



MINISTRY OF DEFENCE

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

NATO AGS

RQ-4D AIR SEGMENT AND PILOT TRAINER

CONFIGURATION CONTROL.

**PREPARATION, ASSESSMENT AND APPROVAL OF
CONFIGURATION CHANGES FOR THE CONTINUED
AIRWORTHINESS IMPLEMENTATION**

NOTE

This edition of the Norm is the first Issue of this document.

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1. INTRODUCTION

1.1 Disclaimer

The AER(EP).00-00-5 "Controllo Configurazione. Processi per l'elaborazione, valutazione ed autorizzazione delle modifiche da introdurre nei materiali di competenza della D.G.A.A." is the National reference norm for the issuing, evaluation and authorization of the changes to the aircrafts registered in the Military Aircrafts Registry. The Configuration Control process defined in the norm AER(EP).00-00-5 is applicable also to the pilot trainers registered in the Military Pilot Trainers Registry as detailed in the norm AER(EP).P-3 "Pilot Trainer - Zero Flight Time, Capitolato, Omologazione, Iscrizione nel Registro, Controllo Configurazione e Pubblicazioni Tecniche". The paragraph 1.1 of the AER(EP).00-00-5, allows the possibility of dedicated procedures for aircraft covered by International Agency Contracts, through the issuing of a specific norm that guarantees the general principles of the AER(EP).00-00-5. Hence, the NATO AGS Configuration Control process for aircraft and for pilot trainer is defined in this dedicate norm that follows the main principles of the AER(EP).00-00-5.

1.2 Overview

Configuration Control is carried out on Configuration Items throughout their life cycle to permit full and continued visibility and maintenance of their functional, physical and performance characteristics.

All activities that contribute to maintaining the performance and airworthiness characteristics of the configuration items are verified and implemented through Configuration Control.

This norm defines the procedures for Configuration Control on the configuration items of the NATO AGS Air Segment and the Pilot Trainer registered in the Italian Military Aircraft Registry / Italian Military Pilot Trainer Registry under the responsibility of the DAAA, commencing with the issuance of their Military Type Certificates (MTCs).

These activities are managed through the Service Bulletins (SBs) processes that are used as a tool to approve the Engineering Change Proposals (ECPs).

In addition this norm addresses the Airworthiness Directives (ADs) that can be directly issued by DAAA to define the mandatory actions to be performed to restore an airworthiness condition.

1.3 Scope

This norm defines the regulatory framework for the configuration control of all the configuration items of the registered NATO AGS Air Segment and the Pilot Trainer that are under the authority of the DAAA. This document has been tailored from AER(EP).00-00-5 norm and defines the processes, procedures and forms for issuing and managing the Engineering Change Proposals (ECPs) and relevant Service Bulletins approved by DAAA.

1.4 Related documentation

A.	AER(EP).00-00-5	Controllo Configurazione. Processi per l'elaborazione, valutazione ed autorizzazione delle modifiche da introdurre nei materiali di competenza della DAAA
B.	AER.P-2TR	Military Aircraft Type Qualification, Qualification and Suitability For Installation
C.	AER(EP).P-3	Pilot Trainer - Zero Flight Time, Capitolato, Omologazione, Iscrizione nel Registro, Controllo Configurazione e Pubblicazioni Tecniche (Only the Italian Version is official)
D.	AER(EP).P-7	Military Aircraft Registration and Rules for the Custody of the Military Aircraft Registry (M.A.R.)
E.	AER.00-00-6/RQ-4D	Configuration Identification and Status Accounting for NATO AGS Air Segment and Pilot Trainer
F.	AER(EP).00-01-6/RQ-4D	Instructions for Compiling, Sending and Managing Occurrence Reports for the NATO AGS Air Segment and Pilot Trainer
G.	AER(EP).0-0-2/RQ-4D	Definition and Regulation of the DAAA System for Handling Technical Publications Applicable to NATO AGS Air Segment and Pilot Trainer
H.	AER.0-0-8/RQ-4D	Technical Publication Standards - Change Recommendations Process for Technical Publications Applicable to NATO AGS Air Segment and Pilot Trainer
I.	AER.P-107/RQ-4D	Preparation of the Manual Concerning the Management Of Hazardous Materials
J.	AER(EP).P-104/RQ-4D	Issue and Updating of the Category 3 NATO AGS Air Segment and Pilot Trainer Technical Publications Under the Responsibilities of DAAA
K.	C-M(2002)49 NATO	Security Policy
L.	Italian Law n. 81/2008	

1.5 Applicability

This norm is applicable to all configuration items of the registered NATO AGS Air Segment and the relevant Pilot Trainer, including the Aircraft Ground Equipment (AGE) Type 1 (ref. 1.7.1).

1.6 Validity

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

1.7 Definitions

For the purposes of this norm, the following definitions apply:

1.7.1 Aircraft Ground Equipment (AGE)

Set of equipment for carrying out flight preparation and maintenance activities. The AGE has specific performance requirements defined in the corresponding procurement contracts.

There are three categories of AGE configuration items:

- a. AGE type 1: the performance and safety of the aircraft depend on the elements/data introduced by these AGE; hence type 1 AGE has direct impact on the airworthiness of the Air Segment / Pilot Trainer. The list of these configuration items must be prepared and sent to DAAA and to the Competent Body, by the aircraft/pilot trainer Design Responsible no later than the Air Segment / Pilot Trainer entry in service.
- b. AGE type 2: aircraft safety and performance do not depend on the AGE since performance is assured by precise procurement and calibration standards.
- c. Non-specific AGE: commercial material with performance requirements guaranteed at purchase (e.g.: testers, benches, etc.).

1.7.2 Air Segment

The NATO AGS Air Segment is composed of the Unmanned Air Vehicle (UAV) and Air Vehicle Mission Command & Control (AVMC2) entities, in accordance with the Declaration of Configuration (DoC) as referred in the Military Type Certificate (MTC).

1.7.3 Airworthiness (AW)

The ability of an aircraft, or other airborne equipment or system, to operate in flight and on ground without significant hazard to aircrew, ground-crew, passengers (where relevant) or to third party.

1.7.4 Airworthiness Directive (AD)

The Airworthiness Directive means a document directly issued by DAAA which mandates actions to be performed on a NATO AGS Air Segment to restore an acceptable airworthiness condition, when evidence shows that the airworthiness condition of this NATO AGS Air Segment may otherwise be compromised.

1.7.5 Continued Airworthiness

Verification of the validity of the conditions under which a type-certificate has been granted.

1.7.6 Continuing Airworthiness

Verification through specific processes which ensure that, at any time in its operating life, the aircraft (tail number) complies with the given airworthiness requirements, maintaining required conditions for safe operation.

1.7.7 Configuration Item

Defined as an item identified by a code in technical documentation that describes the physical and functional characteristics of a product.

There are various levels of configuration items in relation to the complete structure of the higher level final system described in design specifications.

The first level (Lev. 1) always consists of the highest level final system (for example, the aircraft as a whole).

The second level (Lev. 2) systems depending on the first level items which, for their functional significance in terms of performance and airworthiness, require specific Configuration Control management procedures (engines, complex systems, etc).

Levels are attributed according to the use and not the nature of the configuration items. Hence, the same configuration item may be level 1 if used as final system, and level 2 if used in a higher level system.

Each configuration item has a Design Authority Companies, i.e., the organization that has all knowledge and intellectual property of the design, having either developed it or acquired the necessary licenses.

Exceptions include configuration items produced according to unified standards (UNI, MIL, DEF-STAN, STANAG, etc.): in these cases, design responsibility lies with the Company that conducted the technical assessments for their adoption.

1.7.8 Configuration Control (CC)

Configuration Control is the systematic proposal, justification, evaluation, coordination, approval or disapproval of proposed changes, and implementation of all approved changes, in the configuration of a configuration item after establishment of the configuration baseline(s) for the configuration item.

1.7.9 Engineering Change Proposal (ECP)

An ECP is a change request type with the function to introduce a change into a system or subsystem. The ECP includes also the approval or disapproval of the relevant proposed change.

1.7.10 Military Type Certificate (MTC)

Document issued by DAAA certifying the compliance of a Type Configuration with the relevant airworthiness requirements.

1.7.11 Service Bulletini

The Service Bulletin (SB) is a technical document that describes the modification and how it is to be implemented. It has an associated applicability, and once the SB is approved, it can be treated as a design change to the Type Configuration.

1.7.12 System Design Responsible Company (SDR)

The SDR is the Company that has all responsibility and knowledge of the design of the individual configuration item, having either developed it or having received it on license from the original designer.

In the case of modifications to this material, the above Company is responsible for the design of the modifications it makes and the instructions given in the corresponding documents.

Designer Companies of Level 1 and 2 configuration item are appointed as SDR Companies by DAAA..

The SDR plays a fundamental role in the Configuration Control process, being responsible for the design, modifications and instructions given in the corresponding documents it issues.

Designer Companies of lower level configuration item must be specified in the configuration documents (Design Standards or similar) issued by the SDR.

1.7.13 Configuration Baseline

The Configuration Baseline is a set of configuration items the status of which is verified and accepted at a particular stage in the product life cycle.

1.7.14 Competent Body

A NATO Organization that provides the engineering capability to support the continued and continuing AW process and maintains the contractual relationship with the SDR.

