Flexible and extendable advance satellite tracking system

ABSTRACT

Aircraft tracking via satellite uses four dimensional aircraft position information to enhance flight safety by recording, scrutinizing and visualizing the information generated by an Airborne Tracking Unit (ATU) fitted onboard of aircraft flying from one point to another. It is an important device for aircraft operator to ensure its operational safety. Starfish Tracker SF3100-1 aircraft tracking unit can be used in aircraft satellite tracking applications. Research collaboration between Worldgate Technologies (WGT), Universiti Pertahanan Nasional Malaysia (UPNM) and Universiti Putra Malaysia (UPM) has developed the ATU originally from land base to airborne vehicles tracking, hence it provides multitudes of civil and military applications. The ATU is a unique device that enables multi-tasking application such as Air Combat Manoeuvring Instrumentation (ACMI), Network Centric Warfare and Flight Data Monitoring systems. In this paper, system characteristics and its applications are presented with the potential applications for Flight Data Monitoring system.

Keyword: Satellite tracking; Flight data monitoring; GNSS; GPRS; Asset tracking; Fleet management