

ST SPORTSERVICE GmbH

Application for Special Temporary Authority

File No. 1143-EX-ST-2013

Narrative Exhibit and Frequency Coordination Information

Tracking System Testing and Evaluation

This application proposes to deploy a local positioning system for operational testing, proof-of-concept and developmental testing within National Football League stadiums around the United States. The system is intended to provide precise location of football players on the field, for player safety and for fan enhancement applications. This system involves a series of temporary base facilities around the field of play within the stadium; a master processing unit connected to the base stations for calculations; and a series of player-mounted transponders which provide time-of-flight (TOF) measurements from the transponders to the base stations. The distances are short and the TOF transmissions are very brief, on the order of a few hundred nanoseconds. A reference transponder at a known fixed position keeps the base stations synchronized. Individual transponders located on players transmit data to the base stations.

In each NFL stadium, there will be deployed four or more base stations and mobile transponders will be on sideline officials, referees, and members of each football team. There will be backup transponders for each deployed one, hence the large number of transponders specified in the application. All operation will be inside the stadiums.

The system is now equipment authorized for operation in the band 5735-5865 MHz (See, FCC ID 2AATD-REFTPV23) as a Part 15 Low Power Communication Device Transmitter, but the authorized frequency range conflicts with other Part 15 facilities used in the stadiums, so the frequency range specified in this STA is consistent with future licensing as a Part 90 radiolocation device. It is the intention of the applicant, once testing is complete, to file an application for a Part 90 license for this system to operate in each of the NFL stadiums as a non-government radiolocation station, once the equipment is granted certification for operation under Part 90, Subpart F. The six-month period of this STA will enable developmental testing in the frequency range permitted under Part 90 and commencement of the licensing process.

Operation in the stadiums will be coordinated by the National Football League's Game Day Frequency Coordination system and all operation will cease at such time as any report of interference is received. While there is one Game Day Coordinator (GDC) per NFL stadium, the overall "stop buzzer" contact is Mr. Ralph Beaver, who heads the NFL's GDC program. Mr. Beaver can be reached at 813-376-1313.

Other questions can be addressed to undersigned counsel:

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