

# COMMENT RESPONSE DOCUMENT (CRD) TO NOTICE OF PROPOSED AMENDMENT (NPA) 2007-18

for amending the Executive Director Decision No. 2003/19/RM of 28 November 2003

"Appendix 1 Aircraft type ratings for Part-66 Aircraft maintenance licence"

#### **Explanatory Note**

#### I. General

1. The purpose of the Notice of Proposed Amendment (NPA) 2007-18, dated 7 December 2007 was to propose an amendment to Appendix 1 to Annex IV of Decision No 2003/19/RM of the Executive Director of the European Aviation Safety Agency of 28 November 2003 on acceptable means of compliance and guidance material to Commission Regulation (EC) No 2042/2003 of 20 November 2003 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks (hereinafter referred to as "Part-66 AMC Appendix 1").

Please note that following to the discussions with the Agency's consultative bodies at the end of last year, this task was renumbered as 66.023 (previously 66.003) II. Consultation

2. The draft Executive Director Decision amending Decision N° 2003/19/RM was published on the web site (<a href="http://www.easa.europa.eu">http://www.easa.europa.eu</a>) on 7 December 2007.

By the closing date of 18 January 2008, the European Aviation Safety Agency (the Agency) had received 57 comments from 23 National Aviation Authorities, professional organisations and private companies.

#### III. Publication of the CRD

- 3. All comments received have been acknowledged and incorporated into this Comment Response Document (CRD) with the responses of the Agency.
- 4. In responding to comments, a standard terminology has been applied to attest the Agency's acceptance of the comment. This terminology is as follows:
  - **Accepted** The comment is agreed by the Agency and any proposed amendment is wholly transferred to the revised text.
  - **Partially Accepted** Either the comment is only agreed in part by the Agency, or the comment is agreed by the Agency but any proposed amendment is partially transferred to the revised text.
  - **Noted** The comment is acknowledged by the Agency but no change to the existing text is considered necessary.
  - **Not Accepted** The comment or proposed amendment is not shared by the Agency.

The resulting text highlights the changes as compared to the current rule.

- 5. The Agency's Decision will be issued together with the publication of this CRD. Any reactions to this CRD will be taken into account in the next review.
- 6. Such reactions should be received by the Agency not later than 11 September 2008 and should be submitted using the Comment-Response Tool at <a href="http://hub.easa.europa.eu/crt">http://hub.easa.europa.eu/crt</a>.

#### IV. CRD table of comments, responses and resulting text

#### (General Comments)

#### comment

34

comment by: Austro Control

We strongly recommend re-integrating all deleted "Annex II" aircraft into Appendix 1 "Aircraft type ratings for Part-66 Aircraft Maintenance Licence.

#### Justification:

1) The current list of Annex II aircraft has the following status: (The following statements are copied from the first page of the published list on EASA homepage):

EASA has produced this list of Annex II aircraft strictly for information purposes only. It aims to describe the exclusions from the lists of EASA transferred aircraft, EU and non-EU. It is based on information received from several authors internal and external to the Agency. Whilst every care has been taken in preparing the contents of the list to avoid errors the Agency makes no warranty as to the accuracy, completeness or currency of the content. The information contained in the list should not be construed as legal advice.

- 2) As mentioned above the list is today neither mature nor exhaustive enough to be used as basis for the deletion of aircraft from Appendix 1.
- 3) An aircraft defined as Annex II aircraft for one country is not necessarily defined as Annex II aircraft in another country. That means for the same aircraft in one country a Part-66 aircraft maintenance licence is necessary while in another country the national system still applies. (The applicability of Commission Regulation (EC) No 2042/2003 is affected)
- 4) Part-66 Aircraft Maintenance Licences are already issued with type ratings now excluded from the list what is the consequence? Does it mean that in such a case a national licence/equivalent has to be issued (whatever si applicable in national regulations)?
- 5) Standardisation of type ratings is lost. Also in the case as described in item 3, standardised type ratings are necessary

Summary: Although the consequences of defining an aircraft as Annex II or not are clear (applicability of Commission Regulation (EC) No 2042/2003) the type rating list should furthermore include all type ratings - including Annex II aircraft. Another reason for that recommendation is possible confusion and misunderstanding etc. which should be avoided - see item 3, 4

#### response

#### Partially accepted

The documents submitted by the Agency, i.e. the list of type ratings, cannot consider aircraft which are not under its remit. These aircraft in Annex II to Basic Regulation 216/2008 are under the direct responsibility of Member States for operation, airworthiness and licensing.

However all aircraft would not be excluded because a certain number of historic and military aircraft may be operated in commercial air transportation under the implementing rules of the newly published Basic regulation 216/2008.

See explanations provided in the Resulting text of Section 13. Helicopters at the end of this CRD which shows why part of the Annex II aircraft remains in this list of type ratings.

The interpretation of Annex II should not allow interpretation as mentioned in as paragraph 3. This leads to non-standardisation.

A competent authority may endorse under its own legislation a type rating for national approval for an aircraft which is not in the list of type ratings in Appendix I to AMC to Part-66, i.e. Aircraft excluded by Annex II to Basic Regulation, this rating may be added on the Part-66 licence into the Annex to EASA Form 26 (National privileges outside the scope of Part-66 in accordance with national legislation valid in the Member State).

comment

37 comment by: UK CAA

## **Commentor:** UK CAA

#### **Comment:**

An agreement must be made to finalise a current type rating list, with a realistic time frame for adoption and a procedure put in place to ensure minimal changes in the future.

#### Justification:

The current plethora of changes inflicts a large cost in both financial and manhours terms in the maintenance of licensing systems and the management of Part-147 approvals. This cost is further spread to industry in that Part-147 approved training courses need frequent review and updating to meet with the changes to the type rating list.

response

Noted

The amendments of the list of type ratings are made in accordance with an approved procedure which considers all changes from industry. The Agency is aware of the consequence of modifying the list of type ratings, but the changes are made when there is a change resulting from TC holders designation modification and aircraft type variants evolution.

The Agency should by next year issue type ratings making reference to types in the TCDS.

comment

43 comment by: ECOGAS

ECOGAS is grateful for the opportunity to respond to 2007-18, and is in agreement with all of the proposed amendments to the Aircraft Type listing.

response

Noted

TITLE PAGE p. 1

comment

11

comment by: CAA-NL

Reference should be made to other decisions that changed decision 2003/19/RM as well. (e.g. ED Decision 2007/009/R 25/04/2007).

