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Canal Automation for Irrigation Systems

Prepared by
the Task Committee on Recent Advances in Canal Automation
of the Irrigation Delivery and Drainage Systems Committee
of the Irrigation and Drainage Council
of the Environmental and Water Resources Institute
of the American Society of Civil Engineers

Edited by
Brian Wahlin, Ph.D., P.E., D.WRE
Darell Zimbelman, Ph.D., P.E., D.WRE

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CANAL AUTOMATION FOR IRRIGATION SYSTEMS

Editors

Brian Wahlin, Ph.D., P.E., D.WRE, WEST Consultants, Inc. (USA)
Darell Zimbelman, Ph.D., P.E., D.WRE, Water Systems Operations and Management, LLC (USA)

Lead Chapter Authors

Charles Burt, Ph.D., P.E., D.WRE, Irrigation Training and Research Center (USA) – Chapter 1 and Chapter 2
Robert Strand, U.S. Arid-Land Agricultural Research Center (USA) – Chapter 3
Peter-Jules van Overloop, Ph.D., Delft University of Technology (The Netherlands) – Chapter 4 and Chapter 6
Bert Clemmens, Ph.D., P.E., D.WRE, WEST Consultants, Inc. (USA) – Chapter 5 and Chapter 7
Sumith Choy, B. Tech, MEngSc., Rubicon Water (Australia) – Chapter 8

Contributing Authors

Gilles Belaud, Montpellier SupAgro (France)
Jean-Luc Deltour, Société du Canal de Provence (France)
Pierre-Olivier Malaterre, Irstea (France)
Tony Oakes, Rubicon Water (Australia)
Bob Gooch, Salt River Project (USA)
Irrigation Training and Research Center Staff (USA)

BLUE RIBBON REVIEW PANEL

Robert Norman, U.S. Bureau of Reclamation (USA)
Gary Merkley, Consultant (USA)
David Rogers, Rogers Engineering Hydraulics, Inc. (USA)
Stuart Styles, Irrigation Training and Research Center (USA)

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PREFACE

Canal automation always has had the potential to save water and improve efficiency of irrigation water supply projects or of irrigation district operations. Recently, there have been a number of technological and engineering advances in the field of canal automation. The Task Committee on Recent Advances in Canal Automation was formed under the Irrigation Delivery and Drainage Systems Committee under the Environmental and Water Resources Institute of the American Society of Civil Engineers to document the new technological progress in canal automation. Members of the task committee gathered information on canal automation research that is taking place around the world. The task committee was truly an international effort with researchers and engineers in several countries (USA, The Netherlands, Australia, France, Spain, Portugal, China, and Mexico) all participating in the development of this Manual of Practice. This publication is designed to provide guidance on how and when to implement canal automation within the context of canal modernization but not covering the full range of canal modernization issues. The manual also provides practical guidance on some of the more routine aspects of canal automation.

DEVELOPMENT OF THE MANUSCRIPT

The task committee kicked off the project with a series of three short video conferences October 13–15, 2009. The video conference was hosted at three sites across the world (USA, Australia, and France). This video conference was unique in that it allowed a large group of canal automation experts to come together to discuss the manual of practice without undue travel. During the video conference, participants discussed the