

FAA-04-18958-3

Aircraft Certification Service AD PROPOSAL WORKSHEET

DOCKET NUMBER: 04-NE-32i

TECH WRITER:

2004 SEP -3 A 10:20

DEPT OF TRANSPORTATION
DOCKETS

PROPOSED ACTION:

- Telegraphic AD
- Priority Letter
- Immediately Adopted AD
- Federal Register version of Telegraphic AD or Priority Letter
- Final Rule after NPRM (*See Note on next page)
- Notice of Proposed Rulemaking
- Other _____

Is this proposed action one of the following? (Check if applicable):

- Supersedure of an AD
- Revision of an AD
- Supplemental NPRM

1. Product Manufacturer

Hoffmann Propeller

2. Applies to (models, serial numbers or references, installations, part numbers, as applicable)

HO-V343 & HOV-343K {Serial Numbers -All}

3. ACO project engineer.

Name/Title/Branch: Frank Walsh, Aerospace Engineer Propulsion, ANE150.

Telephone: (781) 238-7158

Fax: (781) 238-7170

4. Directorate Project Officer (if applicable) and title.

Name/Title/Branch: Jay Turnberg , Propeller Specialist, ANE 110

Telephone: (781) 238 -7116

Fax: (781) 238-7199

5. If this action is a Final Rule after NPRM, list the docket number and the number of public comments received. **Fill out the "AD Proposal Worksheet Attachment: Disposition of Comments."**

Docket No.:

Number of comments received:

****NOTE: For Final Rules after NPRM, if any of the following requested information (in Questions 6 through 23) is unchanged from the NPRM, you may so indicate this in the space provided, rather than repeat the information.***

6a. Describe the unsafe condition.

Possible propeller blade separation, and propeller hub failure.

6b. Describe the cause of the unsafe condition.

This is a foreign AD reported by the German LBA, and they do not know the cause of the hub failure and subsequent blade separation at this time.

6c. Describe the occurrences that prompted this proposed AD action.

There has been a reported occurrence of a propeller blade separation due to a possible hub failure. The cracked propeller hub is under investigation, and there fore no detailed information regarding the kind of failure is known at this time. The actions specified in this AD are urgent and precautionary and intended to prevent possible additional hub and blade separation failures that could lead to a possible loss of an aircraft.

6d. How many such occurrences have been reported?

The LBA has so far only reported one of these occurrences. However, the FAA has certificated this Model Propeller in 1997. And it is possible some US aircraft have acquired the service hours or more time as what is mentioned in the AD, and these propellers could be suspect, and subject to this failure mode.

6e. On what date did the FAA become aware of the situation?

First notice was on 19 July 2004, but this AD has been revised by the LBA and the Company on 23 July 2004 to add more detailed inspection criteria.

7. Was this proposed action prompted by a manufacturer's quality control (QC) problem? If so, is a reporting requirement needed in the AD to determine the scope of the problem? *(If yes to either of these questions, coordinate with cognizant MDO.)*

This is not considered a QC problem. But this AD is needed to provide investigative Factual data regarding corrosion probabilities and there is a reporting Requirement to Hoffmann on Service Bulletin inspection sheets to assist in the data acquisition.

8. Was this proposed action prompted by the use of suspected unapproved parts (SUP)?

NO

9. Is this action related to an NTSB safety recommendation? If yes, attach a copy of that recommendation and the FAA response.

NO

10. If this proposed action will revise, supersede, or withdraw an existing AD, please provide the following information about the existing AD.

Amendment No.: This AD is considered an urgent safety inspection requirement and the FAA
Intends to issue this as an Immediate Adopted Rule.

Docket No.:

Federal Register Citation:

- 11a.
 - What are the proposed types of corrective actions (i.e., one-time inspections, recurring inspections, terminating actions, modifications, operational restrictions, etc.) *AND*
 - What are the corresponding compliance times?

(See attached "SAMPLE: Proposed Corrective Action" for an example of how this information should be provided.)

