

Astronomy Work Atop Haleakala

Grote Reber Conducting Experiments on Kole Kole Hill

An odd looking movable structure is nearing completion on top of Kole Kole hill upon Haleakala.

The machine will be used by Grote Reber of Wailuku to conduct investigations in astronomy. The celestial radiation to be studied is known as Cosmic Static. It cannot be seen or photographed, but, Reber says, it may be detected by suitable electronic equipment. A pen drawing a wavy line on a moving paper chart provides a permanent record of the intensity of the Cosmic Static detected. According to Reber, very little is known of the origin or nature of this natural phenomenon. "In general," he says, "the radiations come from the Milky Way and are of non-thermal origin. That is, the sources are not hot bodies like stars or nebulae. Instead, the energy, must be produced by some process which converts mechanical energy of motion directly into electromagnetic energy. This is Mother Nature's equivalent of dynamos in the sky."

Haleakala was chosen because from its top the horizon is nearly all water. Since Cosmic Static waves are over a million times as long as light waves, a very high place for the observer and a very large mirror are required. The mountain and the sea provide these.

With the exception of determining time, astronomy has no practical aspect. Rather, its interest is of an intellectual nature providing information about the universe. Reber hopes that these studies on Haleakala will produce fundamental knowledge in this new branch of astronomy.

These experiments are an outgrowth of previous studies conducted by Reber as an avocation at Wheaton, Illinois. The work is financed by a grant from the Research Corporation to the Department of Public Instruction and is administered through the Maui Vocational School. Most of the parts for the super-structure were designed and fabricated at the shops of the school.