



Customer
Thunder City Pro

Location
USA

Thunder City Pro Case Study

Overview

Established in 2016 by Julian Stancil, Thunder City Pro offers turn-key production services to both broadcast and entertainment customers who require design, procurement, and integration for various applications. Its customers include the University of South Florida (USF) and two major league Baseball teams, the Tampa Bay Rays and the Baltimore Orioles. In addition, Thunder City Pro also provides creative services for any of their integrations, provides crews to operate facilities, and provides ongoing service and support.



Solution at a Glance

► Thunder City Pro offers turn-key production services to both broadcast and entertainment customers who require design, procurement, and integration for various applications.

► In 2023, Thunder City Pro was commissioned to build a Mobile Production Unit for Florida Atlantic University (FAU) so that they could capture live content from student games (including basketball, baseball and soccer) for broadcast on the ESPN+ OTT subscription video streaming service.

► Thunder City Pro believes it is entirely possible to have a powerful, state-of-the-art MPU in a small to medium-format vehicle. To this end it recently launched its BOLT Series Mobile Production Units, which are available in 16-, 24- and 32-foot models.

► Thunder City Pro chose the DreamCatcher™ DC-ONE-LX, NEXX Processing and Routing Platform, and 5700MSC-IP Grandmaster Clock these Evertz technologies making the ideal solution for a project where space was at a premium.



The Challenge



In 2023, Thunder City Pro was commissioned to build a Mobile Production Unit for Florida Atlantic University (FAU) so that they could capture live content from student games (including basketball, baseball and soccer) for broadcast on the ESPN+ OTT subscription video streaming service. By having a Mobile Production Unit (MPU), the University could also capture away games - something that wouldn't be possible with just a control room on campus.

The MPU needed to be of a manageable size so that it could be easily moved from venue to venue. In addition, the University wanted the MPU to be a teaching resource

for students on its Multimedia and Production programmes.

"We worked closely with FAU's contracted production company, Digital Wave Productions, to ensure that the MPU met FAU requirements and ESPN+'s technical specifications," Stancil says. "FAU wanted five cameras, seating and workstations for up to 10 people and high-quality, industry-standard equipment so that students could train on technology they will find in the real world. We also had to make sure that the unit was 3G 1080p standard, and 4K/HDR-ready for the future."



The Solution

While 53-foot trailers are impressive, Thunder City Pro believes it is entirely possible to have a powerful, state-of-the-art MPU in a small to medium-format vehicle. To this end it recently launched its BOLT Series Mobile Production Units, which are available in 16-, 24- and 32-foot models. Customers can choose from a pre-designed floor plan, a pre-integrated unit, or can have a unit custom designed specifically for them.

“Whether customers are broadcasting sporting events, capturing live concerts or streaming corporate conferences, our BOLT Series units are the ultimate solution for professional-grade productions on the go,” Stancil says.

FAU’s Mobile Production Unit is housed in a 32-foot BOLT Series trailer and equipped with state-of-the-art production technology from industry-leading companies including Evertz Microsystems.

The Evertz components comprise a DreamCatcher™ DC-ONE replay system with two DC-RCPI0 controllers, a NEXX 64 x 64 embedding and de-embedding router and an 5700MSC-IP Grandmaster clock and video synch generator.

“The DreamCatcher DC-ONE is industry-standard for live shows at this level and I was adamant that we would be including it in FAU’s MPU,” Stancil says. “I am very

accustomed to working with DreamCatcher and the Evertz MAGNUM orchestration platform – to the point where I refuse to use anything else.”

Evertz’ DreamCatcher DC-ONE is an 8-channel replay system with 7.68 TB of continuous loop recording that supports 720p, 1080i, and 1080p video formats. Features include slow motion replay, live steaming between networked systems, clip creation, clip naming, metadata tagging, playlist creation and editing, audio editing, internal audio routing, content import and export, content transcoding and searching, and one touch zooming.

“Having a graphical user interface is so useful,” Stancil says. “It is very easy to see thumbnails and create clips, and because you can literally see what you are editing it is also a very simple system to teach. In addition, you don’t need an X File or any other piece of equipment to tackle file transfers, and because everything is on one server we can easily have two operators working on the system at the same time.”

FAU’s MPU has Network Attached Storage on board and because this can be mounted on the DC-ONE as a drive, operators can import and export clips and graphics very quickly.



The Solution



“Being able to access pre-pro elements such as clips and graphics via the NAS without having to mark in and out or clip everything saves so much time,” Stancil says. “It is a very precise, self-sustaining system, and its ability to access the NAS and all other devices that are connected to was super important to us, therefore choosing a DreamCatcher DC-ONE was a no brainer.”

For the MPU’s router, Stancil wanted a system that could embed and de-embed on every input and handle MAD1, both in and out. He also wanted a router that could generate multiviewers and support processing functions that included frame synching and format conversion.

Evertz recommended its NEXX router and when Stancil learned it also operates with MAGNUM Orchestration software, he was convinced.

“I got really excited, especially when I learned that we could have four multiviewers per card, and each card was 32, which meant the density was more than twice that of other routers we were considering,” he says. “But what I really like, aside from being able to use MAGNUM, is that the multiviewers are truly a virtual resource. You do not have to lose critical I/O resources by reinserting multiviewers like other routers on the market. You can route

any multiviewer in the router to any output you want.”

Stancil adds that the power and versatility of NEXX has allowed Thunder City Pro to install a much smaller form-factor router onboard FAU’s MPU, without compromising functionality.

“When you are dealing with a confined space in an MPU of this size, having a router with a smaller footprint is really important,” he says. “Also, the University is using this MPU as a teaching tool, so it is really advantageous for students to learn about MAGNUM and see how it interfaces with VUE. Having access to the type of router they will use in the real world is very important and this was a major reason why we choose NEXX.”

The decision to install an Evertz 5700MSC-IP Grandmaster clock and video synch generator was also based on this premise.

“The 5700MSC-IP has the GPS component that we needed to synchronise our SMPTE 2110 audio console,” he explains. “We wanted to include the Calrec Type R and 5700MSC-IP to have a SMPTE-2110 component, which will be very useful in educating students on the difference between traditional baseband and 2110 systems.”



The Conclusion



Thunder City Pro chose the DreamCatcher™ DC-ONE-LX because it provided a reliable and robust content management platform that students at FAU could easily learn to operate, thanks to its intuitive touch interface and ergonomic controller design.

The NEXX router platform was chosen for its power, versatility and small footprint, which made it the ideal solution for a project where space was at a premium.

“FAU are delighted with their new MPU, which is doing everything they wanted it to do – and more. I am equally delighted with the help and support I received from Evertz during this project, and I attribute a lot of our success to this, and to the exceptional technology the company provides. If I have anything to say about it, I’ll be putting Evertz equipment in every truck I build from now on!”