2. SYSTEM DESIGN RESPONSIBLE (SDR) ROLES AND RESPONSIBILITIES

2.1 Recognition of the SDR

Prior to the entry in service of the NATO AGS Air Segment and the Pilot Trainer (Level 1 Systems), the relevant companies must declare themselves to DAAA as fit for appointments as SDRs through issue of specific applications in accordance with annex "A1" for NATO AGS RQ-4D Air Segment SDR and annex "A2" for Pilot Trainer SSDR (Simulator-SDR).

The NATO AGS Air Segment and the Pilot Trainer SDRs may be recognized if it meets the following requirements:

- It has access to and full knowledge of all design data on the Level 1 System, including its configuration items. Responsibility for the design data is expressed through signature of the documents submitted to the DAAA by the Technical Director of the SDR;
- It has the technical capability to design modifications to the system for which it is SDR and to assure assessment of the impact of modifications on lower level configuration items;
- It has a design organization with the following elements: a Technical Director, an engineering department, an airworthiness department responsible for compliance of design with applicable requirements and an office responsible for configuration control management. The documentation inherent to airworthiness (including safety) aspects is submitted to the DAAA with the signature of the Technical Director and Airworthiness Manager;
- It has knowledge of the DAAA Qualification, Registration and Configuration Control standards, as tailored for the AGS contract (AER(EP).P-2, AER(EP).P-7, AER(EP).00-00-5/RQ-4D and AER(EP).00-01-6/RQ-4D);
- It has knowledge and access to all or part of the design and the capacity to design the necessary modifications;

The NATO AGS Air Segment SDR has also to meet the following requirements:

The SDR holding the design data and an adequate Design Organization for the NATO AGS Air Segment, is responsible for the integration (fit for installation) and for maintaining compliance with performance and airworthiness requirements as well as configuration cognizance for the engine of the unmanned aircraft in the NATO AGS Air Segment. In discharging this responsibility, the NATO AGS Air Segment level SDR will refer to documentation issued by the Engine Design Authority and it will maintain the NATO AGS Air Segment configuration (including its systems and equipment) updated accordingly.

The SDR guarantees to maintain engine configuration data necessary for continuous compliance with performance and airworthiness requirements of the engine itself and its Fit-For-installation on the NATO AGS Air Segment unmanned aircraft . This will be

assured through the issue of ECPs based on the configuration data documents (Service Bulletins or equivalent) issued by the Engine Design Authority and approved by the competent Civilian/Military Airworthiness Authority. Due account shall be taken by the NATO AGS Air Segment SDR of Airworthiness Directives (or equivalent) issued by the competent Civilian/Military Airworthiness Authority of the Engine Design Authority.

The SDR is responsible for maintaining contractual and technical agreement with the Engine Design Authority throughout the period of performance of the NATO AGS Core contract.

Specifically for the Pilot Trainer, the SDR must have also access to all Technical Data Package of the Air Segment necessary to ensure that the functional characteristics of the Trainer are fully aligned with the Air Segment baseline and relevant approved updates.

The SDR is appointed by DAAA in accordance with annexes “B1” and “B2” and shall take the responsibility for ascertaining possession and maintenance of the above requirements.

In the following paragraph “SDR” is used to refer both to NATO AGS Air Segment SDR and to Pilot Trainer SDR unless otherwise specified.

2.2 Responsibilities of the SDR

The SDR, in addition to all the responsibilities associated to the ECP detailed in the next paragraphs is responsible for:

- Formalizing the list of configuration items to be monitored through logbooks/worksheets according to the level and intervals of configuration item maintenance, through issue of a specific Service Bulletin “List of monitored configuration items” no later than the NATO AGS Air Segment / Pilot Trainer entry in service;
- Formalizing the list of Type 1 AGE through issue of a specific Service Bulletin “Type 1 AGE” no later than the NATO AGS Air Segment / Pilot Trainer entry in service;
- Identifying the hazardous materials no later than the NATO AGS Air Segment / Pilot trainer entry in service;
- Issuing a specific Service Bulletin “list of alternative materials “ with a list of alternative materials updating it as they are made available following current technology;
- Providing instructions for managing hazards to persons and/or equipment, on the ground and in flight, deriving from use of hazardous materials; they shall include disposal instructions for replaced or rejected parts, through issue of Manual Concerning the Management of the Hazardous Materials in accordance with ITA MoD DAAA regulation AER.P-107/RQ-4D.

3. ENGINEERING CHANGE PROPOSALS

3.1 ECPs Description

Engineering Change Proposals (ECPs) are the formal technical documents issued by the entitled entities after formal establishment of the NATO AGS Air Segment/Pilot Trainer configuration baselines, to introduce a technical change, to issue the conditions for tests or inspections, or to provide instruction on configuration items. The technical and the engineering contents of the ECPs are responsibility of the SDR.

Any modifications to the NATO AGS Air Segment components that are represented in the Pilot Trainer must be implemented in parallel to ensure that the Pilot Trainer is fully aligned with the NATO AGS Air Segment. In this case, the same ECP shall be applicable also to NATO AGS Air Segment and to Pilot Trainer and then followed by two Service Bulletins: one for the Air Segment and the other for the Pilot Trainer.

The ECP forms can be found in annex “C1”.

3.2 Interim ECPs (ECPIs)

In particular cases of need or urgency, following the occurrence of a fault that has an immediate impact on the airworthiness and/or efficiency of a configuration item, an Interim ECP (ECPI) is required to be issued. The ECPI officially notifies the immediate precautionary and not definitive actions that must be applied, to prevent damage to persons or equipment and/or repetition of the problems encountered.

Given their purpose of responding to a condition of immediate urgency, the ECPIs are not definitive and, as implied by their title, have a limited validity.

Therefore, an ECPI must always be followed by an ECP that confirms its validity, or modifies the initially adopted provisions based on subsequent and more detailed analyses and technical assessments.

The ECPI due to their urgency has a dedicated form for PART II and PART III that can be found in annex “C2”

In the following paragraph the term “ECPs” includes also the ECPIs, unless otherwise specified and with the exception specified in the ECPI form in annex “C2”.

3.3 ECP Originators

An ECP can be originated by Competent Body, NAGSF and SDR.

An ECP can be also originated by SDR following an Airworthiness Directive (see paragraph 6) issued by DAAA.

The originator does not identify the change. The change is proposed only by the SDR.

3.4 ECP Scope

All the originators listed above (see paragraph 3.3) are entitled and have to raise ECPs (ECP PART I – “submission”) in order to correct failure/defects or to make improvements of any nature, in particular as regards to:

- safety, both on the ground and in flight;

- configuration identification;
- data relative to weight, balance, moments of inertia;
- characteristics of interchangeability, maintainability, reliability, vulnerability, or service life;
- characteristics of use beyond the pre-existing tolerances;
- compatibility with other items with which the configuration item interfaces or with pre-existing support, test or training means or any other Government Furnished Equipment (GFE) material;
- management of hazardous and accident prevention materials, even deriving from work or present in the configuration item being modified or replaced.

The above mentioned originators may submit an ECP on their own initiative for any of the following reasons:

- to prolong the life of the configuration item concerned;
- to increase safety;
- to make modifications considered useful for the NAGSF;
- to make modifications useful for the crew, overflowed third parties, maintenance personnel (see ref. N, Italian Law n. 81/2008).

The SDR has to react with an ECP (ECP PART II and PART III) when requested by the Competent Body (with the authorization of the ECP PART I).

NOTE

IAW AER(EP).P-104/RQ-4D, the ECP must not be used for modifications to manuals and Technical Publications, for which the SDR in any case remains responsible in accordance with AER(EP).0-0-2/RQ-4D and AER(EP).0-0-8/RQ-4D.

All ECPs must be formally recorded by the SDR in a proper configuration management database. The database records must remain accessible for inspection by DAAA and Competent Body at any time.

3.5 ECP Composition

3.5.1 ECP Part I (Submission)

ECP PART I highlights the necessity to correct failure/defect or to make improvements as defined in the paragraph 3.4, and it is issued by the ECP originator.

In particular, the ECP PART I does not identify the change itself.

Part I of the ECP comprises the originator identification, the contact details, the reference to the Type Certificate involved for the NATO AGS Air Segment or for the Pilot Trainer, the relevant system involved, the scope as a brief description of the problem/necessity, if the ECP is to solve a failure/defect potentially impacting

airworthiness and any further supporting information that can be provided by the originator.

In case of the issue of an Occurrence Report, according to AER(EP).00-01-6/RQ-4D, the Part I of the ECP can be omitted.

3.5.2 ECP Part II (Change Definition - Technical and Financial Analysis)

ECP Part II is the definition of the change proposed by SDR following either an ECP Part I or an Occurrence Report issued in accordance with AER(EP).00-01-6/RQ-4D. Part II establishes also if the change concerns performance and/or airworthiness characteristics and provides the change classification according to paragraph 3.6.

In Part II, the SDR proposes a preliminary Service Bulletin that provides:

- Scope and summary;
- A high level technical description of the change (including applicability, maintenance level, material, accomplishment instructions and hazardous information);
- Timing compliance;
- A cost estimate (for both, engineering change design and implementation, and kits) to support the evaluation of financial aspects by the Component Body and the decision making process with regard to the Part II approval or rejection of the change proposal.

NOTE: DAAA is not involved in any financial aspects of the process.

For the specific exception of the ECPI refer to annex "C2".

3.5.3 ECP Part III

The Part III is the collection of all the detailed data and relevant Means of Evidence provided by the SDR necessary to the Competent Body and to DAAA to evaluate the change respectively for performance and airworthiness aspects. The Part III contains the final version of the Service Bulletin issued by the SDR at the end of the qualification activities that will be submitted to the DAAA's Director for its approval. For the specific exception of the ECPI refer to annex "C2".

