

101 INSPECTIONS AND AIRWORTHINESS LIMITATIONS

Table of Contents

Paragraph	Title	Page
101 - 1	GENERAL - INSPECTIONS AND AIRWORTHINESS LIMITATIONS	3
101 - 2	INSPECTIONS - TIME LIMITS	5
101 - 3	LUBRICATION CHART	7
101 - 3.1	Lubrication Chart Basic-Helicopter	7
101 - 4	PREFLIGHT CHECK	11
101 - 4.1	Preflight Check Basic-Helicopter	11
101 - 4.2	Preflight Check Optional Equipment	23
101 - 5	SUPPLEMENTARY CHECK 25/50 FH	33
101 - 5.1	Supplementary Check 25/50 Fh Basic-Helicopter	33
101 - 5.1.1	Supplementary Check 25 Fh Basic-Helicopter	33
101 - 5.1.2	Supplementary Check 50 Fh Basic-Helicopter	34
101 - 6	SUPPLEMENTARY CHECK 100 FH	35
101 - 6.1	Supplementary Check 100 Fh Basic-Helicopter	35
101 - 6.2	Supplementary Check 100 Fh Optional Equipment	37
101 - 7	12-MONTH INSPECTION	39
101 - 7.1	12-Month Inspection Basic-Helicopter	39
101 - 7.2	12-Month Inspection Optional Equipment	43
101 - 8	PERIODICAL INSPECTION	45
101 - 8.1	Periodical Inspection Basic Helicopter	45
101 - 8.2	Periodical Inspection Optional Equipment	51
101 - 9	EXTENDED PERIODICAL INSPECTION	53
101 - 9.1	Extended Periodical Inspection	53
101 - 9.2	Extended Periodical Inspection Optional Equipment	59
101 - 10	SUPPLEMENTARY INSPECTION ACCORDING TO OPERATING TIME IN FH AND/OR CALENDAR TIME	61
101 - 10.1	Supplementary Inspection according to Operating Time in Fh and/or Calendar Time Basic Helicopter	61
101 - 10.2	Supplementary Inspection according to Operating Time in Fh and/or Calendar Time Optional Equipment	69
101 - 11	SPECIAL INSPECTIONS AFTER MAINTENANCE ACTIVITY	79
101 - 11.1	Special Inspections after Maintenance Activity Basic Helicopter	79
101 - 11.2	Special Inspections after Maintenance Activity Optional Equipment	81
101 - 12	INSPECTIONS AFTER OPERATION UNDER SPECIAL ENVIRONMENTAL CONDITIONS	83
101 - 12.1	Inspections after Operation under Special Environmental Conditions Basic Helicopter	83
101 - 12.2	Inspections after Operation under Special Environmental Conditions Optional Equipment	85
101 - 13	SPECIAL INSPECTIONS AFTER OPERATIONAL INCIDENTS	87
101 - 13.1	Special Inspections after Operational Incidents Basic Helicopter	87

101 - 13.2	Special Inspections after Operational Incidents Optional Equipment	111
101 - 14	TIME BETWEEN OVERHAUL OF COMPONENTS (TBO)	113
101 - 14.1	Time Between Overhaul of Components Basic Helicopter	113
101 - 14.2	Time Between Overhaul of Components Optional Equipment	115
101 - 15	AIRWORTHINESS LIMITATIONS	117
101 - 15.1	General	117
101 - 15.2	Service Times of Life-Limited Parts	119
101 - 15.2.1	Service Times of Life-Limited Parts Basic-Helicopter Helicopter series A, C, D, S, except for BO105 CB-5, BO105 CBS-5 and BO105 DBS-5	119
101 - 15.2.2	Service Times of Life-Limited Parts Basic-Helicopter Helicopter series BO105 CB-5, BO105 CBS-5 and BO105 DBS-5 Basic-Helicopter ..	124
101 - 15.3	Service Times of Life-Limited Parts Optional Equipment All Series	126

101 - 1 GENERAL - INSPECTIONS AND AIRWORTHINESS LIMITATIONS

1. General

- a. The inspections/measures specified in Chapter 101 must be accomplished by the latest on reaching those time limits as determined in Section 101-2 to ensure **continued airworthiness of helicopter**.
- b. Inspections of **Basic-Helicopter** are described in Sections **101-X.1**, inspections of **Optional Equipment** are described in Sections **101-X.2**.
- c. Fig. 101-1 represents Chapter 101 "Inspections and Airworthiness Limitations". The contents of Sections 101-5 thru 101-9 are compiled in such a way, that on reaching the corresponding time limits only the required inspections have to be performed. Inspections with shorter intervals are fully incorporated. This means, that the Extended Periodical Inspection 101-9 contains the Periodical Inspection 101-8, which in turn contains the Supplementary Check 100 Fh 101-6 and the 12 Month Inspection 101-7. The Supplementary Check 25/50 Fh 101-5 is incorporated in the Supplementary Check 100 Fh 101-6.
- d. The inspections/measures are to be performed in compliance with specified sections. The column **Reference** of the inspection schedules denotes according to which detailed instruction the inspection and maintenance work is to be performed. The column **Initial** is intended for verification of performance of inspection. A signature in this column verifies that the respective checks/inspections and the removal of any discrepancies have been performed correctly and in consequence the helicopter can be returned to flight operations.
- e. Inspections of vendor components and systems are to be performed in accordance with applicable vendor documentation. Refer to List of Applicable Publications (LOAP).
- f. Supplementary checks may also be performed by trained pilots.

2. Scheduled Checks/Inspections

- a. The scheduled checks/inspections listed in Section **101-3 thru 101-9** are to be performed by the latest on reaching corresponding operating time of helicopter. In case the operating times of components do not coincide with those of the helicopter, regard the operating times of components as applicable.
- b. The supplementary inspections listed in Section **101-10** supplement the periodical inspections/measures 101-5 thru 101-9.
- c. Inspection resp. maintenance points of scheduled checks/inspections may be performed earlier. For this make sure that the specified time limits are not exceeded for those measures performed in advance.

3. Further Scheduled Measures

- a. Time Between Overhaul-components are contained in Section **101-14**. These components are to be overhauled by the respective manufacturer or an authorized service station according to applicable documentation.
- b. Section **101-15** contains a listing of all time change items, their related time limits as well as special regulations determining the use of these items. The operating times of these items must not be exceeded.

4. Unscheduled Inspections

- a. Section **101-11** contains special inspections to be performed after specific maintenance activities.
- b. Section **101-12** contains special inspections to be performed after lengthy operation under special environmental conditions. Special environmental conditions could be: saline atmosphere, high share of sand particles in air or polluted atmosphere. It is the responsibility of the helicopter operator to judge the necessity of these special inspections.

- c. Section **101-13** contains special inspections to be performed immediately after the occurrence of specific operational incidents. These inspections ensure the upholding respectively re-establishment of airworthiness.

5. Inspection Scheme

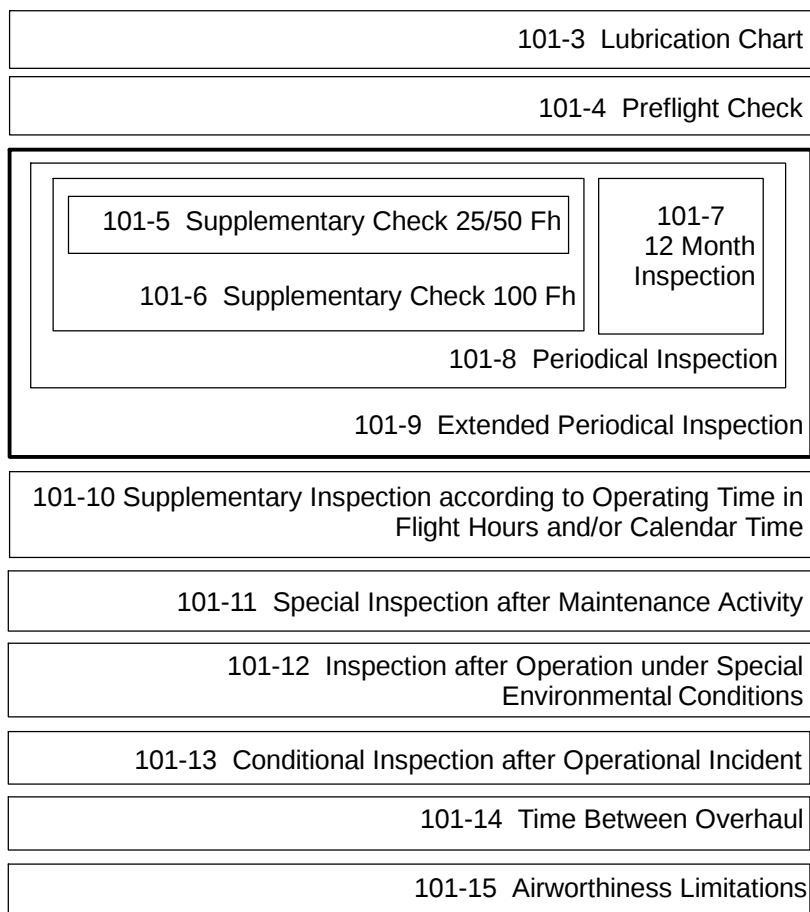


Fig. 101-1 – Inspection Scheme

6. Abbreviations

IPC	Illustrated Parts Catalog
EPU	External power unit
Fh	Flight hours
FLM	Flight Manual
LOAP	List of Applicable Publications
NHA	Next Higher Assembly
OAT	Outside Air Temperature
OMM	Operation and Maintenance Manual (Allison)
PF	Preflight Check
REM	Repair Manual
TBO	Time Between Overhaul
TCI	Time Change Item
TSI	Time Since Inspection
TSN	Time Since New
TSO	Time Since Overhaul

101 – 2 INSPECTIONS – TIME LIMITS

1. Notes regarding Time Limits

- a. The time limits and allowable over-the-limit times for the inspections/measures are specified under step 2.
- b. When unusual local conditions dictate, it is the responsibility of the helicopter operator to increase the frequency and scope of inspections/measures to guarantee safe flight operation.
- c. It is permissible to **exceed intervals** up to specified limits. These over-the-limit times are to be disregarded when determining time of next inspection or measure.
- d. The time of inspection is specified by the following **expressions**:

- 1) **Flight hours (Fh)** are the intervals between takeoff and landing of the helicopter. If time limits are expressed in flight hours, they generally apply to the flight hours of the helicopter, unless the listed flight hours are directly related to a specific component (Nomenclature, Part Number).
- 2) **Calendar Time** in months or years are the intervals of Time Since New (TSN) or Time Since Inspection (TSI). If time limits are expressed in calendar time, they generally apply to the helicopter, unless the listed calendar time is directly related to a specific component (Nomenclature, Part Number).

Storage times following operation must be taken into account. These inspection requirements do not apply to new or overhauled equipment that has been stored according to manufacturer's directives and that has not been operated, unless they are additionally required. ■

- 3) **Number of Flights** is the number of landings (ground contacts).
- 4) **Retirement Time** is the permissible operating time for Time Change Items (TCI) in flight hours, calendar time or number of flights since new. It is always related to a component identified by nomenclature and part number.
- 5) **Time Between Overhaul (TBO)** is the operating time of a component (Nomenclature, Part Number), after which the component is to be overhauled. The interval begins with Time Since New (TSN) or Time Since Overhaul (TSO).

2. Time Limits

- a. The **Oil- / Lubricant Change** is to be performed according to Section 101-3. The listed time intervals are applicable. It is permissible to exceed the respective intervals by 10%.
- b. The **Preflight Check** is to be performed according to Section 101-4 by the latest prior to the first flight of the day. Items marked with a symbol have to be checked each flight before takeoff.
- c. The **Supplementary Check 25/50 Fh** is to be performed according to Section 101-5 every 25 resp. 50 flight hours. It is permissible to exceed these time limits by 5 flight hours.
This does not apply if the Supplementary Check 100 Fh, the Periodical Inspection or the Extended Periodical Inspection is performed on reaching scheduled time.
- d. The **Supplementary Check 100 Fh** is to be performed according to Section 101-6 every 100 flight hours. It is permissible to exceed this time limit by 10 flight hours.
The Supplementary Check 100 Fh does not apply if the Periodical Inspection or the Extended Periodical Inspection is performed on reaching scheduled time.
- e. The **12-Month Inspection** is to be performed according to Section 101-7 every 12 months. It is permissible to exceed this time limit by 3 months.
The 12-Month Inspection does not apply if the Periodical Inspection or the Extended Periodical Inspection is performed on reaching scheduled time.
- f. The **Periodical Inspection** is to be performed according to Section 101-8 every 600 flight hours or 4 years, depending on which time limit is reached first. It is permissible to exceed these time limits by 60 flight hours resp. 6 months.
The Periodical Inspection does not apply if the Extended Periodical Inspection is performed on reaching scheduled time.
- g. The **Extended Periodical Inspection** is to be performed according to Section 101-9 for the first time on reaching 6000 flight hours or 12 years, depending on which time limit is reached first. It is permissible to exceed these time limits by 600 flight hours resp. 12 months.
The subsequent **Extended Periodical Inspections** are to be performed according to Section 101-9 every 6000 flight hours or 8 years, depending on which time limit is reached first. It is permissible to exceed these time limits by 600 flight hours resp. 6 months.
- h. The **Supplementary Inspections** are to be performed according to Section 101-10. The listed time intervals are applicable. It is permissible to exceed the respective intervals by 10%.
- i. The **Special Inspections after Maintenance Activity** are to be performed according to Section 101-11. The listed time intervals are applicable. It is permissible to exceed the respective intervals by 10%.
- j. The **Inspections after Operation under Special Environmental Conditions** are to be performed according to Section 101-12. The listed time intervals are applicable. It is permissible to exceed the respective intervals by 10%.
- k. The **Special Inspections after Operational Incidents** are to be performed according to Section 101-13. The listed time intervals are applicable. Intervals must not be exceeded.
- l. **Time Between Overhaul components** are to be replaced according to Section 101-14. The listed Time Between Overhaul (TBO) is applicable. It is permissible to exceed this time limit by 3%.
- m. **Life-limited components** are to be replaced according to Section 101-15. The listed limits are applicable. These must not be exceeded.

101 – 3 LUBRICATION CHART

101 – 3.1 Lubrication Chart Basic-Helicopter

NOTE

Specifications and quantities of lubrication items are contained in Fig. 101-3.1. For intervals of oil change or regrease, refer to table 101-3.1.

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

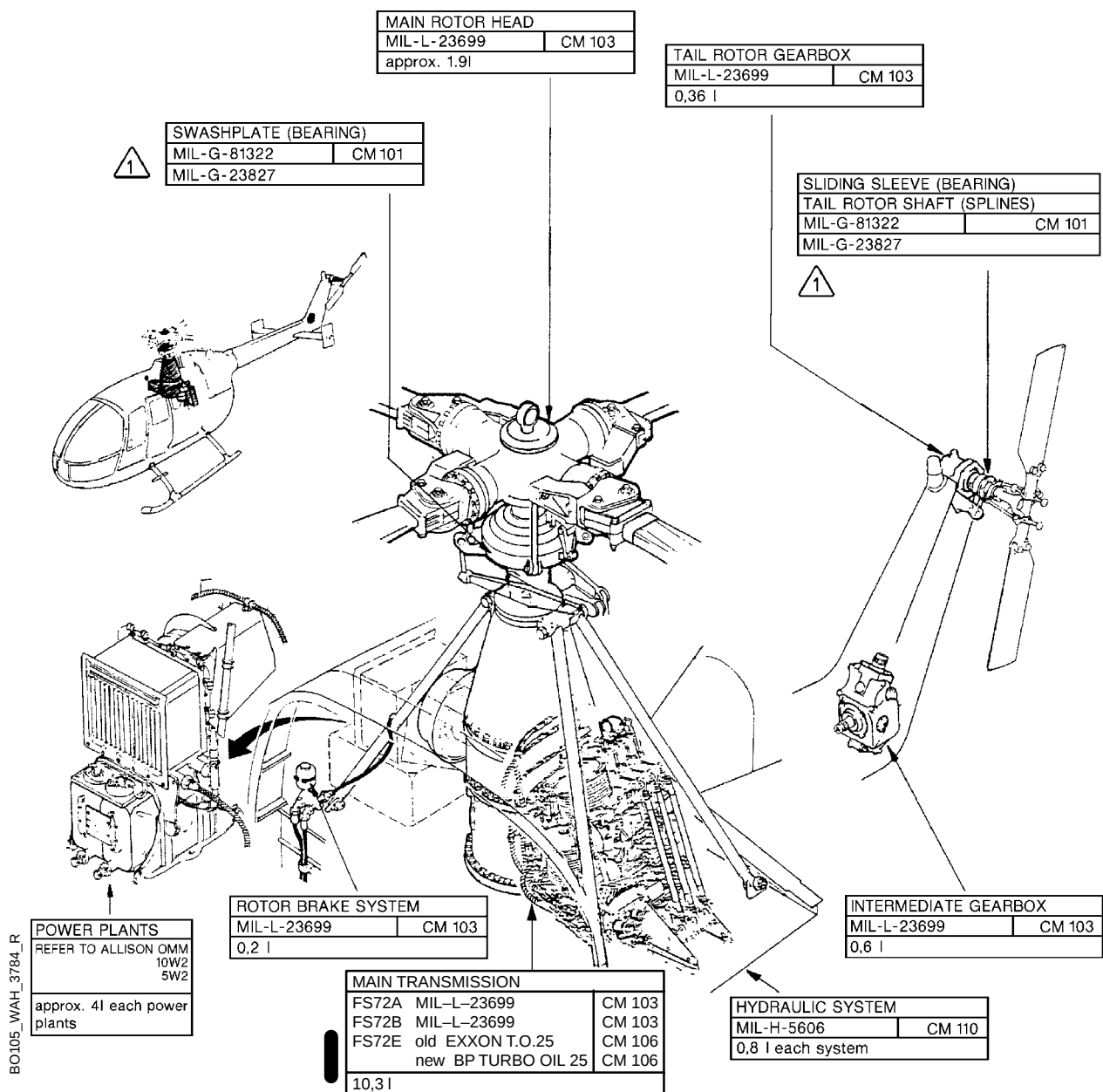
Inspection or Maintenance Work	Interval	Reference	Initial
11 – MAIN TRANSMISSION			
(1) Change oil, inspect and clean filter element	50Fh TSN/TSO, 600Fh or 12 months TSN/TSO, then 600Fh or 12 months, whichever occurs first	11-4 and 11-13	
32 – TAIL ROTOR DRIVE			
(1) Change oil of intermediate gearbox and tail rotor gearbox	50FhTSN/TSO, 600Fh or 12 months TSN/TSO, then 600Fh or 12 months, whichever occurs first	32-9	
33 – TAIL ROTOR			
(1) Grease ball bearing of sliding sleeve	600Fh or 12 months, whichever occurs first	33-27 step 13	
(2) Grease splines of tail rotor shaft for sliding sleeve	600Fh or 12 months, whichever occurs first		
41 – FLIGHT CONTROLS MAIN ROTOR			
(1) Grease swashplate bearing	600Fh or 12 months, whichever occurs first	41-74	
43 – HYDRAULIC SYSTEM			
(1) Change hydraulic fluid	2 years	43-6	

Tabel 101-3.1 – Lubrication Chart Basic-Helicopter (1 of 2)

Inspection or Maintenance Work	Interval	Reference	Initial
43 – HYDRAULIC SYSTEM			
(2) Grease splines of hydraulic pump drive shaft	600Fh or 2 years, whichever occurs first	43-27, 43-29	
61 – ENGINE			
(1) EFFECTIVITY Grease lubricated starter- generator Remove starter-generators, clean splines of stub shaft and engine driveshaft and then lubricate with grease	200Fh	61-21, 61-23	

Tabel 101-3.1 – Lubrication Chart Basic-Helicopter (2 of 2)

Technician		Inspector	
Date:		Date:	
Name	Signature	Stamp	Signature



WARNING

GREASE MIL-G-23827 IS NOT COMPATIBLE WITH GREASE MIL-G-81322. OBSERVE GREASE IDENTIFICATION PLATE.

Figure 101-3.1: Lubrication Chart Basic-Helicopter

BLANK PAGE

101 - 4 PREFLIGHT CHECK

101 - 4.1 Preflight Check Basic-Helicopter

1. General

The preflight check shall be accomplished not later than the first flight of the day, and according to Flight Manual (Section 4) or the Pilot's Checklist.

The preflight check is not a detailed mechanical inspection, but essentially a visual check of the helicopter for correct condition.

Items marked with a star (★) need to be checked each flight before takeoff.

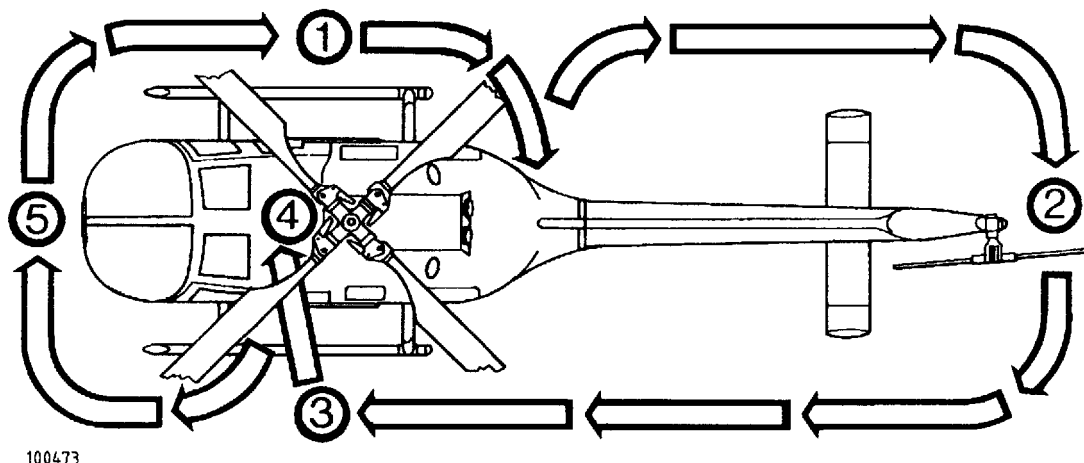
When unusual local conditions dictate, the extent and/or frequency of this check shall be increased as necessary to promote safe operation.

