



March 5, 2024

Indiana Department of Administration
Procurement Division
402 W. Washington St., Room W468
Indianapolis, Indiana 46204

SUBJECT: Executive Summary for IDHS Smoke / Confidence Maze Trailers

Attn: Arthur Sample

Please find our executive summary as defined for the State of Indiana Bid 385-24-76608

Symtech specializes in live fire simulation technologies utilizing Class "A," as well as environmentally friendly propane or natural gas. Our Live Fire Simulator Technology is fully compliant with the NFPA 1402 Standard on Facilities for Fire Training and Associated Props.

Symtech has submitted the appropriate paper work for the Secretary of State of Indiana.

Thank you for your consideration!

Sincerely,

Jonathan J. Hanson
Managing Director – 908-514-6629
Jon.hanson@symtechfire.com

Introduction/Brief Company Overview

Symtech specializes in live fire simulation technologies utilizing environmentally friendly propane. Our Live Fire Simulator Technology is fully compliant with the NFPA 1402 Standard on Facilities for Fire Training and Associated Props. In addition to our LPG-fueled live fire training systems, we offer a full complement of Class “A” training props including Flashover Trainers, Fire Behavior Labs, and Container Buildings. Our service team has the expertise to service both our installations, as well as competitive installations. We also provide annual NFPA 1402 inspections for Symtech or competitive equipment.



symtechfire.com

Commitment to Excellence...

1.1 Safety



Symtech is committed to the safety of system operators and trainees alike. Our systems are fully compliant with NFPA 1402, which became a standard (*rather than a guide*) beginning in 2019. Unlike older systems, our offerings are designed from the ground up with this new Standard in mind. We utilize the highest quality components available including pilot and main burners systems, valves, and electronics.

1.2 Realism

We are committed to delivering training realism with thermal output, flame sizes, flame variability, and smoke output that leads the fire training systems industry. Environmentally friendly propane and natural gas (*indoors only*) alleviate environmental concerns, while delivering consistent training fires at the push of a button.



1.3 Customization



Within the parameters of the NFPA 1402 Standard, Symtech provides our customers with the customization and flexibility options they desire. This is imperative to addressing unique challenges that vary from department to department and within SOP's domestically and abroad. We pride ourselves in delivering timely custom solutions on time and under budget.

1.4 Service

Service is an essential component in what we do as a company. It is not a profit center, but rather, it is a vital element in achieving our mission of enabling AHJ's to deliver life-saving training when it's needed most. We not only stock vital system components to ensure their availability on short notice, but we also offer turnkey service and maintenance.



Why Select Symtech Fire?

- Symtech offers the only system ***designed from the ground*** up precisely ***to the new NFPA 1402 Standard*** on Facilities for Fire Training and Associated Props. We meet every aspect of the Standard without exception.
- ***Unparalleled Design, Engineering & Project Team*** with experience from all major industry players. There is no stronger personnel team in the industry!
- Continuous family experience in fire training systems ***dating back to 1979 (over 40 years!)... longer than any other supplier!***
- All products proudly ***100% Made in the USA*** 
- ***Unparalleled Interior/Structural Fire Simulator*** features list. Next generation extension options with our ST-PRO Platform.
- ***Experts in Value Engineering.*** We consistently delivery cutting-edge solutions to maximize your training value for your set budget.
- ***World-Class Outdoor & Industrial Props.*** Competitor A has pilot proving and Wireless controls, but only single stage (vapor OR liquid fires). Competitor B has two-stage vapor and liquid fires, but no pilot proving and Wireless is an expensive option. What if one company had it all? That's Symtech.
- ***Fully Integrated Sound Systems*** for increased realism. Developed for Bentonville Fire Department and FDNY for their newest live fire training simulators. Now standard on all installations!
- ***The Most Reliable Pilot and Burner System Money Can Buy.*** Maximize fire ground efficiency with our proven, reliable ionization method for pilot proving. Eliminate waiting / cool-down periods and maintenance associated with less reliable thermocouple and ultra-violet mini-peeper proving systems.
- ***Next Gen Wireless Controls.*** With "G-shock" detection, built-in e-stop and "deadman," and wireless recharging all standard
- Symtech was ***selected as the default supplier of Gas Fired Props to Fire Facilities, Inc.*** Symtech was selected based on a combination of technical features, cost effectiveness and system reliability. Symtech now boasts the only system signed and approved in writing for installation in Fire Facilities, Inc. Training Towers. This includes agreed and documented methodologies regarding penetration openings, thermocouple tie-ins, and more. This ensures a fully integrated, seamless solution. 
- ***Low-Cost Service.*** Our service exists to maximize your value not ours! We pride ourselves in keeping service low-cost, reliable, and on-time.
- ***Major Customers and Academies are Selecting Symtech including FDNY, Dallas, Bentonville, Maine Maritime Academy, Sarasota County and many more!***

Item	Description	Price per Unit
1	<p>Smoke Maze Confidence Trailer ST-PRO</p> <p><u>32' Premium Mobile Smoke Maze Confidence Trainer Chassis Features</u></p> <ul style="list-style-type: none"> ▪ 32' enclosed gooseneck trailer with vinyl graphics package ▪ 2 – 7,000 GVWR Axels with electronic brakes ▪ Aluminum frame construction with aluminum sided exterior walls ▪ One piece roof ▪ 2 access doors on passenger side, including entrance stairs ▪ Hinged rear doors ▪ Trailer jacks (TBD at kickoff meeting) ▪ Covered generator space on hitch frame ▪ Generator capable of controlling all system components wired to control room, fillable from ground level ▪ High velocity exhaust fan(s) to remove smoke from entire training area between training sessions or in the event of an emergency. ▪ 4 Flush mount LED flood lights above each door and hatch ▪ 2 wheel chocks <p><u>Training Compartment Features:</u></p> <ul style="list-style-type: none"> ▪ Hatches to access training area, with light prohibiting cover and sloped access ramp ▪ 3 levels of training ▪ Levels 1 and 2 nclude reconfigurable gates, and changeable sloped floors ▪ Level 3 includes wire entanglement prop and rafter crawl area ▪ Horizontal diminishing clearance area ▪ Vertical diminishing clearance area ▪ Attack rafter crawl navigation area ▪ Pass through with maximum dimensions of 15" wide X 15" high area ▪ Two (2) sloped floor access with slip resistant surfaces. ▪ Red and white 120V LED lighting ▪ 70,000 CFM Smoke Machine ▪ Ventilation system <p><u>Control Room Features</u></p> <ul style="list-style-type: none"> ▪ Smoke, exhaust fans, lights to be controlled bia wireless pendant ▪ Walls will be Marine grade plywood ▪ Completely sealed from training space ▪ There shall be a complete control center for the operations of all lighting, ventilation fan(s), and smoke machine. ▪ There shall be a secure mounting for the trailer spare tire ▪ There shall be E-track installed on front wall of control room ▪ There shall be a storage box for smoke fluid remotes general tools and spare parts. ▪ Mounted ladder <p><u>Logistics & Support</u></p> <ul style="list-style-type: none"> ▪ Delivery to Indianapolis, IN ▪ Handover/Walkthrough ▪ Train-the-Trainer Course, 3 days (6 classes total) ▪ 1-Year Standard Warranty ▪ 12 sets of keys 	\$143,500
	Total	\$287,000

