AIM

Association for Information and Image Management

1100 Wayne Avenue, Suite 1100
Silver Spring, Maryland 20910
301/587-8202

Centimeter

Inches

MANUFACTURED TO AIM STANDARDS
BY APPLIED IMAGE, INC.

1 of 1

**Laboratory Technical Services Provides
Business Opportunities for Supervisory
Control and Data Acquisition Systems***

W. Ballard

Superconducting Super Collider Laboratory[†]
2550 Beckleymeade Ave.
Dallas, TX 75237

May 1993

*Presented at the Fifth Annual International Symposium on the Super Collider, May 6-8, 1993 San Francisco, CA.

[†]Operated by the Universities Research Association, Inc., for the U.S. Department of Energy under Contract
No. DE-AC35-89ER40486.

MASTER

LABORATORY TECHNICAL SERVICES PROVIDES BUSINESS OPPORTUNITIES FOR SUPERVISORY CONTROL AND DATA ACQUISITION SYSTEMS

Wayne Ballard

Operations Group Supervisor
Superconducting Super Collider Laboratory*
2550 Beckleymeade Ave.
Dallas, Texas 75237-3997

INTRODUCTION

At this time, I would like to present some additional information about what I consider are some really great opportunities for the business community to participate with us in developing the greatest scientific project in the history of mankind.

Facility Engineering Services is part of Laboratory Technical Services. As part of this group, we have the responsibility to direct the construction of interim facilities, scientific labs, production process, cooling towers, cooling ponds and the operation and control of SSC Laboratory conventional support systems. These operations and controls will be accomplished through the employment of a Supervisory Control and Data Acquisition system (SCADA).

DISCUSSION

From a master control room located at Central Facility, the operating status of all environmental control equipment within the SSC Laboratory will be monitored and building environments controlled. Deviations from normal values will be quickly detected, isolated and corrective action taken. Vital power distribution system characteristics will be observed, analyzed and deviations from normal accounted for and corrections made. When new campuses and/or facilities are added to the SSC Laboratory, their related system monitors and controls will be integrated into and made a part of the Supervisory Control and Data Acquisitions System.

Transmitting electronic input signals from multiple vendors, multiple control systems and from multiple physical locations across a sophisticated and highly active computer network into one automated and integrated system monitored and controlled from one central location is a technically complex task.

* Operated by the Universities Research Association, Inc., for the U. S. Department of Energy under Contract No. DE-AC35-89ER40486.

The complexity of this project makes it necessary for the SSCL to select experienced vendors that can demonstrate both an understanding of the functions of energy management and the capability to apply current information systems technology to the design of centralized and integrated non-proprietary controls for geographically dispersed multiple vendor environmental systems.

AREAS OF OPPORTUNITIES

- Supervisory Control and Data Acquisition Systems
- Integration of multi-vendor proprietary platforms
- Chemically controlled water treatment and analysis systems with read/write capability
- Ion controlled water treatment and analysis systems with read/write capability
- State of the art, flow transmitters, temperature transmitters and pressure transmitters
- Remotely controlled by computer lighting systems utilizing solid state switching
- Water quality and quantity monitoring systems
- Air quality monitoring systems
- Thermal monitoring systems
- Vibration analysis

These are but a few of the possibilities in which the Business Community can participate. We in Facility Engineering Services are more than happy to work with each of you and to assist you in both the immediate and long term needs of the Laboratory Technical Services as we work to support the Superconducting Super Collider.

**DATE
FILMED**

9 / 10 / 93

END