NOTE

- The preflight check can be accomplished either by mechanics with type rating or by pilots with type rating.
- The following list contains only check items for the basic helicopter in standard configuration.
- In addition to these items, check antennas. In addition make certain that the necessary inspections have been performed according to the Maintenance Manual.
- For optional equipment check items refer to the respective Flight Manual Supplements or Maintenance Manual, Chapter 101 - 4.2.

2. Exterior Check

The exterior check is laid out as a walk-around check, starting forward right at the pilot's door, proceeding clockwise to the tail boom, to the left-hand side (including the upper and lower areas of the helicopter) and being completed at the helicopter nose area.



1. Fuselage - right side

4. Cabin roof

2. Tail boom

5. Nose area

3. Fuselage - left side

Figure 101-102 Exterior Check Sequence

NOTE

- If possible, ensure that the helicopter is headed into the wind before starting the engines.
- The area around the helicopter should be clear of all foreign objects.
- To avoid excessive drain on the helicopter battery, particularly during cold weather, all ground operations should be conducted using an external power unit (EPU).
- When the battery is used, the operation of electrical equipment should be kept to a minimum.

★ Helicopter forms and documents

Fuselage underside

Each fuel tank (3)

If OAT $\geq +40^{\circ}\text{C}$ or $\leq -32^{\circ}\text{C}$:

Fuel temperature

★ Covers and tie-downs

★ Ice and snow (if any)

★ Ground handling wheels

- Check, complete

- Condition, no fuel leaks

- Drain sample

- Measure; Determine fuel type to be used and/or limit the operation altitude in accordance with FLM Section 2.

- Removed

- Removed

- Removed

- To be checked before each flight

Cockpit

All switches	- OFF
Power levers	- OFF
Rotor brake handle (if installed)	- In lowest position
Circuit breakers/fuses	- As required
Battery switch	- ON
Voltmeter indication	- 24 VDC nominal
If EPU is available:	
Battery switch	- OFF
Pitot tube heating	- Function

Lighting:

Position lights	- Function
Anti collision lights	- Function
Landing light(s)	- Function

Before Night Flights:

Dome and instrument lights	- Function
Utility lamp	- Function
Hand lamp	- Function
Battery switch	- OFF
Hand-held fire extinguisher	- On board, check pressure
Flashlight	- On board, Function
First aid kit (if installed here)	- On board

Fuselage - Right Side

Cockpit overhead window	- Condition
★ OAT indicator probe	- Condition
Cockpit door	- Condition, function, jettison handle secured
Pilot seat and safety belts	- Condition
★ Static port	- Clean, unobstructed
★ Pitot tube(s)	- Condition, clean, unobstructed

★ To be checked before each flight

Fuselage - Right Side (Cont.)

Landing gear and step	- Condition
Cabin door	- Condition, function
★ Baggage, cargo, loose items	- Stowed, secured
Passenger seats and safety belts	- Condition
★ Transmission compartment	- No foreign objects, no leakage, free of ice/snow
★ Transmission oil filter, filter clogging indicator pin (post SB BO105-10-126)	- Check in
Oil cooler	- No leakage
★ Engine oil level	- Above "ADD OIL" mark
Engine oil tanks	- Security of mounting, no leakage, filler caps secured
Scavenge oil filter (if installed) filter clogging indicator pin (2x)	- Check in
★ Main transmission oil level	- Oil level above "MIN" mark
Main transmission	- Condition, security of mounting, no leakage, filler cap closed
Rotor brake (if installed)	- Condition
Rotor brake	- Oil level, filler cap secured
★ Engine air intake	- Condition, no dirt, no foreign objects, free of ice/snow
Compressor	- Rotate by hand, check for smooth rotation
★ Transmission access door	- Closed, secured
★ Engine compartment	- No foreign objects, no fuel/oil leakage
★ Engine compartment ventilation air intake	- Clear
Engine	- General condition
Wiring, linkages and lines	- Condition, no leakage, no chafing
Engine mounts	- Condition, security
N1-governor and connections	- Security of mounting
Starter-generator	- Security of mounting
★ Engine access door	- Closed, secured

★ To be checked before each flight

Fuselage – Right Side (Cont.)

Drain and vent ports	– Clear
Battery (if installed here)	– Condition, no electrolyte spillage, security of mounting
Battery connectors (2)	– Connected
Battery vents	– Clear
★ Battery compartment door	– Closed, secured
Engine cowling	– Secured
Engine exhaust pipe	– Condition, security
★ Fuselage exterior	– General condition
Clam shell doors and latches	– Condition, function
First aid kit (if installed here)	– On board
Avionics (in avionic equipment bay)	– Security of mounting
★ Baggage, cargo, loose items	– Stowed, secured
Avionic bay door	– Closed
★ Clam shell doors	– Closed, secured
Spoiler	– Condition

Tail Boom

★ Tail boom – RH	– Condition
★ Tail rotor driveshaft fairing	– Secured
Drain ports	– Clear
★ RH horizontal and vertical stabilizer, position light (green)	– Condition
Vertical fin, position light (white), anti-collision light	– Condition
Vertical fin cowling	– Secured
★ Tail rotor	– Condition
PU-Erosion protective film (if fitted)	– Condition, no separation
★ Intermediate gearbox	– Oil level, no leakage

★ To be checked before each flight

Tail Boom (Cont.)**NOTE**

More reliable oil level readings may be obtained by first shaking the tail boom by means of the tail skid.

- | | |
|---|------------------------------------|
| ★ Tail rotor gearbox | – Condition, oil level, no leakage |
| ★ Intermediate gearbox access door (if installed) | – Closed, secured |
| Tail skid | – Condition |
| ★ LH horizontal and vertical stabilizer, position light (red) | – Condition |
| ★ Tail boom – LH | – Condition |
| ★ Tail rotor driveshaft fairing | – Secured |
| Drain ports | – Clear |

Fuselage – Left Side

- | | |
|--|--|
| ★ Fuel filler cap | – Closed, secured |
| ★ Fuselage exterior | – Condition |
| Engine exhaust pipe | – Condition, security |
| Engine cowling | – Secured |
| ★ Engine compartment | – No foreign objects, no fuel/oil leakage |
| ★ Engine compartment ventilation air intake | – Clear |
| Engine | – General condition |
| Wiring, linkages and lines | – Condition, no leakage, no chafing |
| Engine mounts | – Condition, security |
| N2-governor and control linkage | – Condition, security |
| Starter-generator | – Security of mounting |
| ★ Engine access door | – Closed, secured |
| ★ Hydraulic compartment | – No foreign objects, no leakage, free of ice/snow |
| ★ Hydraulic system | – No leakage |
| ★ Under icing conditions:
Area between hydraulic unit and XMSN floor,
especially control rod bellows | – Free of ice/snow |

-
- ★ To be checked before each flight

Fuselage - Left Side (Cont.)

Water drain ports	- Clear
Hydraulic filter clogging indicator pins (4x)	- Check in
★ Hydraulic reservoir oil level (2x)	- Above "FILL" mark
★ Service fitting caps	- Installed, secured
Transmission	- Condition, security of mounting, no leakage
★ Engine air intake	- Condition, no dirt, no foreign objects, free of ice/snow
Compressor	- Rotate by hand, check for smooth rotation
★ Hydraulic compartment access door	- Closed, secured
Main rotor	- Rotate by hand in direction of rotation, check for smooth rotation
★ Rotor hub oil level	- Between "MIN" and "MAX" marks
★ Rotor blades	- Condition
★ Rotor blade attachment bolts	- Secured
Polyurethane erosion protection tape (PUR tape), if fitted	- Condition, no separation
★ Rotor blade discharger-adapter	- Condition of corrosion and cracks
★ Driving link assy, mixing lever assy	- Condition, secured
★ Rotating control rods	- Condition, free movement, secured
Rotating control rod spherical bearings	- Smooth operation
Swashplate and boot	- Condition, secured
Pendulum absorbers (if installed)	- Condition, free movement
★ Air intake	- Condition, no foreign objects, free of ice/snow
Engine inlet deflector shield (if installed)	- Condition, no foreign objects
Cockpit overhead window	- Condition
Cabin door	- Condition, function
★ Baggage, cargo, loose items	- Stowed, secured
Passenger seats and seat belts	- Condition
Fuel vent	- Clear

★ To be checked before each flight

Fuselage - Left Side (Cont.)

- | | |
|---|--|
| Landing gear and step | - Condition |
| ★ Static port | - Clean, unobstructed |
| Cockpit door | - Condition, function, jettison handle secured |
| Copilot cyclic stick (if installed) | - Secured, safety-wired |
| Copilot collective lever (if installed) | - Secured |
| Copilot seat and safety belts | - Condition |
| ★ For single pilot flights: | |
| Copilot safety belts | - Closed, taut |

Nose Area

- | | |
|-----------------------------|--|
| Windshields | - Condition |
| Battery (if installed here) | - Condition, no electrolyte spillage, security of mounting |
| Battery connectors (2) | - Connected |
| Battery vents | - Clear |
| Nose compartment | - No foreign objects |
| ★ Nose compartment door | - Closed, secured |
| Cockpit air intake screens | - Clear |
| Drain ports | - Clear |
| Lower cockpit windows | - Condition |
| Fuselage bottom | - Condition |
| Anti-collision light | - Condition |
| Landing light(s) | - Condition |

3. Interior Check

- | | |
|----------------------------|------------------|
| ★ Seat and pedals | - Adjust |
| ★ Safety belts | - Fasten, adjust |
| ★ Shoulder harness locks | - Function |
| ★ <u>Instrument panel:</u> | |
| All instruments | - Check and set |

-
- ★ To be checked before each flight

Interior Check (Cont.)★ Switch panel:

- | | | |
|---------------------------------|---|-------------|
| Emergency fuel shutoff switches | – | Guarded |
| Circuit breakers | – | As required |
| All switches | – | OFF |
| COMM/NAV equipment | – | OFF |

★ Overhead panel:

- | | | |
|------------------|---|-------------|
| Power levers | – | OFF |
| All switches | – | OFF |
| Circuit breakers | – | As required |

★ Collective lever switch panel

- | | | |
|--------------|---|-----|
| All switches | – | OFF |
|--------------|---|-----|

Pre-start Check

- | | | |
|----------------|---|----|
| Battery switch | – | ON |
|----------------|---|----|

For EPU starts:

- | | | |
|-------------------|---|-----------|
| Battery switch | – | OFF |
| EPU | – | Connected |
| EPU caution light | – | ON |

★ Voltmeter indication

- | | | |
|---------|---|--------------|
| Battery | – | Minimum 24 V |
| EPU | – | 24 / 28 V |

★ Warning/caution lights

– Test

★ Mast moment indicator

– Test

★ Fuel quantity indicator

– Check readings

★ Fuel pumps (4)

– Function

★ Cyclic stick lock (if fitted)

– Removed, secured

★ Collective lever lock

– Removed

★ Flight controls (cyclic stick, collective lever, pedals)

– Check for ease and freedom of movement through entire control range

★ To be checked before each flight

Pre-start Check (Cont.)Hydraulic override (HY BLOCK)– Check function**NOTE**

To get accurate results, the cyclic stick must be moved exactly along the roll and longitudinal axes of the helicopter.

- | | |
|---|---|
| Collective lever | – Raise slightly |
| Hydraulic test switch | – RESET and release |
| HY BLOCK warning light | – Check off |
| Collective lever | – Raise until HY BLOCK warning light comes on, then lower slowly and release |
| Hydraulic test switch | – RESET and release |
| HY BLOCK warning light | – Check off |
| Collective lever | – Lower until HY BLOCK warning light comes on, then raise slowly and release |
| Hydraulic test switch | – RESET and release |
| HY BLOCK warning light | – Check off |
| Cyclic stick | – Move forward until HY BLOCK warning light comes on and release |
| Hydraulic test switch | – RESET and release |
| HY BLOCK warning light | – Check off |
| Each remaining cyclic control direction | – Check as above |
| Collective lever | – Full down |
| ★ Collective lever lock | – Engage |
| ★ HY BLOCK warning light | – Check on |
| <u>Trim actuator limit switches</u> | – <u>Check function as follows</u> |

NOTE

This check is performed to ensure that the cyclic stick retains its full range of travel when the trim actuators are switched off.

- | | |
|------------------------------------|---|
| Cyclic stick trim switch | – Trim full forward until actuator is heard to switch off |
| Cyclic stick | – Check for full fore/aft travel, ease of movement |
| Each remaining cyclic control axis | – Check as above |

★ To be checked before each flight

Pre-start Check (Cont.)

- | | |
|------------------------------------|----------------|
| ★ Cyclic stick | – Trim neutral |
| ★ Cyclic stick lock (if fitted) | – Engage |
| ★ Rotor brake lever (if installed) | – Full down |

-
- ★ To be checked before each flight

BLANK PAGE

101 – 4.2 Preflight Check Optional Equipment**801 Shoulder Harness with Automatic Inertia Reel**

- | | |
|------------------------|-------------|
| Shoulder harness | – Condition |
| Automatic inertia reel | – Function |

802 Electrical Heating and Ventilation System 4 kW/3+1 kW

- | | |
|------------------------|--|
| Four-light annunciator | – Check for function by pressing plastic cover |
|------------------------|--|

NOTE Functional check of the heating system is only possible with EPU engaged or generators operating

- | | |
|----------------|------------|
| Heating system | – Function |
|----------------|------------|

803 Windshield Wiper System

CAUTION OPERATE WINDSHIELD WIPER ONLY ON WET WINDSHIELDS OR LIFT WIPER ARMS

- | | |
|-------------------------|-------------|
| Windshield wiper system | – Condition |
| Windshield wiper system | – Function |

804 Dual Windshield Wiper System

CAUTION OPERATE WINDSHIELD WIPER ONLY ON WET WINDSHIELDS OR LIFT WIPER ARMS

- | | |
|------------------------------|-------------|
| Dual windshield wiper system | – Condition |
| Dual windshield wiper system | – Function |

805 Windshield Wiper and Washer System

- | | |
|------------------------------------|---------------|
| ★ Reservoir | – Fluid level |
| Cover | – Security |
| Windshield wiper and washer system | – Function |
| Windshield wiper | – Condition |

806 Split Bench Seat

- | | |
|------------------|-----------------------------------|
| Split bench seat | – Condition, correct installation |
| Lap-safety belts | – Condition |

807 Bench Seat

- | | |
|------------------|----------------------|
| Bench seat | – Condition, secured |
| Lap-safety belts | – Condition |

★ To be checked before each flight

808 Bench Seat

- | | |
|--|-----------------------------------|
| Bench seat | – Condition, correct installation |
| Lap-safety belts or lap-safety belts with shoulder harnesses | – Condition |

809 4-Seat Back-To-Back Bench

- | | |
|---------------------------|-----------------------------------|
| 4-seat back-to-back bench | – Condition, correct installation |
| Safety belts | – Condition |

810 Retractable Landing Light System

- | | |
|----------------------|-------------|
| Landing light system | – Condition |
|----------------------|-------------|

NOTE Perform preflight functional test of landing light using external power unit (EPU) or generators

- | | |
|----------------------|------------|
| Landing light system | – Function |
|----------------------|------------|

811 Retractable Landing Light System

- | | |
|----------------------|-------------|
| Landing light system | – Condition |
|----------------------|-------------|

NOTE Perform preflight functional test of landing light using external power unit (EPU) or generators

- | | |
|----------------------|------------|
| Landing light system | – Function |
|----------------------|------------|

812 Search and Landing Light

- | | |
|--------------------------|-----------------------|
| Search and landing light | – Condition, Function |
|--------------------------|-----------------------|

813 Searchlight

WARNING ALLOW SEARCHLIGHT TO COOL DOWN BEFORE TOUCHING IT

- | | |
|-----------------------|-----------------------------------|
| Searchlight, mounting | – Condition, correct installation |
| Searchlight lens | – Clean |

814 Medical Equipment Mounting Plate

- | | |
|----------------------------------|-------------|
| Medical equipment mounting plate | – Condition |
|----------------------------------|-------------|

815 Wall Cabinet Assembly

- | | |
|-----------------------|-------------|
| Wall cabinet assembly | – Condition |
|-----------------------|-------------|

816 Suction Bottle Holder

- | | |
|-----------------------|-------------|
| Suction bottle holder | – Condition |
|-----------------------|-------------|

★ To be checked before each flight

817 Oxygen Bottle Holder

Oxygen bottle holder – Condition

818 Infusion Bottle Suspension Hook

Infusion bottle suspension hook – Condition

819 Medical Attendant's Seat

Medical attendant's seat – Condition

820 Converted Copilot Seat

Copilot seat – Condition

821 Litter Retention System

Litter rails – Cleanliness and security of installation

Litter mounting – Secured

Safety utilities – Condition, Function

Litter(s) – Condition, secured

Safety belts for patients – Adjusted, secured

822 Cargo Hook System

Cargo hook system – Condition, secured

Mechanical and electrical release mechanism – Function

LOAD HOOK-Switch – CLOSED

Mechanical release lever – CLOSED

823 Antisettling Shoes

Antisettling shoes – Condition, correct installation

824 Snow Skids

Snow skids – Condition, correct installation

825 Emergency Flotation System

NOTE The following check should be performed prior to each flight over water.

Float covers and attaching lines – Condition

NOTE For flights over water the rubber ropes must be attached to the spoiler. For other flights the ropes can be stowed in clamps attached to the skids.

Rubber ropes – Attached to spoiler

★ To be checked before each flight

- | | |
|-------------------------------------|-----------------------------------|
| Pressure pipes | – Condition, correct installation |
| Pressure bottles | – Condition, correct installation |
| Pressure of bottles | – Check |
| EMERGENCY FLOTATION TEST Switch | – Press |
| Signal lamps | – Illuminated |
| Cover of EMERGENCY FLOTATION switch | – Closed, lead wire sealed |

828 Fuel Microfilter System

- | | |
|--------------------------------|---|
| Microfilter | – Drain |
| Warning segments FILT 1/FILT 2 | – Functionally test by pressing contamination indicator pin on top of the respective filter |

831 Long Range Fuel Tank

- | | |
|--|--|
| Vent and drain pipes | – Condition, connected, no leakage |
| Long range fuel tank(s) | – Secure installation, no leakage, no damage |
| Long range fuel tank(s) | – Drain |
| Only one long range fuel tank installed: | |
| Tank protect wall | – Installed |
| Fuel pipe(s) | – Condition, connected, no leakage |
| Mechanical tank valve indicator | – "CLOSED"-indication |
| Electrical connections | – Connected |
| Fuel level, each tank | – Open lid and check |
| Tank lid(s) | – Secured |

833 External Loudspeaker System

- | | |
|--------------------|-----------------------------------|
| Loudspeaker system | – Condition, correct installation |
|--------------------|-----------------------------------|

NOTE Following check is possible only with engines operating

- | | |
|----------------------|---------------|
| External loudspeaker | – Speech test |
|----------------------|---------------|

834 External Loudspeaker System BO105 S

- | | |
|--------------------|-----------------------------------|
| Loudspeaker system | – Condition, correct installation |
|--------------------|-----------------------------------|

NOTE Following check is possible only with engines operating

- | | |
|----------------------|---------------|
| External loudspeaker | – Speech test |
|----------------------|---------------|

★ To be checked before each flight

835 Safety Harness

Safety harness

– Condition

836 Rescue Hoist Assembly**NOTE**

- During winch operation with battery power, the cable will not retract completely. Complete retraction of the cable is possible after start of the generators. For cable inspection, it is recommended to use the EPU.
- Placement and function of the winch switch depends on the S/N of the helicopter. Up to S/N 160, a rocker-type switch is installed on the pitch control stick. For S/N 161 and subsq., a 4-way switch is installed (refer to Figures 836–2 and 836–3). For operation, refer to the OPM 104.

CAUTION

FOR BOOMS OPERATED WITH A SERVO MOTOR DC2040 M4C, THE DIRECTION OF ACTUATOR MOVEMENT MUST NOT BE CHANGED BEFORE THE MOTOR HAS COME TO A STANDSTILL (RUN-DOWN TIME IS APPROXIMATELY 5 SEC.). A DIRECTIONAL CHANGE CAN BE PERFORMED IMMEDIATELY IF THE BOOM IS OPERATED BY A SERVO MOTOR 13.1–0100.

WARNING

THE RESCUE HOIST MUST ALWAYS BE OPERATED BY ONE PERSON ONLY. SIMULTANEOUS CONTROL INPUTS TO COLLECTIVE LEVER AND WINCH CONTROL LEVER ARE NOT ALLOWED.

Prior to the first flight of the day

Winch boom	– Condition, secure installation on fuselage
Electrical connections (2)	– Tight, secured
Circuit breaker WINCH Circuit breaker CABLE CUTTER	– Pulled

Prior to the first rescue hoist operation of the day

Electrical connections (2)	– Tight, secured
Copilot seat	– Reversed as necessary
Dual controls (cyclic stick and collective lever)	– Removed
Retaining belt and safety belt	– Condition, secure installation, fasten belt
Winch control grip	– Connected
Circuit breaker WINCH Circuit breaker CABLE CUTTER, Circuit breaker HEATING (if installed)	– Push
Temperature control for electrical heating	– Turn to maximum

★ To be checked before each flight

Prior to the first rescue hoist operation of the day (Cont.)

