



**A brace of problems. This is the wing brace that has kept the Twin Pioneer grounded for so many years.**

The Twin Pioneer's slow-flying capabilities have to be seen to be believed. Designed to take-off and land from a jungle clearing the size of your back garden, and to handle rough terrain by head-butting it out of the

**Designed to take-off and land from a jungle clearing the size of your back garden, and to handle rough terrain by head-butting it out of the way, this is easily our least feminine aircraft.**

**So, of course, we christened her Primrose**

When presented with a moderate headwind, the Twin-Pin is capable of picking up its tailwheel before it even begins its takeoff roll. Once it begins to move forward, it unsticks and slips the surly bonds of earth

in an impossibly short distance. Officially, it needs 274 metres (300 yards) to clear an obstacle, but add just a breath of wind and that distance drops dramatically. Given a

good draught on its nose it'll be airborne in less than 100 metres and, on an aircraft as big as this, that looks almost vertical.

G-APRS (that registration is what gave rise to the "Primrose" soubriquet) bears the colours of the Empire Test Pilot School, to which she has returned numerous times to train student pilots. She was built by Scottish Aviation in 1959, and the company retained her for its own use.

Since coming to us she's been a popular act at airshows, demonstrating her physics-defying slow flying capabilities. She's also done sterling work as a pleasure flying aircraft, taking up to sixteen passengers in her spacious cabin. As the only flyable example in the world, she was - and is - an important historic object.

Primrose was grounded in 2007, when her wing braces reached the end of their specified service life. Since then a worldwide search has failed to find replacements. Hope glimmered when a set of braces were discovered in Australia and quickly purchased. But that hope was dashed when they were fitted

and it was found that an undocumented modification prevented the re-fitting of the outer skin. It wasn't a major mod, and a weekend in a workshop with a few tools would probably have sorted the problem. But this is an aircraft, not a classic car. Every modification has to be submitted, evaluated and approved. It's one of the reasons that aviation is so safe.

This is a distressingly similar scenario; documentation of aircraft manufacture was decidedly hit and miss in those pre-computer days, and it's not uncommon for us to find significant variations between supposedly identical aircraft. It was back to the drawing board - literally. We applied for permission to re-manufacture the braces and approval was fairly quickly forthcoming - as long as we could produce the original drawings.

So a new search began, this time in our own archives. And here lay another challenge. Our archive consists of tens of thousands of crackling, fragile documents and several miles of microfilm - much of it so far un-indexed. After three years of searching, the right manufacturer's drawing was found - among rolled up plans from a third-party equipment manufacturer.

But now we discovered that the originally specified alloy is no longer available. A stronger replacement is available, and that has to be approved. And to get that approval we need to produce more documents.

And so it goes on. We understand the importance of this astonishing aeroplane, and one day she **will** fly again. But for now she stands, wingless and forlorn.

But never forgotten.



**SCOTTISH AVIATION**

# TWIN PIONEER

**SHORT FIELD JUNGLE JUMPER**