

28th IAA SYMPOSIUM ON SMALL SATELLITE MISSIONS (B4)  
Interactive Presentations - 28th IAA SYMPOSIUM ON SMALL SATELLITE MISSIONS (IP)

Author: Dr. Wahyudi Hasbi  
Indonesian National Institute of Aeronautics and Space (LAPAN), Indonesia, wahyudi.hasbi@lapan.go.id

LAPAN-A2 & LAPAN-A3 SMALL SATELLITE LESSON LEARN FOR MARITIME SURVEILLANCE

**Abstract**

This paper presents how a small satellite of LAPAN-A2 and LAPAN-A3, which carries an AIS receiver and its optical camera, is used for maritime surveillance within Indonesia's maritime area and the world. Those satellites launched in 2015 and 2016, respectively, in equatorial and polar orbit. Several important maritime cases detected by those satellites in the Indonesian ocean, including typical spoofing and potentially illegal activity in the sea, will be explained. The importance of the fusion of satellite image and AIS data simultaneously as a cooperative and non-cooperative surveillance system also explored. Finally, lessons learned that could be used to improve further small satellites program for maritime surveillance will be described.