



## **Case Study**

Airplane Hangar - JFK International Airport



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### **Project Details**

**Location** JFK International Airport Hangar 19

**Challenge** Highly reverberant space, resulting in loss of intelligibility when aircraft are present.

**Solution** 10 LineWave16 speakers

### Overview

The JFK Hangar project came about per the agencies need for intelligible voice communication within this oversized facility, which houses up to (4) 737's. Original project specified (75) 15W cluster speakers.

This solution provided adequate intelligibility in an empty hangar. When aircraft were present in the facility, the reverberation significantly reduced the intelligibility.

The HyperSpike solution called for (10) LineWave 16 speakers along the walls at listener height. This reconfigured design overcame the reverberation from aircraft in the hangar, and delivered highly intelligible voice throughout the entire facility.



### Solution Overview

**LineWave16** Line Array Speaker for Acoustically Challenging and Reverberant Environments



# Ultra **HyperSpike**260-248-3666 ultra-hyperspike.com **ultra.group**

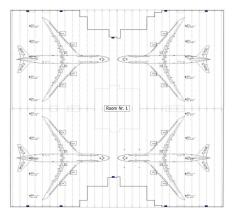
### **Key features**

- Industry leading voice intelligibility in reverberant spaces
- UL1480 Type F and CAN/ ULC-S541:2016, Speakers for Fire Alarm and Signaling Systems.
- 123dB Max SPL @ 1M
- 25/70/100V or 4/8/16  $\Omega$  configurable
- Rated for indoor or Outdoor Applications

### Description

Designed with the latest technology in line array speaker systems, the HyperSpike® LineWave is optimized to produce clear and authoritative voice commands and powerful tones never before possible within reverberant environments.

The beam forming capability of the LineWave speaker allows even coverage across the listening plane while focusing the acoustic pattern away from surfaces that cause unwanted reflections. This technology is essential for achieving optimum levels of speech intelligibility within reverberant spaces. The result is clear and intelligible direct sound that ensures critical messages are heard and understood.



**Room Dim (ft)** 185x185

Room Height 60ft

Ear Height 5.57 ft

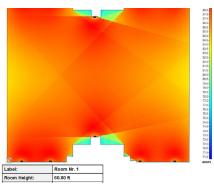
Network Voltage 70V

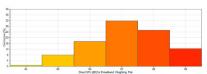
**Power Consumption** 101W per speaker

#### **Speakers**

90243A-804 LineWave16 (10)

### **Acoustic Simulation**





Average 97dB ±1.9