2015 Achievement Awards
Virginia Association of Counties

APPLICATION FORM

All applications must include the following information. Separate applications must be submitted for each eligible program. **Deadline: June 1, 2015.** Please include this application form with electronic entry.

PROGRAM INFORMATION

Locality: Fauquier County, Virginia

Program Title: Regional Paramedic Simulation Laboratory

Program Category: Regional Collaboration, Health and Human Services, Public Safety

CONTACT INFORMATION

Name: Thomas M. Billington

Title: Fire Rescue Chief

Department: Fauquier County Department of Fire Rescue and Emergency Management

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SIGNATURE OF COUNTY ADMINISTRATOR OR CHIEF ADMINISTRATIVE OFFICER

Name: Paul McCulla

Title: County Administrator

Signature:

VACo 2015 Achievement Award Program Nomination

Advanced Life Support Simulation Laboratory Initiative

Paramedic Simulation Laboratory for Fauquier County and the Rappahannock EMS Region Counties of Caroline, Culpeper, King George, and Orange

Fauquier County, Virginia
Thomas M. Billington, MBA, CFOD
Fire Rescue Chief

Paramedic Simulation Laboratory for Fauquier County and the Rappahannock EMS Region Counties of Caroline, Culpeper, King George, and Orange

Background-

In the spring of 2012, Fauquier County Department of Fire, Rescue and Emergency Management (DFREM) received a $254,000.00 grant to purchase equipment for an Advanced Life Support (ALS) Medical Simulation Lab through the Virginia Office of EMS Rescue Squad Assistance Fund Grant Program. The grant required $127,000.00 in local matching funds.

Challenge-

The creation of a Medical Simulation Lab is the first step in the path towards becoming an Accredited ALS Educational program which would facilitate conducting ALS education locally and have control over course design and schedule, something critically needed to serve the Fauquier, Culpeper, and Rappahannock Fire Rescue systems. However, with an estimated one-million dollar price tag to acquire a facility and construct the lab, the realization of such a state-of-the-art facility in mostly rural area counties seemed bleak.

Process-

However, Fauquier County Fire, Rescue and Emergency Management (DFREM) staff under the direction of Fire Rescue Chief Thomas Billington, the project began to take shape. The project workload was led by Assistant Chief Darren Stevens, who took control and became determined to make it a success. Early discussion with the local Fauquier County Hospital administration to use hospital-owned space dedicated for the facility was fruitful, but once the acquisition of the local hospital by another company began, this option stalled.

Other early space options included a modular facility at the local Lord Fairfax Community College and/or leasing privately owned commercial space in the local town or county area. All of these options where discarded because of the cost. Again the project seemed to stall with consideration of grant refusal being considered. But at the recommendation of the County Administrator, DFREM explored the possibility of using space at the local Harvey L. Pearson Armory of the Virginia Army National Guard.

Sure enough, another opportunity surfaced. The best possible option for a dedicated center was a 1,400 square foot room, previously built as a pistol range within the armory. Because the project would involve interior construction to make the site usable, Assistant Chief Stevens began a series of meetings with the Virginia Army National Guard facility management group at Ft. Picket, in which DFREM presented the proposal along with the first drawings. Within a few short weeks, the facilities management group approved the use of the space.

The Fauquier Board of Supervisors had already agreed to provide the matching grant funds for the technical medical training equipment. However, DFREM staff was able to obtain an additional $27,000.00 to cover some of the construction and furnishings from the Board of Supervisors.

DFREM staff realized that this was only enough to purchase materials and that a majority of the labor would have to be done by our career and volunteer fire rescue members.

Once the final plans were submitted to the armory leadership and after a review from the State Fire Marshal's office, DFREM received permission to proceed. All of the site work performed would be done by DFREM staff members led by Assistant Chief Stevens as project coordinator, head construction manager, and laborer.

Other expertise was volunteered by a Fire Rescue Technician (a licensed contractor) and another staff member (a licensed electrician). Both donated many hours to the project. The project required the installation and finishing of 68 sheets of drywall, 1,200 square feet of suspended ceiling and vinyl plank flooring, as well as complete electrical service for new LED ceiling lighting and outlets. The existing HVAC system was used but required ducting to the individual rooms and extending the main trunk for equal and effective air distribution.

To create a realistic ambulance simulator, DFREM staff obtained (through donation) the side and rear ambulance doors from an auto salvage yard. The doors were framed in steel angle iron by a local welding company and a mock ambulance was built with plywood and drywall.

Once the painting was complete, DFREM sought the donations of furniture to complete the lab rooms. Hospice of Fauquier County donated a hospital bed and patient table, Mary Washington Hospital donated a radiology exam bed, and a complete bedroom set was donated by Assistant Chief Stevens himself; the remaining furnishing and materials were obtained from local thrift stores.

