

VIRGINIA FIRE SERVICES BOARD

Live Fire Training Structure Meeting
Thursday, September 21, 2023
Conference Room C
Hampton Roads Convention Center
1610 Coliseum Drive Hampton, Virginia 23666
10:15 AM

Minutes

A regular meeting of the Live Fire Training Structure Committee meeting was held at the First Responder Virginia Conference. The meeting was called to order by Chair Bettie Reeves Nobles and a quorum was present.

COMMITTEE MEMBERS PRESENT

Bettie Reeves-Nobles, Committee Chair – General Public
James Calvert –Industry (SARA Title III/OSHA)
Jerome Williams - Certified Fire Service Instructor
JM Snell II –Board of Housing and Community Development
Billy Hanks – Local Fire Marshal
Dennis Linaburg – Virginia Chapter, IAAI

COMMITTEE MEMBERS ABSENT

Jess Rodzinka – Virginia Professional Fire Fighters

AGENCY MEMBERS PRESENT

Jamey Brads, Chief of Training and Operations
Theresa Hunter, Interim Assistant Chief of Administration
Will Merritt, Marketing and Communications Manager
Spencer Willett, Government Affairs Manager

GUESTS PRESENT

JD Orndorff	Eric Dahl	Alan Ambrose
Ben Ruppert	Ben Powell	
Jason Johnson	Rich Constantino	
Ray Conner	Deshaun Steele	

CHANGES IN THE AGENDA

PUBLIC COMMENTS

CONSENT AGENDA

Motion: To approve the minutes of the previous meeting (February 2023)

Motion: Calvert, **Second:** Snell

Discussion on the Motion: None

VIRGINIA FIRE SERVICES BOARD

Live Fire Training Structure Meeting
Thursday, September 21, 2023
Conference Room C
Hampton Roads Convention Center
1610 Coliseum Drive Hampton, Virginia 23666
10:15 AM

Vote: Unanimous

Action: Minutes approved

COMMENTS FROM THE COMMITTEE CHAIR

Committee Chair Bettie Reeves-Nobles welcomed all in attendance and thanked the committee for their work reviewing the applications that are on the agenda for the day.

UNFINISHED BUSINESS

a. Report from the Structures Group: New Live Fire Prototype

Alan Ambrose presented on updates to the prototype manual regarding a live fire structure utilizing containers or modular live fire training structures. This is referred to as prototype 4. The presentation outlined the history of the live fire prototype manual, annual inspections, and the current prototypes offered with relevant safety features such as thermal protection. He spoke about the issues with the prototype 4 modular building including setting the standard for vendors that might offer to use shipping container like structures. He spoke about WHP having a modular structure that does not use containers which was approved for Harrisonburg in 2019. He also spoke about Goochland County's drawings, which are mainly shop drawings, and how they reference a large variety of ISO 668 shipping containers that vary by size. This is also something that should be regulated for safety for container style structures. Prototype 4 should be broad enough in language to account for container like structures, while also limiting what exactly can be approved for safety related to NFPA 1402. Prototype 4 should meet the Virginia requirements, as well as relevant NFPA standards. He referenced the 2018 International Building Code and how containers have an acceptance criterion contained within it. This limits what can be used. Framework should be in place to make these structures acceptable. It is not worth the effort of the VFSB or VDFP to use the 2018 standard with the 2021 standard becoming the prevailing document for container structures. Conversations have been had with those who service these structures and the group has looked at container structures used for flashover simulators. These containers last around 5 years and have minimal protection but are liked by fire chiefs. TSG does not want prototype 4 to be treated the same way as these more temporary structures. TSG questions the protection of personnel around the outside of the container. Maintenance and the longevity of the prototype are concerns. TSG is expected to provide sample drawings and specifications in December. TSG will provide guidance to the localities currently approved for these types of structures in Goochland.

VIRGINIA FIRE SERVICES BOARD

Live Fire Training Structure Meeting
Thursday, September 21, 2023
Conference Room C
Hampton Roads Convention Center
1610 Coliseum Drive Hampton, Virginia 23666
10:15 AM

James Calvert stated he hears bias in the presentation from TSG regarding prototype 4. The requirement in Goochland was to meet NFPA 1402. The VFSB is interested if these prototypes meet the NFPA 1402 design criteria. He reiterated he felt there was bias in the presentation. Calvert wanted to know the criteria that needs to be designed too by these vendors for these types of structure. Ambrose apologized on the record and stated that there are specific challenges with this style and that he wanted to explain those concerns. He touched on feedback they received from other areas of the country where these props are dangerous if not maintained properly. Safety and protection are the main priority and that is where the presentation derived from.

