Aurora's Solar Plane Cleared for Flight

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Aurora Flight Sciences has received approval to commence tests of a solar-powered unmanned aircraft within the national airspace.

The tests will be conducted at Las Cruces, New Mexico, under the auspices of New Mexico State University (NMSU). NMSU operates the only Unmanned Aircraft System Flight Test Center through an agreement (or in cooperation) with the Federal Aviation Administration. NMSU recently completed a technical and safety analysis of the Aurora aircraft, a precursor to operation in the National Airspace System (according to Steve Hottman, UAS Flight Test Center Director or Dennis Zaklan, lead NMSU analyst for the Aurora aircraft project at the UAS Flight Test Center).

The Aurora plane, which is named "SunLight Eagle", has a wingspan of 114 feet and weighs approximately 200 pounds. The SunLight Eagle was originally built in 1986 at a prototype for the MIT Daedalus human-powered aircraft. To convert it to fly on sunlight, its wings have been covered with solar cells. Electricity from the solar cells drives an electric motor, which turns the 12 foot diameter propeller at the front of the aircraft. The solar cells also charge high-performance batteries, which will allow the aircraft to fly at night or on cloudy days.

"The first set of tests will focus on measuring the performance of the aircraft" says Aurora program manager Robyn Allen. "We need to determine what impact the installation of the solar power system has on the aerodynamic performance of this aircraft". The first tests will be limited to flights up and down the runway at low altitude in order to collect test data. Subsequent flights will expand the flight envelope. Eventually, Aurora plans to fly the aircraft above 50,000' on flights lasting several days.

About Aurora Flight Sciences

Aurora Flight Sciences designs and builds robotic aircraft and other advanced aerospace vehicles for scientific and military applications. Aurora is headquartered in Manassas, VA and operates production plants in Bridgeport, WV and Columbus, MS and a Research and Development Center in Cambridge, MA. To view recent press releases and more about Aurora please visit our web site at www.aurora.aero.

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