

TD-2 RADIO SYSTEM

1. GENERAL

1.01 The TD-2 Radio System is a microwave radio relay system designed for handling television, multichannel telephony, telegraphy or other wide band communication signals. The transmission bandwidth of each repeater at the radiated frequencies is 20 mc with an effective channel bandwidth of the order of 8 mc. The system is designed for a maximum of six channels in each of two directions with the possibility of spurs utilizing frequencies in-between the regular channel assignments. One transmitting antenna and one receiving antenna are required for each direction of transmission. The radio equipment operates in the common carrier band 3700 to 4200 mc. At these frequencies, transmission is limited essentially to line-of-sight distances, that is up to a maximum of 35-40 miles with an average

of 25 to 30 miles depending upon terrain, transmission considerations and over-all system economies.

1.02 The operation, maintenance and description and operating principles of the over-all TD-2 Radio System are given in the following sections:

OPERATING METHODS	SECTION R90.302
MAINTENANCE ROUTINES	SECTION R90.303
MAINTENANCE METHODS	SECTION R90.304
DESCRIPTION AND OPERATING PRINCIPLES	SECTION R90.305

Detailed information is given in the Bell System Practices listed at the end of BSP Section R90.305.

Bell Telephone Laboratories, Inc.

This material is for the use of Bell System employees only, and its distribution is in no sense a publication. Neither this material, nor any portion of it, is to be reproduced in any form, without the written permission of the American Telephone and Telegraph Company.