



Airworthiness and Maintenance

Crash of Cessna 550

Robert Swaim

Airworthiness/Maintenance Records

NTSB



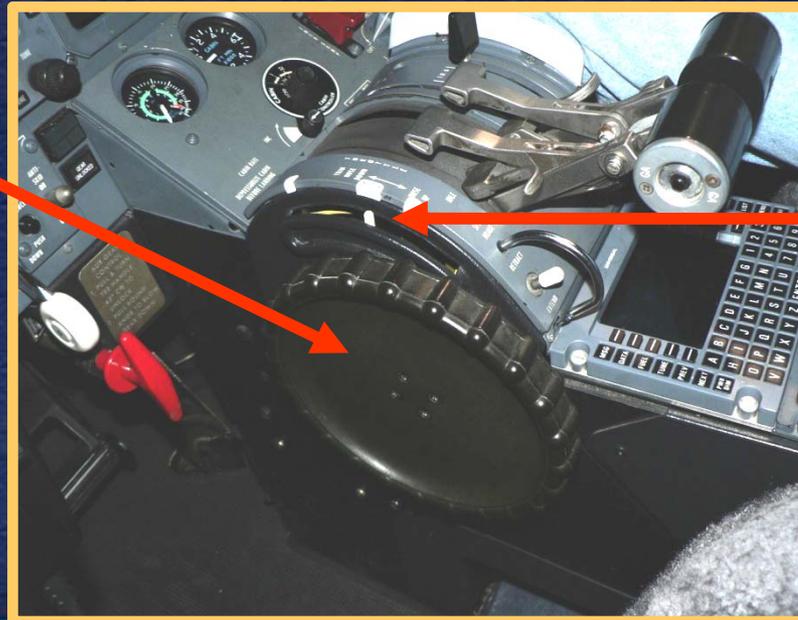
Aileron Trim Issues

- Sensitivity
 - Small control knob adjustment = large force
- Possible deflection
 - Aileron trim forces can exceed 150 pounds
- Pilots awareness

Pitch Trim Issues

- Manual control wheel or electric motor
- Pitch trim movement may be inconspicuous
- Prior pitch trim run-away (different Citation version)
 - July 22, 2003, Penn Cove, Washington
- Aural and visual annunciation recommendation

Control
hand-wheel



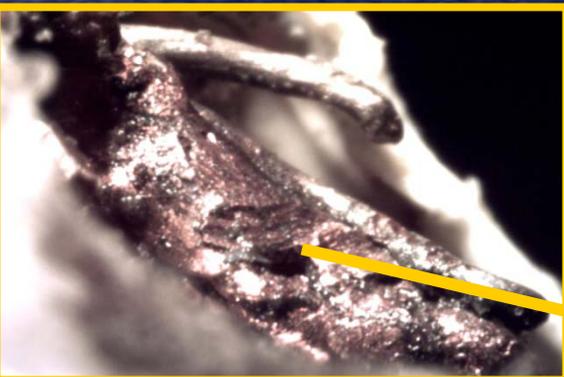
Pitch trim
indicator

NTSB

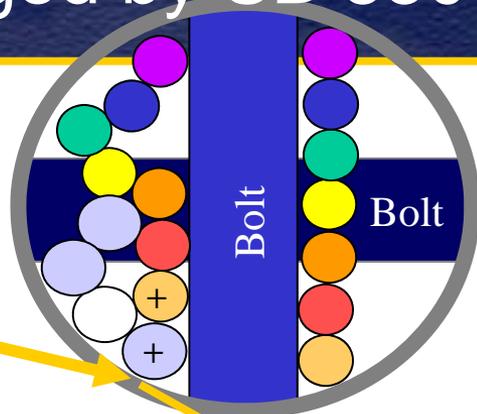


Pitch Trim Wiring in Yoke and Shaft

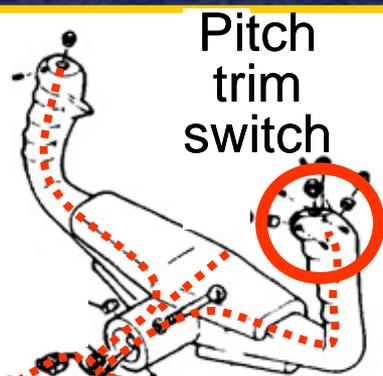
Bundle changed by SB 550-24-14, January 1992



Pitch trim wire short circuited

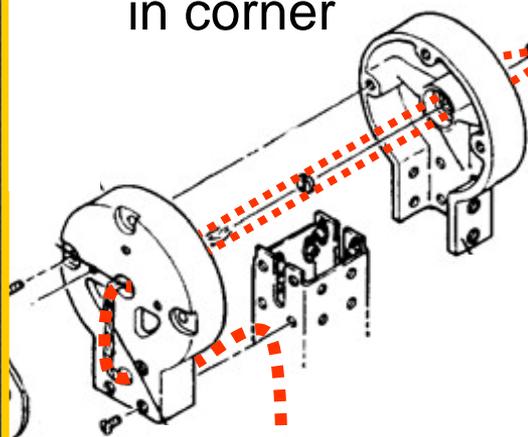


Wires chafe in corner



Pitch trim switch

As-found, with wires pressed into shaft



Red lines represent wire routes



Two repair sleeves

Circuit Breaker (C/B) Identification

- Marlin Air and Penn Cove pilots tried to pull C/Bs
- Individual C/Bs hard to locate and to pull
- Colored collars assist identification and grasp



Plastic collar



NTSB