3.6 ECP Classification, Code and Priority

3.6.1 ECP Classification

The ECPs are classified as minor and major. A minor change is one that has no appreciable effect on the mass, balance, structural strength, reliability, operational characteristics or other characteristics affecting the airworthiness of the product and consider where applicable, environmental characteristics such as noise, fuel venting and exhaust emission. All the other changes are majors.

Following a change proposal, the SDR shall apply for a revision or addendum to the MTC (i.a.w. AER(EP).P-2) in case the change in design, configuration, power, thrust, or mass is so extensive that a substantially complete investigation of compliance with the applicable MTC basis is required.

The detailed flowchart useful to define the classification of an ECP is provided in annex “F”.

This classification has not to be reported for the ECPI

3.6.2 ECP Safety Code

ECPs are also classified according to a justification code applied, “S” or “N”, indicating the nature and the urgency of the ECP:

- Code “S” – SAFETY – if the purpose of the ECP is to eliminate a configuration item fault related to the safety, whether on the ground or in flight. In particular, this code must always be used for any ECP concerning hazardous materials or applications and processes that may require use of hazardous materials; (see relevant manual for identification of hazardous materials and instructions for their use which consequently require updating).
- Code “N” – NORMAL – if the purpose of the ECP is to eliminate a fault not related to security, and therefore only as an improvement to the characteristics or operative efficiency of the configuration item, or to introduce new capacities.

An ECP having safety code “S” can be anticipated by an ECPI.

This code are not applicable to ECPI

3.6.3 ECP Priority

For each ECP must be assigned a priority code to identify the urgency of the relevant required technical action in accordance with the following criteria:

1 IMMEDIATE	Change has to be implemented before the next flight/use	Applicable only to the ECPs with Security Code “S”
2 URGENT	Change has to be implemented within a limited and short time-frame (e.g. 5 days from the issue of the ECP, or a corresponding number of flight hours or cycles)	Applicable only to the ECPs with Security Code “S”
3 ROUTINE	Change has to be implemented within a limited time-frame, generally not short	

The priority code has to be proposed by the originator in the Part I of the ECP and approved by DAAA in the ECP Part II.

The ECP Part II with priority code “1” and “2” shall be anticipated by telephone and sent by the SDR to the Competent Body and to DAAA according to the following time-schedule:

- Priority “1” within 24 hours from the notification of the event(either the issue of an ECP Part I or an Occurrence Report) to the SDR;
- Priority “2” within 5 days from the notification of the event to the SDR.

The DAAA decision concerning the airworthiness implication of the ECP and the validity of the preliminary service bulletin, along with the corresponding decision by the Competent Body on cost and performance, will be provided within 24 hours from the relative acknowledgment of the ECP “immediate”, within 3 working days for the ECP “Urgent”.

An ECP with priority code “3” must be sent via regular communication channel (see paragraph 7).

The DAAA response about a “routine” ECP doesn’t envisage any pre-defined response time and will be provided in accordance with the assigned security code.

3.6.4 ECPI Priority

Due to their urgency, the ECPIs are classified as follow:

- **Immediate ECPIs**

The Immediate ECPI is relevant to corrective/precautionary actions for immediate implementation on the configuration items in service, the use of which could result in immediate hazard.

Therefore the change has to be implemented before the next flight/use.

- **Urgent ECPIs**

The Urgent ECPI is relevant to corrective/precautionary actions on the Cis in service, the use of which could result in a dangerous condition.

Therefore the change has to be implemented within a limited and short time-frame established in the ECPI, to guarantee the safety during the use of the configuration items.

- **Operative ECPIs**

The Operative ECPI is relevant to corrective/precautionary actions not directly related to dangerous conditions. In any case the relevant actions have to be implemented in short time on configuration items with operative zone destinations with the objective to avoid or decree the operative limitation of the configuration items itself.

Differently from the two previous cases, the time-frame for the implementation of the operative ECPI can change in accordance to the relative operative urgency.

ECPI “immediate” and “urgent” follow the same time-schedule and the same time response of the ECP “immediate” and “urgent” reported in the paragraph 3.6.3.

ECPI “operative” follows the same time-schedule of the ECP “urgent” and for the DAAA time-response it will depend from the operative necessity.

3.6.5 ECP Security Classification

An ECP must be assigned an official NATO security classification in accordance with definitions in NATO Security Policy (C-M(2002)49).

Each section of the ECP that could contain classified information shall be marked with NS, NC, NR, NU at the beginning of the text, depending on whether its information is NATO SECRET, NATO CONFIDENTIAL, NATO RESTRICTED or NATO UNCLASSIFIED correspondingly.

The classification of a page or Part containing more than one level of classification is the higher in the page or Part.

Each Part of the ECP can have a different classification, depending on the information included in its section.

The classification of an ECP is the higher classification among the ones included into the ECP

As far as possible, the title of the ECP should be chosen to make it NU with respect to the overall classification of the ECP.

3.7 ECP Revision, Amendment, Cancellation

In case of an ECP modification the following definitions are applicable:

- **Revision.** In case of significant variations. They are the ones having economic and/or performance/airworthiness/logistical effects such as to modify the substance of the ECP.
- **Amendment.** In case of change or correction of Minor Errors (the variations not deemed significant).

The ECP modification (Revision/Amendment) will always lead to the modification (Revision/Amendment) of the corresponding Service Bulletin. On the other hand, a Service Bulletin can be modified only through the modification of the ECP source.

3.7.1 ECP Revision

An ECP shall be revised when any significant variation to the original ECP is deemed necessary either by SDR, or Competent Body or DAAA. The revised ECP shall be identified as such, and shall supersede the previous version. A revised ECP shall be published identifying in the scope (Part I) the reason for its revision and it shall be submitted to the Competent Body and to DAAA for action as per para 5.1.

The statement "This ECP supersedes ECP No Rev....." shall be used in its scope.

The revision of the ECP is the revision of the latest Part.

3.7.2 ECP Amendment

An ECP shall be amended when any change or correction of Minor Errors (the variations not deemed significant) of the original ECP is deemed necessary either by SDR, or Competent Body or DAAA. The amendment shall be identified as such, and

will live together with the amended ECP. An amendment shall be published identifying its scope and the part of the ECP to be amended and shall be submitted to the Competent Body and to DAAA for action as per para 5.1.

The amendment of the ECP is the amendment of the latest Part.

This paragraph is applicable to ECPI with the exception in Annex "C2"

3.7.3 ECP Cancellation

In any stage of the ECP approval process, after the authorization to proceed in Part I and prior to the Service Bulletin signature the Competent Body may decide to quit it, provided that the ECP is not aiming to solve an airworthiness issue.

In case the Competent Body quits the ECP, it shall be classified as canceled

An ECP aiming to solve an airworthiness issue can't be canceled and must be finalized with the issue of the relevant Service Bulletin.

Once the Service Bulletin has been signed, the ECP source can't be canceled. The only way to modify it, is to make a revision/amendment to the ECP (according to para 3.7) or to issue a new one.

4. SERVICE BULLETINS

4.1 SB Description

The Service Bulletin is always issued by the SDR and it is associated to an ECP with the exception of SBs at paragraph 2.2 used to define the “List of monitoring configuration items”, “Type 1 AGE” and “List of alternative materials”.

The Service Bulletin, included in ECP PART III, is approved by DAAA with a formal letter to approve the relevant type change proposal. The Service Bulletin, once signed by DAAA, is used to incorporate, providing the necessary instructions (technical and scheduling), the change in the registered NATO AGS Air Segment or the Pilot Trainer that are under the authority of the DAAA.

Two SB bulletins have to be issued when the relevant ECP is applicable both the NATO AGS Air Segment and the Pilot trainer.

4.1.1 SB for Interim ECPs

For SBs associated to ECPIs, in the dedicated field used to track the associated ECP a proper markup shall be used to provide indication of the “interim” nature. The Service Bulletin relevant to an ECPI, must be followed by another SB that confirms the validity of the ECPI or modifies the initially adopted provisions.

4.2 SB scope

The Service Bulletin is issued by SDR. It introduces the changes that are necessary to correct failures/defects or to make improvements as specified at paragraph 3.4. It is also used to define the data at paragraph 2.2 “List of monitoring configuration items”, “Type 1 AGE” and “List of alternative materials”.

In any case, it requires the DAAA approval. Once approved, the SB integrates the Military Type Certificate and provides the instructions to update the serialized Air Segment / Pilot Trainer baseline.

4.3 SB Structure

The SB shall adopt the structure defined in annex “D”.

4.4 SB Number (No)

SB Numbers shall be assigned by the SDR.

4.5 SB Classification/Code

The Service Bulletin has the same classification and code of the relevant ECP, as defined in the paragraph 3.6.

Furthermore, the SB related to an ECP/ECPI “Immediate” becomes effective from the moment it is received and must be mandatorily applied. The aircraft and/or materials covered by the SB must be suspended immediately from use until the problem has been eliminated by complying with the requirements.

If a SB relative to an ECP/ECPI “Urgent” is not implemented within the specified time-frame, the configuration item must be suspended from the use and/or flight until the

change has been implemented. The SB shall indicate the time-frame limit for the implementation which cannot exceed 10 calendar days or the equivalent number of operating hours/cycles.

4.6 SB Transmission

Once the SB has been approved by DAAA, the SDR shall distribute it to Competent Body, to NAGSF for its implementation, and to DAAA for information. The version to be distributed shall carry the DAAA approval formal letter reference number (as detailed at para. 5.1.3).

