## **ABSTRACT**

Technology is always earn the dedication in all matter. For example in social's sector, can assist to depress the amount of human victim effect because of natural disaster that happened. Last years Indonesia was often knocked over by worse natural disaster such as of floods, landslide, earthquake, tsunami, and mount kelut which latterly often conversed because the condition was worried. The natural disaster was cannot be avoided, but during can be handled it will lessen the amount of loss and human victim generated.

One way to overcome this designedly is make an early warning system establishment which can sense tsunami. This systems consist of censor which can know the change condition above. The indication of tsumani is usually marked by changing water concentration, or the other word is siltation. Therefore this early warning systems can deliver the signal sinusoide then next is accepted by BMG (Badan Meteorologi dan Geofisika) then passing the radio network in frequency 438 - 470 MHZ, the alteration of this consentration will change the amplitude of voltage levels. In this final project execution, writer only focus to assume designing and simulating this early warning system establishment using multisim version 10.0.

In scheme and simulation this early warning system establishment can sense the alteration of signal level when it indicated by tsunami. The threshold level is among 2mV-70mV. And this matter can assist human victims around of location to immediately pacified to better place.