

# The cause and effect of the great alaskan earthquake

[History](#)



Running Head: THE 1964 ALASKAN EARTHQUAKE The 1964 Alaskan Earthquake- Its Cause and Effect of Correspondence concerning this article should be addresses to (Your name and work address) Contact: (email address) THE 1964 ALASKAN EARTHQUAKE 2 Abstract This paper explores the massive earthquake that Alaska witnessed on the 27th of March, 1964 while further analyzing the cause(s) and the effects that the region witnessed. Although, the reason for the earthquake was stated as the shifting of tectonic plates, the question of nuclear tests having played some role cannot be ruled out although there are no supporting evidences regarding the same. Further to the aforesaid, the paper also relates to the description of regions affected and the subsequent rescue and rehabilitation operations that follows any natural disaster. Finally, the paper examines the lasting effects on the people and the regions that the earthquake had bestowed upon them. Keywords: earthquake, regions, cause, rescue, effects THE 1964 ALASKAN EARTHQUAKE 3 The 1964 Alaskan Earthquake- Its Cause and Effect The evening of 27th of March, 1964 witnessed events of terrifying intensity that had a lasting effect on the minds of the Alaskan people- an earthquake of the magnitude of 9. 2 on the richter scale shook the region for a period of four to five minutes. Across Alaska, numerous buildings were damaged, several landslides occurred, and the region even suffered an earthquake liquefaction which is a term used to describe the loosening of the soil due to stiffness deprivation owing to an earthquake. Even after the earthquake came to a halt, a powerful tsunami destroyed a village named Chenega killing many people. Some areas were permanently raised by several feet and others were depressed causing heavy damage to all

structures. This was a moment never to be forgotten by those who had witnessed the terrible events that had incurred destruction of unanticipated levels. Alaska had a long way to go. An earthquake usually occurs due to tectonic movements. The earth's crust is made up of several plates that have a freedom of movement. When one of these plates slide across the other or even when they collide against each other, shock waves of huge intensity are released which causes the so-called earthquake. The most probable cause of the Alaskan earthquake was the sudden south-eastern movement of some of the coastal areas due to the continuous depression caused by the inward or north-west drift of the Pacific plate. This resulted in the pacific plate's movement under the North-American plate by several metres. Although, tectonic activities are the much considered cause of the earthquake, several hypo-theses suggest that secret nuclear tests had triggered the quake although there are no supporting evidences for the same. It is an interesting fact that the energy released by a nuclear test conducted underground could result in tremors being generated. THE 1964 ALASKAN EARTHQUAKE 4 The earthquake resulted in the loss of 131 lives with Anchorage witnessing the greatest damage due to landslides and subsequent tsunamis. The Government Hill School was left in two pieces due to the landslide and the airport collapsed as well. The other coastal towns that suffered damage included Prince William Sound, Kenai Peninsula, and Kodiak Island. The quake resulted in the re-location of a town named Valdez to a higher area. Some other villages like Chenega and Afoganak were also affected drastically. The effects of this disaster were far fledged as it caused damages worth millions of dollars in British Columbia. The USAF immediately

took command over the situation with the assistance of the local police. Medical specialists from military were immediately brought into the picture for their crucial assistance. Risk assessment was done on standing buildings for any possible damage with the help of the army engineers. The Elemendorf's 5040th Civil Engineering Group played a vital role in rescuing the trapped men in the collapsed airport building. Soldiers helped in the supply and transportation of food and other necessities. Within 24 hours of the earthquake, military and civil employees reported to their respective work stations for round the clock duty which had been the greatest support for the people of Alaska. Any natural disaster leaves a scar upon the minds of people. New structures took place for old ones and most of the damaged ones were either repaired or replaced. However, the scar remained far too long for those who belonged to Valdez- a small town that had to be shifted in its entirety to a few miles west of the old one. Due to the soil liquefaction and continuous fear of being swept away by the numerous streams, the old town of Valdez had nothing apart from inevitable solution- relocation to a new place. Although Alaskans recovered from the disaster, much of their grief still remains fresh in their hearts. One look at the old town to the east and they could still remember the events of the Good Friday evening- The Great Alaskan Earthquake. THE 1964 ALASKAN EARTHQUAKE 5 References National Research Council (U. S.) Committee on the Alaska Earthquake (1968): The great Alaska earthquake of 1964, Volume 1, Part 1 Christensen, Doug (2002, November). Retrieved from [http://www.aeic.alaska.edu/quakes/Alaska\\_1964\\_earthquake.html](http://www.aeic.alaska.edu/quakes/Alaska_1964_earthquake.html)