



Technology Service Corporation

Radar Prototyping

Specializing in advanced sensor systems and related technologies, Technology Service Corporation (TSC) develops many radar systems and components that include receivers, transmitters, antennas, and signal processors along with real-time software and graphical user interfaces. Our capabilities include radar prototyping, breadboard, and limited production hardware design, development and testing.

Recently, TSC has focused on high resolution non-scanning radars using FM/CW waveforms. Examples include HSTATS (High Speed Target Acquisition and Tracking System, C-band, detects and tracks bullets, mortar shells, and RPGs) and OMNI (an X-band non-scanning radar providing omni-directional coverage in azimuth). This class of radars has the following advantages:

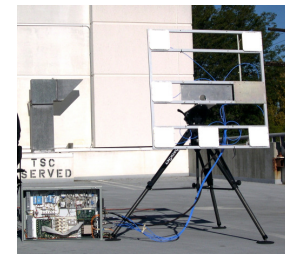
- Very high range resolution
- Antenna coverage, omni-directional or sector
- Low transmitter power, small size
- Continuous tracking of all targets in the fixed antenna beam
- Azimuth and elevation information obtained by interferometry

Additionally, TSC has designed and built airborne weather radars, foliage penetrating radars, and very high resolution X-band radars (to 4") for target imaging.

Omni-directional Periscope Radar (X-Band)



RF Imaging System



High Speed Target Acquisition and Tracking Radar (HSTATS)



Radar Digital Processors



MMW Icing Detection Radar



Receiver/Synthesizer Unit – NOAA Severe Storm Airborne Radar

WHY TSC?

Supporting hardware development and radar prototyping, TSC actively maintains extensive computer resources, well-equipped laboratories, machine shops, and fabrication facilities. Hardware capabilities include printed circuit board layout, fabrication, and assembly along with mechanical, environmental, and EMI/RFI engineering to support design for operation in laboratory and ground-based or airborne field environments.

CONTACT INFORMATION

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