



SOUTH POLE RADIO NEWS



Vol. I

PUBLISHED BY GRAPE-NUTS, THE CEREAL BYRD TOOK TO LITTLE AMERICA

No. 2

BYRD BROADCASTS MAKE RADIO HISTORY

"THE most ambitious broadcasting project in all radio history!" That is the rating given by Senator Guglielmo Marconi, "father of radio," to the broadcasts, which each week bring the story of the Byrd Antarctic Expedition direct from Admiral Byrd and the expedition itself. This epochal series is heard over the Columbia network every Saturday evening at 10:00 P.M., Eastern Standard Time.

The broadcasts are both to and from the Byrd expedition—and are the only ones which will be made by Admiral Byrd and his companions during the time the expedition is in the Antarctic.

Complete details as to the equipment used and how the broadcasts are brought from the Antarctic wastes are given in the questions and answers that follow.

Answers to Questions Most Commonly Asked by Listeners

From the start, the novelty—the humanness—the sheer adventure of this epochal series caught the public imagination and whetted the radio audience's appetite for detailed information about the expedition and the broadcasts. Daily, thousands of letters, containing questions from listeners in every state and from many foreign countries, began to reach the sponsors of the broadcasts, the makers of Grape-Nuts. While it is physically impossible to answer every question, this publication contains the answers to the questions that are most commonly asked.

Question.

What are the outstanding milestones in the life and career of Rear Admiral Richard Evelyn Byrd?

Answer.

Oct. 25, 1888—born, Winchester, Va.; 1900—at 12 made round-the-world trip alone; 1904—entered Virginia Military Institute, Lexington, Va.; May 28, 1908—enrolled in U. S. Naval Academy, graduating with class of 1912; Aug., 1917—entered aviation; July, 1918—until Armistice—Lieut. Commander, U. S. Navy, and chief of American air forces in Canada; June-Oct., 1925—commander, aviation unit of MacMillan Polar expedition, which he helped organize; May 10, 1926—flew over North Pole and back in 15½ hours; June 29—July 1, 1927—made trans-Atlantic flight with three companions (after flying over Paris for six hours headed back to ocean because of poor visibility, and landed on beach at Ver-sur-Mer); 1928-30—first Byrd Antarctic expedition (first successful, large-scale scientific expedition, comprising 82 men, all of whom returned to civilization); Nov. 29, 1929—accompanied by Bernt Balchen, Harold Gurnee and Capt. Ashley McKinley, flew over South Pole and back to Little America in 19 hours; Dec. 21, 1929—commissioned Rear Admiral by President Hoover, following special act of Congress, in response to nation-wide appeal. Admiral Byrd holds 22 citations from the U. S. Navy, including four for bravery and two for extraordinary heroism in saving lives.

Question.

What are the objectives of the second Byrd Antarctic Expedition?

Answer.

The expedition will spend approximately one and a half years in the Antarctic serving 12 important branches of science. The scientific staff's ambitious program may be expected to make worthy contributions in the fields of aurora observations, biology, cosmic rays, color intensity distribution, elasticity of materials, geology, geophysics, gravity determinations, ice studies, magnetic soundings, medical research, meteorology, meteor observations, oceanography, radio, seismology, terrestrial magnetism, thermal radiation, and ultra violet limit of stellar and lunar spectra. As Admiral Byrd has said, he and his men have sailed half way round the world into the dangers, difficulties and isolation of the Antarctic "to bring to light more of the entire history of mother earth from the world's only remaining unknown frontier." He contemplates making another flight over the South Pole and possibly beyond it, as well

Antarctic Drama, Winged 10,000 Miles, Thrills Millions—Arouses Nation-Wide Interest in Radio's Most Difficult Feat



Photograph of Admiral Byrd taken at "Little America" just before his first flight over the South Pole. The American flag and the rock (taken from Floyd Bennett's grave) to which it is attached, were dropped, in memory of Bennett, by Byrd when he reached his southernmost goal.

"I ASKED myself . . . before our Antarctic expedition of 1929, what is the sense of it anyway? Why take men and equipment across distant oceans to explore a vast iced world of 4,000,000 square miles which is as lifeless as space? . . . The answer is not easy. When you say, 'Science,' people smile. The public asks material accomplishments. Ultimately every successful exploration yields them. But they do not always come in the explorer's own generation. . . . Yet life goes on and men go on. Every great human achievement and invention, however sudden its realization has seemed, has required generations of plodding abstract inquiry into the unknown. Much has been accomplished in the Antarctic. But there are mysteries there beyond any already solved. That is a challenge I cannot ignore."

RE Byrd

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as a number of other important exploration trips by air.

Question.

What is the personnel of the expedition?

Answer.

Under the command of Admiral Byrd, 131 men, including 12 internationally known scientists, comprise the expedition's personnel.

Members of the scientific staff are: Dr. Thomas C. Poulter, senior scientist and physicist; Charles Gill Morgan, geologist and geophysicist; Paul A. Siple (who was selected by Boy Scouts of America to accompany first Byrd expedition), biologist; William C. Haines, meteorologist; John N. Dyer, chief radio engineer; Sven Edward Roos, oceanographer; George Griminger, assistant meteorologist; Dr. E. H. Bramhall, assistant physicist; Alton A. Lindsey, assistant biologist; Quinn Blackburn, assistant geologist and surveyor; Richard Black, surveyor; Earle Bryant Perkins, zoologist; Walter Lewisohn, Jr., archaeologist.

Other departmental heads and key members of the expedition include: Commodore Hjalmar Gjersten, commodore of the fleet; Capt.

William F. Verleger, captain of the *Ruppert*; Lieut. Robert A. J. English, commanding the *Bear*; Walter K. Queen, chief engineer, the *Ruppert*; L. L. Barter, chief engineer, the *Bear*; Harold I. June, chief pilot; Leroy Clark, postmaster; Richard S. Russell, Jr., assistant postmaster; Capt. Alan Innes-Taylor, chief dog driver; Charles J. V. Murphy, communications officer; Victor Czegka, executive officer; E. J. Demas, chief aviation mechanic; J. A. Pelter, aerial surveyor; Commander Geo. O. Noville, fuel engineer.

Fifty-six men, forming the Winter Party, will remain at Little America, the expedition's base, for 13 or 14 months while the rest of the group return with the ships to New Zealand.

