

Construction of all seven primate research centers is expected to be completed by the end of 1964. Scientists from all parts of the country and the world will be able to visit the centers and work there on specific projects.

Dr. Geoffrey H. Bourne of Emory University will direct the Yerkes Regional Laboratory, being constructed primarily to study the greater apes.

Emphasis there will be on the relation of infant growth and experience to behavior in later life, as well as on the attributes of the aged primates. Other studies will include brain functions, comparative studies on monkeys and other anthropoids, and effects of unusual environments and intense stimulation.

In addition to the centers already mentioned, the University of Washington at

Seattle, Harvard University, the Delta Regional Primate Center at Tulane University in New Orleans and the National Primate Conditioning Center at the University of California at Davis have received grants from NIH.

Dr. L. H. Schmidt, director of the Davis center, told SCIENCE SERVICE that he expects to organize a broadly based staff of permanent investigators, including specialists in bacteriology, virology, biological chemistry, nutrition, physiology, pharmacology, pathology, psychology, ecology and biometrics.

The center expects to study a number of problems in all of the more common species of monkeys of Asia, Africa, South and Central America, and selected macaques of India, Southeast Asia, the Philippines and Formosa.

• Science News Letter, 84:218 Oct. 5, 1963

AVIATION

Sailplane Trip Difficult

► IF A FORMER Spitfire pilot carries out his plans to "sailplane" his way across the Atlantic Ocean, it would be like "going over Niagara Falls in a bucket," said world famous soaring pilot Paul A. Schweizer.

Cornelius "Paddy" Donovan, a 52-year-old former RAF Wing Commander, hopes to make the 2,000-mile crossing from Newfoundland to Shannon in western Ireland in a glider, using the strong winds of the jet stream to propel him east.

Although the jet stream winds at 50,000 feet reach speeds of several hundred miles an hour, no one has ever ridden them in a glider. Glider technology has not advanced enough for that, said Mr. Schweizer, who also builds gliders.

Glider, or sailplanes as they are more popularly called, are man's closest imitation of a soaring bird. When a bird soars, it is lifted higher and higher because the air is rising faster than the bird is falling through it.

That is how albatrosses and other great frigate birds of the sea can soar or sail for days over water without ever tiring or flapping a wing.

Here is Mr. Donovan's problem:

Once his glider is released from the Canberra jet that will tow it to a height of 50,000 feet, he will have to position himself carefully in order to get sufficient oxygen at that height and gamble that the dependable currents of warm air over the ocean and the strong jet stream winds won't let him down.

The world's record for distance reached by sailplane is about 535 miles, set in 1951 by Richard H. Johnson of the U.S. He flew over land, where air currents are more dependable, from Odessa, Texas, to Salina, Kans.

The world altitude record for gliders is 46,267 feet above sea level, set by Paul F. Bikle of the United States in a Schweizer sailplane in 1961.

During World War II a GC-4 glider was towed 3,500 miles across the Atlantic by a jet, filled with supplies for Russia. But no one has ever tried it alone.

The first heavier-than-air craft to carry men aloft, the glider was developed by a California physicist, John J. Montgomery, in 1884, nearly 450 years after Leonardo da Vinci studied the wings of soaring birds as an answer to human flight.

Subsequent glider pioneering was done by Otto Lilienthal in Germany, where gliding as a sport was used after the first World War to train the war pilots of Hitler's Reich.

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TECHNOLOGY

46-Ton Belt Machine Supported by Air Sleeves

► A BELT-TESTING machine weighing over 46 tons is supported on air at the Goodyear Tire & Rubber Company plant in Akron, Ohio.

The machine, which measures 49 by 36 feet, is held up by rubberized fabric "sleeves" that resemble fat treadless tires and are filled with compressed air. Supported in this manner, vibration is reduced 99%.

If the machine were not supported by air, it would shake apart the 40-year-old building in which it is installed.

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Do You Know?

Flour of a high nutritional value has been made from bleached seaweed.

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The 50-year-old airport at Hamburg, Germany's second largest city, is one of the oldest in Europe still in operation.

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