Aerometrex Receives Special Recognition for 3D Modelling Work

Aerometrex received a global commendation at the internationally renowned Bentley 'Be Inspired' Awards, a showcase of the world's most outstanding advancements in infrastructure design construction and operations. The project in question involved data capture and 3D modelling of an area of Philadelphia, USA, in preparation for a visit by Pope Francis.

On Saturday 26 September 2015, at Independence Mall in Philadelphia, Pope Francis gave an unprecedented address to 50,000 people. The speech was delivered from the podium of Abraham Lincoln's Gettysburg Address. The project's key objective was to manage all aspects of the event including crowd accommodation and seating, road closures, public transport and most importantly security.

The Philadelphia Police supported the Aerometrex work by providing a helicopter as a platform for image capture, and the models were used by security organisations to ensure the safety of Pope Francis throughout the event.

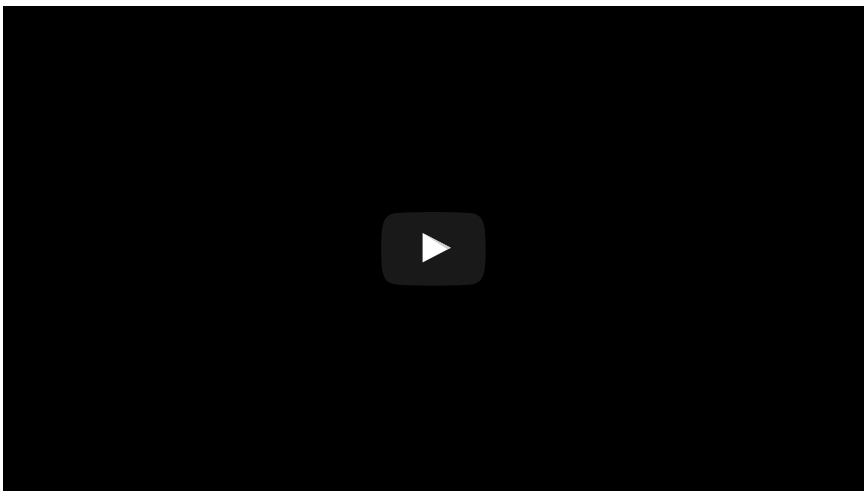
3D mesh

The turnaround time deadline was tight and seamless teamwork with US production teams was vital, so the opportunity to adopt Aerometrex's GPS accurate, high resolution 3D mesh, modelling became critical.

Aerometrex executed a detailed square mile capture, right around the Papal speech site, using aerial and ground photography, David Byrne, technical director, said. From there, they produced the 3D models and added the photographic fidelity and detail.

The pure digital data captured by Byrne's team, created a fully textured and hyper-realistic, 3D image of the Philadelphia landmark, which allowed the production to visualise, identify and monitor every vantage point within a square mile of the Papal stage.

New level

Scott Mirkin, co-founder of ESM Productions and co-production partner of the Papal event to the US, said the inclusion of Aerometrex took the preparation and consequent presentation of the visit to a whole new level.

Previous large scale events were executed using 2D CAD graphics and constant site surveys, Murkin summarised. The ability to leverage 3D modelling was an absolute game-changer for Aerometrex, he added.