

# General Guidance

AMP Reference: IAL/330/T Revision 00 Initial

# 01 Maintenance Clock Start Point

The Transfer of Title (TOT) is when conformity and contractual documentation is handed over and the Certificate of Acceptance is signed, this identifying the official transfer of ownership to the first buyer. In the absence of the date of TOT, the 'Delivery Date', as recorded in the In-Service Data 'Aircraft History' file on Airbus / World, may be used.

Date of First Flight is the date of first test flight by Airbus. This date is given in the Summary Sheet provided with the aircraft delivery documents.

Following table summarises the criteria for start of maintenance clock:

Source			Calendar Time		Flight Hours	Flight Cycles or Landings
MRBR	SYSTEM		TOT		TOT	TOT
	STRUCTURE		TOT		1 <sup>st</sup> Flight	1 <sup>st</sup> Flight
	ZONAL		TOT		TOT	TOT
ALS Part 1 (S		SL-ALI)	1 <sup>st</sup> Flight		1 <sup>st</sup> Flight after	1 <sup>st</sup> Flight after Install
			after Install		Install	
level) Part 4 S (Compo			TOT		1 <sup>st</sup> Flight	1 <sup>st</sup> Flight
		CMR)	R) TOT		TOT	1ST Flight
		EMR (Aircraft	ТОТ		1st Flight	1st Flight
		EMR nent level)	1st Flight 1st Flight		1st Flight	1st Flight
		AL) Section 3			1st Flight	1st Flight
		AL) Section 4	TOT		TOT	1st Flight
LDG O/H or Installation of new gear after first TOT		1 <sup>st</sup> Flight after installation*	N/A			1 <sup>st</sup> Flight
NR, VR or Note requiring task to be managed according to component service history		Date of Manufacture or date of previous task accomplishment on the component**		Date of Manufacture or date of previous task accomplishment on the component**		Date of Manufacture or date of previous task accomplishment on the component**
AD		See AD		See AD		See AD
LDG O/H or Installation of new gear after first TOT		1 <sup>st</sup> Flight after installation*		N/A		1 <sup>st</sup> Flight
NR, VR or Note requiring task to be managed according to component service history		Date of Manufacture or date of previous task accomplishment on the component**		Date of Manufacture or date of previous task accomplishment on the component**		Date of Manufacture or date of previous task accomplishment on the component**
AD		See AD		See AD		See AD

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## Table Key:

- \* Contact Airbus if first flight takes more than 90 days after installation.
- \*\* Unless otherwise stated in vendor or National Authority documentation.

## 01.1 Specific Guidance

- For ALS Part 2 (DT-ALI) tasks:

The threshold is the time at which the maintenance task is first due.

- Threshold limitations quoted in FC or FH count from first flight.
- Threshold limitations quoted in Calendar Time may be counted from the Transfer of Title to the first operator.

In cases where the first task is accomplished very early, the next task can be performed at the threshold (rather than the repeat interval).

When alternative inspection methods are provided, the next interval applicable is the one associated with the inspection method used at the previous inspection.

- "Touch and Go" cycles can be neglected if they are less than 5% of the total number of Flight Cycles up to threshold inspection or between two consecutive inspections. Each "Touch and Go" cycle above 5% is to be counted as one Flight Cycle, up to threshold inspection or between two consecutive inspections.
- For ALS Part 3 (CMR) tasks:
- Limitations quoted in FH or Calendar Time may be counted from the Transfer of Title to the first Operator.

This policy is agreed with EASA in consideration of the very low number of FH performed between first flight and delivery, and the methodology used to define the value of CMR task limitations.

- Limitations quoted in FC count from first flight.
- For ALS Part 4 (SEMR) tasks (previously referred to as ASM):
- Limitations controlled at aircraft level and quoted in Calendar Time count from the Transfer of Title to the first operator.
- Limitations controlled at aircraft level and quoted in FH, FC or LDGS count from first flight.
- Limitations controlled at component/subassembly level and quoted in Calendar Time, FH,

FC or LDGS count from the date at which the component/item accomplishes the first flight for which it will undertake its intended function.

- For ALS Part 5 (FAL) tasks:
- Limitations quoted in FH or Calendar Time may be counted from the Transfer of Title to the first operator. This policy is agreed with EASA in consideration of the very low number of FH performed between first flight and delivery, and the methodology used to define the value of FAL task limitations.
- Limitations quoted in FC count from first flight.