Price valid through 30 June 2024.

Symtech can deliver in approximately 7 to 8 months from award depending on options selected. Will be within 240 days of award.

Payment Terms: 30% on Order, 20% on Completion of Design Drawings, 30% on Shipment, 20% on Completion. Net 10 days.

1-Year Industry Standard Warranty. Unlimited Technical Phone Support for the Life of the Product.

Subject to Symtech Standard Terms & Conditions.

Exclusions:

Customer travel cost for pre-delivery inspection (if desired)

Climate Control and Ventilation (unless otherwise specified)

Cost of Any Local Approvals, Certifications, or Licenses

Payment/performance bond, taxes, duties, permits, and any misc. fees, if applicable.

Graphical Representation (Different Lengths shown)





Experience & Qualifications

Symtech personnel has experience in more than 300 Fire Training Facility Projects, including management of more than \$140M worth of projects. Our team has completed projects in more than 35 Countries including on the Continents of North America, South America, Europe, Africa, Australia and Asia. Symtech has been selected by the following major departments/organizations for the design, supply, installation, and maintenance of their fire training equipment:

- Fire Department of New York (FDNY)
- Bentonville Fire Department, AR
- Maine Maritime Academy
- Barnstable County Fire Academy, MA
- Gloucester County Fire Academy, NJ
- Jasper County Fire Department, TX
- Maine Fire Service Training Institute
- Bristol Fire Department, RI
- Terre Haute Fire Department, IN
- White House Community Fire Department, TN
- Hialeah Fire Department, FL
- Hall County Fire & Rescue, GA
- Caldwell Community College, NC
- Greenville School District, SC
- Austin Community College, TX
- Waukesha Technical College, WI
- Dallas Fire Department, TX
- Fort Morgan Fire Department, CO
- Sarasota County Fire Academy, FL
- Fairview Fire Department, TN
- Hanoi Fire Fighting College, Vietnam
- Ocean County Fire Academy, NJ
- Maryville Fire Department, TN
- Findlay Fire Department, OH

SIMPLY PUT, THERE HAS NEVER BEEN A STRONGER PERSONNEL TEAM ASSEMBLED IN THE FIRE TRAINING SYSTEMS INDUSTRY!

Our personnel has extensive experience in fire training system design, manufacturing, installation, service and maintenance. Unlike competitors who outsource programming, Symtech has a systems programmer on staff. We also employ a lead Flame Control Panel (FCP) Electrical Fabricator.

Multiple Symtech personnel, including Jon Hanson and Byron Charbonneau, have participated in and/or remain active in the NFPA Committee on Fire Service Training.



Symtech personnel has worked in prior capacities conducting 3rd-party inspections of all major industry competitors. This lends a unique view into code compliance, compliance misses, and best practices. Our team holds a variety of Bachelor and Master's degrees in Management, Mechanical Engineering, Electrical Engineering, Construction and Project Management. Lastly, we have extensive firefighting experience in the US, Canada, and New Zealand. Every system design must pass our own rigorous standards for training value, realism, and durability prior to even being presented to an Owner/End-User.

Customer Highlight: Maine Fire Training Institute, ME

Maine Fire Training Institute (Owner of Multiple Mobile Props) Selects Symtech!

- Mobile SUV Fire Simulator ST, Including:
 - Full Aluminum High Quality Enclosed Trailer w/ DOT Tanks
 - Engine, Passenger, Trunk, Ground Spill, and Wheel Fires
 - Hoseline Fire Trainer
 - Extrication Features
 - Forcible Entry Hood
 - (2) 120-Gal DOT-Compliant Tanks
 - Winch for Easy Loading/Off-loading
 - 3-Year Maintenance PM Program



Customer Highlight: Austin Community College, TX

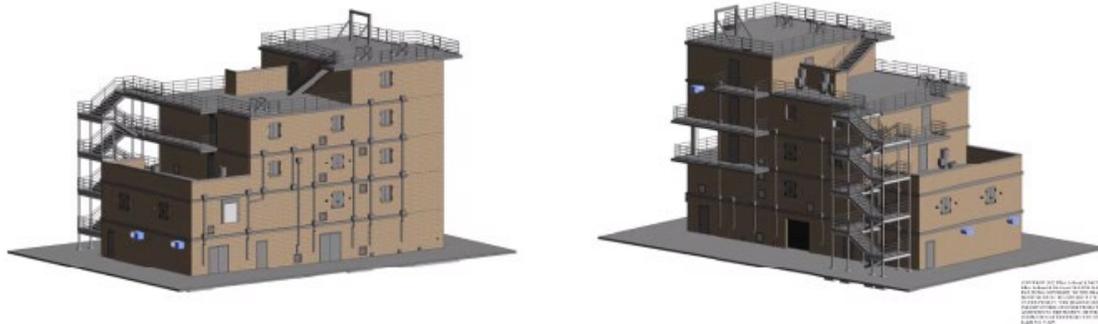
Austin Community College Selects Symtech!

