The Study and Analysis of the GPS Simulcast Radio System

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ABSTRACT

Since tel-communication technologies have been developed rapidly and precociously, the tel-communication methods become variably and convenience for people using them. The simulcast radio system is one of the method for special groups using it（e.g. police department, fire company, ambulance, airport service, trafficable control & maintenance…etc.）. The system is different with 2G/3G system that provides some special functions （e.g. broadcast /walk-in talk-in mode, area selection, individual call, group call, Broadcast call, direct listening and interruption...etc）. Users can apply these functions to do what they are necessary to do such as different communication modes, group and system managements…etc. Based on its special characteristics, the Taiwan Area National Freeway Bureau (TANFB) has been erected the radio system for its control and maintenance groups using. This thesis investigates and analyzes the functional applications, design, erecting processing and testing of the radio system. I hope that this research is going to create some references for designing and erecting the radio system as the project of and “ intelligent network of TANFB－radio system ” in future.

Keywords : Simulcast Radio System 、Broadcast /Walk-in Talk-in mode、Area Selection、Individual Call、Group Call 、Broadcast Call、Dir

Table of Contents

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