



Free-Flight Tunnel

Description:

- Test Section - 12-foot diameter octagon, closed throat
- Power - 570 horsepower
- Speed - 60 miles per hour
- Pressure - Atmospheric

Purpose of Equipment:

To study the problems associated with dynamic stability and control by flying scale models under controlled conditions.

Research Projects:

- a) To evaluate the effects of various design configurations on the stability and control characteristics of airplanes.
- b) To develop means for obtaining adequate stability and control on new types of airplanes.
- c) To evaluate and improve the handling characteristics of new military airplanes of unconventional design.

Illustrations:

1. Model of the P-63 airplane with a "V" tail in flight.
2. Model of airplane having propellers behind the tail surface.
3. Model of a tailless patrol airplane in flight.
4. Model of tailless patrol mounted on force-test support in the tunnel.