- Vehicle & Outdoor Fire Training Simulators with Mobile Vehicle Hauler / Transporter
- Multiple Outdoor & Industrial Gas Fueled Fire Scenarios, Including:
 - Fuel Spill / Flammable Liquid Fire
 - Dumpster Fire
 - SUV/Vehicle Fire Simulator ST w/ the following fires:
 - Engine Fire
 - Passenger Fire
 - Trunk Fire
 - Ground/Spill Fire



Sarasota County Selects Symtech for the Largest Gas Prop Building Project Ever Constructed!

- 30-Acre State-of-the-Art Fire & EMS Facility
- Master Plan Includes More Gas-Fueled Fires in a Single Burn Building than Any Facility Previously Built!
- State-of-the-Art Facility with Multiple Gas Fueled Fire Scenarios and Advanced Features, Including:
 - Tower and Strip Mall Burn Buildings
 - Up to (33) Gas-Fueled Interior Fires
 - Window and Balcony Fires for Scene Assessment
 - Mobile SUV, LPG Tank, and Dumpster Props
 - 1,600 sq. ft. Fuel Spill
 - 70,000 cfm Smoke Machines
 - Sound Generation System
 - Symtech Continuity Protect for 10 Years®



Customer Highlight: Fire Department of New York (FDNY)

FDNY (the largest Fire Department in the United States – a 35-Year Prop User) Selects Symtech!

- Pre-Engineering Container Training Simulator Facility
 - Window Bailout Prop
 - Confined Space Hatches
 - Standpipe System w/ FDC
 - Basement Staircase
 - Forcible Entry System

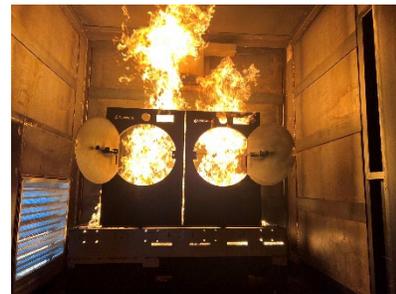
- State-of-the-Art Facility with Multiple Gas Fueled Fire Scenarios and Advanced Features, Including:
 - 2,300° F (1,260° C) Thermal Lining System
 - Stove Fire
 - Overhead Cabinet Extension Fire
 - Bed Fire
 - Boiler Heater Fire
 - Clothes Dryer Fire
 - Ceiling Rollover
 - 70,000 cfm Smoke Machines
 - Fully Integrated Sound System



Boiler Heater Fire



Bed Fire



Clothes Dryer Fire

Customer Highlight: Fairview Fire Department, TN

Fairview Fire Department Selects Symtech!

- 3-Story Container Fire Simulator
- State-of-the-Art Facility with Combination Class “A” / Fire Behavior Burn and Advanced Features, Including:
 - Class “A” Burn Room w/ both Fire Suppression & Fire Behavior Training Capabilities
 - 2,300° F Thermal Lining System
 - Pitched Roof Prop w/ Chop-out
 - Swinging Walls
 - Multi-Use Rappell Station



“I wanted to thank you for helping facilitate such a smooth process. This project has taken several years of planning and budgeting to come to fruition. I believe this live fire training structure has moved our department ahead an immeasurable number of years regarding the quality and quantity of training we can do without leaving the City. Your onsite crew truly have customer satisfaction as their top priority. I look forward to the On-scene training component and your willingness to go an extra step is greatly appreciated. If Fairview can assist in providing access to our training structure for potential customers, please send them our way. I have nothing but positives to share about this project, thank you again.”

Scott Hughes
Fire Chief
City of Fairview Fire Department, TN

Customer Highlight: Bentonville Fire Department, AR

Bentonville (home to the world's largest retailer – Walmart) Selects Symtech!

- Pre-Engineering Training Simulator Facility by Fire Facilities and Symtech Fire
- State-of-the-Art Facility with Multiple Gas Fueled Fire Scenarios and Advanced Features, Including:
 - 2,300° F (1,260° C) Thermal Lining System
 - Stove Fire
 - Overhead Cabinet Extension Fire
 - Bed Fire
 - Garage Vehicle Fire
 - BBQ Balcony Fire
 - (2) Hallway Ceiling Rollovers
 - 70,000 cfm Smoke Machines
 - Fully Integrated Sound System



Stove Fire



Hallway Rollover

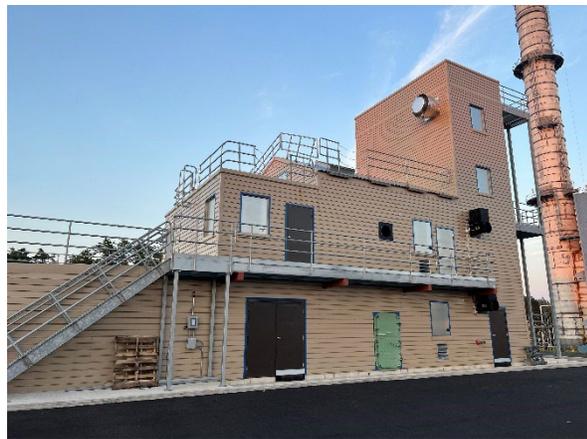
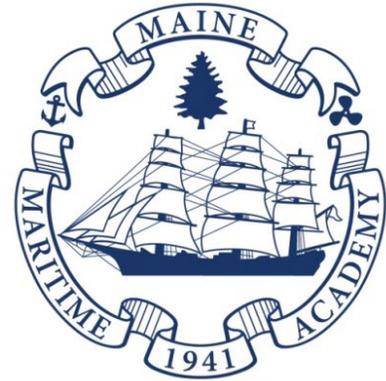


Vehicle Fire

Customer Highlight: Maine Maritime Academy (MMA)

Maine Maritime Academy (a US-Based Maritime Training College) Selects Symtech!

