Chapter 8

VHF (Very High Frequency)

The Very High Frequency communication is widely used to-day for many purposes such as.

1. Back up communication between substations and substations.

2. Radios and Televisions.

3. Mobile communication.

The VHF band occupies the region from 30 to 300 MHz; because of being in the high freqnency range, the VHF waves are limited in the line of sight. None of the VHF wave can pass through the obstacles such as mountains, buildings, e.t.c. this propagation aspect is similar to that of UHF transmission. The other effects such as refraction, reflection, absorption, diffraction, and ducts. May occur to VHF as the UHF in the some manner. The difference of the types of transmission is that, the signal to noise ratio of the VHF is less than that of the UHF, this means that the interference occurs to the VHF easier than to the UHF.

8.1 Disadvantages.

There are many disadvantages in introducing the VHF transmission as a medium for the telemetering and

supervisory control system, and the most obvious disadvantage is the density of propagation, as mentioned above, the VHF transmission is used for many purposes and there are many places that use the VHF as the communication medium such as. Military communication. Police department. EGAT, PEA. and MEA. Radio and TV. stations. et.c.

In telemetering and supervisory control system, a lot of massages must be transmitted, this means that the wide frequency range for this purpose must be employed, and this causes the difficulty in the signal transmission without interference.