The ranks of the expedition were unexpectedly swelled by three on the morning of December 13, 1933, when Robert E. Christian, Geoffrey B. Wrey, and Michael Pilcher, youths from Auckland, New Zealand, were discovered as stowaways on board the Byrd flagship. They returned to New Zealand aboard the *Bear*, which left Little America on February 26, for its winter base. Robert Fowler, 19, of the *Bear's*

crew, is the youngest member of the expedition.

VETERANS WITH BYRD

Question.

How many members of the second expedition are veterans of the first?

Answer.

Sixteen. They are, besides Admiral Byrd, Quinn Blackburn, Victor Czegka, William C. Haines, Harold June, Pete Demas, Paul Siple, Capt. Alan Innes-Taylor, Benedik Johansen, Bob Young, Ed Roos, J. Robinson, Leland Barter, Carl Petersen, Arthur Creagh, M. C. Woolhouse. Commander Geo. O. Noville accompanied Byrd on his North Pole expedition and trans-Atlantic flight.

Question.

What ships carried the expedition to its destination?

Answer.

The S.S. *Jacob Ruppert*, flagship; and the *Bear of Oakland*, supply ship. Formerly bearing the name *Pacific Fir*, the Byrd flagship, S.S. *Jacob Ruppert*, is a 11,000-ton steel freighter, 416 feet in length. An oil burner, it is capable of 10 knots per hour. The *Bear of Oakland*, Coast

Guard cutter, built in 1874 for ice breaking service, was bought by Admiral Byrd from the city of Oakland, Calif. It is a 1,200-ton wooden barkentine, measuring 150 feet in the water. Its planking and sides are of 24-inch oak. Operating under sail and power—it burns coal—the *Bear* averaged 9 knots an hour on its trip from Dunedin, New Zealand, to the Bay of Whales.

Question.

How many airplanes are being used by the expedition?

Answer.

Six. The giant Curtiss-Wright Condor, a specially-built commercial type craft with a wing-spread of 82 feet, is equipped with two Wright 700 horse power Cyclone motors. Equipped with the world's largest pontoons, it has a maximum speed of 175 miles per hour, a cruising speed of 150 miles. Its regulation landing gear has been replaced by two 34-foot pontoons for take-offs on water and so constructed as to permit landing on snow. It is also equipped with auxiliary gas and oil tanks assuring a 1,800-mile cruising range. This large plane; an autogyro, christened *The Snowman*; and two monoplanes—a *Pilgrim* and a *General*—shipped with the expedition on the *Ruppert*. The other two aviation units—the famous Ford tri-motored plane, *Floyd Bennett*, and a *Fairchild*—both of which served with distinction on the first expedition and had been left at Little America, were found in good condition by members of the Ellsworth expedition on January 7, 1934. Admiral Byrd has stated that this is a "flying expedition," that he expects to do ten times more flying on this trip than on the first expedition.

NEARLY 500 TONS OF SUPPLIES

Question.

What equipment and supplies were required by the expedition?

Answer.

A list of all equipment and supplies taken to the Antarctic by the expedition—some 14,000 separate items weighing nearly 500 tons and supplied by over 3,000 manufacturers—would make a good-sized volume in itself. Suffice it to say, the expedition's stores had to include enough food, clothing, and necessities of life to supply the men for three years. Although it is planned that the expedition will not be away from the United States for more than two years, emergency supplies for an extra year had to be included as a precautionary measure. A few items on Admiral Byrd's shopping list included: 50 tons of dehydrated vegetables (lettuce, cabbage, cucumbers, tomatoes, etc.); 1,500 tons of fresh meat; 15 tons of sugar; 50 tons of food for the dogs; 12,000 dozen eggs; 25,000 lbs. flour; 5 tons mixed flour; 3 tons coffee; 10,000 cans evaporated milk; 600,000 cigarettes; \$100,000 worth of scientific equipment; 2 tons of radio equipment; 587 toothbrushes; 10 tons of calcium chloride; 2,000 tons of fuel oil; 15,000 yards of wind-proof Byrd cloth; 1,200 drums of aviation gasoline; 400 tons of special Diesel oil; 100,000 feet moving picture film; 100 rolls aerial film (each with 100 exposures); 2 tons smoked and pickled meat; 4 snowmobiles; two motor sailers or launches; 2 tractors; large stores of 14 General Foods products, including 2,900 pounds of Grape-Nuts; and an ice cream freezer. The three Guernsey cows, taken along to supply fresh milk for the Winter Party, and the bull calf born en route to Little America, have a carload of alfalfa hay, 10 tons of beet pulp, 10 tons of Larro, a ton of bran, three tons of straw and several hundred pounds of calf meal provided for their sustenance and comfort.

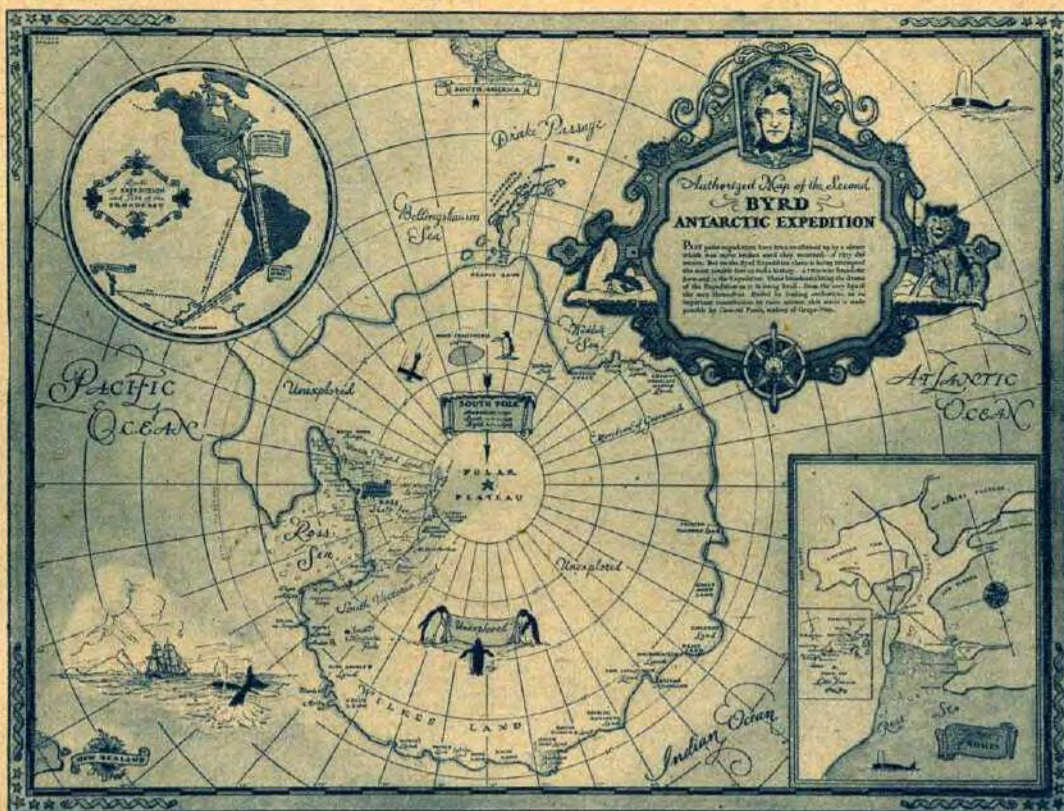
Question.

