

DUNCAN INTELLIGENCE

Revisiting Astra Wing Skin Corrosion

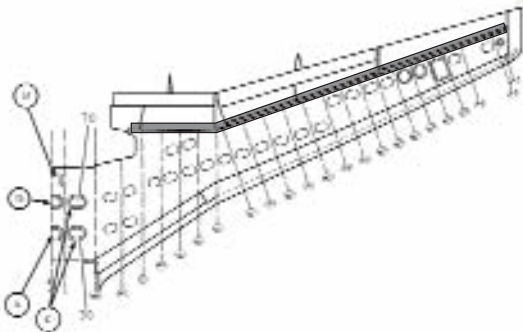
• *Tim Garity*

Wing skin corrosion has become a common issue for the Astra. The corrosion problem is on the upper and lower wing skin panels. The aft edge of the wing skin mates with a Kevlar closeout panel and corrosion has been seen on the top and bottom of the aluminum skin, in the gap between the aluminum and the Kevlar, and under the Kevlar panel. The problem has been detected on approximately 50% of the Astra's Duncan Aviation has seen.

Duncan Aviation technicians found corrosion on an SPX and removed the Kevlar closeout to investigate. There was very little corrosion found on the aluminum under the Kevlar. Duncan Aviation technicians easily removed the corrosion, applied Alodine to the area and then applied primer and paint. Catching the corrosion early saved from major repairs down the road.

Other Astras have not been so fortunate and have required extensive rework, including engineering help from Gulfstream. The corrosion can be spotted as paint lifting or bubbling at the point where the aluminum meets the Kevlar and has been seen on the entire length of the wing trailing edge. It is important to keep these areas sealed and painted to prevent moisture from entering and setting up a corrosive environment. The sooner you detect the corrosion, the less extensive the corrosion damage will be.

See the picture below for more detailed locations highlighted.



Better Calibration = Better Performance

• *James Hood*

One of the biggest reasons Duncan Aviation has such a good reputation for quality is tool and instrument calibration. Fortunately, Duncan Aviation has an internal "Cal Lab" team that is the calibration resource for the entire company and for many regular customers and FBOs. Everything from torque wrenches to air data units are calibrated by this team. To maintain quality, calibration work is extremely important and Duncan Aviation technicians recommend checking the quality of your current calibrations against this seven-point checklist:

1. Turntime: Are your standard and quick turns usually met?
2. Records: Does your lab keep records of your calibrations?
3. Warranty: Does their work have a warranty?
4. Documentation: Is the documentation easy to understand?
5. Traceability: Are your tools/instruments traceable to NIST?
6. Services: Can your shop meet all your calibration needs?
7. Answers: If you have a question, will they explain until you understand?

For more information about the calibration standards Duncan Aviation recommends, call James Hood at 800.228.1836 ext. 4272. Ask him about the magical "calibrated stone!"