Or even better refer, to <u>latest decision only</u>, in which case new decisisoins publish the new issue of the updated list (in fact this is done already).

response

Accepted

When a new decision amends the Annex IV (AMC to Part-66) of the basic

decision 2003/19/RM, a reference to the previous amending decision would be mentioned.

#### comment

42

comment by: CAA-NL

Attachment #1

It is important to have a well developed process to determine type ratings and to establiosh the relations (cross-references) with cerrtification and operational issues.

#### response

#### Accepted

The agency has developed in the NPA 2007-07 (part related to Group Ratings), a process for defining type ratings and group ratings in a more reliable way.

A Rulemaking task is under process 21.039 which is a **Drafting Sub-group** for **CS-Maintenance certifying staff type rating** to define Certifying staff training for a type rating.

In answer to the letter attached, the Agency is aware of the burden imposed by each change in the list, and therefore restricts the modifications to the minimum. See answer 37 to the comment from the UKCAA. Further changes are the result of mistyping or necessity.

By 2009, the Agency should publish this list making reference to types in TCDS.

### A. Explanatory Note - IV. Content of the draft decision

p. 4-7

#### comment

5

comment by: Petkov

Antonov-12 aircraft is equipped not fnly with Ivchenko Ai-20K engines, but also with AI-20M

#### response

#### Accepted

See explanations provided in the Resulting text of Section 13.Helicopters at the end of this CRD which shows why part of the Annex II aircraft remains in this list of type ratings.

Engine will be replaced with AI-20 model.

#### comment

17

comment by: Association of Dutch Aviation Technicians

Attachment #2

By the enforcement of "DECISION No 2006/06/R OF THE EXECUTIVE DIRECTOR OF THE EUROPEAN AVIATION SAFETY AGENCY of 31-07-2006" the Dutch Civil Aviation Authority has been started in the beginning of this year with the issuing of Aircraft Maintenance Licenses AML with the separate type rating Boeing-900.

Therefore, a large amount of our member certifying staff is now fulfilling their certification privileges according the new issued AML and associated 145-certification authorization.

On their AML's the types Boeing 737 -600-700 -800 and Boeing 737 -900 are mentioned separately.

If these NPA will be implemented, it will mean that all these AML'S and 145-certification authorization must be renewed.

IN IV page 4 is stated: further in previous mistake the BOEING 737 -900 is regrouped with all new generation Boeing 737 a/c.

The NVLT believes that this statement is incorrect: there is a considerable difference between the Boeing 737 -600-700 -800 and Boeing 737 -900.

I added an KLM ENGINEERING BULLETIN nr. 1995:

This Bulleting will show the differences, due the fact of these differences the NVLT believes that the Boeing 737-900 should be mentioned on the AML separately and may not regrouped with 737-600/700/800 in this NPA.

response

Not accepted

The Agency opinion is that the changes between 737-6/7/800 and 737-900 are technical design differences on systems and dimensions not preventing the issuance of a single type rating. Similar design differences exist between the Boeing 737-600 and -700 and -800 or Airbus 319/320/321.

comment

11 \*

comment by: CAA-NL

Reference should be made to other decisions that changed decision 2003/19/RM as well. (e.g. ED Decision 2007/009/R 25/04/2007).

Or even better refer, to <u>latest decision only</u>, in which case new decisisoins publish the new issue of the updated list (in fact this is done already).

response

Accepted

This is a repetition of comment 11 in the section TITLE PAGE. Refer to answer already made under comment 11.

comment

12

comment by: CAA-NL

AMC states that typeratings **will** be used; this is more than just **"propose"** a list

response

Not accepted

The correct wording of **AMC 66.B.100 to 115 is** "Aircraft type endorsement should use the standard codes contained in Appendix I." and the Introduction to this Decision shows:

"The following aircraft type ratings <u>should</u> be used to ensure a common standard throughout the Member States."

comment

13

comment by: CAA-NL

Annex II aircraft should be left in the list because there is no reason not to issue Part-66 licences for Annex II aircraft, provided the criteria are met. In the Netherlands we have Part-66 AML's for several Annex II aircraft as well as 145-approvals e.g. DC 3 and 4.

#### response

#### Partially accepted

See explanations provided in the Resulting text of Section 13.Helicopters at the end of this CRD which shows why part of the Annex II aircraft remains in this list of type ratings.

#### comment

14

comment by: CAA-NL

The criteria for (re)grouping aircraft types to one type-rating are not clear and there seems to be little consistency in the application of it.

EASA should indicate the consequences;

Should holders receive an amended AML?

Should holders apply for a change if needed?

Should courses be amended?

What is implementation scheme, from the date of entry into force?

Changing back and forwards should be prevented at all cost.

#### response

#### Noted

In the answer to comment 42, the Agency stated that:

The Agency is aware of the burden imposed by each change in the list, and therefore restrict the modifications to the minimum. Further changes are the result of change in the TC holder designation i.e. McD aircraft are under Boeing TC, Gates Learjet aircraft are under Bombardier TC, Raytheon Beech aircraft are under Hawker Beechcraft TC....

#### comment

15

comment by: CAA-NL

PZL M28 had already been added by dec 2007/009/R

response

Noted

#### comment

16

comment by: CAA-NL

Falcon 7X should include Dassault as TC holder to be consistent with other "Dassault Falcons".

response

Accepted

#### comment

17

comment by: CAA-NL

Twin Commander 690 was in group 2 rather than group 1.

