For Admiral Byrd

BY HOWARD VAN DYKE, ’32

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SHOULD Admiral Richard E. Byrd discover land beneath the ice at the south pole and claim it for the United States, a large part of the credit for the discovery will probably belong to William Gladstone Green, ’25ex, former Norman resident.

Green is the president of the Seismograph Service corporation, with offices at Tulsa. Seven days before the foundering of Little America was to sail the corporation bundled up a 300-pound package and sent it to Byrd.

That small package contained one of the most compact instruments of its kind ever built in six weeks time—a seismograph. It is much different from the ordinary, 1,200 to 1,500-pound instrument used by oil companies all over the United States.

One of the main facts which the highly skilled workers of the Tulsan firm kept in mind at all times was that the equipment was that it would be manipulated by men with numb fingers.

Many other changes also were necessary to meet the handicaps of ice and snow and sub-zero weather.

In this age of service, the duties of the Tulsan firm do not end with the shipment of the seismograph. A high-powered short-wave radio transmitter is to be installed by the corporation for contact with the Byrd expedition any time it is needed.

Anticipating that difficulties might easily arise in the interpretation of the records made by the instrument, Green will be ready to transmit instructions for any necessary adjustments, to the expedition’s main camp.

The seismograph is a complex set of instruments for registering the reflections of sound traveling downward through layers of rock. The waves are started by dynamite explosions.

Changes in rock layers, as the sound travels downward, set up a reflection, just as with a ray of light striking water, and this reflection is received back again on the surface.

The reflections are registered on a film in the seismograph. The depth of the point of reflection, or rock layer is represented on the film by the distance between markings caused by the explosion and those caused when the sound is returned to the surface of the earth.

If Byrd finds land under the layer of ice but above the level of the sea, he can claim it for the United States. Sound traveling through the ice will not be reflected until it reaches rock. Should land be below sea level there would be no object in claiming it.

The set was constructed by Green’s corporation with the idea of easy transportation in the Curtis Condor airplane being carried by the expedition.

Estimated cost of the instrument was $7,000. It was completed six weeks ago and sent to Byrd.

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Estimated cost of the instrument was $7,000. The Byrd expedition’s ice-breaker ship will sail from Boston probably next Sunday, and a week later the Jacob Rupert, Byrd’s flagship, will leave the same port for New York, according to a United Press dispatch today.

The flag ship was renamed the Jacob Rupert in honor of the brewer, one of the principal sponsors of the explorer’s second voyage to the south pole.

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