

# DUNCAN INTELLIGENCE

• Edited by Tim Garity & Tim Klenke • Winter 2003

## Cabin Temp Troubles - Astra, Westwind

By Tim Garity & Sean Pagel

Does the cabin temperature get too hot after extended periods at altitude? Here are a few easy things to check.

1. The inlet for the cabin temp sensor can be blocked (especially on a Westwind) by a seat, briefcase or anything that gets close to the screen. The screen itself can also become clogged with lint, restricting air to the sensor.
2. The cabin temp sensor blower motor could be inoperative. This can be easily verified, as you should feel suction at the screen with the aircraft in a normal, running condition.
3. There could be a lack of insulation around the sensor or a leaking seal between the sensor housing and the sidewall.

Any of these situations will cause the cabin temp sensor to become cold soaked by cold air radiating from the skin around the sensor, making the controller think it is colder in the cabin than it really is. Therefore, the controller adds more heat to the cabin. Since the warmer cabin air can't get to the sensor, the controller is not satisfied and adds more heat. The screened inlet can usually be found on the left side of the cabin on the upper sidewall, about mid-cabin.

## The Value Of Paint, Plan For Protection

By George Bajo

Our current economy is a catalyst for the exchange of aircraft and new paint is often a differentiator in the decision-making process. If you are considering buying or selling an aircraft, consider the condition of its paint. An aircraft kept in a quality coat of paint is less likely to develop corrosion. For this reason, aircraft should be stripped, inspected and repainted by a reputable aircraft paint facility every five to seven years.

Paint technology has improved considerably in recent years. The new High Solids (HS) primers and paint have evolved into excellent products with proven performance on all surfaces, including composites. Flexible agents in HS paint and primers, combined with skilled paint technicians, ensure a long-lasting, top-quality finish and maximum protection for your aircraft.

Also consider that inferior or old paint can cause electrical problems affecting comm radios and navigation receivers. In addition, many aircraft manufacturer's "continuing maintenance instructions" for RVSM aircraft stress that the paint around the static ports needs to be kept in "new condition" with no paint chips allowed to disrupt the airflow over the static sensing areas which could cause altitude errors.

## X-rays and NDT Inspections

By Dan Fuoco

The main purpose of X-ray and NDT procedures is to detect cracks and corrosion; however, other non specific damage/abnormality may also be detected using these procedures.

Corrosion typically appears as more dense areas or individual spots, irregular in shape with poorly defined extremities. It is generally agreed that corrosion of less than 10% in depth of the total material thickness penetrated by the X-ray beam will NOT be readily detected by the conventional radiographic method.

## Don't Make Two Trips For ELT, RVSM & TAWS

By Dave Pleskac

Three avionics mandates are quickly approaching:

**ELT**—January 1, 2004

**RVSM**—December 1, 2004

**TAWS(EGPWS)**—March 29, 2005

Nearly 7,500 aircraft worldwide still need these upgrades.

In order to minimize customer headaches, Duncan Aviation recommends that these mandates be completed while performing other required maintenance. This "killing two birds with one stone" approach will ensure compliance by the deadlines and may also save money, downtime and prevent an AOG situation because a rush may exist next year if operators delay compliance.

**DUNCAN AVIATION**



*For Astra/G-100/Westwind technical info, we have the experts. Our Astra/G-100/Westwind Team consists of tech reps and technicians with experience in airframe/engine, interior/exterior completions, avionics installations, component repair and parts.*

In Lincoln, NE, contact **Tim Klenke** at  
402.475.2611 or 800.228.4277

In Battle Creek, MI, contact **Pete Kilmartin** at  
269.969.8400 or 800.525.2376

Watch our website, [DuncanAviation.com](http://DuncanAviation.com), for details on the 2003 Intelli-Conference schedule.