

Antique Aircraft of Ken Shoulders



Original ducted fan machine with ultrasonic height control and anti-collision system.



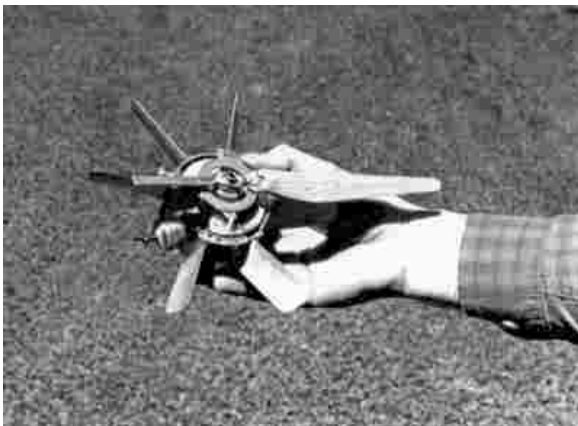
Underside of ducted fan machine showing ultrasonic whistle and microphone.



Highly energetic machine using cyclic pitch controlled open blades with counter torque vanes.



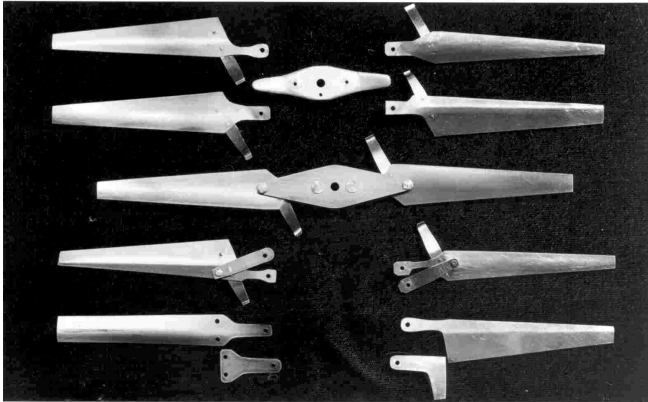
Top view showing single blade cyclic pitch prop.



Variation on counter torque technique from above machine.



Top view of machine on left.



Series of resonant cyclic pitch controlled rotor blades.



Series of cyclic pitch controlled rotor blades.



Uncontrolled but stable VTOL machine having acoustic control of height. Vehicle body spins.



Four blade, cold, tip jet powered machine driven by centrifugal compressor.



Boomerang. Cold tip jet powered machine driven by 0.049 engine. Uncontrolled free flight.



Steve with Boomerang.



Top view of Boomerang.



Three, 0.01 powered Boomerang configurations for free flight.

0.01 engine and compressor.





15 pound lift Boomerang with full control for autonomous flight.
(A patent was issued to Shoulders for the control system.)



Maiden voyage of large Boomerang.
(Note smoke swirl shows two turns of blade has given a height of about 2 feet.)