



**MINISTRY OF DEFENCE**

**SECRETARIAT GENERAL OF DEFENCE AND NATIONAL ARMAMENTS DIRECTORATE  
DIRECTORATE OF AIR ARMAMENTS AND AIRWORTHINESS**

**NATO AGS**

**RQ-4D AIR SEGMENT**

**CONTINUING AIRWORTHINESS RECORDS - AIR  
VEHICLE MISSION COMMAND & CONTROL,  
DEPLOYABLE UAV CONTROL ELEMENT, UNMANNED  
AIR VEHICLE AND ENGINE LOGBOOKS**

## LIST OF EFFECTIVE PAGES

**ATTENTION:** This regulation is valid only if it made of the pages listed below, duly updated.

Copy of this Technical Publication may be found at the address:

[http://www.difesa.it/SGD-DNA/Staff/DT/ARMAEREO/Biblioteca/Pagine/default\\_.aspx](http://www.difesa.it/SGD-DNA/Staff/DT/ARMAEREO/Biblioteca/Pagine/default_.aspx)

**The issue dates of the original and amended pages are:**

Original .....0 ... dated 17/07/2018

This regulation consists of 7 pages as specified below:

<b>Page N.</b>	<b>Amendment N.</b>
Frontpage.....	0
A.....	0
i.....	0
pag. 1 - 4.....	0

## INDEX

1. INTRODUCTION	1
1.1 General	1
1.2 Overview	1
1.3 Aim	1
1.4 Applicability	1
1.5 Validity	1
1.6 Related documentation	1
1.7 Definitions	2
2. NATO AGS Air Segment Logbooks	2
2.1 Logbook description	2
2.2 Logbook contents	3
2.3 Logbook first set up	3
2.4 Logbook fill in	4
2.5 Logbook storage	4

# 1. INTRODUCTION

## 1.1 General

The AER(EP).00-1-24O "Norme per la tenuta e la compilazione dei nuovi libretti di identità Aeromobile, Motore, Elica e Post-Bruciatore (Mod. DP5068, Mod. DP5067 e Mod. DP5066)" is the Italian National regulation concerning the Continuing Airworthiness Records - Logbooks for military aircraft, engine, propeller and afterburner. It defines the Logbooks form and content and establishes the related rules for its compilation and retention. The AER(EP).00-1-24O was developed for manned aircraft and needs to be tailored for Unmanned Aerial Systems (UAS) by issuing a specific regulation. Hence, the NATO AGS Continuing Airworthiness Records - Logbooks are defined in this tailored regulation taking into account the topics covered by the AER(EP).00-1-24O.

## 1.2 Overview

The Logbook, as well as the aircraft technical logs, is a continuing airworthiness record. The Logbook provides the historical data relevant to the system to which it refers (e.g.: aircraft, engine, propeller, afterburner, ground control station) concerning the total utilization, the status of the maintenance and changes, the significant events and the service life limited components. This regulation covers the NATO AGS Air Segment Logbooks but not the related electronic management.

## 1.3 Aim

The purpose of this regulation is to prescribe the requirements of the NATO AGS Air Segment Logbooks and related procedures and responsibilities for first set up, filling in and storage.

## 1.4 Applicability

This regulation is applicable to the NATO AGS Air Segments that are registered in the Italian Military Aircraft Registry under D.A.A.A. responsibility.

## 1.5 Validity

This regulation shall come into effect as of its approval date.

## 1.6 Related documentation

- |                          |   |
|--------------------------|---|
| A. AER(EP).00-1-24O      | Norme per la tenuta e la compilazione dei nuovi libretti di identità Aeromobile, Motore, Elica e Post-Bruciatore (Mod. DP5068, Mod. DP5067 e Mod. DP5066) |
| B. AER(EP).00-00-5/RQ-4D | NATO AGS RQ-4D Air Segment And Pilot Trainer Configuration Control. Preparation,  |

Assessment and Approval of Configuration Changes for the Continued Airworthiness Implementation

- C.** AER(EP).P-7(EN) Regulation for Recording and Maintaining Military Aircraft Register - "Registro degli Aeromobili Militari (R.A.M.)"
- D.** AER(EP).0-0-2/RQ-4D NATO AGS RQ-4D Air Segment and Pilot Trainer Definition and Regulation of the D.A.A.A. System for Handling Technical Publications Aircraft Maintenance Training Organisations

## **1.7 Definitions**

Refer to AER(EP).0-0-2/RQ-4D, annex VI for general definitions.

## **2. NATO AGS Air Segment Logbooks**

In order to record the historical data of the NATO AGS Air Segments, specific Logbooks and dedicated Log cards are necessary for the monitored configuration items defined by System Design Responsible (SDR).