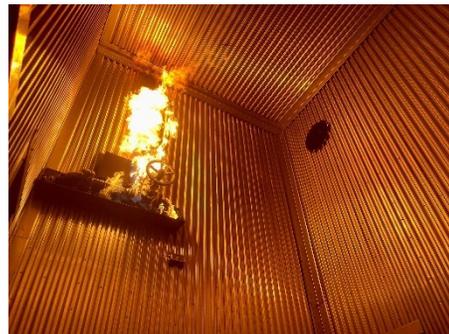
- Pre-Engineering Metal Building with Ship Theming
- 2-Story Engine Room
- State-of-the-Art Facility with Multiple Gas Fueled Fire Scenarios and Advanced Features, Including:
 - 2,300° F (1,260° C) Thermal Lining System
 - Marine Engine Fire
 - Overhead Flange Extension Fire
 - Galley Fire
 - Grease “Flare-up” Fire
 - State Room Fire
 - Ceiling Rollover
 - 70,000 cfm Smoke Machines



Ceiling Rollover



Marine/Ship Engine Fire



Overhead Flange Fire

Customer Highlight: Jasper County Emergency Services District, TX

Jasper County Selects Symtech!

- Outdoor & Industrial Fire Training Simulators for a new County Fire Training Facility
- Multiple Outdoor & Industrial Gas Fueled Fire Scenarios, Including:
 - Fuel Spill / Flammable Liquid Fire
 - 250-Gallon Pressure Vessel Fire w/ the following fires:
 - Impingement Fire
 - Relief Fire
 - SUV/Vehicle Fire Simulator ST w/ the following fires:
 - Engine Fire
 - Passenger Fire
 - Trunk Fire
 - Ground/Spill Fire



Company History

Symtech was founded in by Pete Romero, expert Systems Engineer, and Jon Hanson, son of industry pioneer Jim Hanson. Jim has been widely recognized for his contributions to the industry as one of the original pioneers of the first gas-fueled training systems in the 1970's for the United States Navy. Next, Jim brought gas-fueled technology to the municipal market in 1987 and the FAA market in 1992. He also conceptualized the first Mobile Structural and Mobile ARFF Simulators.

“Jim’s passion and energy were instrumental in the creation and development of the Live Fire Training market and through this, an untold number of firefighters and potential victims have benefited.”

– Bob Downin, President (Ret.) Kidde/UTC

Symtech was founded by a vision and by necessity. Large fire training equipment suppliers have converted Service into a major profit center with spare parts at 100% (or greater) mark-up, all while convincing customers they are stuck with the OEM, and with that, increasingly exorbitant service contract costs that are leading to a troubling number of system tear-outs.

“Symtech’s vision is to deliver maximum training value on time and on budget, while restoring a FIRE SERVICE FIRST mentality. We design, manufacture, install and service systems that push the limits of trainer realism while maintaining the highest safety standards available. Our service exists to benefit our customers – not to maximize profits.”

Symtech utilizes two modified container fabrication partners that have more than 15 years experience each in building modified container fixed and mobile fire training units.



Symtech was contracted for several large Interior/Structural Fire Simulator design and installation projects. Notably, in competition with all major Fire Training Systems competitors, after careful research and highly detailed interviews, the FDNY (Fire Department of New York) – *a 35-year fire training systems user* – selected Symtech to supply their newest Fire Simulator Building! The includes a modified container structure with multiple burn rooms, thermal protection, and training props.

was unanimous and was driven primarily by the of Symtech’s offering. Symtech’s project intake over year (YOY) in the just the first quarter of project awards including Bentonville Fire State-of-the-Art Training Facility that includes fires, rollover, fire extension, sound generation, engineering including a 3-in-1 indoor/outdoor for the price of a single burn room equipment set.



Bentonville Training Tower

FDNY’s selection technical merits doubled year 2022 with major Department’s multiple main and value-garage scenario

Symtech will be completing at least twenty-four (24) major installations between Feb 2024 and Aug 2024. We have the operational bandwidth to take on 3x more projects than currently booked.

Research & Development (R&D)

Symtech training simulators are designed from the ground up to the latest NFPA 1402 Standard (2019 edition). Our designs meet or exceed every aspect of the standard and are based on vast personnel experience exceeding 200 years combined! We have a unique partnership with On-Scene Training, LLC who has instructors in over 35 US States. We discuss current and expected future training challenges with On-Scene personnel regularly and resource unmet training needs with our high performing technical team. We are happy to review our innovation pipeline in a confidential setting.

Our staff has an unmatched combination of systems engineering, project development, geographic, and firefighting experience. That, combined with our company mission to serve the fire service, will propel Symtech into the leadership position within the fire systems industry.

Symtech has no outside investors and is wholly-owned by its founders. We invest over 10% into R&D (*most companies invest 1 to 2%*) and will continue this entrepreneurial approach indefinitely. See our value-added section for some recent new products derived from our intensive R&D process.

5.2 Markets Served

Symtech’s business is heavily focused on the Municipal Fire Fighting and Department of Defense (DoD) markets. We also service Maritime, Civil Aviation, Colleges and Institutions and Industrial Fire Fighting customers.

Our Product Lines & Services include:

- Structural
- Mobile Structural
- Outdoor/Industrial
- Hose Line Trainer
- Vehicle Simulator
- Hazmat
- Aircraft
- Mobile Aircraft
- Container Simulators
- Class “A”
- Fire Behavior
- Needs Assessments
- Design/Facility Interface Services
- Service/Maintenance
- Upgrades



Key Staff & Personnel

Symtech’s personnel and resources are divided into the following major functional areas:

- Engineering/R&D
- Project Management
- Operations
- Sales
- Marketing
- Field Services
- Customer Service
- Distribution

The following summarizes our key staff and personnel:



Jon Hanson
Managing Director



Pete Romero
Director, Engineering



Chief (Ret.) Ross Riddell
Field Const. Manager



Linda Feng
Customer Svc. Manager



Byron Charbonneau
Mechanical Engineer



Lucas Sanz
Mechanical Engineer



Vercelis Samaniego
Project Engineer



Bart Simpson
Field Service Tech



Chief (Ret.) Jim Nilo
Training/Commissioning Mgr.



Greg Pascolla
Field Installation



Maria Oubina
Marketing/Office Mgr.