- | | |
|---|---|
| Main switch HEATING (if installed) | – Set to position HEATING, the four indicator lights HEATING must illuminate |
| Main switch WINCH | – Set to ON, indicator light WINCH must illuminate, the four indicator lights HEATING must extinguish and the heating must be inoperative |
| Electrical heating (if installed) | – Switch OFF |
| Switch CABLE CUTTER TEST | – Push, indicator light CABLE CUTTER TEST must illuminate |
| Press annunciator | – Lamp test |
| Winch control grip (winch operator) | – Extend winch boom, reel out approx. 1m of cable |
| Winch boom | – Condition, secure installation on fuselage |
| Check of indicator pins and cable inspection: | |
| Boot on hook/bumper assy | – Detach at the bottom, fold up |
| Indicator pins | – Check for damage.
If damaged and length is more than 2mm shorter, replace indicator pins and inspect cable. |
| Cable in vicinity of bumper | – Condition |
| Boot | – Fold down and reattach to hook/bumper assy |
| Winch control grip (winch operator) | – Reel in cable until automatic switch-off occurs, retract winch boom |
| Collective lever (pilot) | – Extend winch boom, reel out cable approximately 1m, reel in cable until automatic switch-off occurs, fully retract winch boom |
| Main switch WINCH | – Set to OFF |
| Skid guard assembly | – Installed |

Prior to every rescue hoist operation

- | | |
|-------------------------------------|---|
| Electrical connections (2) | – Tight, secured |
| Retaining belt and safety belt | – Condition, secure installation, fasten belt |
| Winch control grip (winch operator) | – Connected |

★ To be checked before each flight

Circuit breaker WINCH
Circuit breaker CABLE CUTTER

- Push

Prior to every rescue hoist operation

Main switch WINCH

- Set to ON,
indicator light WINCH must illuminate

Winch control grip (winch operator)

- Extend winch boom, reel out approx. 1m of cable

Winch boom

- Condition, secure installation on fuselage, winch unit and hook/bumper assy for signs of impact

Check of indicator pins inside hook/bumper assy and cable inspection:

Boot on hook/bumper assy

- Detach at the bottom, fold up

Indicator pins

- Check for damage.
If damaged and length is more than 2mm shorter, replace indicator pins and inspect cable.

Cable in vicinity of bumper

- Condition

Boot

- Fold down and reattach to hook/bumper assy

Winch control grip (winch operator)

- Reel in cable until automatic switch-off occurs, retract winch boom

Switch CABLE CUTTER TEST

- Push, indicator light CABLE CUTTER TEST must illuminate

Main switch WINCH

- Set to OFF

837 External Rearview Mirror

Mirror

- Secure fit

Mirror glass

- Condition

Cover (night flights only)

- Attached

838 High Landing Gear

High landing gear

- Proper installation

Cross tubes

- Deformation

840 Lightning Protector

Lightning protector

- Condition

★ To be checked before each flight

841 Engine Air Cleaner

- | | |
|--|------------------------|
| Air cleaner panels | – Condition, unclogged |
| Bypass doors (by operating Bowden cable or actuator) | – Freedom of movement |

842 Engine Air Cleaner (with Bleed Air Shutoff)

- | | |
|-----------------------------|-------------------------|
| Air cleaner panels | – Condition, unclogged |
| Bypass doors using actuator | – Unrestricted movement |

843 Engine Inlet Screen

- | | |
|---------------------|------------------------|
| Engine inlet screen | – Condition, unclogged |
|---------------------|------------------------|

844 Pendulum Absorbers

- | | |
|--------------------|-----------------------|
| Pendulum absorbers | – Proper installation |
| Shaft seals | – Leakage |

845 Chip Warning Indication

- | | |
|----------------------|--|
| T PLUG warning light | – Press, warning light must illuminate |
|----------------------|--|

846 Stability Augmentation System (SAS)

- | | |
|------------|------------------------------------|
| SAS system | – Functional check per para. 846-5 |
|------------|------------------------------------|

850 Bleed Air Heating

- | | |
|-----------------------------|----------------------|
| Bleed air system | – Function |
| Air selector lever | – Easy operation |
| Air inlets and nozzles/jets | – No foreign objects |

851 Search and Landing Light 450 W

- | | |
|--------------------------|-------------|
| Search and landing light | – Condition |
| Search and landing light | – Function |

852 Compressor Rinsing Equipment

- | | |
|------------------------------|--------------------|
| Compressor rinsing equipment | – Tight connection |
|------------------------------|--------------------|

853 Fire Extinguishing System

- | | |
|-----------------------------------|---|
| Fire extinguishing system | – Condition |
| Charge pressure on pressure gauge | – Check charge pressure on pressure gauge against permissible limits in table 853-2 |
| Light bulbs | – Functional check per para. 853-5 |

★ To be checked before each flight

854 Main Rotor Blade Folding System

- | | |
|---------------------------|--------------------------|
| Locking lever | – Correct installation |
| Locking lever and pip pin | – Function and safetying |

859 Wire Strike Protection System (WSPS)

- | | |
|------|-------------|
| WSPS | – Condition |
|------|-------------|

860 Engine Air Cleaner

Exterior Check

- | | |
|----------------------|-----------------------------------|
| ★ Particle separator | – Condition, integrity |
| Housing | – Secure |
| Bypass door | – Clean, clear of foreign objects |

NOTE When conditions permit, open bypass door and check particle separator interior for cleanliness.

- | | |
|-------------------|-----------------------------------|
| Swirl tube panels | – Clean, clear of foreign objects |
|-------------------|-----------------------------------|

NOTE Damage swirl tubes must be replaced or sealed closed.

- | | |
|---|------------------------------------|
| Scavenge blower ducts | – Secure, clear of foreign objects |
| Scavenge blower electrical connector (each side) | – Secure |
| Seals (mast, control rods and particle separator) | – Condition, secure |
| Mast and control rods | – Check for chafing |
| Oil cooler air intake scoop and screen | – Secure, clear of foreign objects |
| Oil cooler air outlet | – Clean, clear of foreign objects |

Interior Check

NOTE Under sand/dust conditions, make certain that SANDFILTER switch is ON before switching battery on so that bypass door remains closed.

- | | |
|---------------------------|--|
| Engine air cleaner system | – Check function |
| SANDFILTER switch | – ON; check that SANDEF. caution light comes on for approx. 2 seconds (if bypass door was open), that bypass door closes, and that both blowers come on. |
| SANDFILTER switch | – OFF (as required); check that SANDEF. caution light comes on for approx. 2 seconds, that bypass door opens, and that both blowers go off. |

★ To be checked before each flight

Interior Check

NOTE If use of the particle separator is necessary during engine starting, pull the two SANDF. BLWR circuit breakers so that the bypass door remains closed and the blowers are off.

868 IR Search- and landing light 400/200 W

IR Search- and landing light unit	– Condition, stowed
Before night flights: IR Search- and landing light	– Function
Annunciator light LDG LIGHT	– Function

★ To be checked before each flight

101 - 5 SUPPLEMENTARY CHECK 25/50 FH

101 - 5.1 Supplementary Check 25/50 Fh Basic-Helicopter

101 - 5.1.1 Supplementary Check 25 Fh Basic-Helicopter

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Inspection or Maintenance Work	Reference	Initial
GENERAL		
(1) Review aircraft log book and ensure all recorded discrepancies have been corrected		
(2) Ensure compliance with all applicable airworthiness directives and manufacturer's (ECD) directives		
(3) Ensure compliance with all supplementary inspections and special inspections		
(4) Ensure life-limited parts do not exceed service life		
(5) Ensure TBO-components do not exceed TBO		
(6) Ensure all required inspections of engines, equipment and components have been performed according to respective manufacturer's documentation		
(7) Record compliance with these inspections in Historical Record		
11 - MAIN TRANSMISSION		
(1) Deleted		
41 - MAIN ROTOR CONTROLS		
(1) Deleted		
63 - LUBRICATION SYSTEM		
(1) EFFECTIVITY Ram air ventilation not installed: Visually inspect baffle plate, located between oil cooler and fan, and attaching clamps for cracks.		

Table 101-5.1 - Supplementary Check 25 Fh Basic-Helicopter (1 of 1)

Technician		Inspector	
Date:		Date:	
Name	Signature	Stamp	Signature

101 - 5.1.2 Supplementary Check 50 Fh Basic-Helicopter

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Inspection or Maintenance Work		Reference	Initial
GENERAL			
(1)	Review aircraft log book and ensure all recorded discrepancies have been corrected		
(2)	Ensure compliance with all applicable airworthiness directives and manufacturer's (ECD) directives		
(3)	Ensure compliance with all supplementary inspections and special inspections		
(4)	Ensure life-limited parts do not exceed service life		
(5)	Ensure TBO-components do not exceed TBO		
(6)	Ensure all required inspections of engines, equipment and components have been performed according to respective manufacturer's documentation		
(7)	Record compliance with these inspections in Historical Record		
11 - MAIN TRANSMISSION			
(1)	EFFECTIVITY No electrical chip detector installed, post SB BO105-10-126: Inspect magnetic plug of main transmission for deposits and clean magnetic plug	11-18	
14 - MAIN ROTOR BLADE			
(1)	EFFECTIVITY Main rotor blade type 2 <i>First time at 1000 Fh TSN of main rotor blade:</i> Inspect main rotor blade for bulging in the vicinity of balance weight 1	14-3, step 13	
32 - TAIL ROTOR DRIVE			
(1)	EFFECTIVITY No electrical chip detector installed: Inspect magnetic plugs of tail rotor gearbox and intermediate gearbox for deposits and clean magnetic plugs	11-18	

Table 101-5.2 - Supplementary Check 50 Fh Basic-Helicopter (1 of 2)

Inspection or Maintenance Work	Reference	Initial
41 - MAIN ROTOR CONTROLS		
(1) Deleted		
63 - LUBRICATION SYSTEM		
(1) EFFECTIVITY Ram air ventilation not installed: Visually inspect baffle plate, located between oil cooler and fan, and attaching clamps for cracks		

Table 101-5.2 - Supplementary Check 50 Fh Basic-Helicopter (2 of 2)

Technician		Date:	Inspector		Date:
Name	Signature		Stamp	Signature	

BLANK PAGE

101 - 6 SUPPLEMENTARY CHECK 100 FH

101 - 6.1 Supplementary Check 100 Fh Basic-Helicopter

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Inspection or Maintenance Work	Reference	Initial
GENERAL		
(1) Review aircraft log book and ensure all recorded discrepancies have been corrected		
(2) Ensure compliance with all applicable airworthiness directives and manufacturer's (ECD) directives		
(3) Ensure compliance with all supplementary inspections and special inspections		
(4) Ensure life-limited parts do not exceed service life		
(5) Ensure TBO-components do not exceed TBO		
(6) Ensure all required inspections of engines, equipment and components have been performed according to respective manufacturer's documentation		
(7) Record compliance with these inspections in Historical Record		
11 - MAIN TRANSMISSION		
(1) Inspect magnetic plug of main transmission for deposits and clean magnetic plug	11-18	
(2) Deleted		
(3) Inspect filter element for deposits	11-13	
14 - MAIN ROTOR BLADE		
(1) EFFECTIVITY Main rotor blade type 2 <i>First time at 1000 Fh TSN of main rotor blade:</i> Inspect main rotor blade for bulging in the vicinity of balance weight 1	14-3, step 13.	
(2) EFFECTIVITY Discharger Adapter P/N L621M1007 205 Visually inspection of corrosion and cracks	14-5, step .	
31 - TAIL BOOM ASSEMBLY		
(1) EFFECTIVITY Tail boom assemblies up to S/N 350, if AB 15 not accomplished: Remove tail rotor shaft fairing and visually inspect in the vicinity of the three bearing brackets (P/N 105-30251.17/.18/.19) for cracks. Refer to AB 15 for further limitations		
(2) Inspect tail rotor gearbox attach fitting in vertical fin for loose rivets and cracks	31-2, step 5.	

Table 101-6.1 - Supplementary Check 100 Fh Basic-Helicopter (1 of 3)

Inspection or Maintenance Work		Reference	Initial
32 - TAIL ROTOR DRIVE			
(1)	Inspect magnetic plugs of tail rotor gearbox and intermediate gearbox for deposits and clean magnetic plugs	32-56	
(2)	EFFECTIVITY "Single webbed" type of gearbox housing (see Fig. 32-23): Visually inspect flange to housing transition area for cracks and conditions indicating presence of cracks, such as oil leakage and accumulation of dirt		
33 - TAIL ROTOR			
(1)	Without disassembly, inspect spherical bearings in fork end of tail rotor shaft for play	33-21, step 1.c.	
(2)	EFFECTIVITY Tail rotor blade mounting forks made from aluminum alloy P/N 105-31711, 105-31722: Inspect blade mounting forks for cracks	33-16, step 2.	
	NOTE Remove tail rotor blade prior to inspection	34-4, 34-5	
(3)	Inspect flapping hinge function	33-4, step 3	
34 - TAIL ROTOR BLADE			
(1)	EFFECTIVITY Pre SB BO 105-30-112: all tail rotor blades except P/N: 105-31791, 105-317915, 105-31793, 105-31970, 105-31980 Post SB BO 105-30-112: all tail rotor blades except BO 105 CBS-5KLH and BO 105 CB-3 Inspect tail rotor blade for impact damage and cracks in surface protection. The cover tape in the nose area does not have to be removed.	34-2, steps 2., 4., 6. thru 9., 12., 13.	
41 - MAIN ROTOR CONTROLS			
(1)	EFFECTIVITY Lock washer not installed: Inspect bolts connecting rotating control rods to control levers of main rotor head for tightness	41-3, step 4.c.	
61 - ENGINE			
(1)	Visually inspect exhaust clamps for cracks, particularly near latches	61-3	

Table 101-6.1 – Supplementary Check 100 Fh Basic-Helicopter (2 of 3)

Inspection or Maintenance Work		Reference	Initial
63 - LUBRICATION SYSTEM			
(1) EFFECTIVITY	Ram air ventilation not installed: Visually inspect baffle plate, located between oil cooler and fan, and attaching clamps for cracks		

Table 101-6.1 - Supplementary Check 100 Fh Basic-Helicopter (3 of 3)

Technician		Inspector	
Date:		Date:	
Name	Signature	Stamp	Signature

BLANK PAGE

101 – 6.2 Supplementary Check 100 Fh Optional Equipment

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Inspection or Maintenance Work		Reference	Initial
GENERAL			
(1)	Review aircraft log book and ensure all recorded discrepancies have been corrected		
(2)	Ensure compliance with all applicable airworthiness directives and manufacturer's (ECD) directives		
(3)	Ensure compliance with all supplementary inspections and special inspections		
(4)	Ensure life-limited parts do not exceed service life		
(5)	Ensure TBO-components do not exceed TBO		
(6)	Record compliance with these inspections in Historical Record		
831 – LONG RANGE FUEL TANK			
(1)	Check long range fuel tank for condition (if tank remains installed)	831-4	
845 – CHIP WARNING INDICATION			
(1)	Inspect electrical chip detector on main transmission for deposits, then clean and functionally check chip detector	845-5	
857 – CONTINUOUS IGNITION SYSTEM			
(1)	Check spark igniters for condition	857-4	

Table 101-6.2 – Supplementary Check 100 Fh Optional Equipment (1 of 1)

Technician		Inspector	
Date:		Date:	
Name	Signature	Stamp	Signature

BLANK PAGE

101 - 7 12-MONTH INSPECTION

101 - 7.1 12-Month Inspection Basic-Helicopter

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Inspection or Maintenance Work		Reference	Initial
GENERAL			
(1)	Review aircraft log book and ensure all recorded discrepancies have been corrected		
(2)	Ensure compliance with all applicable airworthiness directives and manufacturer's (ECD) directives		
(3)	Ensure compliance with all supplementary inspections and special inspections		
(4)	Ensure life-limited parts do not exceed service life		
(5)	Ensure TBO-components do not exceed TBO		
(6)	Ensure all required inspections of engines, equipment and components have been performed according to respective manufacturer's documentation		
(7)	Record compliance with these inspections in Historical Record		
11 - MAIN TRANSMISSION			
(1)	Remove magnetic plug and test magnetic retaining force	11-17, 11-19, 11-18, 02-14	
(2)	EFFECTIVITY Transmission mounting struts P/N 105-10161 and 105-10162: Inspect transmission mounting struts for condition	11-3, step 10.	
(3)	Visually inspect area of support tube flange for cracks	11-3, step 12.	
21 - FUSELAGE			
(1)	Inspect landing gear mounting brackets and surrounding fuselage area for condition	21-3, step 10.	
(2)	Clean, grease and functionally check jettison device of cockpit doors. Renew lead wire seal	21-4	
32 - TAIL ROTOR DRIVE			
(1)	Remove magnetic plugs of intermediate gearbox and tail rotor gearbox and test their magnetic retaining force	32-9, 02-14	
41 - MAIN ROTOR CONTROLS			
(1)	Visually inspect seals on upper rod ends of control rods for damage The following control rods are affected: - Vertical control rods below hydraulic unit (3 off) - control rods between hydraulic unit and mixing lever assy (3 off) - rotating control rods (4 off)	41-3	

Table 101-7.1 - 12-Month Inspection Basic-Helicopter (1 of 3)

Inspection or Maintenance Work	Reference	Initial
41 - MAIN ROTOR CONTROLS		
(2) Check rigging of collective control forces	102-16, step 9.	
(3) EFFECTIVITY Rotating control rods P/N 105-13121: Distinguishing feature of control rod: O.D. of tube is 20 mm Visually inspect reinforcement sleeves on control rod ends for cracks. Replace cracked control rods		
(4) Clean swash plate sliding surface on support tube. Move swash plate to uppermost position to expose sliding surface. Use cleaning solvent (CM 201, 202 or 217)		
42 - TAIL ROTOR CONTROLS		
(1) Visually inspect seals on rod end and clevis for damage Following rods are affected: - control rod in the tail boom - control rod in vertical fin (upper clevis)	42-3	
(2) Control rod in vertical fin: Visual inspect sealing of blind hole in fork end for damage		
43 - HYDRAULIC SYSTEM		
(1) Inspect hydraulic system for condition	43-11	
(2) Spray-coat N2-lever (droop-compensation) with corrosion preventive compound (CM 508)		
(3) Check filter contamination indicator (lateral indicator pin configuration)	43-14	
(4) Functionally test hydraulic system	43-15	
(5) Perform ground run check of selector valve setting	43-16 or 43-16A	
(6) Inspect system 1 selector valve for corrosion	43-13	
61 - ENGINE		
(1) Remove chip detectors and test their magnetic retaining force NOTE For removal and installation procedures, see Allison OMM 10W2 or 5W2 as applicable	02-14	
62 - FUEL SYSTEM		
(1) Check fuel differential pressure switch for function	62-39	
(2) Perform functional test and leakage test of fuel shutoff valves	92-82, 92-83	
63 - LUBRICATION SYSTEM		
(1) Remove oil drain plugs of oil tank and test magnetic retaining force of each plug	63-4, step 1.b., 02-14	

Table 101-7.1 - 12-Month Inspection Basic-Helicopter (2 of 3)

Inspection or Maintenance Work	Reference	Initial
700 - STANDARD EQUIPMENT		
(1) Inspect cabin equipment for condition	702-2	
(2) Inspect cabin ventilation for condition, check for function	704-2	
(3) Inspect identification and other markings for legibility, and adhesive-backed decals for damage and proper adhesion		
(4) Inspect harnesses, buckles and inertia reels for condition	701-2 step 5, 6 and 7	
91 - INSTRUMENT SYSTEM		
(1) Ventilate dual torque indication system	91-57	
(2) Inspect instruments for condition	91-4	
(3) Clean and drain pitot-static system, inspect for condition and check for function	91-9 thru 91-12	
(4) Inspect magnetic compass for condition and function and compensate magnetic compass	91-24 thru 91-26	
(5) Calibrate TOT indication system	91-45	
(6) Inspect instrument panel, center panel and overhead panel for presence, legibility and security of labels and placards NOTE Replace missing placards and rebond separated placards		
92 - ELECTRICAL SYSTEMS		
(1) Inspect socket of anti-collision light for condition	92-116	
(2) Inspect battery-temperature warning	92-34E	
(3) Inspect battery connector and cable	92-28 step 1	

Table 101-7.1 - 12-Month Inspection Basic-Helicopter (3 of 3)

Technician		Inspector	
Date:		Date:	
Name	Signature	Stamp	Signature

BLANK PAGE

101 – 7.2 12-Month Inspection Optional Equipment

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Inspection or Maintenance Work	Reference	Initial
GENERAL		
(1) Review aircraft log book and ensure all recorded discrepancies have been corrected		
(2) Ensure compliance with all applicable airworthiness directives and manufacturer's (ECD) directives		
(3) Ensure compliance with all supplementary inspections and special inspections		
(4) Ensure life-limited parts do not exceed service life		
(5) Ensure TBO-components do not exceed TBO		
(6) Record compliance with these inspections in Historical Record		
836 – RESCUE HOIST ASSEMBLY		
(1) Lubricate winch unit	836-22	
(2) Inspect relay box for condition	836-3B	
845 – CHIP WARNING INDICATION		
(1) Remove chip detector and test magnetic retaining force	845-4, 845-6, 02-14	

Table 101-7.2 – 12-Month Inspection Optional Equipment

Technician	Date:	Inspector	Date:
Name	Signature	Stamp	Signature

BLANK PAGE

101 - 8 PERIODICAL INSPECTION

101 - 8.1 Periodical Inspection Basic Helicopter

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Inspection or Maintenance Work	Reference	Initial
GENERAL		
(1) Review aircraft log book and ensure all recorded discrepancies have been corrected		
(2) Ensure compliance with all applicable airworthiness directives and manufacturer's (ECD) directives		
(3) Ensure compliance with all supplementary inspections and special inspections		
(4) Ensure life-limited parts do not exceed service life		
(5) Ensure TBO-components do not exceed TBO		
(6) Ensure all required inspections of engines, equipment and components have been performed according to respective manufacturer's documentation		
(7) Record compliance with these inspections in Historical Record		
11 - MAIN TRANSMISSION		
(1) Inspect main transmission and attached parts for condition	11-3 step 1. thru 16.	
(2) Remove magnetic plug and inspect for deposits, clean and test for magnetic retaining force	11-17, 11-18, 11-19, 02-14	
(3) EFFECTIVITY H/C up to S/N 690 if not installed with washers P/N 105-13104.17: Inspect underside of rotor mast flange in the area of bores, including webs between the bores, for cracks, using a magnifying glass		
12 - ROTOR BRAKE SYSTEM		
(1) Inspect rotor brake system for condition	12-3	
13 - MAIN ROTOR SYSTEM		
(1) Inspect main rotor system for condition	13-3	
(2) Remove primary bolts and secondary bolts, clean and inspect for condition; crack inspection not necessary	13-10, -11, -14, -16, -17, -18	

Table 101-8.1 - Periodical Inspection Basic-Helicopter (1 of 6)

Inspection or Maintenance Work		Reference	Initial
14 - MAIN ROTOR BLADE			
(1) Inspect main rotor blade for condition		14-2 or 14-3	
NOTE	Note following when inspecting erosion protective shells for debonding: When first-time debonds are found, or existing debonds have increased in area, the inspection shall be repeated after 50Fh. Only when an inspection has revealed no further debonding do the periodic inspection intervals re-apply		
(2) EFFECTIVITY Discharger Adapter P/N B621M1026 201 Visually inspection of corrosion and cracks		14-5 step 6	
NOTE	Inspect adapters from now on at the periodical inspection every 600fh or 4 years (600fh or 2 years at CBS-5 KLH), depending on witch time limit is reached first.		
21 - FUSELAGE			
(1) Inspect following frames for cracks:			
- upper corners of frames 7, 8, 9, forward and aft, and diagonal frame and frame 10 - lower frame segments 7 and 8			
NOTE	Stop-drill cracks. Repair any cracks in the upper area of frames 7 and 9 and diagonal frame within the next 50Fh. Repair any cracks in the upper area of frames 8 and 10 and in the lower area of frames 7 and 8 within the next 600Fh. Check for crack propagation every 200Fh. Repair cracks which show propagation within the next 50Fh.		
(2) Inspect landing gear mounting brackets and surrounding fuselage area for condition		21-3, step 10.	
(3) Inspect transmission strut attach fittings and engine mount attach fittings for condition and inspect fuselage area adjacent to attach fittings for loose rivets and cracks		21-3, step 5 and 7	
(4) Clean, grease and functionally check jettison device of cockpit doors. Renew lead wire seal		21-4	
(5) Ensure drain holes are not obstructed		21-3, step 4.	

