

# DUNCAN INTELLIGENCE

Unforgettable People—Legendary Service • Edited by Dave Lewis • Winter 2000

## Is Your Autopilot Developing A Mind Of Its Own?

Just as we need our sense of sight to fly an aircraft, an autopilot needs to know what attitude the aircraft is at and the rate of change in attitude to compute a proper response. The vertical gyro acts as the “eyes” of the autopilot. If this information is missing, the autopilot will give a “hard-over” response in whatever direction drive is required. If the gyro is sluggish or slow, the rate information will not be correct for the autopilot and the result will be wing-rock or pitch porpoise. This symptom is usually fairly slow and constant. The attitude information is electrically picked off slip rings in the gyro by brushes. If the contact between brush and slip ring becomes intermittent due to tension or resistive contact, the autopilot interprets this as change in attitude and attempts to respond accordingly, resulting in jittery or rapid oscillation. Depending on the gyro installed there may also be Service Bulletins addressing this problem.

For more info, contact Larry Troyer in LNK at 800.228.4277, E-mail Larry at [larry\\_troyer@duncanaviation.com](mailto:larry_troyer@duncanaviation.com) or contact Pete Kilmartin in BTL at 800.525.2376, E-mail Pete at [pete\\_kilmartin@duncanaviation.com](mailto:pete_kilmartin@duncanaviation.com)

## Keep An Eye On That APU Inlet Screen Area

Monitor and record idle EGT of your APU weekly. If it starts to rise, check it immediately. Lack of attention makes this expensive to repair.

## Do You Need A Eurocontrol Extension?

As of January 1, 2000, aircraft with TOW of 15,000kg/33,000lbs or more traveling in European airspace (ECAC) must have an ACAS II system.

The ACAS II requirement is met with a TCAS II system with 7.0 or MOPS 7 software. The TCAS system will also need recertification due to the new part number being installed. The STC which the system was “originally” certified under must also be revised. Only the original STC holder is being allowed to make these amendments.

Eurocontrol will allow an extension for compliance until March 31, 2001, for operators whose system currently has software version 6.04. Due to certification time constraints, it’s advisable to apply to Eurocontrol for an extension ASAP. Exemption forms are available on the Eurocontrol website at [www.eurocontrol.be/projects/eachip/acas/](http://www.eurocontrol.be/projects/eachip/acas/) (Select Annex D).

Please call Dave Pleskac in LNK at 800.228.4277, E-mail Dave at [dave\\_pleskac@duncanaviation.com](mailto:dave_pleskac@duncanaviation.com) or contact Dennis DeCook in BTL at 800.525.2376, E-mail Dennis at [dennis\\_decook@duncanaviation.com](mailto:dennis_decook@duncanaviation.com)

## Astra/Westwind Market Info From JetResources / Call 800.228.4277 Ask For JetResources

A/C Model	For Sale/ % of Fleet	Change from Last Six Months	Pricing Trends	Asking Price Range	Comments
WWI	12/11%	+33%	↘	low \$2 to high \$2s	Several sold in last 3 mos.
WWII	10/12%	0%	↔	high \$2s to low \$3s	Excellent value, good select
Astra	4/6%	+ %	↔	high \$5s to low \$7s	Not a large market
SPX	2/5%	0%	↔	high \$9s to mid \$10s	In production. small market

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AVIATION**



For Astra/Westwind technical info, we have the experts. Our Astra/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 **616.969.8400 or 800.525.2376**

Comparing satcom/phone systems? Visit [www.duncanaviation.com/phones](http://www.duncanaviation.com/phones)