

# CROSS TALK

QUARTERLY BULLETIN

FOUNDATION FOR CROSS-CONNECTION CONTROL RESEARCH

UNIVERSITY OF SOUTHERN CALIFORNIA

University Park, Los Angeles, California 90007

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## Additional Participants

Since the initial fifty participating water utilities were announced in the first issue of this bulletin we have been happy to welcome to the ranks of participants twenty-four more California water utilities.

The recent additions are:

City of Buena Park  
Fallbrook Public Water Dist.  
Helix Irrigation Dist.  
Pomona Valley Municipal  
Water Dist.  
City of San Jacinto  
Somerset Mutual Water Co.  
Carpinteria County Water Dist.  
Coachella Water Dist.

Desert Hot Springs County  
Water Dist.  
Eastern Municipal Water Dist.  
City of Alhambra  
Rossmoor Water Co.  
Costa Mesa County Water Dist.  
City of Santa Barbara  
Southwest Water Co.  
County of Kern  
City of Newport Beach  
San Dieguito Irrigation Dist.  
South Coast County Water Dist.  
San Bernardino Valley Municipal  
Water Dist.  
City of Santa Ana  
City of Milpitas

Victorville County Water Dist.  
East San Bernardino County  
Water Dist.

In addition to information and data on Cross-connection control devices some of the participants of the Association with the Foundation are already realizing some tangible benefits of their investment in the form of on-site discussions of some of the problems that have been plaguing them. Immediate answers are not always on the tip of the tongue; but so far, reasonable progress has been made toward the solution of most of these problems.

## Manufacturers Participation

In the first issue of this bulletin mention was made of the participation in the re-establishment of the Laboratory of a number of manufacturers of water utility equipment. Since that time we have been grateful to acknowledge additional gifts of both cash and equipment which have provided us with a portion of the facility. It is a pleasure to list here those companies who have been so gracious.

Ford Meter Box Co.  
BEECO, Division of Hersey-  
Sparling Meter Co.

Febco, Inc.  
Darling Valve & Manufacturing  
Co.  
Southern Pipe & Casing Co.  
Brooks Products, Inc.  
Johns-Manville Co.  
Grinell Company of the Pacific  
Cla-Val Co.  
Badger Meter Co.  
Los Angeles Department of  
Water & Power  
Scott, Smith, Div. of  
United Concrete Pipe Co.  
Rich Valve Co.  
Palos Verdes Peninsula Water Co.

Byron-Jackson Co., Div. of  
Borg-Warner Corp.  
Worthington Corp.

When installed in the Laboratory each piece of equipment donated by a manufacturer, association or utility will be equipped with a suitable identification plate inscribed with the donors name.

We still are in need of some additional instrumentation, electrical switch-gear and some valves which to augment the equipment already on hand. Inquiries should be directed to the Director of the Foundation.

## The Slow Down

By this time it had been expected that a completion date for the new Laboratory would have been established and an open house date set. However, an unexpected delay in the form of a seven week period of "status-quo" developed while the plans for the revision of the Laboratory building fought their way through the Dept. of Building & Safety plan check division in order to be granted the necessary building permit. This delay has, of course, thrown all time schedules completely to the wind. However, we are assured that early in September the required building permit will be issued and then the work on the rehabilitation of the

building will be underway at top speed. Having experienced this delay we are now quite hesitant to even guess at a possible opening date. But, we wish to assure you that every effort has and is being exerted to accomplish the opening of the Laboratory at the earliest possible date.

Working drawings have been prepared for the installation of all control piping beneath a new floor slab. A centralized control panel will be provided with the potential of remotely controlled all of the valves and pumps that normally will be used in the performance of evaluation work in the Laboratory. Valves used for switching circuits and special calib-

ration tests will be manually controlled. In addition provision is being made for the possibility of future installation of continuous recording equipment for pressure drop and flow rate data. In this way we feel that we will not be likely to dig up the floor shortly after the inauguration of the Laboratory. To some the use of continuous recording equipment may seem to be somewhat unnecessary. But, after years of trying to record data from several locations by both verbal and optical means we strongly feel that a study of continuous recordings will be able to give us an insight into equipment performance that has not been available previously.

## Research Notes

F. M. Patterson, who received the degree of Engineer in Mechanical Engineering in June 1967 from USC, has just completed a through and very interesting investigation into the formation of air entraining vortices in a cylindrical tank with the outlet centered in the bottom. The level of critical submergence both with and without a vortex breaker—has been established for a 1½ inch pipe under flow velocities that are normally found

in process pipe lines. The particular application of this investigation is under conditions where the in-flow to the tank may fluctuate a small amount and the outflow is essentially constant; but, where it is imperative that vapor not be entrained into the pipeline. The results of this investigation will be the foundation upon which further work may be done to establish acceptable limits for some of the other parameters of vortex

control in tanks used on process pipelines.

Donald C. Glover, candidate for the Master of Science in Mechanical Engineering degree from USC, is developing a test stand for the evaluation of head loss in 1" PVC pipe. In addition to a liberal distribution of pressure taps there will be an orifice meter and a set of weigh tanks by which the flow rate may be calibrated.



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