Distance Record Set for Human-Powered Flight

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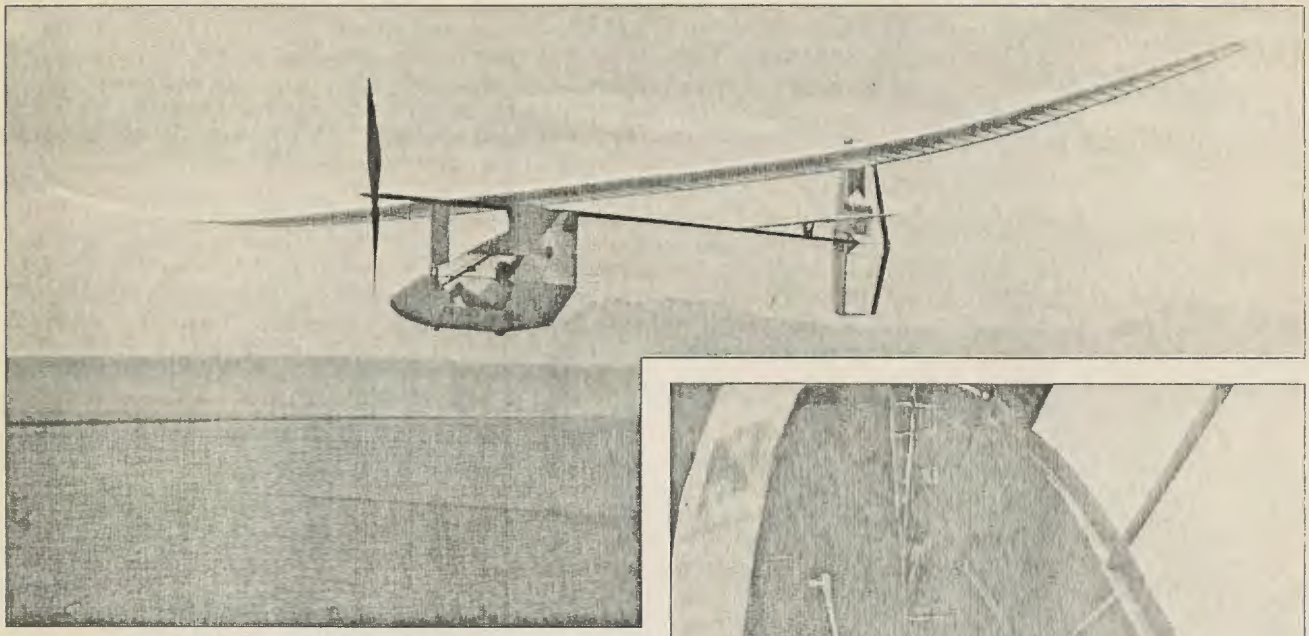

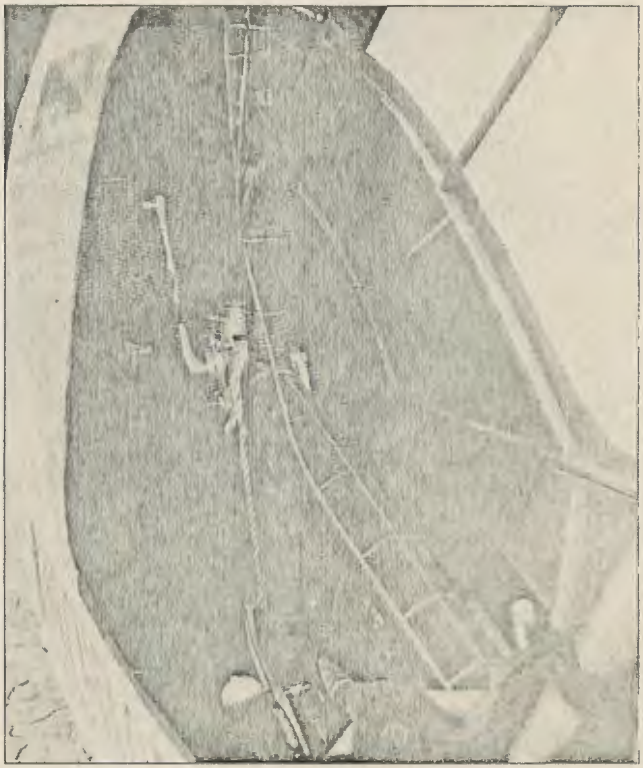

Michelob Light Eagle human-powered airplane set the distance record for its class at 37.3 stat. mi. while undergoing flight testing at Edwards AFB, Calif., on Jan. 22 (photo 1) (AW&ST Jan. 26, p. 30). The airplane—built by the MIT-based Daedalus Project—has a 114-ft. wingspan and 320-sq.-ft. wing area, weighs 91 lb. empty and cruised at 16.6 mph., consuming 0.31 hp. Steering is primarily through an all-flying rudder operated by a right-hand control stick, and roll control is through all-flying wingtips that pivot at the main spar, controlled by the left-hand stick (photo 2). The right-hand stick also controls pitch via an all-flying conventional tail, which project officials said was more efficient than a canard. A carbon-fiber driveshaft connects the pedals to the variable-pitch propeller. Main structural materials are carbon-fiber, Kevlar, polystyrene foam, and .005-in.-thick Mylar skin covering. The project's goal is to recreate Daedalus' mythical flight from Crete to the Greek mainland, a 69-stat.-mi. distance. Next step is to build another aircraft based upon the recent tests and attempt the Crete flight in April, 1988.