# Maintenance Directive

NL-2011-001

THE MAINTENIANO	CE DIRECTIVE IS PUBLISHED BY THE CAA-NL:	
	thiness Authority (ICAO Annex 8) as the State of Registry	
Type Approval Holder's Name	Miscellaneous	
Supersedure	Supersedes OAL 1990-42/4 dated 30 June 1999	
Subject	One-time variations to maintenance intervals	
Applicability	All Dutch registered aircraft	
TCDS number	Miscellaneous	
Reason	Previously CAA-NL issued OAL 1990-42, based upon Regeling Onderhoud Luchtvaartuigen (ROL) art. 6, which regulated one-time variations to maintenance intervals, also called extensions, for aircraft not operated in commercial air transport. For commercial air transport, the operator had to define a policy, acceptable to the authorities.  JAA A&GM section 2 Maintenance, Part 3, Temporary Guidance Leaflet 26 provided a standard for applying extensions.  With the introduction of Part M for the general aviation, the ROL has been amended to exclude the aircraft regulated under the EASA system.  In the EASA system, there are no regulations for extensions, other than that the design approval holders instructions for continuing airworthiness need to be complied with.  This directive is issued in order to:  1. provide criteria for extensions, including Commercial Air Transport operations;  2. improve alignment of the Dutch requirements for extensions with Part-21 as well as with the European standard as defined by the JAA;  3. provide criteria for an accepted procedure as referred to in AMC M.A.301-3.	
Effective date	14 February 2011	
Compliance	One-time variations to maintenance intervals shall only be granted when complying with the requirements as published in Appendix A of this MD.  NOTE: until amendment of Aircraft Maintenance Programme and/or Continuing Airworthiness Management Exposition as applicable, the procedures contained therein may be applied.	

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#### Date

14 February 2011

#### Caution

This Maintenance Directive is issued by the State Secretary of Infrastructure and the Environment in accordance with the Aviation Act 2001 (Wet Luchtvaart), Article 3.22. Maintenance Directives affect aviation safety. These are regulations which require immediate attention. No person may operate an aircraft to which a Maintenance Directive applies, except in accordance with the requirements thereof, unless otherwise agreed with the Authority of the State of Registry (EC2042/2003, M.A.201 & M.A.302 and M.A.303).



	As of 01 May 2012 all Aircraft Maintenance Programmes and all Continuing Airworthiness Management Expositions shall comply with this MD.  NOTE: Application of this MD in the development, revision and application of Aircraft Maintenance Programmes and Continuing Airworthiness Management Expositions is allowed from the effective date.	
Appendix A	Limitations to one-time variations to maintenance intervals	
Appendix B	Acceptable Means of Compliance and Guidance Material	

# Appendix A: Limitations to one-time variations to maintenance intervals

- 1. Contrary to an amendment of the Aircraft Maintenance Programme, a permitted variation applies to a unique aircraft, for a unique occasion.
- 2. The instructions for continuing airworthiness from the design holders prevail over this MD. Only if the design holder does not specify any limitations on one-time variations for a specific task, the limitations in this MD apply.
- 3. The Aircraft Maintenance Programme must specify the maximum allowable variation per periodic maintenance task, task type, or task group.
- 4. One-time variations may not be applied to:
  - a. Airworthiness Directives (AD´s), unless indicated otherwise in the AD;
  - b. Tasks that are included in the Airworthiness Limitation Section (for example ALI's, CMR's and Chapter 4 items).
- 5. A variation shall not be applied if there is evidence or reason to believe that this could endanger flight safety.
- 6. A one-time variation is an exceptional means to allow the operator to fly for a limited period of time until the required maintenance can be performed. This implies that best efforts must be applied to limit the number and duration of variations.
- 7. The maximum permitted one-time variation of a maintenance task interval is as indicated in the table below:

(a) Tasks controlled by flight hours	10%, with a maximum of 500 flight
	hours
(b) Tasks controlled by calendar time,	
with an interval of:	
- 1 year or less	- 10% or 1 month whichever is the
- More than 1 year, but not	lesser
exceeding 3 years	- 2 months
- More than 3 years	- 3 months
(c) Tasks controlled by landings /	10%, with a maximum of 250
cycles	landings / cycles

- 8. The limitations in 6 and 7 above do not apply to tasks that are included in the Aircraft Maintenance Programme at operator/CAMO's discretion (so other than mandatory tasks and other than safety related tasks resulting from any reliability programme or analysis of the effectiveness of the Aircraft Maintenance Programme). The maximum permitted variation specified in the Aircraft Maintenance Programme is at the operator/CAMO's discretion.
- 9. For a task whose interval has been reduced by the operator for planning purposes only (e.g. to coincide with an inspection), the Aircraft Maintenance Programme may specify a maximum variation up to the design holder's interval plus the maximum permitted variation as specified in 7 above. The limitation in 6 above does not apply.