In December, the team installed the simulation equipment and mannequins purchased by the grant funds and hosted an open house.

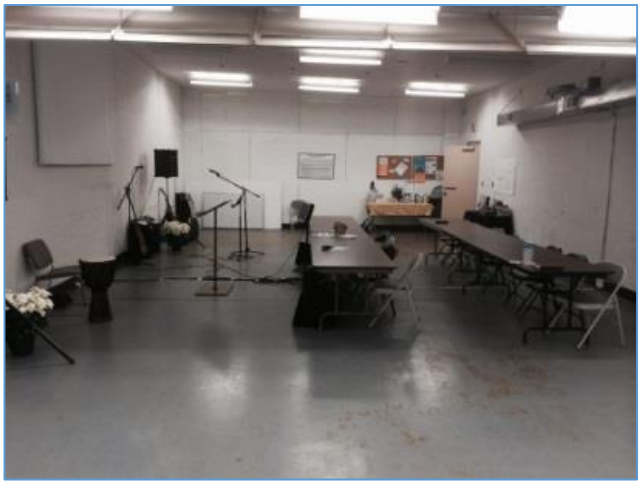
Key features of the center include:

- A classroom for 24 students
- A bedroom Simulation Lab
- A medical room Simulation Lab
- A simulated ambulance box
- A control room equipped with two-way glass viewing

- A large storage room
- 3 adult Sim Patients, a birthing patient, 3 ALS baby simulators and an ALS child
- A 90-inch Smart Board
- 3 Phyisio-Control Lifepak 15 units
- A Lucas CPR Device
- Several ALS Training Aids such as IV arms and airway trainers

This state-of-the-art facility is now available for use not just locally but at a regional level. The persistence of the Department of Fire, Rescue and Emergency Management's staff, the "no-quit attitude" of Assistant Chief Stevens, and hard work by all, this unique facility became a reality at a minimal comparative cost. This is a truly unique project worthy of recognition.

BEFORE



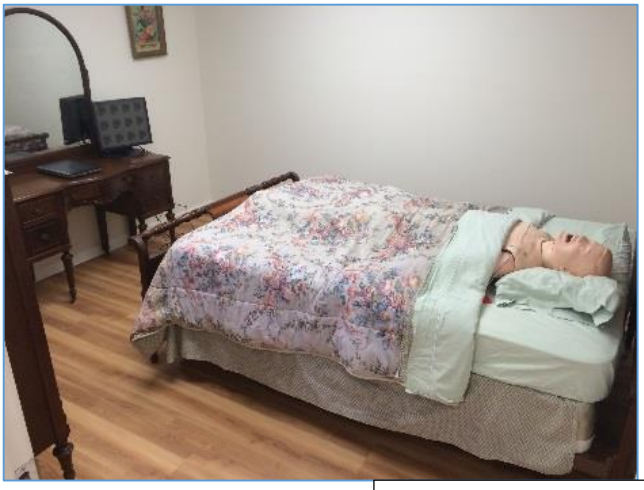
AFTER

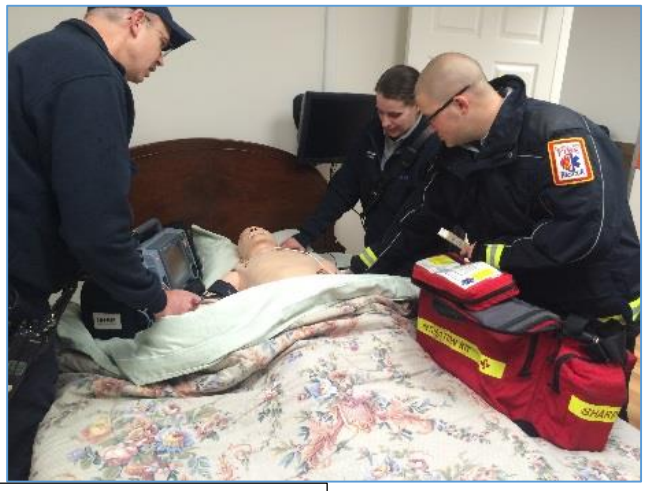
AMBULANCE EXTERIOR

AMBULANCE INTERIOR

"Sim-Man" mannequin with full realistic symptoms and full Advanced Life Support equipment.

HOME BEDROOM SETTING





Two-way mirror into control room.
"Sim-Man" mannequin with full realistic symptoms and full Advanced Life Support equipment.

HOSPITAL CLINICAL BIRTHING SUITE SETTING

Two-way mirror into control room.
"SIM Lady Pregnant" mannequin with full realistic symptoms and birthing abilities.

Harvey L. Pearson Armory of the Virginia Army National Guard