

JOURNAL  
OF THE  
RADIO RESEARCH LABORATORIES

JANUARY 1957

CONTENTS

I.	A New Theory of Formation of the $F_2$ Layer II. The Effect of the Vertical Movement of Electrons and Ions on the Electron Density Distribution . . . . .	<i>By T. Yonezawa</i>	1
II.	On the Relationship between the Scattering of Radio Waves and the Statistical Theory of Turbulence. . . . .	<i>By K. Tao</i>	15
III.	On the Origin of the Long-Lived Solar Corpuscular Streams which Appeared Last Solar Cycle, 1950 to 1953. . . . .	<i>By K. Sinno</i>	25
IV.	Effect of the $S_q$ Current System on the Ionospheric $E$ and $F_1$ Regions . . . . .	<i>By T. Shimazaki</i>	37
V.	Relationship between the Semi-thickness of $F_2$ Layer at Tokyo and Solar Activity . . . . .	<i>By I. Kasuya</i>	49
IV.	On Differences of $f_0F_2$ between June and December viewed from a World-Wide Standpoint . . . . .	<i>By M. Mambo</i>	59
VII.	Amplitude Probability Distribution of Atmospheric Noise on 10 Mc/s . . . . .	<i>By T. Ishida and M. Higashimura</i>	73
VIII.	Characteristics of Fading in $HF$ and $MF$ Waves at Middle Distances . . . . .	<i>By R. Inoue, M. Ose and N. Wakai</i>	77
IX.	Intercomparison on the Various Methods of Measuring Spurious Emissions . . . . .	<i>By S. Kurokawa, T. Takahashi and M. Arai</i>	89
<hr/>			
	Proceedings of the Eleventh Semi-Annual Meeting on Researches conducted in the Radio Research Laboratories on October 23 and 24, 1956 . . . . .		95
	LABORATORIES NEWS. . . . .		98