

**FAIRFIELD TOWNSHIP  
RESOLUTION NO. 21-65**

**RESOLUTION TO APPROVE PURCHASE OF EQUIPMENT AND SERVICES FOR THE  
IMPROVEMENT OF THE AUDIO VISUAL AND STREAMING SYSTEMS IN THE FAIRFIELD  
TOWNSHIP FIRE DEPARTMENT TRAINING ROOM, AT A TOTAL COST OF \$29,071.14.**

**WHEREAS:** The Fire Chief believes the purchase of this service will better serve the training of the Fire Employees; and

**WHEREAS:** The equipment will be paid for from Fire Fund No. 2111;

**NOW, THEREFORE, BE IT RESOLVED,** by the Board of Trustees of Fairfield Township, Butler County, Ohio, as follows:

**SECTION 1:** The Board hereby approves the purchase of equipment and services for the improvement of the audio visual and streaming systems in the Fairfield Township Fire Department training room, at a cost of \$29,071.14 as set forth on the document attached hereto as Exhibit "A".

**SECTION 2:** The Board hereby dispenses with the requirement that this resolution be read on two separate days, pursuant to RC 504.10, and authorizes the adoption of this resolution upon its first reading.

**SECTION 3** This resolution is the subject of the general authority granted to the Board of Trustees through the Ohio Revised Code and not the specific authority granted to the Board of Trustees through the status as a Limited Home Rule Township.

**SECTION 4:** That it is hereby found and determined that all formal actions of this Board concerning and relating to the passage of this Resolution were taken in meetings open to the public, in compliance with all legal requirements including §121.22 of the Ohio Revised Code.

**SECTION 5:** This resolution shall take effect at the earliest period allowed by law.

Adopted: April 28, 2021

**Board of Trustees**

Susan Berding:

Susan Berding

Shannon Hartkemeyer:

Shannon Hartkemeyer

Joe McAbee:

Joe McAbee

**Vote of Trustees**

Yes

Yes

Yes

**AUTHENTICATION**

This is to certify that this is a resolution which was duly passed and filed with the Fairfield Township Fiscal Officer this 28th day of April, 2021.

**ATTEST:**

Shelly Schultz

Shelly Schultz, Fairfield Township Fiscal Officer

**APPROVED AS TO FORM:**

L.E. Barbieri

Lawrence E. Barbieri, Township Law Director



**Recommendation #022102-R:  
Equipment and Services for the improvement of the  
Audio Visual and Streaming Systems in the  
Fairfield Township Fire Dept. Training Room**

*prepared for Chief Thomas  
by Tom Kaper, TECServices  
March 26, 2021*

**About TECServices.**

TECServices - Total Event and Communication Services - came about as the result of years of experience in the event production, entertainment and communications industries. We've been fortunate to be on every side of everything we do as performers and presenters, planners and technicians, as well as designers and installers. Below are some of the turnkey solutions we can provide for you to get your message to the right people in a clear and professional manner:

- Full service event planning, management, staging and production,
- Portable Webcasting and Videoconferencing equipment and services,
- Audiovisual equipment sales, rental and installation
- Local representation for quality production companies all over the United States,
- Live entertainment for private and corporate events,
- Music arranging, composition and recording services,
- Video documenting services including script writing, editing and compilation,
- Digital Signage and Interactive Kiosks,
- Spectacular animated architectural projection.

We can provide one-source solutions at a competitive price for your event, communications and entertainment needs through our extensive network of partnering professionals.

Thank you for the opportunity to quote on your communication needs!

Enthusiastically,

Tom Kaper  
President, TECServices, LLC

## **CONTACT INFORMATION:**

Chief Timothy Thomas  
Fairfield Township Fire Department  
6048 Morris Road  
Fairfield Township OH 45011  
513.785.2240  
[tthomas@fairfieldtwp.org](mailto:tthomas@fairfieldtwp.org)

Tom Kaper  
TECServices, LLC  
1233 Castle Drive, J7  
Mason OH 45040  
513.339.1390  
[tom@4tecservices.com](mailto:tom@4tecservices.com)

## **SCOPE OF WORK.**

The following information comprises the addition of camera equipment and microphones to the existing system in the training room. The camera system will include one camera to follow the presenter via an infrared tracking camera and medallion set, which will direct the 4k video camera in a parallel fashion. The camera will be connected to your computer via an AV Bridge and USB cable for video conferencing and collaboration. One lavalier microphone and belt pack is provided for the presenter.

**REVISIONS:** A second camera, upgraded AV Bridge (to incorporate microphones and additional camera) and camera controller have been added, along with room microphones suspended from the ceiling, replacing handheld wireless microphones. The system has been migrated to a completely network-based system, utilizing a network switch and closed wireless network for access and control on a closed network. Microphones and associated equipment have been added for the Gilmore Ave. firehouse as well.

## KEY COMPONENTS OF THE SYSTEM

Click on the [BLUE](#) links for additional information.

