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## *XZilon 3 revitalizes aircraft paint, provides fuel savings*

by David A. Lombardo

David Allen has been an aircraft detailer for almost 15 years. His Orlando-based Allen Groupe details aircraft interiors and exteriors out of locations in Indianapolis (IND), Atlanta (PDK), Orlando (MCO and ORL) and Palm Beach (PBI). "XZilon is the first product that I've found that can back up its claims scientifically, verified by an independent lab," he told **AIN**.

"Oxidation starts as soon as you finish doing the bright work," Allen said, "but we've been using XZilon regularly for more than a year now and I have observed that it definitely slows down the oxidation process.

"I've also observed that it extends the life of the paint by preventing paint fading and stains from acid rain. That may not sound like a big deal until you consider a paint job can run from \$30,000 to \$250,000 and up depending upon the aircraft." Allen said he details about 30 to 40 interiors and exteriors a week and does a XZilon process on about 20 airplanes a month.

According to Larry Sweetser, aviation division director for Granitize Aviation International, XZilon's manufacturer, the product

works at the angstrom level of molecular adhesion. "The first application fills voids in the paint," he said. "The second and third applications attach to the surface. It helps prevent the bright work from corroding and on painted surfaces it puts down a super-slick coating."

### **XZilon Application**

Sweetser's favorite demonstration for skeptics is to treat a section of their aircraft with XZilon, spray Rust-Oleum paint over it, let it dry then wipe it off with his finger. "The treatment essentially provides a green efficient airplane," he said. "The application process fine-tunes the painted surface of the airframe using a three-step process the first time it is applied."

According to Sweetser, the first step for applying the product on a previously untreated aircraft is to micro-clip the surface with a 2,000-grit polymer clay bar and the company's XC-11 Spray and Shine formula to remove all of the old organic material and smooth the surface of the paint.

The next step is to apply three coats of XZilon at 20-minute cure time intervals. The



*A Boeing Service Letter identifies XZilon as a temporary method of corrosion protection for the BBJ engine inlet.*

product must be wiped off with a clean towel as soon as it is applied; allowing it to dry will result in streaks. The product should then be applied two more times.

Sweetser said a follow-up application should be done about every 400 flight hours for an aircraft left outdoors and between 500 and 600 hours for one that is kept in a hangar. Once the surface has been initially fine-tuned, future applications require the operator only to clean the aircraft with an alcohol-based cleaner and then apply the three coats of XZilon.

Sweetser emphasized that the environment has a significant effect on how long the

aircraft will go between applications. “Here in Seattle, where we have a lot of rain and little pollution, an application lasts longer,” he explained, “but in the New York area, where there is a higher accumulation of industrial fallout, the application may not last as long.”

### Product Benefits

According to Sweetser, the return on the investment is a longer paint life. “Our research shows XZilon protects the aircraft against severe air pollution, color shift in paint and topcoat dulling. It prolongs paint life by providing protection during airframe thermo cycling and UV exposure during high-altitude operation. It is resistant to aircraft-fluid chemical attacks and reduces aircraft wash rack cycles and workload during dry wash cycles.”

Additional benefits of the product, according to the company, are that it blocks engine-exhaust soot build-up, is heat-resistant up to 450 degrees F, resists saltwater spray and is efficient at rain removal. It also reduces parasitic drag by as much as 25 percent, resulting in fuel savings.

The cost of the application process varies with the size of the aircraft, but Sweetser said a first-time application on a Gulfstream IV will be approximately \$900, with future reapplications running about \$350 plus labor. “You’re recovering that cost in fuel savings alone. With fuel costs dramatically rising, tuning the paint

makes economical sense,” he said.

According to the company, XZilon can be applied on every surface of an aircraft except porous rubber such as de-icing boots and tires. Sweetser said the product is even approved for use on windows but cautioned that it has never been tested on Challenger windows.

In a Boeing Service Letter (737-SL-71-053-A) regarding commercial aviation services, which covers the BBJ, Boeing states, “Some operators have reported surface corrosion on the engine inlet cowl lip skins after prolonged parking or storage in warm, moist environments. As discussed in the referenced fleet team digest article, Boeing has evaluated several methods to prevent corrosion on the lip skin and determined that XZilon is an acceptable temporary protective coating for corrosion prevention.”

Stephen Conner, director of maintenance for San Jose, Calif.-based First Virtual Air, maintains a Bombardier Global Express. “We first saw XZilon at the NBAA Convention a year ago and decided that if the claims were true it would be a worthwhile investment,” he said.

“It was taking a crew of four a couple of days just to do the bright work so we decided to give it a try. That was four months ago and we have yet had to buff out the leading edges. They’re still shining so well you can see your reflection. Before

XZilon we were waxing and buffing them out with an orbital buffer about once a month. They look really great; it’s a fantastic deal,” he concluded. □

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### XZilon 3 Specs

**XZilon meets all engineering performance and application requirements for:**

- Boeing D6-17487 Rev. N.
- Douglas Aircraft Company CSD #1 Type V Materials
- Airbus AMS 1650B Type 1

**It has passed the following testing by Boeing Materials Technology:**

- 1,300 hours of salt spray chamber exposure
- UV Block/UV30
- Rain erosion on painted and bare metal surfaces