Table 101-8.1 - Periodical Inspection Basic-Helicopter (2 of 6)

Inspection or Maintenance Work		Reference	Initial
31 - TAIL BOOM			
(1) EFFECTIVITY	Tail boom assemblies up to S/N 350 if AB 15 not accomplished: Remove tail rotor shaft fairing and visually inspect in the vicinity of the three bearing brackets P/N 105-30251.17/.18/.19 for cracks. Refer to AB 15 for further limitations		
(2)	Inspect tail boom assembly for condition	31-2	
32 - TAIL ROTOR DRIVE			
(1)	Inspect tail rotor drive for condition	32-3	
(2)	Remove magnetic plugs of intermediate gearbox and tail rotor gearbox and test their magnetic retaining force	32-9, 02-14	
(3) EFFECTIVITY	"Single webbed" type of gearbox housing (see Fig. 32-23): Visually inspect flange to housing transition area for cracks and conditions indicating presence of cracks, such as oil leakage and accumulation of dirt		
33 - TAIL ROTOR			
(1)	Inspect tail rotor for condition	33-4, step 1 - 7	
(2)	Without disassembly, inspect spherical bearings in fork end of tail rotor shaft	33-21, step 1.c	
(3) EFFECTIVITY	Tail rotor blade mounting forks made from aluminum alloy P/N 105-31711, 105-31722: Remove and inspect blade mounting forks for condition	33-14 thru 33-18	
(4)	Remove bellcrank assy and inspect for condition	33-9 thru 33-12	
(5)	Check ball bearings of sliding sleeve for proper running and absence of play	33-27, step 14.	
(6)	Remove bolt connecting tail rotor shaft to tail rotor head, and clean and inspect bolt for condition	33-21, step 1.e.	
(7)	Inspect balance weight and control lever for condition	33-12C	
34 - TAIL ROTOR BLADE			
(1)	Inspect tail rotor blades for condition	34-2	
41 - MAIN ROTOR CONTROLS			
(1)	Inspect flight control components (boosted section of flight controls) located above hydraulic system including swash plate for condition	41-3	
(2)	Check swash plate bearing for proper running	41-73	
(3)	Check rigging of collective control forces	102-16, step 9.	
(4)	Clean swash plate sliding surface on support tube. Move swash plate to uppermost position to expose sliding surface. Use cleaning solvent (CM 201, 202 or 217)		

Table 101-8.1 - Periodical Inspection Basic-Helicopter (3 of 6)

Inspection or Maintenance Work		Reference	Initial
41 - MAIN ROTOR CONTROLS			
(5) Visually inspect seals on upper rod ends of control rods for condition The following control rods are affected: - Vertical control rods below hydraulic unit (3 off) - control rods between hydraulic unit and mixing lever assy (3 off) - rotating control rods (4 off)		41-3	
(6) EFFECTIVITY Rotating control rods P/N 105-13121: Distinguishing feature of control rod: O.D. of tube is 20 mm Visually inspect reinforcement sleeves on control rod ends for cracks. Replace cracked control rods			
42 - TAIL ROTOR CONTROLS			
(1) EFFECTIVITY H/C up to S/N 310 if SB-BO105-30-17 not accomplished: Remove control rod in the tail boom and inspect chafe protection for condition and grease sliding areas		42-33, step 4.	
(2) Visually inspect seals on rod end and clevis for damage Following rods are affected: - control rod in the tail boom - control rod in vertical fin (upper clevis)		42-3	
(3) Control rod in vertical fin: Visual inspect sealing of blind hole in fork end for damage			
43 - HYDRAULIC SYSTEM			
(1) Inspect switchover control linkage for play		43-17 or 43-17A	
(2) Inspect hydraulic system for condition		43-11	
(3) Spray-coat N2-lever (droop-compensation) with corrosion preventive compound (CM 508)			
(4) Check filter contamination indicator (lateral indicator pin configuration)		43-14	
(5) Functionally test hydraulic system		43-15	
(6) Perform ground run check of selector valve setting		43-16 or 43-16A	
(7) Inspect system 1 selector valve for corrosion		43-13	
51 - LANDING GEAR			
(1) Inspect landing gear for condition		51-2	
61 - ENGINE			
(1) Inspect exhaust clamps for corrosion and cracks		61-34	
(2) Inspect engine accessories and mounting struts for condition		61-3	

Table 101-8.1 - Periodical Inspection Basic-Helicopter (4 of 6)

Inspection or Maintenance Work	Reference	Initial
61 - ENGINE		
(3) Remove anti-icing valve actuators and inspect mounting brackets for condition	61-37 thru 61-39	
(4) Remove chip detectors and test their magnetic retaining force NOTE For removal and installation procedures, see Allison OMM 10W2 or 5W2 as applicable	02-14	
62 - FUEL SYSTEM		
(1) Inspect fuel lines in the engine compartment for condition	62-3	
(2) Check fuel differential pressure switch for function	62-39	
(3) Perform functional test and leakage test of fuel shutoff valves	92-82, 92-83	
63 - LUBRICATION SYSTEM		
(1) EFFECTIVITY Ram air ventilation not installed: Visually inspect baffle plate, located between oil cooler and fan, and attaching clamps for cracks		
(2) Inspect lubrication system for condition	63-3	
(3) Remove oil drain plugs of oil tank and test the magnetic retaining force of their respective magnetic plugs	63-4, step 1.b, 02-14	
64 - FIREWALLS		
(1) Inspect fire walls for condition	64-2	
65 - ENGINE OPERATION AND CONTROL		
(1) Inspect engine operation and control linkages for condition	65-3	
700 - STANDARD EQUIPMENT		
(1) Inspect pilot and copilot seats for condition	701-2	
(2) Inspect cabin equipment for condition	702-2	
(3) Inspect cabin ventilation for condition, check for function	704-2	
(4) Inspect identification and other markings for legibility, and adhesive-backed decals for damage and proper adhesion		
(5) Inspect harnesses, buckles and inertia reels for condition	701-2 step 5., 6. and 7.	
91 - INSTRUMENT SYSTEM		
(1) Ventilate dual torque indication system	91-57	
(2) Inspect instruments for condition	91-4	
(3) Clean and drain pitot-static system, inspect for condition and check for function	91-9 thru 91-12	
(4) Inspect magnetic compass for condition and function and compensate magnetic compass	91-24 thru 91-26	

Table 101-8.1 - Periodical Inspection Basic-Helicopter (5 of 6)

Inspection or Maintenance Work	Reference	Initial
91 - INSTRUMENT SYSTEM		
(5) Calibrate TOT indication system	91-45	
(6) Inspect instrument panel, center panel and overhead panel for presence, legibility and security of labels and placards NOTE Replace missing placards and rebond separated placards		
92 - ELECTRICAL SYSTEMS		
(1) Inspect battery bonding jumper for tight installation and unimpaired surface protection		
(2) Check voltage regulator setting	92-17	
(3) Inspect socket of anti-collision light for condition	92-116	
(4) Remove starter-generator and inspect carbon brushes	92-20, 92-20A	
(5) Inspect battery-temperature warning	92-34E	

Table 101-8.1 - Periodical Inspection Basic-Helicopter (6 of 6)

Technician		Inspector	
Date:		Date:	
Name	Signature	Stamp	Signature

101 – 8.2 Periodical Inspection Optional Equipment

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Inspection or Maintenance Work	Reference	Initial
GENERAL		
(1) Review aircraft log book and ensure all recorded discrepancies have been corrected		
(2) Ensure compliance with all applicable airworthiness directives and manufacturer's (ECD) directives		
(3) Ensure compliance with all supplementary inspections and special inspections		
(4) Ensure life-limited parts do not exceed service life		
(5) Ensure TBO-components do not exceed TBO		
(6) Record compliance with these inspections in Historical Record		
831 – LONG RANGE FUEL TANK		
(1) Check long range fuel tank for condition (if tank remains installed)	831-4	
836 – RESCUE HOIST ASSEMBLY		
(1) Lubricate winch unit	836-22	
845 – CHIP WARNING INDICATION		
(1) Remove chip detector, check, clean, test for function and test magnetic retaining force	845-4, 845-5, 845-6, 02-14	
854 – MAIN ROTOR BLADE FOLDING SYSTEM		
(1) Remove locking lever assembly, clean and inspect for condition (crack inspection not required)	854-3, step 1	
(2) Remove locking lever assembly - Clean and inspect nickel-plated bolts for condition, and provide with corrosion protection (crack inspection not required) - Clean and inspect solid film lubricant-coated bolts for condition (crack inspection not required). Coat bolt with lubricant (CM146)	854-3, step 1.a and 854-4, step 2.f 854-3, step 1.b and 854-4, step 2.g	

Table 101-8.2 – Periodical Inspection Optional Equipment (1 of 2)

Inspection or Maintenance Work	Reference	Initial
857 – CONTINUOUS IGNITION SYSTEM		
(1) Check spark igniters for condition	857-4	
(2) Visually inspect noise suppressor and accessible parts of wiring for condition	857-4	

Table 101-8.2 – Periodical Inspection Optional Equipment (2 of 2)

Technician		Inspector	
Date:		Date:	
Name	Signature	Stamp	Signature

101 - 9 EXTENDED PERIODICAL INSPECTION

101 - 9.1 Extended Periodical Inspection Basic Helicopter

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Inspection or Maintenance Work	Reference	Initial
GENERAL		
(3) Review aircraft log book and ensure all recorded discrepancies have been corrected		
(4) Ensure compliance with all applicable airworthiness directives and manufacturer's (ECD) directives		
(5) Ensure compliance with all supplementary inspections and special inspections		
(6) Ensure life-limited parts do not exceed service life		
(7) Ensure TBO-components do not exceed TBO		
(8) Ensure all required inspections of engines, equipment and components have been performed according to respective manufacturer's documentation		
(9) Record compliance with these inspections in Historical Record		
11 - MAIN TRANSMISSION		
(1) Inspect main transmission and attached parts for condition	11-3, step 1 thru 16	
(2) Remove magnetic plug and inspect for deposits, clean and test for magnetic retaining force	11-17, 11-18, 11-19, 02-14	
(3) EFFECTIVITY H/C up to S/N 690 if not installed with washers P/N 105-13104.17: Inspect underside of rotor mast flange in the area of bores, including webs between the bores, for cracks, using a magnifying glass		
12 - ROTOR BRAKE SYSTEM		
(1) Inspect rotor brake system for condition	12-3	
13 - MAIN ROTOR SYSTEM		
(1) Inspect main rotor system for condition	13-3	
(2) Remove primary bolts and secondary bolts, clean and inspect for condition; crack inspection not necessary	13-10, -11, -14, -16, -17, -18	

Table 101-9.1 - Extended Periodical Inspection Basic-Helicopter (1 of 5)

Inspection or Maintenance Work		Reference	Initial
14 - MAIN ROTOR BLADE			
(1) Inspect main rotor blade for condition		14-2 or 14-3	
NOTE	Note following when inspecting erosion protective shells for debonding: When first-time debonds are found, or existing debonds have increased in area, the inspection shall be repeated after 50Fh. Only when an inspection has revealed no further debonding do the periodic inspection intervals re-apply		
(2) EFFECTIVITY Discharger Adapter P/N B621M1026 201		14-5 step 6	
Visually inspection of corrosion and cracks			
NOTE	Inspect adapters from now on at the periodical inspection every 600fh or 4 years (600fh or 2 years at CBS-5 K LH), depending on witch time limit is reached first.		
21 - FUSELAGE			
(1) Inspect fuselage for condition		21-3	
(2) Inspect following frames for cracks:			
- upper corners of frames 7, 8, 9, forward and aft, and diagonal frame and frame 10			
- lower frame segments 7 and 8			
NOTE	Stop-drill cracks. Repair any cracks in the upper area of frames 7 and 9 and diagonal frame within the next 50Fh. Repair any cracks in the upper area of frames 8 and 10 and in the lower area of frames 7 and 8 within the next 600Fh. Check for crack propagation every 200Fh. Repair cracks which show propagation within the next 50Fh.		
(3) Clean, grease and functionally check jettison device of cockpit doors. Renew lead wire seal		21-4	
31 - TAIL BOOM			
(1) EFFECTIVITY Tail boom assemblies up to S/N 350 if AB 15 not accomplished:			
Remove tail rotor shaft fairing and visually inspect in the vicinity of the three bearing brackets P/N 105-30251.17/.18/.19 for cracks. Refer to AB 15 for further limitations			
(2) Inspect tail boom assembly for condition		31-2	
32 - TAIL ROTOR DRIVE			
(1) Inspect tail rotor drive for condition		32-3	

Table 101-9.1 - Extended Periodical Inspection Basic-Helicopter (2 of 5)

Inspection or Maintenance Work	Reference	Initial
32 - TAIL ROTOR DRIVE		
(2) EFFECTIVITY "Single webbed" type of gearbox housing (see Fig. 32-23): Visually inspect flange to housing transition area for cracks and conditions indicating presence of cracks, such as oil leakage and accumulation of dirt		
33 - TAIL ROTOR		
(1) Inspect tail rotor for condition	33-4, step 1 - 7	
(2) Without disassembly, inspect spherical bearings in fork end of tail rotor shaft for play	33-21, step 1.c	
(3) EFFECTIVITY Tail rotor blade mounting forks made from aluminum alloy P/N 105-31711, 105-31722: Remove and inspect blade mounting forks for condition	33-14 thru 33-18	
(4) Remove bellcrank assy and inspect for condition	33-9 thru 33-12	
(5) Check ball bearings of sliding sleeve for proper running and absence of play	33-27, step 14	
(6) Remove bolt connecting tail rotor shaft to tail rotor head, and clean and inspect bolt for condition	33-21, step 1.e	
34 - TAIL ROTOR BLADE		
(1) Inspect tail rotor blades for condition	34-2	
41 - MAIN ROTOR CONTROLS		
(1) Inspect all flight control components for condition	41-3	
(2) Check swash plate bearing for proper running	41-73	
(3) Check rigging of collective control forces	102-16, step 9	
(4) Clean swash plate sliding surface on support tube. Move swash plate to uppermost position to expose sliding surface. Use cleaning solvent (CM 201, 202 or 217)		
42 - TAIL ROTOR CONTROLS		
(1) EFFECTIVITY H/C up to S/N 310 if SB-BO105-30-17 not accomplished: Remove control rod in the tail boom and inspect chafe protection for condition and grease sliding surface	42-33, step 4	
(2) Visually inspect seals on rod end and clevis for damage Following rods are affected: - control rod in the tail boom - control rod in vertical fin (upper clevis)	42-3	
(3) Control rod in vertical fin: Visually inspect sealing of blind hole in fork end for damage		

Table 101-9.1 - Extended Periodical Inspection Basic-Helicopter (3 of 5)

Inspection or Maintenance Work	Reference	Initial
43 - HYDRAULIC SYSTEM		
(1) Inspect switchover control linkage for play	43-17 or 43-17A	
(2) Inspect hydraulic system for condition	43-11	
(3) Spray-coat N2-lever (droop-compensation) with corrosion preventive compound (CM 508)		
(4) Check filter contamination indicator (lateral indicator pin configuration)	43-14	
(5) Functionally test hydraulic system	43-15	
(6) Perform ground run check of selector valve setting	43-16 or 43-16A	
(7) Inspect system 1 selector valve for corrosion	43-13	
51 - LANDING GEAR		
(1) Inspect landing gear for condition	51-2	
61 - ENGINE		
(1) Inspect exhaust clamps for corrosion and cracks	61-34	
(2) Inspect engine accessories and mounting struts for condition	61-3	
(3) Remove anti-icing valve actuators and inspect mounting brackets for condition	61-37, 61-38, 61-39	
(4) Remove chip detectors and test their magnetic retaining force	02-14	
NOTE For removal and installation procedures, see Allison OMM 10W2 or 5W2 as applicable		
62 - FUEL SYSTEM		
(1) Inspect fuel lines in the engine compartment for condition	62-3	
(2) Check fuel differential pressure switch for function	62-39	
(3) Perform functional test and leakage test of fuel shutoff valves	92-82, 92-83	
63 - LUBRICATION SYSTEM		
(1) EFFECTIVITY Ram air ventilation not installed: Visually inspect baffle plate, located between oil cooler and fan, and attaching clamps for cracks		
(2) Inspect lubrication system for condition	63-3	
(3) Remove oil drain plugs of oil tank and test the magnetic retaining force of their respective magnetic plugs	63-4, step 1.b, 02-14	
64 - FIREWALLS		
(1) Inspect fire walls for condition	64-2	
65 - ENGINE OPERATION AND CONTROL		
(1) Inspect engine operation and control linkages for condition	65-3	

Table 101-9.1 - Extended Periodical Inspection Basic-Helicopter (4 of 5)

Inspection or Maintenance Work	Reference	Initial
700 - STANDARD EQUIPMENT		
(1) Inspect pilot and copilot seats for condition	701-2	
(2) Inspect cabin equipment for condition	702-2	
(3) Inspect cabin ventilation for condition, check for function	704-2	
(4) Inspect identification and other markings for legibility, and adhesive-backed decals for damage and proper adhesion		
91 - INSTRUMENT SYSTEM		
(1) Ventilate dual torque indication system	91-57	
(2) Inspect instruments for condition	91-4	
(3) Clean and drain pitot-static system, inspect for condition and check for function	91-9 thru 91-12	
(4) Inspect magnetic compass for condition and function and compensate magnetic compass	91-24 thru 91-26	
(5) Calibrate TOT indication system	91-45	
(6) Inspect instrument panel, center panel and overhead panel for presence, legibility and security of labels and placards NOTE Replace missing placards and rebond separated placards		
92 - ELECTRICAL SYSTEMS		
(1) Inspect battery bonding jumper for tight installation and unimpaired surface protection		
(2) Check voltage regulator setting	92-17	
(3) Inspect socket of anti-collision light for condition	92-116	
(4) Remove starter-generator and inspect carbon brushes	92-20, 92-20A	
(5) Inspect battery-temperature warning	92-34E	

Table 101-9.1 - Extended Periodical Inspection Basic-Helicopter (5 of 5)

Technician		Inspector	
Date:		Date:	
Name	Signature	Stamp	Signature

BLANK PAGE

101 – 9.2 Extended Periodical Inspection Optional Equipment

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Inspection or Maintenance Work	Reference	Initial
GENERAL		
(1) Review aircraft log book and ensure all recorded discrepancies have been corrected		
(2) Ensure compliance with all applicable airworthiness directives and manufacturer's (ECD) directives		
(3) Ensure compliance with all supplementary inspections and special inspections		
(4) Ensure life-limited parts do not exceed service life		
(5) Ensure TBO-components do not exceed TBO		
(6) Record compliance with these inspections in Historical Record		
831 – LONG RANGE FUEL TANK		
(1) Check long range fuel tank for condition (if tank remains installed)	831-4	
836 – RESCUE HOIST ASSEMBLY		
(1) Lubricate winch unit	836-22	
845 – CHIP WARNING INDICATION		
(1) Remove chip detector, check, clean, test for function and test magnetic retaining force	845-4, 845-5, 845-6, 02-14	
854 – MAIN ROTOR BLADE FOLDING SYSTEM		
(1) Remove locking lever assembly, clean and inspect for condition (crack inspection not required)	854-3, step 1.	
(2) Remove locking lever assembly		
– Clean and inspect nickel-plated bolts for condition, and provide with corrosion protection (crack inspection not required)	854-3, step 1.a and 854-4, step 2.f	
– Clean and inspect solid film lubricant-coated bolts for condition (crack inspection not required). Coat bolt with lubricant (CM146)	854-3, step 1.b and 854-4, step 2.g	

Table 101-9.2 – Extended Periodical Inspection Optional Equipment (1 of 2)

Inspection or Maintenance Work	Reference	Initial
857 – CONTINUOUS IGNITION SYSTEM		
(1) Check spark igniters for condition	857-4	
(2) Visually inspect noise suppressor and accessible parts of wiring for condition	857-4	

Table 101-9.2 – Extended Periodical Inspection Optional Equipment (2 of 2)

