Solutions for OT and Quality Assurance

Our expertise - quality affecting and safety significant systems and software, built for the DOE Complex and its Contractors via task-based solutions and staff augmentation.

If you're looking for top-notch Operational Technology (OT) solutions, look no further than InfoTech NorthStar! At the core of every process control system is OT software, control hardware and instrumentation, and we have your back. Our dedicated staff of Instrumentation and Control engineers, many P.E.s, also specialize in the software design and implementations for many leading commercial HMI, PLC, DCS and simulator applications, including Allen-Bradley, ABB, and GSE Systems. All of our software work is controlled by our ASME NQA-1 Subpart 2.7 Software Procedures for quality affecting systems and DOE Order 414.1D for safety level systems. And our patented testing solutions will save project schedule, cost, and improve the quality of the delivered solution.

Some of the recent systems we've participated in OT solutions for are the EM Tank Side Cesium Removal (TSCR) at the DOE site at Hanford (Richland) Washington and the DOE WIPP Site SSCVS safety control system for mineshaft ventilation. We maintain the staff and the knowledge, so you have a one-stop shop for all your OT needs, no matter how large or small, no matter what.

It starts with client teaming and a solid definition of testable requirements…

OPERATIONAL TECHNOLOGY (OT) LIFECYCLE

- Project Kickoff Meeting and Integration with Client Team
- Precise Scope Definition and Schedule and Milestone Expectations
- Conceptual Analysis Leading to Specific Requirements
- Safety Level Requirements as needed including initial FMEA(s)
- Specific elemental requirements are developed for software, hardware, and interfaces to assist testing

…continues with design documents, interlocks and logic, and implementation…

OPERATIONAL TECHNOLOGY (OT) LIFECYCLE (cont.)

- Design elements include support for P&ID, V&ID, Logic Diagrams and Narratives, Interlock definition, One-Line Diagrams, Loop diagrams, Setpoint and other Calculations, FMEA completion, input to construction drawings, Panel drawings, Electrical Elementaries, instrument and control system specification and datasheets
- Procurement, CGD, and subcontracting assistance
- Implementation of PLC/DCS software logic and HMI screens
- Designs compliant with Cyber Security directives, DOE Order 414.1D, and 420.1C

… FAT, CAT, OAT (testing), and training to complete with success!

OPERATIONAL TECHNOLOGY (OT) LIFECYCLE (cont.)

- Test Writing, Reporting, and Field Support for:
- Factory Acceptance Test (FAT), Construction Acceptance Test (CAT), Commissioning, and Operational Acceptance Test (OAT)
- Procedure and Training development support
- Training by DOE Certified Trainers
- Ongoing maintenance support available