

COMMENT RESPONSE DOCUMENT

EASA PAD No. 21-041

[Published on 10 March 2021 and officially closed for comments on 07 April 2021]

Commenter 1: ACENA Aircraft Engineering Assistance – Philippe MONIN – 11/03/2021

Comment # 1

Regarding the Applicability of PAD 21-041, I do not understand how SB 1345 in reference can be applied on all these type/models because it is only applicable as follows:

MODELS AFFECTED:

PA-28R-180 Arrow

PA-28R-200 Arrow

PA-28R-200 Arrow II

PA-28R-201 Arrow III

PA-28R-201T Turbo Arrow III

PA-28RT-201 Arrow IV

PA-28RT-201T Turbo Arrow IV

SERIAL NUMBERS AFFECTED:

28R-30002 through 28R-31270;
28R-7130001 through 28R-7130013

28R-35001 through 28R-35820;
28R-7135001 through 28R-7135229

28R-7235001 through 28R-7635545
28R-7737002 through 28R-7837317;
2837001 through 2837061; 2844001 and up

28R-7703001 through 28R-7803374;
2803001 through 2803012

28R-7918001 through 28R-8218026

28R-7931001 through 28R-8631005;
2831001 through 2831038

Conclusion: This SB should be revised for all type/model to comply with PAD 21-041.

EASA response:

Comment not agreed. Piper confirms that the instructions of the SB can be accomplished on the additional Models to which the AD applies. No revision of the SB is foreseen, nor necessary.

No changes have been made to the Final AD in response to this comment.



Commenter 2: Individual Contributor – Corrado Schepis – 16/03/2021

Comment # 2

Point (5) of inspection is reporting the following:

“ If, as result of the first review as required by paragraph (1) of this AD, maintenance records are found to be incomplete (i.e. unknown whether a wing spar has been installed with more than zero hours’ TIS), or spar/aeroplane TIS or FH are unknown, within 100 hours after the effective date of this AD, accomplish an EC inspection of the inner surface of the two lower outboard bolt holes on the lower main wing spar cap for cracks. If the wing is installed, use steps 1 to 3 (inclusive) of the instructions of the SB or, if the wing is not installed, use step 3 of the instructions of the SB. “

If I understood correctly Paragraph (1) does not says anything about the hour condition of the spars. It tells about the calculation of aircraft TIS/FH.

Does it mean that the only parameter to consider for the calculation is the aircraft TIS or FH?

My question relates to my aircraft which has less than 5000 hours TIS but not all documents about its maintenance history (e.g. I do not know the spar’s history). As I understand from the PAD, as the first step on the flow chart at this point indicates, the only thing I have to do is to report TIS < 5000 hours. Is this correct?

EASA response:

Comment agreed. The Final AD has been amended to include reference to the life of the spar that has accumulated the most FH since first installation on an aeroplane.

Commenter 3: GRAND VIEW DEVELOPMENT – Marc RENGASSAMY – 23/02/2021

Comment # 3

Grand View Development represents an association that brings together around a hundred Piper owners located in the French Caribbean islands.

To give priority to the immediate safety of flights and to allow the costs of the application of Piper's SB1345 to be shared with the specific arrival of an eddy current specialist from France, many owners whose planes depend on the European legislation have anticipated, and apply the Service Bulletin No. 1345 before the final EASA publication.



In view of this situation, we would like the text of AD's proposal to be completed as follows:

"Any owner or operator of an aircraft covered by these provisions who has applied, in advance, the Piper SB 1345 provided for by these rules and realised all the work to guarantee flight safety carried out and which has, in addition, adopted and demonstrated the application of the calculation formula defined in the EASA regulations, has satisfied the obligations of this text."

EASA response:

Comment not agreed. The Final AD already states (standard for all EASA ADs) that actions are "Required as indicated, **unless accomplished previously**".

No changes have been made to the Final AD in response to this comment.

