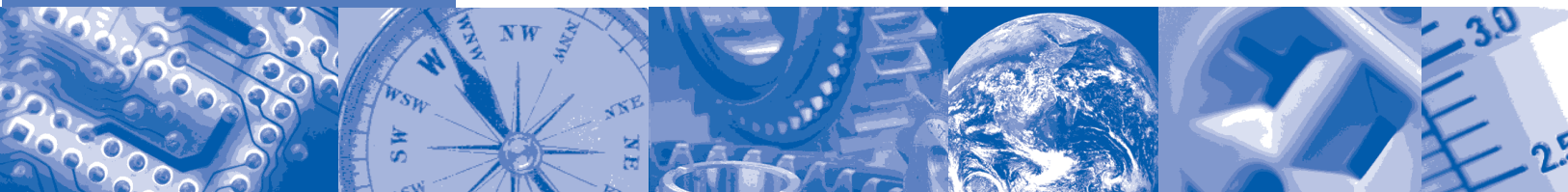


ISA-RP60.1-1990



Control Center Facilities



**ISA—The Instrumentation,
Systems, and
Automation Society**

Approved 5 October 1990



Documents
Document Sharing Hub

ISA–RP60.1–1990, Control Center Facilities

ISBN 1-55617-282-6

Copyright © 1990 by the Instrument Society of America. All rights reserved. Printed in the United States of America. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), without the prior written permission of the publisher.

ISA
67 Alexander Drive
P.O. Box 12277
Research Triangle Park, North Carolina 27709

Preface

This preface is included for informational purposes and is not part of ISA-RP60.1-1990.

This recommended practice has been prepared as part of the service of the ISA toward a goal of uniformity in the field of instrumentation. To be of real value, this document should not be static, but should be subject to periodic review. Toward this end, the Society welcomes all comments and criticisms, and asks that they be addressed to the Secretary, Standards and Practices Board, ISA, 67 Alexander Drive, P.O. Box 12277, Research Triangle Park, NC 27709, Telephone (919) 549-8411, e-mail: standards@isa.org.

The ISA Standards and Practices Department is aware of the growing need for attention to the metric system of units in general, and the International System of Units (SI) in particular, in the preparation of instrumentation standards. The Department is further aware of the benefits to U.S.A. users of ISA standards of incorporating suitable references to the SI (and the metric system) in their business and professional dealings with other countries. Toward this end, this Department will endeavor to introduce SI-acceptable metric units in all new and revised standards to the greatest extent possible. *The Metric Practice Guide*, which has been published by the Institute of Electrical and Electronics Engineers as ANSI/IEEE Std. 268-1982, and future revisions, will be the reference guide for definitions, symbols, abbreviations, and conversion factors.

It is the policy of the ISA to encourage and welcome the participation of all concerned individuals and interests in the development of ISA standards. Participation in the ISA standards-making process by an individual in no way constitutes endorsement by the employers of the individual, of the ISA, or of any of the standards that ISA develops.

The information contained in the preface and footnotes is included for information only and is not a part of the recommended practice.

This recommended practice is one of a series that constitutes the control center standard ISA-S60. The individual sections provide continuity of presentation, convenience of reference, and flexibility of revision. The complete standard consists of the following sections:

SECTION	TITLE	SCOPE
*dRP60.2	Control Center Design Guide and Terminology	Design methods and terminology used in the specification of control center facilities
RP60.3	Human Engineering of Control Centers	Design concepts accommodating man's physiological and psychological capabilities
RP60.4	Documentation for Control Centers	Guide to the documentation associated with control center specifications
*dRP60.5	Control Center Graphic Displays	Guide to the use of available graphic display techniques

RP60.6	Nameplates, Labels, and Tags for Control Centers	Guide to the methods of identification of control center equipment and parts
*dRP60.7	Control Center Construction	Guide to control center profiles, fabrication and finish methods, and enclosure selection
RP60.8	Electrical Guide for Control Centers	Design concepts for control center electrical requirements
RP60.9	Piping Guide for Control Centers	Design concepts for control center piping requirements
*dRP60.10	Control Center Inspection and Testing	Guide to the methods of inspection and testing prior to control center acceptance
*dRP60.11	Crating, Shipping, and Handling for Control Centers	Guide to the available methods for center crating, shipping, and handling

* Draft Recommended Practice — For additional information on the status of this document, contact ISA Headquarters.

