

SECTION 05-00

GENERAL

05-00-1. DESCRIPTION

This Chapter contains the inspection requirements concerning the A119/AW119MKII helicopters equipped with PRATT & WHITNEY PT6B-37A engine, but does not contain inspection procedures. Such procedures will be found in [A119/AW119MKII-MM](#).

The inspections are presented in typographic form suitable for the local reproduction in such a way as to be used by personnel to perform helicopter inspections and to constitute, if desired, a data collection. The inspections must be accomplished by qualified personnel to ascertain the airworthiness of the helicopter. Eventual discrepancies must be eliminated before flight.

Prior to inspection, open or remove as necessary, fairings, cowlings panels and inspection doors.

Flight airworthiness must be determined by inspection of all parts to check the general condition, security of attachment, cleanliness, freedom of movement and security, in accordance with the operational inspection rules and instructions contained in [A119/AW119MKII-MM](#).

The airworthiness of the helicopter is determined by acceptance of all parts with quality standard aircraft practice and specified instructions contained in the pertinent Chapters of this manual.

For acceptance requirements and limits refer to [A119/AW119MKII-MM](#) and/or [A109/AW119 SERIES-OM](#).

NOTE: The inspection and maintenance of the engine, electronic equipment, instruments, etc. must be performed in accordance with the instructions and procedures required by relevant manufacturers and in accordance with approved maintenance schedule.

NOTE: The inspection and overhaul schedule requirements contained in this Chapter must not be exceeded without explicit approval.

NOTE: When operating under particular environmental conditions (contaminated ambient, near the sea or special missions) it is prerogative and responsibility of the operator to increase or intensify the prescribed inspections as necessary to assure safe operation.

NOTE: During maintenance procedure, for identification and handling of the critical parts, refer to [Section 20-30](#) of [A119/AW119MKII-MM](#).

05-00-2. INSPECTION PROGRAMS

The operator may choose from two inspection programs, as indicated in [figure 05-1](#), designed to provide flexibility for maximum utilization of the helicopter and to most suit the operator's needs. The inspection programs are identified as follows:

NOTE: For the inspection requirements concerning the optional equipment refer to [Section 05-60](#).

1. Extended Inspection Program (refer to [Section 05-20](#)). The scheduled inspections consist of a basic 50 flight hours/60 days inspection, 200 hours inspection, 400 hours inspection, 800 hours inspection, 3200 hours inspection and 12 months inspection.
2. Progressive Inspection Program (refer to [Section 05-40](#)). The scheduled inspections consist of a basic 50 flight hours/60 days inspection, progressive 200 hours inspection (divided into four phases), progressive 400 hours inspection (divided into four phases), progressive 800 hours inspection, progressive 3200 hours inspection and progressive 12 months inspection divided in three phases.

The operator may decide to interrupt one program and revert to the other provided the following is accomplished:

- Changing from extended to progressive inspection program:
 - (Helicopters with less than 200 hours) Perform 50hours/60 days inspection, the 200 hours inspection and the 12 months inspection of the extended maintenance program and continue with the new program.
 - (Helicopters above 200 hours) Perform 50hours/60 days inspection, the 200 hours, the 400 hours inspection and the 12 months inspection of the extended maintenance program and continue with the new program.
- Changing from progressive to extended inspection program:
 - (Helicopters with less than 400 hours) Perform 200 hours inspection and the 12 months inspection and continue with the new program.
 - (Helicopters above 400 hours) Perform 200 hours inspection, 400 hours inspection and the 12 months inspection and continue with the new program.

This chapter includes:

A. Time Limits:

Permissible inspection interval tolerances.
 Component overhaul schedule.
 Miscellaneous replacement Schedule.

B. Scheduled Maintenance Inspection:

Extended inspection program.
 Progressive inspection program.

C. Unschedule Maintenance Checks:

Special inspection
 Conditional inspection.

D. Optional equipment scheduled / unscheduled inspections:

Special inspection.
 Conditional inspection.

