

EUROPE, JA. NORTH AMERICA, NEIN

So let's get this straight: The DX's Centurion costs more than twice as much to manufacture as the Lycoming it replaces, it has an 800-hour shorter life cycle and requires a \$7000 gearbox package every 600 hours. How can the economics possibly work?

Outside of the U.S., it works for three reasons: The engine burns a third less fuel, the fuel costs two thirds as much as avgas and in some parts of the world, avgas will never be an option.

The tables here show the details. The U.S. numbers are hardly worth considering, but we're presenting them anyway. At current average prices for Jet A and avgas in the U.S., the DX costs \$13.79 an hour more to operate than the avgas version. That's just direct engine

operating costs. Other costs, such as debt load, aren't baked into that number.

Bump the Centurion's TBR to 2400 hours and the diesel gains a \$3 advantage. Even so, that slim margin could be eaten up by the capital costs of a higher purchase price.

Europe offers an entirely different cost universe. Even at the 1200-hour TBR and at current fuel prices, our analysis shows the DX enjoys a \$23.26 per hour advantage over the Lycoming version. At a 2400-hour TBR, the difference is a whopping \$40.49 advantage for the diesel.

If the gearbox replacement cycle went away, the DX's direct operating costs drops to \$62.82, 45 percent lower than what it costs to feed the Lycoming.

OPERATING COSTS COMPARED

MARKET	AVGAS	JET A	1200 TBR	2000 TBR	2400 TBR
CURRENT U.S.	\$5.90	\$5.55	LYCOMING: \$66.10	LYC: \$66.10	LYC: \$66.10
			CENTURION: \$79.89	CENT: \$68.67	CENT: \$62.36
CURRENT EUROPE	\$11	\$7	LYC: \$112	LYC: \$112	LYC: \$112
			CENT: \$88.74	CENT: \$77.97	CENT: \$71.51
FUTURE U.S.	\$7	\$6	LYC: \$76	LYC: \$76	LYC: \$76
			CENT: \$82.64	CENT: \$71.77	CENT: \$65.41

NOTES: Top row TBR values refer to Continental Centurion diesel. Costs were calculated based on a 2000-hour Lycoming TBO and \$26,000 overhaul cost, including mag inspections and potential cylinder work. Centurion numbers assume \$48,300 engine replacement cost, plus approximately \$7000 for gearbox packages at 600-hour intervals. Future U.S. avgas prices assume a \$7 price for 100LL replacement.