

DUNCAN INTELLIGENCE

Diagnostic Information Loss

•John Rabe

Recently we have seen several Falcon 50 (with Collins Proline 4 installed) and 50EX & 2000 model aircraft, on which diagnostic pages could not be accessed. This is indicated by the message, "no valid diagnostic tables loaded." In discussions with Collins, we have learned there is a battery installed on the MDC-4000 card located in the IAPS rack. This battery has a service life of six to ten years, depending on how the aircraft is flown. When battery capacity is lost, all stored fault history is erased and it no longer records new fault information.

These aircraft require diagnostic operations to check input information for the 24-month certification tests per Chapter 5 requirements. If this battery is "dead," these tests are impossible to complete.

To prevent the loss of fault history, we recommend that the battery on the MDC-4000 card be replaced at the "C" inspection (every six years). Duncan Aviation can coordinate the card exchange through Collins.

A Clean Drinking Water System

•Mark Goertzen

As the saying goes, "In the eyes of the chairman, the two most important systems in the aircraft are the entertainment and the water system." Let's talk about the latter.

It used to be that "washing up" was all that was expected from the aircraft's water system. But now keeping that system clean, pure and drinkable poses an extra measure of precautions and maintenance events.

Chlorine kills all substances and was the chemical of choice for many years, but because of its corrosive nature and the problems of "flushing out the taste," alternatives were needed.

Purogene is an aircraft-safe, extremely effective broad-spectrum micro-biocide approved by Dassault to purify drinking water. A routine servicing dose of 5 ppm is recommended and can be checked using

OxyStix test strips. If the aircraft needs disinfecting because of adverse tastes and smells, a treatment of 50 ppm will be required.

Information about *Purogene* and *OxyStix* can be found at Aerosafe.com. For additional questions about your water system, contact Mark Goertzen or Ron Grose (LNK) at 1.800.228.4277 or Kevin Bornhorst (BTL) at 1.800.525.2376.

Falcon 2000 Oil Smell?

•Kevin Bornhorst

A turbine oil smell in the cabin of your F2000 could be costly if not addressed quickly. If the oil is allowed to build up in the air ducts it will require a very expensive replacement of the foam-lined ducting as instructed in Work Card 21-206 (Check and Decontamination of Air-conditioning System).

During a search for the oil leak source, be aware that the oil will not always show up in the bleed air pipes that are coming directly from the engines. It is more beneficial to inspect the engine and APU seals directly for leakage. Several times we have found the bleed air pipes dry on the inside only to find a seal leaking on that engine. In those cases, oil condensed downstream at the intercooler and turbocooler piping instead of in the engine supply bleed air pipes.

Enhanced Surveillance Mandate

•Dave Pleskac

Enhanced Surveillance (EHS) is now mandatory for all IFR flights within the airspace of Germany and Great Britain, and will be mandatory in France March 31, 2006.

However, EUROCONTROL has established a transition period until March 31, 2007. Operators who do not currently have Enhanced Mode S Surveillance must apply for an exemption. For more information about this installation, please contact Dave Pleskac or Gary Harpster at 800.228.4277.

