

DUNCAN INTELLIGENCE

PW500 Series Engine Performance

•Ken Kuchenreuther

Contained within the PW500 series Maintenance Manuals, Chapter 05-20-00, in "Periodic Inspections" under "Scheduled Maintenance Checks," there is a section headed "Performance" (#6). Under that heading, a five point performance calibration run is required every 400-500 hours unless you are monitoring your engines using ECTM*. If engine performance has deteriorated by more than 15 degrees Centigrade from the previous calibration run, Pratt & Whitney recommends a fan and compressor wash. Following that, another run is recommended. If performance is still bad, comply with "Boroscope Inspection" under the next heading (#7).

If a problem is found during the inspections, such as a nozzle gasket found protruding, make sure all other items on the list are completed before disassembly. There may be more than one discrepancy that leads to the repair, or the discrepancy may be other than the nozzle gasket.

In the case of the PW530A engine in particular, when using the guide tube called out in the maintenance manual for high turbine blade scoping, insert it and the boroscope through the left igniter port for easiest access to the high turbine blades. Also, while looking at the combustion liner interior, pay particular attention to carbon buildup. In a worse case scenario, carbon buildup can modify high turbine blade profile and clearances with a resultant increase in turbine temperatures.

When troubleshooting high ITT, also reference the appropriate fault isolation chart in chapter 72-00-00. Cracked bellows have been a problem in the past. If you are interested in any more details call Ken Kuchenreuther at 269.317.5526 or Bill Walker at 402.540.4152. E-mail addresses are Ken.Kuchenreuther@DuncanAviation.com or Bill.Walker@DuncanAviation.com.

**If you are interested in ECTM (Engine Condition Trend Monitoring) give me a call or consult Pratt and Whitney Canada's SIL # PW500-024.*

Dan Chilla Joins the Engine Service Sales Team

•Jeff Manion

Dan Chilla has joined the Duncan Aviation Engine Team in the position of Engine Service Sales Representative. Dan will focus on Pratt & Whitney engines, working with Kevin Worthington and the entire Duncan Aviation engine team to continue to provide the highest level of customer service to our growing list of Pratt & Whitney engine customers.

Dan, who has been the Manager of Customer Service in Battle Creek for the past 5 years, is excited about this new direction that will allow him to use all of his experience and abilities.

Dan has very strong qualifications for this new role. He began his career in aviation in 1986 with Kal-Aero. For the first 10 years Dan was involved in the Pratt & Whitney engine program which included sales and management of engine overhaul and hot section events. With Dan's help, Kal-Aero built a strong reputation in the Pratt & Whitney market. Now, with Dan's engine sales background and his business experience in customer service, he will work to further enhance the Pratt & Whitney program under the Duncan Aviation banner.

You can contact Dan by phone at 269.969.8412 or email at Dan.Chilla@DuncanAviation.com.

Your Questions and Ideas Welcome

•Ken Kuchenreuther

Do you have a question, tip or other item you'd like to see here? Please contact me at Ken.Kuchenreuther@DuncanAviation.com or 269.317.5526.

Any person who submits an idea that is published will receive a small gift.

