



Full-Scale Tunnel

Description:

- Test Section - 30- by 60-foot, open throat
- Power - 8000 horsepower
- Speed - 120 miles per hour
- Pressure - Atmospheric

Purpose of Equipment:

To determine under full-scale conditions the effect of various components of the airplane on its performance and flight characteristics and to determine means of improving those characteristics.

Research Projects:

- a) Determination and improvement of the stability, control, and performance characteristics of models and full-scale airplanes.
- b) Drag-reduction (clean-up) tests of specific military airplanes.
- c) Investigation and improvement of power-plant installations of full-scale airplanes.

Illustrations:

1. Development tests of the power-plant installation of the XB-39 airplane (liquid-cooled version of the B-29).
2. Investigation of the effects of a radar fairing during stability, control, and clean-up tests of the F6F (Hellcat) airplane.
3. Flying model of the XP-55 airplane mounted in the tunnel.
4. The P-59, jet-propelled airplane, mounted in the tunnel for stability, control, and clean-up tests.