Paul Ellis
Project Development

Symtech does not employ an Architect or have an Architect of record, as this is not required for any of our projects. It is understood that site work, including the burn building/simulator foundation(s), will be by others. The design/build team working on our adjacent fire training facility will be coordinating with the burn building simulator team for foundation design and site requirements. Symtech’s responsibility would be manufacturing and erecting the burn building, as is typical in our projects.

Training facilities are typically considered non-occupied structures exempting them from any local or uniform building codes. They still need to meet OSHA and all NFPA requirements.

Quality / Quality Assurance

Symtech utilizes a Quality Management System (QMS). This is a formalized system that documents processes, procedures, and responsibilities for achieving quality policies and objectives. This helps coordinate and direct Symtech’s activities to meet customer and project requirements. We also believe in continuous improve, that is, improving effectiveness and efficiency on a continual basis.

Our QMS Goals are as follows:

- Meeting the customer’s requirements, which helps to instill confidence in Symtech, in turn leading to more customers, more sales, and more repeat business
- Meeting the organization’s requirements, which ensures compliance with regulations and provision of products and services in the most cost- and resource-efficient manner, creating room for expansion, growth, and profit
- These benefits offer additional advantages, including:
 - Defining, improving, and controlling processes
 - Reducing waste
 - Preventing mistakes
 - Lowering costs
 - Facilitating and identifying training opportunities
 - Engaging staff
 - Setting organization-wide direction
 - Communicating a readiness to produce consistent results

Our QMS Includes:

- Symtech’s quality policy and quality objectives
- Procedures, instructions, and records
- Data management
- Internal processes
- Customer satisfaction from product quality
- Improvement opportunities
- Quality analysis

All aspects of our QMS have a direct impact on project execution.

We utilize **Net Promoter Score (NPS)** to survey our customers once per year. This feedback is carefully analyzed and actions are categorized, noted, and executed upon.



Engineering Documentation Submittals

Symtech will complete and submit the following documents (as applicable) during project execution:

- | | |
|-----------------------------------|-----------------------------------|
| ▪ Installation Drawings | ▪ Acceptance Test Procedure (ATP) |
| ▪ Product Data | ▪ Acceptance Test Log |
| ▪ Shop Drawings | ▪ Training Course Outline |
| ▪ Operation & Maintenance Manuals | ▪ Training Course Material |

Safety Record

Symtech has a flawless safety record. There are zero systems related safety issues or occurrences in our company history. Nearly all other major fire training systems manufacturers have had systems related safety incidents. Symtech personnel has never been involved in a systems related (or non-related) safety incident of any kind at while consulting or employed at a prior fire training systems company.

NFPA Membership & Code Enforcement

Jon Hanson, Principal / Director of Business Development, is a member of the National Fire Protection Association (NFPA). He participated in the development of the new NFPA 1402 Standard on Facilities for Fire Training and Associated Props. “NFPA 1402 provides guidance for the planning of fire service training centers, focusing on the main components necessary to accomplish general fire fighter training effectively, efficiently, and safely” (nfpa.org). The last revision was published February 2019.

In 2019, the new NFPA standard was released. Previously, NFPA 1402 was a Guide. Standards spell out what kind of system and how it must work. Unlike a Guide, the main text of a Standard contains only mandatory provisions using the word “shall” to indicate requirements. Symtech product designs precisely follow the standard.

Pete Romero, Principal / Director of Projects & Engineering, has previously worked at CSA Group as a Special Inspections Representative conducting detailed engineering analysis on unlisted/uncertified industrial equipment. For over 100 years, CSA Group has helped make the world safer and more sustainable through testing inspection, certification, and development of product standards.

Because of his extensive technical expertise of nearly 20 years and in-depth knowledge of applicable standards, he has inspected and written detailed reports for Live Fire Training equipment and installations from all major industry competitors.

This breath of experience directly contributed to the development of the most compliant and safest system platform available.



Safety Certification

All Symtech Live Fire Simulators are fully compliant with NFPA 1402, Standard on Facilities for Fire Training and Associated Props. Delivered systems are certified on-site by an OSHA-recognized Nationally Recognized Testing Laboratory (NRTL). NFPA 1402 requires that Gas-fueled live fire training systems be listed or labeled by a third-party NRTL to ensure compliance with the requirements of the standard.

A full listing of OSHA-approved NRTL's can be found at <https://www.osha.gov/dts/otpc/nrtl/nrtllist.html>.

A list of NRTL's that are no longer recognized can be found at <https://www.osha.gov/dts/otpc/nrtl/recgterm.html>.

There is a difference between labelled and listed.

Labeled – Equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization that is acceptable to the authority having jurisdiction and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

Listed – Equipment, materials, or services included in a list published by an organization that is acceptable to the authority having jurisdiction and concerned with evaluation of products or services, that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services, and whose listing states that either the equipment, material, or service meets appropriate designated standards or has been tested and found suitable for a specified purpose.

Certification Objectives

- a) That the general construction and assembly of the equipment is in accordance with applicable standards and reasonable concepts of safety, substantiality, and durability.
- b) That the general construction and assembly of the equipment is designed with the consideration of the operating environment, that bolts and other fasteners are provided with the required rigidity, and that exposed edges which might be brought in contact with hands during usage or service are smooth.
- c) That the materials used in the construction and assembly of the equipment are suitable for the temperatures to which they will be exposed to.
- d) That all parts of the equipment are secured against displacement, distortion, warping, vibration, or other damage and are supported to maintain a fixed relationship between essential parts, and that such parts are designed so they cannot be incorrectly assembled or aligned when removed for necessary service and/or maintenance.
- e) That the necessary operating and safety controls required by applicable portions of the codes and standards indicated are incorporated in the default configuration of the system.

f) That all purchased components used in the make up the system are listed and/or are selected for the intended application, type, and pressure of the fuel gases to be used and the temperatures to which they are subjected.

g) That redundant protection is provided for all safety critical control functions.

h) That the facility housing the gas utilization equipment is provided with the necessary environmental monitoring systems for assuring the environment is in the intended state for operation of the equipment.

i) That when gas is expelled from all pilot and/or main burners it effectively ignites in an acceptable time frame under all permitted fuel delivery pressures.

j) That flames from all pilot and main burners effectively ignites and fully propagates over all gas ports over the entire length of the burner.

k) That all ignition sources effectively ignite the main burner gas in an acceptable time frame when the ignition source is at the control system detected minimum.

k) That all safety devices are selected, applied, and installed in accordance with this standard and the manufacturer’s instructions.

