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# HLI's presidential project

On behalf of Franklin Exhibit, HLI Rail & Rigging handled the delivery of a Boeing 747 aircraft that has been converted into an Air Force One replica to the National Harbor Exhibition Centre in Maryland.

Spectators looked on in amazement as an Air Force One replica was seen floating along the Chesapeake Bay under the watchful eye of USA-based HLI Rail & Rigging, at the end of September. Measuring 69.8 m long and 59.6 m wide, the converted Boeing 747 was transported from Quonset State airport in Rhode Island to National Harbor in Maryland.

The Children's Democracy Project purchased the B747 in order to provide an educational experience for children to help them understand the USA's democratic process, and how presidential travel has been undertaken throughout the country's history.

## Conversion into replica

After ten months of planning, and once the B747 had been converted into a replica of the official aircraft of the President of the USA, HLI began loading the aircraft onto the Stevens Towing 2501 barge. Measuring 76.2 m long, the barge was able to accommodate the 162.4-tonne aircraft for its journey along Chesapeake Bay and the Potomac River.



The plane's wings extended 70 ft (21.3 m) beyond the width of the barge on both sides.



Loading ramps had to be 14 m wide to accommodate the aircraft's rear landing gear.

Prior to the transport of the aircraft, HLI assessed all bridges along the proposed route to ensure that there was sufficient horizontal and vertical clearance for the barge loaded with the 19.2 m high B747.

HLI positioned roll-on ramps on the barge using a 250-tonne capacity crane. This allowed for the aircraft to be driven on and secured. Along the route, the plane's wings extended 70 ft (21.3 m) beyond the width of

the barge on both the port and starboard sides.

Speaking with HLPFI, HLI's Ross McLaren explained: "Great care had to be taken to illuminate the wings of the plane at night and when manoeuvring around other barges or structures. Lighting had to be mounted on the wing tips, and multiple support tugs were used to maintain visibility while the aircraft was being transported in Chesapeake Bay and on the Potomac River."

Both the push and pull tugs, Sea Crescent and Island Trader, were supplied by Stevens Towing.

## Discharge operation

Upon arrival at the unloading location, an assist crane positioned barge ramps on land to support the discharge operation. "The ramps needed to be 14 m wide to accommodate the rear landing gear of the aircraft," said McLaren.

A prime mover truck was then reversed onto the barge and attached to the front landing gear; hold back-winchs were also attached to the rear undercarriages to control the B747 during discharge operations.

Once attached, the prime mover then drove off the barge with the aircraft in tow. Making a sweeping right-hand turn, the convoy moved towards the required location at the National Harbor Exhibition Center.

**HLPFI**