#### response

#### Partially accepted

The Twin Commander 690 is already in Category 2, this is correct. The line related to this aircraft in the NPA page 5 should read: "is already in category 2" instead of "category 1".

comment

comment by: CAA-NL

NPA uses categories for the groups in Appendix I, this is confusing.

response

Noted

18

The wording "category" is used instead of "group" to avoid confusion with "manufacturer or full group ratings" in 66.A.45.

comment

19

comment by: CAA-NL

Piaggio Aero P166 (Lycoming) is also in group 2.

response

Accepted

comment

20

comment by: CAA-NL

Apex (Robin) DR 400RP (Thielert) was in group 8 rather than 6.

response

Partially accepted

The tables are correct, but the wording on page 5 of the NPA can be corrected as suggested.

comment

21

comment by: CAA-NL

Koliber is not only combined with SOCATA MS892 and -894 but added altogether.

response

Noted

We do not see what is the request since the KOLIBER aircraft has been added, and MS 892/893 cannot be grouped with the model 894, the engines being from different manufacturers.

comment | 22

comment by: CAA-NL

**MD** Helicopters is the correct name of the TC holder, rather than **MD**.

response Accepted

MD Helicopters 600N (RR Corp 250)

MD Helicopters 500N / NH500D / AMD500N

(RR Corp 250)

comment

23

comment by: CAA-NL

The impact of these changes is under estimated. To give an impression what **NAA** have to do:

check differences with national typeratings used

- determine consequences for limitations (ca 1000)
- determine consequences for conversion reports (ca 20)
- amend computer systems to facilitate changes

- verify that changes are correctly carried out
- determine consequences for 145/147 approvals
- amend computer systems for 145/147 approvals
- change licences if necessary
- change 145/147 approvals if necessary

#### Furthermore **organisations** have do:

- change their procedures
- change their authorisations
- change courses
- change certificates of recognition
- change references

The task is not sufficiently facilitated by EASA.

The decisions are not suitable for electronic implementation. Therefore it is necessary to have unique identifications added and to produce a digital conversion list, based on the identifications to replace old by new.

#### response

#### Noted

Refer to answer to comment 14.

The Agency is aware of the burden on NAA and stakeholders, and will minimize the changes as much as possible.

#### comment

38

comment by: UK CAA

#### **Commentor: UK CAA**

### Paragraph: Section 10 (Page 6)

#### **Comment:**

With the removal of aircraft certified under JAR-22 being removed from the list, a replacement list /policy is urgently required to permit certification of aircraft (Issue of ARC) under Part-66 required to be in place by September 2008.

#### Justification:

Required to meet the requirements of EC Regulation 2042/2003 Annex I Part-M.

#### response

### Not accepted

The comment cannot be accepted because the removal of Diamond H36/HK36 from this list is only the consequence of paragraph 66.A.100 and currently the Agency do not intend to submit a list of CS-22 certified aircraft. However we understand the point of the comment, as this Appendix I may be used for wording an aircraft type on an EASA form 3, or a form 15a.

The other sailplanes and motor-powered sailplanes are not either listed in this Appendix I.

TCDS may be used preferably.

#### comment

40

comment by: DCAA (Danish Civil Aviation Administration)

Aircraft is already in category 2 (Not Cat. 1)

#### response

#### Noted

Your comment did not mention which aircraft you were referring. You may get

in contact directly with Mr Knecht at the EASA for fixing this issue directly with him, frederic.knecht@easa.europa.eu.

#### A. Explanatory Note - V. Regulatory Impact Assessment

p. 7

comment

6

comment by: Petkov

MIL Mi-2 and MIL Mi-8 removed from Appendix 1 as these aircraft helicopters are classified as Annex II helicopters

response

Not accepted

An "aircraft" include aeroplanes, rotorcraft, sailplanes, motor-powered sailplanes balloons and airships.

You may refer to the definitions in Article 2 of EC Regulation 2042/2003.

comment 39

comment by: UK CAA

comment by: Walter Gessky

**Commentor: UK CAA** 

Paragraph: Section 13 (Page 7 & 17)

**Comment:** 

Hiller UH-12 regarded as Annex II type.

Justification:

The Hiller UH-12 is included in the EC Regulation 1592/2002 Annex II listing on p40 dated 12 September 2007.

**Proposed Text:** 

Delete (Rogerson) Hiller UH-12 (Lycoming) from Section 13.

response Accepted

Hiller UH-12 (Lycoming)

#### **B. DRAFT DECISION**

p. 8

comment

36

We do not support to delete "Annex II" aircraft from Appendix 1, the list of "Aircraft type ratings for Part-66 Aircraft Maintenance Licence.

Justification:

- 1) EASA has produced this list of Annex II aircraft strictly for information purposes only. It aims to describe the exclusions from the lists of EASA transferred aircraft, EU and non-EU. It is based on information received from several authors internal and external to the Agency. Whilst every care has been taken in preparing the contents of the list to avoid errors the Agency makes no warranty as to the accuracy, completeness or currency of the content. The information contained in the list should not be construed as legal advice.
- 2) Part-66 Aircraft Maintenance Licences are already issued with type ratings now deleted from the list - what is the consequence? Does it mean that in such a case a national licence/equivalent has to be issued (whatever is applicable in national regulations)?

3) In addition it should be note, that with the Amendment to EC 1592/2002, Article 4/2

Personnel involved in the operations of aircraft referred to in paragraph 1(b), (c) or (d) shall comply with this Regulation.

- 3. Operations of aircraft referred to in paragraph 1(b), (c) or (d) shall comply with this Regulation.
- 4. Paragraph 1 shall not apply to aircraft referred to in Annex II.
- 5. Paragraphs 2 and 3 shall not apply to aircraft referred to in Annex II, with the exception of aircraft referred to in points (a)(ii), (d) and (h) thereof when used for commercial air transportation.

Therefore Annex II aircraft, when used for commercial operation, has to comply with the Basic Regulation and the Implementing Rules. Commission Regulation 2042/2003 has to be applied, maintenance has to be done in a 145 Organisation, maintenance release certificates has to be singed by AML holders.

With the deletion from Appendix 1 we would implement problems to execute Article 4/2 lit 3. Operations of aircraft referred to in paragraph 1(b), (c) or (d) shall comply with this Regulation.

response

Noted

The documents submitted by the Agency, i.e. the list of type ratings, cannot consider aircraft which are not under its remit. These aircraft in Annex II to Basic Regulation 216/2008 are under the direct responsibility of Member States for operation, airworthiness and licensing.

However all aircraft would not be excluded because a certain number of historic and military aircraft may be operated in commercial air transportation under the implementing rules of the newly published Basic regulation 216/2008. See the explanation in the Resulting text of Section 13.Helicopters at the end of this CRD.

