

Chapter 3THE COMMUNICATION SYSTEM

The communication between load dispatching center and substations or sometimes, between substations and substations depends on two - way radio system. This system composes of.

1. Transmitter.
2. Receiver
3. Repeater base station

004985

The details of Repeater base station is as follow:-

Transmitter:-

Operating frequency	(1) 169.60 MHz
	(2) 169.65 MHz
R.F. Power output	250-350 Watts
Modulation	Narrow Band (± 5 KHz)
Spurious & Harmonics	At least - 85 db,
Frequency stability	I 0.005 %
	I 0.0002 % (Alternative)
F.M. Noise	At least - 55 db.
Audio response	300 - 3000 Hz
Audio Distortion	less than 5 %

Receiver :-

Operating frequency	(1) 163.60 MHz
	(2) 163.65 MHz
Sensitivity	Not less than 0.35 (EIA SINAD)
	Not less than 0.45 (20db Quieting)
Squelch sensitivity	Not less than 0.15
Selectivity	Not less than -80 db (EIA SINAD)
	Not less than -100 db(20db Quieting)
Spurious response	At least -100 db
Frequency stability	I 0.0005 %
	I 0.0002 % (Alternative)
Audio output	5 Watts
Audio distortion	less than 5 %
