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from the editor's desk

What's new in UAVs: better engines, morphed wings

At the AUVSI unmanned systems show earlier this week, it was interesting to note all the interest in engine technology for UAVs. …
… **Another interesting development came from Frontline Aerospace, Inc. with its V-Star UAV. The V-Star employs morphing wing technology in the form of extensions at the end of its wings that flip up to handle slow flight conditions. So far the craft is only a concept, and there is some pooh-poohing about it from the aviation press because the company is a start-up.**

But there is a 50% scale demonstrator under construction that should be ready next year.

Published Friday, June 13, 2008 4:13 PM by Lee Teschler
Filed under: jet fuel, morphing wings, gas turbines

Comments

FrontlineAerospace said:

Thank you for your straightforward mention of Frontline Aerospace, Inc., and our recently announced V-STAR (tm) unmanned aerial vehicle. The "baseline" configuration, which is shown at www.FrontlineAerospace.com, is aimed at a requirement that has not till now been met -- the Front Line Delivery System (FLDS). V-STAR (tm) can ensure rapid delivery of ammunition, water, food and fuel to frontline troops under fire to replace current slow convoys of trucks or HUMVEEs vulnerable to improvised explosive devices (IEDs) and crew capture. (That is why we have considered V-STAR (tm) to be the "HUMVEE of the Air.“) What we also found when designing V-STAR (tm) is that its

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innovative payload configuration, which is always at the Center-of-Gravity (CG), allows for rapid substitution of other payloads to meet contingencies in the field -- including Intelligence/Surveillance/Reconnaisance (ISR), target acquisition, lethal weapons, and other critical packages. The morphing wing, which allows us to rapidly increase endurance when needed, is just one of our innovations. We do, in fact, have steps underway to produce a smaller-scale V-STAR (tm) vehicle this coming year with mission capabilities of its own, as well as demonstrating our technology for larger vehicles. The final point I might add, which relates to your insight into this year's AUVSI focus on engines, is our MicroFire (tm) gas turbine heat exchanger, which for the first time will provide a recuperator small enough and light enough to benefit helicopters and UAVs. In a day when we face rapidly increasing fuel prices and increasing demands for aircraft endurance, our MicroFire (tm) gas turbine recuperator is attracting serious interest from anyone who operates the proven Rolls-Royce 250 engine series.

RYAN S. WOOD
CEO, Frontline Aerospace, Inc.
June 14, 2008 9:58 PM