

## The History of TMS



Times Microwave Systems (TMS) was founded in 1948 as the Times Wire and Cable Company. TMS is an engineering oriented organization specializing in the design and manufacture of high performance flexible and semi-rigid coaxial cable, connectors, and cable assemblies for RF transmission from HF through Microwave frequencies. TMS is committed to

continuous improvement with respect to ISO-9001 Quality Standards and ISO-14001 Environmental Management Systems.



The expertise that provided cable solutions for the demanding requirements of airborne electronic warfare systems and led the way in the development of low smoke cables for shipboard applications is now yielding

high performance cables to meet the needs of the wireless communications market. The innovative product line provides a better alternative to corrugated copper cables for antenna feeders and system interconnects. Compared to corrugated copper cables, LMR cables offer better flexibility, resistance to linking, comparable attenuation, and easier connector attachment at a lower cost.

The work performed at TMS in the 60's, 70's, and 80's forms the basis for today's high performance coaxial cables. TMS pioneered the development of closed cell low loss polyethylene foam dielectric and low loss taped PTFE dielectric coaxial cables. Through a thorough understanding of transmission line theory and manufacturing processes, TMS was the first to produce cables with reduced periodicity and impedance matched interfaces, resulting in the first transmission lines with low

VSWR over broadband frequency ranges up to 40 GHz. The development of connector design and manufacturing expertise allowed TMS to take full performance responsibility for the entire cable assembly, which was unprecedented at the time.

TMS has been instrumental in the development of military specifications, including MIL-C-17 for coaxial cables. Times is the leading source of MIL-C-17 qualified products, holding far more QPL's (Qualified Product Listings) than any other manufacturer in the world. Times also helped the US Navy write the MIL-T-81490 Transmission Line Specification, and is qualified to supply microwave transmission lines that meet MIL-T-81490 and MIL-C-87104 (US Air Force) requirements. These are the specifications that define harsh military airborne environments that Electronic Warfare transmission lines must perform in, year after year.

TMS applies its expertise to customer requirements through a staff of Field Application Engineers. Unlike other cable manufacturers with limited product lines, who try to fit customer applications to their existing products, the philosophy of TMS is to select or design the right product for the application. This results in an optimal and cost effective solution.



TMS is the leader in the design, qualification, manufacture, and on-time delivery of high performance cable and cable assembly products to the commercial wireless and military marketplace. In 2003, TMS was selected by Lockheed Martin Aeronautics to supply the Broadband Airborne Cable Assemblies on the F-35 Joint Strike Fighter (JSF). TMS was chosen to supply this solution since its high performance cable assemblies are able to handle high-speed data in extreme avionics environments including wide variations in temperature and pressure.

