
Shortly after the Alaska earthquake of March 27, 1964, President Lyndon B. Johnson requested that Dr. Donald F. Hornig, his Special Assistant for Science and Technology, undertake a comprehensive scientific and technical investigation of the earthquake and related events aided by the National Academy of Sciences. As a result a 12-man Committee on the Alaska Earthquake was established within the Academy under the chairmanship of Konrad B. Krauskopf of Stanford University. The resulting report, of which this—on Hydrology—is the first of eight volumes to appear, will undoubtedly constitute the most detailed account of an earthquake ever compiled. The remaining volumes will cover: Geology, Seismology and Geodesy, Biology, Oceanography and Coastal Engineering, Engineering, Human Ecology, and Summary and Recommendations.

The 28 papers comprising this volume are nearly equally divided into four categories on ground and surface water effects in Alaska, ground and surface water effects outside of Alaska, effects on glaciers, and avalanches on glaciers and the effects of snowslides. Together these form a carefully documented presentation—scientific in concept, fascinating in detail. The diverse effects triggered by the earthquake include the shattering of frozen lakes, giant landslides spread over glaciers, snow avalanches, seiches, water-sediment ejections, and groundwater-level fluctuations.

The Academy is to be complimented for producing a volume which in terms of binding, typography, and illustrations alone is a pleasure to read. Certainly the overall excellence of this volume is cause to anticipate eagerly the subsequent volumes of the full report.

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This recently issued report describes the generation, propagation and dispersion of the main tsunami, and its run-up along the North American coast. The major part of the report is devoted to the effects of the main tsunami and of the local seismic sea waves in Alaska and on the North American seaboard. A report is given of tsunami action at communities on Kodiak Island and on neighboring islands, in Cook Inlet, in Resurrection Bay, at Seward, Valdez, Whittier, Cordova, and along the Canadian Pacific coast, the Washington-Oregon coast, and the California coast. Conclusions and recommendations are given regarding tsunami action and protective measures. This report makes clear the extent of the damage wrought by the 1964 earthquake through tsunami action and it will be of particular interest to those concerned with protection from earthquakes. Limited free distribution of this publication is made by the U. S. Army Coastal Engineering Research Center, 5201, Little Falls Road, N. W., Washington, D. C. 20016.

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