

1879

Brief summaries of the activity of Parícutin volcano appear at approximately 6-month intervals in the American Geophysical Union Transactions. Carl Fries, Jr., of the U. S. Geological Survey, has kindly supplied a statement on the current state of activity of Parícutin. The Mexican Institute of Scientific Investigation and the U. S. Geological Survey are maintaining a watch over Parícutin on a cooperative basis. Two Mexican observers are constantly at the observatory, gathering data on eruptive activity, lava movement, weather, and any other pertinent occurrences. Mr. Fries visits the volcano every 2 months to gather the data sheets, make special measurements, and collect lava samples. His last visit was in mid-November, 1951.

In May, 1951, a new pyroclastic eruptive vent formed low on the northeast flank of the main cone. This new vent was very active and formed a separate crater on that flank of the cone. During the following months, the vent gradually moved up the flank, and its crater coalesced with the main crater. By November the depression on the northeast flank had been filled by deposition of pyroclastic fragments, and the profile was once again that of a simple cone.

Lava has continued to issue from the Nuevo Juatita vent at the northeast base of the cone, flowing northeastward around the Equijuata and Capatzun cinder cones. By October it had reached a point about  $2\frac{1}{2}$  miles from the vent, near the site of the former town of San Juan Parangaricutiro, when the flow of lava was interrupted at the vent, and the flow front ceased advancing. Solidification at the vent caused the formation of a new lava cascade just west of the former one, and during November two prongs of Lava were invading the base of Equijuata cinder cone near Tourist Lookout.

Activity of the eruptive vents in the crater of the main cone has, for the past 6 months, been of such an intermittently explosive nature that it has not been possible to climb the cone with any probability of safety. It has been dangerous even to approach the base of the cone.

#### ALEUTIAN-ALASKAN VOLCANO STUDIES

Dr. H. A. Powers, who is in charge of the U. S. Geological

Survey's volcanological program in the Aleutian Islands, reports that the field team from the General Geology Branch, which is studying and mapping the volcanoes of the Aleutian Islands and Alaska Peninsula, completed the reconnaissance mapping of the Rat Group during the summer of 1951. This completes the mapping of all the American Aleutians west of the 180th meridian. Eastward, work has been completed on northern Kanaga, northern Adak, Great Sitkin, Umnak, and the Pavlof Group. The investigation will be continued until all the young volcanic areas have been studied.

#### ALEUTIAN VOLCANIC ACTIVITY

Great Sitkin volcano, in the Andreanof Group of the Aleutian Islands, has continued to steam throughout the past year, according to observations by Austin E. Jones, seismologist in charge of the seismological observatory maintained on Adak Island by the Geophysics Branch of the U. S. Geological Survey. The steam cloud is visible intermittently from Adak. It is not apparent whether this represents fluctuation in volume of steam output or fluctuation in meteorological conditions that condense the steam.

No fume or ash clouds have appeared from Great Sitkin since the series of eruptions which ended about November 29, 1950. During this eruptive period, which began November 5, 1950, several ash showers and fume were produced. Jones estimated that one ash eruption produced possibly as much as 20,000 cubic meters of ash. Flashes of light were observed several times at night by military personnel on Great Sitkin Island, but they were not seen from Adak. Prior to this activity, the last small ash falls and fume clouds were seen on December 30, 1949, and January 7, 1950.

In spite of the frequency of military air travel along the Aleutian Chain, information on minor activity of the different volcanoes is very random because the cloud and fog screen is so persistent. Minor ash showers and fume emission are known to have occurred during 1951 from Gareloi, Kanaga, Great Sitkin, Akutan, and Shishaldin. Others may have shown minor activity which has not been reported. It is certain, however, that no major eruptions have escaped notice.

#### STAFF OF HAWAIIAN VOLCANO OBSERVATORY

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#### HAWAIIAN VOLCANO RESEARCH ASSOCIATION In cooperation with the UNIVERSITY OF HAWAII

The Hawaiian Volcano Research Association was founded in 1911 for the recording and study of volcanoes in the Hawaiian Islands and around the Pacific Ocean. Its equipment at Kilauea Volcano, Hawaii Island, has been transferred to the United States Geological Survey.

The University of Hawaii cooperates in maintaining a research laboratory at Kilauea. The Association and the University supplement the work of the government with

research associates, instrumental equipment, and special investigations. Dr. T. A. Jaggard is their geophysicist resident at Kilauea.

The *Volcano Letter*, a quarterly record of Hawaiian volcano observations, is published by the University of Hawaii and supplied to members of the Research Association and to exchange lists of the above establishments.