

SPACE COMMUNICATIONS AND NAVIGATION SYMPOSIUM (B2)
Near-Earth and Interplanetary Communications (6)

Author: Prof. Nobuyuki Kaya
Kobe University, Japan, kaya@kobe-u.ac.jp

NEW RECEIVING GROUND ANTENNA USING ACTIVE PHASED ARRAY ANTENNA FOR
SATELLITES (II)**Abstract**

An Indian Polar Satellite Launch Vehicle lifted off on Feb. 14, 2017, carrying 104 satellites on a single rocket. All the 104 satellites must be communicated with the ground stations for the control and data acquisition. The ground stations are required to communicate simultaneously with so many satellites. We are newly developing a ground receiving station using an active phased array antenna. The purpose of this study is to build them around the world in order to realize a worldwide receiving antenna network to communicate simultaneously with several satellites and to get information in real-time through the internet anytime and anywhere. We have already built the first pilot model of the receiving antenna at the frequency of X-band and succeeded in receiving the signal from the satellites. We will explain the newly developed pilot receiving antenna and the receiving data from the satellites.