- Have you considered all of the aspects of what you are proposing, such as overlapping requirements, the effect these actions will have on other existing requirements, and other sensitive issues? *(Be as specific as possible.)*

[Note to Word users: The area below is formatted as a "Table." It allows you to insert as much information as needed into each cell. To move to the next cell, use the Tab key.]

PROPOSED CORRECTIVE ACTION

SERVICE INFORMATION (Attach 2 copies)	ACTION	INITIAL COMPLIANCE THRESHOLD	REPETITIVE INTERVAL (if any)	TERMINATING ACTION (if any)
Hoffmann Service Bulletin 61-10-03 SB E 15B,13 Jul 2004	Carry out Additional Inspections IAW Hoffmann Service Instr. 61-10-05 SI (E) 4(), Latest Issue			

Hoffmann Service Instruction 61-10-05 SI E 4B
{ This Service Instruction is basically a two part instruction.
Part 1. Deals with Blade loss of retaining nut preload torque, and subsequent Blade looseness in the Hub.
Part 2. Deals with the calibration of a recommended Ultra Sonic Probe, and then the investigation of the Blade Retaining threads for cracks with the probe in each hub arm bore.

Remove Propeller Blades IAW Propeller Overhaul Manual No.(E)661 Chapter 4. Part 1.
Before removing the blade nut, Conduct Inspection IAW Paragraph 2.2 of the Service Instruction Accomplishment Instructions. -- Perform Blade shake, blade nut preload check, and final blade-nut retorque force of (30ftlb) & record differential angle / findings on Hoffmann inspection form M314A.

Part 2.
IAW Paragraph 2.3 of the Service Instruction calibrate the Eddy current instrument and probe in preparation for Hub inspection.
Conduct hub inspections and Eddy Current probe inspection of the hub-arm thread grooves IAW Paragraph 2.4.
Record findings on Form M314.
Hubs found to have cracks or extensive damage must be taken out of service immediately as unairworthy.

Propellers HO-V343 and HO-V343K with hubs exceeding 1200 hours TSN
Conduct this Service Instruction immediately before the next flight.

After accomplishment of this SI 61-10-05 SI E 4B repeat this inspection every 100hrs.

None at this time.

11b. How was the compliance time(s) established?

This was established by engineering analysis from the Hoffmann Company

11c. Has the manufacturer issued relevant service information? If so, attach 2 copies. *(Copies must be legible and of very good quality. Originals are preferred.)*

- a) Operation and Maintenance Manual No.(E)492
- b) Service Bulletin 61-10-03 SB E 15B, dated 13 July 2004
- c) Service Instruction 61-10-05 SI E 4B, dated 13 July 2004

11d. If this action relates to a non-U.S. product, has the foreign civil airworthiness authority (FCAA) issued a parallel AD? If yes, please provide the following information:

FCAA AD Number: LBA Airworthiness Directive D-2004-352R2

Date of issuance: Effective Date 23 July 2004.

EASA Approval-No. 2004-7836 on 20 July 2004

11e. Are there any differences between the manufacturer's service information referenced above, other AD's (foreign or U.S.), and the requirements of this AD? (For example, does the compliance time of this AD action differ significantly from that recommended in the referenced service information?) If so, explain these differences and the reasons for each.

No.

11f. Are notes, drawings, or diagrams needed in the AD to explain procedures or differences from the service instructions? *(If so, please explain below or attach a copy.)*

No.

12. Number of aircraft/products that will be affected? *(Use numerical figures).*

12 Propellers Approx. Domestic only
150 Propellers approx. Worldwide (including domestic)

13. Provide the number of work hours/associated costs per aircraft/product for *EACH* proposed corrective action (i.e., inspection, modification, etc.) in the table below.
14. 3 hrs per prop
15. 3 hrs @ \$65 /hr = \$195 + \$100 = \$295 per propeller per aircraft.

FOR THE PROPOSED AD:

Type of Corrective Action	Number of Workhours per aircraft	Number of U.S. Aircraft Affected	Parts Costs per aircraft
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Conduct Inspection, and report findings IAW the Service Documents.

3 Hours @ \$65./HR. or \$195 /Aircraft.

12 propellers approx

Misc Shop Charge; \$100 for Probe rental .

