A Novel Antenna Tracking Technique for Maritime Broadband Communication (MariComm) System

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***Abstract*—Maritime communication is internationally protected because closely related to the maritime safety, and it has evolved slower than terrestrial communication technologies. However, with the recent rapid advances in communication technology, maritime communications have become faster and increasingly modernized. A maritime broadband wireless data communication (MariComm) system was developed to make two-way high-speed internet/multimedia services available at a rate of 1 Mbps or more on the sea by extending the communication coverage of terrestrial wireless communications networks to sea areas. The MariComm system uses high-gain directional antennas to extend the transmission range and has multiple directional antennas to cover 360 degrees in azimuth. In this paper, we introduce a directional antenna tracking technique and apparatus using received RF signal and ship location information in the MariComm system.**

***Keyword*— Antenna Tracking, Maritime, Broadband, Wireless, Communication, MariComm**

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