



EUROPEAN AVIATION SAFETY AGENCY  
AGENCE EUROPÉENNE DE LA SÉCURITÉ AÉRIENNE  
EUROPÄISCHE AGENTUR FÜR FLUGSICHERHEIT

# From JOEB to OSD

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Your safety is our mission.





# FROM JOEB to OSD

## **Need for OSD:**

- The JOEB process was created by the JAA OPS DIV in 2000;
- It was created to :
  - respond to several industry (manufacturers and operators) developing needs;
  - Jointly respond to the need to develop an aircraft operational evaluation process taking into account US and Canada already existing practices.
- The JOEB process was decided to be non binding.



# Background information – 1990 to 1995

- For Airbus the challenge has been the following:

- ▶ A340 : first flight - 25 Oct.1991, TC - Dec.1992

- ▶ A330 : first flight - 02 Nov.1992, TC - Oct.1993

- ▶ A321 : first flight - 11 Mar.1993, TC - Dec.1993

- ▶ A319 : first flight Sep.1995, TC - Mar.1996





# Background information –1990 to 1995

- Objective was to demonstrate commonality for Crew Qualification issues:
  - Full Type Rating course
  - CCQ courses between A320, A330 and A340.
- Airbus requested to JAA the setting up of JOEB process in the early 1990's.
- Not having a JOEB process has imposed to demonstrate the Type Rating programme at National level, thus having to duplicate unnecessarily training programme validation.
- The MMEL activity was in place since the early 1990's, but assessment of Type Rating, Flight Crew and Cabin Crew training was not covered, as relevant JARs were not yet in place.
  - JAR-OPS 1 was only issued in 1995
  - JAR-FCL 1 was only issued in 1997







# 1992 – With EU NAA's

- **Airbus FIRST CCQ: A320 to A340**
- **Crew: French DGAC – German LBA**
- **Airbus FIRST A340 full Course**
- **Crew: French DGAC- Austrian CAA**







1994 – With FAA





# FROM JOEB to OSD

## **Need for OSD (continued):**

- In FCL to address in a more efficient manner the type rating training requirements in particular for aircraft presenting common features (familiarisation, difference training, CCQ concept);
- To provide better guidance for those JAR OPS operators using provisions of JAR OPS 980 (operation of more than one variant or type);
- To facilitate operational introduction of new complex aircraft;
- To avoid unnecessary duplication of operational certification work on the industry by harmonising the Joint Evaluation processes with FAA and Transport Canada.



# FROM JOEB to OSD

## **Milestones:**

- ▶ The first JOEB was run in 2000 covering the relevant FCL/OPS issues to provide operational evaluation for the Bombardier CRJ 700;
- ▶ A JOEB report providing ODR tables and operational recommendations was issued;
- ▶ To the closure of the JAA, 38 JOEBs to the benefit of 14 manufacturers (large aircraft, business jets, helicopters) have been performed.
- ▶ In parallel at the JAA/FAA Chicago conference in 2001, JAA, FAA and Transport Canada agreed to work on harmonised operational evaluation procedures in the first place in the area of FCL and OPS, and as far as practicable in the MMEL area.





*The first Joint Operational Evaluation*

*JAA / FAA / TCCA*

*Launched in January 2001 for the A340-600,*

*Followed by the one of the A340-500 .*



# A340-500/600 JOEB



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***“ A single pilot type rating assigned to two or more derivative aircraft which have the Same Type Certificate”***



# ***.Same Type Rating : Evaluation process***



***Fully integrated process***



# March 2002

•JAA, FAA and TCCA have completed  
the first phase of a joint evaluation  
of the A340-600







# March 2002



.JAA, FAA and TCCA recommend that

Same Type Rating (STR) is applied to the A340-600 as to the A340-200/300





# A340-200/300 and A340-500/600 STR



Transport  
Canada

Transports  
Canada



The Joint Aviation Authorities (JAA), Federal Aviation Administration (FAA), and Transport Canada Civil Aviation (TCCA) completed the second phase of a joint evaluation of the Airbus A340-500 & A340-600 aircraft on October 1, 2002

Differences between A340-200/300 and A340-600 were assessed during first phase completed early March 2002, and the three Authorities recommend that the same pilot type rating (single license endorsement) is applied to the A340-600 as to the A340-200/300.

