:		
	a. Check for excessive radial play between the pitch control assembly and the tail rotor gearbox output shaft due to a worn or debonded guide bearing. Radial play in excess of 0.018 inch (0.5080 mm) is considered excessive.		
	b. Check for worn areas on the tail rotor gearbox output shaft wear sleeve.		
	c. Check for worn or rough crosshead bearing set.		
	d. Check for rough or worn counterweight bellcrank bearings.		
	e. Check for worn inner race in the tail rotor idler assembly.		
	f. Check for unbonded bearing in the upper leg of tail rotor input lever assembly.		
	g. Check for worn bearings in the tail rotor pitch links.		
Chapter 65	**19.** Inspect tail rotor hub and blades for cleanliness, visible damage to blades, evidence of wear or excessive play in pitch change bearings, and trunnion bearings and pitch horn for security. R2		

SCHEDULED INSPECTIONS

5-22. PROGRESSIVE INSPECTION — EVENT 7 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 65	**20.** Inspect tail rotor hub and blades assembly retaining nut for proper torque. R2 **NOTE** This inspection is applicable to tail rotor hub and blades assembly prior to upgrade per TB 222-06-174 (Part II). **21.** Inspect tail rotor blades pitch change bearings as follows: **a.** Without removing the blade, clean exposed areas of pitch change bearings.		
BHT-222-CR&O-3	**b.** With the blade bolts torqued to the highest value of torque range, visually inspect each bearing inner member neck area (full 360°) for cracks. If cracks are found, replace both bearings in blade.		
BHT-222-CR&O-3	**c.** Visually inspect chamfered washers installed in direct contact with the outboard surface of the yoke for deformation. Deformed washers must be replaced.		

SCHEDULED INSPECTIONS

5-23. PROGRESSIVE INSPECTION — EVENT 8

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
	GENERAL		
Paragraph 5-13	**1.** Perform a complete 50-hour inspection.		
	DETAIL		
Chapter 66	**1.** Inspect right and left nodal beam assembly as follows: **a.** Flexure assembly for cracks in fiberglass, shear pad debond/delamination, security. F5/F6 **b.** Cam bearing for evidence of grease loss, overheating, and grease seal condition. F5/F6 **c.** Weight and cam arms for indications of misalignment and chafing. F5/F6 **d.** Restraint arms and lift links for security, damage, and elastomeric bearings for obvious damage. F5/F6 **e.** Visually inspect the outside surfaces of station 270 bulkhead at and around the area of attachment fittings 222-031-592-103 to the bulkhead for cracks and damage.		

SCHEDULED INSPECTIONS

5-23. PROGRESSIVE INSPECTION — EVENT 8 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	NOTE Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 66	**2.** Inspect transmission for evidence of oil leakage and correct oil level. F5/F6		
Chapter 66	**3.** Remove transmission chip detectors. Inspect and clean detectors and test electrical circuits. Install chip detectors. R1		
Chapter 66	**4.** Inspect the left longitudinal isolation mount and support for damage and security. F5		
Chapter 66	**5.** Inspect the right longitudinal isolation mount and support, and the lateral isolation mount and support for damage and security. F6		
Chapter 66	**6.** Inspect rotor brake assembly for evidence of hydraulic leakage, security of attachment, and excessive wear of brake linings. Check brake disc for damage. Check reservoir for fluid level and discoloration. R1/F6		
Chapter 66 BHT-222-CR&O-3	**7.** Inspect tail rotor driveshaft coupling overtemperature indicators (TEMP-PLATES) for evidence of overheating (discoloration) and grease leakage. R1		
Chapter 66 BHT-222-CR&O-3	**8.** Inspect main driveshafts overtemperature indicators (TEMP-PLATES) on transmission-end and engine-end driveshaft couplings for evidence of overheating (discoloration) and grease leakage. R1		
	NOTE Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 12 Chapter 79	**9.** Inspect right and left engine oil tanks and lines for evidence of leakage. Check for proper quantity of oil. F5/F6		

SCHEDULED INSPECTIONS

5-23. PROGRESSIVE INSPECTION — EVENT 8 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 66	**10.** Visually inspect the outboard and inboard collective lever idler link attachment points for condition in area of lugs in transmission top case. R1		
BHT-222-CR&O-2	**11.** Inspect hydraulic actuator support attaching nuts for proper torque. R1		
Chapter 65	**12.** Inspect cyclic and collective control levers, swashplate assembly, drive assembly, and links for evidence of damage, security, and corrosion. Inspect walking beam pitch change bearings, ensuring that seals and shields are in place and pitch link clevis is properly aligned with walking beam. If seals and/or shields are missing or loose, bearing must be replaced. R1		
BHT-222-CR&O-2	**13.** Inspect main rotor hub for damage and security, static stops for damage from hard mast contact, and trunnion shims for condition. Inspect yoke for condition in area around flapping bearing attachment bushings. Inspect pendulum dampers for freedom of movement. R1		
BHT-222-CR&O-2	**14.** Visually inspect the accessible portion of the main rotor elastomeric pitch axis bearings, trunnion bearings, and flapping springs for evidence of delamination or loss of elastomer. R1		
Chapter 65	**15.** Inspect main rotor blades for obvious damage and for cleanliness. R1		
Chapter 27 BHT-ALL-SPM	**16.** Inspect roof mounted cyclic and collective shaft assemblies and control tubes for bearing corrosion or mechanical damage, wear, and security of attachment. F5/F6 **NOTE** Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 29	**17.** Inspect hydraulic lines for leaks, system PC-1 and PC-2 reservoirs for proper level and discoloration of fluid, and module of differential pressure indication. Check for chafe guard deterioration, and verify flexible hoses are in satisfactory condition and exhibit no indications of chafing. F5/F6		

SCHEDULED INSPECTIONS

5-24. PROGRESSIVE INSPECTION — EVENT 9

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____		
	FACILITY: _____		
	HELICOPTER S/N: _____		
	REGISTRY NO.: _____		
	TOTAL TIME: _____		
	SIGNATURE: _____		
	GENERAL		
Paragraph 5-13	**1.** Perform a complete 50-hour inspection.		
	DETAIL		
Chapter 12 Chapter 27	**1.** Remove left, center, and right bottom panels beneath the crew compartment. Inspect all installed control tubes, links, rod end bearings, bellcranks, supports, and attachment bolts for corrosion, evidence of wear, and security of attachment. Inspect spring cartridges and rotary actuators for security. F1/F2		
Chapter 12	**2.** Remove access panels along bottom centerline of fuselage to FS 356.00.		
Chapter 27	**a.** Inspect directional control tubes, rod end bearings, bellcranks, supports, and attachment bolts for corrosion, evidence of wear, and security of attachments. F3/F4		
	b. Check wiring bundles for security and evidence of chafing. Visually inspect all exposed structure for corrosion, distortion, or cracks. F3/F4		
Chapter 29	**c.** Inspect directional control actuator for leaks and security of attachment, FS 340.00 bulkhead structure for distortion or cracks. F3/F4		
Chapter 27	**3.** Check cyclic stick, collective stick, and tail rotor pedal minimum friction. Adjust if necessary. F2		

SCHEDULED INSPECTIONS

5-24. PROGRESSIVE INSPECTION — EVENT 9 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 96	**4.** Remove battery. Inspect vent lines for obstructions or damage, and clean battery mounting area prior to installing a serviceable battery. F1/F2		
Chapter 52 Chapter 96	**5.** Inspect nose compartment electrical components for condition and security of mounting, all electrical harnesses and cables for frayed wires, loose or broken clamps and fasteners. Inspect nose door for obvious damage and security of latching. F1/F2		
Chapter 95	**6.** Inspect pitot tube(s) for security of attachment. F1/F2		
Chapter 52	**7.** Inspect crew doors, passenger doors, and baggage compartment doors for corrosion damage, distortion, positive locking mechanisms, seals for tears or separations, and doors for security of attachment. F1/F2, F3/F4		
Chapter 25	**8.** Inspect seat cushions and seat backs for tears, excessive deterioration, and security of attachment. F1/F2, F3/F4		
Chapter 25	**9.** Inspect seat assemblies for security of attachment. F1/F2, F3/F4		
Chapter 25	**10.** Inspect safety belts and shoulder harnesses for deterioration and security of attachment. F1/F2, F3/F4		
Chapter 26	**11.** Inspect cabin fire extinguisher for security and condition, damage, corrosion, and quick opening clamp for operation and security. F1/F2		
Chapter 11 Chapter 95 Applicable Flight Manual	**12.** Inspect placards and instrument panel decals, and all instrument markings for appearance and legibility. F1/F2		
	CAUTION INGESTION OF BROKEN INLET SCREEN SEGMENTS CAN CAUSE FOREIGN OBJECT DAMAGE TO ENGINE COMPRESSOR SECTION.		
Chapter 71	**13.** Inspect both engine inlet screens for damage. F5/F6		

SCHEDULED INSPECTIONS

5-24. PROGRESSIVE INSPECTION — EVENT 9 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 71	**14.** Inspect all firewalls and fireshields for cracks, distortion, loose or missing rivets, broken spot welds, deteriorating seals and sealant. E1/E2		
Chapter 71	**15.** Inspect left power plant area for evidence of fuel and oil leaks, flexible and rigid fuel and oil lines for wear, chafing, damage, and security of attachment. E1		
Chapter 71	**16.** Inspect left engine mounts and accessories for damage and security of attachment. E1		
Chapter 76	**17.** Inspect left engine throttle control housing, push rod, and lever for wear or lost motion and for security of attachment. E1		
	18. Inspect left engine ejector for security of attachment at plenum and support link.		
Chapter 71	**19.** Remove left engine air inlet duct assembly. Inspect duct assembly for delamination. Inspect reverse flow baffle door for security of attachment and general condition.		
Chapter 71	**20.** Inspect right power plant area for evidence of fuel and oil leaks, flexible and rigid fuel and oil lines for wear, chafing, damage, and security of attachment. E2		
Chapter 71	**21.** Inspect right engine mounts and accessories for damage and security of attachment. E2		
Chapter 76	**22.** Inspect right engine throttle control push rod, lever, and bellcrank for lost motion and security of attachment. E2		
	23. Inspect right engine ejector for security of attachment at plenum and support link.		
Chapter 71	**24.** Remove right engine air inlet duct assembly. Inspect duct assembly for delamination. Inspect reverse flow baffle door for security of attachment and general condition.		

SCHEDULED INSPECTIONS

5-24. PROGRESSIVE INSPECTION — EVENT 9 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 65 BHT-222-CR&O-2	**25.** For all main rotor hub assemblies, verify torque of main rotor grip(s) retaining bolts/nuts. Apply 100 foot-pounds (135 Nm) of torque to the nut, in the tightening direction. Provided 100 foot-pounds (135 Nm) of torque is reached without movement of the nut, torque the bolt/nut to 125 foot-pounds (169 Nm). If any nut moves before 100 foot-pounds (135 Nm) of torque is reached, remove grip from main rotor hub assembly. Inspect/repair pitch horn and grip assemblies. R1		

SCHEDULED INSPECTIONS

5-25. PROGRESSIVE INSPECTION — EVENT 10

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
	GENERAL		
Paragraph 5-13	**1.** Perform a complete 50-hour inspection.		
	DETAIL		
	NOTE Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 26	**1.** Inspect right and left engine fire bottles for proper pressure indication. F3/F4		
Chapter 27 Chapter 29	**2.** Remove access panel from bottom of aft fuselage and inspect bellcrank and directional control hydraulic actuator supports for corrosion and mechanical damage. Inspect actuator for hydraulic leakage, bearing wear, and security of attachment. F3/F4		
Chapter 66	**3.** Remove the left aft fairing assembly and inspect the forward tail rotor driveshaft hanger assembly for security of attachment, cracks at mounting ears, and corrosion or mechanical damage. Check bearing for evidence of grease seal leakage and discoloration caused by overheating. E1		

SCHEDULED INSPECTIONS

5-25. PROGRESSIVE INSPECTION — EVENT 10 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 66	**4.** Inspect forward tail rotor driveshaft hanger coupling disc assembly for cracks radiating from bolt holes, corrosion, wrinkles, or other evidence of overstress. E1		
Chapter 66	**5.** Remove forward and aft tail rotor driveshaft covers and inspect hanger assemblies for security of attachment, cracks at mounting ears, and corrosion or mechanical damage. Check bearings for evidence of grease seal leakage and discoloration caused by overheating. T1/T2		
Chapter 66	**6.** Inspect driveshaft hanger coupling discs and the disc at the tail rotor gearbox input quill for cracks radiating from bolt holes, corrosion, wrinkles, or other evidence of overstress. T1/T2		
Chapter 53	**7.** Visually inspect horizontal stabilizer auxiliary fins for obvious damage and security of attachment. T1/T2		
Chapter 53	**8.** Visually inspect upper and lower surface of stabilizer for indications of cracks immediately adjacent to stabilizer support attaching stabilizer to tailboom. T1/T2		
Chapter 53	**9.** Inspect tail skid for obvious damage and security of attachment. T1/T2		
Chapter 53	**10.** Inspect vertical fin assembly for damage. T1/T2 **CAUTION** HARDWARE AND TORQUE REQUIREMENTS OF THE VERTICAL FIN INSTALLATION ARE AFFECTED BY ACCOMPLISHMENT OF TB 222-98-156.		
Chapter 53	**11.** Inspect vertical fin attachment bolts/nuts for proper torque as follows: **a.** For helicopters prior to TB 222-98-156, torque the nut in the tightening direction while restraining the bolt head. If 90 inch-pounds (10 Nm) of torque is reached without nut movement, increase torque to 110 inch-pounds (12.5 Nm) of torque. If the nut moves below 90 inch-pounds (10 Nm) of torque, proceed with 2-year Inspection.		