- 10. For tasks controlled by more than one limit, e.g. items controlled by flying hours and calendar time or flying hours and landings / cycles, the more restrictive limit must be applied.
- 11. Variations shall not be applied cumulatively.
- 12. The next-maintenance-due-information (aircraft maintenance statement) shall be amended to reflect the variation applied.
- 13. When applying a one-time variation, the following information shall be kept in the aircraft technical records:
  - a. the interval as provided in the approved maintenance programme;
  - b. the one-time variation applied, including the revised task due information.
- 14. The person or organisation responsible for the continuing airworthiness of the aircraft may apply one-time variations when complying with the above, without specific authority approval.
- 15. Commercial air transport operators shall have a procedure for applying onetime variations, acceptable to the competent authority, in their Continuing Airworthiness Management Expositions.



# Appendix B: Acceptable Means of Compliance and Guidance Material

## 0. GM - Acceptable Means of Compliance

By complying with the AMC the corresponding requirement is considered complied with. Deviations may be accepted by CAA-NL, provided that the applicant demonstrates that an equivalent level of safety is obtained.

#### 1. GM - Effective date

Sufficient implementation time is provided to update aircraft maintenance programmes in an annual cycle, and company expositions. After the effective date, all one-time variations applied and all maintenance programmes and expositions shall comply with this MD. Before the effective date, compliance with this MD is accepted as a means to comply with current regulation.

#### 2. GM - Limitation on aircraft operation

As specified in the applicable regulations, an aircraft shall not be flown when one or more maintenance tasks exceed their intervals as specified in the Aircraft Maintenance Programme. This includes any one-time variation applied. No variation may be applied that is outside the one-time variation limitations specified in the Aircraft Maintenance Programme. If the Aircraft Maintenance Programme does not specify any limitations on one-time variations for a specific task, then one-time variations may not be applied to that task. Note that in the AMP, limitations may also be specified per task group or task type. For example: "C-check to be performed at 1000 flt hrs +/-100 flt hrs", "a one-time variation of 10% may be applied to all lubrication task intervals", "no extension may be applied to any life limit".

# 3. AMC - National requirements

Extensions may be applied to Maintenance Directives, unless otherwise specified in the Maintenance Directive.

# 4. AMC – Reasons for applying one-time variations

Acceptable reasons for applying a one-time variation may include an unforeseen workload peak in the maintenance organisation, an unforeseen unavailability of staff, an unforeseen delay in the parts provisioning, an unforeseen unavailability or unserviceability of a required tool or equipment, or the aircraft not being able to arrive at the maintenance location.

# 5. GM - One-time variations outside the scope of this MD

In case an interval extension outside the scope of this MD is required, an application for approval can be sent to the authority, together with substantiating documents and a No Technical Objection from the design holder. Note that only the Agency (EASA) may grant approval for a variation of an AD or an Airworthiness Limitation Section task.

# 6. GM - Non-cumulation of variations

The application of variations will not result in the task being performed less often. After a variation has been applied, the maintenance task next due is calculated as if the last compliance was at the original due date (so without the variation being applied).



# Example:

A 100 hour inspection was originally due at 200 flight hours (hrs) TSN, but performed at 210 hrs TSN, with a variation of 10% applied. Next maintenance is then due at 200+100=300 hrs TSN.

#### 7. AMC - Cumulation of variations to calendar time intervals

When an aircraft is grounded, maintenance tasks controlled by calendar time other than parking or storage maintenance tasks may be accepted to be overdue. After performance of the maintenance task before flight, the next due may then be calculated from this last performance of the maintenance task.

#### Example:

An aircraft is grounded for a major repair for 8 months, from 1 February till 1 October. The Aircraft Maintenance Programme specifies a 3 monthly inspection. This inspection is performed only once during the ground time, on 30 September. The inspection is next due at 30 December.

## 8. AMC - Application of one-time variations in line maintenance

In order to maintain continuity in the inspection pattern, it is allowable to apply the maximum variation as a tolerance as detailed below.

If a maximum variation of 10% applies, then tasks may be performed at the interval +/-5%, so within the bracket of 5% before and 5% after the task being due, with the next task due being calculated as last compliance + interval. Note that no additional variation can then be applied.

The Aircraft Maintenance Programme must specify such use of variations.

# Example:

Tasks with a 100 flight hour (hrs) interval and a maximum variation of 10%, may be performed in a 10 hrs bracket between 95 and 105 hrs. If last task compliance is at 200 hrs TSN, then next due is at 300 hrs. If the task is performed at 295 hrs, then next compliance is due at 400 hrs. If then performed at 405 hrs, it is still within the 10% tolerance (405-295=110 hrs).

### 9. GM - Variation of intervals reduced for planning purposes only

Reducing a task interval may be more efficient, for example in cases where performing specific maintenance tasks during maintenance checks reduces labour by limiting the number of times that access needs to be provided.

# Example:

The design holder specifies a 500 hour interval for a task, with no specific requirement regarding variation. An operator has an inspection cycle based on 100, 200 and 1000 hour inspections. This operator has included this task in its 200 hour inspection. The operator has included a maximum one-time variation of 350 flight hours in the Aircraft Maintenance Programme for the task (200 + 350 = 500 + 10%).