How many sled dogs are being used by the expedition?

Answer.

One hundred and forty-seven of the finest huskies, malamutes, and Chinooks, most of them from Canada and the Chinook kennels at Wonalancet, New Hampshire, were taken on the expedition. Some of these dogs are veterans of the first Byrd expedition.

Send For Free Copy of This Big, 6-Color Map!



Capt. Ashley C. McKinley (left), aerial surveyor on the first expedition and upon whose surveys the "Authorized Map of the Second Byrd Antarctic Expedition" (above) is based. Thousands of people are following Admiral Byrd's progress on this map. Thousands have framed it and hung it proudly in their homes. The map is impressive in size—18 x 24 inches—and is printed in six beautiful colors. Would you like a copy of it—at no cost? Just mail the tops of two yellow and blue Grape-Nuts packages to Grape-Nuts, Battle Creek, Mich., and this handsome map will be sent without delay.

Question. Were any flights made by Admiral Byrd en route to the Antarctic?

Answer. Admiral Byrd drove further great wedges of exploration into the white uncharted spaces of the Antarctic continent when on three separate occasions he ordered the flagship halted on its course to Little America and took to the air.

His first flight was reported on Dec. 22. Before he turned back, the giant Curtiss-Wright Condor seaplane had carried him to lat. 70° south, surpassing by 350 miles the record southing attained by Captain Cook on this meridian in 1773. The area of vision within the range of the plane on its four-hour journey together with the corridor opened by the flagship, brought to approximately 30,000 square miles the total amount of unexplored sea opened up by the expedition in its first operations.

The second take-off was on Jan. 3. Admiral Byrd sped 150 miles from the ship toward the continent and found sea instead of supposed land. The course of this flight lay approximately along the 117th meridian and the big seaplane attained 72° 30' s. before being forced back by formidable snow squalls. As a result of the two flights, Admiral Byrd is convinced that upward of 200,000 square miles of unknown area can now be wiped off Antarctic maps and be designated as Pacific Ocean.

On Jan. 12, Byrd flew for two hours along the 152nd meridian to lat. 71° 45' s. The take-off was made from a ship could reach when it was selected by Byrd on his first expedition on Jan. 1, 1929, is now only about two and a half miles from the Bay, as the crow flies. That much ice has broken away during the past five years.

Sprawling in all directions below the majesty of three 65-foot radio towers, the squat buildings of this

land exists any nearer the coastal fronts of King Edward VII Land and Marie Byrd Land."

UNLOADING THE SHIPS

Question. How long did it take the two ships to unload at the Bay of Whales?

Answer. Unloading of the Ruppert began immediately following the ship's arrival at the east wall of the Bay of Whales on Jan. 17.

Five days later the flagship was driven from her berth along the low shelf of bay ice by strong winds, forcing the Ruppert to cruise slowly within the high barrier walls of the bay—waiting for the weather to abate. Twenty men were marooned ashore, three at Little America, and the rest at an empty supplies cache.

On Jan. 24 the ship was again docked and the unloading of supplies was once more in full swing. Then again the ship was forced from its mooring and again—the third time in six days dating Jan. 27. Only heroic action saved the ship and the men from the crumbling ice floes, which were upsetting all the plans for unloading. Where the ship had lain and landed more than 175 tons of stores nothing remained. With tractors and dog teams the 47 men now marooned ashore had hauled away most of the supplies that had been landed at a cache about 100 yards from the ship. One foe did carry away 25 bales of hay.

By the thirtieth the Ruppert was back at its berth and unloading was proceeding in earnest 24 hours a day. On that day, the Bear arrived

village lie buried in the snow. The main structure, officially known as the Administration building, serves as sleeping quarters, mess hall and general headquarters. The other buildings in the group include: medical stores shack, food stores shack, gymnasium, radio repair shop, non-magnetic houses, ammunition shack, and coal house—all of which are connected with the Administration building by snow tunnels—kite house, observation tower, fur stores, aviation repair shop, two hangars, snowmobile garage, gasoline storage shack, sledge repair and blacksmith shop, seal cache, seal chop house, and puppy house. Little America is built on a large "chunk" of ice under which is 1,600 feet of water. The living quarters are lighted by electricity and heated by coal and blubber stoves.

Members of the Winter Party, when away from Little America on field trips, live in specially constructed tents.

REDISCOVERING LITTLE AMERICA

Question. Was Little America found intact upon Byrd's return?

Answer. At the request of Admiral Byrd, Bent Balchen and Christopher Braathen, who had been members of the first expedition, left the Ellsworth expedition ship on Jan. 7, 1934, and journeyed over the barrier to see what remained of Little America. They found the place virtually in the condition in which they left it in 1930. The radio towers were standing though two of them had tilted slightly, about 10 degrees from vertical. The airplanes appeared to be in excellent condition. A few hours' digging would clear the doors of the living quarters and storage shacks. (This discovery was made by the Ellsworth party before it was forced to turn back to New Zealand by the smashing of its plane.)

Ten days after Balchen's report, Admiral Byrd and four companions footed their way across the treacherous ice from the Bay of Whales to Little America.

William Haines dug into the Administration building, the other men plunging in after him.

It was dark in the big room but Admiral Byrd soon found a fruit jar half full of kerosene which had been his reading lamp. He lit that and the shadows fell back. Empty bunks against the wall were draped with some loose clothing thrown aside when the camp was abandoned on Feb. 19, 1930.

On the table was a pot of coffee, frozen, and a side of beef with a fork stuck into it. The clock on the wall had stopped at 4:30. On the floor Admiral Byrd found a rubber ball with which his fox terrier, "Igloo," now dead, used to play.

