

DEPARTMENT OF TRANSPORTATION



U-S AIRWAYS

OFFICE OF THE
CHIEF COUNSEL
RULES DOCKET

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DOCKET SECTION

1999 MAR 26 P 4: 32

February 18, 1999

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53265

Mr. Robert Peel
Air Transport Association of America
1301 Pennsylvania Avenue NW, Suite 1100
Washington DC 20004-1707

Subject: NPRM #FAA-1998-4815 - 11

Dear Mr. Peel:

US Airways has reviewed **NPRM #FAA-1998-4815** and finds it acceptable as written,

This NPRM specifically dealt with an engine's run on ability subsequent to the ingestion of birds of various pedigrees and sizes. US Airways has an additional concern over the related issue of containment of a failed fan blade(s) on an engine certificated under FAR 33, as it is currently written.

Specifically, we are concerned over debris penetrating the inlet cowl structure. Several years ago, US Airways experienced an event in which several **CFM56-3** fan blades were liberated at or below the **midspan** subsequent to the ingestion of a 3.8 pound, common Eider duck. The fan case contained the energy, but in doing so, deflected the fan blade fragments into the inlet cowl. The blade **fragments** cut through the inner barrel of the inlet cowl in saw-like fashion, almost liberating the inlet cowl forward of the "A" flange (photos attached).

The consequences of such a liberation are potentially catastrophic and US Airways questions whether containment and run-on ability should be demonstrated with a power-plant in full flight configuration vs. focusing on the engine only. General Electric has also expressed similar concerns regarding inlet cowl structural integrity subsequent to a severe bird strike.

Overall, US Airways applauds any and all safety enhancements directed at ensuring an engine maintains **power-**producing ability subsequent to a **significant** bird strike; however, should a fan blade fracture occur, it is equally important that the structural integrity **of the** entire powerplant be maintained.

Sincerely,

Gordon Kemp
Senior Director, Technical Services
(412) 747-3882

GGK/EE/js
corres/99/EXT/ATA/98-AD-378



March 11, 1999

Federal Aviation Administration.
Office of the Chief Counsel
Attention: Rules Docket [AGC-200],
Docket No. FAA- 1998-48 15.
Room 915G,
800 Independence Avenue, SW .,
Washington. DC 20591.

Subject: Amendment of the FAA Type Certification Standards for Aircraft Turbine Engines with Regards
to Bird Ingestion • Notice of Proposed Rulemaking

Dear Madam or Sir;

FAA has issued Notice of Proposed Rulemaking, FAA-1998-481 5, which if adopted would amend the FAA type certification standards for aircraft turbine engines with regards to bird ingestion.

Attached is the comment of two of our members on this subject. One has no technical objection to the rule. The other whilst supporting the rule expresses an additional concern over the related issue of containment of a failed fan blade or blades on an engine certificated under FAR 33. as is currently written.

Your consideration of these comments is appreciated.

Yours sincerely,

Robert Peel
Director, Airworthiness &
Technical Standards

Attachments

copy: PSC