United Turbine

We keep your PT6 flying!

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e-news

NBAA 2011 in Las Vegas

United Turbine considers it had a very successful event during the just past annual NBAA convention in Las Vegas, Nevada. The new display was not only more informative because of its many picture and messages but also it was lighter than the previous one, and that is important when traveling to important conventions just like this one.
United Turbine has confirmed agreements with some customers and also has received the interest of international companies to prepare joint ventures.

Come to see us in 2011:

- NAAA Annual Convention, December 5th-8th, Las Vegas, NV

Idle adjustment on Fuel Control

An operator asked for assistance with Ng ground idle speed and field altitude on a PT6A-41 engine. He adjusted idle speed to 52% Ng at sea level. After landing at about 8400 ft. altitude the idle speed increased to 62% Ng. Thinking there was something wrong he re-adjusted it to 52% Ng again. Next day the aircraft flew back to sea level and the Ng idle speed was 42%. This is the explanation. The fuel control has an evacuated bellows that compensates Ng idle rpm for barometric pressure up to 3500 feet altitude, referred to as the minimum governing speed. The fuel flow required to maintain a constant idle speed decreases with increasing altitude, until a point where the fuel flow does not decrease any further; this point is the minimum fuel flow setting and it coincides with the minimum governing speed. At altitudes higher than this point, the gas generator speed increases proportionally with altitude. This includes also ground idle speed, which at altitudes of 8400 feet very well can reach 62% Ng. Ground Idle speed must be adjusted only below the 3500 ft. altitude.

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