Carl Petersen idly flipped a switch and suddenly the lights of the building went on. He pressed the telephone connection in the Administration building. Dr. Poulter, flabbergasted, picked up the phone. After four years everything worked. Unbelievable as this may seem it is easily explained. The operation of the lights and the telephone depended merely upon the storage batteries that were installed by the first expedition. These evidently were in good condition and still retained some of their energy.

ABOUT LITTLE AMERICA

Question. What is Little America?

Answer. Little America is the "capital city" of the Antarctic. Its site, approximately seven miles from the nearest point in the Bay of Whales which a ship could reach when it was selected by Byrd on his first expedition on Jan. 1, 1929, is now only about two and a half miles from the Bay, as the crow flies. That much ice has broken away during the past five years.

Sprawling in all directions below the majesty of three 65-foot radio towers, the squat buildings of this

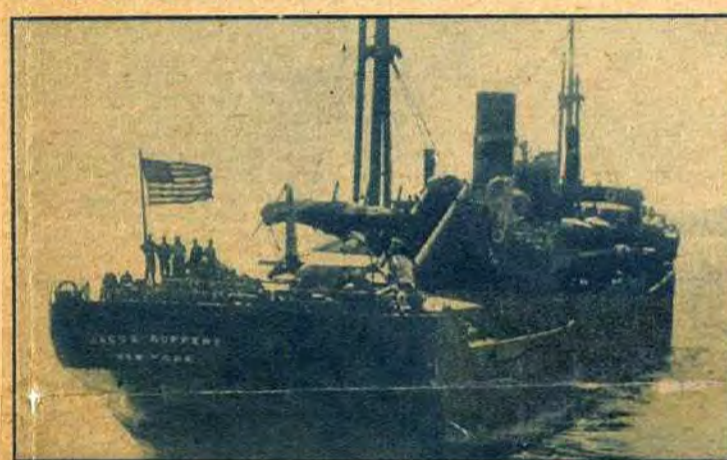
Station KJTY's "Studio" aboard the Ruppert: (left) Admiral Byrd is shown with Charles J. V. Murphy, Mamaroneck, N. Y., communications officer, the man whose voice you hear each Saturday night saying: "We now return you to civilization."



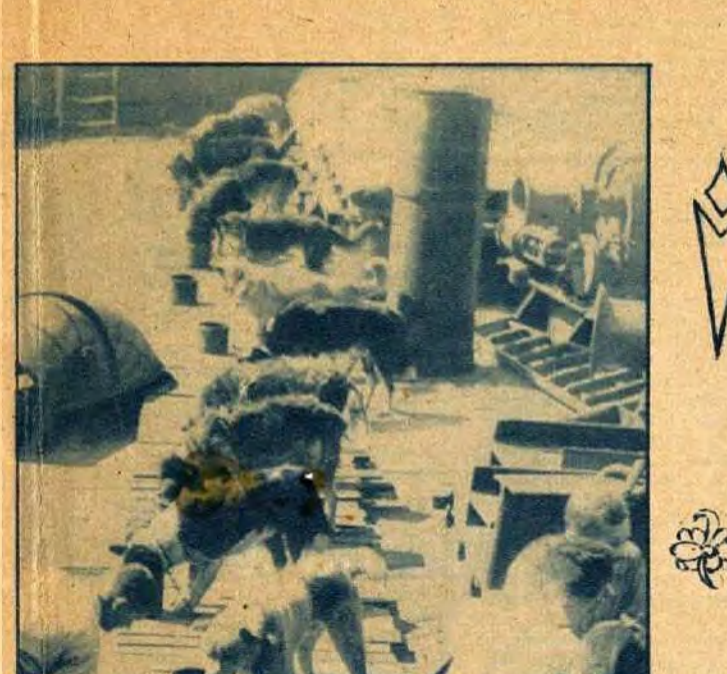
The Bear of Oakland, Admiral Byrd's supply ship.



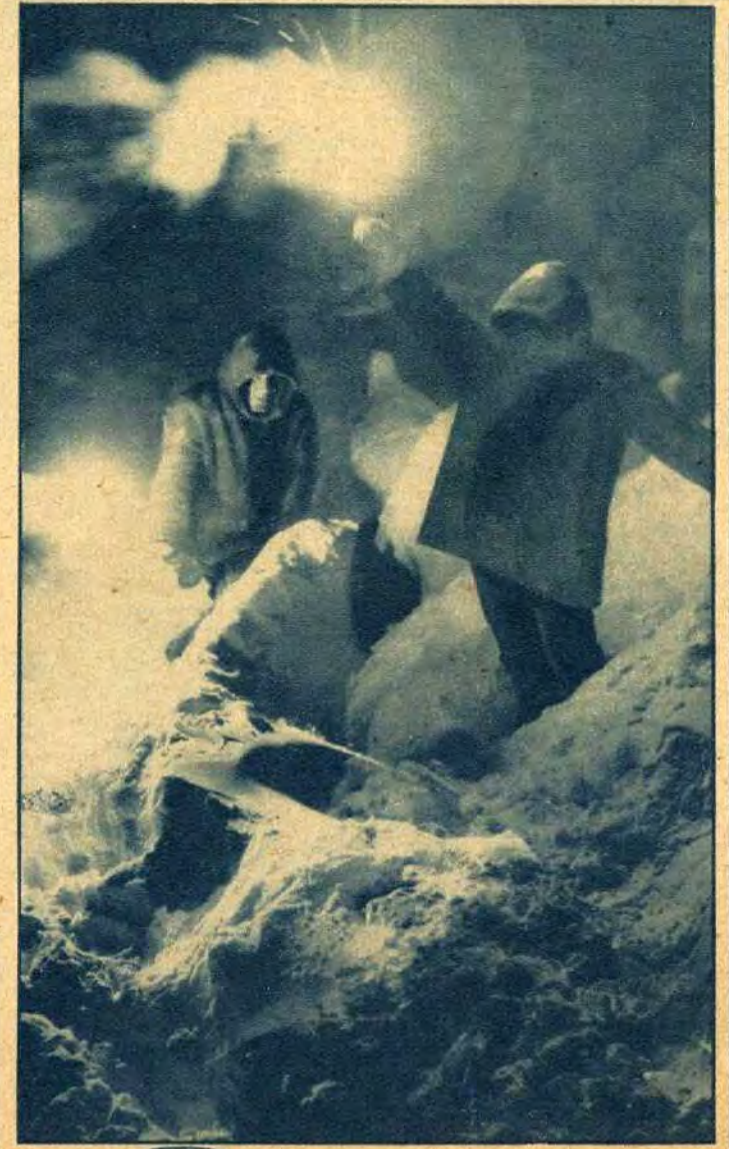
Other key members of the expedition heard on Grape-Nuts broadcasts. Left to right: William Haines, meteorologist; Leroy Clark, Little America postmaster; Paul Siple, biologist; and Harold Gatty, chief pilot.



