

Test & Evaluation Project Summary

Overview

Houston TranStar (TranStar), a consortium of the Texas Department of Transportation, Harris County, the City of Houston and the Metropolitan Transit Authority of Harris County, requested that the Southwest Public Safety Technology Center (SWTC) review and assess video downlink connectivity to helicopters for incident coverage during disasters. These helicopters may belong to Houston Police Department, Harris County, MetroNetworks, Channels 2, 11, 13, 26 or others.

The focus of the study was Electronic News Gathering (ENG) and how a system might be created to gather disaster-related information from both government and public airborne sources, for utilization in traffic analysis and situational awareness.

Outputs of the Study

The output of the study was a focused report that provided distances to-and-from TranStar at different Antenna heights and frequencies to both dense areas (helicopter height at 500') and non-dense areas (helicopter height at ground level).

In general, the report provided information relative to the following:

- System for determining propagation at frequencies ranging between 2 GHz-7 GHz;
- Variety of antenna and controller systems;
- List of research universities;
- Major list of suppliers; and,
- General "rules of thumb" for the Fresnel Zone Intercept.