Technician		Inspector	
Date:		Date:	
Name	Signature	Stamp	Signature

101 - 10 SUPPLEMENTARY INSPECTION ACCORDING TO OPERATING TIME IN FH AND/OR CALENDAR TIME

101 - 10.1 Supplementary Inspection according to Operating Time in Fh and/or Calendar Time Basic Helicopter

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Inspection or Maintenance Work	Interval	Reference	Initial
11 - MAIN TRANSMISSION			
(1) EFFECTIVITY Bolts with P/N 105-60701.15/16: Remove bolts and inspect for condition	150Fh	11-54, 11-55, part A, step 10 or part B, step 5	
(2) EFFECTIVITY Drive flange P/N 4619 302 037 on main transmission: Check torque of screw on drive flange. If torque is too low, remove drive flange and inspect for damage	300Fh	11-59, step 1 and 2, 11-60, step 11	
(3) Remove input drive shafts and inspect for condition	4800Fh or 6 years, whichever occurs first	11-54 thru 11-56	
(4) Remove transmission mounting struts and inspect for condition	3000Fh	11-50 thru 11-52	
(5) EFFECTIVITY Borg Warner free wheel unit P/N 4638202007: Remove freewheel unit and inspect for condition	1200Fh TSN, then every 600Fh	11-60, 11-64, 11-67	
(6) EFFECTIVITY Kaflex shafts made by Kamatics Company: Remove drive shafts and send to manufacturer for assessment	6000Fh or 9 years, whichever occurs first	11-54	
(7) EFFECTIVITY No electrical chip detector installed, pre SB BO105-10-126: Inspect magnetic plug of main transmission for deposits and clean magnetic plug	10 Fh	11-18	
(8) EFFECTIVITY Pre SB BO105-10-126: Inspect and cleaning of oil filter	100Fh	11-13	
(9) EFFECTIVITY Post SB BO105-10-126: Inspect and cleaning of oil filter	600Fh or 12 months, whichever occurs first	11-13	

Table 101-10.1 - Supplementary Inspection according to Operating Time in Fh and/or Calendar Time Basic Helicopter (1 of 7)

Inspection or Maintenance Work		Interval	Reference	Initial
13 - MAIN ROTOR SYSTEM				
(1)	EFFECTIVITY Quadruple nuts P/N 105-14101.54/.55: Remove quadruple nuts and inspect for cracks	1200Fh	REM106	
(2)	EFFECTIVITY Bolts P/N 105-14101.76/.77: Remove bolts and inspect for cracks	1200Fh	REM106	
(3)	EFFECTIVITY Quadruple nuts P/N 105-14101.19/.20: Remove upper and lower quadruple nuts and inspect for cracks NOTE Quadruple nuts with serial numbers listed below do not require periodic inspections during their service life. For these quadruple nuts it is also not necessary to install quadruple nuts with the same serial number (also refer to SB 10-18). Serial numbers: Quadruple nuts, upper 105-14101.19 S/N 63, 145 thru 151, 153 thru 172, 197, 198, 212 thru 221, 247, 249 thru 251, 269, 270, 272 thru 281, 283, 290 thru 293 Quadruple nuts, lower 105-14101.20 S/N 63, 145 thru 151, 153 thru 171, 197, 213 thru 221, 247, 249 thru 251, 269 thru 283, 290, 292	1200Fh TSN, then every 300Fh	REM 106	
(4)	EFFECTIVITY Bolts P/N 105-14101.22/.23: Remove bolts and inspect for cracks	1200Fh TSN, then every 300Fh	REM 106	
(5)	EFFECTIVITY Main rotor head P/N 105-14101: Remove main rotor head and inspect for condition per REM 106	1800Fh or 3 years, whichever occurs first	13-6, REM106	
(6)	EFFECTIVITY Main rotor head P/N 105-14104: Remove main rotor head and inspect for condition per REM 106	2400Fh or 4 years, whichever occurs first	13-6, REM106	
(7)	EFFECTIVITY Quadruple nuts P/N 1121-14102.19/.20: Remove quadruple nuts and inspect for cracks	2400Fh	REM106	
(8)	EFFECTIVITY Bolts P/N 1121-14102.22/.23: Remove bolts and inspect for cracks	2400Fh	REM106	

Table 101-10.1 - Supplementary Inspection according to Operating Time in Fh and/or Calendar Time Basic Helicopter (2 of 7)

Inspection or Maintenance Work	Interval	Reference	Initial
13 - MAIN ROTOR SYSTEM			
(9) Remove, clean and inspect primary and secondary bolts for cracks and condition	2400Fh	13-10, 13-11, 13-14 and 13-16 thru 13-18	
(10) Remove, disassemble and inspect driving link assembly for condition	3000Fh	13-20 thru 13-24	
(11) EFFECTIVITY Main rotor head : P/N 105-141081 (PRE ASB-BO 105-10-113); P/N 105-141091 (POST ASB-BO 105-10-113): Remove main rotor head and inspect for condition per REM 106	4800Fh or 8 years TSN, whichever occurs first, then every 4800Fh or 6 years, whichever occurs first	13-6, REM106	
14 - MAIN ROTOR BLADE			
(1) Remove main rotor blade and inspect for condition NOTE Note following when inspecting erosion protective shells for debonding: When first-time debonds are found, or existing debonds have increased in area, the inspection shall be repeated after 50Fh. Only when an inspection has revealed no further debonding do the periodic inspection intervals re-apply.	1200Fh	14-4, 14-5	
21 - FUSELAGE			
(1) Inspect bores in the engine mounting fittings for wear	3000Fh or when engine(s) is removed, whichever occurs first	21-3	
(2) Inspect doors, windows, structure and tailboom connecting flange for condition	2400Fh	21-3, step 1, 2, 3 and 9	
(3) Visually inspect frame 2L of tail boom (fuselage side) for cracks NOTE Depending on the operational spectrum of the helicopter and on the existing environmental conditions, different inspection intervals may be established upon consultation with ECD.	2400Fh or 6 years TSN, whichever occurs first, then every 1800Fh or 3 years, whichever occurs first	21-3	

Table 101-10.1 - Supplementary Inspection according to Operating Time in Fh and/or Calendar Time Basic Helicopter (3 of 7)

Inspection or Maintenance Work	Interval	Reference	Initial
21 - FUSELAGE			
(4) Visually inspect connecting flange of tail boom (fuselage side) and adjacent fuselage areas for condition and cracks, using a magnifying glass NOTE Depending on the operational spectrum of the helicopter and on the existing environmental conditions, different inspection intervals may be established upon consultation with ECD.	2400Fh or 6 years TSN, whichever occurs first, then every 1800Fh or 3 years, whichever occurs first	21-3	
(5) Inspect spherical bearings and claw bushings in main transmission fittings for condition and play	3000Fh	21-3	
22 - COWLINGS			
(1) Remove cowlings and inspect for condition	2400Fh	22-2 thru 22-5	
31 - TAIL BOOM ASSEMBLY			
(1) Remove tail boom and inspect interior and exterior for condition NOTE Depending on the operational spectrum of the helicopter and on the existing environmental conditions, different inspection intervals may be established upon consultation with ECD.	2400Fh or 6 years TSN, whichever occurs first, then every 1800Fh or 3 years, whichever occurs first	31-2, 31-5, 31-6	
32 - TAIL ROTOR DRIVE			
(1) EFFECTIVITY Tail rotor drive with Bendix shafts and coupling: Remove shafts and coupling and inspect their exterior and interior surfaces for condition	2400Fh or 4 years, whichever occurs first	32-36, 32-46, 32-40, 32-50	
(2) EFFECTIVITY Tail rotor drive with laminated disk coupling: Remove, disassemble and inspect forward short driveshaft, couplings, long driveshaft and aft short driveshaft in vertical fin for condition	3600Fh or 6 years, whichever occurs first	32-11 thru 32-34	
(3) Remove intermediate gearbox and tail rotor gearbox and inspect for condition	3600Fh or 6 years, whichever occurs first	32-55 thru 32-57 and 32-59 thru 32-61	
33 - TAIL ROTOR			
(1) Measure play between blade mounting fork and inner sleeve	1200Fh	33-16, step 1.	

Table 101-10.1 - Supplementary Inspection according to Operating Time in Fh and/or Calendar Time Basic Helicopter (4 of 7)

Inspection or Maintenance Work	Interval	Reference	Initial
33 - TAIL ROTOR			
(2) Remove bolts connecting laminated strap pack to blade mounting forks, and inspect for condition	1200Fh or 6 years, whichever occurs first	33-16, step 5.	
(3) Remove, disassemble and inspect tail rotor head for condition	2400Fh or 6 years, whichever occurs first	33-14 thru 33-17	
(4) Inspect tail rotor shaft for play	2400Fh	33-4, step 8	
34 - TAIL ROTOR BLADE			
(1) Remove the tail rotorblades. Inspect erosion protection for debonds. Inspect attachment area for damages. Inspect tail rotor blades for cracks in surface protection. It is not necessary to remove the cover tape in the nose shell area.	300Fh	34-2, steps 2., 4. thru 9., 12.,13.	
(2) Remove tail rotor blade and inspect for condition	2400Fh	34-2, 34-4, 34-5	
41 - MAIN ROTOR CONTROLS			
(1) Inspect bearing forks of swashplate control ring and swashplate bearing ring for cracks	300 Fh	41-3 step 4.d	
(2) EFFECTIVITY Pitch shaft without bonded brake pads: Inspect pitch shaft for condition	1200Fh	41-55	
(3) Remove, disassemble control rods and inspect for condition. The following control rods are affected: - control rods between hydraulic unit and mixing lever assy (3 off) - rotating control rods (4 off)	3000Fh or 4 years, whichever occurs first	41-76 thru 41-83	
(4) Remove compression springs of longitudinal and lateral trimmers, clean and inspect for condition. Lubricate spring case	4 years	41-27 thru 41-34	

Table 101-10.1 - Supplementary Inspection according to Operating Time in Fh and/or Calendar Time Basic Helicopter (5 of 7)

Inspection or Maintenance Work		Interval	Reference	Initial
41 - MAIN ROTOR CONTROLS				
(5) Remove all bolts from the boosted section of the main rotor controls (i.e. above hydraulic unit) and inspect for condition and cracks NOTE Crack inspection per dye penetrant method ASTM-E-1417 or magnetic particle method ASTM-E-1444. The following bolts are affected: - lower and upper bolts of the 3 control rods between tandem hydraulic unit and mixing lever assy - lower and upper bolts of the 2 control rods between mixing lever assy and swash plate - lower and upper bolts of the 4 rotating control rods		3000Fh or 4 years, whichever occurs first		
NOTE Perform inspections (5), (6) and (7) on the occasion of main transmission overhaul, if possible				
(6) Remove, disassemble mixing lever assembly and inspect for condition		3000Fh	41-65 thru 41-70	
(7) Inspect swash plate for condition		3000Fh	REM 403	
(8) Remove control rods between mixing lever assy and swash plate and inspect for condition		3000Fh	41-78, 41-80, 41-83	
42 - TAIL ROTOR CONTROLS				
(1) Inspect tail rotor controls for condition		1200Fh	42-3	
43 - HYDRAULIC SYSTEM				
(1) Inspect flat springs of hydraulic system II for correct functioning		1200Fh TSN, then every 300Fh	43-19	
(2) Remove, disassemble and inspect control rods for condition		3000Fh or 4 years, whichever occurs first	43-36, 43-37, 41-79, 41-80	
(3) Change filter elements NOTE If the hydraulic unit was not returned to service after filter replacement, the filter need not be replaced again until 2 years after return to service		2 years	43-31, 43-32	

Table 101-10.1 - Supplementary Inspection according to Operating Time in Fh and/or Calendar Time Basic Helicopter (6 of 7)

Inspection or Maintenance Work		Interval	Reference	Initial
43 - HYDRAULIC SYSTEM				
(4)	EFFECTIVITY Bushings P/N 105-45511: Distinguishing feature: These bushings can be rotated in installed position. Remove hydraulic unit and inspect guide bushings of couplings for play	2400Fh TSN, then every 600Fh	43-11, step 14.	
51 - LANDING GEAR				
(1)	Inspect the internal cross tubes for corrosion	600Fh	51-2	
61 - ENGINE				
(1)	Inspect exhaust clamps for corrosion and cracks	300Fh	61-34	
(2)	Remove engine mounts and inspect for condition NOTE If the associated engine is to be removed within 600Fh after the inspection is due, the inspection can be performed concurrently with engine removal.	2400Fh	61-8 thru 61-19	
(3)	Remove engine stub shaft and inspect for condition	3000Fh or 6 years, whichever occurs first	61-40	
63 - LUBRICATION SYSTEM				
(1)	EFFECTIVITY H/C with scavenge oil filters: Remove and replace filter elements of scavenge oil filters	with each engine oil change according to manufacturer's instructions	63-30	
700 - STANDARD EQUIPMENT				
(1)	Inspect interior paneling and floor covering for condition	2 years	703-2	
92 - ELECTRICAL SYSTEMS				
(1)	Remove battery and inspect for condition in accordance with manufacturer's instructions	Time and scope of inspection in accordance with manufacturer's instructions	92-27	
(2)	Inspect components of electrical system for condition	2400Fh	92-4	
(3)	Deleted			

Table 101-10.1 - Supplementary Inspection according to Operating Time in Fh and/or Calendar Time Basic Helicopter (7 of 7)

Technician		Inspector	
Date:	Date:	Date:	Date:
Name	Signature	Stamp	Signature

101 – 10.2 Supplementary Inspection according to Operating Time in Fh and/or Calendar Time Optional Equipment

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Inspection or Maintenance Work	Interval	Reference	Initial
801 – SHOULDER HARNESS WITH AUTOMATIC INERTIA REEL			
(1) Inspect shoulder harness with automatic inertia reel for condition	300Fh	801-4	
(2) Check shoulder harness with automatic inertia reel for function	300Fh	801-5	
NOTE For permissible shelf life and service life of shoulder harness and reel, refer to Autoflug Component Maintenance Manual			
802 – ELECTRICAL HEATING AND VENTILATION SYSTEM 4kW/3+1kW			
(1) Inspect system for condition	300Fh	802-4	
(2) Check system for function	300Fh	802-5	
NOTE Functional check of the heating system is only possible with EPU engaged or generators operating			
803 – WINDSHIELD WIPER SYSTEM			
(1) Inspect windshield wiper system for condition	300Fh	803-4	
(2) Perform electrical functional test	300Fh	803-5	
804 – DUAL WINDSHIELD WIPER SYSTEM			
(1) Inspect dual windshield wiper system for condition	300Fh	804-4	
(2) Perform electrical functional test	300Fh	804-5	
805 – WINDSHIELD WIPER AND WASHER SYSTEM			
(1) Inspect windshield wiper and washer system for condition, and check for function	300Fh	805-3, 805-4	
806 – SPLIT BENCH SEAT			
(1) Inspect lap-safety belts for condition	Refer to manufacturer's instructions for time intervals and scope of inspection for belts	Autoflug GmbH Maintenance Manual	

Table 101-10.2 – Supplementary Inspection according to Operating Time in Fh and/or Calendar Time Optional Equipment (1 of 10)

Inspection or Maintenance Work	Interval	Reference	Initial
806 – SPLIT BENCH SEAT			
(2) Inspect split bench seat for condition	300Fh	806-3	
807 – BENCH SEAT			
(1) Inspect lap-safety belts for condition	Refer to manufacturer's instructions for time intervals and scope of inspection for belts	Autoflug GmbH Maintenance Manual	
(2) Inspect bench seat for condition	300Fh	807-3	
808 – BENCH SEAT			
(1) Inspect lap-safety belts or lap-safety belts with shoulder harnesses for condition NOTE Refer to Autoflug GmbH Maintenance Manual for permissible storage and usage time limits of lap-safety belts or lap-safety belts with shoulder harnesses		Autoflug GmbH Maintenance Manual	
(2) Inspect bench seat for condition	300Fh	808-3	
809 – 4-SEAT BACK-TO-BACK BENCH			
(1) Inspect 4-seat back-to-back bench for condition	300Fh	809-3	
810 – RETRACTABLE LANDING LIGHT SYSTEM			
(1) Inspect landing light system for condition	300Fh	810-4	
(2) Perform functional test NOTE Perform functional test of landing light using external power unit (EPU) or generators	300Fh	810-5	
811 – RETRACTABLE LANDING LIGHT SYSTEM			
(1) Inspect landing light system for condition	300Fh	811-4	
(2) Perform functional test NOTE Perform functional test of landing light using external power unit (EPU) or generators	300Fh	811-5	

Table 101-10.2 – Supplementary Inspection according to Operating Time in Fh and/or Calendar Time Optional Equipment (2 of 10)

Inspection or Maintenance Work	Interval	Reference	Initial
812 - SEARCH AND LANDING LIGHT			
(1) Inspect search and landing light for condition	300Fh	812-4	
(2) Check search and landing light for function	300Fh	812-5	
813 - SEARCHLIGHT SX-16			
(1) Inspect searchlight for condition	300Fh or 6 months, whichever occurs first	813-4	
(2) Test searchlight for function NOTE Functionally test searchlight using either external power (EPU) or generator power	300Fh	813-5	
(3) Cleaning of foam filter element	300Fh	813-18	
(4) Cleaning of IR filter	300Fh	813-20	
814 - MEDICAL EQUIPMENT MOUNTING PLATE			
(1) Inspect medical equipment mounting plate for condition	300Fh	814-3	
815 - WALL CABINET ASSEMBLY			
(1) Inspect wall cabinet assembly for condition	300Fh	815-3	
816 - SUCTION BOTTLE HOLDER			
(1) Inspect suction bottle holder for condition	300Fh	816-3	
817 - OXYGEN BOTTLE HOLDER			
(1) Inspect oxygen bottle holder for condition	300Fh	817-3	
818 - INFUSION BOTTLE SUSPENSION HOOK			
(1) Inspect infusion bottle suspension hook for condition	300Fh	818-3	
819 - MEDICAL ATTENDANT'S SEAT			
(1) Inspect medical attendant's seat for condition	300Fh	819-3	
820 - CONVERTED COPILOT SEAT			
(1) Inspect copilot seat for condition	300Fh	820-3	
821 - LITTER RETENTION SYSTEM			
(1) Inspect litter retention system for condition	300Fh	821-3	

Table 101-10.2 - Supplementary Inspection according to Operating Time in Fh and/or Calendar
Time Optional Equipment (3 of 10)

Inspection or Maintenance Work	Interval	Reference	Initial
822 - CARGO HOOK SYSTEM			
(1) Inspect cargo hook for condition NOTE One load cycle = 1x opening and closing of hook	After 1000 load cycles or 3 years in service, whichever occurs first	Perform maintenance in accordance with SIREN Component Maintenance Manual	
(2) Inspect cargo hook system for condition	300Fh	822-4	
(3) Inspect cross tube fittings for cracks	600Fh	822-4	
823 - ANTISETTLING SHOES			
(1) Inspect antisetling shoes for condition	Always prior to installation and every 50Fh if antisetling shoes remain installed	823-3	
824 - SNOW SKIDS			
(1) Inspect snow skids for condition	Always prior to installation and every 50Fh if snow skids remain installed	824-3	
825 - EMERGENCY FLOTATION SYSTEM			
(1) Inspect emergency flotation system for condition	300Fh	825-4	
(2) Check emergency flotation system for function NOTE Refer to manufacturer's documentation for time intervals and extent of inspection for pressure cylinders and floats	300Fh	825-5	
826 - FUEL JETTISON SYSTEM			
(1) Check fuel jettison system for correct function NOTE Or when helicopter is defueled	300Fh	826-4	
(2) Visually inspect fuel jettison system for leakage If fuel leakage is evident, check threaded connections for prescribed torque load. If necessary, replace respective sealing element	300Fh		

Table 101-10.2 - Supplementary Inspection according to Operating Time in Fh and/or Calendar Time Optional Equipment (4 of 10)

Inspection or Maintenance Work	Interval	Reference	Initial
827 – FUEL JETTISON SYSTEM (76 mm dia.)			
(1) Check fuel jettison system for correct function NOTE Or when helicopter is defueled	300Fh	827-4	
(2) Visually inspect fuel jettison system for leakage If fuel leakage is evident, check threaded connections for prescribed torque load. If necessary, replace respective sealing element	300Fh		
828 – FUEL MICROFILTER SYSTEM			
(1) Inspect fuel microfilter system for condition	300Fh	828-4	
(2) Check fuel microfilter system for function	300Fh	828-5	
(3) replace filter element	Every 1200Fh or when clogged (not when caused by ice crystals)		
829 – CROSSFEED LINES			
(1) Check crossfeed lines for function	300Fh	829-4	
830 – SELF SEALING FUEL TANKS			
(1) Inspect installed fuel tanks for condition	300Fh	830-4	
831 – LONG RANGE FUEL TANK			
(1) Inspect long range fuel tank for condition	Every 50Fh if tank remains installed	831-4	
832 – FUEL SYSTEM WITH DIVIDED SUPPLY TANK			
(1) Inspect fuel system for condition	300Fh	832-4	
(2) Check fuel system for function	300Fh	832-5	
833 – EXTERNAL LOUDSPEAKER SYSTEM			
(1) Inspect system for condition	300Fh	833-4	
(2) Check system for function	300Fh	833-5	
(3) Check final amplifier 4TD for function	Take action according to manufacturer's instructions	Wandel and Goltermann Maintenance Manual	

Table 101-10.2 – Supplementary Inspection according to Operating Time in Fh and/or Calendar Time Optional Equipment (5 of 10)

Inspection or Maintenance Work	Interval	Reference	Initial
--------------------------------	----------	-----------	---------

833 – EXTERNAL LOUDSPEAKER SYSTEM

(4) Check preamplifier VV450 for function	Take action according to manufacturer's instructions	Wandel and Goltermann Maintenance Manual	
---	--	--	--

