

Live fire training systems are increasingly essential as the occurrence of structural fires decreases. However, training equipment represents a significant capital investment – one that is beyond the budgets of many fire departments. The FEMA Assistance to Firefighters Grant (AFG) program can help you obtain this essential equipment. Learn how.

I. Abstract

This whitepaper explains the purpose of the FEMA Assistance to Firefighters Grant (AFG) program and outlines the kinds of equipment that it typically covers. The focus of this paper is on training systems, which can represent a substantial capital expenditure to fire departments and colleges. The discussion describes the various Dräger Class A and Class B training systems that are eligible for an AFG grant, and incudes tips on how to maximize the success of your grant application.

II. AFG Program, explained

What is the AFG program?

The Assistance to Firefighters Grant (AFG) program is a federal program managed by FEMA to provide financial assistance in purchasing firefighter equipment. The AFG program provides funding for a wide range of needed equipment, including SCBAs, fire facilities, fire trucks, training equipment, and more.

Statement of Purpose of the AFG Program

The primary goal of the Assistance to Firefighters Grants (AFG) is to enhance the safety of the public and firefighters with respect to fire-related hazards by providing direct financial assistance to eligible fire departments, nonaffiliated Emergency Medical Services (EMS) organizations, and State Fire Training Academies (SFTA). This funding is for critically needed resources to equip and train emergency personnel to recognized standards, enhance operations efficiencies, foster interoperability, and support community resilience.

Source: FEMA

Is Dräger equipment eligible for an AFG grant?

Yes. Dräger offers a wide variety of personal protective equipment (PPE), thermal imaging cameras, training structures, and related equipment that are eligible for AFG grants. Within the training category, we offer both Class A (wood-burning) and Class B (propanefueled) live fire training systems that address a number of different training scenarios and budgetary levels.

Where can I find information about applying for an AFG grant?

FEMA provides a number of resources on this dedicated website to help guide you through the grant application process: https://www.fema.gov/assistance-firefighters-grant-program-info

To construct a successful grant proposal, it is important to understand why certain grant proposals were successful. One source of this information is the following link, which details past AFG grant success stories: https://www.fema.gov/assistance-firefighters-grants-success-stories

In addition, FEMA holds regularly scheduled regional instructional workshops to help guide you through the application process and give you the opportunity for interaction as you build a grant application. For workshop dates and locations, go to: https://www.fema.gov/media-library/assets/documents/101765

III. Grant Applications for Training Equipment

When applying for an AFG grant to acquire training equipment, it is important to understand and document the overall training objectives to be met with the proposed equipment, including the number of individuals or locations subject to the training and the specific NFPA training standards that will be met by using the proposed equipment. This information should be an integral part of any application as justification for the cost to acquire the requested equipment.

The primary key to success is to choose systems that will maximize the number of potential participants to be trained, as well as to maximize the overall breadth of training scenarios using a specific system or set of systems.



Mobile Live Fire Training Unit obtained via an AFG grant

Consider Mobile Training Equipment in Your Application

While there is no requirement for training equipment to be mobile or portable to be eligible for an AFG grant, mobile training equipment allows departments and schools to expand their training universe without incurring the expense of transporting participants to a permanent training facility. As a result, mobile training units are very strong candidates for consideration for grant money.

In this product category, Dräger offers mobile products that can address a number of training scenarios, as listed below.

IV. Dräger Training Equipment Eligible for an AFG Grant

Mobile Live Fire Training Unit (MLFTU)

Dräger's propane-fueled MLFTU enables training on many of the scenarios that permanent training structures offer, while maximizing the overall reach to satellite facilities due to its mobility. These units are completely self-contained because they can be equipped with an onboard generator and propane to power the generator and the fire props. This minimizes set-up time and maximizes training time.

We have also equipped our MLFTUs with gas detection systems and full video and thermal monitoring devices. The insulated 53' units include a fully-enclosed control room, which allows instructors to monitor conditions during training using the onboard monitoring equipment.