Johnson spoke about how he and JM Snell II serve on the Board of Housing and Community Development. He asked if VDFP could require the group use the 2021 IBC code. Johnson asked if other states have been looked at and what those states are. Ambrose stated said few states have prototypes that look like Virginia and that Virginia is often the standard, but admitted a deep dive has not been completed. Johnson feels that VFSB is proactive and leads the country, but there also must be a consideration for safety. Reeves Nobles wanted to know about other states that use these types of structure. Ambrose spoke about the importance of getting out in front of safety and performance specifications not present in other states. He is unaware of localities that have specific requirements.

Reeves Nobles asked if the group provided a report on container structures or modular structures. Ambrose stated that this was a nomenclature difference, because modular is a broader term for containers and other pre-engineering buildings.

Johnson asked if they do not use VDFP funds, do they require VFSB approval. Hunter stated that state approval is not needed to build structures if the locality pays for them.

Jamey Brads stated it needs to meet NFPA 1402 and 1403 to be approved for training. The building needs to be certified by the VFSB to be used for certified training. It is difficult for VDFP to know where all training is conducted. However, certified training must be done in a certified structure. Calvert highlighted that it was based on NFPA standards, not necessary the grant prototype specifications. This is all based on safety requirements. Ambrose stated that an engineer must sign off according to NFPA 1402 already.

Jerome Williams stated that the containers were not dangerous, but in his experience, it was instructors or those utilizing the structure that may need additional training. Ambrose talked

VIRGINIA FIRE SERVICES BOARD

Live Fire Training Structure Meeting
Thursday, September 21, 2023
Conference Room C
Hampton Roads Convention Center
1610 Coliseum Drive Hampton, Virginia 23666
10:15 AM

about the learning curve that will exist for a new prototype. He did not disagree with this statement, but also stated there were dangers related to the prototype style.

Calvert stated he was not an advocate for any certain design but wants to make sure the work done for Goochland is carried on and that the structures are designed for safety.

Reeves Nobles wanted to clarify where the committee moves from here. Should TSG look at container style or modular style structures? Calvert thought the committee would get a set of specifications. He feels there must be data out there to build this specification. Ambrose stated that specifications had not been provided. Reeves-Nobles asked if this would be provided in December. This will include NFPA 1402, 1403, and IBC requirements.

NEW BUSINESS

a. City of Winchester Renovation Application

JD Orndorff from the City of Winchester spoke about their request. An engineering firm (SRG) did a review of the building for compliance. He spoke about the requested amount for the renovation. He stated they completed an inspection in 2021, but not 2022 because of the five year plan implemented by the board.

Calvert asked how they would characterize the damage in the structure. Orndorff explained that the probes in the system were too large, creating a delay when temperatures reach a certain point and should be shut down. He also stated it could be related to instructors using the facility and allowing the heat to buildup. He stated that localities are often not provided good training on this. Winchester will be training its personnel on the proper use of the building.

Calvert spoke about the NFPA 1403 compliance officer program and how this could be used to limit damage based off pre and post inspections. These inspections could be implemented to fix the issue across the Commonwealth.

Reeves Nobles asked what the full amount was. Orndorff stated it was \$150,274.85 and the city has committed to assist with anything it can. Calvert clarified that three localities used the building, which was confirmed.

VIRGINIA FIRE SERVICES BOARD

Live Fire Training Structure Meeting
Thursday, September 21, 2023
Conference Room C
Hampton Roads Convention Center
1610 Coliseum Drive Hampton, Virginia 23666
10:15 AM

Motion: To approve the City of Winchester Renovation Application for the Full Board

Motion: Calvert, **Second:** Linaburg

Discussion on the Motion: None

Vote: Unanimous

Action: Renovation grant approved for the amount of \$150,274.85 for the Full Board

b. Fluvanna County Extension Request

County Administrator Eric Dahl presented on the demographics and fire service in Fluvanna County. He explained that the county is requesting an extension and to change their request to a container like structure. They have used the \$30,000 for design and the county has also put additional funds into the project. The current prototypes are not viable options for a rural locality like theirs. Fluvanna feels that a container structure would better service their volunteer firefighters. Fluvanna County examined Goochland's request and building, which is a Draeger product that meets NFPA 1402 standards. Fluvanna is trying to replicate Goochland's building, except Fluvanna's structure would be a Class A burn building. The building official has approved the initial drawings. Fluvanna asked if data existed showing that these structures only last for 5 years. The county believes this model (container style) is a good move for rural localities to provide live fire training. They are requesting a 2-year extension because they have seen the amount of time it takes for other localities and the 24-26 week delivery time that is expected.

