# U.S. Naval Academy Chapel



# **SUMMARY**

• LOCATION Annapolis, MD

### FACILITY SCOPE 2.500-seat historic venue

### OBJECTIVES

Staff at the Chapel sought to install a sound solution that could overcome the speech intelligibility and coverage issues plaguing the venue.

### BIAMP SOLUTIONS Community™

#### OUTCOME

With the implementation of Biamp's Community loudspeakers, the Chapel's longstanding sound problems were solved, allowing the historic space to enjoy full audio reliability.

#### EQUIPMENT

• Community ENT-FR Column Loudspeakers

The Naval Academy Chapel is a historic focal point for the U.S. Naval Academy and the city of Annapolis, Maryland. Dedicated in 1908 and remodeled in 1940, the Chapel underwent an extensive restoration in 2009. Its classic cruciform design centers on a 121-foot-high dome, seats 2500 worshippers, and includes a 268-rank pipe organ. In addition to religious services for several faiths, the Chapel also hosts weddings, funerals, and other services.

The large size, hard surfaces, and high dome of the Chapel have always presented substantial acoustical issues. Because of its acoustics, the building suffered from poor speech intelligibility and uneven coverage. In an attempt to deal with these issues, staff at the Chapel tried several different sound systems, including a distributed system and a pew-back system. However, none solved the underlying acoustical issues.

# SOLUTION

Working with Design & Integration of Baltimore, Maryland, the Chapel staff chose to implement a new sound system based on Community ENTASYS column line source loudspeakers. ENTASYS column arrays were installed on each side of the Chapel to cover the audience area, mezzanine, and choir loft.

ENTASYS baffles can be configured as "straight" (6° vertical coverage), "curved" (12° vertical coverage), or in J-format at the factory or in the field. This versatility helped achieve good front coverage while providing ample sound to the rear of the Chapel. The ENTASYS arrays were aimed with a laser to avoid slap echoes from the back wall, with a delay added to the rear stacks to match the sound arrivals from the front. Carefully adjusted levels of the individual loudspeakers resulted in even coverage throughout. The rear ENTASYS can be turned "off" when no one is seated in those areas. Throughout the Chapel, ENTASYS' narrow vertical coverage keeps sound away from the ceiling and the dome and its wide horizontal dispersion provides even coverage in all seating areas.



# CONCLUSION

System aesthetics were very important to the Chapel. For this reason, Biamp custom-painted the ENTASYS columns to an RAL color number provided by the contractor, resulting in a final product that seamlessly complemented the existing structure. The Chapel staff was very pleased with the system's intelligibility, coverage, and appearance, granting the space with a sound solution designed to stand the test of time.

# **ABOUT BIAMP**

Biamp® is a leading provider of innovative, networked media systems that power the world's most sophisticated audiovisual installations.

Recognized worldwide for delivering high-quality products and backing each one with a commitment to exceptional customer service. Biamp's mission is connecting people through extraordinary audiovisual experiences.

Founded in 1976, Biamp is headquartered in Beaverton, Oregon, with offices and manufacturing facilities located around the world.

## **CONTACT US**



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