The flagship, S.S. Jacob Ruppert, steams out of the harbor at Wellington, N. Z., on the last leg of its 15,000-mile trip to Little America. Aboard her is Station KJTY, from which came the first broadcasts that gave millions a new radio thrill.



Some of the 147 huskies enjoying their noon meal aboard the flagship. Inset, Capt. Alan Innes-Taylor, formerly of the Royal Air Force and Northwest Mounted Police, now commander-in-chief of the dog sled detachment.



Out of the long Antarctic winter night—thrills . . . drama . . . history in the making from the very lips of the men living this exciting adventure!



Dr. Thomas C. Poulter, senior scientist, with some of his scientific gear.



Think of wishing your father "Merry Christmas" when he is 10,000 miles away! This little girl did. She's Charaine Petersen, Freeport, N. Y., daughter of Carl O. Petersen, one of the expedition's radio operators. Her greeting was one of the real heart-throbs of the Christmas eve program.



Admiral Byrd, to insure accuracy of his compasses during the three exploratory flights over the South Pole regions, had his navigating instruments checked at the expedition's last stop before setting out for the Bay of Whales. The giant Curtiss-Wright Condor plane, in the center of a circle marked off in degrees, is shown on the docks at Wellington, N. Z.

time, but New Zealand is the closest established point of human contact.

Question. What are the seasons in the Antarctic?

Answer. The long winter night, during which time the Antarctic is in constant darkness, extends from about the middle of April to late in August. During the summer period, there is constant daylight.

Question. How cold does it get in the Antarctic?

Answer. During the first expedition's stay at Little America, the temperature reached 40 degrees below zero (Fahrenheit) on 114 days; 50 degrees below on 61 days; 60 degrees below on 33 days and 70 degrees below on three days. July 28, 1929, was the coldest day experienced—72 degrees below zero.

Question. What is the altitude of Little America?

Answer. Between 50 and 60 feet above sea level.

THE BYRD BROADCASTS

Question. When did the Byrd expedition broadcasts begin?

Answer. The broadcasts from the expedition (the only ones to come direct from the expedition) began Sat. night, Nov. 18, 1933, at 10 o'clock e.s.t.

Question. What stations carry the Byrd expedition broadcasts?

Answer. 61 Columbia Broadcasting System and associated stations in the U. S. (heard only on Saturday nights at 10 o'clock e.s.t.): 9 o'clock, e.s.t.: 8 o'clock, Rocky Mountain time; and 7 o'clock, Pacific Coast time;

- Akron: WADC, 10 to 10:30; Albany: WOKO, 10 to 10:30; Atlanta: WGST, 9 to 9:30; Baker, Ind. Cal.: KERN, 7 to 7:30; Baltimore: WCAO, 10 to 10:30; Bangor: WLBE, 10 to 10:30; Boston: WMAC, 10 to 10:30; Buffalo: WKBW, 10 to 10:30; Chicago: WBBM, 9 to 9:30; Charlotte: WBT, 10 to 10:30; Cincinnati: WKRC, 10 to 10:30; Cleveland: WHK, 10 to 10:30; Columbus: WBNS, 10 to 10:30; Dallas: KRLL, 9 to 9:30; Denver: KJZ, 8 to 8:30; Detroit: CKLW, 10 to 10:30; Fresno: KMMF, 7 to 7:30; Harrisburg: WHP, 10 to 10:30; Hartford: WDRR, 10 to 10:30; Houston: KTRH, 9 to 9:30; Indianapolis: WFWM, 9 to 9:30; Kansas City: KMB, 9 to 9:30; Little Rock: KLR, 9 to 9:30; Los Angeles: KJL, 7 to 7:30; Louisville: WHAS, 9 to 9:30; Memphis: WRRC, 9 to 9:30; Miami: WQAM, 10 to 10:30; Minneapolis: WCCO, 9 to 9:30; Nashville: WLAC, 9 to 9:30; New Orleans: WDSU, 9 to 9:30; New York: WABC, 10 to 10:30; New York: W2XE, 10 to 10:30; Oklahoma City: KOMA, 9 to 9:30; Philadelphia: WCAU, 10 to 10:30; Philadelphia: WXAU, 10 to 10:30; Pittsburgh: WJAS, 10 to 10:30; Portland: KOIN, 7 to 7:30; Providence: WEAN, 10 to 10:30; Richmond: WMB, 10 to 10:30; Rochester: WHEC, 10 to 10:30; Sacramento: KFBK, 7 to 7:30; Salt Lake City: KSL, 8 to 8:30; San Antonio: KTSB, 9 to 9:30; San Diego: KGB, 7 to 7:30; San Francisco: KPBC, 7 to 7:30; Santa Barbara: KBB, 7 to 7:30; Seattle: KOL, 7 to 7:30; Spokane: KFPP, 7 to 7:30; St. Louis: KMOX, 9 to 9:30; Stockton, Cal.: KWG, 7 to 7:30; Syracuse: WFBL, 10 to 10:30; Tacoma: KVI, 9 to 9:30; Tampa: WDAE, 10 to 10:30; Toledo: WSPD, 10 to 10:30; Topeka: WIBW, 9 to 9:30; Waco: WACO, 9 to 9:30; Waterloo: WMT, 9 to 9:30; Washington: WJSV, 10 to 10:30; Wichita: KFH, 9 to 9:30; Worcester: WORC, 10 to 10:30; Yankton, S. D.: WNAX, 9 to 9:30.

Question. Where did the first broadcasts originate?

Answer. From Nov. 18 through Jan. 27, the broadcasts came from Station KJTY aboard the Ruppert. The Feb. 3 program originated from Station KFZ set up temporarily in a tent on the ice at Little America.

SHIP'S POSITION DURING BROADCASTS

Question. What was the Ruppert's position at the time of the broadcasts from the ship?

Question. When did the expedition sail and from where?