4.7 SB Implementation

A SB can be implemented only if it carries the DAAA approval formal letter reference number (as detailed at para. 5.1.3).

It is the responsibility of the NAGSF to ensure the implementation of the changes within the constraints specified in the approved Service Bulletin; should the constraints not be met, NAGSF shall ensure that the concerned configuration items be suspended from service.

The only SB to be implemented are the ones marked with the reference to the relevant approval letter issued by DAAA.

The Service Bulletin forms can be found in annex "D".

4.8 Service Bulletin Cancellation, Suspension, Supplement

The following paragraphs are applicable to Service Bulletins already approved by DAAA.

4.8.1 Cancellation

Any Service Bulletin (SB) that, in the opinion of the Competent Body (for SB not relevant to airworthiness issues) or DAAA (for airworthiness related SB) is no longer considered applicable must be canceled through issue of a formal "Deed of Cancellation" signed by DAAA's Director.

At any time an amendment/revision to an ECP is issued because the requirements are no longer technically and/or conveniently applicable to the corresponding configuration item, the original SB must be canceled and a replacement SB issued, which will be identified by a new number and new edition date.

The substitute SB will indicate whether or not it is necessary to re-modify the items previously modified under the SB that the substitute replaces.

According to the case, one of the following notes will always be included at the start of the text, before frame 1:

"This SB supersedes SB. n° Ed.

This SB requires additional works to the configuration items to which the above SB has already been applied".

Or:

“This SB supersedes SB. n° Ed.”

The SB requires no additional works to the configuration items to which the above SB has already been applied”.

4.8.2 Suspension

If it should become necessary to suspend application of an SB already issued and currently being implemented but found to be unsatisfactory, a motivated communication must be sent by rapid communication means (see paragraph 7) to the Competent Body, which will then request to the SDR to prepare a supplement to the base SB.

4.8.3 Supplement

The Competent Body has the faculty to request to the SDR the evaluation of supplements to an SB already in effect in cases where the modifications / supplements / improvements / changes to execution times are of an entity that does not require issue of a new SB. Supplements approval process shall follow the flow as per Part III in para 3.5.3.

The following note will always be included at the start of the supplement:

“This Supplement is relevant to SB. n° Ed.”.

5. ECP/SB ISSUE AND APPROVAL PROCESS

5.1 ECP Process Description

For the specific exception of the ECPI refer to annex "C2".

5.1.1 ECP Part I

The ECP Part I issued and numbered by the Originator, has to be submitted to Competent Body and DAAA (in CC). The Competent Body records the ECP and proceeds to evaluate it. DAAA will provide to the Competent Body his concurrence concerning airworthiness matters. In particular DAAA will assess the Originator evaluation on the impact on airworthiness determined by the failure/defect the ECP is aiming to solve; ECPs adjudicated by DAAA as needed to solve airworthiness issues shall be mandatorily authorized by the Competent Body. Should DAAA adjudicate the ECP Part I as to solve an Airworthiness issue whereas the Originator didn't do so, the Originator shall update the ECP Part I accordingly.

In case of negative evaluation of the ECP Part I, the Competent Body rejects it with a formal communication to the Originator.

In case of positive evaluation, the Competent Body authorizes to proceed providing also to SDR the ECP PART I. Then the SDR has to issue the Part II.

The Competent Body is responsible to monitoring the progress of an ECP, starting from the issue of the ECP Part I up to the approval of the relevant Service Bulletin, while its technical and engineering contents remain the responsibility of the SDR.

The Competent Body has to ensure that any ECP is made available to the DAAA.

5.1.2 ECP Part II

The SDR shall issue the ECP Part II after the Competent Body's authorization to proceed.

Once Part II is completed, it is then evaluated in coordination by:

- Competent Body in terms of cost and technical performance;
- DAAA in terms of relevance to airworthiness and classification according to paragraph 3.6.1.

In case of negative evaluation, the Competent Body will communicate to the SDR:

- ECP Part II has to be revised, or
- ECP Part II is rejected, excluded the case that the ECP has not been originated to solve an airworthiness issue.

In case of positive evaluation, the Competent Body authorizes to proceed with the ECP Part III.

If the solution identified in Part II has a cost implication, the Competent Body will assess and authorize it, after coordination with DAAA for certification purposes.

5.1.3 ECP Part III

In Part III Phase I there will be the evaluation from the Competent Body of the ECP for performances aspects and from DAAA for the airworthiness ones. The Phase I ends either with the rejection of the ECP (if any) or with the combined (Competent Body and DAAA) proposal to DAAA's Director for the approval of the ECP and his approval of the Service Bulletin.

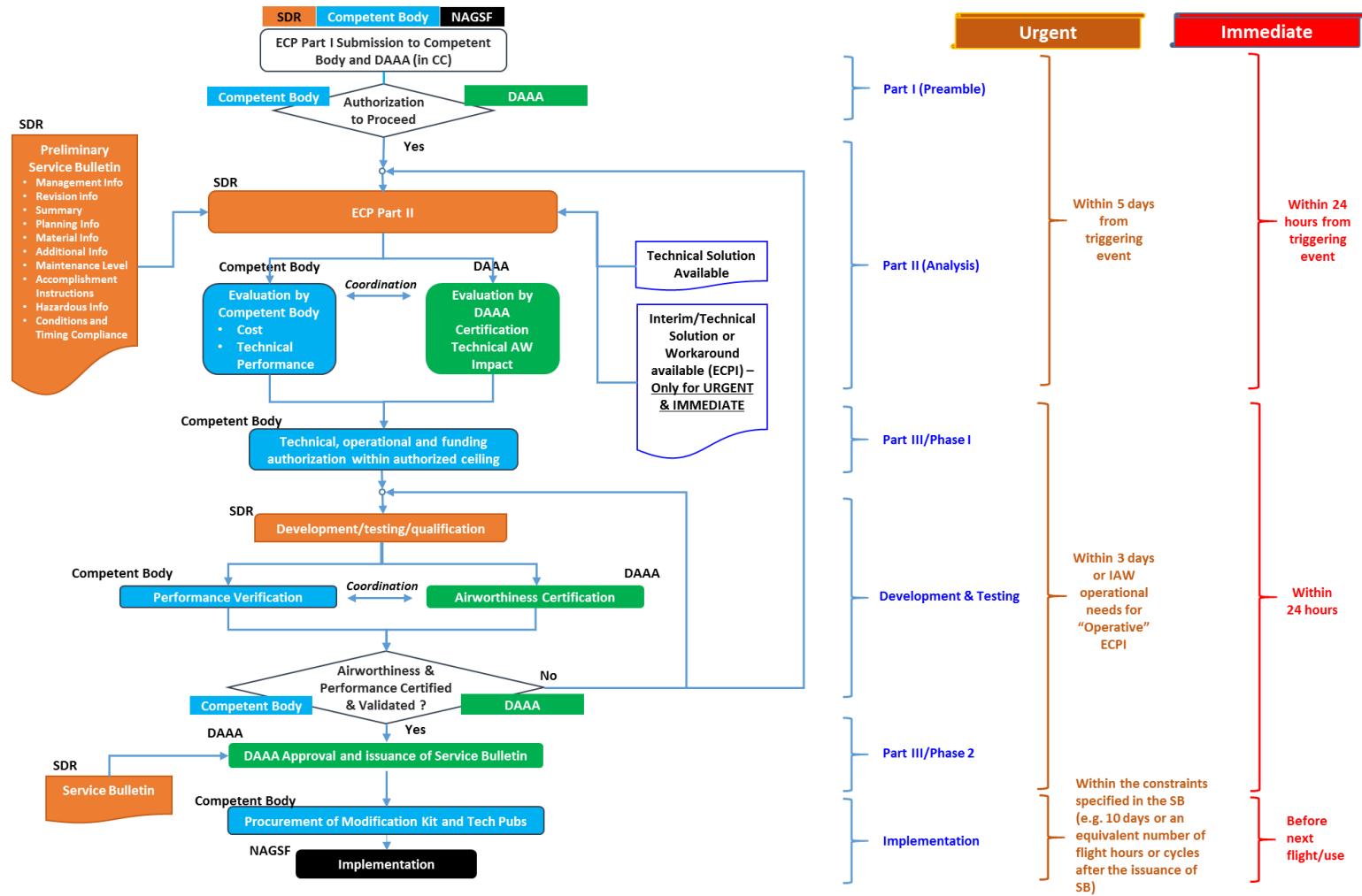
The ECP rejection in Part III Phase I can be determined either by the negative impact of the proposed change on performance and/or airworthiness or by the lack of exhaustively of the evidence provided (test reports and/or analyses).

In the first case the SDR has to re-evaluate the proposed solution and to issue a revised Part II. In the latter the SDR has to collect further evidence to support the ECP and to issue an updated Part III.

The Part III Phase II is the DAAA's Director approval or rejection of the Service Bulletin. This approval or rejection is by mean of a formal letter to the SDR (and to the Competent Body in cc). In case of approval, the DAAA formal letter will include in attachment the SB. This SB will include the formal letter reference number. In case of rejection the DAAA formal letter will include in attachment the SB but the latter must not include the formal letter reference number.

In any stage of the ECP approval process, after the authorization to proceed in Part I and prior to the Service Bulletin approval the Competent Body may decide to quit it, provided that the ECP is not aiming to solve an airworthiness issue. Should this be the case, the ECP shall be classified as canceled (Para 3.7.3).