834 – EXTERNAL LOUDSPEAKER SYSTEM BO 105 S

(1) Inspect system for condition	300Fh	834-4	
(2) Check system for function	300Fh	834-5	
(3) Check final amplifier 4TD for function	Take action according to manufacturer's instructions	Wandel and Goltermann Maintenance Manual	
(4) Check preamplifier VV450 for function	Take action according to manufacturer's instructions	Wandel and Goltermann Maintenance Manual	

835 – SAFETY HARNESS

(1) Inspect safety harness for condition	300Fh	835-3	
--	-------	-------	--

836 – RESCUE HOIST ASSEMBLY

NOTE

- For service life of life-limited parts, refer to 101-15.
- One cable operating cycle comprises:
Reel out of cable (full or partial) in flight and subsequent reel in until automatic switch-off occurs.

deleted			
(1) Inspect rescue hoist for condition	20 cable operating cycles	836-3	
(2) Check rescue hoist for function	20 cable operating cycles	836-4	
(3) Inspect cable	20 cable operating cycles	836-5	
(4) Lubricate winch unit	Each time cable is replaced or 1x annually, whichever occurs first	836-22	

Table 101-10.2 – Supplementary Inspection according to Operating Time in Fh and/or Calendar Time Optional Equipment (6 of 10)

Inspection or Maintenance Work	Interval	Reference	Initial
836 – RESCUE HOIST ASSEMBLY			
(5) Disassemble and inspect winch boom assy	600Fh or 4 years (installation and storage time)	836-10, 836-11	
(6) Disassemble and inspect hook/bumper assy	200 cable operating cycles or 4 years (installation and storage time), whichever occurs first	836-17, 836-18	
(7) Remove and inspect mounting fittings	600Fh or 4 years (installation and storage time), whichever occurs first	836-38, 836-39	
(8) Inspection of winch unit	First accomplished after 4 years, then every 2 years TSN/TBO	836-3A	
(9) Replace seal of relay box by new one	after 4 years, TSN	836-3B	
837 – EXTERNAL REARVIEW MIRROR			
(1) Inspect mirror for condition	300Fh	837-3	
838 – HIGH LANDING GEAR			
(1) Inspect high landing gear for condition	300Fh	838-3	
840 – LIGHTNING PROTECTOR			
(1) Inspect lightning protector for condition	300Fh	840-3	
841 – ENGINE AIR CLEANER			
(1) Inspect engine air cleaner for condition	300Fh	841-4	
(2) Check engine air cleaner for function	300Fh	841-5	

Table 101-10.2 – Supplementary Inspection according to Operating Time in Fh and/or Calendar Time Optional Equipment (7 of 10)

Inspection or Maintenance Work	Interval	Reference	Initial
842 - ENGINE AIR CLEANER (WITH BLEED AIR SHUTOFF)			
(1) Inspect engine air cleaner for condition	300Fh	842-4	
(2) Check engine air cleaner for function	300Fh	842-5	
843 - ENGINE INLET SCREEN			
(1) Inspect engine inlet screen for condition	300Fh	843-3	
844 - PENDULUM ABSORBERS			
(1) Inspect pendulum absorbers for condition	300Fh	844-4, steps 1. thru 7.	
(2) Inspect split line of upper and lower pendulum brackets for cracks and corrosion (not for P/N 105-81022.01/.02)	300Fh or 1x annually, whichever occurs first	844-4, step 8.	
846 - STABILITY AUGMENTATION SYSTEM (SAS)			
(1) Inspect actuator and control rod assemblies and base plate with gyro amplifiers for condition	300Fh	846-4	
(2) Check actuator and control rod assemblies and base plate with gyro amplifiers for function	300Fh	846-5	
(3) Remove actuator and control rod assembly and disassemble control rod and inspect for condition	2400Fh or 6 years (if boots are unimpaired), whichever occurs first	846-6, 846-7	
847 - FOLLOW-UP TRIM			
(1) Inspect follow-up trim for condition	300Fh	847-4	
(2) Check follow-up trim for function	300Fh	847-5	
848 - SPERRY HELIPILOT			
(1) Inspect Sperry Helipilot for condition	300Fh	848-4	
850 - BLEED AIR/AUXILIARY HEATING SYSTEM			
(1) Inspect bleed air/auxiliary heating system for condition	300Fh	850-4	
851 - SEARCH AND LANDING LIGHT 450 W			
(1) Inspect search and landing light for condition	300Fh	851-4	
(2) Check electrical components of the search and landing light for function	300Fh	851-5	

Table 101-10.2 - Supplementary Inspection according to Operating Time in Fh and/or Calendar Time Optional Equipment (8 of 10)

Inspection or Maintenance Work	Interval	Reference	Initial
852 – COMPRESSOR RINSING EQUIPMENT			
(1) Inspect compressor rinsing equipment for condition	300Fh	852-3	
853 – FIRE EXTINGUISHING SYSTEM			
(1) Inspect fire extinguishing system for condition NOTE Observe special local safety regulations	300Fh	853-4	
(2) Perform functional test	300Fh	853-5	
(3) Remove and dispose of explosive cartridge	Accomplish when cartridge life (combined storage and in-situ time) has expired	853-8, 853-10	
(4) Weigh fire extinguisher bottle	Before initial installation, then every 5 years	853-9	
854 – MAIN ROTOR BLADE FOLDING SYSTEM			
(1) Inspect rotor blade folding cradles, strut, handling bar and clip assemblies for condition	Prior to installation	854-3, step 2.	
(2) Remove locking lever assembly, clean and inspect for condition and cracks	2400Fh	854-3, step 1.	
856 – ATTACH FITTINGS-MULTIPURPOSE PYLON			
(1) Visually inspect attach fittings-multipurpose pylon – as far as accessible – for damage	After each removal of the multipurpose pylon		
(2) Inspect attach fittings-multipurpose pylon for condition (multipurpose pylon removed)	300Fh	856-3	
859 – WIRE STRIKE PROTECTION SYSTEM (WSPS)			
(1) Inspect WSPS for condition	300Fh	859-3	
860 – ENGINE AIR CLEANER			
(1) Inspect engine air cleaner for condition	300Fh	860-4	
(2) Perform functional test	300Fh	860-5	

Table 101-10.2 – Supplementary Inspection according to Operating Time in Fh and/or Calendar Time Optional Equipment (9 of 10)

Inspection or Maintenance Work	Interval	Reference	Initial
--------------------------------	----------	-----------	---------

867 - CARTIDGE-TYPE FUEL PUMP

(1) Inspect fuel pump for condition	600Fh	867-3	
-------------------------------------	-------	-------	--

868 – IR SEARCH AND LANDING LIGHT 400/200 W

(1) Inspect IR search and landing light for condition	300Fh	868-4	
(2) Check electrical components of the IR search and landing light for function	300Fh	868-5	

Table 101-10.2 – Supplementary Inspection according to Operating Time in Fh and/or Calendar Time Optional Equipment (10 of 10)

Technician	Date:	Inspector	Date:
Name	Signature	Stamp	Signature

101 - 11 SPECIAL INSPECTIONS AFTER MAINTENANCE ACTIVITY

101 - 11.1 Special Inspections after Maintenance Activity Basic Helicopter

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Incident	Inspection or Maintenance Work	Interval	Reference	Initial
11 - MAIN TRANSMISSION				
(1) EFFECTIVITY Transmission mounting struts P/N 105-10155, 105-10156, 105-10161 und 105-10162: High-pressure cleaner used in transmission compartment	Inspect transmission mounting struts for missing or damaged sealant on rivet heads	Always before and after the transmission compartment is high-pressure cleaned		
14 - MAIN ROTOR BLADE				
(1) Installation of new main rotor blade or replacement of erosion protective shell NOTE If peeling occurs after between 5Fh to 10Fh, inform ECD product support before next flight	Inspect erosion protective shells for peeling	5Fh - 10Fh after incident and once after 200Fh	14-2, step 12. or 14-3, step 10.	
(2) If debonding was found in the warning area of the blade, perform special tappingtest to determine whether debonding has increased	Inspect erosion protective shells for increase in debonding	Every 25 Fh after incident, but have erosion protective shell replaced by manufacturer before more than 100 Fh have elapsed	14-2, step 12. or 14-3, step 10.	
(3) After installation of a new main rotorblade, or a repaired main rotorblade	Inspect blade thimble for cracks	Every 3600 Fh or if a new main rotor blade has already been in use for more than 3600Fh, an inspection must be accomplished within the next 1200Fh at the latest.	14-10 thru 14-12	

Table 101-11.1 - Special Inspections after Maintenance Activity Basic Helicopter
(1 of 2)

Incident	Inspection or Maintenance Work	Interval	Reference	Initial
32 - TAIL ROTOR DRIVE				
(1) Installation of tail rotor gearbox NOTE Not applicable if spring washers were used in the attachment of the tail rotor gearbox	Inspect attachment bolts and nuts of tail rotor gearbox for required torque and tighten as necessary	5Fh - 10Fh after installation	Figure 32-23	
(2) After dynamic balancing of tail rotor with more than 1.0 IPS. Inspect the vertical fin and the tail rotor gearbox for cracks.			31-2, step 5 and step 6 32-60, step 1.	
34 - TAIL ROTOR BLADE				
(1) Installation of new tail rotor blade or replacement of erosion protective shell NOTE If peeling occurs after between 5Fh to 10Fh, inform ECD product support before next flight	Inspect installed parts for peeling	5Fh - 10Fh after incident and once after 100Fh	34-2, steps 7. thru 9., 12.	
91 - INSTRUMENTS				
(1) After major structural modification of helicopter	Compensate compasses	after completion of maintenance activity	91-26	

Table 101-11.1 - Special Inspections after Maintenance Activity Basic Helicopter
(2 of 2)

Technician		Date:	Inspector	Date:
Name	Signature		Stamp	Signature

101 – 11.2 Special Inspections after Maintenance Activity Optional Equipment

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Incident	Inspection or Maintenance Work	Interval	Reference	Initial
857 – CONTINUOUS IGNITION SYSTEM				
(1) After replacement of system parts	Check continuous ignition system for function		857-5	

**Table 101-11.2 – Special Inspections after Maintenance Activity Optional Equipment
(1 of 1)**

Technician		Inspector	
Date:		Date:	
Name	Signature	Stamp	Signature

BLANK PAGE

101 – 12 INSPECTIONS AFTER OPERATION UNDER SPECIAL ENVIRONMENTAL CONDITIONS

101 – 12.1 Inspections after Operation under Special Environmental Conditions Basic Helicopter

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Inspection or Maintenance Work	Interval	Reference	Initial
11 – MAIN TRANSMISSION			
(1) Inspect housing of main transmission for condition	12 months	11-3	
13 – MAIN ROTOR SYSTEM			
(1) Remove primary and secondary bolts, clean and inspect for condition; crack inspection not necessary	150Fh	13-10, -11, -14, -16, -17, -18	
33 – TAIL ROTOR			
(1) Inspect pitch links	50Fh	33-4, step 1.	
(2) Remove, clean and inspect following bolts for condition: – Bolt between tail rotor shaft and tail rotor head – Bolts between tail rotor head and tail rotor blade – Bolts between laminated strap pack and blade mounting fork NOTE Protect nickel-plated bolts against corrosion by brush-coating them with grease (CM 101, 102, 120, 146) or with corrosion preventive compound (CM 505) prior to installation. Do not lubricate new bolts coated with solid film lubricant. Apply lubricant (CM 146) to previously installed bolts coated with solid film lubricant.	300Fh	33-21, step 1. 33-16, step 6. 33-16, step 5.	

**Table 101-12.1 – Inspections after Operation under Special Environmental Conditions
Basic Helicopter
(1 of 2)**

Inspection or Maintenance Work	Interval	Reference	Initial
61 – ENGINE			
(1) Wash compressor of both engines	After the last flight of the day	Allison OMM Pub. No. 5W2 or 10W2	
(2) Inspect air inlet of compressor for condition	After the last flight of the day in snow	Allison OMM Pub. No. 5W2 or 10W2	

Table 101-12.1 – Inspections after Operation under Special Environmental Conditions
Basic Helicopter
(2 of 2)

Technician		Inspector	
Date:		Date:	
Name	Signature	Stamp	Signature

101 – 12.2 Inspections after Operation under Special Environmental Conditions Optional Equipment

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Inspection or Maintenance Work	Interval	Reference	Initial
854 – MAIN ROTOR BLADE FOLDING SYSTEM			
(1) Remove locking lever assembly – Clean and inspect nickel-plated bolts for condition, and provide with corrosion protection (crack inspection not required) – Clean and inspect solid film lubricant-coated bolts for condition (crack inspection not required). Coat bolt with lubricant (CM146)	150Fh	854-3, step 1.a and 854-4, step 2.f 854-3, step 1.b and 854-4, step 2.g	

**Table 101-12.2 – Inspections after Operation under Special Environmental Conditions
Optional Equipment
(1 of 1)**

Technician	Date:	Inspector	Date:
Name	Signature	Stamp	Signature

BLANK PAGE

101 - 13 SPECIAL INSPECTIONS AFTER OPERATIONAL INCIDENTS

101 - 13.1 Special Inspections after Operational Incidents Basic Helicopter

1. Measures to be taken after exceeding rotor speed of 110%	88
2. Special inspection after contact of main rotor with an obstacle.	89
3. Special inspection after contact of tail rotor with an obstacle.	91
4. Special inspection after a hard landing	93
5. Measures to be taken if mast moment limits are exceeded (MM-Limit warning light remains on)	97
6. Special inspection after excessive main rotor blade bending	98
7. Special inspection of main transmission and when mast moment indicating sys. defective/removed	100
- Presence of deposits	
- Defective or removed mast moment indicating system	
8. Measures to be taken with regard to main transmission FS 72 A after reaching max. torque ranges or exceeding max. permissible torque limits	101
9. Measures to be taken with regard to main transmission FS 72 B after reaching max. torque ranges or exceeding max. permissible torque limits	102
10. Measures to be taken with regard to main transmission FS 72 E after reaching max. torque ranges or exceeding max. permissible torque limits	104
11. Special inspection of the hydraulic system	105
- Filter contamination indicator pin has popped out	
- Indicator ring changes position	
12. Measures to be taken following freewheel clutch slippage due to engine rpm N2 exceeding rotor rpm NRo	106
13. Special inspection of instruments	107
- After flight in thunderstorm	
- After parking the helicopter for a longer period of time (3 months) in one direction	
14. Measures to be taken after flights in falling snow	108
15. Measures to be taken after flights in sandy environment	108
16. Measures to be taken when operating at extremely low temperatures	109

1. Measures to be taken after exceeding rotor speed of 110%

1. The service life of the parts listed below is adversely affected if rotor speed exceeds 110%.
 - a. During their service life, these parts may be subjected 60 times to tail rotor speeds above 110% but not exceeding 115%. Each time a rotor speed of 110% is exceeded, an entry must be made in the related historical record.
 - b. Discard the following parts if they have been subjected 60 times to a rotor speed above 110% or once to a rotor speed above 115%.

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Inspection or Maintenance Work	Reference	Initial
(1) Main rotor head: - Bendix tie bar/tension torsion strap (4 off) - Quadruple nut, upper (1 off) - Quadruple nut, lower (1 off) - Bolts for quadruple nuts - bendix tie bar/tension torsion strap (4 off) - Bolts for bendix tie bar/tension torsion strap - nut (outside) (4 off)		
(2) Tail rotor head: - Laminated strap pack assembly (1 off) - Blade mounting fork (2 off) - Fitted bolt (blade mounting fork - laminated strap pack) (2 off) - Fitted bolt (blade mounting fork - tail rotor blade) (4 off)		

Table 101-13.1.1 - Measures to be taken after exceeding rotor speed of 110% (1 of 1)

Technician		Inspector	
Date:		Date:	
Name	Signature	Stamp	Signature

2. Special inspection after contact of main rotor with an obstacle.

WARNING IF SEVERE VIBRATIONS, OUT-OF-TRACK PROBLEMS OR BALANCE PROBLEMS OCCUR FOLLOWING KNOWN OR SUSPECTED ROTOR CONTACT WITH AN OBSTACLE, CONTACT THE ECD CUSTOMER SERVICE FOR ADVICE ON HOW TO PROCEED.

NOTE If the allowable damage limits on any component have been exceeded as a result of contact with an obstacle, contact the ECD Customer Service for advice on how to proceed.

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

a. Special inspection after contact of main rotor with an obstacle without a change in main rotor rpm.

This inspection shall be performed if contact with an obstacle did not cause a change in the rotor rpm or sudden stoppage of the main rotor.

Inspection or Maintenance Work	Reference	Initial
14 - MAIN ROTOR BLADE		
(1) Remove main rotor blade and inspect for condition	14-4, 14-5	

b. Special inspection after contact of main rotor with an obstacle with a change in main rotor rpm.

The sudden stoppage of the main rotor, or change in main rotor rpm, is caused by contact of the main rotor blades with the ground, water, snow, dense vegetation, or other objects of sufficient mass. The following types of main rotor blade damage may be regarded as evidence of a blade strike:

- Skin damage, such as deformation, delaminations or cracks.
- Deformation of erosion protection and end cap.
- Trailing edge damage, such as bulging, delaminations and chipping.
- Out-of-track and imbalance conditions that cannot be rectified.

Inspection or Maintenance Work	Reference	Initial
11 - MAIN ROTOR TRANSMISSION		
(1) Inspect main rotor transmission for condition	11-3, step 1. thru step 7	
(2) Inspect drive shafts for condition	11-3, step 8	
(3) Inspect transmission V-mounting struts for condition, also for correct installed position of main transmission relative to fuselage	11-3, step 10	
(4) NOTE If drive shaft is damaged, inspect engines per "Sudden Stoppage Inspection" in the Allison Operation and Maintenance Manual No. 5W2 or 10W2, as applicable	OMM	

13 - MAIN ROTOR SYSTEM		
(1) Inspect main rotor system for condition, in particular the main rotor head (including visible area of inner sleeves) and driving links (including fitted bolts and other attaching hardware)	13-3	

Table 101-13.1.2 - Special inspection after contact of main rotor with an obstacle (1 of 2)

Inspection or Maintenance Work	Reference	Initial
13 - MAIN ROTOR SYSTEM		
(2) Check torque on special nuts of main rotor head to main rotor mast connection	Fig. 13-4	
14 - MAIN ROTOR BLADE		
(1) Remove main rotor blade and inspect for condition	14-4, 14-5	
21 - FUSELAGE		
(1) Inspect gearbox and engine mount attaching areas for condition	21-3	
(2) Inspect fuselage exterior, including inboard area of transmission deck (remove cowlings to obtain access) for condition	21-3	
31 - TAIL BOOM		
(1) Visually inspect tail rotor gearbox attachment fitting for cracks	31-2	
32 - TAIL ROTOR DRIVE		
(1) Inspect tail rotor drive and couplings for condition	32-4 or 32-5	
(2) Visually inspect tail rotor gearbox for cracks and check torque on its vertical fin connection	Fig. 32-23	
33 - TAIL ROTOR		
(1) Inspect tail rotor for condition	33-4	
34 - TAIL ROTOR BLADE		
(1) Inspect tail rotor blade for condition (inspect with blade installed)	34-2	
41 - MAIN ROTOR CONTROLS		
(1) Inspect condition of control elements in the boosted section (incl. mountings of the hydraulic unit), in particular the rotating control rods, swashplate, mixing lever assembly and associated attaching hardware	41-3 and Fig. 43-32	

Table 101-13.1.2 - Special inspection after contact of main rotor with an obstacle (2 of 2)

Technician		Inspector	
Date:		Date:	
Name	Signature	Stamp	Signature

3. Special inspection after contact of tail rotor with an obstacle.

WARNING IF SEVERE VIBRATIONS OR BALANCE PROBLEMS OCCUR FOLLOWING KNOWN OR SUSPECTED ROTOR CONTACT WITH AN OBSTACLE, CONTACT THE ECD CUSTOMER SERVICE FOR ADVICE ON HOW TO PROCEED.

NOTE If the allowable damage limits on any component have been exceeded as a result of contact with an obstacle, contact the ECD Customer Service for advice on how to proceed.

This inspection shall be performed if there has been contact with e.g. the ground, snow, cables or dense vegetation. Tail rotor blade contact with an obstacle might not necessarily be noticed by the pilot.

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Inspection or Maintenance Work	Reference	Initial
31 – TAIL BOOM		
(1) Visually inspect tail boom for cracks, loose rivets and other damage (e.g. deformation of vertical fin)	31-2	
(2) Remove tail rotor gearbox and visually inspect tail rotor gearbox attachment fitting on vertical fin for cracks	31-2, step 5	
32 – TAIL ROTOR DRIVE		
(1) Visually inspect tail rotor drive and couplings for condition, especially the rivets connecting the shaft to the flange	32-4 or 32-5	
(2) Visually inspect intermediate gearbox and tail rotor gearbox for cracks	32-4 or 32-5	
33 – TAIL ROTOR		
(1) Inspect tail rotor for condition. If pitch link(s) are damaged/broken, or severe imbalance is present/suspected, perform following inspections: – Remove, disassemble and inspect tail rotor head per REM Remove following bolts and inspect for cracks (using visible dye method): – Laminated strap pack to blade mounting fork connecting bolts – Blade mounting fork to tail rotor blade connecting bolts – Close-tolerance bolt between tail rotor head and tail rotor shaft – Bolts between tail rotor head and pitch links – Bolts between sliding sleeve and pitch links – Bolts between sliding sleeve and bellcrank – Bolts between bellcrank and tail rotor gearbox	33-4 REM 301 or REM 308 33-16, step 5 33-16, step 6 33-21 – – – –	
34 – TAIL ROTOR BLADE		
(1) Remove tail rotor blade and inspect for condition	34-2, 34-4, 34-5	

Table 101-13.1.3 – Special inspection after contact of tail rotor with an obstacle (1 of 2)

Inspection or Maintenance Work	Reference	Initial
42 – TAIL ROTOR CONTROLS		
(1) Inspect tail rotor controls for condition. Visually inspect pivot pin for bellcrank on tail rotor gearbox for cracks, using magnifying glass	42-3 –	

Table 101-13.1.3 – Special inspection after contact of tail rotor with an obstacle (2 of 2)

Technician		Inspector	
Date:		Date:	
Name	Signature	Stamp	Signature

4. Special inspection after a hard landing

A hard landing is one which results not only in deformation of one or both cross tubes but also in one or more of the following damage conditions:

- Damage to the lower part of frame 9
- Damage to the upper part of the canted frame (in the area of the rear door)
- Damage to underside of fuselage as a result of ground contact
- visible permanent deformation of the tail boom

The entire helicopter must be subjected to a thorough visual inspection. For this purpose, remove all engine cowlings, tail rotor fairings, interior panels and other panels and fairings, including all firewalls and covers. A 10–power magnifying glass is required for some inspection areas.