Calvert asked Theresa Hunter if a 2-year extension effects accounting. Hunter stated that these extensions would only allocate money to the project, preventing it from being used by someone else and it would not affect the accounting. Reeves Nobles asked how many extensions they have had. Hunter stated 4 extensions amounting to 6 years. Reeves Nobles asked if they have received funds. Hunter stated they had received funds after submitting a building permit in March 2020 totaling \$112,500.

Calvert spoke about the need for extensions because the costs came back too high. He stated that the VFSB have approved two of these structures for Richmond and Goochland. He asked if this request meets the needs of the jurisdiction. Chief of

VIRGINIA FIRE SERVICES BOARD

Live Fire Training Structure Meeting
Thursday, September 21, 2023
Conference Room C
Hampton Roads Convention Center
1610 Coliseum Drive Hampton, Virginia 23666
10:15 AM

Monticello Constantino stated that it will meet the needs of the locality and the departments. Calvert is interested if it meets NFPA 1402 and if it meets the financial needs of the locality. Calvert moved to approve the application. Chair Reeves Nobles asked for further discussion.

Reeves Nobles asked if an architecture and engineering firm had been utilized. Dahl stated they have worked with two firms, one for the civil work and one for the design. They have also submitted information to TSG. He cited challenges with prototype 1 and 2 construction and how the pandemic has increased the costs for buildings. Fluvanna feels handcuffed in the process. Dahl asked if they received \$112,500 which Hunter confirmed and explained was issued without invoices because the locality had been issued a building permit.

Reeves Nobles is reluctant to grant an extension and approval because of the beta testing that is still ongoing with Goochland County and the City of Richmond. She wants to make sure that funds that are approved meet the specifications that TSG is working on for the VFSB.

Linaburg is hesitant to grant the approval, but he is also reluctant to holdup Fluvanna County in this process and start over again. Linaburg suggested a year extension. There are many companies that design these structures to appropriate safety specifications and the VFSB should not stop this. Reeves Nobles stated her intention was to have documentation to go by, suggesting the committee wait until TSG provides guidelines. She wants to make sure funds are used appropriately.

Dahl suggested that Fluvanna could be the Class A container structure beta test because Richmond and Goochland were both Class B.

Calvert stated NFPA 1402 should be the guidance. He did not recall using Richmond and Goochland as beta tests. He reemphasized how NFPA was the guidance.

Johnson suggested waiting until December to make sure a standard is set and that safety measures are in place. The report from TSG is needed. There is a need for

VIRGINIA FIRE SERVICES BOARD

Live Fire Training Structure Meeting
Thursday, September 21, 2023
Conference Room C
Hampton Roads Convention Center
1610 Coliseum Drive Hampton, Virginia 23666
10:15 AM

this prototype in rural areas and small jurisdictions that cannot fund larger, traditional burn buildings.

Willett provided comments from previous minutes, which did not state that Richmond and Goochland as beta tests. The minutes from the special meeting stated they would meet NFPA 1402 requirements pending specifications from TSG.

Calvert made a previous motion. Willett stated that without a second it would not be voted on.

Calvert made a motion to approve the extension request for 2 years and the conversion of the project to a container style structure if it meets NFPA 1402.

Reeves Nobles made an amendment for the extension to be for one year. This amendment was accepted by Calvert.

Motion: To approve the Fluvanna County Extension Request for 1 year and the project to meet NFPA 1402 Standards for a container style structure.

