

East Greenbush Fire District #3

Live Fire Training SOG & Checklists

Purpose: To provide a guideline for conducting live fire training evolution (s) to ensure that they are conducted in safe facilities and that the exposure to health and safety hazards for the firefighters receiving the training is minimized.

Procedure: Written permission must be obtained from the property owner prior to conducting any training evolutions. The District must obtain a copy of the cancelled insurance on the structure or vehicle before any training is started. If the property owner requests it, a letter of indemnification and a copy of the Districts Certificate of Insurance will be provided.

Any acquired structure and vehicle that is to be used for live fire training evolution shall be prepared appropriately for the training evolution following the NFPA standard, #1403. All hazardous conditions shall be removed or neutralized as to not present a safety problem during the use of the structure. A search of the structure shall be conducted to ensure that no unauthorized persons, animals, or objects are in the building immediately prior to ignition.

Prior to conducting actual live fire training evolutions, a pre-burn briefing session shall be conducted for all participants in which all facets of each evolution to be conducted are discussed and assignments made for all crews participating in the training are given. The location of simulated victims shall not be required to be disclosed, provided that the possibility of the victims is discussed during the briefing. No live members will play the role of a victim inside of the building.

The officer in charge shall assess the selected fire room environment for factors that can affect the growth, development, and spread of the fire. Fuel materials shall be used only in the amounts necessary to create the desired fire size. The fuel load shall be limited to avoid conditions that could cause an uncontrolled flashover or back draft. Only one fire at a time shall be permitted within the structure. No crews will operate or be placed above the fire room or floor.

One officer (instructor) shall be assigned to each functional crew; crew shall not exceed five firefighters. A safety officer, plus additional safety personnel as deemed necessary, shall be located in and or around the structure to react to any unplanned or threatening situations or conditions.

Each participant shall be equipped with full protective clothing and self-contained breathing apparatus (SCBA). All participants shall be inspected by the safety officer prior to entry into the structure to ensure that the protective clothing and SCBA are being worn properly.

One person shall be designated as the ignition officer. The ignition officer shall wear full protective clothing, including SCBA, when performing this control function. A charged hose line shall accompany the ignition officer when he is igniting the fire. The decision to ignite the training fire shall be made by the officer in charge in coordination with the safety officer. The fire shall be ignited by the ignition officer in the presence of the safety officer.

During the live fire evolutions, the incident command system shall be in operation. It is mandatory that the Districts accountability system be used during ALL live fire evolutions. For any live fire evolution, the Live Fire Evolution Checklist shall be used. A post-training critique shall be conducted to evaluate firefighter performance and to reinforce the training that was covered.

Rev. 8/29/03

The following records and reports shall be maintained on all live fire training evolutions and placed in the training file in the Chiefs Office:

- (1) Written permission from the property owner to use building or vehicle.
- (2) Written confirmation of no insurance on building or vehicle.
- (3) Clear title and registration for vehicle
- (4) Copy of Districts Certificate of Insurance.
- (5) Copy of letter of indemnification.
- (6) An accounting of the activities conducted.
- (7) A listing of all officers (instructors) present.
- (8) A listing of all participants.
- (9) Any injuries incurred and treatment received.
- (10) Live Fire Evolution Checklists.

Rev. 8/29/03

East Greenbush Fire District #3

Live Fire Training Checklist

Training Date: ____/____/____ Training Location: _____

- Neighboring residents and /or business.

Pre-burn Planning

Drawings made showing the following:

- ____ Floor plan – rooms to be burned
- ____ Location of Command Post
- ____ Position of apparatus
- ____ Position of hoses
- ____ Emergency escape routes
- ____ Location of Staging
- ____ Location of EMS Staging

Separate water sources established for attack and safety hoselines.

Operations area established.

Communication frequencies established.

Required water supply

Reserve water supply (+50%)

Building Preparation

- Building inspected to determine structural integrity
- Ventilation openings pre-cut in each roof area
- Windows and glass removed
- Doors open and close properly
- Water heater removed or vented
- Utilities disconnected
- Stairways are safe

Pre-burn Procedures

Participants briefed on:

- Building layout
- Crew and instructor assignments
- Safety rules
- Evacuation procedures

Hose lines, tools, and SCBA checked

Fire “sets” prepared:

- Class A materials only
- No flammable/combustible liquids

Notifications made:

- East Greenbush Communications
- Rensselaer County Communications

Pre-burn Comments

Post-burn Procedures

All personnel accounted for

Overhaul complete

Critique performed

Equipment ready for service

If necessary, Bldg and property released to owner.