5.2 ECP Process Diagram



6. Airworthiness Directives

6.1 AD Scope

The Airworthiness Directive (AD) issued by DAAA has the aim to mandate actions to be performed on the NATO AGS Air Segment to restore an acceptable airworthiness condition when evidence shows that the airworthiness of this NATO AGS Air Segment may otherwise be compromised.

6.2 AD Structure

The AD shall contain at least the following information:

- Identification of the unairworthy condition;
- Identification of the affected NATO Air Segment as built configuration items;
- The action(s) required;
- The compliance time/constraints for the required action(s);
- The date of entry into force.

The AD form can be found in annex “E”.

6.3 AD Number (No)

AD Numbers shall be assigned by the DAAA.

6.4 AD Proces

The Airworthiness Directive issue by DAAA shall be sent:

- To NAGSF for the execution of the relevant directives;
- To the SDR for the identification of the appropriate corrective actions in accordance to paragraph 5 or AER(EP).0-0-2/RQ-4D
- To the Competent Body for information and actions as required.

6.5 AD Cancellation/Revision

An AD must be revised or cancelled through issue of a formal “deed of cancellation” signed by DAAA’s Director.

7. COMMUNICATION CHANNEL

All formal communications shall be sent via e-mails. Formal documents (e.g., AD, ECP, SB) need to be attached as signed PDF copy and including the formal transmission letter with the relevant signature and protocol number. Formal e-mails shall be acknowledged by the Receiver via e-mails, containing the protocol number of the Receiver. The process for access to supporting electronic data shall be provided within the formal communications (e.g., a link to an online workspace).

Classified information be exchanged require to follow the same process via NATO SECRET network.

8. List of Annexes

Annex "A1"	Request for the appointment of NATO AGS RQ-4D Air Segment SDR
Annex "A2"	Request for the appointment of NATO AGS Pilot Trainer SSDR
Annex "B1"	SDR Recognition for NATO AGS RQ-4D Air Segment
Annex "B2"	SSDR Recognition for NATO AGS Pilot Trainer
Annex "C1"	ECP/ECPI PART I – ECP PART II – ECP PART III
Annex "C2"	ECPI PART II - ECPI PART III
Annex "D"	Service Bulletin for NATO AGS RQ-4D Air Segment or Pilot Trainer
Annex "E"	Airworthiness Directive for NATO AGS RQ-4D Air Segment or Pilot Trainer
Annex "F"	ECP Classification

REQUEST FOR THE APPOINTMENT OF
NATO AGS RQ-4D AIR SEGMENT
SYSTEM DESIGN RESPONSIBLE (SDR)

1. COMPANY

.....

2. N° Date

Rev.Date

Amdt. Date

3. TITLE

"APPLICATION/DECLARATION FOR RECOGNITION OF **[COMPANY NAME]** AS SYSTEM DESIGN RESPONSIBLE (SDR) FOR NATO AGS AIR SEGMENT"

4. NATO AGS AIR SEGMENT

Type:

MDS:

P/N:

5. DESCRIPTION

The Company legal head office **[Address]**, is the System Design Authority of the NATO AGS Air Segment at point 4.

The Company holding the design data and an adequate Design Organization for the NATO AGS Air Segment P/N. is the System Design Responsible (SDR) for the Air Segment including its systems, installed equipment and the engine, Part Number, whose Engine Design Authority is

The Air Segment contains the AV P/Nand the AVMC2 P/N including DUCE P/N.....

The Company, is responsible for the integration (fit for installation) and for maintaining compliance with performance and airworthiness requirements as well as configuration cognizance for the **[Engine Type]** engine of the unmanned aircraft in the NATO AGS Air Segment. In discharging this responsibility, the NATO AGS Air Segment level SDR will refer to documentation issued by the Engine Design Authority and it will maintain the NATO AGS Air Segment configuration (including its systems and equipment) updated accordingly.

The Company guarantees to maintain engine configuration data necessary for continuous compliance with performance and airworthiness requirements of the engine itself and its Fit-For-installation on the NATO AGS Air Segment. This will be assured through the issue of ECPs based on the configuration data documents (Service Bulletins or equivalent) issued by the Engine Design Authority and approved by the competent Civilian/Military Airworthiness Authority. Due account shall be taken by the NATO AGS Air Segment SDR of Airworthiness Directives (or equivalent) issued by the competent Civilian/Military Airworthiness Authority of the Engine Design Authority.

The Company duties as SDR will last for _____ starting to the date of the relevant recognition document [IF APPLICABLE].

6. REFERENCE DOCUMENTS - AGREEMENT

The Company..... is responsible for maintaining contractual and technical agreement with the Engine Design Authority throughout the period of performance of the NATO AGS Core contract and any follow-on support contracts awarded to Company..... The Contract between the Company and the Engine Design Authority in place is.....(in attachment).

Any and all changes and/or updates to the contract(s) with Engine Design Authority will be supplied to DAAA by the Company

7. CONTACT:

Tel:

FAX:

E-MAIL

Technical Director Signature

REQUEST FOR THE APPOINTMENT OF
NATO AGS PILOT TRAINER
SIMULATOR SYSTEM DESIGN RESPONSIBLE (SSDR)

1. COMPANY

.....

2. N° Date

Rev.Date

Amdt. Date

3. TITLE

"APPLICATION/DECLARATION FOR RECOGNITION OF [COMPANY NAME] AS SIMULATOR SYSTEM DESIGN RESPONSIBLE (SSDR) FOR NATO AGS Pilot Trainer"

4. NATO AGS Pilot Trainer

P/N:

Simulator of the NATO AGS Air Segment:

Type:

MDS:

P/N:

5. DESCRIPTION

The Company legal head office [Address], is the Simulator System Design Authority of the NATO AGS Pilot Trainer at point 4.

The Company holding the design data and an adequate Design Organization for the NATO AGS Pilot Trainer P/N. is the Simulator System Design Responsible (SSDR) for the Pilot Trainer including its systems and installed equipment.

The Company,

being also Design Authority of the NATO AGS Air Segment at point 4

or

through the contract (in attachment) with the Design Authority of the NATO AGS Air Segment at point 4

guarantees to have access to all Technical Data Package of the Air Segment necessary to ensure that the functional characteristics of the Trainer are fully aligned with the Air Segment baseline and relevant approved updates.

The Company duties as SDR will last for _____ starting to the date of the relevant recognition document.[IF APPLICABLE]

6. REFERENCE DOCUMENTS - AGREEMENT [if applicable]

The Company..... is responsible for maintaining the contract with the Design Authority of the NATO AGS Air Segment at point 4 throughout the period of performance of the NATO AGS Core contract and any follow-on support contracts awarded to Company.....

Any and all changes and/or updates to the contract with the Design Authority of the NATO AGS Air Segment will be supplied to DAAA by the Company

7. CONTACT:

Tel:

FAX:

E-MAIL

8. Technical Director Signature

NATO AGS RQ-4D SDR Recognition Document N° _____

Date edition: [Enter date]



MINISTRY OF DEFENCE

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

TITLE: System Design Responsible (SDR) recognition for the *NATO AGS RQ-4D Air Segment*
P/N _____

Source: Request for the appointment of NATO AGS RQ-4D Air Segment SDR
N° _____ Dated _____, issued by the **[name of the Company]**

Ref.: [Reference Documents listed in the SDR application]

NOTE

This document issued by DAAA, gives full applicability to the Request for the SDR appointed N° _____ Dated _____ issued by the **[name of the Company]**, that remains fully responsible for the technical information therein contained.

This recognition document supersedes the recognition document N° _____ dated _____ [if applicable].

1. NATO AGS AIR SEGMENT

[Type, MDS, P/N]

2. SCOPE

To recognize the Company **[Company name]** as System Design Responsible (SDR) for the NATO AGS RQ-4D Air Segment based on the information at point 5.

3. REGULATION REFERENCE

DAAA's Regulation AER(EP).00-00-5/RQ-4D Edition **[applicable edition and relevant supplement]**.

4. DESCRIPTION

The Company **[name of the Company]**, legal head office **[Address]**, holding the design data and a Design Organization for the NATO AGS Air Segment P/N _____, according to regulation at point 3 provided the request for the appointment of SDR for NATO AGS Air Segment (point 1) in the terms of the responsibilities defined at point 5.

5. SDR RECOGNITION

The Company **[name of the Company]**, legal head office **[Address]**, holding the design data and an adequate Design Organization for the NATO AGS Air Segment P/N _____ is the System Design Responsible (SDR) for the Air Segment including its systems, installed equipment and the **[type]** engine, P/N _____, whose engine design company is **[name of the Company]**. The Air Segment contains the AV, P/N _____ and the AVMC2, P/N _____ including DUCE, P/N _____.

The Company **[name of the Company]** is responsible for the integration (fit for installation) and for maintaining compliance with performance and airworthiness requirements as well as configuration cognizance for the **[type]** engine of the unmanned aircraft in the NATO AGS Air Segment. In discharging this responsibility, the aircraft level SDR will refer to documentation issued by the Engine Design Authority and it will maintain the aircraft configuration (including its systems and equipment) updated accordingly.

The Company **[name of the Company]** guarantees to maintain engine configuration data necessary for continuous compliance with performance and airworthiness requirements of the engine itself and its Fit-For-installation on the NATO AGS Air Segment. This will be assured through the issue of ECPs based on the configuration data documents (Service Bulletins or equivalent) issued by the Engine Design Authority and approved by the competent Civilian/Military Airworthiness Authority.

