

Technology Profile Fact Sheet

Title: Mapping Tool

Aliases: None

Technical Challenge: Typical Direction Finding receivers fail to adequately provide for a dynamic operating environment, requiring the user to definitively identify their operating environment prior to deployment. Once operational, such systems need to be taken off-line to alter the geographic chart coverage available to the operator. Additionally, these systems often do not provide indications of Signal Quality, DF Quality, or direction of travel. These limitations prove very difficult to work with in a dynamic environment.

Description: This invention permits communications between a commercial DF receiver and the USG Geospatial Information System geospatial charts, dynamically maintaining pace with a moving vehicle. An operator can tune up to 16 independent receivers, independently or simultaneously, and the system provides for a dynamic user interface plotting directional information on a signal of interest (SOI). Using multiple receivers, a central operator can direct various platforms to the SOI within minutes. Additionally, network based receiver control has been introduced that permits remote tuning, reporting, and updating over Ethernet based networks. The system provides a solution to the need for an inexpensive, rapidly deployable DF system that can be used operationally with very little operator training required.

Demonstration Capability: A demonstration is available upon request.

Potential Commercial Application(s): This direction finding system has the potential for widespread applicability to civilian agencies such as the FAA, FCC, and law enforcement, to include local government. It has generated significant interest among various government contractors as well, several of whom foresee applicability outside the government arena.

Patent Status: A patent application has been filed with the USPTO.

Reference Number: 1437