Notifications made:

- East Greenbush Communications
- Rensselaer County Communications

Live Burn Personnel Roles

Incident Command: _____

Exterior Safety Officer: _____

Interior Safety Officer: _____

Ignition Officer: _____

Apparatus Operators:

E-3: _____

E-6: _____

E-7: _____

E-8: _____

E-9: _____

T-11: _____

Team Leaders / Instructors:

Team #1: _____

Team #2: _____

Team #3: _____

Team #4: _____

Burn #1: Attack – Team #____ Backup – Team #____ Safety – Team #____ SAR – Team #____

Burn #2: Attack – Team #____ Backup – Team #____ Safety – Team #____ SAR – Team #____

Burn #3: Attack – Team #____ Backup – Team #____ Safety – Team #____ SAR – Team #____

Burn #4: Attack – Team #____ Backup – Team #____ Safety – Team #____ SAR – Team #____

Team # 1 Members:

Team # 2 Members:

Team # 3 Members:

Team # 4 Members:

Post-burn Comments

Total Water Supply =

$$\frac{\text{Total Volume of structure} \times \text{Construction Class Number}}{\text{Occupancy Hazard Class Number}}$$

NFPA 1142 - 6.2* Construction Classification Number:

- **6.2.2 Type I Construction [Construction Classification Number 0.5].** Type I construction shall be that type in which the structural members, including walls, columns, beams, girders, trusses, arches, floors, and roofs, are of approved noncombustible or limited-combustible materials and shall have fire resistance ratings not less than those specified in Table 3.1 in NFPA 220.
- **6.2.3 Type II Construction [Construction Classification Number 0.75].** Type II construction shall be that type not qualifying as Type I construction in which the structural members, including walls, columns, beams, girders, trusses, arches, floors, and roofs, are of approved noncombustible or limited-combustible materials and shall have fire resistance ratings not less than those specified in Table 3.1 in NFPA 220.
- **6.2.4* Type III Construction [Construction Classification Number 1.0].** Type III construction shall be that type in which exterior walls and structural members that are portions of exterior walls are of approved noncombustible or limited-combustible materials, and interior structural members, including walls, columns, beams, girders, trusses, arches, floors, and roofs, are entirely or partially of wood of smaller dimensions than required for Type IV construction or of approved noncombustible, limited-combustible, or other approved combustible materials. In addition, structural members shall have fire resistance ratings not less than those specified in Table 3.1 in NFPA 220.
- **6.2.5 Type IV Construction [Construction Classification Number 0.75].** Type IV construction shall be that type in which exterior and interior walls and structural members that are portions of such walls are of approved noncombustible or limited-combustible materials. Other interior structural members, including columns, beams, girders, trusses, arches, floors, and roofs, shall be of solid or laminated wood without concealed spaces and shall comply with the provisions of 6.2.5.1 through 6.2.5.5. In addition, structural members shall have fire resistance ratings not less than those specified in specified in Table 3.1 in NFPA 220.
- **6.2.6 Type V Construction [Construction Classification No. 1.5].** Type V construction shall be that type in which exterior walls, bearing walls, columns, beams, girders, trusses, arches, floors, and roofs are entirely or partially of wood or other approved combustible material smaller than material required for Type IV construction. In addition, structural members shall have fire resistance ratings not less than those specified in specified in Table 3.1 in NFPA 220.

