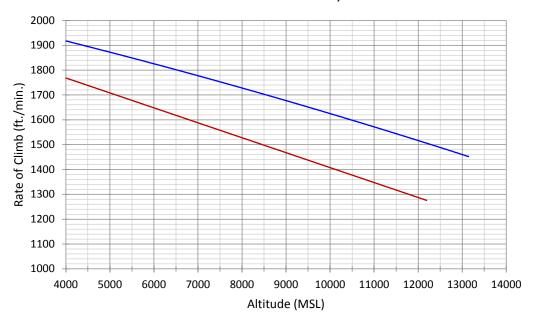
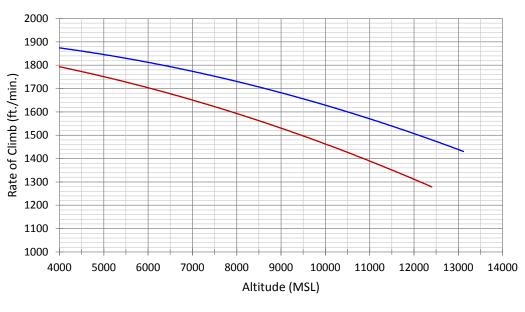


Climb performance with Flaps 0 showed an average improvement of 11.6%. The average improvement in climb performance with Flaps 25 was 8.5%. This testing was performed with the airplane loaded at medium weight.

Climb Performance - FLAPS 0, 105 KTS.



Climb Performance - FLAPS 25, 105 KTS.



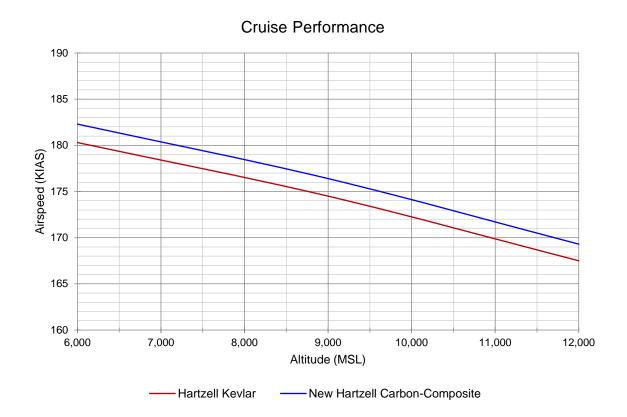
----- Hartzell Kevlar Propeller

—— Hartzell Carbon-Composite Propeller



Cruise Performance

A 2-3 KT increase in airspeed with the new propeller was observed when tested at 6000, 9000, and 12000 ft. MSL. This testing was performed with the same torque and EGT values for both the new propellers and the Hartzell Kevlar propellers.



Ordering the New Propellers

The new propeller set can be order either directly through Texas Turbine Conversions or through Airbus Defense and Space. Texas Turbine Conversions can be contacted at (972) 382-2500. Propeller pricing is available through these companies. A deposit of \$10,000 per propeller set and \$5000 per spare propeller is required with each order. The lead time is estimated by Hartzell to be 12-14 weeks, although Hartzell is attempting to keep at least 1 set on the shelf for prompt delivery. Orders will be filled in the order in which deposits are received.



PROPELLER DATA SHEET

Hartzell Propeller Inc.
One Propeller Place
Piqua, OH 45356-2634 USA
Tel: +1-937-778-4200
Fax: +1-937-778-4215
www.hartzellprop.com

<u>M</u>	odel Numbers		
Aircraft	C.A.S.A. C-212-CC, CD, CE, CF, DF		
Engine	TPE-331-10, -10R		
Propeller	HC-E5N-5KL/JNC109	905B	
Spinner			
Blade	JNC10905B		
Hub	HC-E5N-5KL		
Control System	5		
<u>(</u>	Configuration		
Number of Blades	. 5		
Propeller Diameter	112.0 inches	$284.5\mathrm{CM}$	
Spinner Diameter	. 19.8 inches	$50.3\mathrm{CM}$	
Spinner Length	25.4 inches	64.5 cm	
Hub Material	. Aluminum		
Spinner Material	Aluminum		
	Blade Data		
Activity Factor / Blade	116		
Design Lift Coefficient (CL ₁)	0.654		
Blade Material	Carbon Composite		
Weig	hts and Moments		
Basic Propeller	$173.0\mathrm{pounds}$	$78.47^{\rm Kg}$	Measure
Spacer	pounds	Kg	Measure
Mounting Hardware	pounds	Kg	Measure
Spinner	11.2 pounds	$5.08\mathrm{Kg}$	Measure
De-Ice	6.2 pounds	$2.81\mathrm{Kg}$	Measure
Total Weight	$190.4\mathrm{pounds}$	$86.36\mathrm{Kg}$	✓ Measure
Polar Moment of Inertia	$11.57\mathrm{slugs}\mathrm{x}\mathrm{ft}^{-2}$	$15.687\mathrm{Kg}\mathrm{x}\mathrm{M}$	² ✓ Measure
Distance from Blade Center to Mounting Flange (CG location)	3.660 inches	9.30 cm	

Restrictions / Placards

Stabilized ground operation is prohibited below 1034 (65%) RPM.

Oil weight approx 2.5 lbf at reverse, 0.25 lbf at feather

NOTE 1: OPERATING RESTRICTION INFORMATION MUST BE COMMUNICATED TO ALL OPERATORS IN THE FLIGHT AND MAINTENANCE MANUALS, AND ALSO IDENTIFIED ON INSTRUMENT OR PANEL MARKINGS WHERE APPROPRIATE:

NOTE 2: Unless otherwise noted, all data are analytically estimated at nominal dimension.

printed: 11/5/2018