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- For an overhauled landing gear or a new landing gear installed after first Transfer of Title:

the start date for Calendar Time tasks is the date of the gear's first flight after installation. If this first flight takes place more than 90 days after installation, contact Airbus Maintenance Programs Engineering using Tech Request on-line tool. For the original LDG, paragraph '1. General Rule' applies.

– For equipment having intervals defined by National Requirements (NR) or annotated with a NOTE that requires the task to be managed according to component service history, the starting point is the date of manufacture or previous task accomplishment on the component or the first flight for which it will undertake its intended function (for FH and FC tasks) unless otherwise stated by vendor or National Authority.

If the date of manufacture refers only to the month, then, for the purposes of scheduled maintenance planning, the subsequent maintenance actions can be scheduled with reference to the last day of that month.

- For components addressed by Airworthiness Directive (AD): as stated in the AD.

# 01 General Rules

The following rules, apply to the A330 maintenance program:

Task intervals of tasks with source "MRBR" may be changed in accordance with the National Authority (replace with your authority). However, tasks with Failure Effect Category 5 and 8 must not be deleted from the operator's maintenance program. In this respect, attention is drawn to the task origin (refer to MPD "SOURCE" column).

Inspection techniques such as X-Ray, ultrasonic, eddy current, radio isotope, which are available and described in the Non-Destructive Testing Manual (NTM).

The use of such techniques can be developed to provide a valuable adjunct to the prescribed visual inspections. For any substitution of such inspection technique, it must be ensured that the same damage size will be detectable by the proposed technique with, at least, the same level of confidence.

Items that are life limited will be removed from service according to the life limits stated in the appropriate section of the engine or aircraft manufacturer's manuals. These sections are referenced in the aircraft "Type Certificate Data Sheet".

Tasks coming from any of the ALS parts must not be deleted and should be handled with specific associated rules, as described in the subject documents. ALS Part 3 Certification Maintenance Requirements (CMR) tasks have specific rules regarding escalation as follows:

CMR\*\*: Task interval may be escalated by an operator, in accordance with an approved reliability program.

CMR\*: Task interval shall not be escalated by an operator.

ETOPS tasks must not be deleted and should be handled according to specific rules described in the ETOPS CMP document. 'Not to exceed' intervals shall not be escalated.

It is the responsibility of each operator to adjust his own maintenance program in accordance with his National Requirements and to comply with existing rules with respect to reporting to his

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Regulatory Authority and to the manufacturer events having effects on the continued airworthiness of the aircraft.

Task interval parameters expressed in this MPD may be converted to the desired unit (flight hours, cycles or calendar time) provided this conversion does not result in the operator exceeding the initial requirements of the MPD.

The maintenance clock does not stop while the aircraft is on ground or in maintenance condition.

Although the aircraft does not collect any FH or FC when being on ground, attention has to be given to tasks, where the interval is expressed in calendar time (hours, days, month, year). All tasks that become due while the aircraft is on ground at the time of the maintenance visit have to be performed prior to return to service. However, there is no need to repeat inspections during the time on ground. E.g., during a 4-week downtime, tasks with interval 8 DY only need to be performed at the end of the check (for return to service).

The overall reliability of the A330 will be monitored by a reliability programme for continuous analysis and surveillance as detailed in Section X.

The thresholds and intervals quoted in calendar time in this document include aircraft time in and out of service. There will be no credit for time out of service or storage periods to extend calendar inspection thresholds/intervals.

The reapplication of all protective materials (e.g., Temporary Protection Systems (TPS), paints etc.) Shall be carried out following their removal to perform the inspection/maintenance task.

The CMP (ETOPS) document is the authoritative document for mandatory ETOPS Maintenance Standards. Where maintenance task intervals in the CMP are more restrictive than required in the MRBR, these overrule those in the MRBR. Where the MRBR task interval is more frequent than required by the CMP, the MRBR value remains valid until the operator justifies escalation (the CMP interval acts as an upper limit to the escalation). Maintenance tasks, which become obsolete due to an authorized configuration change are not applicable.

Any fairings, panels, doors or other items which are removed/opened to gain access for maintenance tasks must also be inspected for general condition with a minimum level of GVI before reassembly/refitting.

IALTA CAMO will report any findings to the manufacturer via the inspection reporting system on Airbus World/Maintenance and Engineering/Prepare Maintenance/Optimize maintenance management/Optimize maintenance program/Report my check records.