Motion: Calvert, **Second:** Linaburg

Discussion on the Motion: None

Vote: Unanimous

Action: Fluvanna County's request is approved for the Full Board

c. City of Hopewell Live Fire Structure Application

Chief Ruppert spoke about the history and makeup of the Hopewell Fire Department. He outlined their application for the Live Fire Structure. The burn building in Hopewell currently is no longer used but was a staple in the region for many years. None of the surrounding localities have their own burn buildings and are supportive of the city's request. He stated that the lack of a burn building has made live fire training difficult for the crews. Staffing challenges make it difficult to send crews outside the city for training. Site plans and a presentation was provided to the VFSB. The city has already allocated the matching portion of the grant. He spoke about how the city cannot afford a prototype 1 or 2 structure because of fiscal constraints. He further spoke about the training that is provided by the container style structure they are requesting. He highlighted that the vendor is working to get stamped plans by an

VIRGINIA FIRE SERVICES BOARD

Live Fire Training Structure Meeting
Thursday, September 21, 2023
Conference Room C
Hampton Roads Convention Center
1610 Coliseum Drive Hampton, Virginia 23666
10:15 AM

engineer that are approved by and architecture and engineering firm, rather than shop drawings.

Calvert asked if an environmental assessment has been completed. Ruppert explained that an environmental firm handles this for the whole site owned by the city. Calvert asked if it was a risk-based closure of the landfill. His worry is that without an environmental assessment, the VFSB may be approving funding for a site that will not be suitable for building. Hunter stated that VDFP does not review this once the money is allocated specifically related to environmental impact. This falls on the locality building the structure to meet the local requirements. Ruppert spoke about how the next step requires a site plan, which will include a third-party review, including storm water requirements, etc

Johnson asked for further explanation on the architecture and engineering firm to stamp the plans. Ruppert explained that their vendor, Draeger, is working with a Virginia firm to get plans reviewed and stamped. This had not occurred at this point. Reeves Nobles asked if the city had an architecture and engineering firm. Ruppert stated they would have a firm if approved.

Motion: To approve the City of Hopewell Live Fire Structure Application if it meets NFPA 1402 until prototype 4 is complete.

Motion: Linaburg, **Second:** Calvert

Discussion on the Motion: Willett clarified if the approval rests on the NFPA 1402 guidelines. Reeves Nobles stated this was the case. Hunter asked if the projects were being exempt from the new standards that may come out in December. Reeves Nobles stated that the NFPA 1402 guidelines would be used.

Vote: Unanimous

Action: Grant approved for the Full Board

d. Halifax County Live Fire Structure Application

Emergency Services Coordinator Jason Johnson presented on the application. He provided history on their former burn building built in the late 1990s. Damage was done to the building during a time when there was a change in leadership at the county level, resulting in little oversight of those using the structure. Policies have been modified to prevent this in the future. Each fire department in the county will have a custodian who will be in charge of making sure policies are followed during

VIRGINIA FIRE SERVICES BOARD

Live Fire Training Structure Meeting
Thursday, September 21, 2023
Conference Room C
Hampton Roads Convention Center
1610 Coliseum Drive Hampton, Virginia 23666
10:15 AM

burns. He spoke about building a new burn building making more sense for their taxpayers in the long term and how the county is ready to provide the remainder of the balance that is not paid by the grant. They would like to host regional schools and provide a building for the 200 firefighters that reside in the county, with Halifax being one of the largest counties in the state.

Reeves Nobles asked how old the current building is. Jason Johnson stated it was completed in 1998. This building is out of commission. Reeves Nobles also asked where it would be built, which Jason Johnson stated was provided in the packet. It would be located beside or on the site of the current burn structure.

Calvert wanted reassurance that this structure will not be damaged like the former structure. He asked if the custodian position was a term from NFPA 1403. Jason Johnson stated it was not directly pulled from NFPA 1403 but is very similar. Jason Johnson assured the committee that the building would be taken care of.

Motion: To approve the Halifax County Live Fire Structure Application

Motion: Calvert, **Second:** Linaburg

Discussion on the Motion: None

Vote: Unanimous

Action: Grant approved for the Full Board

Brads offered that if vendors can provide training on the operation and upkeep of these types of structures, that the committee should look at requiring this training or annual training aids from the vendors or contractors. This training should be done initially and over time to make sure personnel know how to use these burn buildings. NFPA 1403 touches more on training, while NFPA 1402 does touch on maintaining the structure. This may be something to be examined further down the road to make sure assets are protected.

ADJOURNMENT

Board Clerk

Spencer R. Willett