**Vaddio RoboTRAK Presenter Tracking System.** The system includes and AV Bridge 2x1 (replacing the ONELink bridge) and RoboTRAK Auto IR System. As mentioned the RoboSHOT camera and RoboTRAK camera work together to track and display the image of the presenter wearing the included IR medallion. *The cameras are typically mounted to a wall with an included two-shelve mount. Read more [HERE](#).*

**Vaddio Roboshot 20 UHD cameras\*.** The cameras will allow up to 4K resolution, making your system future-proof for years to come. One will be connected to the above-mentioned RoboTRAK IR camera; the other will be mounted at the front of the room to capture training attendees. They can be controlled and switched with the Vaddio Device Controller. All will be connected to the network via an ethernet switch. *Read more [HERE](#).*

*\*Several options for 1080p cameras are available for a cost saving measure. As all popular streaming meeting software offerings currently offers 720p resolution, these will be more than adequate for the foreseeable future as well. Please let us know if you would like more information about camera resolutions and offerings.*

**Vaddio Easy IP CeilingMIC D Microphone.** Four of these will be suspended from the ceiling to capture speech from those attending the training session for streaming over meeting software. NOTE: these microphones will not be connected to the in-room audio system. *Read more [HERE](#).*

**Vaddio Device Controller.** The Device Controller will control and switch the Vaddio cameras. Control and access for the cameras and microphones will also be available via browser on internet-ready devices as well. It will connect to the system via ethernet cable (which will require the installation - or repurposing of an existing - ethernet wall plate. *Read more [HERE](#).*

**Vaddio AV Bridge 2x1.** The AV Bridge 2x1 will essentially be the “brains” of the AV system, connecting all Vaddio devices and the MiPro wireless microphone to the network and AV system. *Read more [HERE](#).*

**MiPro ACT7 Series Wireless Microphone Systems.** The ACT-7 Series offers high quality components competing with other name brands at a much lower cost. One lavalier microphone will be utilized for in-room audio and for streaming to meeting software in the main training room; two wireless handheld microphones will be utilized at Gilmore Ave. *Read more [HERE](#).*

The two wireless mics at Gilmore will connect to the small **Behringer XENYX Q802USB** mixer. This mixer offers analog outputs for connection to your existing room audio system, along with a USB output for connectivity to the streaming computer. *Read more [HERE](#).*

**Rolls MX22s Mini Line Mixer.** This will allow basic volume control of the computer and wireless lavalier microphone for the in-room audio system of the training room. *Read more [HERE](#).*

*KEY COMPONENTS, continued.*

**Luxul AMS-1816 Network Switch.** This will connect all Vaddio equipment to the closed network. It will connect to a small unmanaged switch and wifi router for access from other devices. *Read more [HERE](#).*

**Estimates and Allowances.** Not to exceed budget figures have been included for items such as an unmanaged switch, wireless router, cabling, hardware, labor and shipping. Actual figures will be included on the final invoice. Actual charges will not exceed the listed figures without change order approval from Fairfield Township.

## YOUR INVESTMENT.

*Below find pricing the proposed equipment and services for the training facilities.*

Qty	Description	Price	Extended
<b>FOR FIREHOUSE TRAINING ROOM:</b>			
1	Vaddio RoboTrak Auto IR System	3,995.00	\$ 3,995.00
2	Vaddio RoboShot 20 UHD Cameras, Black	4,652.88	\$ 9,305.76
1	Vaddio Device Controller	582.83	\$ 582.83
1	Vaddio AV Bridge 2x1	2,515.33	\$ 2,515.33
4	Vaddio Easy IP Ceiling MIC D - White	758.82	\$ 3,035.29
1	Luxul AMS-1816P Network Switch, PoE	700.69	\$ 700.69
1	Allowance: Closed Network; Unmanaged Switch, Wireless Router	250.00	\$ 250.00
1	MiPro ACT71 Wireless Microphone Receiver	395.00	\$ 395.00
1	MiPro ACT0T Beltpack Transmitter for above, w/Lavaliere	430.00	\$ 430.00
1	Rolls MX22s Mini Mix 2 Channel Mixer	55.56	\$ 55.56
1	Allowance: Wall-Mounted Rack; Power Supply	350.00	\$ 350.00
1	Lot: Network Cabling (estimated)	175.00	\$ 175.00
1	Lot: Misc. Hardware, Cabling (estimated)	175.00	\$ 175.00
1	Lot: Labor; Programming	4,950.00	\$ 4,950.00
1	Shipping Estimate	237.50	\$ 237.50
<b>SUBTOTAL:</b>			<b>\$ 27,152.96</b>
<b>FOR GILMORE AVE. FIREHOUSE:</b>			
1	MiPro ACT-72 Two-Channel Wireless Microphone Receiver	695.00	\$ 695.00
2	MiPro ACT-70H Handheld Wireless Microphone	365.00	\$ 730.00
2	Table Microphone Stands for Above	18.95	\$ 37.90
1	Behringer XENYX Q802USB Analog Audio Mixer w/USB Output	87.78	\$ 87.78
1	Lot: Labor	330.00	\$ 330.00
1	Shipping Estimate	37.50	\$ 37.50
<b>SUBTOTAL</b>			<b>\$ 1,918.18</b>
Sales Tax - exempt w/certificate			0.00
<b>TOTAL FOR RECOMMENDATION:</b>			<b>\$ 29,071.14</b>

*Pricing is guaranteed for 30 days from the date of this recommendation.*

## **NEXT STEPS.**

We look forward to discussing this recommendation with you. If the recommendation is accepted as is or with revisions, a Professional Services Agreement will be issued by TECServices, outlining proposed installation timeline, change order procedures, deposit and invoicing, terms, duties and responsibilities and warranties.

Thank you again for the opportunity to provide this recommendation. We look forward to discussing it with you in detail and sincerely hope that we earn your business!

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas H. Kasper".

**NOTE: This document and its contents represent a confidential communication between TECServices, LLC and Fairfield Township, Ohio**

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