In this second phase, system differences were reviewed and Normal, Abnormal, and Emergency procedures compared for the A340-600 and A340-500. Sample Operator Difference Requirements were examined. Both the A340-500 and A340-600 aircraft were flown to assess any potential differences in handling qualities.

The Authorities determined that only "B" level differences (candidate aircraft are functionally *similar*) existed between the A340-600 and the A340-500. Ground courseware on CBT/Video/Transparencies is adequate to cover differences when transitioning from the A340-600 to the A340-500.

As a consequence the three Authorities recommend that the same pilot type rating (single license endorsement) is applied to the A340-500, as to the A340-600 and the A340-200/300.

Jean-Claude Albert  
Joint Operations Evaluation Board Chairman

Ron Tidy  
TCCA Operational Evaluation Chairman

James Kling  
FAA Flight Standardization Board Chairman

Hoofddorp, 1<sup>st</sup> October, 2002

**The three authorities recommend that the same pilot type rating (single licence endorsement) is applied to the A340-500 as to the A340-500 and the A340-200/300.**

**1 October 2002**



# A318 and A319/A320/A321 STR



Transport  
Canada

Transports  
Canada



The Joint Aviation Authorities (JAA), Federal Aviation Administration (FAA), and Transport Canada Civil Aviation (TCCA) have completed the joint evaluation of the Airbus A318 aircraft on April 24<sup>th</sup>, 2003.

System differences were reviewed and Normal, Abnormal, and Emergency procedures compared for the A320 and A318. Airbus proposed Operator Difference Requirements tables were examined and proposed Computer Based Training (CBT) reviewed. Both the A321 and A318 aircraft were flown to assess any potential differences in handling qualities.

The Authorities determined the maximum level of differences that existed between the A318 and A321 were level B. Ground courseware on CBT/Video/Transparencies is adequate to cover differences when transitioning from the A319/A320/A321 to the A318.

As a consequence the three Authorities recommend that the same pilot type rating (single license endorsement) is applied to the A318, as to the A319, A320 and A321.

Stuart Gruber  
Joint Operations Evaluation Board Chairman

Ron Tidy  
TCCA Operational Evaluation Chairman

For Rod Lalley  
FAA Flight Standardization Board Chairman

Hoofddorp, 24<sup>th</sup> April, 2003

The three authorities recommend that the same pilot type rating (single licence endorsement) is applied to the A318, as to the A319, A320, A321.

24<sup>th</sup> April, 2003



## **Milestones (continued):**

- ▶ The corresponding procedures were officially released at the 2006 Philadelphia EASA/JAA/FAA conference.
- ▶ In 2005, it was also agreed that for the A340-600 JOEB Project, the FAA, and Transport Canada would joint the JOEB process. This resulted in a common JOEB report co signed by JAA , FAA and Transport Canada;
- ▶ In 2005, the JOEB process was transferred to EASA which expanded the concept in the EU legal frame work (Regulation 216) integrating all relevant operational elements under a total system approach vision.





# Main differences.

- Applicability : The OSD as such is part of basic regulation 216 article 5 airworthiness and thus becomes mandatory, but in a proportionate manner, for all aircraft for which the Agency issues a TC.
- The OSD will be fully integrated in the TC process, thus ensuring the highest achievable level of consistency.
- Scope : the OSD will be a systemic approach covering flight crew , cabin crew, simulators, MMEL and maintenance certifying staff areas.
- The OSD concept enhances high uniform level of safety products operational standards and promotes effective use of technological innovations.



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# Thank you

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