The gas utilization system manufactured and assembled by Symtech Fire is compliant with applicable portions of the following nationally recognized codes and standards, as well as with sound engineering and industry accepted practices for fuel utilization equipment.

- NFPA 1402 – Standard on Facilities for Fire Training and Associated Props
- NFPA 54 – National Fuel Gas Code
- NFPA 58 – Liquefied Petroleum Gas Code
- NFPA 70 – National Electrical Code
- NFPA 86 – Standards for Ovens and Furnaces
- UL508A – Industrial Control Panels Standard for Safety

PROJECT INFORMATION REPORT
FORM NUMBER: 1000-0001



**Special Inspection /
Field Evaluation Report
Fuel Burning Appliances**

Project Name: **2014-176**
Date Issued: **03/03/2015**

Issued by: **Symtech Fire LLC**
2015 Fire Safety Building, 1017922

Approved: **Leah S. Hall**

Inspection Location: **3 River Road, Berkeley Heights, NJ 07922**

COMMENTS
Pages: 1 to 1
Job #: **176-14-176**
Job #: **176-14-176**

SCOPE
Inspection of Fuel Burning Appliances and Electrical Systems for industrial use only.

REFERENCE STANDARDS
NFPA 86 – Standards for Ovens and Furnaces
The CSA code, applied by the CSA Self-Inspection, and Inspection. All applicable standards are listed and are applicable. The specific codes which are the subject of this report are the following: CSA Special Inspection Field Evaluation – Fuel Burning Appliances (L-4040).

CSA Label Number	Unit Model Name / Manufacturer	Model Number	Serial Number
4040	Stovetop Fire	ST-270	1002

Field	Project	Minimum Input Rating	25,000,000 BTU/h
Max. Natural Gas Pressure	05 psig	Electrical Input Rating	200 kW (Phase 1/2/3)
Max. Liquefied Gas Pressure	30 psig	Electrical Input Rating	25 kW (Phase 1/2/3)
Supply Gas Pressure	30 psig		

This report shall not be reproduced, stored in a retrieval system, or used in any way without the written permission of Symtech Fire.
Evaluation made under this Special Inspection/Field Evaluation Service shall not be considered as the operation of the Code Commission.

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Field Evaluation Report

End-User Training / Train-the-Trainer

NFPA 1402 now requires the inclusion of operation and maintenance (O&M) training in with all fire training equipment. Accordingly, Symtech includes operation and maintenance training with all live simulator equipment sales. Training must include the following:

- Visual Inspections
- Operation
- Maintenance
- Shutdown

Symtech provides detailed operation and maintenance training manuals with every purchase. This includes hard copies and a digital version. Per NFPA 1402, manuals include schematics, start-up procedures, shutdown procedures, emergency procedures, and maintenance procedures.

Understanding department needs and turnover, we also offer re-fresher training programs for existing customers. We aim to ensure your department is fully self-sufficient in operation and maintenance of your training system. We also offer comprehensive service and maintenance programs.

Our goal is to ensure world-class service and an exceptional experience from start to finish and throughout the life of your training equipment!

For Advanced Train-the-Trainer Programs and Fire Behavior courses, Symtech partners with On-Scene Training who delivers world-class instructor development from Certified Fire Instructors.



Warranty

All products sold typically include an industry standard limited one-year warranty. Extended warranties are available. Below is Symtech's standard warranty description.

1-YEAR STANDARD WARRANTY

The essential purpose of any sale or contract for sale of any of the products listed in the SYMTECH catalog, price list, bid, or proposal is the furnishing of that product. It is expressly understood that in furnishing said product, SYMTECH does not agree to insure the Purchaser against any losses the Purchaser may incur, even if resulting from the malfunction of said product.

SYMTECH warrants that the equipment herein shall conform to said descriptions as to all affirmation of fact and shall be free from defects of manufacture, labeling and packaging for a period of one (1) year from the delivery date to the original purchaser, provided that product photos, detailed information, maintenance record, and the physical training unit(s) is made available to SYMTECH for inspection. Upon a determination by SYMTECH that a product is not as warranted, SYMTECH shall, at its exclusive option, replace or repair said defective product or parts thereof at its own expense except that Purchaser shall pay all shipping, insurance and similar charges incurred in connection with the replacement of the defective product or parts thereof. Wherever possible, Symtech incorporates thermal insulation, heat shields, and/or expansion joints in its live fire training products. Some planned deformation is expected over time and is explicitly excluded from this Warranty. This Warranty is void in the case of abuse, misuse, abnormal usage, faulty installation or repair by unauthorized persons, or if for any other reason SYMTECH determines that said product is not operating properly as a result of causes other than defective manufacture, labeling or packaging.

The Aforesaid Warranty Is Expressly Made In Lieu Of Any Other Warranties, Expressed Or Implied, It Being Understood That All Such Other Warranties, Expressed Or Implied, Including The Warranties Of Merchantability And Fitness For Particular Purpose Are Hereby Expressly Excluded. In No Event Shall Symtech Be Liable To Purchaser For Any Direct, Collateral, Incidental Or Consequential Damages In Connection With Purchaser's Use Of Any Of The Products Listed Herein, Or For Any Other Cause Whatsoever Relating To The Said Products. Neither Symtech Nor Its Representatives Shall Be Liable To The Purchaser Or Anyone Else For Any Liability, Claim, Loss, Damage Or Expense Of Any Kind, Or Direct Collateral, Incidental Or Consequential Damages Relative To Or Arising From Or Caused Directly Or Indirectly By Said Products Or The Use Thereof Or Any Deficiency, Defect Or Inadequacy Of The Said Products. It Is Expressly Agreed That Purchaser's Exclusive Remedy For Any Cause Of Action Relating To The Purchase And/or Use Of Any Of The Products Listed Herein From Symtech Shall Be For Damages, And Symtech's Liability For Any And All Losses Or Damages Resulting From Any Cause Whatsoever, Including Negligence, Or Other Fault, Shall In No Event Exceed The Purchase Price Of The Product In Respect To Which The Claim Is Made, Or At The Election Of Symtech, The Restoration Or Replacement Or Repair Of Such Product.