### **2.1 Logbook description**

As the NATO AGS Air Segment consist of an Unmanned Air Vehicle (UAV), including an engine, and an Air Vehicle Mission Command & Control (AVMC2), which is a basic part of the operation of the Air Segment, it is necessary to use specific Logbooks for the UAV, the engine and the AVMC2. Moreover, considering the usage of the Deployable UAV Control Element (DUCE) independently from the AVMC2, the following Logbooks and Log cards require to be set up and maintained for the NATO AGS Air Segment:

- Air Vehicle Mission Command & Control (AVMC2) Logbook<sup>1</sup>;
- Deployable UAV Control Element (DUCE) Logbook<sup>1</sup>;
- Unmanned Air Vehicle (UAV) Logbook<sup>1</sup>;
- Engine Logbook<sup>1</sup>;
- Log cards for any Configuration Item (CI), included limited service life components, defined by the SDR in a specific Service Bulletin "List of monitored configuration items" i.a.w. AER(EP).00-00-5/RQ-4D.

Each Logbook includes the Log cards of the installed monitored configuration items. Logbooks have to be updated every time a CI is removed/installed and related Log cards have to be removed/introduced.

---

<sup>1</sup> NOTE: It is acceptable that the specific Logbook is the collection of dedicated Log cards

## 2.2 Logbook contents

Data to be recorded in the Logbooks/Log cards, including the relevant instructions, have to be defined by the SDR. The SDR also recommends the Logbook/Log card template to be used. NAGSF is authorized to issue internal procedures in order to facilitate the applicability to NATO AGS of the SDR provided relevant instructions.

In any case the following minimum contents have to be recorded.

The Logbooks shall contain the type, the registration number and the date, together with total utilization (e.g.: flight time and/or flight cycles and/or landings) registered on a monthly basis of the UAV, AVMC2, DUCE, Engine to which it refers, and also as a minimum the current:

1. Status of applicable Airworthiness Directives;
2. Status of applicable approved Service Bulletins and repairs;
3. Status of compliance with the maintenance program;
4. Status of monitored configuration items, including the service life limited components, with the reference to the relative installation and removal;
5. Record of significant events (e.g.: incident, reason of CI removal before expiration, experimental test/flight, special check/inspections, contamination by chemical, biological and radiological agents, overstresses and hard landings).

All the above listed minimum information (1-5) recorded have to be entered in a proper and readable manner.

Moreover:

- The Engine Logbook shall report the part number (P/N) and serial number (S/N) of the UAV on which the engine is installed. This has to be updated at each engine installation or removal.
- The AVMC2/DUCE Logbook shall contain the reference to the related work stations and it has to be updated at each installation or removal.

### NOTE

All records required for the AVMC2 also have to be registered when the AVMC2 is used in training mode.

As applicable, the Log card shall contain the same set of minimum records required for the Logbook. In addition, the Log card shall report the P/N and S/N of the system (UAV, engine, AVMC2 or DUCE) where the relevant CI is installed and has to be updated at each installation or removal.

## 2.3 Logbook first set up

The activity of associating a Logbook/Log Card to a specific UAV, AVMC2, Engine, DUCE or monitored CI is indicated with the term "set up" and it consists of recording for the first time the relevant historical data of the system/CI to which it refers (maintenance, change, etc.).

The Logbook/Log card shall be set up by the SDR or by NAGSF no later than the relevant system/CI entry into service. The second case shall only take place if the

SDR provides the historical data as a data collection in a format different than the template recommended by SDR itself i.a.w. paragraph 2.2.

NAGSF shall set up the Logbook/Log card on the basis of the historical data provided by the SDR that shall be retained by the NAGSF together with the Logbook/Log card i.a.w. the same time constraints, paragraph 2.5. In relation to these historical data, NAGSF is solely responsible for transcribing them to the dedicated Logbook/Log card.

## **2.4 Logbook fill in**

After Logbook/Log card first set up, NAGSF, being responsible for the management of continuing airworthiness tasks, shall control/ensure that the records are performed i.a.w. the SDR instruction or NAGFS internal procedures if any (paragraph 2.2) and in any case accordingly to this regulation.

All entries recorded in the Logbooks/Log cards shall be written in block letters with the exception of the signatures, in a clear and accurate manner using a pen. When it is necessary to correct an entry, the correction shall be made in a manner that the original entry remains readable.

Each entry shall be made as soon as practicable but in any case no more than 30 days after the day of the maintenance action/events.

## **2.5 Logbook storage**

NAGSF is responsible for storing the Logbook/Log cards at least under the following conditions:

- The Logbook/Log card shall be stored in a manner that ensures protection from damages, alterations and theft.
- The Logbook/Log card shall remain readable and accessible for the duration of the storage period.
- The Logbook/Log card have to be stored in a specific area and in any case not in the UAV or AVMC2 or DUCE.
- The Logbook/Log card shall be stored at least for 10 years and in a manner that it can be consulted, even after the disposal of the relevant UAS (P/N). If during storage period any dispute arise, the above mentioned period will become effective from the end of the dispute.

Upon request, NAGSF shall grant D.A.A.A. and Competent Bodies access to the records.