NFPA 1142 - 5.2* Occupancy Hazard Classification Number:

5.2.1* Occupancy Hazard Classification 3 - Occupancy Hazard Classification 3 shall be used for severe hazard occupancies. This classification shall include occupancies with operations or functions similar to the following:

(1) Cereal or flour mills

(2) Combustible hydraulics

- | | |
|---|---|
| (3) Cotton picker and opening operations | (12) Plastic processing |
| (4) Die casting | (13) Plywood and particle board manufacturing |
| (5) Explosives and pyrotechnics manufacturing and storage | (14) Printing using flammable inks |
| (6) Feed and gristmills | (15) Rubber reclaiming |
| (7) Flammable liquid spraying | (16) Sawmills |
| (8) Flow coating/dipping | (17) Solvent extracting |
| (9) Linseed oil mills | (18) Straw or hay in bales |
| (10) Manufactured homes/modulars | (19) Textile picking |
| (11) Metal extruding | (20) Upholstering with plastic foams |

5.2.2* Occupancy Hazard Classification 4 - Occupancy Hazard Classification 4 shall be used for high hazard occupancies. This classification shall include occupancies having conditions similar to the following:

- | | |
|---|--|
| (1) Barns and stables (commercial) | (8) Paper and pulp mills |
| (2) Building materials supply storage | (9) Paper processing plants |
| (3) Department stores | (10) Piers and wharves |
| (4) Exhibition halls/Auditoriums/Theaters | (11) Repair garages |
| (5) Feed stores (without processing) | (12) Rubber products mfg and storage |
| (6) Freight terminals | (13) Warehouses, such as those used for furniture, general storage, paint, paper, and woodworking industries |
| (7) Mercantiles | |

5.2.3* Occupancy Hazard Classification 5 - Occupancy Hazard Classification 5 shall be used for moderate hazard occupancies, in which the quantity or combustibility of contents is expected to develop moderate rates of spread and heat release. This classification shall include occupancy locations similar to the following:

- | | |
|--|-------------------------------------|
| (1) Amusement occupancies | (9) Lithography shops |
| (2) Clothing mfg plants | (10) Machine shops |
| (3) Cold storage warehouses | (11) Metalworking shops |
| (4) Confectionery product warehouses | (12) Nurseries (plant) |
| (5) Farm storage buildings | (13) Pharmaceutical mfg plants |
| (6) Laundries | (14) Printing and publishing plants |
| (7) Leather goods mfg plants | (15) Restaurants |
| (8) Libraries (with large stockroom areas) | (16) Rope and twine mfg plants |

- | | |
|-------------------------|---------------------------|
| (17) Sugar refineries | (20) Tobacco barns |
| (18) Tanneries | (21) Unoccupied buildings |
| (19) Textile mfg plants | |

5.2.4* Occupancy Hazard Classification 6 - Occupancy Hazard Classification 6 shall be used for low hazard occupancies, in which the quantity or combustibility of contents is expected to develop relatively low rates of spread and heat release. This classification shall include occupancy locations similar to the following:

- | | |
|--|--|
| (1) Armories | (14) Foundries |
| (2) Automobile parking garages | (15) Fur processing plants |
| (3) Bakeries | (16) Gasoline service stations |
| (4) Barber or beauty shops | (17) Glass and glass products mfg plants |
| (5) Beverage mfg plants/breweries | (18) Horse stables |
| (6) Boiler houses | (19) Mortuaries |
| (7) Brick, tile, and clay product mfg plants | (20) Municipal buildings |
| (8) Canneries | (21) Post offices |
| (9) Cement plants | (22) Slaughterhouses |
| (10) Churches and religious structures | (23) Telephone exchanges |
| (11) Dairy products mfg and processing | (24) Tobacco mfg plants |
| (12) Doctor offices | (25) Watch and jewelry mfg plants |
| (13) Electronics plants | (26) Wineries |

5.2.5* Occupancy Hazard Classification 7 - Occupancy Hazard Classification 7 shall be used for light hazard occupancies, in which the quantity or combustibility of contents is expected to develop relatively light rates of spread and heat release. This classification shall include occupancy locations similar to the following:

- | | |
|-----------------------------------|--|
| (1) Apartments | (8) Hospitals |
| (2) Colleges and universities | (9) Hotels and motels |
| (3) Clubs | (10) Libraries (excl. large stockroom areas) |
| (4) Dormitories | (11) Museums |
| (5) Dwellings | (12) Nursing and convalescent homes |
| (6) Fire stations | (13) Offices (including data processing) |
| (7) Fraternity or sorority houses | (14) Police stations |

(15) Prisons

(17) Theaters without stages

(16) Schools

Example: 14' x 60' mobile home with 8' ceilings

Total Volume = 6,720 (14x60x8)

CCN = 1.5

OHC = 3

The total water supply needed is 3,360 gallons, plus an additional 50% reserve equals a total of 5,040 gallons on the scene at the start of the drill.

