RELIABILITY - A TOTAL APPROACH

By Don Dworkin, Ellery Litz, Peter Parikh and Harry Suri

Just as reliability within an individual equipment, for example an amplifier, is the multiplied product of the reliabilities of the separate components, so the reliability of a CATV system, as far as the <u>customer</u> is concerned, is the product of the reliability of <u>every</u> equipment in series with the siganl path - from antenna to the television set.

Further, in line with the customer's point of view, reliability must be defined as the steady production of a good quality picture, and <u>any</u> operation below that standard, whether due to ice or co-channel at the head-end, excessive hum or power outage in the system, or drifting of a converter at the subscriber must be counted as a failure.

This article will discuss system reliability from this point of view using both theoretical and system history to illustrate. Still existing deficiencies will be identified, the overall object being to firmly establish a totally serviceand system-style of thinking and work in regard to CATV reliability.

> Warner Cable Corp. 75 Rockefeller Plaza New York, NY 10019

Complete text is either printed in appendix B or available upon request from the author.

107