SCHEDULED INSPECTIONS

5-25. PROGRESSIVE INSPECTION — EVENT 10 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	b. For helicopters after TB 222-98-156, torque the nut in the tightening direction while restraining the bolt head. If 130 inch-pounds (14.5 Nm) of torque is reached without nut movement, increase torque to 160 inch-pounds (18 Nm) of torque. If the nut moves below 130 inch-pounds (14.5 Nm), proceed with 2-year Inspection. **NOTE** Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 12 Chapter 66	**12.** Remove tail rotor gearbox fairing and inspect tail rotor gearbox for oil leakage, mechanical or corrosion damage, and security of mounting. Check for proper oil level. T1/T2		
Chapter 66	**13.** Remove tail rotor gearbox chip detector. Inspect and clean detector and test electrical circuit. Install chip detector. R2		
	14. Inspect tail rotor gearbox retaining nuts for proper torque.		
	15. Inspect tail rotor pitch control assembly as follows: **a.** Check for excessive radial play between the pitch control assembly and the tail rotor gearbox output shaft due to a worn or debonded guide bearing. Radial play in excess of 0.018 inch (0.5080 mm) is considered excessive. **b.** Check for worn areas on the tail rotor gearbox output shaft wear sleeve. **c.** Check for worn or rough crosshead bearing set. **d.** Check for rough or worn counterweight bellcrank bearings. **e.** Check for worn inner race in the tail rotor idler assembly. **f.** Check for unbonded bearing in the upper leg of tail rotor input lever assembly.		

SCHEDULED INSPECTIONS

5-25. PROGRESSIVE INSPECTION — EVENT 10 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	g. Check for worn bearings in the tail rotor pitch links.		
Chapter 65	**16.** Inspect tail rotor hub and blades for cleanliness, visible damage to blades, evidence of wear or excessive play in pitch change bearings, and trunnion bearings, and pitch horn for security. R2		
Chapter 65	**17.** Inspect tail rotor hub and blades assembly retaining nut for proper torque. R2		
	NOTE This inspection is applicable to tail rotor hub and blades assembly prior to upgrade per TB 222-06-174 (Part II).		
	18. Inspect tail rotor blades pitch change bearings as follows:		
	a. Without removing the blade, clean exposed areas of pitch change bearings.		
BHT-222-CR&O-3	**b.** With the blade bolts torqued to the highest value of torque range, visually inspect each bearing inner member neck area (full 360°) for cracks. If cracks are found, replace both bearings in blade.		
BHT-222-CR&O-3	**c.** Visually inspect chamfered washers installed in direct contact with the outboard surface of the yoke for deformation. Deformed washers must be replaced.		

SCHEDULED INSPECTIONS

5-26. PROGRESSIVE INSPECTION — EVENT 11

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
	GENERAL		
Paragraph 5-13	**1.** Perform a complete 50-hour inspection.		
	DETAIL		
Chapter 27 BHT-ALL-SPM	**1.** Open control tunnel access in the canted bulkhead behind the pilot station. Inspect the lower and upper cyclic and collective pitch control bellcranks for evidence of bearing wear, corrosion or mechanical damage to clevises, and security of attachment to supports and control tube bearings. F5/F6		
Chapter 66	**2.** Inspect right and left nodal beam assembly as follows: **a.** Flexure assembly for cracks in fiberglass, shear pad debond/delamination, and security. F5/F6 **b.** Cam bearing for evidence of grease loss, overheating, and grease seal condition. F5/F6 **c.** Weight and cam arms for indications of misalignment and chafing. F5/F6 **d.** Restraint arms and lift links for security, damage, and elastomeric bearings for obvious damage.		

SCHEDULED INSPECTIONS

5-26. PROGRESSIVE INSPECTION — EVENT 11 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	e. Inspect station 270 bulkhead for cracks and damage as follows: **(1)** Remove equipment installed and interior trim to gain access to the underside of station 270 bulkhead. **(2)** Remove transmission drain pan from aft cabin. **(3)** Remove screws retaining door 222-031-506-043 to the bottom side of the station 270 bulkhead. Remove access door. **(4)** Using a bright light, inspect the outside and inside surfaces of the bulkhead assembly for cracks and damage, paying particular attention to the area around the rivets/ Hi-Locks attaching the aft nodal beam fittings 222-031-592-103 to the station 270 bulkhead. **(5)** If a crack or damage is found, contact Product Support Engineering for repair procedure. **NOTE** Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 66	**3.** Inspect transmission for evidence of oil leakage and correct oil level. F5/F6		
Chapter 66	**4.** Remove transmission chip detectors. Inspect and clean detectors and test electrical circuits. Install chip detectors. R1		
Chapter 66	**5.** Inspect the left longitudinal isolation mount and support for damage and security. F5		
Chapter 66	**6.** Inspect the right longitudinal isolation mount and support, and the lateral isolation mount and support for damage and security. F6		

SCHEDULED INSPECTIONS

5-26. PROGRESSIVE INSPECTION — EVENT 11 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 66	**7.** Inspect rotor brake assembly for evidence of hydraulic leakage, security of attachment, and excessive wear of brake linings. Check brake disc for damage. Check reservoir for fluid level and discoloration. R1/F6		
Chapter 66 BHT-222-CR&O-3	**8.** Inspect tail rotor driveshaft coupling overtemperature indicators (TEMP-PLATES) for evidence of overheating (discoloration) and grease leakage. R1		
Chapter 66 BHT-222-CR&O-3	**9.** Inspect main driveshafts overtemperature indicators (TEMP-PLATES) on transmission-end and engine-end driveshaft couplings for evidence of overheating (discoloration) and grease leakage. R1 **NOTE** Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 12 Chapter 79	**10.** Inspect right and left engine oil tanks and lines for evidence of leakage. Check for proper quantity of oil. F5/F6		
Chapter 66	**11.** Visually inspect the outboard and inboard collective lever idler link attachment points for condition in area of lugs in transmission top case. R1		
BHT-222-CR&O-2	**12.** Inspect hydraulic actuator support attaching nuts for proper torque. R1		
Chapter 65	**13.** Inspect cyclic and collective control levers, swashplate assembly, drive assembly, and links for evidence of damage, security, and corrosion. Inspect walking beam pitch change bearings, ensuring that seals and shields are in place and pitch link clevis is properly aligned with walking beam. If seals and/or shields are missing or loose, bearing must be replaced. R1		
BHT-222-CR&O-2	**14.** Inspect main rotor hub for damage and security, static stops for damage from hard mast contact, and trunnion shims for condition. Inspect yoke for condition in area around flapping bearing attachment bushings. Inspect pendulum dampers for freedom of movement. R1		

SCHEDULED INSPECTIONS

5-26. PROGRESSIVE INSPECTION — EVENT 11 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
BHT-222-CR&O-2	**15.** Visually inspect the accessible portion of the main rotor elastomeric pitch axis bearings, trunnion bearings, and flapping springs for evidence of delamination or loss of elastomer. R1		
Chapter 65	**16.** Inspect main rotor blades for obvious damage and for cleanliness. R1		
Chapter 27 BHT-ALL-SPM	**17.** Inspect roof mounted cyclic and collective shaft assemblies and control tubes for bearing corrosion or mechanical damage, wear, and security of attachment. F5/F6 **NOTE** Examine inspection window(s) and/or glass(es) for cracking and discoloration. If either of these conditions are present, the part must be removed and replaced prior to returning helicopter for service.		
Chapter 29	**18.** Inspect hydraulic lines for leaks, system PC-1 and PC-2 reservoirs for proper level and discoloration of fluid, and module for differential pressure indication. Check for chafe guard deterioration, and verify flexible hoses are in satisfactory condition and exhibit no indications of chafing. F5/F6		

SCHEDULED INSPECTIONS

5-27. PROGRESSIVE INSPECTION — EVENT 12

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____		
	FACILITY: _____		
	HELICOPTER S/N: _____		
	REGISTRY NO.: _____		
	TOTAL TIME: _____		
	SIGNATURE: _____		
	GENERAL		
Paragraph 5-13	**1.** Perform a complete 50-hour inspection.		
	DETAIL		
Chapter 96	**1.** Remove battery. Inspect vent lines for obstructions or damage, and clean battery mounting area prior to installing a serviceable battery. F1/F2		
Chapter 52 Chapter 96	**2.** Inspect nose compartment electrical components for condition and security of mounting, all electrical harnesses and cables for frayed wires, loose or broken clamps and fasteners. Inspect nose door for obvious damage and security of latching. F1/F2		
Chapter 95	**3.** Inspect pitot tube(s) for security of attachment. F1/F2		
Chapter 52	**4.** Inspect crew doors, passenger doors, and baggage compartment doors for corrosion damage, distortion, positive locking mechanisms, seals for tears or separations, and doors for security of attachment. F1/F2, F3/F4		
Chapter 25	**5.** On helicopters equipped with emergency exit windows in the passenger doors and/or aft window position, inspect as follows after removing interior trim from around windows: F3/F4		

SCHEDULED INSPECTIONS

5-27. PROGRESSIVE INSPECTION — EVENT 12 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	a. On passenger door only, visually inspect window retainer to door frame bond. Replace the retainer if it is not securely bonded to the frame at all points except at the two lower corners. F3/F4		
	b. Visually inspect the inboard side of all rubber retainers. Any nicks or cracks in the retainer is cause for replacement of the retainer. F3/F4		
	c. Check that all filler strips and pull tab are firmly seated in their retainer grooves. F3/F4		
Chapter 25	**d.** Install interior trim. F3/F4		
Chapter 25	**6.** Inspect seat cushions and seat backs for tears, excessive deterioration, and security of attachment. F1/F2, F3/F4		
Chapter 25	**7.** Inspect seat assemblies for security of attachment. F1/F2, F3/F4		
Chapter 25	**8.** Inspect safety belts and shoulder harnesses for deterioration and security of attachment. F1/F2, F3/F4		
Chapter 26	**9.** Inspect cabin fire extinguisher for security and condition, damage, corrosion, and quick opening clamp for operation and security. F1/F2		
Chapter 11 Chapter 95 Applicable Flight Manual	**10.** Inspect placards and instrument panel decals, and all instrument markings for appearance and legibility. F1/F2		
	11. Inspect first aid kit contents. Replace any items that are damaged or time expired. Replace any items with deteriorated packaging. F2		

SCHEDULED INSPECTIONS

5-27. PROGRESSIVE INSPECTION — EVENT 12 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	CAUTION INGESTION OF BROKEN INLET SCREEN SEGMENTS CAN CAUSE FOREIGN OBJECT DAMAGE TO ENGINE COMPRESSOR SECTION.		
Chapter 71	**12.** Inspect both engine inlet screens for damage. F5/F6		
Chapter 71	**13.** Inspect all firewalls and fireshields for cracks, distortion, loose or missing rivets, broken spot welds, and deteriorating seals and sealant. E1/E2		
Chapter 71	**14.** Inspect left power plant area for evidence of fuel and oil leaks, flexible and rigid fuel and oil lines for wear, chafing, damage, and security of attachment. E1		
Chapter 71	**15.** Inspect left engine mounts and accessories for damage and security of attachment. E1		
Chapter 76	**16.** Inspect left engine throttle control housing, push rod, and lever for wear or lost motion and for security of attachment. E1		
	17. Inspect left engine ejector for security of attachment at plenum and support link.		
Chapter 71	**18.** Remove left engine air inlet duct assembly. Inspect duct assembly for delamination. Inspect reverse flow baffle door for security of attachment and general condition.		
Chapter 71	**19.** Inspect right power plant area for evidence of fuel and oil leaks, flexible and rigid fuel and oil lines for wear, chafing, damage, and security of attachment. E2		
Chapter 71	**20.** Inspect right engine mounts and accessories for damage and security of attachment. E2		
Chapter 76	**21.** Inspect right engine throttle control push rod, lever, and bellcrank for lost motion and security of attachment. E2		
	22. Inspect right engine ejector for security of attachment at plenum and support link.		