A competent authority may endorse under its own legislation a type rating for national approval for an aircraft which is not in the list of type ratings in Appendix I to AMC to Part-66, i.e. Aircraft excluded by Annex II to Basic Regulation, this rating may be added on the Part-66 licence into the Annex to EASA Form 26 (National privileges outside the scope of Part-66 in accordance with national legislation valid in the Member State).

## APPENDIX I - AIRCRAFT TYPE RATINGS FOR PART-66 AIRCRAFT MAINTENANCE LICENCE

p. 9

comment

52 comment by: Martinair QSA

"Proposal: Aircraft identifiers in Appendix I start with the name of the original aircraft designer. E.g. McD MD-11, where McD stands for McDonnell Douglas, the original designer of the MD-11. We propose to replace the name of the original designer by the name of the current T.C. holder. For the MD-11, that is Boeing, not McD.

Reason: This list is adopted by some NAAs for other continuing airworthiness purposes, such as listing of aircraft types on the CAMO Approval Certificate. As the current T.C. holder is an important partner for CAMOs in continuing airworthiness, it is important that the current T.C. holder is listed on all formal NAA and EASA documents related to continuing

airworthiness. This list, in itself, is such a document and should therefore properly refer to T.C. holder names. But as this list is used as a reference for other formal documents, it becomes even more important to use the proper references."

#### response

#### Accepted

The aircraft type ratings where Boeing is TC holder have been modified to read Boeing instead of McD. See resulting text in the Decision.

# Appendix I - 1. Large aircraft (LA). Aeroplanes with a maximum take-off mass of more than 5700 kg, requiring type training and individual type rating

p. 10-12

#### comment

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comment by: Aero Maintenance & Trading

JAR66 variant on fresh maintenance knowledge & knowhow must be covered for old aircraft generation with nbr aircraft flying less than 500 units in EASA area on a same aircraft type assemble by manufacturer, system philosophy, power pkant, access, ... . This is the reason why we suggest to regroup on one variant:

Line: B707/720 PWJT3D with B727 JT8D & B737-100/200 JT8D

Base: B727 JT8D with B737-100/200 JT8D Line: F28/F100/F70 with Tay & Spey

response

#### Not accepted

The grouping of aircraft is made according to rules which do not allow to combine different types as suggested.

In addition, the implementing rule does not provide for a group of type ratings for line maintenance and another group for base maintenance. A type rating is endorsed on a Part-66 licence together for line and base maintenance.

#### comment

3

comment by: arzu ertekin

Who can release the tasks which have been performed on Airbus A300 C4/F4 type of the aircraft if we do not add Airbus A300 C4/F4 into Appendix I? Regards.

#### response

#### Accepted

The table for Airbus B2/B4 types is modified to refer to basic models of A300.

Note: These aircraft A300-200C4/F4 are not to be confused with **A300F4**-605R which are A300-600 types.

#### comment

ß

comment by: Federal Office of Civil Aviation FOCA

#### Proposed Text:

Embraer ERJ 170/175 (GE CF34-08) Embraer ERJ 190/195 (GE CF34-10)

#### Justification:

The GE CF 34 Engine variants on the Embraer 170/175 compared to the Embraer 190/195 are completely different. Therefore it is absolutely necessary

to keep these two Aircraft variants separate.

#### response

#### Not accepted

The engine types design CF 34-08 and -010 shows technical differences, but the engine model is the same.

There are similar differences in numerous other aircraft type variants, and the type ratings are designed by the combination of airframe designation/engine designation.

The 145 approved organisations are responsible to check that competency of maintenance staff and certifying staff is sufficient, therefore the difference course should be required, as applicable.

#### comment

9 comment by: DASSAULT AVIATION Airworthiness Assurance Office

In order to harmonize with other aircraft equipped with Pratt & Whitney Canada engines, it is sufficient to mention "PWC xxx" instead of "PWC PWxxx" which is a redundant designation.

Likewise, it is not necessary to mention the amendment " $\mathbf{A}$ " of the Falcon 7X PWC 307 engine.

In order to harmonize aircraft designations within the Dassault Falcon family, we ask to add "Dassault" before "Falcon 7X".

So, the requested changes are the followings:

- replace "Dassault Falcon 2000EX (PWC **PW**308)" by "Dassault Falcon 2000EX (PWC 308)";
- replace "Dassault Falcon 2000EX EASy/DX (PWC **PW**308)" by "Dassault Falcon 2000EX EASy/DX (PWC 308)";
- replace "Falcon 7X (PWC PW307A)" by "Dassault Falcon 7X (PWC 307)".

#### response

#### Partially accepted

The engine designation is normally made of (Manufacturer & Engine type), and these engines designated in TCDS are:

Type: 2 PW308C Turbofan engines (PRATT & WHITNEY Canada)

Therefore the engine designation PWC PW308 is correct. See next comment 24 from CAA-NL.

This helps to make consistent with all Pratt And Whitney engines in other aircraft types and to make the difference between P&W from USA and P&W Canada.

The designation **Dassault** Falcon 7X (PWC 307) has been corrected.

#### comment

24

comment by: CAA-NL

Some PW engines are now changed to include PW in the type designation (PWC  ${\bf PW}$ 123).

Suggest to do this consistently:

- ATR 42/72 (PWC PW120 Series)
- BAE Systems ATP/Jetstream 61 (PWC PW120)
- Bombardier DHC-8-100/200/300 (PWC PW120)
- Bombardier DHC-8-400 (PWC PW150)
- Bombardier (Canadair) CL-415 (PWC PW123)

- Cessna 550/560 (PWC PW530/535)
- Cessna 680 (PWC PW306)
- Dornier 328-100 (PWC PW119)
- Dornier 328-300 (PWC PW306)
- Embraer EMB-120 (PWC PW118)
- Fokker 50/60 (PWC PW125/127)
- (Gates) Learjet 60 (PWC PW305)
- Gulfstream (IAI) 200/Galaxy (PWC PW306)
- Ilvushin IL-114PC (PWC PW127)
- Raytheon (BAe) 125 / Hawker 1000 (PWC PW305)
- Agusta A109 Series (PWC PW206/207)
- Bell 427 (PWC PW207D)
- Eurocopter EC 135 (PWC PW206)
- MD Helicopters MD900 (PWC PW206/207)

#### response

#### Accepted

PWC engine designations have been corrected.

