

Polar Focus Uses Standard Parts for Custom Design Uneven Radial Beams Are No Problem for Highly Adjustable Rigging System

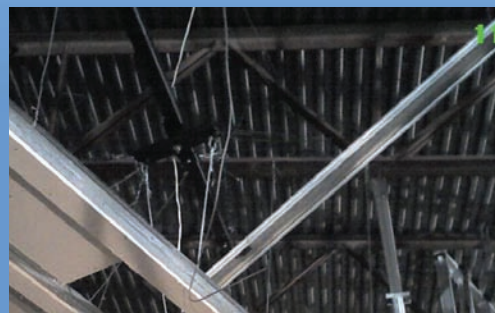
Hadley Massachusetts based Polar Focus Audio Rigging recently provided a custom rigging design for installation at the St. John Chrysostom Church in Wallingford, Pennsylvania. The scope of Polar Focus' work was the complete transition from the attachment to the roof structure down to the hardware that attaches to the loudspeakers, using standard Polar Focus parts put together in a custom design. Broomall, Pennsylvania's Audio Video Systems Group, a division of Hi Fi House Group, was the installing contractor.

The unusual, almost yurt shaped church was taken apart back to its steel skeleton for a complete renovation, including the new sound system. AVSG asked Polar Focus to help them precisely suspend and aim six Community SLS 920 speakers, weighing in at seventy pounds each, from the sloped, uneven steel roof trusses. The SLS 920's had to be individually hung in a half circle around the front of the altar area within very tight tolerances.



Polar Focus was able meet the time deadline to design, assemble and ship the order before the sloped roof trusses would be enclosed by a semi-permanent tile ceiling. In the finished installation all you can see is a curved line of identical white speakers, each one attached at three points to a Polar Focus Tilt Cable Kit, providing individual tilt control. The TCK then attaches to two lengths of wire rope that disappear through small holes in the ceiling. Above the ceiling, the lengths of wire rope terminate at Polar Focus Zbeams attached to the roof trusses.

Achieving the evenly spaced semi-circle meant some speakers had to hang from locations where there were no roof trusses. Installing a spreader bar across the span between two sloped roof trusses, and then suspending the speaker from there, solved that problem.



AVSG said the flexibility of the Polar Focus gear made a big difference in completing the rigging without delay, as the blueprints for the building dated back to the 1950's, and there were surprises during the retrofit that had to be accommodated. Obstructions from other construction activities up among the roof trusses made things more complicated as well. In the photograph, the textured black powder coating on the Polar Focus Zbeams and custom spreader (powdercoating in black or white is standard on Polar Focus rigging beams) distinguishes them from the visual cacophony in the roof structure area.

Making the St. John Chrysostom job go more easily for the crew at AVSG were Polar Focus data collection worksheets for the complicated roof structure. These worksheets facilitate clear communication with customers and speed up the design process. AVSG said that Mike and Steve at Polar Focus were totally available for answering all questions. Once the data is collected, the design can be assembled at Polar Focus from off the shelf parts, kitted up and sent to the customer. Polar Focus stocks a family of audio rigging beams and hardware which are put together in custom designs to accommodate almost any situation involving suspension of professional loudspeakers.

The Zbeams and spreaders in St. John's hang level by having a long rigging chain sling directly attached at one end, and a shorter chain sling, attached to a turnbuckle, attached at the other end. By using the turnbuckle the level can be incrementally adjusted until it's right.

From their precise placements in the air, and complemented with floor-mounted SBS subwoofers, the Community SLS 920's will provide deep sound projection all around the beautifully refurbished St. John Chrysostom Church.

<http://avsg.hifihousegroup.com/>
<http://www.saintjohnchrysostom.net/>
<http://www.polarfocus.com>