



Service Bulletin

SB #: 005

Date: 07/08/26

Flylight Airports Ltd., Sywell Aerodrome, Northamptonshire, United Kingdom, NN6 0BN
T: +44(0)1604 494459 F: +44(0)1604 495007 E: info@flylight.co.uk

Title: **Cracking of the Alloy Wheels**

Classification: ESSENTIAL / ~~RECOMMENDED~~ / ~~INFORMATION~~

Applicable to Aircraft: (include any specific restriction, hours, serial numbers etc.)

ALL Exodus DeltaJet 500 StingRay aircraft

Description of defect, implications:

We have recently been made aware that cracks have been found in the alloy wheel castings of a small number of aircraft. The cracks propagate across the wheel spokes closest to the inner hub of the wheel. Failure to spot these initial cracks could lead eventually to the wheel's integrity being lost with potential associated damage to the aircraft.

The cracking of the wheel spokes appears to be associated with single or multiple very heavy landings and/or landing heavily with a high crosswind component that introduces a large side load to the wheel on touchdown.

It is also likely that the cracks are due to the tyres being under-inflated, allowing the landing shocks to be transmitted directly to the wheel rim and then the hub, causing damage much more easily.

Rectification Action:

To ascertain the extent and propagation of fleet wide wheel damage, this bulletin obliges owners to carry out a thorough inspection of each wheel to check for cracks before the next flight.

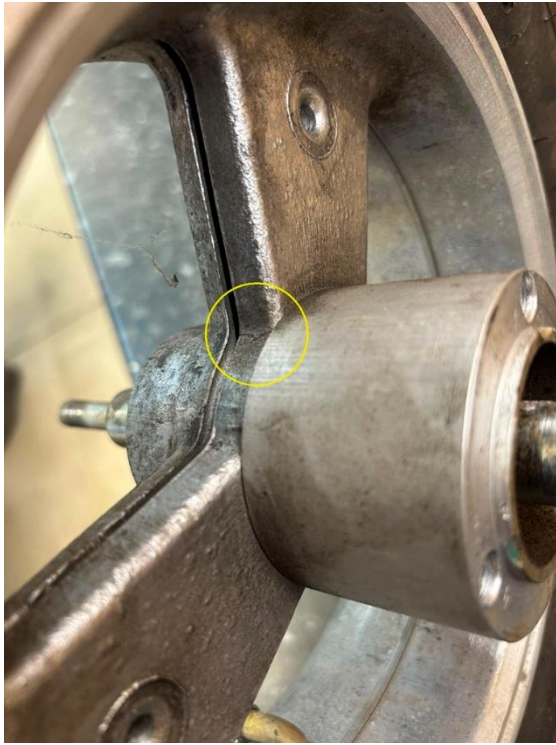
The inspection can be carried out by the owner or delegated to a 'qualified person' as defined by the BMAA

The inspection must be recorded in the Aircraft Engine and Airframe Log Book, as carried out in accordance with this Service bulletin.

The cracks found to date have been at the base of one or more of the three spokes where they meet the axle hub. The images below show examples of what you should be looking for during the inspection. However close examination of the entire wheel should be undertaken. Whilst it is possible to inspect the wheels with the spats fitted, removing the spats allows for a closer / more detailed inspection and is therefore advised. Another option is to use a borescope to help to inspect the wheels. Dye Penetrant can also be used if a potential crack is suspected.

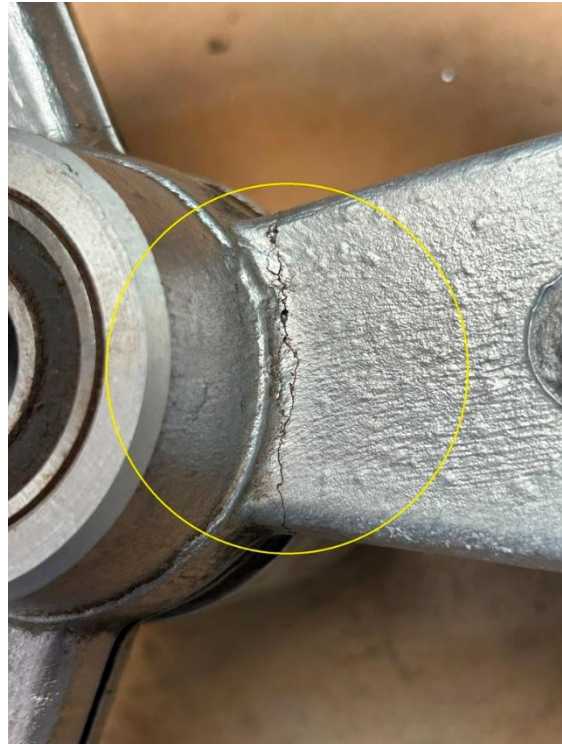
If a crack is observed, or you are concerned about a possible fracture, do not fly the aircraft. Contact Flylight Airports or Exodus Aircraft or the BMAA immediately, preferably with images of the wheel showing the fracture feature.

If there is any doubt, the aircraft must not be flown until a replacement wheel is fitted.



Note that the cracks appear to start on the spokes at the side of the wheel where the brake disc attaches but may propagate across to the other spoke.

If left unchecked, the cracks will propagate across the entire width of the spoke.



Tyre Pressure

It is essential that the correct tyre pressure is maintained. The tyre fitted to the DeltaJet has relatively stiff side-walls that can disguise under-inflation. It is strongly recommended to check the tyre pressure of all wheels regularly and inflate where necessary to the correct pressure of 25 psi.

Ongoing Maintenance

Owners are reminded that a check of wheels and tyre inflation is part of the prescribed pre-flight inspection and the 50-hour/6-month checks – as detailed in the Pilot Operators Handbook (POH).

Heavy landings, particularly heavy landings with a side load (crosswind) subject the wheels to high loads. Section 8.16 of the POH details checks that should be made following any suspected heavy landing. Detailed checks of the wheels as per this bulletin should also be included.

Please note that a new POH Version 1.1 is available to download on the Exodus Website (www.exodusairsports.co.uk).

Released under CAA A8-1 approval DAI/9967/18.

Approved by: Accountable Manager, Chief Design Engineer or Quality Manager signature, date

A handwritten signature in black ink, appearing to be 'J. Smith' or similar, written over a white background.

07/08/26