



38

# The Station of the Cross goes digital in Buffalo

Holy Family Communications upgrades its network operations center

Above  
Studio A

**H**oly Family Communications Inc., a 501 (c) (3) non-profit organization, is the umbrella company for The Station of the Cross Catholic Media Network, headquartered in Buffalo, N.Y. and comprising 16 terrestrial stations (both FM and AM) and the iCatholicRadio app, which has a strong worldwide presence and continues to grow rapidly. Its programs can also be heard at [thestationofthecross.com](http://thestationofthecross.com).

Founders Jim and Joanne Wright and the board of directors approved a new initiative to revamp and migrate a 100% analog infrastructure to a completely digital AoIP network operations center.

The transformation came to fruition under the leadership of Bill Havas and Michael Buttino, who oversee the technical operations and engineering departments, and through the guidance of Rob Goldberg, founder and CEO of RadioDNA, which provided onsite services, installations and

training. RadioDNA continues to provide critical ongoing remote support.

"This project involved upgrading two live production studios and facilities in our computer rack room," said Jim Wright.

"Previously, these studios had analog consoles with thousands of feet of shielded analog cable. After considering many vendors, we determined that Wheatstone and the WheatNet platform best suited our needs. The upgrade included a migration to the WideOrbit Automation for Radio platform."

Phase 1 included the installation of the WheatNet Blade infrastructure to replace analog routed devices. At that time a Glass LXE virtual studio was installed for remote operation of live radio shows from the state of Maine.

Phase 2 involved the decommissioning of eight older automation servers servicing the network and replacing them with two commercial-grade WideOrbit

# Spectacular Radio Studios

servers, running four instances each with two redundant failover servers.

"This WideOrbit setup uses a leader-follower configuration. The system has complete remote access capabilities via our virtual private network. Show hosts and guests connect from all over the world via the internet with Comrex codecs. During this phase, the server for our iCatholicMusic internet music station that features all Catholic artists was also upgraded to WideOrbit."

Phase 3 was completed with the purchase of Wheatstone all-digital mixing consoles for two local studios with remote board-op access from Florida. This allows The Station of the Cross to fundraise with fully remote on-air hosts and crew. Most shows are produced remotely and are streaming live audio and video to Facebook, thestationofthecross.com, and the iCatholic Radio mobile app. Additionally, the phone system was upgraded to the Telos VX Prime+ VoIP system, with remote call screening for live call-in shows.

The main studios use EV RE20 mics, routed to a WheatNet M4 Blade for audio processing. "Having the processor in the audio chain has made a significant improvement in the voices of our talent," Wright said. "Whether live or recorded, this was one more addition to our digital AoIP network that was worth every penny."

Technical Operations Manager Bill Havas said he and Wright are fans of Wheatstone's IP Meters software.

"There is a 42-inch flatscreen monitor across from the studios. We have every audio source and destination on meters for the production department, engineering, remote broadcasts and network feeds, on a 16-by-16 grid, with room to spare. At a glance we can determine if we have lost a feed or confidence monitor. The meter changes color upon an audio loss," he said.

"We have a bank of 36 alarms that email on-call staff members if something goes down. We also have the capability to use up to 16 POTS dial-out numbers to place alarm calls when problems occurs. The goal is to be notified



“Previously, these studios had analog consoles with thousands of feet of shielded analog cable.”

**Above**  
Bill Havas at work in the rack room, which includes hardware for the WheatNet and WideOrbit systems.

**Below**  
Studio B

when something crashes."

The operation includes the aforementioned "virtual studio," using a Wheatstone Glass LXE user interface. A producer, who works remotely, dials into and runs the show; his hosts are also remote, connected by codec to the site in Buffalo, so the entire production is done remotely.

"We also just installed another Wheatstone virtual Glass program that allows us to remotely control our Studio B console from other locations. We have three off-site studio board operators who can utilize both of our Wheatstone Glass virtual consoles, which adds versatility to our network," Havas said.

Behind the scenes is a technical room with 12 racks, home to WideOrbit servers, WheatNet hardware and 18 Comrex BRIC-Link II IP codecs for remote audio and to transport audio to the transmitter sites.

"We also utilize seven Barix Instreamers to route audio to our iCatholic Radio application. We have several markets in which we provide local content to via our web streams."

The Station of the Cross receives program content from several other Catholic radio outlets, via six Barix Extreamers, and has a C band satellite feed from EWTN.

"This two-year migration to a fully digital platform has propelled The Station of the Cross to current digital industry standards and sets it apart as a pioneer in Catholic media programming," Wright said. 