Due account shall be taken by the NATO AGS Air Segment SDR of Airworthiness Directives (or equivalent) issued by the competent Civilian/Military Airworthiness Authority of the Engine Design Authority.

The Company duties as SDR will last for _____ starting to the date of this recognition document. [IF APPLICABLE]

6. REFERENCE DOCUMENTS – AGREEMENT VALIDITY

The Company **[name of the Company]** as SDR guarantees to maintain the necessary configuration data for the compliance to performance and airworthiness requirements of the NATO AGS Air Segment unmanned aircraft.

The Company **[name of the Company]** is responsible for maintaining contractual and technical agreement with **[name of the Engine Design Authority]** throughout the period of performance of the NATO AGS Core contract and any follow-on support contracts awarded to **[name of the Company]**.

The Contract between the Company and the Engine Design Authority in place is **[Purchase Orders number]**.

Any and all changes and/or updates to the contract(s) with **[name of the Engine Design Authority]** will be supplied to DAAA by **[name of the Company]**.

7. ATTACHMENT LIST

THE DIRECTOR

NATO AGS Pilot Trainer SSDR Recognition Document N° _____

Date edition: [Enter date]



MINISTRY OF DEFENCE

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

TITLE: Simulator System Design Responsible (SDR) recognition for the **NATO AGS Pilot Trainer**
Part Number _____

Source: Request for the appointment of NATO AGS Pilot Trainer SSDR N° _____ Dated _____,
issued by the **[name of the Company]**

Ref.: [Reference Documents listed in the SDR application]

NOTE

This document issued by DAAA, gives full applicability to the Request for SSDR appointment N° _____ Dated _____ issued by the **[name of the Company]**, that remains fully responsible for the technical information therein contained.

This recognition document supersedes the recognition document N° _____ dated _____ [if applicable].

1. NATO AGS PILOT TRAINER

[P/N]

Simulator of the NATO AGS Air Segment **[Type, MDS, P/N]**

2. SCOPE

To recognize the Company **[Company name]** as Simulator System Design Responsible (SSDR) for the NATO AGS Pilot Trainer based on the information at point 5.

3. REGULATION REFERENCE

DAAA's Regulation AER(EP).00-00-5/RQ-4D Edition **[applicable edition and relevant supplement]**.

4. DESCRIPTION

The Company _____, legal head office **[Address]**, holding the design data and a Design Organization for the NATO AGS Pilot Trainer P/N _____, according to regulation at point 3 provided the request for the appointment of SDR for NATO AGS Pilot Trainer (point 1) in the terms of the responsibilities defined at point 5.

5. SDR RECOGNITION

The Company **[name of the Company]** holding the design data and an adequate Design Organization for the NATO AGS Pilot Trainer P/N _____ is the Simulator System Design Responsible (SSDR) for the Pilot Trainer including its systems and installed equipment.

The Company **[name of the Company]**,

being also Design Organization for the NATO AGS Air Segment **[MDS]** at point 1

or

through the contract **[number of the Contract]** with the Design Authority for the NATO AGS Air Segment **[MDS]** at point 1

guarantees to have access to all Technical Data Package of the Air Segment necessary to ensure that the functional characteristics of the Trainer are fully aligned with the Air Segment baseline and relevant approved updates.

The Company duties as SDR will last for _____ starting to the date of this recognition document. [IF APPLICABLE]

6. REFERENCE DOCUMENTS – AGREEMENT VALIDITY [if applicable]

The Company _____ as SDR guarantees that the functional characteristics of the Trainer are fully aligned with the Air Segment baseline and relevant approved updates.

The Company _____ is responsible for maintaining the contract with the Design Authority of the NATO AGS Air Segment at point 1, throughout the period of performance of the NATO AGS Core contract and any follow-on support contracts awarded to Company.....

Any and all changes and/or updates to the contract with the Design Authority of the NATO AGS Air Segment will be supplied to DAAA by the Company

7. ATTACHMENT LIST

THE DIRECTOR

**ENGINEERING CHANGE PROPOSAL (ECP)/ ENGINEERING CHANGE
PROPOSAL INTERIM (ECPI)**

PART I

1. Originator _____ 2. Title _____ 3. N° _____ Date _____
Rev _____ Date _____
Amdt _____ Date _____

4. Security classification: NS ☐ NC ☐ NR ☐ NU ☐

5. Air Segment _____ ☐ - MTC N° _____ 6. System _____
Pilot Trainer _____ ☐ - Certificate N° _____

7. Scope

to solve an airworthiness issue ☐ *to correct failure/defects* ☐
to confirm/modify ECPI ☐
Consequence of A.D. N° _____ ☐
Other _____ ☐
to solve a performance issue ☐ *to make improvements* ☐
to correct failure/defects ☐
Other _____ ☐

Description: _____

Signature

INSTRUCTIONS FOR COMPILING THE ECP/ECPI PART I FORM

Where necessary, to provide additional information, use extra sheets (with drawings, diagrams, etc.) referring to the fields on the form.

- Field 1: Enter the name, address and contact details of the Organization (Competent Body (CB) or NAGSF or SDR) originating the ECP/ECPI.
- Field 2: Enter the title of the ECP/ECPI.
- Field 3: Enter the alphanumeric identification and date of the base ECP/ECPI and the current revision and amendment relevant to ECP/ECPI Part I.
- The alphanumeric identification of the ECP/ECPI is given by the combination of the originator identifier (e.g.: CB, NAGSF or SDR) plus a progressive number assigned by the originator.
- Field 4: Enter the applicable ECP Part I security classification according to paragraph 3.6.5.
- Field 5: Select with an "x" the applicable boxes (Air Segment and/or Pilot Trainer) specifying the relevant type or model as reported in the Military Type Certificate/Military Full Flight Simulator Qualification Certificate.
- If the ECP/ECPI is applicable to the Air Segment, enter the number of the relevant Military Type Certificate. If the ECP/ECPI is applicable to the Pilot Trainer, enter the number of the relevant Military Full Flight Simulator Qualification Certificate.
- Field 6: Enter the part description (name) or type of the configuration item's upper level meaningful equipment/assembly (e.g., UAV, AVMC2, DUCE, Engine or specific equipment/assembly) which is concerned to the ECP/ECPI (if the system consists of the Air Segment/pilot trainer, write "see field 4").
- Field 7: Enter an "x" to specify if the ECP/ECPI is issued to request solution for an airworthiness or a performance issue. In case of an airworthiness issue, specify if the ECP/ECPI is necessary to correct failure/defects or to confirm/modify ECPI or as a consequence of A.D. (in this case the number of the relevant A.D., has to be recorded) or for other purposes. In case of a performance issue, specify if the ECP/ECPI is necessary to make improvements or to correct failure/defects or for other purposes. Enter also the brief description of the problem or necessity. In the description indicate the Part Number of the affected configuration item, if known.
- Field "Signature": Signature of the Originator formally appointed responsible (e.g., SDR Technical Director).

SAFETY ^(*)

ENGINEERING CHANGE PROPOSAL (ECP)

PART II^() - Page 1**

This ECP Part II defines the change subsequent to the authorized ECP Part I N° _____

Rev _____ Amdt _____ / subsequent to Occurrence Report N° _____ Dated _____

9. ECP Title

10. N° _____ Date _____

Rev. _____ Date _____

Amdt. _____ Date _____

11. Security classification: NS ☐ NC ☐ NR ☐ NU ☐

12. Area of Interest:

13. ECP Classification

14. Safety Code

Airworthiness ☐

Minor ☐

"S" ☐

Performance ☐

Major ☐

"N" ☐

15. ECP Priority: Immediate ☐

Urgent ☐

Routine ☐

16. Air Segment ☐ MTC N. _____

17. System

18. Other Involved Systems

Pilot Trainer ☐ Certificate N. _____

☐ YES ☐ NO

19. Maintenance Level: OLM ☐ ILM ☐ DLM ☐

20. Affected Specifications

21. Affected Drawing

22. Higher Level Assembly Name

23. Name of Part

24. P/N of Part

a) Current:

b) Modified:

25. Proposed Change Description

26. Proposed Change Purpose

27. To be implemented within

28. Implementation procedure

29. This change has to be introduced before/with/after the following modification

Application in production

30. From S/N or registration number:

Quantity involved:

Application in retrofit

31. From S/N or registration number:

Quantity involved:

Signature

32. Pag 2

YES ☐

NO ☐

Attachment "A": preliminary Service Bulletin N° _____

^(*) To be written only for ECP with Safety Code "S"

^(**) Not applicable to ECPI

ENGINEERING CHANGE PROPOSAL (ECP)

PART II^(**) - Page 2

Continued from Page 1 of ECP PART II N° _____ Rev _____ Amdt _____					
Impact on Configuration					
33. <u>Other Involved systems</u>			34. <u>Other Companies/Organizations concerned</u>		
35. <u>Parts involved</u>					
36. <u>Impact on specifications of the involved part</u>					
37. <u>Impact on system characteristics and specifications</u>					
38. <u>Impact on technical publications</u>					
39. <u>Alternative solutions</u>					
40. <u>Hazardous materials</u>					
<u>X</u>	41. ELEMENTS	Att	X	ELEMENTS	Att
a	IMPACT ON SPECIFIC CHARACTERISTICS:		b	IMPACT ON OPERATIONAL EMPLOYMENT	
	PERFORMANCE			SAFETY	
	WEIGHT/BALANCE/STABILITY (Aircrafts)			SURVIVAL	
	WEIGHT/ANGULAR MOMENT (Other equipment)			RELIABILITY	
	DRAWINGS			MAINTAINABILITY	
	NAME			LIMITED LIFE TIME ITEM (hours, cycles, calendar)	
	CERTIFICATION AND/OR FIT-FOR-INSTALLATION PLAN			OPERATING PROCEDURES	
				ELECTROMAGNETIC INTERFERENCE	

INSTRUCTIONS FOR COMPILING THE ECP PART II FORM

Where necessary, to provide additional information, use extra sheets (with drawings, diagrams, etc.) referring to the fields on the form.

