

JOURNAL
OF THE
RADIO RESEARCH LABORATORIES

I.	Electron Density Irregularities Observed in the Antarctic Auroral E Region	By T. Ogawa, H. Mori, and S. Miyazaki	1
II.	Sodar Probing of Small Scale Temperature Structure in the Clear Troposphere	By M. Fukushima, K. Akita, and H. Tanaka	23
III.	Determination of Elements of Sub-Synchronous or Super-Synchronous Orbits and their Application to Operational Satellites	By K. Takahashi	45
SHORT NOTE			
IV.	Detection of Fundamental Frequency of Speech Taking Account of the Phase of Waveforms	By T. Takasugi	59

RADIO RESEARCH LABORATORIES
MINISTRY OF POSTS AND TELECOMMUNICATIONS
TOKYO, JAPAN