

DUNCAN INTELLIGENCE

604 Operators ATA 29

• *Scott Shefke*

Have experienced noise from the #1 and #2 hydraulic systems or in some cases, a hydraulic system failure? This has been traced to hydraulic tube assemblies with certain part numbers found to be installed in a pre-loaded condition.

Bombardier has an in-service modification summary package, IS600-29-0001, available at no cost on the CIC web site. This mod summary provides instructions, part numbers and drawings that are considered acceptable reference data by the FAA and Transport Canada.

If you've experienced a hydraulic system failure, you know what a labor-intensive event it is. This is a must-do preventative maintenance item.

APU Battery Information

• *Scott Shefke*

Challenger 600 / 601 operators have the option of a Supplemental Type Certificate by Securaplane to replace the auxiliary power unit Nicad battery for a maintenance-free, sealed lead acid battery. This STC requires no changes to existing electrical loads, existing aircraft wiring, flight manual or mmel/mel.

Foreign Object Damage (FOD)

• *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 or flying or floating in the air, such as bird strikes. Other examples are blowing sand, dust or wildlife on or near runways.

Internal FOD may be an object left behind after maintenance, 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,

avionic 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.

Carelessness with FOD should not be tolerated. 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.

ATA 78 TR Power Drive Units Corrosion and Failure Prevention for 601 and 604 Operators

• *Scott Shefke*

Moisture has been found to build up in the 14 stage bleed air supply ducting when operating in hot / humid temperatures; this then condenses in-flight. When there is no usage of the anti-ice system, this moisture buildup has no place to go except when forced through the ducting to operate the thrust reverser power drive unit, allowing the ingestion of moisture. The simple fix is to drill a .0625 inch hole in the thrust reverser ground supply cap. This new hole will allow the continuous purging of air and prevent moisture from accumulating in the duct work. This will aid in preventing moisture-laden air getting into the power drive unit. It may also prevent having to prematurely replace the power drive unit. Refer to CF34-NAC-30-005 for reference data.

