



## Advisory Notice for Titan Tornado Aircraft

March 7, 2002

### Inspection required before any further flights

#### **Affected aircraft:**

- Aircraft equipped with spades

#### **Aircraft not affected:**

- Aircraft not equipped with spades

#### **Circumstances:**

On February 24, 2002, a Titan Tornado II equipped with spades had an incident, where a spade and counterweight tore away from the aileron in-flight. The pilot reduced speed and continued to his destination without any further issues. The pilot also reported the plane was controllable during this incident, but it caused him some concern.

#### **Inspection required:**

Inspection of the steel counterweight attachment plate that is welded to the counterweight and riveted to the aileron rib is required. Look for any signs of flexing or fatigue in the plate.

#### **Corrective action:**

From the photos we have analyzed, it appears that the steel attachment plate may have been flex, this resulted in the plate cracking due to fatigue. Once the plate broke, the only things holding the counterweight and spade to the aileron were the rivets through the bottom aileron skin and rib flange. It was also determined that the aileron skin was weakened due to flexing over time that resulted in it tearing away under load.

It is recommended that you remove the spades until you are able to replace the parts in question, as without the spades the air loads on the counterweights are minimal.

All future attachment plates will be made from .090" instead of .040" steel. Replacement counterweights will also be made from .090". If you can show proof of purchase of a set of spades, Titan Aircraft will replace your counterweights free of charge. If you are unable to find receipts, do not hesitate to call, we should be able to verify your purchase from our records.

Contact Titan Aircraft: 440-275-3205 or email [support@titanaircraft.com](mailto:support@titanaircraft.com) with any questions or concerns.

Best regards,

A handwritten signature in blue ink that reads "John Williams".

John Williams  
President  
Titan Aircraft

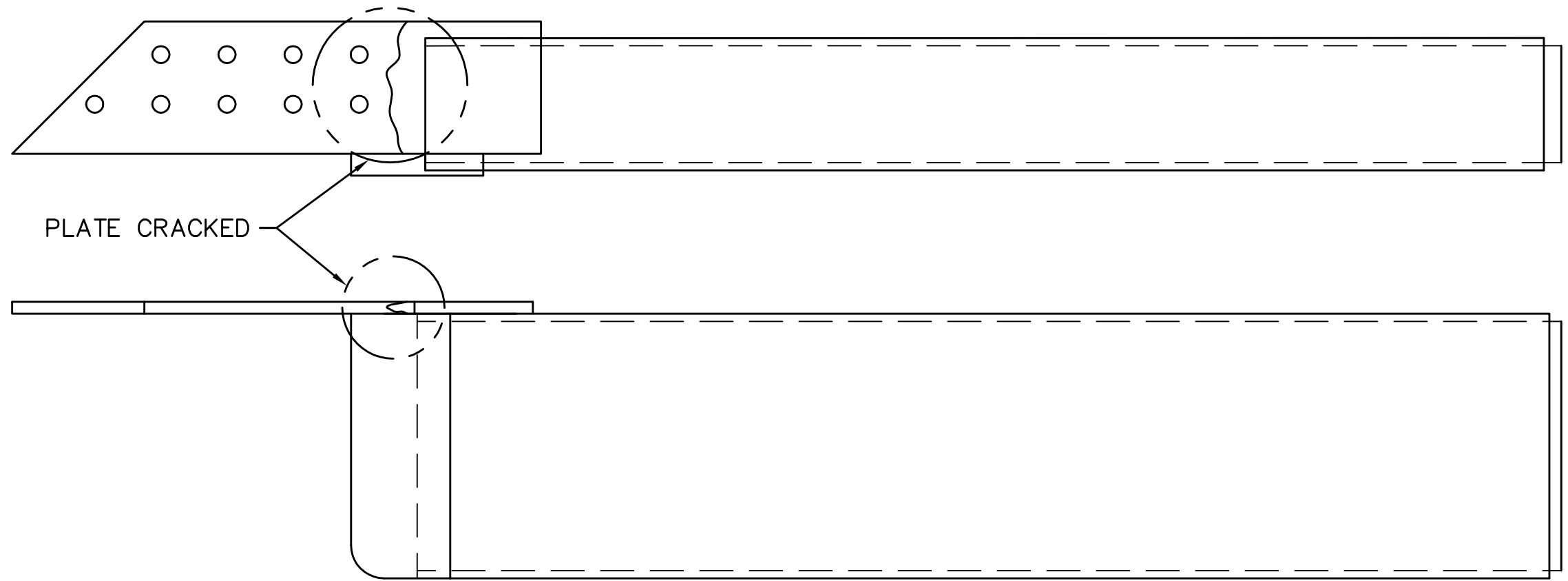


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