

## THE JOURNAL OF

Volume L Number 4

Published by Association for Preservation Technology International

Association internationale pour la préservation et ses techniques

Asociación Internacional para la Technología de la Preservación

Bulletin Editor and Advertising Diana S. Waite, Editor Elizabeth Marsh, Project Manager Jane Trask, Research and Publication Coordinator

Mount Ida Press 111 Washington Avenue Albany, NY 12210 Tel.: 518-426-5935 Fax: 518-426-4116

Email: info@mountidapress.com

APT

PO Box 7317 Springfield, IL 62791 Tel.: 217-529-9039 Fax: 217-529-9120 www.apti.org

APT 2020 Annual Conference Edmonton, Alberta, Canada, Oct. 3-7

APT 2021 Annual Conference Washington, D.C., Oct. 29-Nov. 1

Articles from the *Bulletin* are copyrighted and may be reproduced only with permission of the editor. Please submit requests in writing to Diana S. Waite, Mount Ida Press, 111 Washington Ave., Albany, NY 12210. or info@mountidapress.com.

Past issues of the *Bulletin* are available on JSTOR, the Scholarly Journal Archive. The *Bulletin* is indexed on APT's website, www.apti.org, and in Art and Architecture Technical Abstracts, Avery Index to Architectural Periodicals, Garden Literature, America: History and Life, Ulrich's, and the University of Maryland-National Trust Library Index to Historic Preservation Periodicals.

Responsibility for the methods and/or materials described herein rests solely with the contributors and should not be considered official statements or endorsements of APT.

© 2020 by Association for Preservation Technology International. ISSN 00449466.

Postmaster: Send address changes to APT, PO Box 7317, Springfield, IL 62791.

Cover: Restored electrical controller with cable drum and traveling sheave in motion. Photograph by Romas Bubelis.

Printing: Fort Orange Press. Printed in U.S.A. All *Bulletin* articles undergo peer review.

Special Issue: Preservation Engineering

Keeping the Lights On: Challenges to the Conservation of Australia's Electrical Heritage MacLaren North





Conservation of Character-Defining Engineered Building Systems Matthew S. Chalifoux 33

A Working Artifact: Restoration of a 1908 Manually Controlled Elevator in Toronto Romas Bubelis





Clearing the Air: Ventilation at the Colt Patent Fire-Arms Factory in Hartford, Connecticut Christopher Tavener

Measured Performance: Assessing Limit States of Structural Hollow-Tile Arches Derek Trelstad Rebecca Buntrock Alex Vandenbergh



Directory of Advertisers 54

Building Technology Heritage Library Mike Jackson 56

Index 58

APT Membership Information 63

**Editor's Note** Diana S. Waite **3** 

Guest Editors' Note

Jenna C. Bresler Justin M. Spivey **4** 

Book Reviews Lesley Gilmore Book Review Editor 51