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Julius Goldhirsh
Wolfhard J. Vogel

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The Johns Hopkins University
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Laurel, MD 20707

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Electrical Engineering
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13. ABSTRACT *(Maximum 200 words)*
The period from 1980 to 1990 saw numerous experiments carried out and models developed with the objective of characterizing the propagation environment associated with the provision of land mobile communications using satellites. Experiments were carried out with transmitters on stratospheric balloons, remotely piloted aircraft, helicopters, and geostationary satellites. This text assembles the experimental results in a single source for use by communications engineers, designers of planned Land Mobile Satellite Systems (LMSS), and modelers of propagation effects. The results given here are mostly derived from systematic studies of propagation effects for LMSS geometries in the United States associated with rural and suburban regions. Where applicable, the authors also draw liberally from the results of other related investigations in Canada, Europe, and Australia. Frequencies near 1500 MHz are emphasized to coincide with the frequency bands allocated for LMSS by the International Telecommunication Union although earlier experimental work at 870 MHz is also included.

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