



THE SUPERIOR CONTROLLER

VOLUME 3, ISSUE 1 WINTER 1998

Holiday Start-up at Chemical Facility



The Superior Controller is published quarterly by Superior Controls, Inc. of Plaistow, NH—the leading controls system integrator specializing in the design and implementation of industrial automation and information systems. The purpose of this newsletter is to present project examples to our customers. Your comments are welcome. Write or Fax:

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“Twas the night after Christmas and all through the facility, not an operator of stirring or mixing ability. The PLCs were hung in the enclosure with care, in hopes that Superior Controls soon would be there.”

On December 26 at 6:00 P.M., the night after Christmas, 12 Superior Controls engineers and technicians began working through the night replacing an obsolete chemical control system. The project, itself, was fairly typical. Superior Controls was responsible for providing and programming two programmable logic controller (PLC) based systems with approximately 600 input and output signals. All field wiring including the detaching of the old system and rewiring of the new system was implemented by

Superior Controls. Not so unusual . . . except all the field wiring and start-up tasks had to take place within 48 hours.

This Fortune 500, New England-based, chemical company had a problem. Their solvent recovery and industrial waste water treatment system was being controlled by



Regenerative Thermal Oxidizer Equipment

a 12-year-old PLC system. Obsolescence and trouble obtaining spare parts made it essential that the PLC system be replaced. However, four major manufacturing buildings were dependent upon this treatment system 24-hours a day, so the only time this continuous process could be interrupted was during a 48-hour window during Christmas break. In addition, the PLC system for a nearby Regenerative Thermal Oxidizer (RETOX) had to be replaced during this same weekend.

Patty Ascanio, lead project engineer, noted, “It was absolutely critical that both systems be back up and running in the



Patty Ascanio (Superior Controls) modifies two of six FIX packages at 3:00 A.M. during holiday startup.

THE PEOPLE WHO ARE SUPERIOR CONTROLS

Superior Controls Welcomes Chris Opolski

Superior Controls is pleased to announce that **Chris Opolski**, a talented chemical engineer with more than seven years industrial automation experience has joined our team. Chris has extensive engineering and management experience in the implementation of chemical and pharmaceutical control and information systems. He recently completed the design and management of a multi-million dollar control system for a major pharmaceutical company in Pennsylvania.

Chris, an avid skier, enjoys vacationing and skiing out west each year. After a January trip to Aspen, Chris will be relocating to southern New Hampshire.

We are very pleased that Chris has joined Superior Controls, and we welcome him to our "superior" engineering team.



Chris Opolski joins the staff at Superior Controls.

Practice, Practice, Practice . . .

As the old joke goes, "How does one get to Symphony Hall?" Answer: Practice, Practice, Practice.

Superior Controls is often asked, "How will you be sure that your control system will function properly?" The answer is found partly in the old joke.



Superior Controls engineer, Mike Veksler (left), simulates control system with Mario Patriarca of Polaroid.

Mark LaRoche, director of engineering, says, "The entire process of custom control system implementation can be broken down into three basic steps before on-site start-up.

1. Define it in writing.
2. Build and program it.
3. Simulate and test it thoroughly or as some say practice, practice, practice."

The importance of performing simulations with our customers cannot be underestimated. And to ensure proper field installation, Superior Controls often will work with our affiliate Vector Electrical (licensed in all New England states) to properly connect field transmitters, drives, motors, valves, etc., back to the PLC or DCS control systems. Following this 3-step process, we can take responsibility for the quality and performance of the control system.

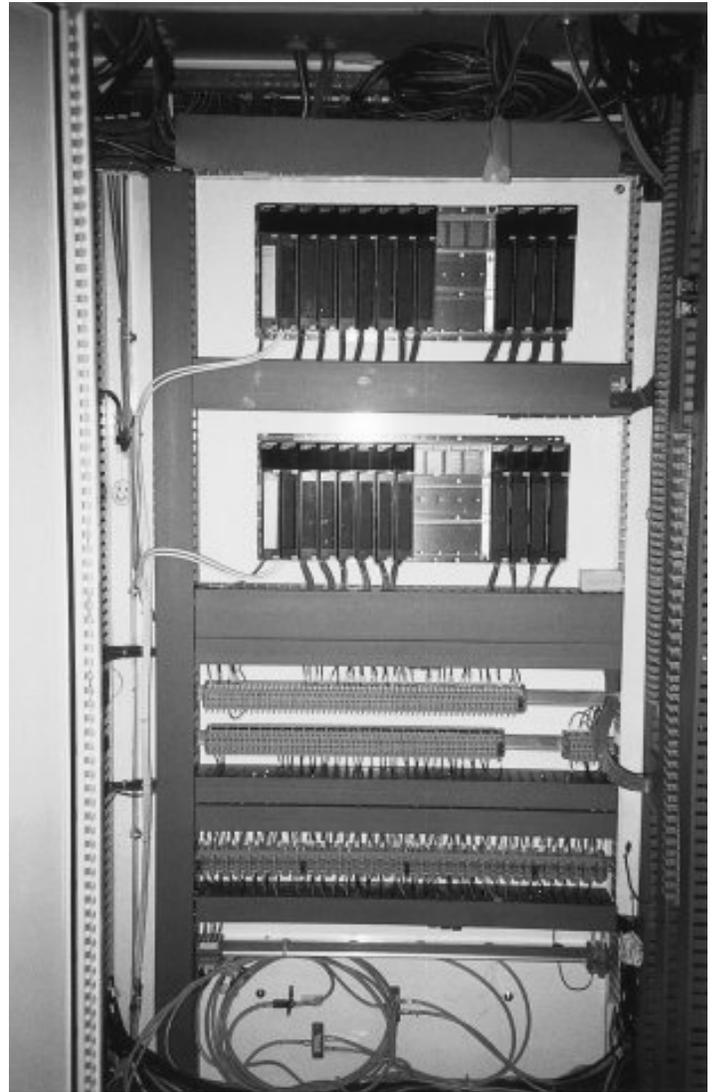
allocated time. If the system is not, the entire site would be shut down.”

Although large and complex, the industrial waste water and RETOX systems were only two of the 11 networking PLC systems Superior Controls had implemented at this facility during recent years. With 11 Modicon PLCs and six FIX-based SCADA Nodes, the entire system controls and monitors more than 3,000 field points.

Before the big weekend, Superior Controls and Beckwood Services (our affiliate and Plaistow, New Hampshire based panel fabrication facility), constructed several panel inserts containing the PLCs, I/O modules, and terminal blocks. These would fit neatly into the old control panels after the old control equipment was removed. The control programs were tested prior to going on-site. The RETOX system, because of its critical nature, was tested and



Technicians begin detaching obsolete PLC equipment from one of three enclosures on Friday night.



By Sunday morning, new PLCs and modules were installed and functioning flawlessly.

simulated several times. Numerous coordination meetings were held and contingency lists prepared.

Mark LaRoche, director of engineering noted that “Months of planning resulted in complete success. Groups of engineers and technicians worked around the clock in 12-hour shifts through the weekend. With great efforts both systems were rewired and back up and running in the allotted time.”

Applause to all associated with the project.

“And 12 talented technicians and engineers passed the test. The plant is up and running. They’ve given it their best.”

Superior Controls Celebrates Holiday with Dinner



The Superior Controls annual Holiday Dinner was held at the beautiful Exeter Inn.