



CARTER AVIATION TECHNOLOGIES

An Aerospace Research & Development Company

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CARTER'S SLOWED-ROTOR VTOL PROTOTYPE AIRCRAFT ACHIEVING LIFT-TO-DRAG VALUES 2.5 TIMES BETTER THAN HELICOPTERS IN ONGOING PERFORMANCE FLIGHT-TESTING

December 2012 (Wichita Falls, Texas) – Carter Aviation Technologies, LLC, working in conjunction with Carter Aerospace Development, LLC, has made significant progress as performance flight-testing of its current Slowed-Rotor/Compound (SR/C™) prototype, the Proof of Concept demonstrator (the “POC”), continues. The POC is a variant of the company’s four passenger vertical takeoff and landing (“VTOL”) aircraft, known as the SR/C™ 4-Place PAV.

The POC is continuing to expand the high speed / slowed rotor envelope. During November, performance flight-testing yielded the following results:

- Rotor slowed to 106 rpm
- By significantly slowing the rotor rpm (to less than half that of a comparably-sized helicopter), thus far, a lift-to-drag (“L/D”) value of 12 – around two-and-a-half times better than the most efficient helicopters

L/D is a measure of the efficiency of an aircraft (lift or weight divided by drag or thrust). Higher L/D ratios are directly related to enhanced speed, fuel economy, climb performance, and glide ratio.

- Thus far, an advance ratio of 0.85

The advance ratio is calculated by dividing the forward airspeed of the aircraft by the tip speed of the rotor. As the rotor rpm (i.e., the tip speed) is reduced, the advance ratio increases. As the advance ratio increases, drag on the rotor decreases dramatically (resulting in increased efficiency).

- Importantly, these key achievements clear the way for the POC to achieve speeds in excess of 200 knots at 25,000 feet and 350 HP with the current test weight of 3,950 lbs



Additionally, the POC has proven its VTOL capability, achieved speeds in excess of 140 knots on 200 HP and an altitude of 12,000 feet.

The company will continue to expand the high speed/slowed rotor envelope at ever-increasing altitudes, and will gather more data on flight efficiencies under those conditions. A video showcasing Carter Aviation’s progress is available at, <http://www.youtube.com/watch?v=cB29pFKa4Lo&feature=youtu.be>.

About Carter Aviation Technologies, LLC.

Carter Aviation is a Wichita Falls, Texas based aerospace research and development firm that has developed and demonstrated its Slowed-Rotor/Compound (SR/C™) Technology. This technology couples the speed,

range and efficiency of an airplane with the vertical takeoff and landing (VTOL) capability of a helicopter. More information is available at www.CarterAviationTechnologies.com. To discuss any of the foregoing or schedule a visit to Carter Aviation's facilities, please contact Baron T. Oursler, VP & CLO, at (940) 691-0819, Baron.Oursler@CarterAero.com.