(Draw layout of structure and placement of apparatus, hose lines, command post, means of egress)



Prepared By: _____

Title: _____ Date: _____

VERIFICATION, NOTIFICATION, and ACKNOWLEDGEMENT

Instructor-in-Charge: _____ **Date:** _____

Safety Officer: _____ **Date:** _____

RESPONSIBILITIES OF PERSONNEL

Instructor-in-Charge:

1. Plan and coordinate all training activities
2. Monitor activities to ensure safe practices
3. Inspect building integrity prior to each fire
4. Assign instructors:
 - Attack hoselines
 - Backup hoselines
 - Functional assignments
 - Teaching assignments
5. Brief instructors on responsibilities:
 - Accounting for assigned students
 - Assessing student performance
 - Clothing and equipment inspection
 - Monitoring safety
6. Assign coordinating personnel, as needed:
 - Achieving tactical and training objectives
 - Emergency medical services
 - Communications
 - Water supply
 - Apparatus staging
 - Equipment staging
 - Breathing apparatus
 - Personnel welfare
 - Public relations
7. Ensure adherence to this standard by all persons within the training area

Safety Officer:

1. Prevent unsafe acts
2. Eliminate unsafe conditions
3. Intervene and terminate unsafe acts
4. Supervise additional safety personnel, as needed
5. Coordinate lighting of fires with instructor-in-charge
6. Ensure compliance of participants' personal equipment with applicable standards:
 - Protective clothing
 - SCBA
 - Personal alarm devices, where used
7. Ensure that all participants are accounted for, both before and after each evolution

Instructor:

1. Monitor and supervise assigned students (no more than five per instructor)
 2. Inspect students' protective clothing and equipment
 3. Account for assigned students, both before and after evolutions
-

Student:

1. Acquire prerequisite training
2. Become familiar with building layout
3. Wear approved full protective clothing
4. Wear approved self-contained breathing apparatus
5. Obey all instructions and safety rules
6. Provide documentation of prerequisite training, where from an outside agency

East Greenbush Fire District #3

Vehicle Fire Training Checklist

Training Date: ____/____/____ Instructor in Charge: _____

Pre-burn Planning

Drawings made showing the following:

- ____ Vehicle being burned
- ____ Location of Command Post
- ____ Position of apparatus
- ____ Position of hoses
- ____ Location of EMS Staging

Required water supply

Reserve water supply (+50%)

Vehicle Preparation

- Fluid reservoirs emptied
- Shock absorbers removed / vented
- Drive shafts removed / vented
- Tires deflated to prevent roll or vehicle stabilized
- Trunk checked for hazardous materials
- Occupant compartment checked for hazardous materials

Pre-burn Procedures

Participants briefed on:

- Type of vehicle being burned
- Terrain around vehicle
- Crew and instructor assignments
- Safety rules
- Emergency Procedures

Hose lines, tools, and SCBA checked

Class A fuel prepared – No flammable/combustible liquids

Notifications made:

- East Greenbush Communications
- Rensselaer County Communications

Post-burn Procedures

All personnel accounted for

Overhaul complete

Critique performed

Equipment ready for service

Notifications made:

- East Greenbush Communications
- Rensselaer County Communications

Live Burn Personnel Roles

Incident Command: _____

Exterior Safety Officer: _____

Ignition Officer: _____

Apparatus Operators:

E-3: _____

E-6: _____

E-7: _____

E-8: _____

E-9: _____

T-11: _____

Team Leaders:

Team #1: _____

Team #2: _____

Team #3: _____

Team #4: _____

Pre-burn Comments

Burn #1: Attack – Team # _____

Backup – Team # _____

Burn #2: Attack – Team # _____

Backup – Team # _____

Burn #3: Attack – Team # _____

Backup – Team # _____

Burn #4: Attack – Team # _____

Backup – Team # _____

Team # 1 Members:

