

growth-valuable sunlight in the lower strata of the forest is well demonstrated when the trees are thinned out either by cutting or accident, letting more light

through. The humbler plants of the forest floor then fairly leap forward in their growth.

Science News Letter, July 20, 1935

GEOGRAPHY

Air Survey Of New Mexico Aided By 275-Pound Camera

THE WORLD'S largest aerial camera, which can photograph a ground area of 760 square miles, or over twice that of New York City at a single "shot," has been built by Fairchild Aerial Surveys and Aerial Camera Companies for use by the Department of Agriculture in a mapping survey of central New Mexico.

Weighing 275 pounds without films, the camera has ten lenses mounted in two sets of five. When the ten lens shutters are snapped at exactly the same instant by a master electric trigger, ten negatives making a composite print which measures 32x32 inches are exposed.

A single load of films for this photographic colossus weighs 70 pounds; includes 1,200 feet of film; takes 2,000 unit exposures, which will make up 200 composite pictures.

Soil Conservation Service workers,

starting a survey from the air of the rugged and almost inaccessible terrain of central New Mexico about mid-July, will make first use of the new camera. It will primarily aid in the selection of control points, so indispensable in the detailed mapping work to be undertaken. Previously these control points were necessarily established as the result of ground surveys, because smaller cameras did not photograph a large enough stretch of territory.

Surveyors will fly the camera back and forth over the Rio Grande area, along courses 30 miles apart, with lanes 11 miles wide being "shot." From these surveys, control points which could not have been established by ground surveys because of the lack of roads and general inaccessibility of the territory, will be set up, and from them every square inch

of territory photographed with smaller cameras.

As there are wide stretches in Siberia and China which have never been surveyed, and since only about one-third of the United States has been adequately mapped, the camera may prove invaluable in bringing the last unknown wilderness under the study of scientists and explorers.

Science News Letter, July 20, 1935

GEOGRAPHY

Soviet Ice-Breaker Will Seek "Lost" Arctic Island

THE SOVIET ice-breaker Sadko recently sailed from Archangel on a 6,000-mile journey into the melancholy wastes of the Arctic, to determine the existence of Gillis or Giles Land, a phantom "lost" island of the North, which has been reported seen by only a half-dozen persons since its alleged discovery by Capt. Cornelis Gillis in 1707.

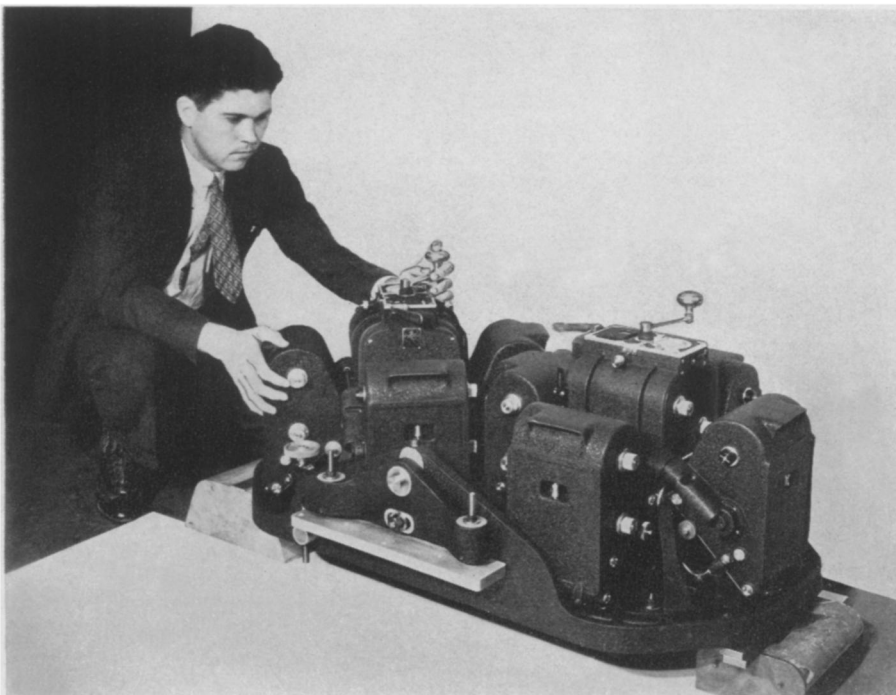
The expedition will also make a hydrological study of the lower depths of the polar basin, down to 3.1 miles, and explore the course of the Gulfstream as it finally "dies" in the frigid waters of the Arctic.

Leaving Archangel, the expedition will touch at North Cape, the southern part of Spitzbergen, go into Greenland Sea and then round Spitzbergen and Franz Joseph Land from the north, finally reaching the barren Siberian coast at Novaya Zembla, where the coal supply will be renewed. Turning north, the Sadko will again pass Franz Joseph Land, cruising about in little known waters, and finally go into the Lepatev Sea, the Vilkitsky Strait, and the Kara Sea.

Mindful of previous disasters, provisions and clothing enough to last for two and a half years are being taken, although the expedition plans to stay but four months. Headed by the explorer G. A. Ushakov, the 72 members of the party count among their number many leading Soviet geologists, hydro-chemists and physicists.

Equipment aboard the Sadko includes two airplanes, five research laboratories, and four dog teams, besides the over-supply of food and clothing.

Gillis Land or Giles Land was first reported by Captain Cornelis Gillis in 1707. It was reported seen from the eastern part of Northeast Land in 1864, after being forgotten for nearly a century and a half. In 1896 Arnold Pike claimed to have landed on the island on a hunting



LARGEST AERIAL CAMERA

The world's largest aerial camera, capable of photographing an area of 760 square miles at one shot, is finished, with all its 10 lenses ready for the mid-July survey of central New Mexico by Soil Conservation Service workers. It is built by the Fairchild Aerial Surveys and Aerial Camera Companies, and weighs 275 pounds plus an extra 70 pounds for films.