APPENDIX A – KEY PERSONNEL (EXPANDED)

Key Staff & Personnel

The following summarizes our key staff and personnel in expanded detail:



Jon Hanson, MSPM, Managing Director

Location: Berkeley Heights, NJ

Jon Hanson's family history in gas-fueled live fire training systems began in the 1970's. His Father, Jim Hanson, was one of the pioneers of the earliest propane fueled fire training system technology for the United States Navy beginning in 1979. Jim, in multiple roles for Symtron Systems, Inc., led the development of more than one dozen Navy surface (shipboard) and sub-surface (submarine) live fire training facilities. He advocated for an extension of the technology into other market segments beginning with FDNY as the first Municipal customer in 1987 and Fayetteville Airport as the first large-area propane-fueled fuel spill trainer in 1992.

Jon began his career in gas-fueled live fire training systems with Kidde Fire Trainers (then owned by United Technologies Corporation) in 2005 in Marketing. He ran Sales & Marketing for the company for North America, Latin America and China and also Project Managed several high profile installations. In his tenure there, Jon invented numerous products including the Portable Fire & Hazmat Fire Trainer, Mobile Hazmat/WMD Trainer, Hazmat Rollover Tanker Trainer, and Mobile Arson Investigation Training Unit. After eight years in a variety of roles at Kidde, Jon left the Company. He began Consulting for Fireblast Global, Inc. in 2013. Under a five year contract where he ran the company's global sales and marketing, Jon led a significant geographic and product line expansion. The company's product portfolio boomed from 10 products to more than 30 during that time and its geographic reach went from two countries to more than 20.

Jon is a certified fire fighter in NJ. He holds a Bachelor's Degree in Management Science and a Master of Science in Project Management (MSPM) from Boston University. He has an advanced Graduate Certificate in Training & Development.



Pete Romero, Director of Engineering

Location: Los Angeles, CA

Pete Romero's experience in gas fueled flame effects began in the early 2000's. Pete began his flame effects career at WET Design, WET is an integrated architecture, design, manufacturing, and engineering firm that creates water fountains and experiences all over the world. An industry leader of the world's most iconic water and fire features such as The Bellagio Hotel and The Mirage Hotel in Las

Vegas. In 2002, Pete worked for 10 years as Director of Field Services where he was responsible for overseeing the installation, accuracy, and design integrity of numerous multimillion-dollar flame effect projects throughout the world. Pete's responsibilities also included management of flame effect

equipment compliance and certification. He has worked directly with testing agencies and laboratories to achieve product certification.

In 2012, Pete left WET Design and joined Fireblast Global, Inc. Fireblast is a Firefighter equipment manufacture of Industrial, Commercial, Home, Maritime and Aircraft live fire training simulators. Pete began worked for 7 Years in Fireblast's engineering department, culminating his tenure there as head of the department. He was responsible for the development of several fire training products such as the B-737, F-18, F-35, Hazmat Tankers, Maritime Ship Trainer, Large Flammable Liquids Spill, File Cabinets, BBQ Grill, Double Bed, Single Bed and Balcony Live Fire Simulators. Pete's responsibilities also encompassed overseeing the installation accuracy and design integrity of flame effect projects worldwide and managing of the flame effect equipment compliance and certification.

In 2019, Pete left Fireblast Global, Inc. and joined CSA Group. CSA is a global organization dedicated to safety, social good and sustainability. CSA is a leader in Standards Development and in Testing, Inspection and Certification around the world including Canada, the U.S., Europe, and Asia. CSA provides global product testing and certification for a wide variety of commercial products, industrial products, and flame effects equipment. As a leading standards organization, CSA is the trusted product certification experts. Pete's responsibilities included performing field evaluations on custom equipment with the objective of validating regulatory compliance. His expertise relates specifically to gas fueled Live Fire Training Simulators and Flame effects, including for major theme parks such as Disneyland and Universal Studios. He is an equipment expert including custom electrical, gas, and mechanical equipment from industrial control panels, automated manufacturing, semiconductor fabrication, luminaires, switchboards, robotics, heating and cooling, distributed generation and energy storage systems.



Byron Charbonneau, Mechanical Engineer

Location: Foothills, AB

Byron has over 20 years of experience as a mechanical design engineer in the automotive, aerospace, fire training, and renewable energy fields. His mechanical aptitude and skills to design and develop a wide array of complex mechanical and electrical equipment make him an asset to any project.

Byron was part of Draeger Safety from 2007 through 2017 where he worked on countless product and infrastructure design projects including Structural, Outdoor, Mobile Structural, and Fire Behavior training units. In addition to his design expertise, Byron is experienced with PLC controlled electrical equipment and human machine interfaces (HMI). He integrated and installed the Draeger training products into multiple, diverse large scale projects.

Byron contributed significantly to the NFPA 1402 Standard on Fire Training Facilities and Associated Props. Additionally, he has an extensive fire fighting background, having served as both a volunteer and paid firemen in Alberta.



Lucas Sanz, Mechanical Engineer

Location: Berkeley Heights, NJ

Lucas has over 15 years of experience as a Mechanical Engineer. He holds degrees in Project Management and Mechanical Engineering. He is well versed in vapor and liquid pipe trains, flame pilot ignitions systems, safety instrumentation, and steel prop design. Lucas' time is split between facility interface (applications engineering) and product design.

Lucas has worked on dozens of fire training product designs and Facility Interface Documents (FIDs) in his career. Lucas led the design of the newest FDNY Fire Training Simulator for Symtech.



Vercelis Samaniego, Project Engineer

Location: Berkeley Heights, NJ

Vercelis has over 20 years of combined mechanical design and project engineering experience within manufacturing and construction industry. He excels in preparation of Facility Interface Documents (FIDs) for new fire training facility projects. Vercelis has extensive experience with metal framing design, sheet metal design, and piping layout and design. His knowledge of Project Management, Project Control, and Total Quality Management (TQM) adds to his value in larger, more complex projects.