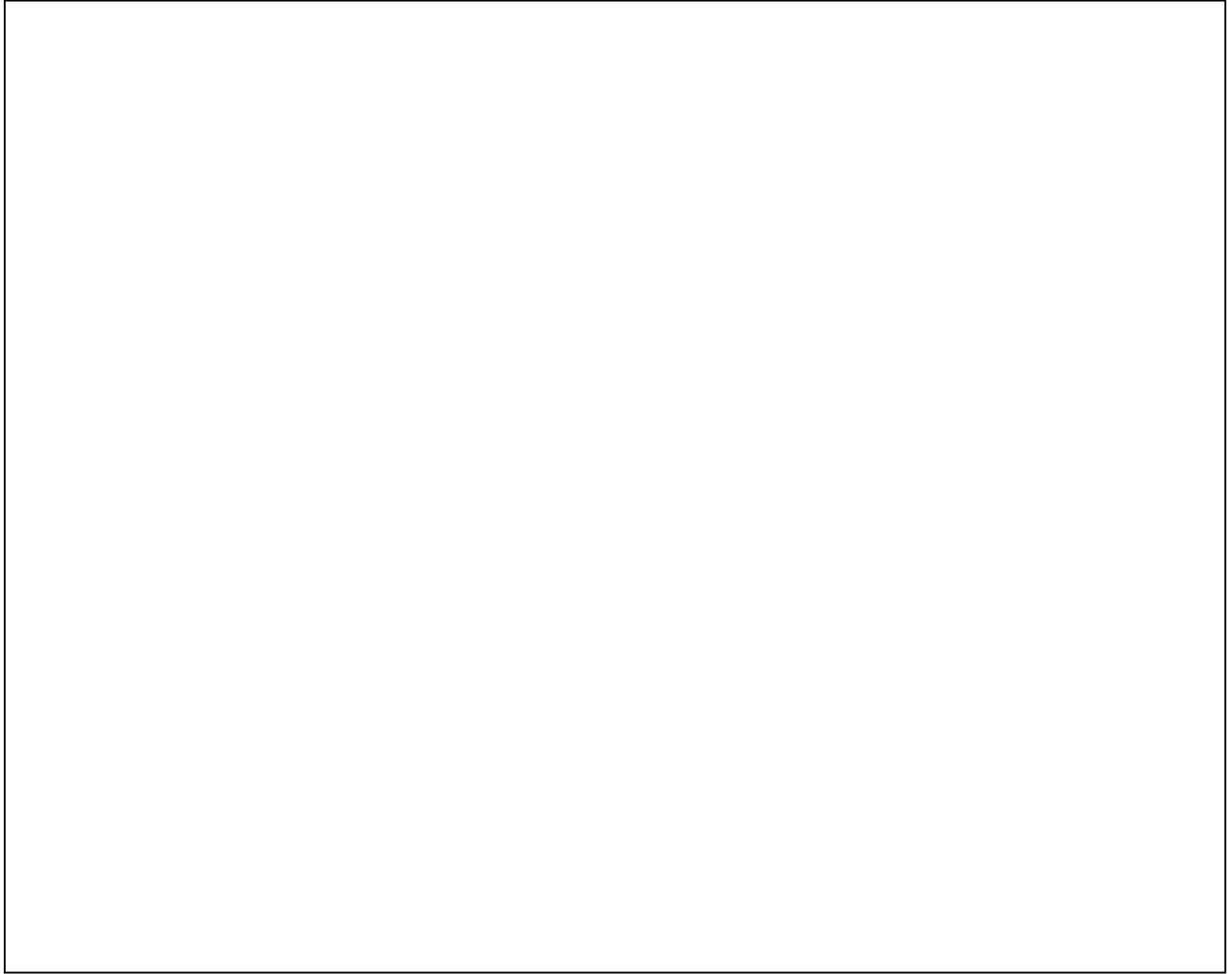
Team # 2 Members:

Team # 3 Members:

Team # 4 Members:

Post-burn Comments

(drawing of vehicle and exposures, apparatus and hose line placement, command post)

A large, empty rectangular box with a thin black border, intended for a drawing of vehicle and exposures, apparatus and hose line placement, and command post.

Prepared By: _____

Title: _____ Date: _____