Answer. Bear of Oakland: sailed from Boston, Sept. 25, 1933; docked at Bayonne, N. J., Sept. 28; left Bayonne, Sept. 29; docked at Newport News, Va., Oct. 1; sailed from Newport News, Oct. 3. S.S. Jacob Ruppert: sailed from Boston, Oct. 11; docked at Bayonne, N. J., Oct. 12; left Bayonne, Oct. 13; docked at Norfolk, Va., Oct. 14; left Norfolk, Oct. 21; arrived Newport News, Va., Oct. 21; sailed from Newport News, Oct. 23.

ROUTES OF SHIPS

Question. What routes were followed by the two ships?

Answer. S.S. Jacob Ruppert: After proceeding down the eastern coast of the United States and through the Caribbean Sea, the flagship completed the first leg of its journey when it arrived, Oct. 30, at Cristobal, Canal Zone, a distance of 1,772 miles from Newport News. Passing through the Panama Canal, the ship steamed into Cook's Bay at Easter Island, on Nov. 15, to give the members of the ship's company time ashore. This tiny spot in the South Pacific Ocean is about 3,000 miles southwest of the Canal Zone. Leaving here on Nov. 17, the flagship headed in a southwesterly course for Wellington, New Zealand. Late on the night of Dec. 5, the Ruppert arrived in the harbor at Wellington, 3,610 miles from Easter Island. The party sailed from New Zealand's friendly shores on the last leg of its journey to the Antarctic on Dec. 12.

The route of the Ruppert, after its departure from Wellington, follows: Dec. 14—lat. 51° 32' s., long. 176° 15' w.; Dec. 15—lat. 55° 1' s., long. 172° 27' w.; Dec. 16—lat. 58° 30' s., long. 168° w.; Dec. 21—lat. 66° 23' s., long. 150° w. (surpassed Capt. Cook's record southing of 1773); Dec. 22—lat. 66° 20' s., long. 144° w.; Dec. 25—lat. 66° 15' s., long. 143° w.; Dec. 27—lat. 66° 18' s., long. 142° 30' w.; Dec. 28—lat. 67° 30' s., long. 133° 10' w. (50 miles past previous southing record in these latitudes); Dec. 29—lat. 68° 42' s., long. 124° 40' w.; Dec. 30—lat. 69° 12' s., long. 116° 41' w.; Jan. 3—lat. 69° 25' s., long. 116° 40' w.; Jan. 4—lat. 72° s., long. 217° w.; Jan. 5—lat. 68° s., long. 117° 3' w.; Jan. 6—lat. 67° 21' s., long. 124° 29' w.; Jan. 8—lat. 67° 21' s., long. 130° 17' w.; Jan. 9—lat. 69° 15' s., long. 138° 36' w.; Jan. 11—lat. 68° 2' s., long. 152° 20' w. (300 miles south of Capt. Cook's record southing on the 152nd meridian); Jan. 13—lat. 69° 26' s., long. 162° 14' w.; Jan. 16—150 miles north of Little America.

On Jan. 17, coasting along the high cliffs of the Ross ice barrier, the Ruppert rounded West Cape and struck south into the Bay of Whales—the flagship had completed her three months' cruise from Boston and Little America lay scarcely two miles away. In exploring along the northern edge of the Antarctic ice pack before heading for his base on the Bay of Whales, Admiral Byrd added considerable "mileage" to his route. From the time the Ruppert sailed from Boston until the arrival at its goal, the ship covered approximately 15,000 miles.

The Bear of Oakland: Following the same route as its sister ship from Newport News, Va., the Bear reached Cristobal, C. Z., Nov. 17. Passing out of the Panama Canal on Nov. 18 the Bear headed southwest for the pretty little island of Tahiti en route to Wellington, N. Z. To escape a hurricane, the bark put into Hick's Bay on the north coast of New Zealand on Dec. 29. It reached Wellington on Jan. 8, and sailed for Dunedin, Jan. 10. Leaving this last port of call Jan. 19, the Bear reached its destination for unloading on Jan. 31, after covering approximately 4,300 miles from Dunedin.



Station KFZ down in "Penguin Town": Housed in a snow-hidden shack, with the antennas singing in the Antarctic gale, this studio is the source of those thrills and adventures brought to you each week by the makers of Grape-Nuts.



John Dyer, Haverhill, Mass., the expedition's chief radio engineer, snapped in the control room. Looks thoughtful, doesn't he? Probably trying to decide whether to send the program via Buenos Aires, Honolulu, San Francisco, or Riverhead, L. I.



Station KJTY's "Studio" aboard the Ruppert: (left) Admiral Byrd is shown with Charles J. V. Murphy, Mamaroneck, N. Y., communications officer, the man whose voice you hear each Saturday night saying: "We now return you to civilization."



Some of the 147 huskies enjoying their noon meal aboard the flagship. Inset, Capt. Alan Innes-Taylor, formerly of the Royal Air Force and Northwest Mounted Police, now commander-in-chief of the dog sled detachment.



You've heard their singing across 10,000 miles of storm-tossed seas. Four members of the expedition's "Glee Club."

Answer.
Nov. 18, 1933—lat. 25° s., long. 110° w. (west of Easter Island); Nov. 25—lat. 33° 11' s., long. 142° 10' w.; Dec. 2—500 miles east of Wellington, N. Z.; Dec. 9—in the harbor at Wellington, N. Z.; Dec. 16—lat. 58° 30' s., long. 168° w.; Dec. 23—lat. 66° 20' s., long. 140° w.; Dec. 30—lat. 69° 12' s., long. 116° 42' w.; Jan. 6—lat. 68° s., long. 117° w.; Jan. 13—lat. 69° 26' s., long. 162° w.; Jan. 20—Bay of Whales (cruising); Jan. 27—Bay of Whales (docked).

Question.
Where do the broadcasts originate now?

Answer.
Station KFZ at Little America. The Federal Radio Commission has also issued a license for Station KFY which may be located at the expedition's meteorological sub-base 400 miles (towards the South Pole) from Little America.

Question.
What is the output power of Station KJTY?

Answer.
1,000-watt or 1 kilowatt, equal to the power used to operate two electric irons.

Question.
What is the power of Station KFZ and where is the power derived?

Answer.
Same as KJTY, derived from Kohler gasoline-engine driven generator.

HOW THEY BROADCAST

Question.
How are broadcasts made possible?

Answer.
Three transmitters are used to broadcast the programs: one is a 1,000-watt crystal control 100% modulated radiotelephone transmitter, initially installed on the *Ruppert* and now at the permanent base in the Antarctic. At Little America this transmitter operates into a directional antenna in the directional receiving antennae at Buenos Aires, Argentina, 4,050 miles away, and thence is relayed by short wave to the Columbia key station, WABC, in New York, 5,290 miles away.