Commenter 4: Aviation Services – Aleksander Szumski – 24/03/2021

Comment # 4

I am writing to EASA, on behalf of the private owners of the aircraft PA28R-201, with some questions and analysis regarding PAD No.: 21-041 (PA-28 and PA-32 aeroplanes).

A. I would like to ask for clarification of "maintenance records are found to be incomplete (i.e. unknown whether a wing spar has been installed with more than zero hours' TIS), or spar/aeroplane TIS or FH are unknown."

The reason for clarification and consideration above: We have aircraft that have damaged LH wing due to hard landing in June 2020, which resulted in LH WING ASSY replacement (with indicated replacement of wing spar iaw. SB1345). Repair of LH WING ASSY performed in August 2020 with WO (below). The LH WING ASSY has been installed on the aircraft in December 2020 by Part-145.



1. Approving Civil Aviation Authority/Country: FAA/United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG		3. Form Tracking Number: WO21454ACW-2517	
4. Organization Name and Address: Airframe Components by Williams, Inc., 9838N 1100E Kendallville, IN 46755 USA (WWFR300K)				5. Work Order/Contract/Invoice Number: 21454 One page 08-13-20	
6. Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status/Work:
1	Piper PA28R LH wing assy.	35630-982	1	N/A	REPAIRED
12. Remarks: Work Order 21454 prescribing the actual work performed is attached and is on file at Airframe Components by Williams, Inc. under the work order and system tracking reference number indicated in Blocks 3 and 5. This certifies that the work specified in Blocks 11/12 was carried out in accordance with EASA 145 and in respect to that work the aircraft component is considered ready for release to service under EASA Acceptance Certificate Number EASA.145.5018. All work completed in reference to Piper PA28R-201 Service Manual 761-639 (01/2009).					
13a. Certifies the items identified above were manufactured in conformity to: <input type="checkbox"/> Approved design data and are in a condition for safe operation. <input type="checkbox"/> Non-approved design data specified in Block 12.			14a. <input checked="" type="checkbox"/> 14 CFR 43.9 Return to Service <input checked="" type="checkbox"/> Other regulation specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.		
13b. Authorized Signature:		13c. Approval/Authorization No.:		14b. Authorized Signature:	
				CRS WWFR300K EASA.145.5018	
13d. Name (Typed or Printed):		13e. Date (dd/mm/yyyy):		14c. Date (dd/mm/yyyy):	
				13 AUG 2020	
14d. Name (Typed or Printed): Roy S. Williams					
User/Installer Responsibilities					
It is important to understand that the existence of this document alone does not automatically constitute authority to install the aircraft engine/propeller/article. Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts aircraft engine(s)/propeller(s)/article(s) from the airworthiness authority of the country specified in Block 1. Statements in Blocks 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.					

FAA Form 8130-3 (02-14)

NSN: 0052-00-012-9005

Airframe Components by Williams, Inc.
9838N 1100E
Kendallville, IN 46755 USA
(260)-347-0807

Work Order Number: **Nº 21454**

Date: Aug. 13, 2020

Name:	IBEX-UL Sp zo.oo	Manufacturer:	Piper
Address:	Ul.Ksiezykowa 3	Model:	PA28R
City & State:	01-934 Warszawa	Serial Number:	N/A
Country:	POLAND	Part Number:	35630-982
		Assembly Name:	LH wing assy.

General Description of Repair:

Wing repaired with the following parts replaced:

- 35118-803 Skin, LH lower outboard
- 35118-824 Skin, LH upper outboard
- 35118-828 Skin, LH leading edge outboard
- 35118-849 Skin, LH leading edge tip
- 35603-800 Skin, LH upper outboard aft
- 35615-002 Rib, LH
- 35634-014 Skin, LH lower outboard aft
- 35734-800 Skin, LH upper inboard aft
- 38206-004 Skin, LH lower inboard
- 67069-002 Spar, LH inboard replaced in reference to Piper Service Bulletins 1006 and 1345
- 67672-000 Plate, LH replaced in reference to Piper Service Bulletin 1244C

END

The aircraft and/or component identified above was repaired and inspected in accordance with the Federal Aviation Regulations and was found airworthy for return to service. Pertinent details of the repairs are on file at this agency under the above Work Order Number.