#### comment

#### 25

comment by: CAA-NL

Delete F in Fokker F50 and Fokker F70 Add Fokker "60" and add "PW"

- Fokker 50/60 (PWC PW125/127)
- Fokker 70/100 (RRD Tay)

#### response | Accepted

#### comment

26

comment by: CAA-NL

Add B to Flacon 50 to clarify that '50EX' is not covered by '50'.

Dassault Falcon 50**B** (Honeywell TFE731)

#### response

#### Not accepted

The Falcon 50B will not be issued as a type rating because the variant 50B is not in the TCDS.

#### comment

28

comment by: CAA-NL

Make clear that Dassault Falcon 900EX (Honeywell TFE731) does not cover Dassault Falcon 900EX EASy/DX (Honeywell TFE731) and Dassault Falcon 2000EX (PWC PW308) covers Dassault Falcon 2000EX EASy/DX (PWC PW308). Normally not shown details would be included; ATR42 includes ATR42-500.

Disinction could be made by adding "Basic model" or any other designator.

- Dassault Falcon 900EX **Basic model** (Honeywell TFE731)
- Dassault Falcon 900EX EASy/DX (Honeywell TFE731)
- Dassault Falcon 2000EX **Basic model** (PWC PW308)
- Dassault Falcon 2000EX EASy/DX (PWC PW308)

#### response

Not accepted

Type ratings will not include the wording Basic model, because the Agency intends in 2009 to issue a list of type ratings making reference to the types in the TCDS, which would solve the problem submitted in the comment.

#### comment

29

comment by: Malta Department of Civil Aviation

Raytheon should be substituted by Hawker, this applies to the other types.

#### response

Accepted

Raytheon is replaced by Hawker Beechcraft (HB) on Beech models where HB has the TC responsibility.

#### comment

30

comment by: Malta Department of Civil Aviation

Raytheon should be substituted by 'Hawker'. This applies to the other types

#### response

Accepted

See response to comment 29 above

#### comment

31

comment by: Malta Department of Civil Aviation

Learjet 60XR with Proline Glass Cockpit, should it be included as well?

#### response

Noted

No, the pro-Line installation is an STC, and this sort of STC doesn't modify the type rating. Only STCs which modify the type of the aircraft by designation of another type would be introduced as a new type rating i.e. replacement of engines.

#### comment

32

comment by: CAA-NL

Bombardier/canadair aircraft have many different designations:

- Challenger 300/605/800/850/870/890 etc
- Regional jet; CRJ-
- 100/100ER/100LR/200/200ER/200LR/440/700/700ER/705/900/1000
- CL-600/601/604/605/800
- Global 5000/ Global Express XRS

The aircraft designations should be clear and easy to verify for a particular aircraft. Using variant 601 and 604 but not 605 will lead to confusion. Propose to make an extensive cross reference list to different designations used. Please combine, for Part-66 AML, as much types as possible (with regard to maintenance).

response | Not accepted

The definition of type ratings doesn't use the commercial designations as Challenger, Regional Jet, Global... which may be not precise enough, but refer to the TCDS designation, except when it cannot be avoided.

This is the case of CL-600-2A12 which has 2 different definitions with

the variants 601-3A/3R and variant 604.

The definition of the Bombardier aircraft family is the result of agreement with TC holder.

#### comment

41

comment by: DCAA (Danish Civil Aviation Administration)

Attachment #3

Gates Learjet L40/L45 (expand with L40), see attached letter from Bombardier.

response

Not accepted

Commercial designation of aircrafts are not considered as type ratings, the Learjet 40 is a Learjet 45 type.

#### comment

48

comment by: ATR Training Centre

Attachments #4 #5 #6

Dear Sirs,

Object: In the type rating list , Row ATR 42/72 (PWC 120 Series)

ATR manufacturer Requests to change from ATR 42/72 (PWC 120 Series) to:

ATR 42-200/300 series (PWC 120) ATR 72-100/200 series (PWC 120) ATR 42-400/500/72-212A (PWC 120)

As discussed with Frederich Knecht, ATR would like to modify the actual "Aircraft type rating list for Part-66 Aircraft maintenance licence" through the NPA 2007-18.

ATR sent to EASA, via Frederic Knecht, different documents and explanations as support of this request.

The decision N° 2007/009/R dated 25 April 2007 amended the decision N° 2005/07/R. The ATR type rating list defined with decision N° 2007/009/R is not in accordance with ATR manufacturer point of view.

With the decision N° 2007/009/R, there is only one type rating for 12 models of ATR (ref TCDS N° A.084) and we would like to define 3 type ratings taking into account the communality and differences between each model, significant time for training we have to add in case of only one type rating training and the associated time and money for new type educational support development.

ATR propose the 3 following type ratings:

#### ATR 42-200/300 series (PWC 120)

ATR 72-100/200 series (PWC 120)

ATR 42-400/500/72-212A (PWC 120)

As explained in my previous letters to EASA, it is today the best compromise for training and safety.

You will find here attached three files containing ATR remarks.

- CRD Reaction form
- letter from ATR N° DS/OT-3713-07
- letter from ATR N° DS/OT-0170-08.

M. Frederic Knecht has followed the full process and can give you all additional sent e-mail.

Thank you and Happy New Year.

Jean ERNST ATR Training Centre Head of Master Reference Training Centre

#### response

#### Accepted

ATR type ratings modified as per request, See the resulting text.

Please note that in accordance with remark 24 from CAA-NL, engine type ratings are aligned with complete engine designation (PW120 instead of 120)

#### comment

#### 49

comment by: Cessna Aircraft Company

Page 10- Listing Cessna 550/560 together on one line is being interpreted as a mecahnic needing training on both to work on either-- this is troublesome.

#### response

#### Noted

Having aircraft grouped on one line suppose that the difference training course is minor (less than 3 days i.e.) or that there is no difference training. It is the responsibility of approved maintenance organisations to provide training on a new type, as applicable, before issuing certification authorisation.

