

EUFAR
Expert Working Group – Certification & Operations

Toulouse 27-28 September 2005

1 Description of the workshop

Location : Centre International de Conférence de Météo-France, Toulouse, France

Duration : 27-28 September 2005

Subject: to clarify what are the common issues of the EUFAR operators on Certification & Operations and to build up a common strategy to address these issues.

Participants:

Steve BALL (FAAM)

Jean-Louis BRENGUIER (Météo-France)

Javier DIAZ DE AGUILAR (INTA)

Joel GIGER (METAIR)

Volkert HARBERS (DLR)

Stefan KOMMALLEIN (DLR)

Carsten LINDERMANN (FUB)

Peter PURCELL (NERC)

Didier SCHELL (ENVISCOPE)

Jouko VIRONMAKI (GTK)

Aurélien BOURDON (SAFIRE)

Eric MATHIEU (SAFIRE)

Marc PONTAUD (SAFIRE) (Leader of the Expert Working Group – Certification and Operations)

2 Development of the workshop

Tuesday 27th September 2005

Morning

- (i) general presentation of the EWG prepared by Phil Brown (Marc Pontaud);
- (ii) presentation of EASA regulation (Marc Pontaud and Aurélien Bourdon). Open discussion on EASA regulation;
- (iii) presentation by each operator of his internal/national regulations with regard to certification and operations.

Afternoon

Open discussion about "Certification & Operations".

The solutions implemented by the EUFAR operators to deal with Certification regulations are all different with diverse benefits and drawbacks. This is not consistent with a European approach for airborne research though, there is no pressure at the moment from modifying and improving these solutions. The future evolution of European regulations however is unclear and it is timely to create a EUFAR working group on Certification to anticipate this evolution.

About operations, it is recognised that a better cooperation between European operators will certainly improve and facilitate their activities.

Wednesday 28th September 2005

Morning

The discussion was focused on common issues to address and in which way. Six items were discussed and actions were decided.

3 Decisions

3.1 ITEM 1 : EASA

The operators are concerned with a possible transfer of responsibilities from national authorities to the EASA (European Aviation Safety Agency) and the resulting evolution of the regulations:

- what could be the interactions between EASA and national authorities, and their respective responsibilities?
- is there a need/possibility to request a European status for scientific aircraft ?
- do we have any design and certification problems to clarify with EASA ?
- do we need to clarify with EASA, our needs about operation like clearance, drop-sonde
- does EASA prepares a specific item about airwork in the future JAR-OPS 2 ?

The following actions were decided:

The EWG-CO leader will organise a meeting with EASA before the end of 2005. The EUFAR delegation will be constituted by the EWG-CO leader, a representative of CS/JAR/FAR25 aircraft and a representative of the FAR23 aircraft.

The mandate of this group for the EASA meeting will be :

- to present the EUFAR fleet
- to present our needs related to airwork, and specifically the scientific constraints
- to ask about the future of the interactions between EASA and national authorities
- to ask about the place of airwork in the future JAR-OPS 2
- to ask what would be convenient to facilitate transfer of certification of an instrument from an aircraft to another one.

The workshop participants are aware of the differences between Operation and Certification issues, and the need to contact different members of EASA. The priority will be on Operations while Certification aspects can be addressed later.

Action : EASA meeting
Actor : EWG-CO leader (Marc Pontaud)
Dead line : December 2005

3.2 ITEM 2: EUFAR POD

Under the Joint Research Activity of EUFAR, a new common POD will be developed for scientific instrumentation on aerosol. It is proposed to designate a member of the EWG-CO to join the JRA group and help at the preparation of the certification documentation for the EUFAR POD.

Stefan Kommallein from DLR is designated for this mission.

Action : EWG-CO representative for JRA
Actor : Stefan Kommallein
Dead line : October 2005

3.3 ITEM 3 : INSTRUMENT CERTIFICATION DOCUMENT

During the workshop, the need to establish guidelines for aircraft users (scientists) on integration and certification of new instruments has been discussed. In fact, each operator has already such guidelines that are specific to each aircraft.

