

GEOGRAPHIC NEWS BULLETIN

ON

POLISH STRATOSPHERE FLIGHT TO BE MADE
IN WORLD'S LARGEST BALLOON

PREPARED AND ISSUED BY

THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888, for the Increase and Diffusion of Geographic Knowledge)

General Headquarters, Washington, D. C.

The next manned-balloon flight into the stratosphere will be made by Polish aviators and scientists, from Poland, in September, in the largest balloon ever constructed, it was announced here yesterday by the National Geographic Society after a conference with members of the Polish Embassy staff. The pilot will be Captain Zbigniew Burzynski of the Polish Army, who has just sailed for Poland after a brief visit to the United States during which he consulted with Major Albert W. Stevens who commanded the world-record stratosphere flight of the National Geographic Society and the U. S. Army Air Corps in 1935; and specialists of the National Bureau of Standards who designed some of the instruments used in the 1935 ascent.

The Polish flight will be notable in several respects. The balloon, which is almost completed, will be considerably larger than Explorer II of the Geographic - Army flight and will be made of rubberized silk. Silk for the bag was both grown and processed in Poland, product of an industry not generally known to exist in that country. The volume of the bag will be more than 4,800,000 cubic feet as against 3,700,000 cubic feet for Explorer II; the height at take-off time, 459 feet as against 315 feet; and the greatest diameter 209 feet as against 192 feet. In spite of this greater

size, the bag will weigh only 3,300 pounds instead of the 6,350 pounds of Explorer II, owing to the lesser weight per square yard of the silk fabric.

The spherical gondola to be used in the Polish flight will be made of aluminum and steel. With instruments and ballast installed, it will weigh much less than the similarly equipped gondola of Explorer II.

Balloon and gondola together, ready for flight, will weigh less than half as much as Explorer II, so that it should reach a much greater height, probably 81,000 feet (15 1/3 miles) above sea level. Explorer II established the present world altitude record of 72,395 feet (approximately 13 3/4 miles), in an ascent from the Black Hills, near Rapid City, South Dakota, November 11, 1935.

Captain Burzynski will be accompanied on the forthcoming flight by Captain F. R. Hynek, also of the Polish Army, and Dr. Yodko Narkiewicz, noted Alpinist and explorer. The two officers are well known to American balloonists. They were the winners of the Gordon Bennett Balloon Race in 1933, flying from Chicago into Quebec. In 1935 they established a record by remaining in the air 57 hours and 45 minutes, while flying from Warsaw deep into Russia.

The flight of the Polish stratosphere balloon will be made from a valley in the Tatra Mountains near Zakopane, in southwestern Poland near the Czechoslovakia border. Studies to be made during the flight will include those in regard to cosmic radiation, pressure, and temperature. Among the instruments taken aloft will be several loaned by the National Geographic Society which were used in the

3

flight of Explorer II in 1935. Funds for the flight, amounting to a million zlotys, (nearly \$200,000) were raised by popular subscription and the ascent is being made under the auspices of the Polish Army.

Since the flight of Explorer II on November 11, 1935, three attempts have been made to penetrate the stratosphere. On March 9, 1936, two Russian scientists, ascending from Moscow, reached an altitude of 10,000 meters (about 32,808 feet) in a balloon of only 77,700 cubic feet capacity.

On May 25, 1937, at Brussels, Professor Auguste Piccard's balloon caught fire from a gas burner used to heat air for lifting the balloon, as the ground crew were attaching the basket for the ascent of Piccard and Max Cosyns.

On July 18, 1937, Professor Jean Piccard took off at Rochester, Minnesota, in a gondola lifted by a group of small balloons, and six hours later, crashed into the treetops near Lansing, Iowa. He attained a height of 11,000 feet.