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Inspection or Maintenance Work	Reference	Initial
GENERAL		
(1) Remove all panels and fairings, firewalls and the tail boom		
11 – MAIN TRANSMISSION		
(1) Inspect bolts of transmission struts for cracks by penetrant method per MIL-STD-6866, type II, visible dye		
(2) Inspect main transmission struts for deformation and inspect for cracks, using magnifying glass. If deformation is evident, replace affected V–strut only. If one of the V–struts is cracked, it must be removed together with the opposite V–strut		
21 – FUSELAGE		
(1) Inspect engine and transmission attachment fittings for damage and proper riveting, and ball bearings of transmission attachment fittings for damage and excessive play		
(2) Inspect engine and transmission attachment areas on fuselage for deformation and damage. If damage is suspected, perform dye penetrant crack inspection per MIL-STD-6866, type II, visible dye		
(3) Inspect frame 7, frame 9, canted frame and frame 2L for local buckling. For inspection of frame 2L, remove tail boom		
(4) Inspect aft cross tube attachment areas on fuselage, outer skin, tail boom and tail cone for deformation and damage		
(5) Inspect landing gear fittings and the rivets connecting them to the fuselage for damage		
(6) Inspect doors and panels for flush fit. Improper fit is an indication of structural deformation of the fuselage		
(7) If deformation of the fuselage is suspected, perform leveling of the fuselage and compare values with original data in the leveling table. If deformation is verified, contact ECD or a service facility authorized by ECD for advice on how to proceed		

Table 101-13.1.4 – Special inspection after a hard landing (1 of 4)

Inspection or Maintenance Work	Reference	Initial
31 – TAIL BOOM		
(1) Inspect necked-down bolts in the tail boom to fuselage flange connection for the specified torque load (7.5 Nm). Replace bolts having less than the required torque		
(2) Visually inspect tail boom for damage		
(3) Visually inspect attachment fitting of intermediate gearbox and tail rotor gearbox for cracks and proper riveting to vertical fin. If damage is suspected, remove intermediate gearbox or tail rotor gearbox, as applicable, and perform a penetrant crack inspection of attaching areas and bolts per MIL-STD-6866, type II, visible dye		
32 – TAIL ROTOR DRIVE		
(1) Inspect tail rotor drive shafts for correct alignment		
(2) Inspect intermediate gearbox and tail rotor gearbox for secure mounting, and inspect housing for cracks, using a magnifying glass		
(3) Check tail rotor gearbox and intermediate gearbox with alignment device for correct installed position	32–60	
33 – TAIL ROTOR		
(1) Visually inspect tail rotor for damage. If there is evidence of a blade strike, perform "Special inspection after contact of tail rotor with an obstacle"		
41 – MAIN ROTOR CONTROLS		
(1) Visually inspect all control rods between hydraulic unit and main rotor head and between mixing lever assembly and swashplate for damage, and bearings for free movement without play		
43 – HYDRAULIC SYSTEM		
(1) Visually inspect hydraulic unit for damage and check for secure mounting on fuselage		
(2) Apply hydraulic pressure to the hydraulic unit, using a ground hydraulic cart or a portable unit, and visually inspect hydraulic system for leaks		
51 – LANDING GEAR		
(1) Inspect cross tubes for deformation		
(2) Inspect landing gear for condition		
61 – ENGINE		
NOTE When the fuselage hits the ground during a hard landing, it must be assumed that the engines have suffered an impact load of 10 g or more.		
(1) For inspections pertaining to engines and engine accessories, refer to manufacturer's documentation. After loading in excess of 10 g, return engine for overhaul		

Table 101-13.1.4 – Special inspection after a hard landing (2 of 4)

Inspection or Maintenance Work	Reference	Initial
61 – ENGINE		
(2) Inspect engine mounts for deformation and cracks. Use a magnifying glass for crack inspection		
(3) Inspect rubber bushings of mounting supports for damage by rocking the engine. The resulting movement within the rubber bushings must not be so great as to cause the washers on each end of the rubber bushings to contact the outer metal part of the rubber bushings (metal contact is audible)		
(4) Inspect exhaust ducts for firm attachment		
62 – FUEL SYSTEM		
(1) Inspect fuel tanks for evidence of leakage		
(2) Visually inspect fuel lines for damage, loose connections and security of attachment		
(3) Inspect fuel system for evidence of leakage at operating pressure		
63 – LUBRICATION SYSTEM		
(1) Visually inspect lubrication system for damage, loose connections and security of attachment		
(2) Inspect lubrication system for evidence of leakage at operating pressure		
64 – FIREWALLS		
(1) Visually inspect firewalls for damage		
700 – STANDARD EQUIPMENT		
(1) Visually inspect interior panels for damage		
(2) Inspect seat fittings and safety belts for security of attachment		
800 – OPTIONAL EQUIPMENT		
(1) Inspect optional equipment for condition and correct functioning. If in doubt, contact ECD or a service facility authorized by ECD		
91 – INSTRUMENTS		
(1) Inspect instruments for security of attachment and correct function		
92 – ELECTRICAL SYSTEMS		
(1) Inspect battery for condition (refer to manufacturer's instructions)		

Table 101-13.1.4 – Special inspection after a hard landing (3 of 4)

Inspection or Maintenance Work	Reference	Initial
92 – ELECTRICAL SYSTEMS		
(2) Visually inspect battery mounting support for damage		
(3) Compensate compasses		

Table 101-13.1.4 – Special inspection after a hard landing (4 of 4)

Technician		Inspector	
Date:		Date:	
Name	Signature	Stamp	Signature

5. Measures to be taken if mast moment limits are exceeded (MM–Limit warning light remains on)

After exceeding the max. permissible mast moment, which is indicated by continuous illumination of the MM–Limit warning light, proceed according to Table 101-13.1.5 below:

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Inspection or Maintenance Work	Reference	Initial
(1) Enter the incident in the historical record		
(2) Check torque on special nuts securing the rotor mast to the studs of the main rotor head. If the tightening torque on all nuts is at least 140 Nm, flight operations may be continued		
(3) If the tightening torque on one or more nuts is below 140 Nm, stop flight operations and give ECD a detailed report of the incident		

Table 101-13.1.5 – Measures to be taken after mast moment limits have been exceeded (1 of 1)

Technician		Inspector	
Date:		Date:	
Name	Signature	Stamp	Signature

6. Special inspection after excessive main rotor blade bending**WARNING**

THE DESIGN OF THE MAIN ROTOR BLADE IS SUCH THAT DAMAGE NOT IMMEDIATELY DETECTABLE ON THE BLADE EXTERIOR WILL BECOME EVIDENT THROUGH DISTINCT CHANGES IN THE BALANCE AND TRACK BEHAVIOR OF THE BLADE.

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Inspection or Maintenance Work	Reference	Initial
(1) The main rotor blades shall be removed and inspected if it is suspected that they have been bent beyond an acceptable degree, e.g., by gusts of wind when not or inadequately tied down. Acceptable / Unacceptable bending (see figure 101-13.1.6): Acceptable: Upward and downward blade bending of up to 1.4 m from the rotor plane and/or a once-only downward blade bend of 1.4 to 1.6 m. A bend of 1.6 m corresponds to a ground clearance of approx. 1.4 m. These measurements shall be taken at the blade tip. Unacceptable: More than the once-only allowable bend of between 1.4 m and 1.6 m. Bending in excess of 1.4 m upwards and in excess of 1.6 m downwards. The latter corresponds to a ground clearance of less than 1.4 m. These measurements shall be taken at the blade tip.	Chapter 14	
(2) Check balance and track behavior during next flight	Chapter 106	

Table 101-13.1.6 – Special inspection after excessive bending of the main rotor blades
(1 of 1)

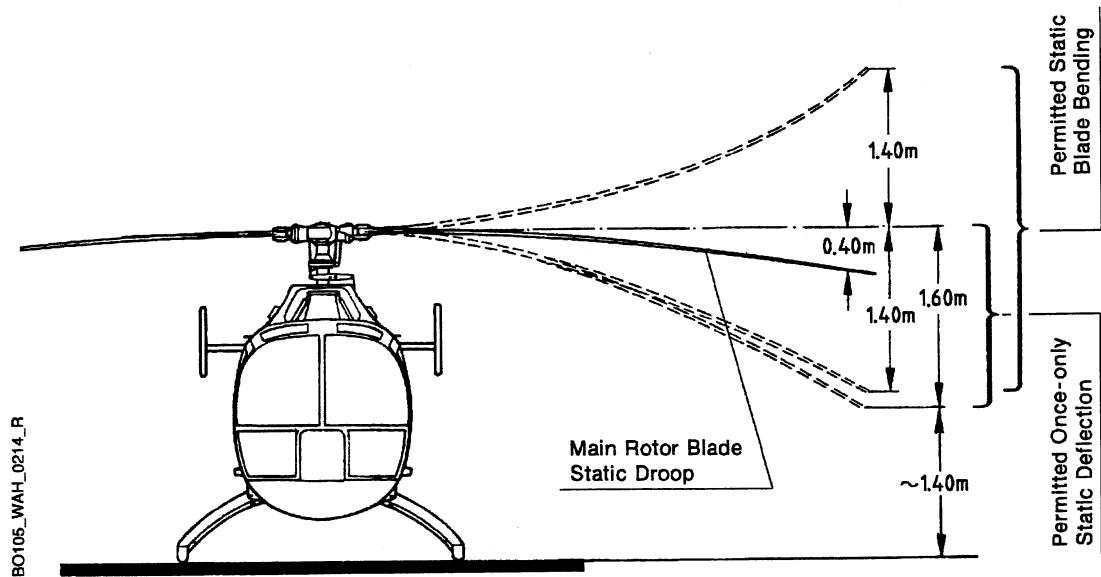


Figure 101-13.1.6 Main Rotor Blade Bending

Technician	Date:	Inspector	Date:
Name	Signature	Stamp	Signature

7. Special inspection of main transmission and when mast moment indicating system defective/removed

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Incident	Inspection or Maintenance Work	Interval	Reference	Initial
11 - MAIN TRANSMISSION				
(1) Presence of deposits	Remove oil filter element from main transmission and inspect for deposits	5Fh to 15Fh after incident	11-12 thru 11-14	
(2) Defective or removed mast moment indicating system	Check torque on special nuts securing the rotor mast to the studs of the main rotor head. If the torque on any of the special nuts is less than 140 Nm, stop flight operations and consult ECD	Within the next 150Fh after failure of the mast moment indicating system, then every 150Fh until it is returned to service		

Table 101-13.1.7 - Special inspection of main transmission (1 of 1)

Technician		Inspector	
Date:		Date:	
Name	Signature	Stamp	Signature

8. Measures to be taken with regard to main transmission FS 72 A after reaching max. torque ranges, or exceeding max. permissible torque limits

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

A. Overload ranges and overload limits

The following overload ranges and overload limits (torque/duration) apply to the main transmission FS 72 A within the overhaul interval (TBO) (for measures to be taken after reaching or exceeding these ranges/limits, refer to step B):

(1) Twin-engine operation:

<u>Torque range (%)</u>	<u>Max. duration</u>
2 x 94 – 100%	5 s
or	
2 x 80 – 93%	15 s
or	
a total torque of 158% on both engines with one engine allowed to reach 80% to max. 93%	15 min

(2) Single-engine operation (one engine inoperative):

<u>Torque range (%)</u>	<u>Max. duration</u>
1 x 101 – 110%	5 s
or	
1 x 94 – 100%	15 s

B. Measures to be taken after reaching overload ranges or exceeding overload limits

Inspection or Maintenance Work	Reference	Initial
(1) Whenever the overload ranges specified under point A (torque values/duration) are reached or their respective limits exceeded, notice to this effect must be entered into the historical record of the main transmission. It is necessary to have the main transmission inspected by the manufacturer ZF in the following cases: – If <u>one</u> of the values for torque range/duration specified in (1) or (2) <u>was reached</u> more than twice within the overhaul interval (TBO). – If <u>one</u> of the values for torque limits/duration specified in (1) or (2) <u>was exceeded</u> within the overhaul interval (TBO).		

Table 101-13.1.8 – Measures to be taken after reaching overload ranges or exceeding overload limits
(1 of 1)

Technician	Date:	Inspector	Date:
Name	Signature	Stamp	Signature

9. Measures to be taken with regard to main transmission FS 72 B after reaching max. torque ranges or exceeding max. permissible torque limits

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

A. Overload ranges and overload limits

The following overload ranges and overload limits (torque/duration) apply to the operation of the main transmission FS 72 B for the time interval between overhauls (TBO): (Refer to step B. for measures to be taken after reaching or exceeding these ranges/limits):

EFFECTIVITY

The torque ranges and their respective duration listed below under points (1) and (2) apply to BO 105 C23, CS, C-2, CS-2, D and DS helicopter series, provided that they have been modified by SB 60-44 or SB 60-47. The overload ranges and limits listed below do not apply to BO 105 A helicopters.

(1) Twin-engine operation:

<u>Torque range (%)</u>	<u>Max. duration</u>
2 x 96 – 105%	5 s
or	
2 x 87 – 95%	15 s
or	
a total torque of 172% on both engines with one engine allowed to reach 87% to max. 95% torque.	15 min

(2) Single-engine operation (one engine inoperative):

<u>Torque range (%)</u>	<u>Max. duration</u>
1 x 101 – 110%	5 s
or	
1 x 96 – 100%	15 s

EFFECTIVITY

The torque ranges and their respective duration listed below under items (3) and (4) apply to BO 105 C23, CS, C-2, CS-2, D and DS helicopter series, provided that they have **not** been modified by either SB 60-44 or SB 60-47. If they have been modified by these bulletins, the values specified under points (1) and (2) apply to them.

(3) Twin-engine operation:

<u>Torque range (%)</u>	<u>max. duration</u>
2 x 94 – 105%	5 s
or	
2 x 80 – 93%	15 s
or	
a total torque of 158% on both engines with one engine allowed to reach 80% to max. 93% torque.	15 min

- (4) Single-engine operation (one engine inoperative):

<u>Torque range (%)</u>	<u>Max. duration</u>
1 x 101 – 110%	5 s
or	
1 x 94 – 100%	15 s

B. Measures to be taken after reaching overload ranges or exceeding overload limits

Inspection or Maintenance Work	Reference	Initial
(1) Whenever the overload ranges specified under point A (torque values/duration) are reached or their respective limits exceeded, notice to this effect must be entered into the historical record of the main transmission. It is necessary to have the main transmission inspected by the manufacturer ZF in the following cases: – If <u>one</u> of the values for torque range/duration specified in (1) or (2) or in (3) and (4) <u>was reached</u> more than twice within the overhaul interval (TBO). – If <u>one</u> of the values for torque limits/duration specified in (1) or (2) or in (3) or (4) <u>was exceeded</u> within the overhaul interval (TBO).		

Table 101-13.1.9 – Measures to be taken after reaching overload ranges or exceeding overload limits
(1 of 1)

Technician		Inspector	
Date:		Date:	
Name	Signature	Stamp	Signature

10. Measures to be taken with regard to main transmission FS 72 E after reaching max. torque ranges or exceeding max. permissible torque limits

A. Overload ranges and overload limits

The following overload ranges and overload limits (torque/duration) apply to the main transmission FS 72 E within the overhaul interval (TBO): (for measures to be taken after reaching or exceeding these ranges/limits, refer to step B.):

EFFECTIVITY

The following torque ranges and respective duration in steps (1) and (2) apply to helicopters which have been modified for VTOL mode.

(1) Twin-engine operation:

<u>Torque range (%)</u>	<u>Max. duration</u>
2 x 96 – 105%	5 s
or	
2 x 87 – 95%	15 s
or	
a total torque of 172% on both engines with one engine allowed to reach 87% to max. 95% torque	15 min

(2) Single-engine operation (one engine inoperative):

<u>Torque range (%)</u>	<u>Max. duration</u>
1 x 111 – 123%	16 s

B. Measures to be taken after reaching overload ranges or exceeding overload limits

Inspection or Maintenance Work	Reference	Initial
(1) Whenever the overload ranges specified under point A. (torque values/duration) are reached or their respective limits exceeded, enter notice to this effect in the historical record of the main transmission. An inspection of the main transmission by the manufacturer ZF is required: – If <u>one</u> of the values for torque range/duration specified in (1) or (2) <u>was reached</u> more than ten times within the overhaul interval (TBO). – If <u>one</u> of the values for torque limits/duration specified in (1) or (2) <u>was exceeded</u> within the overhaul interval (TBO).		

Table 101-13.1.10 – Measures to be taken after reaching overload ranges or exceeding overload limits
(1 of 1)

Technician	Date:	Inspector	Date:
Name	Signature	Stamp	Signature

11. Special inspection of the hydraulic system

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Incident	Inspection or Maintenance Work	Interval	Reference	Initial
43 – HYDRAULIC SYSTEM				
(2) Filter contamination indicator pin has popped out	Inspect for deposits in filter element	10Fh after occurrence	43-30	
(3) EFFECTIVITY Hydraulic reservoir with trapped air indicator (ring) Indicator ring changes position	Bleed hydraulic system	Within 10Fh after initial occurrence	43-5	

Table 101-13.1.11 – Special inspection of the hydraulic system (1 of 1)

Technician		Inspector	
Date:		Date:	
Name	Signature	Stamp	Signature

12. Measures to be taken following freewheel clutch slippage due to engine rpm N2 exceeding rotor rpm N_{Ro}

In the event of freewheel clutch slippage, i.e., when N2 speed of one of the engines has exceeded rotor speed N_{Ro} , the rpm difference between N2 and N_{Ro} may result in a sudden hard clutch engagement, thus causing damage to the drive shafts between engine and transmission. Perform corrective measures listed below in Table 101-13.1.12 .

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Inspection or Maintenance Work		Reference	Initial
(1)	Remove and discard appropriate drive shaft between main transmission and engine. Install new drive shaft.	Chapter 11	
(2)	Remove and discard freewheel clutch. Install new freewheel clutch.	Chapter 11	
(3)	Inspect and, if necessary, replace drive units of transmission input stage	REM 103	
(4)	NOTE The inspection referred to below shall be performed if the above-mentioned incident occurs more than <u>once</u>. A once-only occurrence does not require inspection of the engine. However, the incident shall be recorded in the engine log, together with the date of occurrence and the accumulated flight hours at the time. Eg. Clutch slippage occurred for the first time on after flight hours. Inspect engine as described under "Slippage and/or sudden engagement of freewheel clutch unit" in Allison OMM	Special Inspections in Allison OMM 5W2 or 10W2	

Table 101-13.1.12 – Measures to be taken in the event of freewheel clutch slippage (1 of 1)

Technician		Inspector	
Date:		Date:	
Name	Signature	Stamp	Signature

13. Special inspection of instruments

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Incident	Inspection or Maintenance Work	Interval	Reference	Initial
91 – INSTRUMENTS				
(1) After flight in thunderstorm	Compensate compasses	After occurrence		
(2) After parking the helicopter for a longer period of time (3 months) in one direction	Compensate compasses	After occurrence		

Table 101-13.1.13 – Special inspection of instruments (1 of 1)

Technician		Inspector	
Date:		Date:	
Name	Signature	Stamp	Signature

14. Measures to be taken after flights in falling snow

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

After flights in falling snow, inspect engines according to documentation of engine manufacturer.

Technician		Inspector	
Date:	Date:	Date:	Date:
Name	Signature	Stamp	Signature

15. Measures to be taken after flights in sandy environment

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

After flights in sandy environment, inspect engines according to documentation of engine manufacturer.

Technician		Inspector	
Date:	Date:	Date:	Date:
Name	Signature	Stamp	Signature

16. Measures to be taken when operating at extremely low temperatures**NOTE**

The following measures only apply when the helicopter is continuously operated at temperatures below -30°C .

Inspection or Maintenance Work	Reference	Initial
LIFTING SYSTEM		
Do not operate rotor brake at temperatures below -30°C		
(1) Preheat oil in main transmission to a temperature of at least -25°C	PF, refer to FLM	
(2) Inspect boot on swashplate for condition	PF	
FUSELAGE		
(1) At ambient temperatures of -30°C and below, heat the cabin interior until the cabin thermometer indicates a temperature of -10°C for at least 15 min.	PF	
TAIL BOOM		
(1) Tail rotor drive shaft (Bendix): Axial play necessary for operation at extremely low temperatures must have been adjusted	Chapter 32	
(2) Inspect boots on tail rotor sliding sleeves for condition	PF	
FLIGHT CONTROLS		
(1) Inspect neoprene edge protectors for condition at locations where control rods of tandem hydraulic unit pass through fuselage	PF	
POWERPLANT		
(1) Preheat engine oil to at least -25°C	PF, refer to FLM	
(2) Preheat engine fuel controls	PF, refer to Allison OMM und FLM	
OPTIONAL EQUIPMENT		
(1) - Do not switch on SAS when outside temperatures are below -35°C - Observe operating limits laid down by manufacturers of optional equipment		
(2) If installed, visually inspect rescue hoist for signs of leakage. Leakage of lubricant indicates a deteriorated seal. Replace such seals.	PF	
INSTRUMENTS AND ELECTRICAL SYSTEMS		
(1) Preheat battery with electric blanket or store battery in heated room	PF	

BLANK PAGE

101 – 13.2 Special Inspections after Operational Incidents Optional Equipment

1. Measures to be taken when Reflector of Searchlight is contaminated 112

1. Measures to be taken when Reflector of Searchlight is contaminated

If contaminants form a film on rhodium plating of the searchlight reflector, proceed according to Table 101-13.2.1 below:

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Inspection or Maintenance Work	Reference	Initial
(1) Cleaning of reflector	813-19	

Table 101-13.2.1 – Measures to be taken when Reflector is contaminated (1 of 1)

Technician		Inspector	
Date:		Date:	
Name	Signature	Stamp	Signature

101 - 14 TIME BETWEEN OVERHAUL OF COMPONENTS (TBO)

101 - 14.1 Time Between Overhaul of Components Basic Helicopter

The following tables are arranged in chapter sequence and list the overhaul intervals (TBO) of individual assemblies. When overhaul is due, the unit concerned must be removed and overhauled or replaced by a new or overhauled unit. If a part has been assigned different overhaul intervals, the interval expiring first shall apply. Periodic inspections do not affect overhaul intervals.

