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# THE VOLCANO LETTER

A Weekly news leaflet of the Hawaiian Volcano Research Association

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No. 183

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June 28, 1928

## KILAUEA REPORT No. 856

WEEK ENDING JUNE 27, 1928

Hawaiian Volcano Observatory, U. S. Geological Survey  
R. M. Wilson, Temporarily in Charge

No changes have been detected at the pit. There are only infrequent slides and a slight increase of steaming following recent rains.

There were 18 very feeble local earthquakes recorded on the Observatory seismographs during the week ending June 27. Two teleseisms were also recorded, both on the 21st. The preliminary motion of the first one arrived at 12:18:27 a. m., and the indicated distance to its origin is 3,120 miles. The beginning of the preliminary wave of the second teleseism was recorded at 6:05:07 a. m., with 2,900 miles as the indicated distance. Both of these records were feeble, but the phases were fairly distinct.

Accumulation of tilt during the week was slight toward the east.

## THE PAVLOF VOLCANO EXPEDITION

A brief radio message from Dr. T. A. Jaggar dated May 15 gave his address as King Cove, Alaska. Some additional news has now come from him in a letter of the same date written from his camp at Squaw Harbor. The expedition arrived at that place on May 9, camp was established, and the equipment tried out.

The "Honukai of Hilo" is the amphibious boat in use by the party, and was built for the expedition by the Powell Mobile-Boat Corporation, Chicago, Illinois. The name "Honukai" comes from the Hawaiian for "sea turtle." Photographs of the vehicle have appeared occasionally in the daily press during the last few weeks. It is in principle similar to the "Ohiki," described in Volcano Letters Nos. 156 and 165. The "Honukai" is a metal boat built upon a truck chassis for land travel, and is propelled in the water by twin screws as an ordinary motor boat. The amphibian was tested in Puget Sound before it was shipped to Alaska. Dr. Jaggar speaks highly of its behavior during the test and during the first days of work in establishing camp in Alaska. He states that it is tight and dry, its canopy top furnishing good protection from the weather. It is sufficiently seaworthy to navigate easily in moderately rough weather when white caps and ground swells are running. It can be "navigated" right up out of the water over the stony beaches and tundra directly to the camp site or elsewhere, and promises to be very useful and practical. Its power and speed in the water is augmented when necessary by the use of a Johnson outboard motor.

A sloop with a 5 h. p. motor has been hired locally as an auxiliary in water transportation. Two pack mules, towed upon a scow from base to base, are used when the party wishes to make expeditions inland into the mountains beyond the range of the "Honukai."

At the time of writing, it was planned to start work at Canoe Bay, at the head of Pavlof Bay, about May 18. The expedition is under the auspices of the National Geographic Society. The scientific data collected, the maps and photographs obtained, and the experiences of the party, we hope will appear in the National Geographic Magazine soon after the season is ended. R.M.W.

## KONA SEISMOGRAPH STATION

The Monthly Bulletin and the Volcano Letter of the Hawaiian Volcano Observatory have from time to time mentioned the records of the seismograph that has been operated in Kealakekua since March 4, 1922. This single-component instrument has furnished data of great value. The usefulness of the station can be understood from the fact that it is directly on the other side of Mauna Loa from the Observatory, and is therefore in a strategic position to supplement the records of the Observatory in the study of that active volcano. The air line distance between the two stations is 43.6 miles, affording an excellent base from which to triangulate the epicenters of Mauna Loa earthquakes.

One of the new Hawaiian type two-component instruments has just been installed in place of the older and smaller seismograph that has so well demonstrated the value of seismic observations on the west side of the island. The new instrument is the same type as the one installed last summer in Hilo, except that the magnification is slightly reduced. The same concrete pier that was used for the old instrument is being used, with a few alterations, for the new installation. It is founded on solid pahoehoe lava, and is well protected from temperature changes in an instrument room built in a sheltered basement. Captain R. V. Woods remains in charge of the station. Operation of the new instrument was begun on June 22.

Surveys show the station to be at latitude 19° 31' 18" N. and longitude 155° 55' 20" W. Its elevation is about 470 meters above sea level. Using these coordinates, computations show this position to be 70.2 km. N. 81° 30' W. of the Hawaiian Volcano Observatory. The summit of Mauna Loa lies almost exactly midway, in line, between these two stations.

The instrument has inertia masses of about 70 kilograms, and records on smoked paper. The static magnification is 120. Both N-S and E-W components have been adjusted to a free period of 6 seconds, and are oil damped to a 3:1 ratio. The recording drum is driven by an escapement clock mechanism, giving the paper a speed of 30 millimeters per minute. Time used is Hawaiian Standard, 10 h. 30 m. slower than Greenwich. The time clock is corrected by radio signals from U. S. Naval Radio Station NPM at Pearl Harbor. R.M.W.