

# DUNCAN INTELLIGENCE

## Hawker 700 Flap Vane Corrosion

• *Jason Behrens*

During the recent re-painting of two Hawker 700 aircraft, Duncan Aviation technicians noticed extensive corrosion on flap vane skins after stripping off the old paint. This corrosion has required costly repairs and in cases replacement of the skins.

Operators who plan on painting their Hawker 700s soon should be advised that the aircraft may have corrosion on the flap vanes that will be revealed after paint stripping. This condition may not be limited to the 700 series aircraft. Duncan Aviation technicians have not yet seen this condition in 800 series aircraft, but that does not rule out the possibility.

It is also worth noting that even though your vanes may have recently received X-Ray Structural Inspections, that this method is not fool-proof at revealing corrosion. Corrosion may show up on an x-ray but this is not always case. The primary purpose for x-ray inspections is for the examination of cracks.

For more information about the dangers of corrosion and how to combat it, please contact Jason Behrens in Battle Creek, Michigan, at 269.969.8419 or Dick Hyde in Lincoln, Nebraska, at 402.479.1561.

## FOD or Foreign Object Damage

• *Dick Hyde*

Aviation experts agree that FOD inside or outside your aircraft can be extremely serious. External FOD may be nothing more than a small rivet or other object on the ramp or runway. Tire punctures are common with runway FOD. FOD also comes from objects flying or floating in the air. "Bird strikes" are common around bird fly-way areas,

rivers and lakes. Other examples are blowing sand, dust or volcanic ash and wildlife on or near runways.

Internal FOD may be an object left behind after maintenance. It may be trapped behind a panel or floorboard. It may even be part of the airplane that was not returned to its proper place. Duncan Aviation technicians have found items ranging from tie-raps, avionics control buttons, pencils and even an auxiliary gear handle. FOD trapped under floorboards could be a potential hazard to the safe operation of an aircraft. Sharp objects found lying on wire bundles, hydraulic lines, pitot / static lines, etc. are especially dangerous and can have a chafing potential which can lead to catastrophic failure. Recently, Duncan Aviation technicians have seen a rise in the level of internal FOD.

When it comes to FOD, strict procedures must be adhered to. Duncan Aviation is extremely serious about FOD, and has an inspection process in place to ensure that all foreign objects, regardless of area of origination, are secured prior to panel / floor close-up. Duncan Aviation advises that operators review FOD procedures at any maintenance facility you might be considering to be sure FOD is taken seriously.

For more information about FOD, how to eliminate it as much as possible and the proper procedures that maintenance facilities should utilize to prevent FOD, please contact Dick Hyde in Lincoln, Nebraska, at 402.479.1561 or Jason Behrens in Battle Creek, Michigan, at 269.969.8419.

