

infantile paralysis cases in North Carolina discloses that the name is in many ways a misnomer. The disease is not wholly a children's disease although the greatest incidence is among those under five years of age.

In North Carolina's current epidemic 62 persons over thirty-five years old, had contracted the disease (up to the middle of July). Children under five, however, accounted for over half the cases.

Cases broken down into their classification as urban or rural, male or female, and White, Negro or Indian, follow closely the population distribution as given by the state census. Thus, the oncoming of the disease seems not to

be explained by the place of living, sanitary conditions or other factors which account for the spread of other infectious diseases.

Whether or not the potential victims have been fortunate enough to have built up some natural immunity in the past, seems to be the biggest factor.

Either you have such natural immunity or you don't. What medicine hopes will come from its vaccine experiments in North Carolina is some definite proof that at least artificial immunity can be provided. Parents of children in the path of the epidemic and everywhere else share that hope.

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makes 200-mile an hour model speeds possible is mounted ten feet off the floor of the laboratory on a huge concrete and steel base weighing four tons.

The arm resembles nothing so much as the old-fashioned horse-powered feed mill, which applied the elementary principle of hitching a horse to a long pole made fast to the upright drive shaft of the mill and walking the horse round in a circle.

The lighter-than-air craft forum was the first of its kind ever held in America. Its object was to review the present status of the airship from the engineering and scientific viewpoint, according to Dr. Theo. Troller, director of the Guggenheim Airship Institute, where meetings were held.

Outstanding airship experts of America were in attendance at the technical sessions, whose chairman is Dr. G. W. Lewis, Director of Aeronautical Research, National Advisory Committee for Aeronautics.

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AERONAUTICS

Zeppelin Models Whirled At 200 Miles per Hour in Tests

See Front Cover

A TWO-TON revolving arm which hurls twelve-foot zeppelin models through space at 200 miles an hour was exhibited to the experts attending the lighter-than-air craft forum at the Daniel Guggenheim Airship Institute.

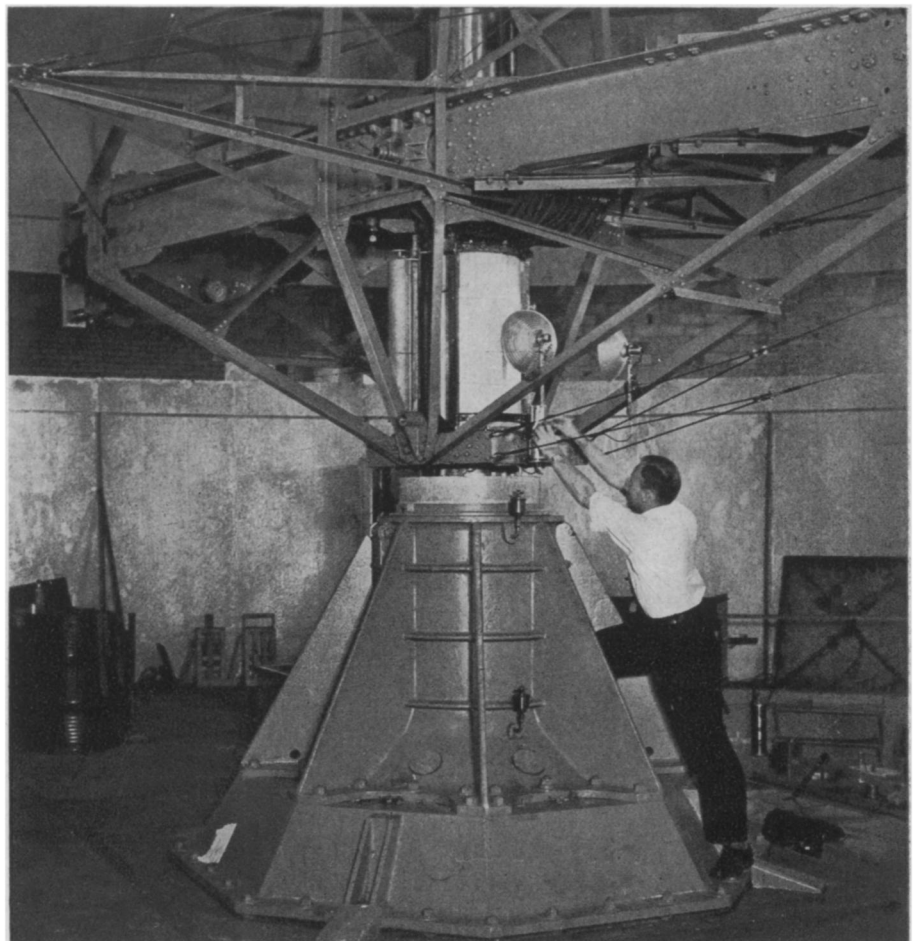
The giant whirling arm—as long as the average city block is wide—is designed to make accurate tests on zeppelin models to check where the greatest strains occur in time of severe storms; times of disasters like that which caused the crash of the Akron off New Jersey.

The twelve-foot-long model zeppelins, whirled round and round by the device, have sixty small holes drilled in them from the extreme nose to the tail. Separate rubber tubes are connected to each hole and the sixty tubes run through the hollow whirling arm back to three score manometers, which indicate the air pressure at each given hole in the hull.

The long glass tubes of the manometers contain red fluids whose relative heights give an accurate picture to the research scientists of the pressure forces distributed along the model's hull. As a final automatic touch, a photographic film passes behind the tubes and makes a permanent record of the heights at one minute intervals for each one-sixtieth of the model's length.

Knowledge gained from the tests will be applied to the construction of future airships to make them more sturdy at the points where they experience the greatest strains.

The two-ton whirling arm which



WHIRLING ARM FOR AIRSHIP TESTS

This spinning device whirls 12-foot zeppelin models about in synthetic storms to test their weathering ability. Dr. Theodore Troller, director of the Guggenheim Airship Institute, is here shown adjusting the automatic photography unit which records the readings of the instruments.