

CASE STUDY

VINTAGE PLANE TRANSFORMS INTO HOTEL LOUNGE WITH CONCEALED HIGH-END SOUND SYSTEM

PROJECT HIGHLIGHTS

- The new TWA Hotel highlights '60s style and renowned **architecture**, and honors aviation history with a classic 1958 Lockheed Constellation plane as a finishing touch.
- The **Connie Lounge** gives guests a seat in the pilot's seat and the feel of glitzy '60s-style air travel, complete with live air traffic control in the cockpit.
- For an in-flight feel with high-performance sound, **Mode:Green designed a hidden high performance audio system** with 24 in-ceiling speakers and six subwoofers built under the seats.

The once state-of-the-art 1958 Lockheed Constellation plane was fitted with a high-performance sound system to transport guests into the golden era of air travel.

In 1962, New York's John F. Kennedy International Airport was expanded with the TWA Flight Center terminal, designed by world renowned architect Eero Saarinen. The landmarked masterpiece was an architectural marvel, suited to air travel's glamorous roots among top-notch service, futuristic styling, and luxurious amenities.

As air travel popularized over the years, these features became reserved for first-class only, and eventually planes began to outgrow the TWA Flight Center Terminal. It closed in 2001, and 18 years later is relaunched as a new retro hotel experience to welcome New York's travelers.



TAKING “RETROFIT” TO NEW HEIGHTS

The historic air terminal couldn't be elevated to the standards of its former glory without a plane at its gate: A vintage 1958 Lockheed Constellation L-1649A plane was purchased and transported cross-country so it could be repainted and restored to become TWA Hotel's new cocktail lounge, the Connie. To transform into the Connie Lounge, the plane needed a high-performance technology system.

Technology integration firm Mode:Green was brought on board to design and install an audio system that would play period music throughout the lounge and in common areas such as The Sunken Lounge, hotel gym, the ballroom, and more – all without a speaker in sight. Retrofit projects in existing hotels, restaurants, and commercial buildings are complex, but outfitting a 750 square-foot plane interior and landmarked building with a state-of-the-art audio system while preserving its original décor would be a greater challenge.

Experienced in specialty, hospitality, and custom audio projects, Mode:Green was faced with tightly packing and completely concealing the system within the former terminal and the vintage plane – with no ability for in-wall wiring of the historic and protected building.



A CAREFUL FLIGHT PLAN WITH CRAFTY CABLING

The vintage Constellation plane had been restored to original condition with authentic parts, new flooring and windows, along with a fresh coat of paint and the original cockpit controls. Maintaining the Connie's original atmosphere and a retro aesthetic was the goal for the lounge, and the hotel needed a sound system that would

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propel it into the next century. To maneuver in the carry-on-sized space and requirements for preserving the plane and neighboring building's landmarked architecture, Mode:Green established a precise plan.

Audio feeds for hotel common areas and the plane's interior would be configured through a Dante networked audio system; Mode:Green set up five racks and a Bluetooth system in the bar, that could be completely hidden from guests' view.

To fit a high-performance audio system in the confined space of the Constellation plane, Mode:Green had to maximize every inch of space. After evaluating options of brands and speaker models for the audio system, their team selected low-profile, in-ceiling speakers, placing 24 throughout for high-performance sound with six subwoofers concealed under rows of seats. They worked

with James Loudspeaker to select compact speakers that could provide the sound quality needed for the lounge while maintaining the historical value of the plane's restored interior, and selected both custom speakers, as well as 32AL, DF10, and 42SA-4 models.

"This is not our first request to design custom loudspeakers for the interior of an aircraft, and we embraced the challenge to create something truly special for the lounge," said Mark Schafle, CEO, James Loudspeaker. "Our engineers worked with the Mode:Green team to provide the Small Aperture® in-ceiling models with a low profile that would blend seamlessly into the plane's interior without giving guests any visual clue that they're hearing a high-performance audio system. Only James Loudspeaker can create custom solutions quickly and precisely, enabling Mode:Green to deliver the most stunning sound experience from any seat in the Connie Lounge."

ELEVATING A PLANE ROOTED IN HISTORY

The TWA Hotel is a time machine to the 1960s complete with vintage cars, a display of flight attendant uniforms through the years, period music, and retro décor complementing Saarinen's architecture. Guests are greeted by vintage-style music throughout the hotel and the Connie Lounge is ready for takeoff daily from 11 a.m. to 12 a.m. for cocktails as well as private events. When boarding the restored Lockheed Constellation plane, guests filter down aisles to choose their own airline seats and enjoy vintage-inspired cocktails, an "in-flight" snack menu, and views of takeoffs from JFK across the tarmac.

In addition to pumping the sounds of the '60s throughout the plane, the lounge continues the hotel's living-museum experience atmosphere, down to the finest details and without speakers noticeable in the décor. When they

venture into the cockpit, guests can get a pilot-like experience from JFK airport's live air traffic control feed playing among the Lockheed's original controls.

Preserving the original architecture and plane interior creates the immersive retro experience of the TWA Hotel and the Connie Lounge. But its technology isn't rooted in the 1960s; the state-of-the-art sound system fills the plane with high-performance audio. Speakers and wiring are invisible to guests, but maintained the integrity of the architecture. Fully equipped with today's technology as the Connie Lounge, the Lockheed plane is suited to propel into its second life.

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