



One Button, Full Reach: BMU Replacement with One-Touch Launch at Park Hyatt Chicago

The prestigious Park Hyatt Chicago, a prominent mixed-use condominium and hotel designed by Lucien Lagrange Architects with structural engineering by Chris P. Stefanos Associates, required an advanced facade access solution. The original 24-year-old Building Maintenance Unit (BMU) was due for replacement, and the challenge was to integrate a modern system into the existing track while meeting safety standards and accommodating the building's distinctive design. Key architectural complexities included a two-story rooftop penthouse interrupting the track and a constrained rooftop garage.

Client Vision

Working directly with the building owner, Manntech was selected for its proven reliability and extensive replacement experience. The goal was to deliver a technologically advanced, dependable BMU capable of navigating the tower's intricate facade.

Key Manntech Design Solutions

The Park Hyatt Chicago rooftop presented formidable challenges for BMU integration: a narrow passage under 8 feet wide, just 4 inches of clearance from the facade, and an 8-foot garage height limit severely restricted design flexibility. Compounding these constraints was a two-story penthouse that interrupted the existing track system, requiring a solution capable of navigating around architectural obstructions while maintaining full facade coverage.

Manntech's engineering team in Germany rose to the challenge, designing a custom Type 4.1 BMU that runs on the original track and incorporates:

- A luffing mast to clear the 7-foot parapet
- A two-stage telescopic jib to reach over terraces and decorative elements
- A 9.5-meter outreach (48 feet including cradle) to ensure uninterrupted access across the entire facade

Despite the rooftop's spatial limitations, the BMU's mechatronic system automates both launch and return sequences, transforming a previously manual 25–30 step deployment into a streamlined one-touch operation. This precision-engineered solution not only overcame significant architectural hurdles but also set a new standard for safety, efficiency, and facade access innovation.

Innovative Installation & Proven Expertise

With rooftop constraints ruling out traditional crane methods, the Manntech BMU was airlifted by helicopter and assembled with precision. Thanks to Facade Access Solutions' installation expertise and Manntech's engineering reliability, the team successfully delivered a system that met all technical, operational, and safety requirements.

Facts and Figures

Completion:
2000

Building height:
257 m

Number of BMUs:
1

BMU Type:
Manntech Type 4.1.
Mount to existing track system

Outreach:
9.5

Building Type:
Mixed Use Condominium/Hotel

For more information, contact us

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