#### comment

54

comment by: UK CAA

We have an approved training organisation that delivers Raytheon (BAe) 125 training. The current listing includes, under one heading the Hawker 800/800XP/850XP, however the organisation also deliver the 700 which is on the same TCDS no A3EU. Can the Raytheon (BAe) 125/Hawker 800/800...... be amended to read Raytheon (BAe) 125/Hawker 700/800/800XP/850XP (Honeywell TFE 731). Incidentally the TCDS holder is Hawker Beechcraft revision 37 dated 24 August 2007.

#### response

#### Accepted

See response to following comment from UKCAA.

#### comment

55

comment by: UK CAA

Aircraft type

Raytheon (BAe) 125/Hawker 800/800XP/850XP (Honeywell TFE731). change to read Hawker Beechcraft 125/series 700/800/800XP/850XP/900XP (Honeywell TFE731)

Raytheon (BAe) 125 (RR Viper) change to read Hawker Beechcraft 125 (RR Viper)

Raytheon (BAe) 125 /Hawker 1000 (PWC 305) change to read Hawker Beechcraft 125 series 1000 (PWC PW305)

Also would recommend transfer of the Lockheed 18 (Wright Cyclone) from Section 1 to Annex II list.

#### response | Partially accepted

The aircraft type ratings have been modified according to the request, but adding:

- the designation (Hawker Beechcraft) BAe 125 instead of Hawker Beechcraft 125,
- by adding model 750
- and with separation of models 700 and 800 from the group Raytheon (BAe) 125/Hawker 700/800/800XP/850XP/900XP.

#### comment 57

comment by: DASSAULT AVIATION Airworthiness Assurance Office

#### Attachment #7

I am sorry for the delay in responding to your comments. There has been a great deal of discussion on this matter.

We have tried to clarify the Type rating distinction for Part 66 Aircraft Maintenance Licenses, and have attempted to standardize

these listings using type certificates to complement the model type rating designation to the aircraft type certificate.

Our responses to your comments below are attached to this email.

If you have additional comments or concerns please contact me.

#### Regards, **Edward Fleming**

#### response | Noted

Thank you for your letter attempting to standardize the Dassault type ratings, we noticed that we had some difficulties with these type ratings and we first sent a mail to Philippe Pasquier Dassault Aviation in order to try to solve these issues.

Further to our mail we received your letter, suggesting some type ratings and we thank you for these efforts.

However your proposal leads to some difficulties:

1) we had in the Comment Response Document CRD published in 2006 further to the Notice of Propose Amendment (NPA) 03/2006 a clear position from Dassault, and based on that proposal, we published the next lists of type ratings that you have probably read in our Decisions 2006/06 and 2007/009 which amend the basic Decision 2003/19/RM (called AMC to Part-66).

Further to this, the last NPA 2007-18 proposed the introduction of the Falcon 2000DX and the Falcon 7X, until we received a request from a NAA asking the introduction of Falcon 50 B , Dassault Falcon 900EX "basic model" and Falcon 2000 EX "basic model".

2) Regarding the Falcon 50B, the EASA TCDS doesn't show this variant, but instead shows a Mystere Falcon 50, and a Falcon 50EX. We will then consider these two types as type ratings, because type ratings are based on TCDS definitions.

Similarly, the Falcon 900B is not shown in the TCDS, but instead there is a Falcon 900, of which the 900B is a commercial definition, when modified by some Dassault modifications. Therefore, to cover all Dassault 900 variants, we prefer keeping the "Dassault Falcon 900 (Honeywell TFE731)".

Therefore we intend to issue a new decision with a definition of Dassault type ratings as follows:

Dassault Falcon 10/100 (Honeywell TFE731)
Dassault Falcon 20 (GE CF700)
Dassault Falcon 20-5 (Honeywell TFE731)
Dassault Falcon 50 (Honeywell TFE731)
Dassault Falcon 50EX (Honeywell TFE731)
Dassault Falcon 200 (Honeywell ATF 3-6)
Dassault Falcon 900 <del>900B</del> (Honeywell
TFE731)
Dassault Falcon 900C (Honeywell TFE731)
Dassault Falcon 900EX (Honeywell TFE731)
Dassault Falcon 900EX EASy/DX (Honeywell
TFE731)
Dassault Falcon 2000 (CFE 738)
Dassault Falcon 2000EX (PWC PW308)
Dassault Falcon 2000EX EASy/DX (PWC
PW308)
Dassault Falcon 7X (PWC PW307A)

The addition of PW in the engine type is to make it consistent with our standard of definition for engines and other aircraft PWC definitions.

We would be pleased if this table meets your agreement.

We intend in the future to modify the form of the list and make references to types in the TCDS. Therefore we will have a clear picture of the variants in TCDS and our Part-66 type ratings. Further to this, we will not need using the proposal from this NAA by the adding "basic model".

 3) We are also confused by the proposals you made in your letter to cover some variants, where you introduced dash numbers to the engine type and avionics definitions.

The standards of Type ratings in our table are only made with the combination of <airframe TC holder, airframe type; engine TC holder, engine type>, i.e. Dassault Falcon 50 (Honeywell TFE 731).

Therefore the proposals you made will not fit in our standards, and we will not be able to retain your proposals, however we are ready to consider any proposal you will make in the future, and will be pleased to continue working with you or Mr Pasquier for the next variants of Dassault aircraft.

comment

59 comment by: Gestair

We are in process to incorporate a Hawker 900 XP into the Part 145 and AOC approvals; so we'd like you to inform us about:

1º Type rating for Hawker 900XP in Part 66 Licenses ¿is the same than:

Raytheon (BAe) 125/Hawker 800/800XP/850XP (Honeywell TFE731)?

2º Approved limitation on Part 145 approval for Rytheon 800XP ¿could cover also Hawker 900XP?

According with Type Certificate, Maintenance Manual, Training Courses, there are not significant differences; but we would like to clarify these points to fast mentioned process.

#### response

#### Accepted

The TC holder designation has been changed to Hawker Beechcraft. The Hawker Beechcraft 900XP has been added in the list of Hawker Beechcraft type ratings. Refer to the resulting Decision.