It is mandatory to compile the first para of the ECP Part II filling in the relevant data (number, last revision/amendment) of the ECP Part I or of the Occurrence Report originating the ECP Part II.

PART II – Pag.1

- Field 9: Enter the ECP title. If it is originated by an ECP Part I, the ECP Part II title will be composed of the title utilized in ECP Part I and a brief meaningful description of the change which is being proposed.
- Field 10: Enter the number and date of the ECP Part II and the current revision and amendment. The number of the ECP Part II is the same of the relevant ECP Part I (if any), on the contrary the date, revision and amendment are specific of the Part II.
- Field 11: Select the applicable ECP Part II security classification according to paragraph 3.6.5.
- Field 12: Select if the proposal change interests airworthiness and/or performance aspects.
- Field 13: Select if the ECP classification is Minor or Major according to paragraph 3.6.1.
- Field 14: Select the applicable safety code according to paragraph 3.6.2.
- Field 15: Select the applicable ECP priority according to paragraph 3.6.3.
- Field 16: Select with an “x” the applicable boxes (Air Segment and/or Pilot Trainer) specifying the relevant type or model as reported in the Military Type Certificate/Military Full Flight Simulator Qualification Certificate.
- If the ECP is applicable to the Air Segment, enter the number of the relevant Military Type Certificate. If the ECP is applicable to the Pilot Trainer, enter the number of the relevant Military Full Flight Simulator Qualification Certificate.
- Field 17: Enter the part description (name) or type of the configuration item’s upper level meaningful equipment/assembly (e.g., UAV, AVMC2, DUCE, Engine or specific equipment/assembly) which is concerned to the ECP/ECPI (if the system consists of the Air Segment/pilot trainer, write “see field 16”).
- Field 18: Select the proper box to indicate whether modifications to other systems or parts are involved.
- Field 19: Select at which maintenance level is possible to apply the change in accordance with AER(EP).0-0-2/RQ-4D.
- Field 20: In case the ECP impacts technical specifications and/or acceptance test procedures, enter their references and their originators.
- Field 21: Enter the identifier of the highest level drawing affected. Other relevant drawings and drawings directly quoted by the specifications of the configuration item object of the ECP, must be listed in Part III – Field “45”.
- Field 22: Enter the part description (name) of the upper level assembly that the configuration item(s) is part of.

- Field 23: Enter the part description (name) of the configuration item(s) object of the ECP.
- Field 24: Enter the P/N of the configuration item(s) in Field“23”.
Enter the P/N referring to the item(s) in pre-modified state in part a), and the P/N referring to the item(s) in post-modified state in part b).
- Field 25: Enter a detailed description of the proposed change, to permit prompt identification and assessment. The description must include both the modified part or parts and the type of modification. If the field is too small, use extra sheets to introduce drawings in order to detail the proposed modification, reference specifications and all other technical documentation supporting the proposed modification.
- Field 26: Specify if the proposed change completely or partially solves the airworthiness/performance issue defined in the relevant ECP Part I. If changes in performance are foreseen, these must be indicated in quantitative terms.
- Field 27: Enter when the proposed change is required to be introduced. For “Routine Action” - Safety ECPs, the time limit for introduction must always be indicated (in operating hours, cycles and/or calendar time), after which any parts concerned that are still in pre-modified configuration must be suspended from service.
- Field 28: Enter a detailed description of the operations/procedure necessary to be performed to introduce the proposed change.
- Field 29: When changes previously formalised in SB must be introduced in a certain order, this order must be specified. Any incompatibility with other approved changes must be indicated.
- Field 30: Enter the S/N or the Military Registration Number of the system to which the change must be applied in production.
- Field 31: Enter the S/N or the Military Registration Number of the system to which the change must be applied in retrofit.
- Field 32: Select the applicable box; “yes” if Part II-Page 2 exists, on the contrary “no”.
- Field “Signature”: Signature of the Technical Director of the SDR following by the number of the relevant preliminary SB in attachment.

PART II – Pag.2 “Impact on Configuration”

This page has to be compiled only if the proposed change affects the system/part specifications.

- Field 33: Enter every other system affected by the ECP, indicating the relevant part description (name)/P/N and quantity.
- Field 34: Enter the other Companies/Organizations concerned to the ECP.
- Field 35: Enter all configuration items, training and support equipment affected by the ECP.
- Field 36: Enter the impact of the proposed change on the specifications and characteristics of the part affected by the ECP, in quantitative terms. Indicate any incompatibility with other approved changes, if any.
- Field 37: Enter the impact of the proposed change on the specifications and characteristics of the system.
- Field 38: Enter whether it is necessary to modify the technical publications

- Field 39: Enter the various possible solutions and the motives that led to the choice of the solution proposed through the ECP.
- Field 40: Enter the hazardous materials present in the change and any other information on instructions for handling hazardous materials and for material disposal.
- Field 41: In case of proposed change effect on the component's characteristics on use, etc., enter "x" in the dedicate column "Att" and it has to be recalled and reported in a dedicate attachment to ECP Part III.

Any changes to the text of the contract specification must also be attached

If not exhaustively described on Part II – Pag. 1, the impact on drawings must be described in specific attachments to Part III.

ATTENTION

Any attached drawings must be executed such as to permit good quality reproduction.

Under the item "certification and/or fit-for-installation plan", indicate "yes" if certification or fit-for-installation certification is required for the components involved. If yes, the corresponding attachment must indicate the certificate and/or fit-for-installation certificate number or the reference of the application sent to DAAA with the corresponding plan and schedules.

If certification and/or fit-for installation certification is not required for the modified C.I., the attachment to Part III must detail the corresponding reasons.

The item "safety" must indicate the safety assessment documentation and any other information related to management of hazardous materials, including instructions for safe disposal of any parts replaced or rejected.

ENGINEERING CHANGE PROPOSAL (ECP)

PART III^(**)

This ECP Part III collects all detailed data and relevant Means of Evidence related to the change proposed in ECP Part II N° _____ Rev _____ Amdt _____

42. Title

43. N° _____ Date _____
Rev _____ Date _____
Amdt _____ Date _____

44. Requirements affected by the change

Airworthiness basis requirements:

Performance requirements:

45. Summary description of Means of Evidence

Signature

Attachment "A": Service Bulletin N° _____

Means of evidences in attachment:

"B":

"C":

.....

^(**)Not applicable to ECPI

INSTRUCTIONS FOR COMPILING THE ECP PART III FORM

Where necessary, to provide additional information, use extra sheets (with drawings, diagrams, etc.) referring to the fields on the form.

It is mandatory to compile the first para of the ECP Part III, filling in the relevant data (number, last revision/amendment) of the ECP Part II originating the ECP Part III.

- Field 42: Enter the ECP title as defined in the relevant Part II.
- Field 43: Enter the number and date of the ECP Part III and the current revision and amendment relevant to ECP Part III. The number of the ECP Part III is the same of the relevant Part II, on the contrary the date, revision and amendment are specific of the Part III.
- Field 44: Enter the list of all performance and airworthiness basis requirements affected by the proposed change, even if their compliance status has not altered due to the proposed change.
- Field 45: Summarize the investigation activities performed to identify the proposed change necessary to solve the airworthiness/performance issue in the ECP Part I and the relevant results. Furthermore, summarize the activities (Means of Compliance) performed to define the compliance status of the modified Nato AGS Air Segment/Pilot Trainer configuration (configuration baseline plus previous approved changes plus the present proposed change) with its performance and airworthiness basis requirements. For each activity the relevant Mean of Evidences has to be mentioned and reported in attachment to the ECP Part III. This Field has to recall and report in attachment all the document listed in ECP Part II - Field "41".
- Field "Signature" Signature of the Technical Director of the SDR following by the number of the relevant SB in attachment and by the reference of the attached means of evidences.

INTERIM ENGINEERING CHANGE PROPOSAL (ECPI)

PART II

This ECPI Part II defines the change subsequent to the authorized ECP Part I N° _____
Rev _____ Amdt _____ / subsequent to Occurrence Report N° _____ Dated _____

9. Title _____ 10. N° _____ Date _____

11. Security classification: NS ☐ NC ☐ NR ☐ NU ☐

12. ECP Priority: Immediate ☐ Urgent ☐ Operative ☐

13. Air Segment ☐ MTC N. _____

Pilot Trainer ☐ Certificate N. _____

14. Maintenance Level: OLM ☐ ILM ☐ DLM ☐

15. To be implemented within

16. Application

17. Proposed Change Scope

18. Materials information

19. Implementation procedure

20. Hazardous materials

21. Additional information

22. Registration on logbooks

Signature

Attachment "A": preliminary Service Bulletin N° _____

INSTRUCTIONS FOR COMPILING THE ECPI PART II FORM

Where necessary, to provide sufficiently detailed information, use extra sheets (with sketches, diagrams, etc.) referring to the boxes on the form.

It is mandatory to compile the first para of the ECPI Part II filling in the relevant data (number, last revision/amendment) of the ECPI Part I or of the Occurrence Report originating the ECPI Part II.

