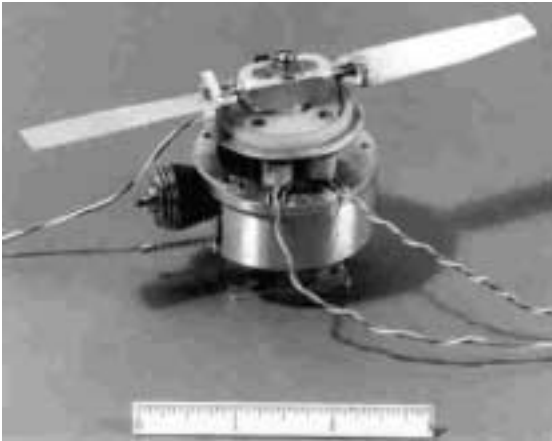


## Engine Work by Ken & Steve Shoulders



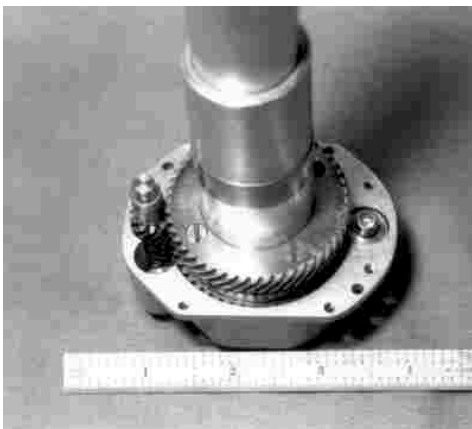
Power pod for saucer using 0.049 engine with alternator and cyclic pitch control for blades.



Free piston gas generator developing 2 ghp output.

Gearbox for dual 0.61 engines used in contra rotating propeller vehicle.

Detail of helical gear drive.





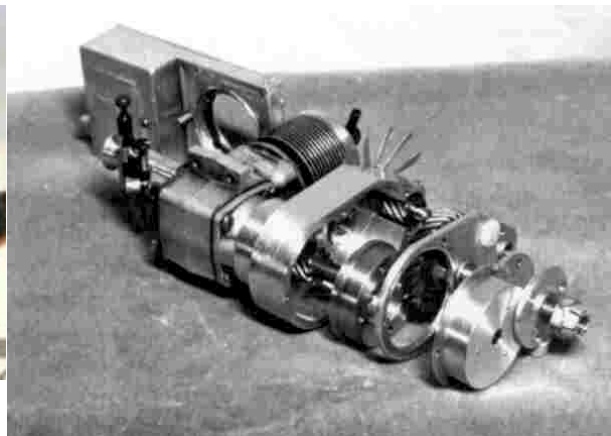
Tip jet powered test rig.



Pressure jet engine using propane fuel.  
Shown in test cell.



0.15 cu. inch diesel engine shown with hydraulic dynamometer, starter, cooling fan and muffler. Entire assembly is enclosed in sound proof housing to reduce noise level to 35 db at 10 feet.



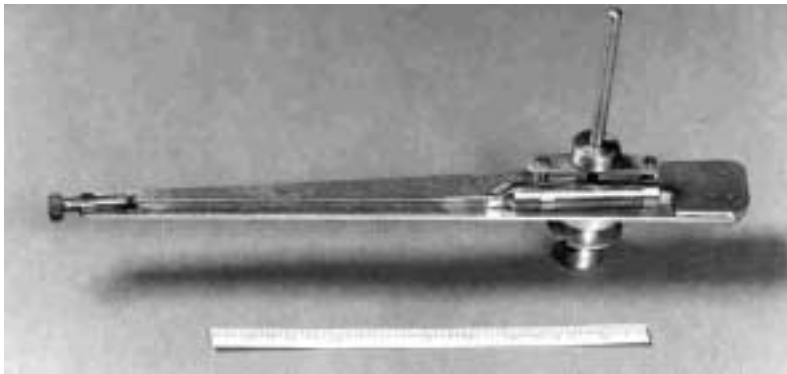
0.15 cu. inch diesel engine with induction and reduction gearing for driving a large propeller.



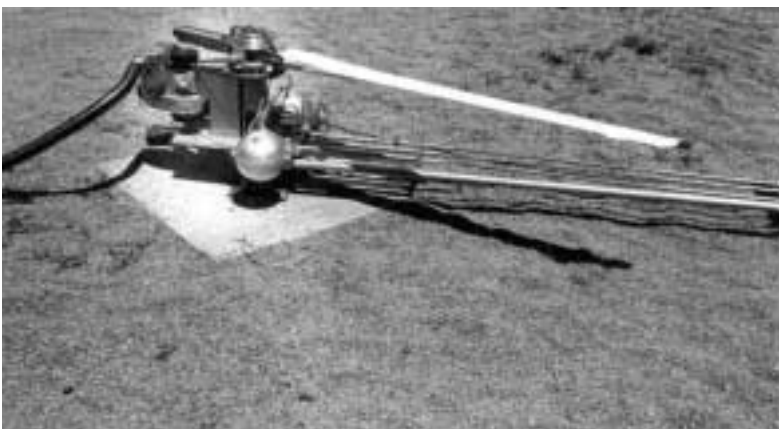
Ceramic cylinder, piston and sleeve valve used in 0.05 cubic inch displacement sleeve valve engine. Parts made from aluminum oxide to a precision of 10 micro inches on all critical dimensions.



Solid rocket powered, single blade rotors for testing takeoff from unprepared area.



90% hydrogen peroxide powered liquid rocket and rotor blade on launching spindle. (Metal sheath for blade not shown.)



90 horsepower hydrogen peroxide powered rocket on rotor blade. (Shown on test stand with starting engine.)