#### resulting text

Fokker <del>F</del>50/60 (PWC PW125/127) Fokker <del>F</del>70/100 (RRD Tay)

and new text for ATR type ratings:

ATR 42/72 (PWC 120 Series)
ATR 42-200/300 series (PWC PW120)
ATR 72-100/200 series (PWC PW120)
ATR 42-400/500/72-212A (PWC PW120)

new text for Dassault aircraft type ratings:

Dassault Falcon 10/100 (Honeywell TFE731) Dassault Falcon 20 (GE CF700) Dassault Falcon 20-5 (Honeywell TFE731) Dassault Falcon 50 (Honeywell TFE731) Dassault Falcon 50EX (Honeywell TFE731) Dassault Falcon 200 (Honeywell ATF 3-6) Dassault Falcon 900 900B (Honeywell TFE731) Dassault Falcon 900C (Honeywell TFE731) Dassault Falcon 900EX (Honeywell TFE731) Dassault Falcon 900EX EASy/DX (Honeywell TFE731) Dassault Falcon 2000 (CFE 738) Dassault Falcon 2000EX (PWC PW308) Dassault Falcon 2000EX EASy/DX (PWC PW308) Dassault Falcon 7X (PWC PW307A)

and new text for BAe 125 aircraft type ratings:

(Hawker Beechcraft) BAe 125/ Series 700/800 (Honeywell TFE731)
(Hawker Beechcraft) BAe 125/
Series 750/800XP/850XP/900XP (Honeywell TFE731)
(Hawker Beechcraft) BAe 125 (RR Viper)
(Hawker Beechcraft) BAe 125 Series 1000 (PWC PW305)

## Appendix I - 2. Aeroplanes of 5700 kg and below, requiring type training and individual type rating (A-tr)

p. 12

#### comment

33

comment by: CAA CZ

Aircraft type PZL M28 (PWC PT6) is included in both categories 1 and 2. However there is no remark that this type was added to category 2 in general provisions of this NPA. In addition, with regard to the maximum take-off mass exceeding 5700 kg we recommend including of this type only to category 1.

#### response

Accepted

PZL M28 type rating remains in category 1.

#### comment

50

comment by: Cessna Aircraft Company

Page 12- Cessna 406 doesn't exist-- suggest removing from list, (see Reims 406 which does exist.)

#### response

Accepted

Decision modified accordingly.

#### comment

53

comment by: Nayak Aircraft Services

Twin Commander

(Gulfstream / Rockwell / Aerocommander) 680/681/690/695 Series (Honeywell TPE 331)

This Aircraft Type are fitted with different Engines under different Typeversions

680/681 is a Twin Commander with Piston Engine (Continental) 690/695 is a Twin Commander with TPE 331 Engine

#### response

Not accepted

The aircraft referred in the comment are in different categories;

- 1) The aircraft with <u>turboprop engines</u> in the category 2 of this list are:
  - Aero Commander 680T Turbo Commander which is an Aero Commander 680FL/P with Garrett TPE331-43 turboprop engines.
  - Aero Commander 680V Turbo Commander: which is a 680T with increased take off weight and slightly improved cargo capacity.
  - Aero Commander 680W Turbo II Commander: which is a 680V with pointed nose, squared off fin, one panoramic and two small cabin windows and weather radar.
  - Rockwell 681 Hawk Commander: 680W with improved pressurisation, air conditioning system and nose.
- 2) and the aircraft with <u>piston engines</u> listed in category 5 are:
  - Aero Commander 500, 680 (Lycoming engines) and 685 (Continental engines), which for the type 680, exclude the turboprop variants.

TC holder is Twin Commander Aircraft Corporation USA.

comment 58

comment by: Hawker Beechcraft Corporation

The following list provides our latest proposals for updating. I hope that they can be incorporated in the new decision in May. For explanation, these proposals have been grouped the same way they are grouped for training. For example the 200CT (the King Air with a cargo door and tip tanks) is not taught as a separate course, it is included as part of the 200/B200 training course. Another example is grouping the same model line even though the designated marketing name may vary, such as the Beechjet and 400XP.

- 1) Current Raytheon (Beech) 200CT (PWC PT6) Current - Raytheon (Beech) 200 Series (PWC PT6) Proposed - Hawker Beechcraft 200/B200 Series (PWC PT6)
- 2) Current Raytheon (Beech) 300 (PWC PT6) Current - Raytheon (Beech) 350 (PWC PT6) Proposed - Hawker Beechcraft 300/B300 Series (PWC PT6)
- 3) Current Raytheon (Beech) 400 / Mitsubishi MU-300 (PWC JT15) Proposed - Hawker Beechcraft 400XP/Beechjet 400/400A/Mitsubishi MU-300 (PWC JT15)
- Current Raytheon (Beech) 1900 (PWC PT6) Proposed - Hawker Beechcraft 1900 (PWC PT6)
- 5) Current Raytheon (Beech) 90 Series (PWC PT6) Proposed - Hawker Beechcraft 90 Series (PWC PT6)
- 6) Current Raytheon 390 (Williams FJ44) Proposed - Hawker Beechcraft 390 (Williams FJ44)

The rest of the courses are for piston aircraft that do not require type rating paperwork, but we propose changing all the names from Raytheon to Hawker Beechcraft for correctness.

#### response Partially accepted

The corrections you suggested in your mail had already been considered for the issuance of the next decision, and I attach here an excerpt of the table:

Category 1- Large aircraft (Aircraft above 5,7T MTOM):

(Hawker Beechcraft) Beech 300 Series (PWC PT6) Hawker Beechcraft 400 / Mitsubishi MU-300 (PWC JT15) (Hawker Beechcraft) Beech 1900 (PWC PT6)

#### Category 2- Non-large Aircraft:

(Hawker Beechcraft) Beech 90 Series (PWC (Hawker Beechcraft) Beech 200 Series (PWC (Hawker Beechcraft) Beech 99/100 Series (PWC PT6)

(Hawker Beechcraft) Beech B100 (Honeywell TPE331)
(Hawker Beechcraft) Beech 390 (Williams FJ44)

You can identify some differences from your proposal:

- we do not refer to Beech 200/B200 as you propose, because the type rating identified in the TCDS are all B200, B300 ... and all our Beech aircraft type ratings have always been defined as 200 series, 300 series... This does not mean that there is no difference course between the variants, this is the responsibility of maintenance organisations to provide adequate training;
- we do not use commercial designation (this is the case of the model 350), but also we do not mention all the types, therefore the Hawker Beechcraft 400XP and 400/400A are grouped in a single model 400.