The second is a 200-watt crystal control radiotelephone transmitter to be located at Admiral Byrd's sub-base at the foot of the polar barrier and about 300 miles closer to the South Pole than the main base.

The third is a 50-watt portable short wave radiotelephone transmitter, which will be installed aboard the bi-motored plane in which Byrd will fly across the South Pole and from which it is anticipated that broadcast description of the flight while in progress may be picked up.

The sledge parties of the Byrd expedition, when out scouting, will be able to communicate by radio with the base at Little America. Some of the dog sleds in the expedition are equipped with combination one-watt transmitting and receiving sets. These sets are five inches square and operate with dry batteries. Each set has earpieces for receiving and an airplane microphone is used for speaking.

In all cases, auxiliary receivers and transmitters are operated in conjunction with the broadcasting receivers and transmitters. This equipment is used to maintain two-way telephonic conversation as cue channels and to relay information back and forth, incidental to the broadcast but not actually heard by the radio audience.

Since the start of the broadcasts, the RCA Communications receiving stations at Buenos Aires, San Francisco, Honolulu, and even Riverhead, L. I. (New York), have all been "monitoring" the signal—that is, have been used as the receiving points from where the program was relayed to WABC in New York.

Question.
What are directional antennas?

Answer.
A directional antenna, such as is involved in this difficult engineering undertaking, is an aerial of special design which will receive energy with maximum efficiency from one specified direction but will not collect energy from other directions. This possesses the desired advantage of picking up all the energy possible from the transmitter on which it is "trained", and, in addition, minimizes the pickup of interfering electrical noises emanating from other directions. A directional transmitting antenna is an aerial which concentrates all the usable transmitted signal in one direction, rather than sending it out in all directions as present day broadcasting stations now do and as was the case from Station KJTY, aboard the *Ruppert*.

Question.
Do weather conditions affect reception?

Answer.
Weather conditions, such as rain, fog, cloudiness, heat, cold, etc., have no effect upon the reception of transmissions from Little America. Magnetic storms, electrical storms, sun spots and other inter-stellar disturbances, affect transmissions.

WAVE LENGTHS OF KFZ

Question.
What frequencies are used by Stations KJTY and KFZ?

Answer.
These stations have been assigned a number of frequencies between 3,000 and 22,000 kilocycles by the Federal Radio Commission. Some of the frequencies most often used are: 6,650, 8,840, 11,830, 13,200, 15,270, 17,600 and 11,600 kilocycles. During the course of a test, a station often switches from one frequency to another in order to improve the transmission.

This station is not a "broadcast" station but is engaged in "point-to-point" private communication. Transmission from this station is not intended for general public reception and use. It is classified by international treaty and United States law as private communication concerning which an obligation of secrecy is imposed. Such communication is "correspondence of a private nature" of which the "unauthorized reception", by others than to whom the communication is addressed, "the unauthorized divulging of the contents" or "the unauthorized publication or use" is in violation of the secrecy provisions of the International Radio Convention.

Question.
Do Columbia engineers establish contact with the expedition's radio engineers at any time besides during Saturday night broadcasts?

Answer.
A number of two-way tests are carried on every week between Columbia engineers in New York and the expedition. These tests are private, point-to-point communications, and are not rebroadcast.

Question.
How long does it take the voice on radio waves to carry from Little America to New York?

Answer.
A small fraction of a second. It takes a radio wave only one second to carry around the world seven and one half times. Sound waves travel 1,090 feet per second.

Question.
What time is it in Little America when the broadcasts are heard in this country?

Answer.
The time of the broadcast is 10 to 10:30 p.m. Eastern Standard Time, Saturday night. When it is 10 p.m. Eastern Standard Time, it is 3 p.m.

of the same afternoon in Little America.

Question.
What was the roaring and swishing noise heard on some broadcasts during the series?

Answer.
The roaring and swishing noise is not caused by the pounding of the waves or by the wind as many listeners believe. This disturbance is caused by atmospheric noises, such as static, and man-made electrical disturbances which are picked up by the receiving stations. Background noise of this nature is present in every long distance radio circuit to a greater or lesser degree.

Question.
Why was the expedition on for such a short part of the earlier programs?

Answer.
When Admiral Byrd left for the Antarctic he expected to follow a southerly course down the west coast of Chile. Accordingly, all of the Columbia engineers' plans were based on keeping the ship in line with a north-south directional antenna "path". Shortly after leaving the Panama Canal, the ship was forced to change its course and headed for Wellington, New Zealand—proceeding not in a north-south route but in an east-west direction. This upset all plans that had been made and resulted in a poor quality of reception from the ship, which was continually changing its course approximately 1,600 miles every week. Rather than subject listeners to 14 minutes of faulty reception—that was the time originally allotted to the expedition—and the subsequent straining for words over such a long period, it was felt that a shorter period of from 5 to 7 minutes would remedy this unfortunate situation.



Meet the Skippers: Capt. Verleger, left; Lieut. English, right.

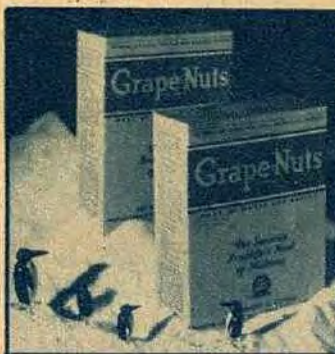
Question.
Why isn't news of the world and the U. S. broadcast to the expedition?

Answer.
News dispatches can be and are regularly sent to the expedition through Mackay Radio code messages.

NO PRINTED REPORTS

Question.
Are printed reports of the broadcasts available?

Answer.
Due to the added expense of printing and mailing such material to the tens of thousands of listeners who have indicated that they would like to have these printed reports each week, it was reluctantly deemed impossible to comply with these requests. Stories reporting the broadcasts are filed each Saturday night following the programs with the leading news services.