The persons listed below served as members of the ISA Control Centers Committee for the major share of its working period.

NAME

COMPANY

R. W. Borut, Chairman	The M. W. Kellogg Company
G. F. Erk, Secretary	Retired
H. S. Hopkins, Managing Director	Utility Products of Arizona
W. W. Aird	Aird Telcom Associates
A. R. Alworth	
C. D. Armstrong	Tennessee Valley Authority
F. Aured	Silent Watchman Corporation
B. W. Ball	The Foxboro Company
S. Boyer	ESSO Plaza West
J. H. Cusak	Moore Products Company
F. L. Dufree	Swanson Monitrol System
J. M. Fertitta*	The Foxboro Company
C. Gording	BIF Sanitrol/General Signal
R. E. Hetzel	Stauffer Chemical Company
T. R. Holland	Johnson Controls, Inc — Panel Unit
A. A. Kayser	Norden
A. L. Kress	3M Company
C. S. Lisser*	

*Chairman or Secretary Emeritus

W. A. Maxwell
 R. E. Munz
 H. R. Solk*
 I. Stubbs
 M. J. Walsh
 S. J. Whitman
 W. G. Williams
 W. T. Williams
 W. J. Wylupek

Lower Colorado River Authority
 Mundix Control Center, Inc.

 The Foxboro Company
 American Chain & Cable (ACC), Bristol Division

 Lockwood Greene
 Moore Products Company

This recommended practice was approved for publication by the ISA Standards and Practices Board in October, 1990.

NAME

COMPANY

D. N. Bishop
 D. E. Rapley
 N. L. Conger
 C. R. Gross
 H. S. Hopkins
 R. B. Jones
 A. P. McCauley, Jr.
 E. M. Nesvig
 R. D. Prescott
 R. H. Reimer
 J. Rennie
 W. C. Weidman
 J. R. Whetstone
 M. A. Widmeyer
 P. Bliss*
 W. Calder III*
 B. A. Christensen*
 L. N. Combs*
 R. L. Galley*
 T. J. Harrison*
 R. T. Jones*
 R. E. Keller*
 O. P. Lovett, Jr.*
 E. C. Magison*
 R. G. Marvin*
 W. B. Miller*
 J. W. Mock*
 G. Platt*
 J. R. Williams*

Chevron USA, Inc.
 Rapley Engineering Services
 Fisher Controls Int'l Inc.
 Eagle Technology
 Utility Products of Arizona
 Dow Chemical Company (USA)
 Chagrin Valley Controls, Inc.
 ERDCO Engineering Corp.
 Moore Products Company
 Allen-Bradley Company
 Factory Mutual Research Corp.
 Gilbert/Commonwealth, Inc.
 Nat'l Inst. of Standards & Technology
 The Supply System
 Consultant
 The Foxboro Company
 Continental Oil Company
 Consultant
 Consultant
 Florida State University
 Philadelphia Electric Company
 Consultant
 Consultant
 Honeywell, Inc.
 Consultant
 Moore Products Company
 Bechtel Western Power Company
 Consultant
 Stearns Catalytic Corporation

*Directors Emeritus



Documents
Document Sharing Hub

Contents

1 Introduction	9
1.1 Scope	9
1.2 Definition	9
2 Site considerations	9
2.1 Hazards	9
2.2 Operability	10
2.3 Clearances	10
3 Construction	10
3.1 Foundations and supports	10
3.2 Floors	12
3.3 Protective structures	13
3.4 Control center bases	15
4 Heating, ventilating, and air conditioning	15
4.1 General	15
4.2 Mild climate locations	15
4.3 Severe climate locations	16
4.4 Locations classified for electrical installations	16
5 Services	17
5.1 Power	17
5.2 Lighting	17
5.3 Emergency lighting	17
5.4 Grounding	17
5.5 Drains	18
6 Personnel safety	18
6.1 Fire	18
6.2 Radiation	18
6.3 Toxic gases and flammable vapors	18
6.4 Noise	18
7 Communications	19
7.1 Wired	19
7.2 Radio	19