SCHEDULED INSPECTIONS

5-27. PROGRESSIVE INSPECTION — EVENT 12 (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Chapter 71	**23.** Remove right engine air inlet duct assembly. Inspect duct assembly for delamination. Inspect reverse flow baffle door for security of attachment and general condition.		
Chapter 65 BHT-222-CR&O-2	**24.** For all main rotor hub assemblies, verify torque of main rotor grip(s) retaining bolts/nuts. Apply 100 foot-pounds (135 Nm) of torque to the nut, in the tightening direction. Provided 100 foot-pounds (135 Nm) of torque is reached without movement of the nut, torque the bolt/nut to 125 foot-pounds (169 Nm). If any nut moves before 100 foot-pounds (135 Nm) of torque is reached, remove grip from main rotor hub assembly. Inspect/repair pitch horn and grip assemblies. R1		

SCHEDULED INSPECTIONS

5-28. EVERY 100 HOURS OF COMPONENT OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
	MAIN BEAM/ROOF FRAME JOINT		
Paragraph 5-32	**NOTE** If TB 222-86-92 (Addition of Hi-Lock Fastener), TB 222-88-114 (Installation of Main Beam) and TB 222-91-129 (Star Doubler Installation) have been accomplished, the inspection interval is 300 hours.		
Paragraph 5-36	**NOTE** Additionally, if referenced TBs have been accomplished and roof frame 222-031-503-105 or subsequent has been installed, the inspection interval is 600 hours.		
	1. Remove cover at FS 240, BL 12 on the right interior roof skin and inspect outboard side of main beam 222-031-583 bulkhead joint for crack(s).		
	2. Inspect attachment flange of roof frame 222-031-503 for crack(s).		
	3. At station 233, inspect front and aft portion of roof frame 222-031-503 from BL 0.0 to the right side attachment flange with the main beam 222-031-583 for cracks. Pay particular attention to the area in line with the inboard leg of star doubler. If a crack is found, contact Bell Helicopter Textron Customer Representative.		

SCHEDULED INSPECTIONS

5-28. EVERY 100 HOURS OF COMPONENT OPERATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	LANDING GEAR **NOTE** This inspection is not required if landing gear trunnion 3965001-7 is installed. **NOTE** Clean nose landing gear trunnion prior to inspection with a 10 to 15% solution of cleaning compound (C-318) and water. **1.** Using a bright light, visually inspect nose landing gear trunnion webs for cracks and corrosion. Pay particular attention to the left 45° web that extends from pivot shaft to cylinder attachment ring.		

SCHEDULED INSPECTIONS

5-29. EVERY 150 HOURS OF COMPONENT OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____ **SWASHPLATE CONTROLS** **NOTE** This inspection is applicable to drive pins 222-010-455-003 installed in rotating ring assemblies 222-010-403-005 and/or -113.		
Chapter 65	**1.** Disconnect both drive link assemblies from swashplate rotating ring. Inspect trunnion bearing for roughness and/or looseness. Replace bearing(s) if damaged or rough. F5/F6 **2.** Check both swashplate rotating ring drive pins 222-010-455-003 for adequate interference fit as follows: **a.** Clean and inspect drive pin 222-010-455-003 for damage and looseness. Any defect is cause for replacement. **b.** Using a marker, create a straight slip mark on the rotating ring/drive pin joint.		

SCHEDULED INSPECTIONS

5-29. EVERY 150 HOURS OF COMPONENT OPERATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	NOTE During the drive pin(s) torque check procedure, deflection of the torque wrench and the offset extension may be noticed when torque is applied. This deflection could be perceived as pin rotation. Therefore, it is important that clear and precise index marks on the pins and the ring exist so that rotation can be verified by visible displacement between the marks. **NOTE** The head of drive pin 222-010-455-003 has two flats that fit into a clearance slot inside the rotating ring. An unacceptable interference fit will allow the pin to rotate within the slot at a torque less than 50 foot-pounds (67.79 Nm). The motion will be small, but can easily be detected using procedures in step e and step f that follow. An acceptable interference fit will allow zero pin rotation during the torque check procedure at 50 foot-pounds (67.79 Nm) of torque. **c.** Align the rectangular hole of torque test tool 230-210-100-101 on the wrenching flats of the drive pin to be tested. Secure the tool to the pin with one thrust washer and nut. Torque the retaining nut 6 to 12 foot-pounds (8.13 to 16.27 Nm). **NOTE** A calibrated dial type torque wrench is recommended for this torque check. However, if a click type wrench is used, apply torque with a slow, smooth motion. Otherwise, the 50 foot-pound (67.79 Nm) torque may be exceeded. **d.** Attach the torque wrench vertically (90° to the centerline of the tool) to the outboard end of the torque test tool.		

SCHEDULED INSPECTIONS

5-29. EVERY 150 HOURS OF COMPONENT OPERATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
BHT-ALL-SPM	**WARNING** APPLICATION OF TORQUE IN EXCESS OF 50 FOOT-POUNDS (67.79 NM) COULD RESULT IN A BREAKDOWN OF THE PRIMER ADHESION AND SUBSEQUENT PIN ROTATION, WHICH IS CAUSE FOR REMOVAL FROM SERVICE OF THE RING ASSEMBLY. **e.** Apply a maximum torque of 50 foot-pounds (67.79 Nm) in the clockwise/right direction. Verify the slip mark on the rotating ring/drive pin joint. Any misalignment of the slip mark indicating rotation of the drive pin is cause for rejection of the swashplate rotating ring. **f.** Apply a maximum torque of 50 foot-pounds (67.79 Nm) in the counterclockwise/left direction. Verify the slip mark on the rotating ring/drive pin joint. Any misalignment of the slip mark indicating rotation of the drive pin is cause for rejection of the swashplate rotating ring. **g.** If no rotation of the drive pin(s) is observed, inspect the pin(s) for visible damage. Repair any raised material on the wrenching flats of the drive pin(s) and refinish rework areas as required.		

SCHEDULED INSPECTIONS

5-30. DELETED

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER

SCHEDULED INSPECTIONS

5-31. AFTER FIRST 300 HOURS AND EACH 50 HOURS THEREAFTER

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____ **SWASHPLATE DUPLEX BEARING** **NOTE** The following inspection is not required if triplex bearing set 222-310-476-101 is installed. **1.** Disconnect swashplate drive links and inspect swashplate duplex bearing 222-310-470-001 by applying pressure in both up and down position while rotating the outer ring. If binding or roughness is found, the bearing must be replaced.		

SCHEDULED INSPECTIONS

5-32. EVERY 300 HOURS OF COMPONENT OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
	SWASHPLATE CONTROLS		
	1. Clean and inspect collective friction collet. Inspect drive hub assembly for interference, security of attachment, mechanical damage, or corrosion. F5/F6		
Chapter 65	**2.** Check collet friction and adjust as required.		
	3. Remove pitch change links and inspect the following bearings:		
	a. Upper pitch link bearing for axial looseness in excess of 0.015 inch (0.38 mm). Replace bearing if limits are exceeded.		
	b. Lower pitch link bearing in walking beam for roughness. Check pitch link bearing by misaligning inner race and rotating while applying slight radial force. Replace bearing if roughness is felt when rotating inner race.		
Chapter 65	**4.** Disconnect both drive link assemblies from swashplate rotating ring. Inspect trunnion bearing for roughness and/or looseness. Replace bearing(s) if damaged or rough.		
Chapter 65	**5.** Disconnect both cyclic links, check swashplate friction, and adjust as required.		

SCHEDULED INSPECTIONS

5-32. EVERY 300 HOURS OF COMPONENT OPERATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	NOTE This inspection is applicable to drive pins 230-010-402-101 and -103 installed in any rotating ring assembly.		
Chapter 65	**6.** Disconnect both drive link assemblies from swashplate rotating ring. Inspect trunnion bearing for roughness and/or looseness. Replace bearing(s) if damaged or rough. F5/F6		
	7. Check both swashplate rotating ring drive pins 230-010-402-101/-103 for adequate interference fit as follows:		
	a. Clean and inspect drive pin 230-010-402-101/-103 for damage and looseness. Any defect is cause for replacement.		
	b. Using a marker, create a straight slip mark on the rotating ring/drive pin joint.		
	NOTE During the drive pin(s) torque check procedure, deflection of the torque wrench and the offset extension may be noticed when torque is applied. This deflection could be perceived as pin rotation. Therefore, it is important that clear and precise index marks on the pins and the ring exist so that rotation can be verified by visible displacement between the marks.		
	NOTE The head of drive pin 230-010-402-101/-103 has two flats that fit into a clearance slot inside the rotating ring. An unacceptable interference fit will allow the pin to rotate within the slot at a torque less than 50 foot-pounds (67.79 Nm). The motion will be small, but can easily be detected using procedures in step e and step f that follow. An acceptable interference fit will allow zero pin rotation during the torque check procedure at 50 foot-pounds (67.79 Nm) of torque.		

SCHEDULED INSPECTIONS

5-32. EVERY 300 HOURS OF COMPONENT OPERATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	c. Align the rectangular hole of torque test tool 230-210-100-101 on the wrenching flats of the drive pin to be tested. Secure the tool to the pin with one thrust washer and nut. Torque the retaining nut 6 to 12 foot-pounds (8.13 to 16.27 Nm). **NOTE** A calibrated dial type torque wrench is recommended for this torque check. However, if a click type wrench is used, apply torque with a slow, smooth motion. Otherwise, the 50 foot-pound (67.79 Nm) torque may be exceeded. **d.** Attach the torque wrench vertically (90° to the centerline of the tool) to the outboard end of the torque test tool. **WARNING** APPLICATION OF TORQUE IN EXCESS OF 50 FOOT-POUNDS (67.79 NM) COULD RESULT IN A BREAKDOWN OF THE PRIMER ADHESION AND SUBSEQUENT PIN ROTATION, WHICH IS CAUSE FOR REMOVAL FROM SERVICE OF THE RING ASSEMBLY. **e.** Apply a maximum torque of 50 foot-pounds (67.79 Nm) in the clockwise/right direction. Verify the slip mark on the rotating ring/drive pin joint. Any misalignment of the slip mark indicating rotation of the drive pin is cause for rejection of the swashplate rotating ring. **f.** Apply a maximum torque of 50 foot-pounds (67.79 Nm) in the counterclockwise/left direction. Verify the slip mark on the rotating ring/drive pin joint. Any misalignment of the slip mark indicating rotation of the drive pin is cause for rejection of the swashplate rotating ring.		