Authorized Signature for Repair Station WWFR300K

Aug. 13, 2020
Date

Form 7191WA-4 (4/17)

How should I consider this component? With known history or with incomplete maintenance records?

B. If we consider that wing is with known history and maintenance records, the AD requires the calculation of AAU. We have AAU=83,75 that states, the aircraft does not require further action at this time. Is that correct?

C. EFSH - should be calculated for each wing, or only for the worst case?

In our case we have: LH wing replaced (with spar replacement) with 0 TIS after repair; and RH wing factory installed with 3601,5 FH TIS.

D. Calculation formula from paragraph (3) (page 3/7):

In our case we have for RH WING: TIS=3601,5 and Years=43; the result is: -411,83 EFSH - Is that correct?

E. Due to LH WING ASSY replacement, we have added to AMP for the aircraft an inspection of wing spars within next 800 FH since replacement (iaw. Piper Service Manual), that gives us a shorter period of time, that 5000 TIS indicated by FAA AD, EASA PAD and SB1345 (current we have 3601,5 TIS).

In that case, we would like to ask if this AD will be applicable, if the aircraft has more restricted AMP iaw. service manual.



An agency of the European Union

500 FH Propeller removal, sludge from crankshaft removal, cleaning any residual (Special Inspection 3-8 A(1)(d)4))	PA-28R-201/201T Service Manual (Doc no.: 761-693, Rev.PR160115, 27-SEP-2017)	500 FH
800 FH Wing Spar inspection (Special Inspection 3-8 A(1)(e)2))	Piper Aircraft, Inc Arrow III – Turbo Arrow III PA-28R-201/201T Service Manual (Doc no.: 761-693, Rev.PR160115, 27-SEP-2017)	800 FH
2000 FH / 84 MTH AFT Wing attach fitting inspection (SB No.1244) (Special Inspection 3-8 A(1)(h)7) and 3-8 A(1)(h)8))	Piper Aircraft, Inc Arrow III – Turbo Arrow III PA-28R-201/201T Service Manual	2000 FH / 84 MTH

c) Usage Class “C” - Extreme

Aircraft which have been damaged due to operations from extremely rough runways, flight in extreme damaging turbulence or other accident/incident which required major repair or replacement of wing(s), landing gear or engine mount.

2) Each 800 Hours:

- a) For airplanes in “Usage Class B” (i.e. - severe usage), beginning at 1,800 hours total time-in-service, and each 800 hours thereafter, conduct Wing Spar Inspection.
- b) For airplanes in “Usage Class C” (i.e. - extreme usage), conduct Wing Spar Inspection, each 800 hours time-in-service.

EASA response:

- A. Comment noted. The provided maintenance documentation does not specify if the replacement spar has been installed as a new or used part. The TIS definition in the AD does require to count the hours of the spar since first installation on an aeroplane and not the hours since latest installation on an aeroplane. If the P/N 670609-002 spar LH inboard was new at the time of installation, then it can be considered with known history and the AAU can be calculated accordingly. Otherwise, the maintenance documentation should be considered as incomplete.**
- B. Comment noted. If the AAU is 83,75, no further action is required on the aeroplane at this time.**
- C. Comment noted. EFSH should be calculated for each wing.**
- D. Comment noted. If the AAU is calculated to be below 100, the formula in paragraph (3) does not need to be applied.**
- E. Comment noted. The inspection method used must be determined to be equivalent to the method required by the AD, as specified in Piper SB 1345. An AMOC application ([Form 42](#)) must be made to EASA to make that determination. Once the method is approved as AMOC to the EASA AD, see EASA answer to Comment #3 above.**

No changes have been made to the Final AD in response to this comment.

