

**FAA Validation of EASA State of Design Turbine Aircraft Engines
 FAA Significant Standards Difference Summary List
 Per FAA-EASA Technical Validation Procedures (TIP) Revision 6**

**14 CFR Part 35 Amendment 9 compared to CS-P Amendment 1
 Dated March 21, 2018**

SSD	Subject	14 CFR Section	Remarks
1	Bird Impact	35.36	1. Requires demotration that the propeller can withstand the impact of a 4-pound bird for all airplanes, including part 23. Not applicable to fixed-pitch wood propellers of conventional design.
2	Instruction for Continued Airworthiness (ICA)	A35.4	<p>1. 35.4 requires ICA instructions to be complete at type certification unless a program exists to ensure their completion prior to delivery of the first aircraft with the prpoeller installed, or upon issuance of a standard certificate of airworthiness for the aircraft with the propeller installed, whichever occurs later. EASA requires the same for ICAs in Part 21.A.61 with the allowance that the “availability of some manual or portion of the instructions for continued airworthiness, dealing with overhaul or other forms of heavy maintenance, may be delayed until after the product has entered into service, but shall be available before any of the products reaches the relevant age or flight-hours/cycles”.</p> <p>2. Section A35.3 contents requires the manuals to be in English: a35.3 "The contents of the manual must be prepared in the English language."</p> <p>3. Section A35.4 requires the following statement to be included in Airworthiness Limitation Section of the Instructions for Continued Airworthiness: a35.4 “The Airworthiness Limitations section is FAA approved and specifies maintenance required under §§43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.”</p>

Notes:

- 1) In accordance with Tittle 14 Code of Federal regulations (14 CFR) 21.29 and the Technical Implementation Procedures for Airworthiness and Environmental Certification between the Federal Aviation Administration of the United States of America and the European Aviation Safety Agency of the European Union, Revision 6, dated September 22, 2017, (TIP Rev 6), the FAA here prescribes additional requirements relative to CS-P to provide a level of safety equivalent to that provided by 14 CFR part 35.
- 2) Reference detail SSD write ups for additional information including guidance material.

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Manager, Engine and Propeller Standards Branch, (AIR-6A0)
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Significant Standards Differences (SSD) Detail Description
14 CFR part 35 versus CS-P
Instructions for Continued Airworthiness § 35.4 vs CS-P
March 20, 2018

A. Summary:

In accordance with Title 14 Code of Federal Regulations (14 CFR) 21.29 and the Technical Implementation Procedures for Airworthiness and Environmental Certification between the Federal Aviation Administration of the United States of America and the European Aviation Safety Agency of the European Union, Revision 6, dated September 22, 2017, (TIP Rev 6), the FAA here prescribes additional requirements relative to CS-P 40 to provide a level of safety equivalent to that provided by ICA requirements contained in 14 CFR part A35.4 as described below.

B. Regulatory Comparison:

1. 35.4 requires ICA instructions to be complete at type certification unless a program exists to ensure their completion prior to delivery of the first aircraft with the propeller installed, or upon issuance of a standard certificate of airworthiness for the aircraft with the propeller installed, whichever occurs later.

EASA requires the same for ICAs in Part 21.A.61 with the allowance that the “availability of some manual or portion of the instructions for continued airworthiness, dealing with overhaul or other forms of heavy maintenance, may be delayed until after the product has entered into service, but shall be available before any of the products reaches the relevant age or flight-hours/cycles”.

2. Section A35.3 contents requires the manuals to be in English:

a35.3 "The contents of the manual must be prepared in the English language."

3. Section A35.4 requires the following statement to be included in Airworthiness Limitation Section of the Instructions for Continued Airworthiness:

a35.4 “The Airworthiness Limitations section is FAA approved and specifies maintenance required under §§43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.”

C. Guidance Material:

FAA Advisory Circular (AC) 35, titled “Propeller Instructions for Continued Airworthiness”, dated 11/3/03

E. Applicable Amendment Pair Matrix:

		14 CFR Part 35 Amendment													
		6	7	8	9	9a	10								
JAR-P Change	7	X	X												
CS-P Amendment	0														
	1			X	X	X	X								
	2														
	3														
	4														

The actual amendment pair will be based on the bilateral agreement. Per TIP Rev 6 the validating authority certification basis is established based on the application date to the certifying authority. This SSD may be applicable to later amendment pairs which will be reflected in the SSD list summary. For amendment pairs prior to 14 CFR Part 35 amendment 6 contact the Engine and Propeller Standards Branch.

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File: SSD 35.4 ICA Amdt 9a vs CS-P Amdt 1.docx

Significant Standards Differences (SSD) Detail Description
14 CFR part 35 versus CS-P
Bird Impact § 35.36 vs CS-P 360
March 21, 2018

A. Summary:

In accordance with Title 14 Code of Federal Regulations (14 CFR) 21.29 and the Technical Implementation Procedures for Airworthiness and Environmental Certification between the Federal Aviation Administration of the United States of America and the European Aviation Safety Agency of the European Union, Revision 6, dated September 22, 2017, (TIP Rev 6), the FAA here prescribes additional requirements relative to CS-P 360 to provide a level of safety equivalent to that provided by the bird impact requirements contained in 14 CFR part 35.36 as described below.

B. Regulatory Comparison:

1. Section 35.36 requires the applicant must demonstrate, by tests or analysis based on tests or experience on similar designs, that the propeller can withstand the impact of a 4-pound bird at the critical location(s) and critical flight condition(s) of a typical installation without causing a major or hazardous propeller effect. This section does not apply to fixed-pitch wood propellers of conventional design.
 - a. The specified bird size in CS-P 360 established by aircraft specifications applicable to the intended installation of the Propeller, EASA requires 4 pound bird demonstration for part 25 installations and less than 4 pounds for part 23 installations.

C. Guidance Material:

FAA Advisory Circular (AC) 35, titled "Certification of Propellers", dated 12/29/08.

E. Applicable Amendment Pair Matrix:

		14 CFR Part 35 Amendment													
		6	7	8	9	9a	10								
JAR-P Change	7	X	X												
CS-P Amendment	0														
	1			X	X	X	X								
	2														
	3														
	4														

The actual amendment pair will be based on the bilateral agreement. Per TIP Rev 6 the validating authority certification basis is established based on the application date to the certifying authority. This SSD may be applicable to later amendment pairs which will be reflected in the SSD list summary. For amendment pairs prior to 14 CFR Part 35 amendment 6 contact the Engine and Propeller Standards Branch.

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File: SSD 35.36 Bird Impact Amdt 9 vs CS-P Amdt 1.docx