

BAD NEWS TRAVELS FAST

Although it happened a half world away, within days of the Speyer accident, it was gaining notice among the tiny FADEC R&D community. One company playing close attention was Malibu Power and Propeller, a Minnesota mod shop developing an impressively ambitious STC to fit Continental's Aerosance FADEC to the Piper Malibu and Mirage.

Engine refits for any airplane are nothing new, but because of the FADEC's unique requirements, MPPI is undertaking what amounts to a radical redesign of the airplane's electrical system. That in part explains why the cost of the STC will be about \$200,000, according to MPPI's Chad Menne. The project will offer a Continental TSIO-F550J, a new engine variant intended specifically for this application. Menne told us the engine will have larger, more efficient turbos, improved cylinders and

tuned top-down induction. But it's the airplane's electrical system that will see the most radical revision. The airframe will have dual, truly independent buses with an automatic tie to isolate the buses from a catastrophic voltage drain. The engine will have dual alternators, one at 100 amps, one at 85 amps. In addition, the airplane will have two batteries, a start battery and a smaller system battery for the FADEC, providing essentially four sources of FADEC power, a level of redundancy that approaches transport-category aircraft. And that may be just what it takes to convince customers that a FADEC can be kept alive reliably.