SCHEDULED INSPECTIONS

5-32. EVERY 300 HOURS OF COMPONENT OPERATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
BHT-ALL-SPM	**g.** If no rotation of the drive pin(s) is observed, inspect the pin(s) for visible damage. Repair any raised material on the wrenching flats of the drive pin(s) and refinish rework areas as required. **8.** Inspect swashplate and lever assembly paying particular attention to ball sleeve and slider assemblies as follows: **a.** Tilt the swashplate to one side and subsequently to the opposite side to expose each slider in turn. While viewing each slider, apply a rotational force to the swashplate non-rotating ring in alternating directions. Carefully observe the slider bolt, looking for radial movement. Any evidence of radial movement or fretting residue will require further disassembly of the swashplate for inspection and repair. **b.** Inspect ball sleeve assembly for evidence of debonding or fretting of upper and lower sleeves. Any evidence of looseness or fretting residue will require further disassembly of swashplate for inspection and repair. **c.** Move ball sleeve up and down through full range of travel and inspect swashplate support for surface damage and evidence of radial play between ball sleeve assembly and support. Surface damage and/or evidence of radial play will require further disassembly of swashplate for inspection and repair.		
	ENGINE STARTER GENERATOR		
BHT-222-CR&O-V.2	**NOTE** Inspection intervals may be established per the manufacturer's recommendations, as an alternate means of compliance.		
Chapter 96	**1.** Inspect right engine starter generator brushes for wear down to the diagonal groove wear indicator. E2		
Chapter 96	**2.** Inspect left engine starter generator brushes for wear down to the diagonal groove wear indicator. E1		

SCHEDULED INSPECTIONS

5-32. EVERY 300 HOURS OF COMPONENT OPERATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	MAIN BEAM/ROOF FRAME JOINT		
Paragraph 5-36	**NOTE** If TB 222-86-92 (Additional of Hi-Lock Fastener), TB 222-88-114 (Installation of Main Beam) and TB 222-91-129 (Star Doubler Installation) have been accomplished and roof frame 222-031-503-105 or subsequent has been installed, inspection interval is 600 hours.		
	1. Remove cover at FS 240, BL 12 on the right interior roof skin and inspect outboard side of main beam 222-031-583 bulkhead joint for crack(s).		
	2. Inspect attachment flange of roof frame 222-031-503 for crack(s).		
	3. At station 233, inspect front and aft portion of roof frame 222-031-503 from BL 0.0 to the right side attachment flange with the main beam 222-031-583 for cracks. Pay particular attention to the area in line with the inboard leg of star doubler. If a crack is found, contact Bell Helicopter Textron Customer Representative.		
	HYDRAULIC PUMP SPLINES		
Paragraph 5-37	**NOTE** If TB 222-88-115 (Hydraulic Pump, Vespel Driveshaft) has been accomplished, inspection interval is 1200 hours.		
Chapter 12 Chapter 29	**1.** Remove left hydraulic pump. Inspect pump drive spline and transmission adapter gear spline for wear. Lubricate splines.		
Chapter 12 Chapter 29	**2.** Remove right hydraulic pump. Inspect pump drive spline and transmission adapter gear spline for wear. Lubricate splines.		

SCHEDULED INSPECTIONS

5-32. EVERY 300 HOURS OF COMPONENT OPERATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	HORIZONTAL STABILIZER **NOTE** This inspection is not applicable to 222-035-250-107 and -109. **1.** X-ray horizontal stabilizer 222-035-250-103 and -105. Refer to ASB 222-89-53 for inspection procedure.		

SCHEDULED INSPECTIONS

5-33. (MODEL 222) 300 AND 900 HOURS AFTER INITIAL INSTALLATION (SPRINGLESS DRIVESHAFT ONLY)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
Chapter 66	**ENGINE DRIVESHAFT ADAPTER 222-044-066** A torque check of the adapter retaining bolt is required at initial installation of the springless driveshaft assembly and after 300 and 900 hours of operation. **1.** Remove main driveshaft utilizing plate assembly T103031-107 (or a suitable alternate), hold engine adapter, and verify retaining bolt torque (35 to 45 foot-pounds) (47.50 to 61.0 Nm). If torque is low, remove the bolt and perform visual and magnetic particle inspection. Wear or crack indications on the bolt are cause for rejection. Each time a low torque condition is encountered, the torque check must be repeated at 300 and 900 hours of operation until the torque of the bolt stabilizes at both intervals. **2.** When the torque of the bolt has stabilizes at both 300 and 900 hours of operation, the torque check inspection is no longer required provided the same bolt, engine adapter, and engine combination is maintained and not disassembled. Replacement of any of these components will require the bolt torque check inspection to be repeated.		

SCHEDULED INSPECTIONS

5-34. EVERY 600 HOURS OR 6 MONTHS OF COMPONENT OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
	ENGINE FIRE EXTINGUISHER AND CARTRIDGE		
Chapter 26 Chapter 96	**1.** Inspect right engine fire extinguisher for dents and scratches. Perform operational test of engine fire extinguisher system.		
Chapter 26 Chapter 96	**2.** Inspect left engine fire extinguisher for dents and scratches. Perform operational test of engine fire extinguisher system.		

SCHEDULED INSPECTIONS

5-35. EVERY 600 HOURS OR 12 MONTHS OF COMPONENT OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____		
	FACILITY: _____		
	HELICOPTER S/N: _____		
	REGISTRY NO.: _____		
	TOTAL TIME: _____		
	SIGNATURE: _____		
	MAIN DRIVESHAFT		
Chapter 12 BHT-222-CR&O-2	**1.** Inspect and lubricate the right main driveshaft.		
Chapter 12 BHT-222-CR&O-2	**2.** Inspect and lubricate the left main driveshaft.		
	TAIL ROTOR DRIVESHAFT		
Chapter 12 BHT-222-CR&O-3	**1.** Inspect and lubricate tail rotor driveshaft flexible coupling. F5/F6		
	MAIN ROTOR MAST ASSEMBLY		
	NOTE Removal of the main rotor hub assembly and main rotor swashplate assembly is not required to inspect the exposed external surfaces of the mast located above the transmission.		
BHT-222-CR&O-2	**1.** Inspect the electroless nickel coated area of the mast.		
BHT-222-CR&O-2	**2.** Inspect the exposed external surfaces of the mat located above the transmission.		

SCHEDULED INSPECTIONS

5-35. EVERY 600 HOURS OR 12 MONTHS OF COMPONENT OPERATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	3. Inspect the Teflon liners on the inboard surface of all the fingers of collective friction collet for condition, wear, and debonding.		

SCHEDULED INSPECTIONS

5-36. EVERY 600 HOURS OF COMPONENT OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
Paragraph 5-28	**MAIN BEAM/ROOF FRAME JOINT** **NOTE** If TB 222-86-92 (Additional of Hi-Lock Fastener), TB 222-88-114 (Installation of Main Beam) and TB 222-91-129 (Star Doubler Installation) have not been accomplished, the main beam/roof frame joint shall be inspected every 100 hours. **1.** Remove cover at FS 240, BL 12 on the right interior roof skin and inspect outboard side of main beam 222-031-583 bulkhead joint for crack(s). **2.** Inspect attachment flange of roof frame 222-031-503 for crack(s). **3.** At station 233, inspect front and aft portion of roof frame 222-031-503 from BL 0.0 to the right side attachment flange with the main beam 222-031-583 for cracks. Pay particular attention to the area in line with the inboard leg of star doubler. If a crack is found, contact Bell Helicopter Textron Customer Representative.		

SCHEDULED INSPECTIONS

5-36. EVERY 600 HOURS OF COMPONENT OPERATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	TRANSMISSION **NOTE** Whenever outboard collective lever idler link bushings are inspected/measured, the inner floating bushings 222-010-483-001 must also be inspected for damage and wear. New bushing dimensions are: inside diameter: 0.6250 to 0.6255 inch (15.87 to 15.89 mm) and outside diameter: 0.8740 to 0.8745 inch (22.20 to 22.21 mm). **1.** Inspect inner diameter of the two outboard collective lever idler link bushings on the transmission top case 222-040-061 for wear in excess of 0.8774 inch (22.28 mm). Take measurements at two points, 90° apart. If bushing(s) wear exceeds above limits, replace bushing(s) per TB 222-02-169. **NOTE** The following inspections are not required on transmission modified in accordance with TB 222-84-65 or TB 222-84-66 and 222-00-163, and serviced with 555 lubricating oil, specification DOD-PRF-85734 (AS). **2.** Visually inspect gear teeth of six pinions for excessive wear or pitting. Pitting may be in the form of micropits: very minute pit near the top or bottom edges of gear teeth, which may cause a frosted or etched appearance in the advanced stages. **3.** Visually inspect gear teeth of sun gear for excessive wear or pitting.		
Chapter 66 BHT-222-CR&O-2	**LIFT LINK** **1.** Remove lift links and inspect rod end bearings elastomerics for separation/delamination and serviceability. F5/F6		

SCHEDULED INSPECTIONS

5-36. EVERY 600 HOURS OF COMPONENT OPERATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	OIL COOLER BLOWER		
Chapter 12	**NOTE** If TB 222-92-132 (Oil Cooler Blower Torlon Drive) has not been accomplished, the oil cooler blower drive splines shall be lubricated every 300 hours.		
Chapter 71	**1.** Inspect left engine oil cooler blower.		
Chapter 71	**2.** Inspect right engine oil cooler blower.		

SCHEDULED INSPECTIONS

5-37. EVERY 1200 HOURS OF COMPONENT OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
	HYDRAULIC PUMP SPLINES		
Paragraph 5-32	**NOTE** If TB 222-88-115 (Hydraulic Pump, Vespel Driveshaft) has been accomplished, inspection interval is 300 hours.		
Chapter 29	**1.** Remove left hydraulic pump. Inspect pump drive spline and transmission adapter gear spline for wear. F5		
Chapter 29	**2.** Remove right hydraulic pump. Inspect pump drive spline and transmission adapter gear spline for wear. F6		

SCHEDULED INSPECTIONS

5-38. EVERY 2500 HOURS OF COMPONENT OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
	MAIN ROTOR HUB **NOTE** This inspection is applicable to all main rotor hub assemblies 222-011-101 and 222-012-101.		
Chapter 65	**1.** Remove main rotor hub and blades.		
	2. Disassemble and clean main rotor hub.		
	NOTE It is not necessary to remove the flapping bearings from the trunnion to accomplish this inspection.		
BHT-ALL-SPM	**3.** Perform a fluorescent penetrant inspection of the following parts: **a.** Grip assembly **b.** Pitch horn assembly		

SCHEDULED INSPECTIONS

5-38. EVERY 2500 HOURS OF COMPONENT OPERATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
BHT-ALL-SPM	**4.** Perform magnetic particle inspection on the following parts: **NOTE** Some of the bolts used in these applications are manufactured from non-magnetic material. For those bolts, fluorescent penetrant inspection method (BHT-ALL-SPM is acceptable in leu of magnetic particle inspection requirement. **a.** Pitch horn to grip attachments bolts **NOTE** Some of the bolts used in these applications are manufactured from non-magnetic material. For those bolts, fluorescent penetrant inspection method (BHT-ALL-SPM is acceptable in leu of magnetic particle inspection requirement. **b.** Flapping bearing to yoke attachment bolts		
BHT-222-CR&O-2	**5.** Install new buffers on the pitch horn assemblies and flapping bearing assemblies.		
BHT-222-CR&O-2	**6.** Reassemble main rotor hub.		
Chapter 65	**7.** Install main rotor hub and blades.		

SCHEDULED INSPECTIONS

5-39. EVERY 6 MONTHS

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ W.O. _____ FACILITY: _____ HELICOPTER S/N: _____ REGISTRY NO.: _____ TOTAL TIME: _____ SIGNATURE: _____		
	STANDBY ATTITUDE INDICATOR		
Chapter 95	**1.** Test the pilot standby attitude indicator power supply.		