MLFTU Interior Simulation Props

Several different fire props can be installed in the MLFTU, including a stove, bed/couch, and rollover simulator. To expand training scenarios, other interior props can also be integrated into the design, including:

- Moveable walls
- Breach wall
- Confined space
- Entanglement prop
- Smoke generator
- Noise simulator
- Louvered walls to path smoke to additional areas
- And more



MLFTU training with a couch prop

Hydraulic Second Level

One of the hallmarks of the Dräger MLFTU design is a hydraulically operated second level, which can be easily raised during training and lowered for transport. This unique design element expands on training scenarios by adding a second-level entry point, allowing up-slope and down-slope fire access, expanding hose technique training, and creating multi-level, multi-fire scenarios with the addition of a second-level fire prop.

MLFTU Exterior Training Props

These versatile training units can also be equipped with a retractable pitched roof prop that facilitates training on ladder techniques, as well as teaching ventilation techniques. A walkable roof with stair and ladder access creates additional training scenarios, based on a department's training objectives.

Examples of exterior props include:

- Bailout window frame
- Confined space entry

For more information about the MLFTU, go to: https://www.draeger.com/en-us_us/Fire-Services/Products/Training-Systems/Fire-Training/Mobile-Live-Fire-Training-Unit-MLFTU-53



Mobile unit

Class A Mobile Fire Trainers

In addition to propane-based mobile training units, departments may also consider mobile Class A wood-fueled training units — which are also strong candidates for AFG funding. Within this product category, Dräger has several designs.

Advanced Attack - Mobile

Our Class A Swede Survival Phase 2 Mobile Advanced trainer is equipped with a variety of training props in a compact, mobile 40 ft. container. Using this versatile trainer, departments and schools are able to train on an extensive number of training scenarios, while demonstrating real fire behavior. Equipped with an insulated 10 ft. wood-fueled burn chamber, the Mobile Advanced trainer also features a number of training elements to expand the overall instructional curriculum, including:

- Pitched roof with ventilation prop
- Walkable roof
- Confined space entry from roof
- Second level window frame
- Multiple entry points
- Adjustable ventilation



Mobile unit ready for transport

Because the unit is mobile, instructors are able reach participants across regions and teach multiple scenarios as an economical alternative to more complex propane-based systems, while students are able to observe real fire behavior and better understand the signs of fire development. These training units do not require specialized equipment for transport and many departments can use vehicles already in their fleet — eliminating the need to acquire additional equipment for transport.

Mobile Attack

Dräger also offers a standard Class A mobile fire trainer, the Swede Survival Phase 2 – Interior Attack, with which instructors can address specific elements of fire behavior. In this trainer, the curriculum focuses on signs of fire development, recognizing smoke conditions, nozzle techniques, using thermal imaging cameras, ventilation, and other fire training scenarios.

To see loading techniques in these training structures, click here: https://www.youtube.com/watch?v=NceCjEBp_mA

For more information about this Class A trainer, go to: https://www.draeger.com/Products/Content/draegerswedesurvival-phase-2.pdf



Burn chamber with live fire

Multi-Scenario Training Structures

As previously stated, while mobile trainers are an ideal choice when building an application for an AFG grant, fixed training structures that can facilitate a comprehensive training curriculum are a powerful tool to consider for a grant, based on the breadth of training scenarios that can be accomplished. Class A or Class B structures can be considered when applying for a grant.



3 level container-based Class A burn structure

Class A Multi-Level, Multi-Fire Structure

In addition to permanent steel or concrete structures, companies offer a variety of container-based training structures as a modular, more economical alternative. Dräger designs multi-level structures that can be modified to meet any department's specific training objectives. These versatile container-based trainers expand the training curriculum beyond fire observation and attack, to search and rescue, ventilation, escape and bailout, and other training scenarios. At a fraction of the cost of a concrete or steel structure, these units are a very economical training alternative.

