



Specialized Equipment Test and Control Systems

MAR has effectively engineered and implemented a number of fully automated test and control systems for a broad range of contract work. Our past projects have included towed line array testing, specialized plant equipment design, automated process controls, automated test and measurement equipment, analog/digital circuit design, and 3D modeling.

Some examples of our past performance in this area include:

Naval Surface Warfare Center, Carderock Division (NSWCCD), Wavemaker Replacement Program

In September 2007, MAR Range Services, a subsidiary of MAR, Incorporated., was awarded a five year contract in support of NSWCCD's Wavemaker Replacement Program. As prime contractor, MAR is overseeing an international group of subcontractors to replace outdated wavemaker systems with state-of-the-art automated wavemaker arrays in the NSWCCD hydrodynamic test facilities.

MAR has overall design and Program Management responsibility to remove and dispose of the existing wavemakers and design, manufacture, assemble, install, and commission the new systems. Each basin will be equipped with a set of computer-controlled wavemakers that utilize a dry-back paddle design that will exceed the replacement specifications. On-going work includes the design and development of all mechanical, drive, electrical, control, and software components for 260 individual wavemaker paddle systems. These systems incorporate a modular electromechanical design with both position and force-based absorption feedback, and use a fully digital control system. This high-visibility program draws on broad technical disciplines including mechanical, electrical, ocean, civil, construction, corrosion, computer, and software engineering, as well as Program Management and Administrative support.