



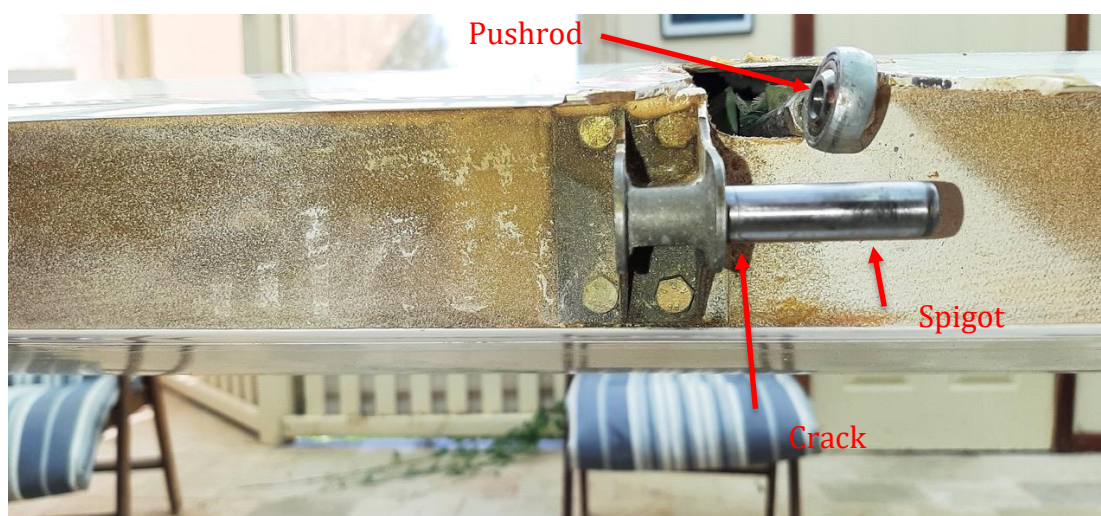
THE GLIDING FEDERATION OF AUSTRALIA INC

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Airworthiness Alert 2021-1 **PIK-20 Cracking of Chrome Plated Flaperon** **Spigots**

Overview

A Service Difficulty Report has been received detailing circumferential cracking of two chrome plated flaperon pivot pin spigots on the right wing of a PIK-20E, this defect was found whilst performing an annual inspection. The PIK-20 flaperon has three actuating pushrods with a corresponding spigot that forms part of the hinge. Two of these spigots on the right hand wing adjacent to the flaperon push rods were found with circumferential cracking (see red arrows on wing below). It is not known at this time if the circumferential crack is only in the chrome coating or if it extends into the chrome molybdenum tubing.



Investigation

It appears there are three types of spigots fitted to PIK-20 variants. Some have bare chrome molybdenum spigots, others have chrome plated spigots and later PIK-20 E II variants have completely different designed chrome plated spigots. The GFA have obtained the design drawings but there is no mention in the drawings of chrome plating.

The PIK-20 owners group have been advised. Since that time, the GFA has become aware of one more PIK in England with cracking. More investigation is being carried out on the Australian PIK to ascertain the extent of the cracking.

The cracking appears to encircle the entire spigot, but a residual strength test has demonstrated a very large amount of strength remaining. At present, it appears the crack may only be to the depth of the chrome plating but the cause and mechanism driving the crack is yet to be determined.



Circumferential cracking of the chrome plating near base of spigot



Spigot without chrome plating

Recommendation/Action

If a survey or deeper inspection has not been carried out recently, the GFA recommends a detailed inspection is performed at the next annual inspection.

This alert is raised to make members aware of the above occurrence. An Airworthiness Directive may be issued in the future.

Reporting

Notify the GFA in the usual manner if you have information relating to any similar or related occurrence.

A handwritten signature in black ink, consisting of a stylized 'D' followed by a horizontal line that curves downwards at the end.

Dennis Stacey
GFA CTO
30/03/2021