Vercelis worked at Symtron/Kidde Fire Trainers from 2001 to 2012 as a Mechanical Engineer. His advanced educational background includes a Master's Degree in Engineering Management.



Ross Riddell, Field Construction Manager

Location: Pembroke Pines, FL

Ross has over 30 years of experience in the Public Safety field that covers fire and rescue training and response, as well as incident management at both the operational and executive level. He was the Deputy Public Safety Manager of Auckland International Airport (AKL) in New Zealand. From there, Ross was retained by Fire Control Fiji Limited and the Fijian Government to revamp the Fire and Rescue services for the Country. Tasks included the establishment of a National Response team for all emergencies on the island, preparation of a transferable incident management plan between services, establishing co-operative and functional relationships with all emergency services in the provision of a strategic emergency response management system, and set up of effective and efficient administrative procedures to ensure the capability to maintain the collective response systems established.

Ross has led numbers field construction efforts for both new construction and major renovations.

He has been involved in the planning, conceptualization, and project management of major fire related infrastructure and training facility projects domestically and abroad. Ross was Client Representative for the concept, design and construction management of an \$18 million ARFF Trainer (*including LPG fires*) at Pago Pago Int'l Airport (PPG). Ross has consulted for AECOM Engineering as part of their Aviation

Rescue Firefighting Team. He was also formerly contracted to the World Bank through the Technical and Fiduciary Services Unit (TFSU) as their Fire and Rescue consultant under the World Bank Airport Improvement Program.

Anthony Eckeresall, Lead Software Engineer

Location: Los Angeles, CA

Anthony is the on-staff lead for all Symtech software programs, including for Structural Fire Simulator ST/ST-PRO systems. Anthony has over two decades of experience in program development.

Oscar Gonzalez, Panel/Electrical Fabricator

Location: Los Angeles, CA

Oscar is Symtech's lead Flame Control Panel (FCP) Electrical Fabricator. He has over 15 years of electrical fabrication and panel building experience.



Chief (Ret.) Jim Nilo, C.M., ACE, IACE, Commissioning/Training Manager

Location: Richmond, VA

Jim is a retired Fire Chief from Richmond International Airport (RIC) and part-time instructor for Virginia Department of Fire Programs (VDFP). Jim led the project planning, budgeting and procurement for the first ever Mobile Aircraft Simulator for the VDFP in the late 1990's manufactured by Symtron Systems, Inc. He has been involved in commissioning and training of numerous training projects in his career.

After retiring from RIC, Jim joined Jon Hanson and the Fireblast team where Jim worked in technical publications, project development, and he provided end-user training. Jim leads the Technical Publications Department (O&M Manuals) Department for Symtech.

Outside of his role with Symtech, Jim consults for AAAE , the American Authority of Airport Executives.



Greg Pascola, Field Installation/Fire Behavior Expert

Location: Los Angeles, CA

Greg Pascola recently retired from a 38-year career with Los Angeles Fire Department, CA. Separately, he is a living legend in fire behavior, excelling in knowledge, teaching, and product development. Greg was in at the ground floor when the first Flashover Training Units were brought to the US market.

In addition to providing design input to the Flashover Simulators (including many iterations and improvements), Greg worked as a fabricator and on-site installation/assembly foreman. More importantly, Greg established the original training curriculum for fire behavior training and observation. Few individuals understand the nuances of fire behavior better, from fuel-loading, to thermal layering, and much more. Greg collaborated with New York City fire fighters to incorporate their

learnings on smooth-bore nozzles and their effectiveness at piercing thermal layers without disruption into his teachings.

Greg is a long-tenured fire officer, instructor, and he is a fire training systems expert with strong mechanical aptitude.



Linda Feng, Customer Service Manager

Location: Los Angeles, CA

Linda leads Symtech’s Customer Service Department. She manages both full and part-time service team members, including scheduling and dispatch.

Prior to joining Symtech, Linda led the customer service organization for several small and medium size companies in a variety of industries ranging from flame and water effects to heavy industrial equipment.



John “Bart” Simpson, Field Service Technician

Location: Osceola County, FL

John “Bart” Simpson is a 42-year veteran and student of the Fire Service. He started his fire service career with the Peters Township Fire Department (Pa), where he held the rank of Captain. John then moved to Florida where he has worked for Palm Bay Fire Rescue, Titusville Fire Department and is currently employed by Osceola County Fire Rescue assigned to Tower Ladder 72.

He has held the position of Training Officer with all the departments he has worked for. John currently teaches at The Central Florida Fire Institute, as well as Gaston College and On Scene Training Associates LLC. He has taught for Brevard Community College Fire Training Academy. He also has been an Instructor at FDIC, FDIC East, Firehouse Expo, Firehouse World and has been featured on Fire Engineering’s “Training Minutes” along with teaching nationally and internationally. John is the lead instructor for his department’s Truck Company Operations program. He is one of the founding members of the Fraternal Order Of Leatherheads Society (F.O.O.L.S. International).

Bart is a part-time Field Service Technician for Symtech.



Maria Oubina, Marketing / Office Manager

Location: Berkeley Heights, NJ

Maria is responsible for external product development research, pricing, web and social media, and accounts payable. She holds a Bachelor’s Degree from Montclair State University and a Master’s Degree from Fairleigh Dickinson University. Maria joined Symtech in 2020. Prior to her tenure with Symtech, she provided Marketing Consulting for small and large firms for more than 10 years.



Paul Ellis, Project Development

Location: Cambridge, ON

Paul has extensive fire training systems experience. He worked at Pro Safe Fire Training Systems, Inc. and Fireblast Global for 5 years each respectively, prior to joining Symtech in 2021. Throughout his career, Paul has been involved in the planning, budgeting, and execution of more than 45 fixed and mobile training facilities.

Paul supports Symtech customers with identifying optimal solutions that meet both their training needs and budgets. He prepares detailed performance specifications, proposals, and helps coordinate with other trades for comprehensive planning estimates.

Paul holds a Bachelor's Degree from the University of Toronto.