



APT PETC Webinar Series



Lessons from the Mid-19th Century Wood-Framed Steeples of John McArthur, Jr.

Description:

In the early 1850s, young Philadelphia architect John McArthur Jr., primarily remembered for his design of Philadelphia City Hall, was engaged in several ecclesiastical commissions, resulting in the construction of two remarkably tall wood-framed steeples that towered over their respective cities. He achieved these great heights utilizing an “internal armature” frame which was a departure from typical known steeple framing forms. This comparative analysis of McArthur’s two steeples tries to inhabit the world of this vastly experienced mid-19th century framer and architect and provide a clearer comprehension of his wood-framed steeples in the context of mid-nineteenth century steeple design and construction. This analysis offers a window into mid-19th century steeple structures, their performance as systems, and their longevity.

Speaker: Holly Boyer

Historical Architect, Independence National Historical Park, National Park Service (NPS)

Holly Boyer, AIA, NCARB (she/her/hers) is currently Historical Architect at Independence National Historical Park in Philadelphia, PA. She holds a Bachelor of Architecture from Cornell University and a Master of Science in Design in Historic Preservation from the University of Pennsylvania. She has over thirty years of experience in preservation practice, project management, and contract administration. The range of her project experience includes buildings that have state, national, and international significance. She documented and delineated the First Presbyterian steeple and acted as Project Manager for the restoration under Watson & Henry Associates. The content of this webinar is based on an excerpt from her master’s thesis (2019) entitled *High and Mighty: A Comparative Analysis of the Wood-Framed Steeples of John McArthur, Jr.*, available for download: repository.upenn.edu/hp_theses/686/.

Learning Objectives:

1. Use terminology associated with wood-framed steeple forms and structural components.

August 22

Webinar via Zoom
August 22, 2023
2:00 - 3:00 PM (ET)

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2. Identify the basic features of American wood-framed steeples and compare McArthur's internal armature framing system as a departure from that context.
3. Explore several design and construction features that affect the performance and longevity of wood-framed steeples as systems.
4. Identify cycles in which differential structural movement, moisture ingress, and wood deterioration can manifest as a reinforcing, or amplifying, feedback loop.
5. Compare the outcomes of structural damage caused by storms and other catastrophic weather events on wood-framed steeples.

Recording terms:

The webinar recording will be available for 30 days only for attendees who register for the event. Attendees must abide by copyright permissions. The recording must not be shared and by attending the webinar you agree to these terms.

Continuing Education:

1.0 AIA HSW/LU, 1.0 PDH/CEU

A form will be circulated to all attendees who attend the full webinar to collect information on architect or engineering license information and certificate of attendance. The form shall be completed in a maximum of 10 days from the webinar. Per completed forms, APT will register with AIA or RCEP, or issue a certificate for self reporting.

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