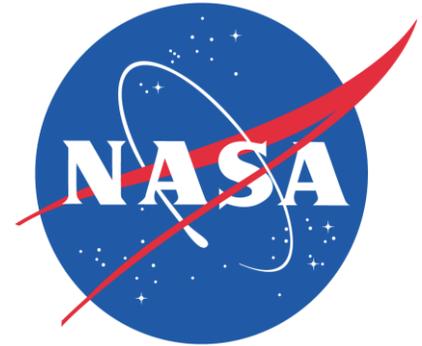


For Out of This World Protection, NASA Relies on WIN-911

Making sure that the Mars Rover can land on the red planet, testing rocket engines that deliver people and materials to the space station or evaluating plasma propulsion systems for deep space missions to asteroids, the engineers and scientists at NASA need to simulate the operating conditions of space as precisely as possible. So, NASA developed a world-class testing facility at the Plum Brook Station, a 6400-acre in Sandusky, Ohio.



The Challenge

The Spacecraft Propulsion Research Facility is the world's largest space simulation chamber measuring 100 feet in diameter and rocketing more than six stories tall. The facility is capable of performing a full suite of testing services simulating a complete space mission from launch to deep space environments - all under one roof.

The Spacecraft Propulsion Research Facility conducts tests within the vacuum chamber after the necessary electrical power, fuel, oxidizer, and purge gas connections are made. To recreate the conditions of outer space while still on earth, the test facilities rely on vacuum pumps and cryogenic systems which can simulate deep space temperatures down to -423°F. Protecting the scientists and engineers is critical to moving space missions forward safely.

The Solution

Programmable Logic Controllers are used in conjunction with the SCADA and historian software to control and log all events of the test firing from the start of the water deluge system until the completion of the engine test firing and facility shutdown. WIN-911 delivers critical alarm information via voice callout along with email and paging notifications to NASA engineers during the test procedure.

Making sure people and components are safe in space requires strict attention and monitoring of process controls and safety conditions in the test facility. WIN-911 provides a crucial role ensuring the safety of personnel and protecting the huge investment of time and funding.

About WIN-911

WIN-911[®] is real-time Alarm Notification Software that works with your existing control software or SCADA system to monitor operations and notify personnel of problem conditions. With WIN-911, your operators can concentrate on other tasks while your computer system does the monitoring.