SCHEDULED INSPECTIONS

5-40. EVERY 2 CALENDAR YEARS

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
Chapter 95	**PITOT STATIC SYSTEM** **1.** Drain any accumulated moisture from the pitot-static system piping. F1/F2		
Chapter 65 BHT-ALL-SPM	**FLIGHT CONTROLS** **1.** Inspect flight control bolts. R1 **NOTE** More frequent inspection of control bolts may be required when operating in adverse environmental conditions. **a.** Remove the following bolts: • Main rotor pitch link universal bearing lower (2) • Main rotor pitch link lower (2) • Main Rotor pitch link universal bearing upper (2) • Collective lever to servo (1) • Cyclic lever to servo (2) • Swashplate horn to cyclic links (2)		

SCHEDULED INSPECTIONS

5-40. EVERY 2 CALENDAR YEARS (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	• Walking beam to drive hub (2) • Walking beam to drive link (2) • Idler link to transmission top case (2) • Collective levers to idler link (2) • Cyclic link to cyclic lever (2) **b.** Clean bolts with cloth damp with MEK (C-309). **c.** Visually inspect bolts for thread damage, shank wear, and corrosion. Replace bolts that show evidence of damaged threads, shank wear, or corrosion pitting.		
Chapter 65 BHT-ALL-SPM	**d.** Apply corrosion preventive compound (C-104) to shanks of bolts only and install. **e.** After bolts are installed, torqued, and lockwired, coat bolt heads and nuts with corrosion preventive compound (C-101).		
Chapter 53 BHT-ALL-SPM	**VERTICAL FIN** **1.** Remove vertical fin. Discard nuts. **2.** Inspect the vertical fin and tailboom fittings for cracks, elongation of bolt holes, distortion, and corrosion. **3.** Inspect attaching bolts for serviceability. **4.** Temporarily install vertical fin to tailboom using serviceable hardware. Tighten hardware 5 inch-pounds (0.5 Nm) plus tare. Using feeler gauge, measure gap at eight locations where vertical fin fitting contacts tailboom fitting. Gap shall be less than 0.003 inch (0.076 mm). If gap is larger than 0.003 inch (0.076 mm), fill gap using shim 120-008C40E11. Maximum allowable shim thickness to be 0.010 inch (0.254 mm). Remove vertical fin.		

SCHEDULED INSPECTIONS

5-40. EVERY 2 CALENDAR YEARS (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	CAUTION ATTACHING HARDWARE SHALL BE TORQUED TO SPECIFIED TORQUE WITHIN 60 MINUTES AFTER APPLICATION OF SEALANT. **5.** Apply sealant (C-308) to faying surface of vertical fin fitting and tailboom fitting. Install shim (if required). **6.** Apply corrosion preventive compound (C-104) to shank only of all attaching bolts. **CAUTION** HARDWARE AND TORQUE REQUIREMENTS OF THE VERTICAL FIN INSTALLATION ARE AFFECTED BY ACCOMPLISHMENT OF TB 222-98-156.		
Chapter 53 BHT-ALL-SPM	**7.** Install vertical fin to tailboom using bolts, washers, and nuts. Torque attaching bolts/nuts as required. **8.** Coat all bolt heads, nuts, and washers with corrosion preventive compound (C-101).		

SCHEDULED INSPECTIONS

5-41. EVERY 3 CALENDAR YEARS

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____		
	FACILITY: _____		
	HELICOPTER S/N: _____		
	REGISTRY NO.: _____		
	TOTAL TIME: _____		
	SIGNATURE: _____		
	HYDRAULIC SYSTEM RESERVOIR		
Chapter 29	**1.** Replace hydraulic system PC-1 reservoir baffle. F6		
Chapter 29	**2.** Replace hydraulic system PC-2 reservoir baffle. F5		
	EMERGENCY FLOTATION SYSTEM		
	NOTE This inspection applies to any reservoir/cylinder that has been manufactured or last retested prior to July 1, 2006.		
Chapter 99 BHT-222-SI-20 BHT-222-SI-25	**1.** Remove emergency flotation system nitrogen reservoir. Perform a hydrostatic test in accordance with DOT-SP-8162 cylinder inspection.		

SCHEDULED INSPECTIONS

5-42. EVERY 5 CALENDAR YEARS

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
	FIRE EXTINGUISHER RESERVOIR		
Chapter 4	**NOTE** Refer to Airworthiness Limitations for squib replacement intervals.		
Chapter 26	**1.** Remove the right fire extinguisher reservoir. Do a hydrostatic test in accordance with specification DOT-4 DA, DOT-4 DS, or DOT-SP-7945 as marked on container. F4		
Chapter 26	**2.** Remove the left fire extinguisher reservoir. Do a hydrostatic test in accordance with specification DOT-4 DA, DOT-4 DS, or DOT-SP-7945 as marked on container. F3		
	EMERGENCY FLOTATION SYSTEM		
	NOTE This inspection applies to any reservoir/cylinder that has been manufactured or last retested after July 1, 2006.		
Chapter 99 BHT-222-SI-20 BHT-222-SI-25	**1.** Remove emergency flotation system nitrogen reservoir. Perform a hydrostatic test in accordance with DOT-SP-8162 cylinder inspection.		

SCHEDULED INSPECTIONS

5-43. EVERY 10 CALENDAR YEARS

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____ **MAIN ROTOR MAST ASSEMBLY (TORQUEMETER)** **NOTE** This inspection is only applicable for mast assemblies P/N 222-040-130-1, 222-040-130-101, 222-040-130-107 and 222-040-130-109. For mast assemblies P/N 222-040-130-113 and subsequent, this inspection does not need to be done.		
BHT-222-CR&O-2	**1.** Mast assembly must be disassembled and inspected for corrosion, both externally and internally, in addition to the inspection criteria of the BHT-222-CR&O-2. The torquemeter shaft must be removed to inspect the inside diameter. The mast assembly must be returned to Bell Helicopter Textron for reindexing of the mast torque sensing components. R1		

SPECIAL INSPECTIONS

5-44. SPECIAL INSPECTIONS

Special inspections are a one-time inspection that must be performed at specified times following certain maintenance actions.

The parts affected include the following:

- Main Rotor Hub (after every main rotor hub disassembly)
- Main Rotor Trunnion (after the first flight following each installation)
- Tail Rotor Hub Retention Nut (after 1 to 5 hours of operation following each installation)
- Main Rotor Mast Nut (after 5 to 10 hours of operation following each installation)
- Engine Tailpipe Coupling (after 5 to 10 hours of operation following each installation)
- Vertical Fin (after 5 to 10 hours of operation following each installation)
- Main Rotor Hub (after 5 to 10 hours of operation following each installation)
- Hydraulic Actuator Support (after 5 to 10 hours of operation following each installation)
- Tail Rotor Hub and Blades (after 5 to 10 hours of operation following each installation)
- Swashplate (after 25 hours of operation following each installation)
- Main Rotor Trunnion (after 25 hours of operation following each installation)
- Tail Rotor Gearbox (after 100 hours of operation following each installation)

SPECIAL INSPECTIONS

5-45. AFTER EVERY MAIN ROTOR HUB DISASSEMBLY

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____ **MAIN ROTOR HUB** **NOTE** This inspection is to be performed every time the main rotor hub is disassembled to the extent allowing inspection of the buffers installed on the pitch horns and the flapping bearings.		
BHT-222-CR&O-2	**1.** When the main rotor hub is disassembled, inspect condition of the buffers on the pitch horns, flapping bearings, and the yoke assembly. No defect allowed. Install new buffers as required. R1		

SPECIAL INSPECTIONS

5-46. AFTER FIRST FLIGHT FOLLOWING EACH INSTALLATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
BHT-222-CR&O-2	**MAIN ROTOR TRUNNION** **1.** Verify torque of main rotor trunnion bolts in the tightening direction, minimum 45 foot-pounds (61 Nm). Provided 45 foot-pounds (61 Nm) is reached without movement of bolts, torque bolts to 53 foot-pounds (72 Nm). If any bolt moves before 45 foot-pounds (61 Nm) is reached, remove all six bolts and visually inspect for crack(s) or sign(s) of yielding. If any defective bolts are found, replace all six bolts. If no defects are found, reinstall bolts. R1		

SPECIAL INSPECTIONS

5-47. AFTER 1 TO 5 HOURS OF OPERATION FOLLOWING EACH INSTALLATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
Chapter 66	**TAIL ROTOR HUB RETENTION NUT** **1.** Following each installation, verify torque of retention nut attaching the tail rotor hub assembly to the tail rotor gearbox output shaft. Repeat the torque verification every 1 to 5 hours until torque stabilizes to 40 to 50 foot-pounds (54 to 68 Nm). R2		

SPECIAL INSPECTIONS

5-48. AFTER 5 TO 10 HOURS OF OPERATION FOLLOWING EACH INSTALLATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
	MAIN ROTOR MAST NUT		
Chapter 65	**1.** Following each installation, verify torque of nut to 475 to 675 foot-pounds (644 to 915 Nm) after a minimum of 5 hours, but not to exceed 10 hours of service. R1		
	ENGINE TAILPIPE COUPLING		
	1. Following each installation, verify torque of coupling nut 70 to 100 inch-pounds (7.9 to 11.3 Nm) after initial engine run, and every 5 to 10 hours thereafter until torque remains within limit for three consecutive inspections.		
Chapter 53	**VERTICAL FIN**		
	CAUTION HARDWARE AND TORQUE REQUIREMENTS OF THE VERTICAL FIN INSTALLATION ARE AFFECTED BY ACCOMPLISHMENT OF TB 222-98-156.		
	1. Following each installation, make sure the torque of the retention bolts/nuts is correct after a minimum of 5 hours, but not to exceed 10 hours of service. Apply the highest value of specified torque range to the nut while restraining the bolt head.		

SPECIAL INSPECTIONS

5-48. AFTER 5 TO 10 HOURS OF OPERATION FOLLOWING EACH INSTALLATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	MAIN ROTOR HUB		
BHT-222-CR&O-2	**1.** Following each installation, verify torque of main rotor grip(s) retaining bolt/nuts to 125 foot-pounds (169 Nm) after a minimum of 5 hours, but not to exceed 10 hours of service.		
BHT-222-CR&O-2	**2.** Following each installation, verify torque of main rotor flapping bearing(s) retaining bolts/nuts to 125 foot-pounds (169 Nm) after a minimum of 5 hours, but not to exceed 10 hours of service.		
	TAIL ROTOR HUB AND BLADES		
BHT-222-CR&O-3	**1.** Inspect tail rotor blade attaching bolts/nuts for correct torque after a minimum of 5 hours, but not to exceed 10 hours of operation after each installation. Apply highest value of specified torque range to the nut while restraining the bolt head. Repeat the torque verification every 1 to 5 hours until torque stabilizes. R2		
	HYDRAULIC ACTUATOR SUPPORT		
BHT-222-CR&O-2	**1.** Following each installation, verify torque of hydraulic actuator support attaching nuts for correct torque after a minimum of 5 hours, but not to exceed 10 hours of service.		

SPECIAL INSPECTIONS

5-49. AFTER 25 HOURS OF OPERATION FOLLOWING EACH INSTALLATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
	SWASHPLATE		
Chapter 65	**1.** Verify swashplate friction adjustment 25 hours after initial installation. R1		
	MAIN ROTOR TRUNNION		
BHT-222-CR&O-2	**NOTE** Retorque is not required if flapping springs 222-310-117-105 are installed.		
	1. Verify torque of main rotor trunnion bolts in the tightening direction, minimum 45 foot-pounds (61 Nm). Provided 45 foot-pounds (61 Nm) is reached without movement of bolts, torque bolts to 53 foot-pounds (72 Nm). If any bolt moves before 45 foot-pounds (61 Nm) is reached, remove all six bolts and visually inspect for cracks or signs of yielding. If any defective bolts are found, replace all six bolts. If no defect(s) are found, reinstall bolts. R1		

SPECIAL INSPECTIONS

5-50. AFTER 100 HOURS OF OPERATION FOLLOWING EACH INSTALLATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ W.O. _____ FACILITY: _____ HELICOPTER S/N: _____ REGISTRY NO.: _____ TOTAL TIME: _____ SIGNATURE: _____		
	TAIL ROTOR GEARBOX		
Chapter 66	**1.** Verify torque of tail rotor gearbox retaining nuts. T1/T2		

SPECIAL INSPECTIONS

5-50A. AFTER 600 HOURS OR 12 MONTHS, WHICHEVER OCCURS FIRST

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
Chapter 27	**MAGNETIC BRAKE ASSEMBLY 204-001-376-105 AND 204-001-376-107** — Detailed Visual Inspection **1.** Get access to the fore and aft and lateral magnetic brake assemblies located under the co-pilot seat. **NOTE** Make sure that stop shaft not dis-bonded from the housing assembly. **2.** Remove the stop assemblies from original position and do a visual inspection of the stop assemblies. **3.** If any evidence of dis-bonding, inspect the lower side of the arm for possible chafing damage, refer to Chapter 27, Paragraph 27-82A for repair procedure. **NOTE** The maximum allowable mechanical damage limit is 0.030 inch (0.762 mm). **4.** If no evidence of dis-bonding, install the stop assemblies.		