TOTAL COST of AD
per prop = \$295.00

FOR THE EXISTING AD (i.e., the one to be superseded or revised), if applicable.

Type of Corrective Action	Number of Workhours per aircraft	Number of U.S. Aircraft Affected	Parts Costs per aircraft
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NA

14. If parts are required, are they available for all aircraft?

Inspection only required.

15. If known, please indicate the number of affected aircraft that are already in compliance with the proposed inspection, modification, installation, or replacement, etc.

Unknown

16. Should a special flight permit be:

- Permitted
- Permitted with limitations (*List the limitations on a separate sheet.*)
- Prohibited

17. In general, how is the product utilized (i.e., air carrier, general aviation, commuter, military, agri-business, training, etc.)?

General Aviation. These propellers are usually installed as STC FAA approved installations.

18a. If this proposed AD would revise or supersede an existing AD, have alternative methods of compliance (AMOC) been approved for the existing AD?

NA

18b. If yes, should those AMOC's continue to be considered approved for all or any portion of the proposed AD?

18c. If yes, state for what portions of the proposed AD the previously approved AMOC's should continue to be considered approved.

19. With whom outside the FAA has this proposal been discussed (i.e., ATA, NBAA, RAA, AOPA, ALPA, GAMA, etc.)? (A separate record may need to be submitted to the Rules Docket. See paragraph 3, "Ex parte Contacts," of the AD Manual.)

NOTE: This item should be completed prior to submission of the AD Proposal Worksheet.

Organization	Person Contacted	Date	Reaction
AOPA	MR. Luis Gutierrez	28 July,2004	I forwarded a copy of the LBA AD, and the Service Documents for their info. He had a positive reaction , and thanked me for the assistance.

20. Are there any special considerations or concerns that need to be taken into account in the drafting of this proposal? (Use a separate sheet to detail these items, if necessary.)

No

21. Do you have reason to believe that this action would be considered "sensitive?" (See Section 15 of the AD Manual for a definition of "sensitive".) If yes, please explain below.

No

22. Please indicate Yes or No to the following questions:

YES Is this considered interim action?

No Do you know of any optional or alternative methods of accomplishing the proposed action?

No Have you considered any alternatives to an AD action?

No Are other Directorates involved in any similar actions?

No ___ Does this action affect the Presidential fleet?

No ___ Does this action affect the FAA fleet?

Yes X, AEG. ___ Have the proposed procedures been verified (i.e., by MIDO, AEG, ACDO, FSDO)?

23. Check the category that best describes the cause of the unsafe condition addressed by this AD:

Design Problem

Quality Control Problem

Operational

Maintenance

Unapproved Parts

Other (specify):

This condition can occur due to corrosion development in aluminum hubs with time.

Signature Section

(Signature indicates concurrence with proposed action)

Project Engineer FW 7/28/04 Date
28 July, 2004

Branch Manager 28 July, 2004 Date

28 July, 2004 Date

Directorate Staff/ Office Manager Date

KEVIN McLAUGHLIN KMc 7/28/04 Date
AEG Representative

NA Date
MIDO Representative*

(MIDO signature required if QC problem involved.)

*Enforcement action status? NA

see other attached

No ___ Does this action affect the Presidential fleet?

No ___ Does this action affect the FAA fleet?

Yes X, AEG. ___ Have the proposed procedures been verified (i.e., by MIDO, AEG, ACDO, FSDO)?

23. Check the category that best describes the cause of the unsafe condition addressed by this AD:

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Other (specify):

This condition can occur due to corrosion development in aluminum hubs with time.

Signature Section

(Signature indicates concurrence with proposed action)

FRANCIS WALSH

FW

28 July, 2004

Project Engineer

Date

28 July, 2004

Branch Manager

Date

ROBERT MANN

RM

28 July, 2004

MIDO;
Directorate Staff/ Office Manager

Date

AEG Representative

Date

NA

MIDO Representative*

Date

(MIDO signature required if QC problem involved.)

*Enforcement action status? NA