resulting text

Cessna 406 (PWC PT6)

# Appendix I - 4. Aeroplanes single turbine engine (ASTE) of 5700 kg and below, eligible for type examinations and group ratings

p. 12-13

comment

3.5

comment by: Austro Control

The following type rating should be added to this group: Cessna 210 (RR Corp 250)

response

Accepted

Type rating added

resulting text

Cessna 210 (RR Corp 250)

Appendix I - 6. Aeroplane single piston engine – metal structure (ASPE-MS), eligible for type examinations and group ratings p. 13-15

comment

51

comment by: Cessna Aircraft Company

Cessna 120 should be moved to Annex II.

response

Accepted

Decision modified accordingly

comment

56

comment by: UK CAA

We have received an application for licence conversion from someone holding a Beagle B121 (also called a Beagle Pup 150) with Lycoming engine. This aircraft is listed in the "EU Aircraft" with a SAS reference of SAS.A.082 and has a TCDS

under DeHavilland Supprot no A22EU rev 4 dated March 2008.

The name is listed as Beagle Pup series 1, Beagle Pup series 2 and Beagle Pup series 3.

May I propose that we place this type rating on a Part-66 licence as "Beagle Pup Series 1/2/3 (Lycoming)"

We may have a few instances like this in the coming months and it may be better if we apply common sense to add the type rating to a licence in the first instance then amend in the long term as necessary.

response

Noted

Beagle Pup added in category 6. Ref. resulting text.

#### resulting text

#### Cessna 120 (Continental)

De Havilland Support Beagle B.121 series 1 (Continental)

De Havilland Support Beagle B.121 series 2/3 (Lycoming)

## Appendix I - 8. Aeroplane single piston engine – wooden structure (ASPE-WS), eligible for type examinations and group ratings

p. 15

comment

10

comment by: Diamond Maintenance GmbH.

Diamond DV22 (Rotax) should be listed in Appendix I - 10. Aeroplane single piston engine - composite structure (ASPE-CS)

response

Accepted

Aircraft type transferred to category 10.

resulting text

Diamond DV22 (Rotax)

#### Appendix I - 11.Multi-engine helicopters (MEH), requiring type training and individual type rating

p. 16-17

comment

46

comment by: Eurocopter

No comment from Eurocopter Patrick Paul - Regulation Manager

(On behalf of Catherine Gathier, SSCC Member)

response | Noted

#### Appendix I - 12.Helicopters - Single turbine engine (HSTE), eligible for type examinations and group ratings

p. 17

comment 1

comment by: AgustaWestland

With reference to the Agusta A 119 (PWC PT6) rating in table 12; Helicopter Single Turbine Engine eligible for type examination and group rating.

We would like to recall your attention on the new rating definition that we propose to the competent NAA, ENAC and that ENAC sent to the kind attention of the Agency in October, considering the new variant of the A 119.

We would like to have the list updated with new nomenclature to avoid problems such as missinterpretation of certificates and other documents on the A 119. The following is our proposed modification already passed to ENAC:

Agusta A 119 (PWC PT6) current rating

Agusta A 119/AW 119 MKII (PWC PT6) new rating.

response Accepted

New type Agusta/ AW119MkII added in category 12.

comment

47

comment by: Eurocopter

No comment from Eurocopter Patrick Paul - Regulation manager

(On behalf of Catherine Gathier, SSCC Member)

response

Noted

resulting text

Agusta A119/ Agusta AW119MkII (PWC PT6)

## Appendix I - 13. Helicopters - Single piston engines (HSPE), eligible for type examinations and group rating

p. 17

comment

44

comment by: UK CAA

**Commentor: UK CAA** 

Paragraph: Section 13 (Page 7 &17)

**Comment:** 

Hiller UH-12 regarded as Annex II type.

Justification:

The Hiller UH-12 is included in the EC Regulation 1592/2002 Annex II listing on p40 dated 12 September 2007.

**Proposed Text:** 

Delete (Rogerson) Hiller UH-12 (Lycoming) from Section 13.

response

Accepted

The helicopter is removed from the list.

Hiller UH-12 (Lycoming)

#### resulting text

EXPLANATORY NOTE TO THE COMMENT RESPONSE DOCUMENT to NPA 2007-18.

The Agency NPA 2007-18 List of type ratings published on December 2007, intended initially to remove from the list of Part-66 type ratings those related to aircraft listed in the Appendix II to Basic Regulation 1592/2002 because they were historic or military aircraft.

However the Basic Regulation recently published by the European Commission intends to determine the requirements for the issue of an AOC in commercial operations. Implementing Rules would further be developed

A certain number of historic and military aircraft initially classified as Annex II, if they were used in commercial air transport would need to meet the implementing rules, which refer to continuing airworthiness requirements.

Therefore, the Agency has reviewed the list of types that we were planning to withdraw because they were listed in Annex II and made assumptions on those that could potentially be used in commercial air transportation. Such aircrafts are listed below and will remain in the list of type ratings.

- France
- o Sud Aviation SE313, SE3130 Alouette II
- o Eurocopter SE 313/SA 318
- o Eurocopter SE 313 B
- Italv:
- o AB47 all variant
- - CIS countries:
- o An-2
- o AN-12
- o IL Series
- o MI-8
- USA:
- o DC-3
- o DC-4
- o DC-6
- o DC-7
- o Bell 47
- o Consolidated PBY-5A
- o Viking Air DHC-2 and DHC-3
- o Beech 23, 24, 35 series,
- o Cessna 140, 170, 195;

Therefore, these aircraft will remain in the Appendix I to AMC to Part-66.

All other aircraft listed by the NPA 2007/18, intended to be removed because they are now classified as Annex II (as historic or military aircraft), will be removed when they have not been listed here above.

#### **Appendix A - Attachments**

General comment on determination of type rating.pdf
Attachment #1 to comment #42

EB-1995.pdf
Attachment #2 to comment #7

L40-L45 Execujet letter.pdf
Attachment #3 to comment #41

reaction form.pdf
Attachment #4 to comment #48

EASA Type Rating Letter1.PDF
Attachment #5 to comment #48

EASA Type Rating Letter2.PDF
Attachment #6 to comment #48

Dassault Flemming letter.pdf
Attachment #7 to comment #57