CONDITIONAL INSPECTIONS

5-51. CONDITIONAL INSPECTIONS

Conditional inspections are unscheduled inspections or checks that must be performed following the occurrence of unusual events reported during the operation of the helicopter. Such events include (but are not limited to) the following:

- Hard Landing
- Sudden Stoppage — Power ON or OFF
- Overtorque
- Lightning Strike
- Overspeed
- Compressor Stall or Surge

Components removed from a helicopter for evaluation as a result of conditional inspection shall be evaluated as an interrelated group. Removal records accompanying each component shall cross-reference part and serial numbers of other components removed for evaluation.

CONDITIONAL INSPECTIONS

5-52. HARD LANDING

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____ A hard landing is defined as any incident or accident in which the impact of the helicopter with the ground causes severe pitching of the main rotor, allowing hard contact of hub with mast, which results in cracking or yielding of the transmission or nodal beam support structure, or imparts unusually high loads on the landing gear. A hard landing relative to retractable landing gear is any landing that causes any of the tires and/or shock struts to bottom out (when properly serviced) or induces high side loads on any of the landing gear. The following condition at touchdown could result in such a landing: • Excessive rate of descent • Excessive sideward speed • High roll angle coupled with normal rates of descent • High yaw angles coupled with normal forward landing speeds • Landing with forward airspeed in soft or unprepared soil Following hard landing, accomplish the following:		
Paragraph 5-53	**1.** Inspect main and tail rotor blades for evidence of strike damage. If such evidence is found on either rotor, perform Sudden Stoppage — Power ON or OFF.		

CONDITIONAL INSPECTIONS

5-52. HARD LANDING (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	2. Visually inspect underside of fuselage and tailboom for evidence of ground contact. **3.** If, under the conditions previously noted, the landing gear is judged to have been involved in a hard landing, place the helicopter on jacks and perform the following inspections: **a.** Visually inspect tires for cuts, damage, and deflation. **NOTE** If wheel is deformed or cracked, replace wheel and remove landing gear assembly for disassembly and inspection. **b.** Inspect wheel rims for cracks or deformation. Check wheel rim connecting bolts for looseness and damage. Inspect brake assemblies for cracks or damage to housing or mounting bolts. **c.** Inspect wheel yokes for yielding and twist (removal of yoke from landing gear is required). Fluorescent penetrant inspect yoke for cracks. Check holes for elongation. **d.** Inspect main and nose gear drag arm and landing gear housing for deformation and for damage at airframe attachment points. Check airframe attachment fittings for cracks and damaged rivets. **NOTE** If the landing gear airframe attachment fittings show indications of damage, as necessary remove lower wing access covers and inspect all wing attachment fittings and bolts for cracks or deformation; remove under fuselage access panels and inspect main beams for damage. **NOTE** If during removal of air or shock strut cycling, hydraulic fluid is expelled from air valve, remove landing gear for further inspection.		

CONDITIONAL INSPECTIONS

5-52. HARD LANDING (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	e. Remove air from shock strut. Leave air valve open and cycle shock struts by manually raising and lowering wheel from fully extended to fully compressed position. Check shock strut for binding. If binding occurs, remove landing gear for disassembly and inspection. **f.** Manually raise landing gear to retracted position and check for deformation, looseness, and clearance within wheel well. **4.** Inspect mast for evidence of hard rotor hub contact, sufficient to yield or deform the mast. **5.** If no damage has been found at this point, it can reasonably be decided that a true hard landing did not occur. Complete a daily inspection and return helicopter to flight status provided no further evidence of damage is found. **6.** If damage is more extensive than landing gear crosstube yielding, or if a hard landing has occurred, comply with step 7 through step 22. **7.** Inspect main and tail rotor blades for evidence of strike damage. If no obvious damage is discovered, the blades may be retained in service for continued usage. However, if either rotor comes into contact with the ground, tailboom or other foreign object, the blades are to be regarded as having been involved in a sudden stoppage and must be returned to a blade repair station for inspection. **8.** Visually inspect underside of fuselage and tailboom for evidence of ground contact. **9.** For transmission and mast inspection, proceed as follows: **a.** Inspect mast for evidence of hard rotor hub contact, sufficient to yield or deform mast.		

CONDITIONAL INSPECTIONS

5-52. HARD LANDING (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
BHT-222-CR&O-2	**NOTE** If there is any yielding or deformation in areas contacted by main rotor hub, or any other obvious damage, the mast is unserviceable and nonrepairable, and transmission top case must be inspected for yielding. **b.** Inspect transmission mounting points for cracks, loose, sheared, or elongated rivets, studs, or bolts, distortion or deformation, paying particular attention to the following areas: **(1)** Restraints and restraint fittings **(2)** Transmission top case and lift link attachment fittings **(3)** Transmission outboard quill case and forward lift links **(4)** Transmission redundant pylon up-stop plates and up-stop pins **(5)** Nodal beam travel (up and down) stops and flexure fittings **(6)** Main driveshaft transmission-end coupling grease retainer sleeves and adjoining shaft area **10.** For main rotor hub inspection, proceed as follows: **a.** The main rotor flexure may be inspected in the following manner without removing the hub from the helicopter: **(1)** Untie the main rotor so that the blades are free to flap. **(2)** Place a 6-inch (15-cm) (or equivalent) straight edge across the bottom surface of the flexure.		

CONDITIONAL INSPECTIONS

5-52. HARD LANDING (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	(3) Measure the resulting gap between bottom of the flexure and the midpoint of the straight edge with a feeler gauge on both flexures. If the difference between the two measurements is unequal in excess of 0.003 inch (0.076 mm), or in excess of 0.030 inch (0.762 mm) on either flexure, the hub should be removed and returned to an overhaul facility for evaluation. **(4)** If requirements of preceding steps are not exceeded, the hub may be reused. **b.** Inspect the static stops for yielding. **NOTE** The following procedure should be used to determine the distance from concave surface of yoke to concave surface of static stop. If distance is less than 0.025 inch (0.635 mm), static stop has yielded excessively and must be replaced. Modeling clay, wax, or any other material that will give a suitable impression may be used. **(1)** Press small amount of modeling clay against yoke to static stop intersection to form an impression in clay. **(2)** Carefully remove clay and inspect offset with a 0.025-inch (0.635-mm) gauge. **(3)** If offset is less than 0.025 inch (0.635 mm), static stop must be replaced. **(4)** Repeat procedure to inspect static stop on opposite side of yoke.		
BHT-222-CR&O-2	**11.** If any damage is found after completing the inspections of step 7, step 9, and step 10, remove and perform an overhaul inspection of following components: **a.** Mast assembly **b.** Transmission assembly **c.** Main driveshaft assemblies		

CONDITIONAL INSPECTIONS

5-52. HARD LANDING (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	12. Check all cowling, fairing, windows, and doors for proper fit and alignment. Misalignment may indicate a distorted fuselage, resulting in major stresses and damage to components.		
	13. Inspect cabin roof structure in the nodal beam area for loose, missing, or sheared rivets, and distortion or damage to roof panels or supporting beam structure. Check for crack(s) and loose Hi-Locks in fitting connection areas. Particular attention should be directed to the nodal beam attachment fittings and pylon up-stop fittings.		
	14. Remove lower wing access covers and inspect all wing attachment fittings and connecting hardware for crack(s) or deformation.		
	15. Inspect tailboom internally and externally for crack(s), distortion, and loose rivets, especially in the tailboom aft fuselage splice area and at the tail rotor gearbox attachment fitting.		
	16. Inspect vertical fin for damage and distortion, paying particular attention to the tail skid, the mounting structure, and the vertical fin attachment fitting.		
	NOTE If significant damage has been found in any area of the airframe, inspection shall be expanded in those areas until it extends beyond the zone of damage.		
Honeywell 101-650C/750C Series Operation and Maintenance Manual, LTS 101-2.2	**17.** Perform engine Excessive-G Inspection.		
	18. Perform complete visual inspection of the flight control system from cockpit to main rotor head for bent or damaged tubes, damaged actuator structure, bellcranks and supports, and for damaged bearings. Particular attention should be given to all rotating and nonrotating controls mounted above the transmission.		

CONDITIONAL INSPECTIONS

5-52. HARD LANDING (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	19. Check for leaks in the hydraulic system, interference or binding of hydraulic actuators and controls, and for satisfactory operation. **20.** Inspect fuel and oil systems for damage and leaks. **21.** Inspect fuel system breakaway valves (vent and wing/ fuselage disconnects). **a.** Actuation of the vent line will be readily noticeable as separation of the two halves is required before the valve halves seal. **b.** Actuation of the interconnect valve will be detectable by observing a yellow ring adjacent to the frangible section. If the ring is visible, the valve has actuated and requires replacement. **22.** Perform a thorough visual inspection of the following components. If inspection does not reveal any discrepancies or obvious damage to components, they may be retained in service. **a.** Tail rotor hub and controls **b.** Tail rotor gearbox **c.** Tail rotor driveshafts **d.** Tail rotor driveshaft hanger assemblies **e.** Main rotor blades **f.** Tail rotor blades		

CONDITIONAL INSPECTIONS

5-53. SUDDEN STOPPAGE — POWER ON OR OFF

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____ Sudden stoppage is defined as any rapid deceleration of the drive system whether caused by seizure within the helicopter transmission or by contact of the main or tail rotor blades with the ground, water, snow, dense vegetation, or other object of sufficient mass to cause deceleration. Tail rotor blade damage, when caused by striking some object sufficient to require blade replacement, is considered sudden stoppage. When sudden stoppage occurs, inspect helicopter and replace components as follows: **NOTE** If sudden stoppage is the result of main rotor strike, comply with step 1. If sudden stoppage is the result of tail rotor strike, comply with step 2. **1.** Perform a sudden stoppage inspection as follows: **a.** Main Rotor Blades **(1)** Visually inspect both main rotor blades for evidence of damage such as cracks, bonding voids, and wrinkled skin. **(2)** Model 222 with 222-015-500 Series blades: Remove blade tip cap assembly and inspect tip cap assembly and inspect tip cap attaching screws for deformation. Any deformation of screws or elongation of mating holes in spar is cause for blade to be disposed of.		

CONDITIONAL INSPECTIONS

5-53. SUDDEN STOPPAGE — POWER ON OR OFF (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	(3) If either blade is damaged, return both blades to an authorized overhaul facility. Make an entry in component record to show reason for removal was sudden stoppage.		
	(4) If no evidence of damage is found on either blade, both blades may be retained in service.		
	b. Main Rotor Hub		
	(1) If main rotor blades were not damaged, the main rotor hub may be retained in service.		
BHT-222-CR&O-2	**(2)** If main rotor blades incurred damage, perform an overhaul evaluation inspection on main rotor hub assembly. Make an entry in component record to show reason for removal was sudden stoppage.		
	c. Main Rotor Controls		
BHT-222-CR&O-2	**(1)** If one or more of the following discrepancies in step (a) through step (d) are found, the swashplate and levers assembly, and the drive assembly shall be removed and an overhaul inspection shall be performed.		
	(a) Main rotor blade damage requiring overhaul or replacement		
	(b) Obvious damage or deformation to pitch horn or connecting bolts		
	(c) Pitch change link failure of any type		
	(d) Damage to lift link (upper or lower) attachment fittings, transmission up-stops, or nodal beam travel stops		
	(2) If no condition exists as listed in preceding step c, substep (1); perform a close visual inspection and if no evidence of damage is found, the swashplate and levers assembly and the drive assembly may be retained in service.		
	(3) Replace all bolts in rotating controls. Scrap removed bolts.		