05-00-3. COMMON SCHEDULED MAINTENANCE CHECKS

This Section gives the date necessary to do the common scheduled maintenance checks on the helicopter. The common-scheduled maintenance checks are applicable to:

- Extended Inspection Program - [Section 05-20](#)
- Progressive Inspection Program - [Section 05-40](#)
- Unscheduled Maintenance Checks - [Section 05-50](#)

The common scheduled maintenance checks includes:

- Expiry of components' retirement life and inspection in accordance with [Chapter 04](#)
- Components' overhaul interval in accordance with [Section 05-10](#).

- Non flight critical parts replacement time in accordance with **Section 05-12**.
- Servicing in accordance with **Section 05-70**.
- Perform applicable optional equipment inspections in accordance with **Section 05-60**.
- Other inspection requirements.
- Check log book for recorded discrepancies. Correct any fault that could affect safety of operations.

Refer to the latest issue of Engine Maintenance Manual for the scheduled and unscheduled maintenance requirements applicable to the Pratt & Whitney Canada PT6B-37A engine.

NOTE 1: With respect to the Rescue Hoist Assembly, there is a set of tasks for which Operators shall obtain the Official Component Maintenance Publication from the OEM (BREEZE EASTERN) and must be certified to a suitable level. For reference of the Operator, a copy of the Component Maintenance Publication is included in the A109/A119-CMP (CD-ROM only), for information only.

NOTE 2: With respect to the Cargo Hooks, there is a set of tasks for which Operators shall obtain the Official Component Maintenance Publication from the OEM (Onboard System) and must be certified to a suitable level. For reference of the Operator, a copy of the Component Maintenance Publication is included in the A109/A119-CMP (CD-ROM only), for information only.

05-00-4. PERMITTED VARIATION OF TASKS FREQUENCIES

To allow an acceptable level of flexibility in the maintenance planning and in order to compensate for unpredictable situations (e.g. unforeseen increase in the helicopter utilization rate), a set of permitted variations associated to task intervals can be utilized.

A variation can be applied only when the minimum inspection interval prescribed by MPM Ch.05 cannot be complied with due to circumstances which could not reasonably have been foreseen by the Operator or by its contracted Maintenance Organization.

The permitted variation is a range after the nominal task interval identified using the following scheme:

- If a task is executed within the permitted variation it is considered as accomplished at its nominal interval; therefore the next task deadline and permitted variation will be calculated starting from such nominal value.
- "If the task is executed outside the permitted variation (early execution), the subsequent due time and permitted variation shall be calculated starting from its actual completion.

The accomplishment of a task at an interval greater than its nominal value plus the allowed positive variation is not authorized by Leonardo Helicopter Division and shall be verified and approved by the competent National Aviation Authority.

In any case all permitted variations are not cumulative and cannot be assumed as maintenance planning tool.

PERMITTED VARIATION (SECTION 05-20, 05-40, 05-50 AND 05-70)**Items Controlled by Flying Hours**

NOMINAL TASK INTERVAL	MAXIMUM VARIATION OF PRESCRIBED PERIOD
Below 50FH	: No variation permitted
From 50FH (included) up to 400FH (excluded)	: + 10 FH
From 400FH (included) up to 3200FH (excluded)	: + 30 FH
More than 3200 FH	: + 60 FH

Items Controlled by Calendar Time

NOMINAL TASK INTERVAL	MAXIMUM VARIATION OF PRESCRIBED PERIOD
Below 2 months	: No variation permitted
From 2 months (included) up to 12 months (excluded)	: + 10 days
12 months (included) or more	: + 2 months

Items Controlled by more than one limit

For items controlled by more than 1 limit, i.e. items controlled by flying hours and calendar time, all limits shall be considered. The task shall be performed when the most restrictive one is reached.

