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Title: Inspection of Kievprop composite propeller blades
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1 Introduction

This service bulletin is intended to highlight isolated damage reports to operators of aircraft fitted with Kievprop propellers. The two types of damage are transverse cracking and trailing edge delamination.

2 Blade transverse cracking

The BMAA has received 2 reports of transverse cracks on Kievprop type 283 (tractor) blades similar to that in Figure 1. This damage may be caused by overload in bending caused, most likely, by hangar rash. It is also possible that the cracks could be fatigue cracks caused, for example, by extended rough running with carburettors poorly balanced, or engine starting problems being left unresolved.



Figure 1 – transverse crack Kievprop on propeller blade

Note: there is a similar known problem on Kievprop type 183 (pusher) blades addressed by BMAA Service Bulletin 2399 for Air Création Tanarg aircraft. It is believed the vibration caused by the propeller being immersed in the wake from the structure ahead resulted in these cracks being initiated. The design of later 183 blades has been changed to resolve the problem. Operators of Kievprop type 183 propellers who do not have BMAA Service Bulletin 2399 should obtain it from the BMAA Technical Office.

3 Blade trailing edge delamination

A small number of Kievprop propellers fitted to BMAA aircraft have suffered delaminated trailing edges as shown in Figure 2.



Figure 2 – delaminated trailing edge

Trailing edge cracking can occur from moisture in the (hollow) blade, especially if it freezes. The blades come with a vent hole at the tip, but this can get blocked over time.

4 Action

Operators – of all Kievprop propeller types – should be aware of these potential damage types when inspecting the propeller. Propeller inspection should form part of the normal pre-flight inspection.

The drain holes should be checked periodically, and cleaned out if blocked.

If damage is found the aircraft should not be flown until replacement propeller blades are fitted. Owners are requested to report any damage found to the BMAA.

This Service Bulletin should be kept with the aircraft Manual.

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