CONDITIONAL INSPECTIONS

5-53. SUDDEN STOPPAGE — POWER ON OR OFF (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
BHT-222-CR&O-2	**d.** Main Driveshafts **(1)** Remove and inspect main driveshafts visually. If evidence of yielding or deformation is noted, scrap the appropriate driveshaft assembly and the engine driveshaft adapter and attaching bolts.		
BHT-222-CR&O-2	**(2)** If no visual evidence of damage is detected, perform an overhaul. Make an entry in component record to show reason for removal was sudden stoppage.		
	e. Engine Mounts **(1)** Inspect No. 1 and No. 2 engine mounts for cracks or distorted mount bolts.		
Honeywell Overhaul Manual	**(2)** If driveshaft has been scrapped or sudden stoppage has occurred sufficient to crack engine mounts or yield connecting bolts, remove the affected engine and perform an overhaul evaluation.		
	(3) Make an entry in component record to show reason for removal was sudden stoppage.		
BHT-222-CR&O-2	**f.** Transmission and Mast Assembly **(1)** If mast has evidence of torsional yielding, the mast and transmission shall be considered unserviceable and scrapped. If a main driveshaft required replacement (step d), the outboard quill will be unserviceable and scrapped.		
BHT-222-CR&O-2	**(2)** If mast does not have torsional yielding, main driveshafts were retained (step d), and transmission has no obvious damage that would render it nonrepairable, the transmission and mast shall have an overhaul evaluation. Make an entry in component record to show reason for removal was sudden stoppage.		
BHT-222-CR&O-2	**(3)** Replace collector gear. Inspect collector gear shaft for excessive runout of gear mounting flange. Runout of the gear flange must not exceed 0.0004 inch (0.0102 mm) when gear shaft is mounted on centers or on bearing journals.		

CONDITIONAL INSPECTIONS

5-53. SUDDEN STOPPAGE — POWER ON OR OFF (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	g. Tail Rotor Driveshaft System		
BHT-222-CR&O-3	**(1)** Visually inspect tail rotor driveshaft tubes for evidence of torsional deformation.		
	(2) Remove gear coupling assembly at transmission tail rotor output quill. Disassemble as required to visually inspect condition of both drive and coast side of male and female coupling teeth.		
	(3) Inspect torque on tail rotor gearbox retaining nuts for 100 to 140 inch-pounds (11.3 to 16 Nm).		
	(4) If any of the following criteria is met, inspections specified by sudden stoppage caused by tail rotor strike (step 2) shall also be accomplished. If none of the four criteria is met, completion of step 2 is not required.		
	(a) Main rotor blade damage is sufficient to render blade nonrepairable.		
	(b) Gapping of tail rotor driveshaft disc couplings exceeds 0.005 inch (0.127 mm).		
	(c) Any evidence of torsional yielding has been found in tail rotor driveshaft tubes.		
	(d) Inspection of gear tooth coupling in step (2) revealed chipping or other damage to coupling teeth.		
BHT-222-CR&O-3	**h.** Tail Rotor Hub and Blade Assembly		
BHT-222-CR&O-3	If sudden stoppage originated at main rotor or transmission, tail rotor hub and blade assembly may remain in service provided there is no visible external damage. If visible damage is noted on tail rotor hub and blade assembly, remove tail rotor hub and blade assembly and perform overhaul evaluation. Make an entry in component record to show reason for removal was sudden stoppage.		
	2. Perform the following inspection if sudden stoppage is the result of a tail rotor strike.		
BHT-222-CR&O-3	**a.** Tail Rotor Driveshaft Hangers and Coupling		

CONDITIONAL INSPECTIONS

5-53. SUDDEN STOPPAGE — POWER ON OR OFF (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	(1) Visually inspect all tail rotor driveshafts hangers. If shaft has been damaged by main rotor strike or circumstances other than torsional overload, hangers to which damaged shaft was attached shall be considered unserviceable and scrapped. If any shaft fails as a result of torsional load, all hangers, coupling, and shafts shall be considered unserviceable and scrapped.		
BHT-222-CR&O-3	**(2)** Remove gear coupling assembly at tail rotor output quill. Disassemble as required to inspect condition of both drive and coast side of male and female coupling teeth.		
BHT-222-CR&O-3	**(3)** If inspection reveals no condition as listed in step (1), and there is no obvious damage which would render hanger assemblies unserviceable, the hanger assemblies shall have an overhaul evaluation performed. Make an entry in component record to show reason for removal was sudden stoppage.		
Chapter 66	**b.** Tail Rotor Driveshafts		
	NOTE If one or more of conditions listed in step (a) through step (d) are noted, all driveshaft and bearing hangers shall be considered unserviceable and scrapped.		
	(1) Remove tail rotor driveshafts and inspect for following conditions:		
	(a) Adapter flanges for distortion and cracks.		
BHT-ALL-SPM	**(b)** Shafts for concentricity and distortion. Inspect for crack(s) using fluorescent penetrant methods.		
	(c) Loose or sheared rivets.		
Chapter 66	**(d)** Scratches in excess of limits.		

CONDITIONAL INSPECTIONS

5-53. SUDDEN STOPPAGE — POWER ON OR OFF (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	NOTE If driveshaft(s) or hanger assemblies are scrapped as the result of step (a) or step (b), perform a thorough inspection of hanger support structure for cracks, loose, or missing rivets and elongated mount holes.		
Chapter 66	**(2)** If inspection reveals no condition as listed in step (1), substep (a) through substep (d), then perform an inspection. Make an entry in component record to show reason for removal was sudden stoppage.		
BHT-222-CR&O-3	**c.** Tail Rotor Hub and Blade Assembly **(1)** If sudden stoppage originated at tail rotor blades, the tail rotor hub and blade assembly shall be considered unserviceable and nonrepairable.		
BHT-222-CR&O-3	**(2)** If sudden stoppage originated at tail rotor driveshaft or tail rotor gearbox, remove tail rotor hub and blade assembly and perform overhaul evaluation inspection. Make an entry in component record to show reason for removal was sudden stoppage.		
BHT-222-CR&O-3	**d.** Tail Rotor Gearbox **(1)** Inspect torque on tail rotor gearbox retaining nuts for 100 to 140 inch-pounds (11 to 16 Nm).		
	(2) Remove tail rotor gearbox. Check for cracks, sheared or bent attaching studs, dowel pin, and evidence of case distortion or output shaft distortion. If any of the above is noted, the gearbox is unserviceable and shall be scrapped.		
BHT-222-CR&O-3	**(3)** If inspection reveals no condition as listed in step (2), perform conditional inspection and overhaul evaluation. Make an entry in component record to show reason for removal was sudden stoppage.		

CONDITIONAL INSPECTIONS

5-53. SUDDEN STOPPAGE — POWER ON OR OFF (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	e. In all instances of step b and step c, perform the following inspections:		
	(1) Tail rotor gearbox and vertical fin attachment fittings for cracks, sheared rivets, or damaged connecting bolts.		
	(2) Boosted tail rotor flight controls from the hydraulic actuator to the pitch change linkage for damage to tubes, bellcranks, supports, fairleads, and bearings. Special attention should be paid to the support, bellcranks, and links mounted on the tail rotor gearbox.		
	(3) Tailboom structure for distortion, cracks, and loose or missing rivets, especially at the tail rotor driveshaft hanger support structure and at the tailboom to fuselage attachment area.		
BHT-222-CR&O-2	**f.** If damage to the tail rotor gearbox, tail rotor driveshafts, or tail rotor driveshaft hanger assemblies is such that these items are scrapped as unserviceable, remove transmission and perform the following evaluation. Make an entry in component record to show reason for removal was sudden stoppage.		
BHT-222-CR&O-2	**(1)** Replace the collector gear.		
BHT-222-CR&O-2	**(2)** Inspect collector gear shaft for excessive runout of gear mounting flange. Runout of gear flange must not exceed 0.0004 inch (0.0101 mm) when gear shaft is mounted on centers or on bearing journals. Inspect collector gear shaft using magnetic particle method.		
BHT-222-CR&O-2	**(3)** Inspect transmission lower case duplex bearing. Replace bearing if rough or if any evidence of spalling or flaking is evident.		
BHT-222-CR&O-2	**(4)** Inspect center bearing case roller bearing. Replace bearing if any evidence of brinelling, spalling, or flaking is evident.		
BHT-222-CR&O-2	**(5)** Perform an overhaul evaluation of the tail rotor drive quill.		

CONDITIONAL INSPECTIONS

5-54. OVERTORQUE

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
Honeywell 101-650C/750C Series Operation and Maintenance Manual, LTS 101-2.2	Overtorque is defined as any incident in which torsional loads are introduced into the helicopter dynamic system in excess of established limits. This can involve either an overtorque of mast or engine. Refer to the engine manufacturer's manual for engine overtorque limits and inspection requirements. **1.** Model 222B — When main rotor overtorque has exceeded 105% but did not exceed 115%, perform the following: Model 222 — When main rotor overtorque has exceeded 110% but not more than 120%, perform the following: **a.** Conduct a thorough visual inspection of the assemblies that follow (installed on the helicopter) for any evidence of damage, deformation, yielding, etc. **(1)** Main rotor hub and blades		

CONDITIONAL INSPECTIONS

5-54. OVERTORQUE (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	NOTE Cadmium plating on outside diameter of mast is 0.0003 to 0.0004 inch (0.0076 to 0.0102 mm). When measuring mast outside diameter at six places for out-of-round, ensure that 0.0003 to 0.0004 inch (0.0076 to 0.0102 mm) differential is considered when measuring plated surfaces or when plating may have been removed. **(2)** Main rotor mast. Using a suitable micrometer, measure mast outside diameter at the minimum of six places for out-of-round condition; two measurements 90° to each other between the swashplate and drive hub assembly; two measurements 90° to each other just above the collective friction collet assembly, and two measurements 90° to each other approximately 2 inches (51 mm) below the static stop contact area on the mast. If any set of opposing measurements vary in excess of 0.002 inch (0.051 mm), the mast is suspected of bending and a runout inspection must be performed. **(3)** Start engine and check main rotor, while in a flat pitch condition, for any evidence of a 1/rev vibration. If one or more of the previous inspection requirements of step (1) or step (2) reveals an unsatisfactory condition, a mast runout inspection must be performed. If unsatisfactory conditions are not found, the mast runout inspection is not required. **(4)** Lift link upper and lower attachment fittings **(5)** Nodal beam mounts, attachment fittings, and travel stops **(6)** Transmission restraints and restraint fittings **(7)** Transmission top case **(8)** Inspect main driveshaft couplings for indications of overheating **(9)** Tail rotor hub, blades, and attachments **(10)** Swashplate and lever assembly		

CONDITIONAL INSPECTIONS

5-54. OVERTORQUE (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	(11) Drive assembly **b.** Inspect main transmission chip detectors and external oil filter for metal particles. **(1)** If chip detectors and external filter appear normal and there is no evidence of internal failure, operate the transmission for 5 hours, then check chip detectors and external filter. If chip detector and filter inspection does not reveal metal particles, the transmission is satisfactory for service. **(2)** If metal particles indicating internal failure are found or if there is any evidence of internal failure, remove and overhaul the transmission. Make entry in component record to show reason for removal was overtorque. Clean all transmission system oil lines and replace oil coolers. **c.** After the next 25 hours, following an overtorque, conduct a thorough inspection of the following: **(1)** Main rotor hub assembly **(2)** Main rotor mast **(3)** Transmission top case **(4)** Transmission mount (nodal beam) link assemblies, link attachments, and arm and support assemblies **(5)** Cabin roof and beam at transmission mount (nodal beam) attachment points **(6)** Transmission restraint attachment at stop mounts, support, and cabin roof shell, and beam **(7)** Transmission electric chip detectors **(8)** Tail rotor hub, blades, and attachments **(9)** Swashplate and lever assembly **(10)** Drive assembly		

CONDITIONAL INSPECTIONS

5-54. OVERTORQUE (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	2. When main rotor overtorque exceeds 120% for Model 222 (115% for Model 222B), perform the following:		
BHT-222-CR&O-2 BHT-222-CR&O-3	**a.** Conduct a major overhaul on the following components. Make an entry in component record to show reason for removal was overtorque. **(1)** Main rotor hub **(2)** Mast assembly **NOTE** During overhaul of the main transmission, inspect gear patterns for scoring and top case for yielding. **(3)** Transmission assembly **(4)** Tail rotor hub		
Chapter 65 BHT-222-CR&O-2	**(5)** Inspect the main rotor blades. Pay particular attention to blade skins for distortion or debonding. **b.** Perform a thorough visual inspection of the following components. If no visual damage is found, the components may be retained in service. **(1)** Swashplate and lever assembly **(2)** Drive assembly **(3)** Main rotor and tail rotor blades **(a)** Do a visual and tap inspection. **(b)** If the blade shows sign of bond separation, scrap the blade. **(c)** If the tip or root end balance weights have moved, scrap the blade. **(d)** If the retention bushings are loose, scrap the blade.		