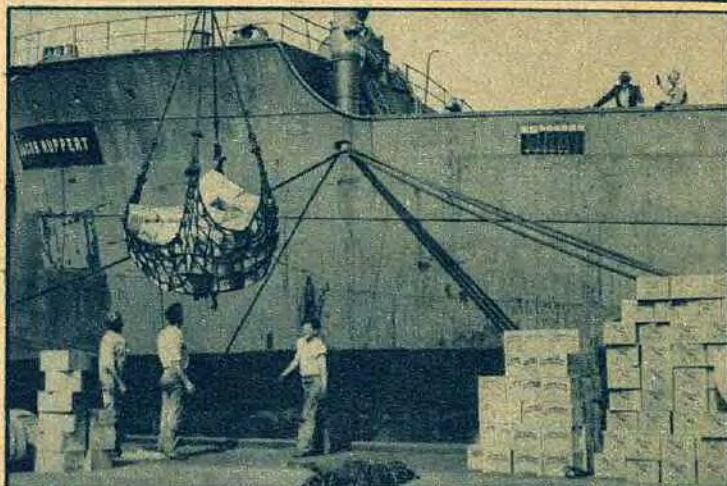
GRAPE-NUTS
AMERICA'S FAVORITE CEREAL

—a delicious, nut-like flavor unlike anything else you ever tasted.

—rich in varied nourishment, contributing to the body many of the elements it needs: dextrins, maltose, and other carbohydrates; iron, phosphorus, proteins, and vitamin B.

—real economy, a small serving, with milk or cream, is extremely nourishing.

Many delightful desserts, pastries, vegetable dishes, main dishes, salads and stuffings can be made with Grape-Nuts. Write to Grape-Nuts, Battle Creek, Mich., for free recipe literature.



The first cases of Admiral Byrd's two-year supply of Grape-Nuts are swung aboard the flagship at Boston.

Question.
From what sources, other than the broadcasts, can news of the expedition be obtained?

Answer.
News stories are regularly sent up from the expedition. This material, carried by Mackay Radio, is addressed to Byrd expedition headquarters, New York, and distributed from there to all news services desiring the information. The Associated Press, United Press, International News Service and Universal Service are among the larger services releasing these stories.

Question.
Are copies of Snowshoes, the "newspaper" being published by the men at Little America available?

Answer.
No copies can be procured at present. It is possible that a limited number may be available upon the return of the expedition in 1935.

Question.
How can personal messages be broadcast to members of the expedition?

Answer.
For information on this subject communicate with Mr. John McNeil, Byrd expedition headquarters, Beverly Hotel, New York, N. Y.

LITTLE AMERICA STAMPS

Question.
How can a letter be sent for cancellation and mailing from the Little America post office?

Answer.
As announced by the Post Office department in October, 1933, a special 3-cent postage stamp has been issued in commemoration of the Byrd expedition, for use on letters mailed through the Little America post office. The first mail was postmarked at Little America on January 30th, in honor of President Roosevelt's birthday.

Arrangements have been made for the transportation of this philatelic mail to Little America by the Byrd expedition. The expedition accepts covers for mailing through the Little America post office bearing appropriate postage at a service charge of 50 cents for each letter exclusive of the postage rate of 3 cents. This service charge covers the handling of the mail by the expedition. Byrd stamps or other commemorative issues should not be used on mail matter to be sent to Little America. However, covers bearing such stamps will be forwarded.

Collectors desiring the Little America postmark will send all covers to the "Byrd Antarctic Expedition, care of Postmaster, Washington, D. C." (accompanied with postal money-order remittance at the rate of 53 cents per cover, payable to Byrd Antarctic Expedition, Washington, D. C.) from which point the covers will be forwarded to Little America Post Office for postmarking and return. Covers will continue to be received by the expedition office in Washington, D. C., until about November 1, 1934, approximately the latest date mail can be forwarded to Dunedin, New Zealand, in time to reach the relief ship before its departure to Little America. These covers will reach addresses approximately one year later than those carried to Little America on the first trip. As the new Little America 3-cent stamp is being issued solely for use on mail matters of the Antarctic expedition, supplies thereof will not be placed on sale in post offices for use on ordinary domestic mail. However, stamp collectors desiring Little America stamps for collection use may obtain same from the Philatelic Agency, Post Office Department, Washington, D. C., where the stamp is available. Remittances should be by postal

money-order and must include, in addition to the cost of the stamps ordered, allowance for return postage and registration. To insure prompt delivery, orders to the agency must be restricted to the Little America stamp.

Mail sent to the expedition before Nov. 1, 1934, will travel by boat from this country to Dunedin, N. Z. There it will be loaded on one of the expedition's ships and carried to Little America, properly postmarked, returned to Dunedin via expedition ship and thence carried to the U. S. and its sender.

Question.
Where can Byrd expedition photographs be obtained?

Answer.
Many photographs depicting the activities of the first expedition, which were taken by Capt. Ashley McKinley, are still available. There are also photographs of most of the members of the present expedition available. In ordering prints specify clearly what subjects are desired and address orders to Mr. John McNeil, Byrd expedition headquarters, Beverly Hotel, New York, N. Y. Headquarters will advise prices on pictures before sending.

Question.
Are moving pictures being made of the expedition?

Answer.
Paramount, the company which made the popular film "Little America," has again sent two expert cameramen with Byrd to record the thrilling experiences of the expedition in moving pictures.

Question.
What books have been printed on Admiral Byrd and his previous explorations?

Answer.
"Little America," by Admiral Byrd; "Cold," by Dr. Laurence Gould; "Rear Admiral Byrd and the Polar Expeditions," by Coram Foster; "Skyward," by Admiral Byrd; "A Boy Scout with Byrd," by Paul A. Siple; "Struggle," by Charles J. V. Murphy.

No doubt, many of these books, as well as bound copies of *National Geographic Magazine* for 1928, 1929, 1930 and 1931, which contain many articles about Admiral Byrd's explorations, can be found in most public libraries or good book stores.

GRAPE-NUTS AT SOUTH POLE

Question.
Why did Admiral Byrd select Grape-Nuts as one of his most important food stores?

Answer.
Grape-Nuts was an ideal choice for an expedition such as Admiral Byrd's. Here is a food which, served with milk or cream, is a valuable contribution to a balanced diet—yet it actually does not take up much room in the limited storage space aboard ship—does not add materially to the tonnage that had to be hauled to Little America. In short, its concentrated nourishment appealed to Admiral Byrd as one of the necessities he and his men had to have, not only on this expedition but also on the first. Then, too, Admiral Byrd knew that the famous, delicious Grape-Nuts flavor, and crisp texture—unlike anything else you ever tasted—would appeal to the palates of his hard-worked men. The economy of Grape-Nuts was another important consideration. Admiral Byrd, like many another individual, was faced with a limited food budget. Grape-Nuts, offering so much nourishment in its 16 average servings per package, also met this requirement with flying colors.