These structures are designed with multiple fire locations on multiple levels with various access points and can include various training props, including:

- Forcible entry door
- Bailout window
- Walkable roof
- Confined space entry from roof
- Rappelling bar
- Third level with ladder entry
- Standpipe system
- Pitched roof with ventilation prop
- Flat roof with ventilation prop
- Multiple doors and windows
- Multiple burn areas
- Staging level
- Interior and exterior staircase
- Exterior lighting

With the addition of many such training props, these structures facilitate a comprehensive training curriculum in a single unit. As such, they represent a powerful training tool to be considered for a federal grant.

It is very important to note in your grant application that you are applying for train-the-trainer training in addition to the training structure. For any Dräger Class A training structure, we offer a two-day train-the-trainer course to certify your instructor team to teach the training curriculum.

For additional information on the entire Dräger line of container-based Class A wood-fueled training structures, go to: https://www.draeger.com/en-us-us/Fire-Services/Products/Training-Systems/Fire-Training/Swede-Survival

Class B Multi-Level Training Structure

Another training alternative that is eligible for a federal grant is a permanent multi-level Class B training tower. Multiple fire scenarios can be simulated at multiple levels. Fire simulation designs can include a kitchen, bedroom, rollover, among others. Such multi-level structures are ideal for training on hose and nozzle techniques, as well as laddering and rescue. Dräger designs include a separate control room where instructors can control fires and smoke and observe each room's conditions via video cameras, thermal imaging cameras, thermal sensors, and multi-gas detectors.



Couch prop



Stove/rollover fire simulation



Tower retrofit with Class B system

These structures can also be equipped with smoke generation to simulate real fire conditions, as well as additional props to expand on the training scenarios.

If your department has an existing tower used for other purposes, you can apply for funding to retrofit the tower to be a Class B burn building. Dräger specializes in state-of-the-art Class B interior fire systems and control and can re-purpose existing structures with the latest Class B fire control technology – at a fraction of the cost of building a new tower.



Control panel



Hose teams training with car prop

Portable Training Systems

Another possible training alternative for an AFG grant is the portable training system. Smaller training props are also strong candidates for funding because of their portability and flexibility. When including such props in a grant proposal, you should emphasize the following:

- Portability expands locations for training
- Transport via a truck bed is possible, so no additional transport equipment is required
- Quick set-up allows for more training time
- Small footprint expands possible training venues
- Multiple different props extend training scenarios
- Lower overall cost than most other training systems

System 64 Propane Fire Trainer

In the portable trainer category, Dräger offers the System 64 portable Class B fire training system. This propane-based system includes a primary control unit used to ignite and manage fires, a control interface that connects gas, water, and electrical lines to the training prop, a 6 ft. x 4 ft. water-based burn pan used to disperse propane for an even, two-stage fire, and various water-cooled props to simulate different fire scenarios. In your application, you can include one or many different props that fit within the same burn pan, including:

- Car with multiple burn scenarios (truck, passenger area, engine, wheel)
- BBQ with simulated wall
- Pallet with crates and drums
- Electric motor
- Dumpster
- Propane cylinder
- Christmas tree

When applying for a grant for such a portable system, you should also consider including a trailer for ease of storage and transport in your application. Dräger offers both an open and enclosed trailer designed specifically for our System 64 props.

For more information on the System 64 fire training props, please go to: https://www.draeger.com/en-us_us/Fire-Services/Products/Training-Systems/Fire-Training/System-64-Portable-Exterior-Live-Fire-Trainer

V. Summary

Training systems are a very important product category to consider when you are expanding your department's capabilities via the AFG program. Once you have established the training objectives to be met via your application, there are many training products from which to choose to meet these objectives. The key to a successful application is to pursue training alternatives that will maximize your overall training output — whether it be an increased number of training participants, expanded breadth of training scenarios, or both.

Contact Information

For more information on Dräger's training portfolio, please contact: Jeff Bowles

Product Portfolio Manager, Dräger, Inc.

Office: 346-802-6020 Mobile: 281-382-7660

Email: Jeffrey.Bowles@draeger.com

IMPRINT

Drager, Inc 7256 South Sam Houston West Parkway Suite 100 Houston, TX 77085-2328

www.draeger.com