Practical examples:

1. Task Interval 50FH
Permitted variation: + 10FH
 - If the task is accomplished between 50 FH and 60 FH its next execution is due at 100 FH (helicopter total time) + 10 FH
 - If the task is anticipated at 40 FH its next execution is due at 90 FH (helicopter total time) + 10 FH
2. Task Interval 400 FH
Permitted variation: + 30FH
 - If the task is accomplished between 400 FH and 430 FH its next execution is due at 800 FH (helicopter total time) + 30 FH
 - If the task is anticipated at 250 FH its next execution is due at 650 FH (helicopter total time) + 30 FH
3. Task Interval 12 Months
Permitted variation: + 2 Months
 - If the task is accomplished between 12 and 14 months its next execution is due after 12 months + 2 months from the nominal due date
 - If the task is anticipated at 10 months its next execution is due after 12 months + 2 months

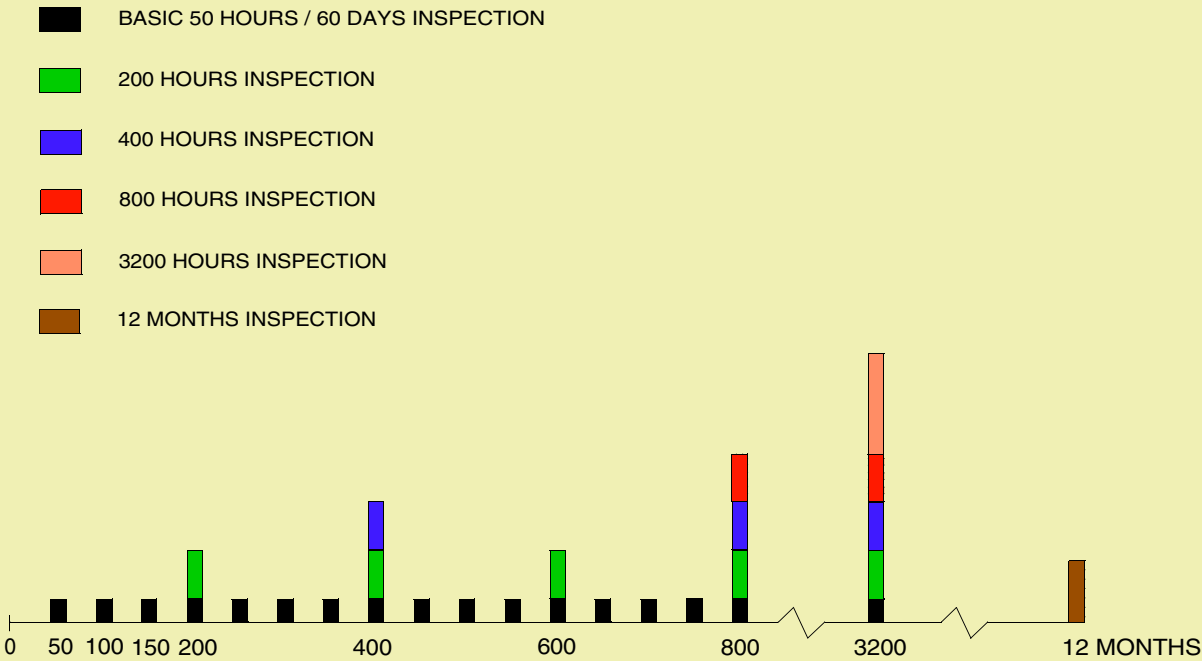
EXCLUSION CASES

1. Unless otherwise specified, permitted variations DO NOT apply to:
 - Airworthiness Directive

- National Requirements
 - Life limited part intervals specified by a manufacturer or identified in aircraft or engine Type Certification Data Sheets
 - Airworthiness Limitations, including CMRs
 - Discard Tasks
 - Overhaul tasks
 - Special Inspections whose interval requirement is not expressed only in FH or calendar parameters (e.g. "At each engine removal/installation", "At each blade retention bolt removal", "Prior to the first flight of the day", "Between 5-10 FH (new a/c or after reinstallation of major components)", "At pilot doors removal/Installations", "At each transmission removal/Installation", "Every 2400 hours and subsequently after 1200 hours of component operation", ...).
2. Following tasks for which a specific task permitted variation is identified:
- "Indication/recording system **E**" and "Standby controls and indicators" Special Inspection 12 months (Para 05-50-1 Step 9): no variation allowed
 - Servicing of main rotor dampers every 400 hours (**Section 05-70**) : no variation allowed
 - Lubrication of MR blades every 7days (**Section 05-70**): + 3 days variation allowed
 - Servicing of Landing Gear dampers (**Section 05-70**): + 100 landings variation allowed.

Figure 05-1 Deleted

LEGEND KEYED TO EXTENDED INSPECTION PROGRAM (REFER TO SECTION 05-30)



05-00-5. GLOSSARY

For a correct understanding of the inspection requirements contained in this Chapter, the meaning of the following terms are defined:

DENT	A point where the surface of a body is deformed by a concavity.
