



THIS WILD NEW CONCEPT AIRCRAFT IS ELECTRIC, AUTONOMOUS, AND POWERED BY DOZENS OF FANS

News / Manufacturer



DARPA has awarded a contract to Aurora Flight Sciences to develop the agency's newest unpowered vertical takeoff and landing (VTOL) aircraft. The new "X-plane" concept (no, not that X-plane) will reach speeds of 400 knots and carry cargo loads of at least 40 percent of the plane's expected 10,000- to 12,000-pound gross weight, all while beating the efficiency of its predecessor, the V-22 Osprey.

Aurora is calling the new plane "LightningStrike," which is fitting, because the craft will also be electric. LightningStrike's turboshaft will generate 3 megawatts (4,000 horsepower) of electrical power in order to power the 24 ducted fans on its wings. DARPA says that's equal to the output of an average commercial wind turbine. The research agency is also hailing the experimental design for the technological advancements that could eventually find their way into other aircraft, like the cellular aerodynamic wing design or the "overactuated flight control systems" that can dynamically adjust the thrust of each fan.

The radical aircraft will be a sight to behold when it actually gets up in the air, even if it has little practical impact on those of us outside the military industrial complex. Unfortunately, the LightningStrike won't begin test flights until at least 2018 — but that doesn't stop us from taking a few minutes to gawk at the computer generated concept video released by DARPA. In it, we see

the LightningStrike taxiing to a runway before stopping to take off vertically. The fans rotate as it rises, propelling the aircraft forward. It's reminiscent of a few recent concepts from NASA, one of which has already flown using similar technology.

05 MARCH 2016

SOURCE: THE VERGE

ARTICLE LINK:

<https://virginia.50skyshades.com/news/manufacturert/this-wild-new-concept-aircraft-is-electric-autonomous-and-powered-by-dozens-of-fans>