COMPONENT	PART NO.	TBO
11 - LIFTING SYSTEM		
Main Transmission (built-up)	4619 001 003 (FS 72 A)	1200Fh
Main Transmission (built-up)	4638 001 001 (FS 72 B)	3000Fh
Main Transmission (built-up)	4638 001 003 (FS 72 B)	3000Fh
Main Transmission (built-up)	4638 001 004 (FS 72 B)	3000Fh
Main Transmission (built-up)	4638 001 011 (FS 72 B)	3000Fh
Main Transmission (built-up)	4638 001 007 (FS 72 E)	3000Fh
Main Transmission (built-up)	4638 001 008 (FS 72 E)	3000Fh
Main Transmission (built-up)	4638 001 009 (FS 72 E)	3000Fh
Main Transmission (built-up)	4638 001 010 (FS 72 E)	3000Fh
32 - TAIL ROTOR DRIVE		
Intermediate Gearbox (built-up)	4619 002 005	3600Fh
Intermediate Gearbox (built-up)	4619 002 003	3600Fh
Tail Rotor Transmission (built-up)	4619 003 003	3600Fh
43 - FLIGHT CONTROL SYSTEM		
Hydraulic Pump	AP05VC-032	1800Fh
Hydraulic Pump	AP05VC-032-01	no TBO
61 - POWER PLANT		
Allison Engine	250-C18	Refer to 250-C18 CSL 8
Allison Engine	250-C20	Refer to Allison 250-C20 Operation and Maintenance Manual
Allison Engine	250-C20B	Refer to Allison 250-C20 Operation and Maintenance Manual
Starter/Generator		1000Fh

Table 101-14.1 - Time Between Overhaul of components Basic Helicopter (1 of 1)

BLANK PAGE

101 - 14.2 Time Between Overhaul of Components Optional Equipment

The following tables are arranged in chapter sequence and list the overhaul intervals (TBO) of individual assemblies of Optional Equipment. When overhaul is due, the unit concerned must be removed and overhauled or replaced by a new or overhauled unit. If a part has been assigned different overhaul intervals, the interval expiring first shall apply. Periodic inspections do not affect overhaul intervals.

COMPONENT	PART NO.	TBO
822 - CARGO HOOK SYSTEM		
Load hook	S1609.2.105**	1500 release operations* or 5 years, 
Load hook	S1609.2.106**	1500 release operations* or 5 years, 
Load hook	S1609.2.105A**	1500 release operations* or 5 years, 
Load hook	S1609.2.106A**	1500 release operations* or 5 years, 
Load hook	S1609.2.107A**	1500 release operations* or 5 years, 
Load hook	S1609.1.118A**	1500 release operations* or 5 years, 
Load hook	S1609.1.119A**	1500 release operations* or 5 years, 

NOTE

* One release operation is defined as one times opening and closing.

** The part number can be written with a hyphen instead of a point, e.g. S109-1-119A.

836 - RESCUE HOIST ASSEMBLY		
Winch unit	105-81215 105-81216	300 cable operating cycles or 8 years, 
Winch unit	WE-3821-3 WE-3821-4	300 cable operating cycles or 8 years, 
Servo motor	DL 2050 M4D	8 years
Servo motor	13.1-0100	8 years
Servo motor	13.1-0110	8 years

Table 101-14.2 - Time Between Overhaul of components Optional Equipment (1 of 1)

 whichever occurs first.

BLANK PAGE

101 - 15 AIRWORTHINESS LIMITATIONS

101 - 15.1 General

1. List of Revisions

Revision	Date	LBA approval
Second Issue	Dec. 1, 1990	signed by Schönmann
Revision 1	not applicable, chapter 101-15 (former 101-9) not affected	
Revision 2	May 15, 1991	signed by Schönmann
Revision 3	not applicable, chapter 101-15 (former 101-9) not affected	
Revision 4	not applicable, chapter 101-15 (former 101-9) not affected	
Revision 5	not applicable, chapter 101-15 (former 101-9) not affected	
Revision 6	not applicable, chapter 101-15 (former 101-9) not affected	
Revision 7	not applicable, chapter 101-15 (former 101-9) not affected	
Revision 8	March 23, 1993	signed by Schönmann
Revision 9	not applicable, chapter 101-15 (former 101-9) not affected	
Revision 10	Feb. 1, 1994	signed by Schönmann
Revision 11	not applicable, chapter 101-15 (former 101-9) not affected	
Revision 12	not applicable, chapter 101-15 (former 101-9) not affected	
Revision 13	not applicable, chapter 101-15 (former 101-9) not affected	
Revision 14	Sept. 21, 1995	signed by Schönmann
Revision 15	Dec. 8, 1995	signed by Kayser-Herold
Revision 16	July 26, 1996	signed by Kayser-Herold
Revision 17	not applicable, chapter 101-15 (former 101-9) not affected	
Revision 18	June 30, 1997	signed by Schönmann
Revision 19	not applicable, chapter 101-15 (former 101-9) not affected	
Revision 20	not applicable, chapter 101-15 (former 101-9) not affected	
Revision 21	not applicable, chapter 101-15 (former 101-9) not affected	
Revision 22	not applicable, chapter 101-15 (former 101-9) not affected	
Revision 23	Aug. 23, 2002	signed by Kayser-Herold

Revision of Chapter 101-15	Issue date	EASA approval number and date
Revision 24	May 2, 2005	2005-1339 dated 09.02.2005
Revision 25	not applicable, chapter 101-15 (former 101-9) not affected	
Revision 26	Aug. 15, 2010	10028672 dated 02.02.2010
Revision 27	March 15, 2012	10038496 dated 21.02.2012

2. General

The tables in this section contain retirement times of parts whose failure would adversely affect the airworthiness of the helicopter. Retirement times must not be exceeded.

In addition, it is necessary to observe the Intermediate Inspections, Periodic Inspections and Special Inspections outlined in paras 101-5 thru 101-13, and the Overhaul Intervals outlined in para 101-14.

The life-limited parts listed in this paragraph must be retired from service as soon as their service times are completed. They must be removed and replaced by new parts or serviceable used parts which still have a number of useful life hours. It must also be noted that as a consequence of exceeding the operational limits of a part (refer to para 101-13), the retirement life of the part may have to be reduced.

In paragraph 15.2 are listed the life-limited parts for the Basic Helicopter, in paragraph 15.3 are listed the life-limited parts for Optional Equipment.

WARNING

LIFE-LIMITED COMPONENTS MUST NOT BE INTERCHANGED BETWEEN BO105 AND BO105 LS HELICOPTERS OR BETWEEN BO105 AND BK117 HELICOPTERS.

WARNING

IF PARTS WHICH HAVE A LIFE LIMITATION ARE INTERCHANGED BETWEEN DIFFERENT BO105 SERIES HELICOPTERS, THE PARTS MUST BE RESTRICTED TO THE LOWEST RETIREMENT TIME.

WARNING

WHEN LIFE-LIMITED PARTS ARE REPLACED, THEIR ATTACHING HARDWARE MUST BE REPLACED AT THE SAME TIME.

AFTER REMOVAL, THIS ATTACHING HARDWARE SHALL BE RENDERED UNSERVICEABLE AND NEW (UNUSED) ATTACHING HARDWARE INSTALLED IN ITS PLACE.

THIS DOES NOT APPLY TO LIFE-LIMITED ATTACHING HARDWARE. SUCH ATTACHING HARDWARE SHALL BE REPLACED WHEN IT REACHES ITS OWN LIFE LIMIT.

WARNING

DELTA NOTES ARE AT THE END OF THE TABLES.

NOTE

Certain part numbers have been changed by ASB-BO 105-10-113. Both the new and old part numbers of the affected parts are shown in the following list 101-15.2.2 "Service Times of Life-Limited Parts Basic-Helicopter Helicopter series BO105 CB-5, BO105 CBS-5 and BO105 DBS-5 Basic-Helicopter". The old part numbers are shown in brackets.

101 - 15.2 Service Times of Life-Limited Parts

101 - 15.2.1 Service Times of Life-Limited Parts Basic-Helicopter Helicopter series A, C, D, S, except for BO105 CB-5, BO105 CBS-5 and BO105 DBS-5

PART	PART NO.	RETIREMENT TIME
LIFTING SYSTEM		
Rotor Mast	4619 305 032	9000 Fh
Transmission Support Struts, LH 	105-10161	6800 Fh
Transmission Support Struts, RH 	105-10162	6800 Fh
Free Wheel Unit 	CL-42071-1 or 4619 302 063	300 Fh
Free Wheel Unit 	4619 302 048	1500 Fh
Free Wheel Unit 	4619 302 059	1500 Fh
Free Wheel Unit 	4638 202 006	1500 Fh
Main Rotor Blade 	105-15103	10000 Fh  
Main Rotor Blade 	105-87214	10000 Fh  
Tension-Torsion-Strap	260 2559	10 years or 2400 Fh or 15600 flights 
Tension-Torsion-Strap	260 6576	10 years or 2400 Fh or 15600 flights 
Tension-Torsion-Strap	260 4067 (117-14110)	10 years or 40000 flights 
Tension-Torsion-Strap	J17322-1 (117-14111)	12 years or 40000 flights 
Quadruple Nut, upper 	105-14101.19	2400 Fh or 15600 flights 
Quadruple Nut, upper 	105-14101.54	2400 Fh or 15600 flights 
Quadruple Nut, upper 	1121-14102.19	30000 flights 
Quadruple Nut, lower 	105-14101.20	2400 Fh or 15600 flights 
Quadruple Nut, lower 	105-14101.55	2400 Fh or 15600 flights 
Quadruple Nut, lower 	1121-14102.20	30000 flights 
Nut	105-142241.01	122850 fligths  
Bolt	105-141041.22	109200 fligths  
Bolt	105-141041.23	109200 fligths  
Bolt 	105-14101.22g and up	2400 Fh or 15600 flights 
Bolt 	105-14101.76	2400 Fh or 15600 flights 

**Table 101-15.2.1 - Service Times of Life-Limited Parts Basic-Helicopter
Helicopter series A, C, D, S, except for BO105 CB-5, BO105 CBS-5 and BO105 DBS-5 (1 of 4)**

PART		PART NO.	RETIREMENT TIME
LIFTING SYSTEM			
Bolt		105-14101.23g and up	2400 Fh or 15600 flights 
Bolt		105-14101.77	2400 Fh or 15600 flights 
Bolt		1121-14102.22	20000 flights 
Bolt		1121-14102.23	20000 flights 
Secondary Blade Mounting Bolt		105-14101.35 thru e	2400 Fh
TAIL UNIT			
Blade Mounting Fork		105-31711	2400 Fh
Blade Mounting Fork		105-31722	1200 Fh

Table 101-15.2.1 - Service Times of Life-Limited Parts Basic-Helicopter
Helicopter series A, C, D, S, except for BO105 CB-5, BO105 CBS-5 and BO105 DBS-5 (2 of 4)

PART	PART NO.	RETIREMENT TIME
TAIL UNIT		
Laminated Strap Pack Assy.	105-31727	25350 flights 
Laminated Strap Pack Assy.	105-317261	25350 flights 
Close Tolerance Bolt 	105-31725.12/.14/.16	600 Fh
Close Tolerance Bolt	1121-31712.10	25350 flights 
Close Tolerance Bolt	105-317391.12	25350 flights 
Tail Rotor Blade  	105-31742	4800 Fh
Tail Rotor Blade 	105-87161	4800 Fh
Tail Rotor Blade 	105-31743/44/45/46	6000 Fh
Bendix Shaft 	19E144-1	1800 Fh
Bendix Shaft 	19E145-1	1800 Fh
Bendix Shaft 	19E144-3	1800 Fh
Bendix Shaft 	19E145-3	1800 Fh
Bendix Shaft 	105-31503 (19E144-3, mod.)	3600 Fh 
Bendix Shaft 	105-31504 (19E145-3, mod.)	3600 Fh 
Bendix Shaft 	105-31505 (19E144-1, mod.)	2400 Fh 
Bendix Shaft 	105-31506 (19E145-1, mod.)	2400 Fh 
Bendix Shaft 	19E144-2/2A	6000 Fh
Bendix Shaft 	19E145-2/2A	6000 Fh
Bendix Coupling 	19E143-1/1A	6000 Fh
HYDRAULIC UNIT		
Piston Rod 	D133-750.08E	1800 Fh 
Flat Spring	EE-4-2054	2400 Fh
Flat Spring	D133-741.11E	2400 Fh
Flat Spring	105-457211.14	2400 Fh

Table 101-15.2.1 - Service Times of Life-Limited Parts Basic-Helicopter
Helicopter series A, C, D, S, except for BO105 CB-5, BO105 CBS-5 and BO105 DBS-5 (3 of 4)

PART		PART NO.	RETIREMENT TIME
POWER PLANT			
Rubber Bushing (Freudenberg)		0118 530	300 Fh
Rubber Bushing (Lord)		J 14403-2	300 Fh
Rubber Bushing (Lord)		J 14326-2	300 Fh
Teflon Bushing		D133-867	300 Fh
Rubber Bushing		105-60376	300 Fh
Rubber Bushing		105-60377	300 Fh
Rubber Bushing		105-60378	300 Fh
V-Struts		D133-373	10000 Fh
V-Strut, LH		105-60371	10000 Fh
V-Strut, RH		105-60372	10000 Fh
Lower Strut		D133-597	10000 Fh
Lower Strut		105-60361	10000 Fh
Lower Strut		105-60363	10000 Fh
Flange		D133-592	10000 Fh
ENGINE			
Allison		250-C18	Refer to 250-C18 CSL 10
Allison		250-C20	Refer to Allison 250-C20 Operation and Maintenance Manual
Allison		250-C20B	Refer to Allison 250-C20 Operation and Maintenance Manual

Table 101-15.2.1 - Service Times of Life-Limited Parts Basic-Helicopter
Helicopter series A, C, D, S, except for BO105 CB-5, BO105 CBS-5 and BO105 DBS-5 (4 of 4)

- ④ Service life is unlimited when blade is modified by a cuff in the blade fitting area, using retrofit kit P/N 105-87218. Refer also to the historical records.
- ② If the number of flights cannot be determined: 4800 Fh
In this connection the number of flights is to be considered equal to the number of landings (ground contacts).
- ③ If the number of flights cannot be determined: 3600 Fh
In this connection the number of flights is to be considered equal to the number of landings (ground contacts).
- ④ If the number of flights cannot be determined: 3900 Fh
The number of flights is to be considered equal to the number of landings (ground contacts).
- ⑤ Service life after modification.
- ⑥ This service life applies only to piston rods with S/N 101 to 440, manufactured by Teledyne Hydra-Power (THP).
- ⑧ Concurrent replacement of attaching hardware is not required.
- ⑨ Whichever occurs first.
- ⑩ For alternative part without life limit, refer to IPC.
- ⑪ If the total installation time is not known, the total operating time of the main rotor head can be assumed instead.
- ⑫ If the number of flights cannot be determined: 18900 Fh.
The number of flights is to be considered equal to the number of landings (ground contacts).
- ⑬ If the number of flights cannot be determined: 16800 Fh.
The number of flights is to be considered equal to the number of landings (ground contacts).
- ⑮ ■ Cannot be used unmodified. See SB 30-32.

101 - 15.2.2 Service Times of Life-Limited Parts Basic-Helicopter Helicopter series BO105 CB-5, BO105 CBS-5 and BO105 DBS-5 Basic-Helicopter

PART	PART NO.	RETIREMENT TIME
LIFTING SYSTEM		
Bearing Block	117-132031.11	6000 Fh
Hexagon Bolt	117-132031.13	6000 Fh
Hexagon Bolt	105-13104.13	4500 Fh
Rotor Mast	4619 305 032	9000 Fh
Tension-Torsion-Strap	260 4067 (117-14110)	10 years or 25000 flights 
Tension-Torsion-Strap	J17322-1 (117-14111)	12 years or 25000 flights 
Nut	105-142241.01	122850 flighths  
Bolt	105-141041.22	109200 flighths  
Bolt	105-141041.23	109200 flighths  
Free Wheel Unit 	CL-42071-1 or 4619 302 063	300 Fh
Free Wheel Unit 	4619 302 048	1500 Fh
Free Wheel Unit 	4619 302 059	1500 Fh
Free Wheel Unit 	4638 202 006	1500 Fh
Main Rotor Blade 	105-15107	2500 Fh
Main Rotor Blade 	105-15107V001	2500 Fh
Main Rotor Blade 	105-15108	2500 Fh
Main Rotor Blade 	105-15108V001	2500 Fh
Main Rotor Blade 	105-15110	2500 Fh
Main Rotor Blade 	105-15110V001	2500 Fh
TAIL UNIT		
Laminated Strap Pack Assy.	105-31727	25350 flights 
Laminated Strap Pack Assy.	105-317261	25350 flights 
Close Tolerance Bolt	1121-31712.10	25350 flights 
Close Tolerance Bolt	105-317391.12	25350 flights 
FLIGHT CONTROL SYSTEM		
Control Ring	105-41953	10800 Fh

Table 101-15.2.2 - Service Times of Life-Limited Parts Basic-Helicopter
Helicopter series BO105 CB-5, BO105 CBS-5 and BO105 DBS-5 Basic-Helicopter
(1 of 2)

PART	PART NO.	RETIREMENT TIME
FLIGHT CONTROL SYSTEM		
Control Rod	1120-13281	6600 Fh
Control Rod	1120-13282	6600 Fh
HYDRAULIC UNIT		
Piston Rod	D133-750.08E	1800 Fh 
Flat Spring	EE-4-2054	2400 Fh
Flat Spring	D133-741.11E	2400 Fh
Flat Spring	105-457211.14	2400 Fh
Hex. Bolt (installed in forkend assy P/N 105-45613, 105-456311)	105-45016.26 (LN9485-8x22)	7000 Fh
POWER PLANT		
V-Strut, LH	105-60371	10000 Fh
V-Strut, RH	105-60372	10000 Fh
Lower Strut	105-60363	10000 Fh
ENGINE		
Allison	250-C20B	Refer to Allison 250-C20 Operation and Maintenance Manual

Table 101-15.2.2 - Service Times of Life-Limited Parts Basic-Helicopter
Helicopter series BO105 CB-5, BO105 CBS-5 and BO105 DBS-5 Basic-Helicopter
(2 of 2)

101 - 15.3 Service Times of Life-Limited Parts Optional Equipment All Series

PART	PART NO.	RETIREMENT TIME
SEARCHLIGHT SX16		
Gimbal frame (Aluminium)	019059-4, 019059-10, 019059-11	7 years
Gimbal frame (Steel)	022955-21, 022955-22	10 years
RESCUE WINCH		
Cable	WA-2485	300 cable operating cycles 
Roller, driving	WA-4354	10-year period of installation and storage
Roller, driving	WA-2479	10-year period of installation and storage
Explosive Cartridge	TA 97155	5-year period of installation and storage
Explosive Cartridge	Mark 23 Mod. O	5-year period of installation and storage
NOTE		
Driving rollers may only be replaced by ECD.		
FIRE EXTINGUISHING SYSTEM		
Explosive Cartridge	AE13083-5	8 years 
Explosive Catridge	13083-5	4 years 
EMERGENCY FLOTATION SYSTEM		
Pressure Bottle	16D17194-12	24-year period of installation and storage

**Table 101-15.3 - Service Times of Life-Limited Parts Optional Equipment
all Series (1 of 1)**

- △₁ Service life is unlimited when blade is modified by a cuff in the blade fitting area, using retrofit kit P/N 105-87218. Refer also to the historical records.
- △₂ If the number of flights cannot be determined: 4800 Fh
In this connection the number of flights is to be considered equal to the number of landings (ground contacts).
- △₃ If the number of flights cannot be determined: 3600 Fh
In this connection the number of flights is to be considered equal to the number of landings (ground contacts).
- △₄ If the number of flights cannot be determined: 3900 Fh
The number of flights is to be considered equal to the number of landings (ground contacts).
- △₅ Service life after modification.
- △₆ This service life applies only to piston rods with S/N 101 to 440, manufactured by Teledyne Hydra-Power (THP).
- △₇ If cartridges are stored in the original factory packaging, the total life of the cartridge will be 6 years (storage time and service life), in which case service life may not exceed 4 years.
- △₈ Concurrent replacement of attaching hardware is not required.
- △₉ Whichever occurs first.
- △₁₀ For alternative part without life limit, refer to IPC.
- △₁₁ If the total installation time is not known, the total operating time of the main rotor head can be assumed instead.
- △₁₂ If the number of flights cannot be determined: 18900 Fh.
The number of flights is to be considered equal to the number of landings (ground contacts).
- △₁₃ If the number of flights cannot be determined: 16800 Fh.
The number of flights is to be considered equal to the number of landings (ground contacts).
- △₁₄ The life limit starts to count from the date on which the inner weights have been bolted.
- △₁₅ Cannot be used unmodified. See SB 30-32.
- △₁₆ For definition of cable operating cycles, refer to paragraph 10.2: Supplementary Inspection according to Operating Time in Fh and/or Calendar Time, Optional Equipment, Point 836 - Rescue Winch
- △₁₇ If cartridges are stored in the original factory packaging, the total life of the cartridge will be 10 years (storage time and service life), in which case service life may not exceed 8 years.

BLANK PAGE