CONDITION	Term used to determine if the item under examination presents external damage which could jeopardize its safe operation.
DAMAGE	Failure, malfunction, inconvenience. The term is always used to cover its most extensive meaning.
DISTORTIONS	Shape alteration. The term is always used to cover its most extensive meaning.
SECURED	Term used to determine if the item under examination is correctly attached; mainly referred to doors and disconnectable items.
CRACK	A partial fracture of an item.
INSPECT	Observe, examine.
SECURITY	Term used to determine if the item under examination is connected to relative attachment area.
WEAR	Mechanical deterioration due to extensive use. The term is used to indicate excessive consumption.
FLIGHT HOURS	Flight hours are counted from take off to landing.

05-00-6. ABBREVIATIONS

The following list contains the abbreviations used in this Chapter.

<u>ABBREVIATION</u>	<u>MEANING</u>
a.c.	Alternating current
A.F.C.S.	Automatic flight control system
CMR	Certification Maintenance Requirements
CMM	Component Maintenance Manual
d.c.	Direct current
IDS	Integrated Display System
LH	Left hand
MEC	Mechanical Engine Control
MFR	Manufacturer
MOS	Manual Override System
No.	Number
P/N	Part Number
RH	Right hand
Flt hrs	flight hours
SAS	Stability augmentation system

05-00-7. CHAPTER 05 ORGANIZATION

This Chapter is consists of the following sections:

SECTION 05-10	Component Overhauled Schedule
SECTION 05-12	Miscellaneous Replacement Schedule
SECTION 05-20-1	Basic 50 Flight hours/60 days
SECTION 05-20-2	200 Flight hours
SECTION 05-20-3	400 Flight hours
SECTION 05-20-4	800 Flight hours
SECTION 05-20-5	3200 Flight hours
SECTION 05-20-6	12 months
SECTION 05-40-1	Basic 50 Flight hours/60 days
SECTION 05-40-2	Progressive 200 Flight hours (Phase A)
SECTION 05-40-3	Progressive 200 Flight hours (Phase B)
SECTION 05-40-4	Progressive 200 Flight hours (Phase C)
SECTION 05-40-5	Progressive 200 Flight hours (Phase D)
SECTION 05-40-6	Progressive 400 Flight hours (Phase 1)
SECTION 05-40-7	Progressive 400 Flight hours (Phase 2)
SECTION 05-40-8	Progressive 400 Flight hours (Phase 3)
SECTION 05-40-9	Progressive 400 Flight hours (Phase 4)
SECTION 05-40-10	Progressive 800 Flight hours
SECTION 05-40-11	3200 Flight hours
SECTION 05-40-12	12 Months (Phase I)
SECTION 05-40-13	12 Months (Phase II)
SECTION 05-40-14	12 Months (Phase III)
SECTION 05-50-1	Special Inspections
SECTION 05-50-2	Conditional Inspections
SECTION 05-60	Optional Equipment
SECTION 05-70	Lubrication and Servicing