CONDITIONAL INSPECTIONS

5-54. OVERTORQUE (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	(e) If the skin on any blade is wrinkled or deformed, scrap all blades. **(f)** If the tip block shows evidence of movement or is loose, scrap the blade. **(g)** If the blades pass the inspection in step (a) through step (f), the blade can be returned to service. **c.** After the next 25 hours following an overtorque, conduct a thorough inspection of the following: **(1)** Main rotor hub and blades **(2)** Transmission mount fittings, upper and lower attachment points **(3)** Cabin roof at transmission mount fittings **(4)** Transmission restraint attachments **(5)** Transmission electric chip detectors **(6)** Tail rotor hub, blades, and attachments **(7)** Swashplate and lever assembly **(8)** Drive assembly		

CONDITIONAL INSPECTIONS

5-55. OVERTORQUE — ONE ENGINE INOPERATIVE

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Honeywell 101-650C/750C Series Operation and Maintenance Manual, LTS 101-2.2	**DATE:** _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____ **1.** Model 222 — When a One Engine Inoperative (OEI) operation occurs in which engine torque has exceeded 87%, but did not exceed 103%, perform the following: Model 222B — When a One Engine Inoperative (OEI) operation occurs in which engine torque has exceeded 86.4%, but did not exceed 103%, perform the following: **a.** Record duration and maximum engine torque in main transmission maintenance record. **b.** Refer to the engine manufacturer's manuals for engine overtorque inspection requirements if engine torque exceeded 100%. **c.** If engine torque exceeded 100%, inspect main transmission chip detectors and external filter for metal particles. **(1)** If chip detectors and external filter appear normal and there is no evidence of internal failure, the transmission is satisfactory for service. No other component inspections are required. **(2)** If metal particles indicating internal failure are found, remove the transmission for overhaul inspection. Make entry in component record that reason for removal was OEI overtorque operation. Clean all transmission system oil lines and replace oil coolers.		

CONDITIONAL INSPECTIONS

5-55. OVERTORQUE — ONE ENGINE INOPERATIVE (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	d. Three OEI operations which exceed 87% (86.4% for Model 222B), but do not exceed 103% engine torque are permissible within the rated life of the collector gears 222-040-109-003 and -103 and -105 in Models 222 and 222B respectively. After a third OEI occurrence, the collector gear must be removed from service and scrapped.		
	2. When an OEI operation occurs in which engine torque has exceeded 103%, perform the following:		
	a. Record duration and maximum engine torque in main transmission maintenance record.		
Honeywell 101-650C/750C Series Operation and Maintenance Manual, LTS 101-2.2	**b.** Refer to the engine manufacturer's manuals for engine overtorque inspection requirements.		
BHT-222-CR&O-2	**c.** Perform overhaul of main transmission. Make entry in component record that reason for removal was OEI overtorque operation.		
	(1) The collector gear 222-040-109 shall be scrapped at this overhaul.		
	(2) During overhaul of the main transmission, inspect gear patterns for scoring.		

CONDITIONAL INSPECTIONS

5-56. LIGHTNING STRIKE

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____ When the helicopter has had a lightning strike, the following precautions shall be followed: **NOTE** In all instances that follow, if significant damage has been found in any area, inspection shall be expanded in those areas until it extends beyond the zone of damage. **1.** Visually inspect all external surfaces of the helicopter with particular attention to main rotor blades and hub, the transmission and mast assembly, tail rotor blades and hub, tail rotor gearbox, horizontal stabilizer auxiliary fins, and vertical fin. Check electrical instruments and systems. **2.** If visual indications of damage are present, proceed as follows: **a.** Inspect main rotor blades. If blades show any of the following indications, scrap blades. **(1)** Inspect blades for signs of burns. Burn marks can be very minute. **(2)** Inspect entire surface of all blades for voids and delamination. **b.** Remove main rotor hub for overhaul. State lightning strike as reason for removal.		

CONDITIONAL INSPECTIONS

5-56. LIGHTNING STRIKE (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	c. Remove transmission and mast assembly for overhaul making note of lightning strike as reason for removal.		
	d. Remove tail rotor hub for overhaul. State lightning strike as reason for removal. Scrap blades if indications of burns or debonding are evident.		
	e. Remove tail rotor driveshaft bearing hangers and tail rotor gearbox and return for overhaul, stating lightning strike as reason for removal.		
	f. Check auxiliary fins for evidence of burning or debonding.		
	g. Inspect tailboom fitting for indication of arcing burns around mounting points of tail rotor gearbox and vertical fin.		
	3. If no visual indications or damage is found:		
BHT-222-CR&O-2	**a.** Remove main rotor hub grips.		
	(1) Visually inspect bearings for signs of electrical arcing, burning, or delamination.		
	(2) Visually check pitch change links at the drive assembly connections for arcing burns.		
BHT-222-CR&O-2	**(3)** If indications of arcing or burning are present, overhaul main rotor hub and drive assembly and replace the affected pitch change link, including all attaching hardware.		
BHT-222-CR&O-2	**(4)** If no indications are found, assemble main rotor hub.		
	b. Remove main rotor mast assembly. Without removal of the bearing from the mast, inspect visible portions of the bearing for signs of electrical arcing or burning. Rotate bearing during inspection. Check bearing for smooth rotation. Visually inspect the lower mast bearing race and driving spline on the mast for signs of arcing or burning.		

CONDITIONAL INSPECTIONS

5-56. LIGHTNING STRIKE (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	(1) If indications of arcing, burning, or roughness of the bearing are present, remove transmission and mast assembly and return for overhaul. State lightning strike as reason for removal.		
	(2) If no indications are found, assemble transmission and mast assembly and return to limited service. After 5 hours, remove the chip detectors and filter and inspect for chips. If no indications are found, return transmission to full service. If indications are found, remove transmission and mast assembly and return it for overhaul. State lightning strike as reason for removal. Clean all transmission oil lines. Replace oil cooler.		
BHT-222-CR&O-3	**c.** Remove output quill assembly from tail rotor gearbox. Visually inspect gear teeth for signs of electrical arcing or burning. Rotate tail rotor mast to check for smooth rotation of bearings.		
	(1) If evidence of arcing or burning is found or if bearings do not rotate smoothly, remove gearbox and return it for overhaul, stating lightning strike as reason for removal.		
BHT-222-CR&O-3	**(2)** If no indications of damage are found, and if bearings rotate smoothly, assemble gearbox and return it to limited service. After 5 hours, remove chip detector and inspect for chips. If no indications are found, return gearbox to full service. If indications are found, return gearbox for overhaul, stating lightning strike as reason for removal.		

CONDITIONAL INSPECTIONS

5-57. OVERSPEED

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____		
Honeywell 101-650C/750C Series Operation and Maintenance Manual, LTS 101-2.2	Rotor overspeed is defined as any incident in which 109% main rotor speed is exceeded. Refer to engine manufacturer's manual for engine overspeed limits and inspection requirement. **1.** If main rotor overspeed exceeds 109%, but not more than 113%, perform a thorough visual inspection of the following components. If no damage is found, no further inspection is required. **a.** Main rotor hub and blades **b.** Swashplate and lever assembly **c.** Drive assembly **d.** Tail rotor driveshafts and hanger assemblies **e.** Tail rotor gearbox assembly **f.** Tail rotor hub assembly **g.** Tail rotor blades **(1)** Perform visual and tap inspection. **(2)** If bond separation on the blade exists anywhere, scrap the blade.		

CONDITIONAL INSPECTIONS

5-57. OVERSPEED (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	(3) If any movement of the tip or root end balance weights has occurred, scrap the blade. **(4)** If the retention bushings show evidence of looseness, scrap the blade. **(5)** If skin of either blade is wrinkled or deformed, scrap both blades. **(6)** If blade tip block shows evidence of movement or is loose, scrap the tail rotor blade. **(7)** If blades pass the previous inspection requirements and no other discrepancies exist, the blades are acceptable for service. **h.** Tail rotor controls **i.** Main transmission **j.** Main driveshaft **2.** Perform the following inspection if main rotor overspeed exceeds 113%, but not more than 120%: **a.** Remove and perform a thorough visual inspection as listed in step 1. **b.** Verify torque of tail rotor gearbox attachment studs. **3.** Perform the following inspections if main rotor overspeed exceeds 120%. Remove and perform overhaul inspection on the following components. Note overspeed as reason for removal. **a.** Main rotor hub and blades **b.** Main rotor mast **c.** Main transmission **d.** Main driveshafts **e.** Swashplate and lever assembly		

CONDITIONAL INSPECTIONS

5-57. OVERSPEED (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	f. Drive assembly		
	g. Tail rotor driveshafts		
	h. Tail rotor driveshaft hanger assemblies		
	i. Tail rotor gearbox		
	j. Tail rotor hub and blades		
	k. Tail rotor controls		

CONDITIONAL INSPECTIONS

5-58. COMPRESSOR STALL OR SURGE

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
	DATE: _____ **W.O.** _____ **FACILITY:** _____ **HELICOPTER S/N:** _____ **REGISTRY NO.:** _____ **TOTAL TIME:** _____ **SIGNATURE:** _____ Engine compressor stall or surge is characterized by a sharp rumble or a series of loud sharp reports, severe engine vibration, and a rapid rise in measured gas temperature (MGT), depending on severity of surge. When a surge has been reported, progressively perform step 1 through step 6, as dictated by discrepant condition. Compressor stall may cause severe torsional loading of the main driveshaft resulting in scoring of the transmission input quill gears and damage to the main driveshaft, and distortion or damage to the tail rotor gearbox attachment fitting. **1.** Power Plant **a.** Examine inlet FOD screen or particle separator for blockage. **b.** Inspect leading edges and tip areas of compressor rotor impeller for accumulation of dirt, evidence of severe erosion, or foreign object damage. **(1)** If contaminants are found, clean and perform a power check.		
Honeywell 101-650C/750C Series Operation and Maintenance Manual, LTS 101-2.2			

CONDITIONAL INSPECTIONS

5-58. COMPRESSOR STALL OR SURGE (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH	INITIAL OTHER
Honeywell 101-650C/750C Series Operation and Maintenance Manual, LTS 101-2.2	**(2)** If erosion or foreign object damage appears to exceed acceptable limits, perform a teardown inspection.		
Honeywell 101-650C/750C Series Operation and Maintenance Manual, LTS 101-2.2	**c.** If compressor stall or surge occurred during acceleration, refer to engine manufacturer's manual for troubleshooting procedures.		
Honeywell 101-650C/750C Series Operation and Maintenance Manual, LTS 101-2.2	**d.** If step a through step c do not reveal cause of surge, inspect turbine assembly.		
	2. Power Train **a.** If compressor stall occurs below 59% main rotor mast torque, comply with the following: **(1)** Remove magnetic chip detectors from transmission and tail rotor gearbox, and inspect for metal particles. **(2)** If no indication of metal particles is found on chip detectors, clean chip detectors and reinstall. Return helicopter to limited flight status and repeat chip detector inspection in 5 to 10 hours. If positive indication of metal chips is found on chip detectors on initial or 5 to 10 hour inspection, return unit for overhaul, noting the reason. **b.** If compressor stall occurs at 62% (59% for Model 222B) mast torque or above, comply with the following: **(1)** Remove magnetic chip detectors from transmission and tail rotor gearbox, and inspect for metal particles. If no indication of metal particles is found on chip detectors, clean chip detectors and reinstall. If positive indication of metal chips is found on chip detectors, return unit for overhaul, noting the reason. Clean all affected oil lines and replace oil coolers.		