- Field 9: Enter the ECPI title. If it is originated by an ECPI Part I, the ECPI Part II title will be composed of the title utilized in ECP Part I and a brief meaningful description of the change which is being proposed.
- Field 10: Enter the number and date of the ECPI Part II. The number of the ECPI Part II is the same of the relevant ECP Part I (if any), on the contrary the date is specific of the Part II.
- Field 11: Select the applicable ECP Part II security classification according to paragraph 3.6.5.
- Field 12: Select the applicable ECP priority according to paragraph 3.6.4.
- Field 13: Select with an "x" the applicable boxes (Air Segment and/or Pilot Trainer) specifying the relevant type or model as reported in the Military Type Certificate/Military Full Flight Simulator Qualification Certificate.
- If the ECPI is applicable to the Air Segment, enter the number of the relevant Military Type Certificate. If the ECPI is applicable to the Pilot Trainer, enter the number of the relevant Military Full Flight Simulator Qualification Certificate.
- Field 14: Select at which maintenance level is possible to apply the change in accordance with AER(EP).0-0-2/RQ-4D.
- Field 15: Enter when the proposed change is required to be introduced.
- Field 16: Enter the P/N and S/N of the configuration item object of the ECPI.
- Field 17: Enter the Proposed Change Scope providing a detailed description of the proposed change, to permit prompt identification and assessment. The description must include both the modified part or parts and the type of modification. If the field is too small, use extra sheets to introduce drawings in order to detail the proposed modification, reference specifications and all other technical documentation supporting the proposed modification.
- Field 18: Enter information about materials if necessary.
- Field 19: Enter a detailed description of the operations/procedures necessary to be performed to introduce the proposed change.
- Field 20: Indicate the hazardous materials present in the change and any other information on hazardous materials management also about the disposal of the replaced parts.
- Field 21: Enter additional information if any.
- Field 22: Indicate the logbooks where the change has to be registered.
- Field "Signature": Signature of the Technical Director of the SDR following by the number of the relevant preliminary SB in attachment.

INTERIM ENGINEERING CHANGE PROPOSAL (ECPI)

PART III

This ECPI Part III collects all detailed data related to the change proposed in ECPI Part II
N° _____ Dated _____

23. Title

24. N° _____ Date _____

Signature

Attachment "A": Service Bulletin N° _____

INSTRUCTIONS FOR COMPILING THE ECPI PART III FORM

Where necessary, to provide additional information, use extra sheets (with drawings, diagrams, etc.) referring to the fields on the form.

It is mandatory to compile the first para of the ECPI Part III, filling in the relevant data (number, last revision/amendment) of the ECPI Part II originating the ECPI Part III.

Field 23: Enter the ECPI title as defined in the relevant Part II.

Field 24: Enter the number and date of the ECPI Part III and the current revision and amendment relevant to ECPI Part III. The number of the ECPI Part III is the same of the relevant Part II, on the contrary the date is specific of the Part III.

Field "Signature": Signature of the Technical Director of the SDR following by the number of the relevant SB in attachment.

1. PRIORITY _____

[SAFETY]^(*)

[NATO AGS RQ-4D AIR SEGMENT or PILOT TRAINER]^()**
SERVICE BULLETIN^(*)**

2. Title

3. N° _____ Date _____

Rev _____ Date _____

Amdt _____ Date _____

WARNING

This SB is originated by [ECP or INTERIM ECP] N° _____ Rev _____ Amdt _____ dated _____ and issued by the appointed SDR _____ for the system covered by this SB.

[This SB deletes and supersedes the SB N° _____ Rev _____ Amdt _____ dated _____]

This SB requires additional works to the configuration items to which the above SB has already been applied".
Or:

The SB requires no additional works to the configuration items to which the above SB has already been applied".]

Commanders shall assure that all personnel authorized to operate the equipment covered by this SB are informed about the content of this SB (wording to include only if the change introduces modification to flight envelope, flight procedures, flight instrumentation or cockpit layout)

This SB consists of _____ pages

4. Security classification: NS ☐ NC ☐ NR ☐ NU ☐

5. Maintenance Level: OLM ☐ ILM ☐ DLM ☐

6. To be implemented within

7. Application

8. Scope

9. Materials information

9.1 Parts necessary to perform the change

9.2 Spare parts involved

9.3 Identification data change

9.4 Necessary tools to perform the change

10. Implementation procedure

11. Special Instructions for Hazardous Material and/or Material Disposal

11.1 Special instructions for hazardous materials

11.2 Instructions for material disposal

12. Additional information

12.1 Need to conduct tests on modified part

12.2 Need for rig or flight testing on the system involved

12.3 weight & Balance variation

12.4 reference technical Publications

13. Registration on logbooks

Signature

(*)To be written only for SB originated by ECP with Safety Code "S"

(**) Enter "AIR SEGMENT" if the SB is applicable to the Air Segment or "PILOT TRAINER" if the SB is applicable to Pilot Trainer.

(***) For SBs to be used to define the "List of monitoring configuration items", "Type 1 AGE" and "List of alternative materials" (paragraph 2.2), not applicable fields will be marked with N/A.

INSTRUCTIONS FOR COMPILING THE SERVICE BULLETIN FORM

It is mandatory to fill in the "WARNING" section with the relevant data (number, last revision/amendment) of the ECP or ECPI originating the SB (with reference to the latest Part of the ECP/ECPI). Insert the SDR name and address and the reference to SB superseded by this SB (if any). Specify also the total pages number of the SB.

- Field 1: Enter the applicable SB priority according to paragraphs 4.5 and 3.6.3/3.6.4.
- Field 2: Enter the SB title as a summary description of the SB and the system to which it is applicable.
- Field 3: Enter the progressive number and date of the SB and the relevant current rev. and amdt..
- Field 4: Select the applicable SB security classification according to paragraphs 4.5 and 3.6.5.
- Field 5: Select at which maintenance level is possible to apply the change in accordance with AER(EP).0-0-2/RQ-4D.
- Field 6: Specify by when (in terms of operating hours and/or cycles and/or calendar time) the SB is required to be introduced. Beyond this limit, any configuration items that are still in pre-modified configuration must be suspended from service.
- Field 7: Enter the configuration items or equipment to be modified. If the SB is not applicable to all S/Ns specify the Military Registration Number or S/Ns to which the SB is applicable. If the SB is applicable also during production, this field shall specify the S/N since the change has to be implemented. Specify if the introduction of this SB has to be performed before/after/together with another change.
- Field 8: Enter the root cause of the SB and the relevant solution.
- Field 9: Enter the parts necessary for the change, replaced parts and spare parts. In particular:
- Enter the Parts necessary to perform the change (name, P/N and quantity)
 - Enter Spare parts involved
 - Enter Identification data change (name, P/N pre end post-change end quantity)
 - Enter special tools necessary to perform the change. In case the change implies the modification of available tools, this circumstance has to be reported even if another specific SB is issued to modify the tool.
- Field 10: Enter the implementation procedure/operations necessary to introduce the SB change.
- Field 11: Enter all the necessary instructions for the management of the risks related to the use of hazardous material and/or material disposal. In particular enter instructions for handling hazardous materials and for material disposal.
- Field 12: Enter the additional information that are not covered by a dedicate field. In particular specify if it is necessary a modified part test, a modified system rig/flight test, weight & Balance variation and the technical Publications reference.
- Field 13: Indicate the logbooks where the change has to be registered.
- Field "Signature" Signature of the Technical Director of the SDR.

NATO AGS RQ-4D AIR SEGMENT AIRWORTHINESS DIRECTIVE



MINISTRY OF DEFENCE

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

This AD consists of ____ pages

1. Security classification: NS ☐ NC ☐ NR ☐ NU ☐

TO: NAGSF _____
SDR _____

INFO: Competent Body _____

2. AD N° _____ Edition _____ Rev _____

3. Title:

4. Source:

5. Identification of the no airworthy condition:

6. Application

7. Action(s) Required:

8. To be implemented within/constraints for the required actions:

9. Date to Entry into force:

Signature

INSTRUCTIONS FOR COMPILING THE AIRWORTHINESS DIRECTIVE FORM

It is mandatory to compile the first para of the AD specifying the relevant total pages number and the addresses of SDR,NAGSF and Competent Body.

- Field 1: Enter the applicable AD security classification as defined in paragraph 3.6.5 for the ECP.
- Field 2: Enter the progressive number and date of the AD and relevant current revision.
- Field 3: Enter the AD title as a summary description of the AD dispositions and the system to which it is applicable.
- Field 4: Enter the data (number, last revision/amendment) of the document (e.g.: ECP, ECPI, Occurrence Report) originating the AD, if any. For ECP/ECPI referring to the latest relevant Part.
- Field 5: Detail the no airworthy condition originating the AD.
- Field 6: Enter the configuration item or equipment to be modified (P/N and S/N). If the AD is not applicable to all S/Ns, specify the Military Registration Number or S/Ns to which the AD is applicable. Specify if the introduction of this AD has to be performed before/after/together with another change.
- Field 7: Enter the implementation procedure/operations necessary to introduce the AD change.
- Field 8: Indicate when the AD is required to be introduced. The time limit for introduction must always be indicated (in operating hours, cycles and/or calendar time), after which any parts concerned that are still in pre-modified configuration must be suspended from service.
- Field 9: Enter the AD data to entry in to force. The entry data is the signature data unless otherwise specified by DAAA.
- Field "Signature" Signature of DAAA Director.

