

WHISPER PROP®

Key Features

Natural Composite

- Highly Engineered Wood Core
- Carbon Skins
- Allows for Field Repairs

Infinite Blade Life

- Nickel Leading Edge: 50% Harder than Aluminum
- Not subject to Cycle Fatigue

Quiet

- Shorter Diameter
- 88.6" VS 93.0" (KA200)
- Better FOD Characteristics

Less Vibration

- 45% Higher Dampening Coefficient



BLR/ MT Whisper Propeller

TECHNICAL BRIEF

Benefits Beyond Imaginable.

Natural Composite

The BLR/MT Whisper Prop is a Natural Wood composite structure. The core of the blade is a hybrid comprised of Spruce wood and a resin injected Beech wood at the blade's root. The blade core is protected with carbon face skins that are bonded to the wood core. Unlike traditional composite propellers with a foam core, the wooden core of the BLR/MT propeller is the principle structural element of the blade. With traditional foam core composite propellers the blade's composite skins are the principle structural element. When a foam core composite blade is damaged it generally requires a structural repair which cannot be done in service and often must be returned to the factory for expensive and time consuming repairs. **Since the BLR/MT prop skins are only a protective cover for the wood core most damage can be simply and quickly repaired in the field, reducing aircraft down time.**

Infinite Blade Life

Unlike its aluminum counterpart, the BLR/MT Natural Composite propeller blade does not get smaller with time in service due to erosion and the regular filing of small nicks in the blades. Eventually aluminum blades will no longer meet their dimensional limits and will need to be replaced. Nicks in the BLR/MT prop can be simply and quickly filled with epoxy resin and hence do not get smaller with time. As a result the BLR/MT natural composite propeller blade has an infinite life. The BLR/MT Propeller blade also has a 2 inch wide nickel cobalt erosion sheath providing superior leading edge protection since nickel is 50% harder than aluminum.

Only composite prop capable of easy
IN FIELD REPAIRS
decreasing cost and aircraft down time.

BLR Whisper Prop is the
QUIETEST
propeller on the market.

BLR Whisper Prop is the
SHORTEST
composite blade on the market.



Quiet

The BLR/MT Whisper Propeller is the quietest propeller available for The King Air 200 or C-12 aircraft. The European Aviation Safety Agency (EASA) maintains a database of certified noise performance for all propellers approved for use within the EASA community of countries. From the EASA database the following are certified noise levels for the available King Air 200 or C-12 propellers:

- Hartzell 4 bladed factory aluminum propeller – 82.2 dB
- Hartzell 4 bladed factory composite propeller – 80.0 dB
- Raisbeck 4 bladed aluminum swept propeller – 81.7 dB
- BLR MT 5 bladed Natural Composite propeller – 77.1 dB**

The principle reason for the substantial reduction in noise level for the BLR/MT prop is propeller diameter,

- Hartzell 4 bladed factory aluminum propeller – 93.0 inches
- Hartzell 4 bladed factory composite propeller – 93.0 inches
- Raisbeck 4 bladed aluminum swept propeller – 96.0 inches
- BLR MT 5 bladed Natural Composite propeller – 88.6 inches**

In addition to a reduction in noise due to the shorter blade diameter, the BLR/MT props have superior foreign object damage (FOD) characteristics since the blade tip is further from the ground.

Less Vibration

The BLR/MT 5 bladed Natural Composite Propeller has a 45% high dampening coefficient as compared to its 4 bladed aluminum counterparts. An increase in dampening coefficient means a decrease in vibration. The combination of reduced vibration and noise results in a significantly improved cabin and cockpit environment. A reduction in vibration also reduces airframe fatigue and avionics and engine maintenance precipitated by propeller vibration.