

25th June 2019

To. BMAA Tech office
LAA Tech office

C42 Brake Pads

TLAC have had a number of C42 owners calling in with brake problems, the standard C42 braking system is reliable and when correctly maintained offers the owner/operator a good effective braking system and a good cost in use.

The problems we are finding is that mineral based mountain bike disc pads are being used rather than the correct factory sintered pads, this is a dangerous and potentially expensive false economy. The mountain bike pads are generally a black to brown colour friction material with steel backplate, whereas the OEM sintered pads are steel copper coloured backplate with sintered copper coloured metallic friction material.

The mineral mountain bike brake pads are not designed to take the loads of a 472.5kg aircraft under braking, as such they wear very quickly and generate a significant amount of excess heat compared to the sintered pads and this has multiple actions:-

1. Generates significant heat in the disc resulting in disc warping and cracking requiring replacement.
2. Excess heat distorting the brake calliper pistons requiring replacement
3. The wear rate means the stroke on the master cylinder increases, which appears like fluid loss.
4. Significant loss of braking performance
5. Frequent pad changes

Use of the OEM brake pads ensures that braking performance is kept to its peak and the heat build-up during braking is dissipated and not put into the other brake system components.

Never has the term penny wise and pound foolish been more profound.