So it has been decided to publish a more general document, including an introduction to airborne instrument design and recommendations on general rules of integration and certification. This document will include links to the operator's specific guide-lines.

Aurélien Bourdon from SAFIRE will propose a first draft to the EWG-CO members for validation.

Action : Propose a general document about instrument integration
Actor : Aurélien Bourdon
Dead line : december 2005

3.4 ITEM 4: TRANSNATIONAL ASSISTANCE FOR AIRWORK

Some operators have encountered difficulties while operating their aircraft in another European state. So, the EWG-CO decides the creation of a common EUFAR operation

directory. This document will list in each country, the partner which could be contacted to facilitate local operation negotiations.

This document will precise for each country, the local authority, the name(s) of local EUFAR contact, email(s), phone(s) and fax. Aurélien Bourdon from SAFIRE will prepare the document.

Action : EUFAR operation directory
Actor : Aurélien Bourdon
Dead line : december 2005

It has been decided that a cooperation statement will be proposed about operation (and data access – see item 6).

Action : cooperation statement
Actor : Peter Purcell
Dead line : december 2005

3.5 ITEM 5: CERTIFICATION COSTS AND FLEXIBILITY

Each operator has a specific organisation (aircraft owner or not, direct operator or not, design agreement or not, ...) but each succeeded to build up a functional organisation.

So there is no urgent need to develop a now common structure. The EUFAR operators are however aware of possible evolutions at EASA future and consider that the EWG-CO monitor carefully any possible change.

3.6 ITEM 6: ACCESS TO INSTRUMENT DATA FOR CERTIFICATION

The (free) access for any EUFAR operator to documentation already created for instrument certification (e.g. stress analysis) has been discussed. Depending on the operator and instrument, these data may belong to a private company and free access may not be possible.

To clarify what could be a common rule, it is asked to each partner to write a short paragraph about his policy to deliver (free) access to technical data about their instruments already certified.

Action : operator policy to deliver access to technical data about instruments
Actor : Aurélien Bourdon
Dead line : december 2005

It has been decided that a cooperation statement will be proposed about (operation - see item 4 and) data access.

Action : cooperation statement
Actor : Peter Purcell
Dead line : december 2005

4 Closure of the workshop

The workshop has been closed at 12 o'clock the 28 of September 2005.

5 Recommendations summary

5.1 AIRCRAFT OPERATORS

To organize a meeting with EASA to clarify the future operation rules in Europe

To establish a general document for aircraft users (scientists) : "introduction to airborne instrument design and recommendations on general rules of integration and certification".

To clarify what could be a common rule, to deliver access (free or not) to technical data about their instruments already certified.

5.2 USERS OF INFRASTRUCTURE

It is proposed that a representative of the EWG-CO (Stefan Kommalein) will be associated to the Joint Research Activity of EUFAR to help at the preparation of the certification documentation for the EUFAR POD.

5.3 FUNDING AGENCIES

The EUFAR aircraft operators consider that here is no urgent need to establish a European research aircraft category. The EUFAR operators are however aware of possible evolutions at EASA and consider that the EWG-CO monitor carefully any possible change.

6 Summary of actions

Action : EASA meeting
Actor : EWG-CO leader (Marc Pontaud)
Dead line : December 2005

Action : EWG-CO representative for JRA
Actor : Stefan Kommalein
Dead line : October 2005

Action : Propose a general document about instrument integration
Actor : Aurélien Bourdon
Dead line : december 2005

Action : EUFAR operation directory
Actor : Aurélien Bourdon
Dead line : december 2005

Action : cooperation statement
Actor : Peter Purcell
Dead line : december 2005

Action : operator policy to deliver access to technical data about instruments
Actor : Aurélien Bourdon
Dead line : december 2005