

# Ku Band Monopulse Tracking Antenna System Design

陳哲郎、張道治

E-mail: 9000162@mail.dyu.edu.tw

## ABSTRACT

The article discusses a Ku band antenna system design, which has small aperture size with high efficiency, low side lobe level and two-dimension monopulse tracking function. The paper depicts the principles of antenna tracking. First of all, two different antenna types are analyzed, one is inverse cassegran antenna and another is slot array antenna. Then, the best one is chosen for hard ware fabrication. According to the design of antenna pattern and aperture distribution, the analyses and measurement results of wave guide slot array impedance, manufacturing tolerance analysis and possible methods of improvement. Finally a high tracking accuracy, and practical antenna system is achieved.

Keywords : Monopulse

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