



**BROWARD COUNTY SHERIFF'S OFFICE  
DEPARTMENT OF FIRE RESCUE AND EMERGENCY SERVICES  
FIRE PREVENTION BUREAU**

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***Outdoor Fireworks Display Site Checklist***

Tech Arrival Time: \_\_\_\_\_ am/pm      Show Time: \_\_\_\_\_ pm      Show Time Start: \_\_\_\_\_ pm  
Show Time End: \_\_\_\_\_ pm      Show Time Duration: \_\_\_\_\_ min      Waiting Period: \_\_\_\_\_ min

**DOCUMENTATION:**

- FMB Personnel to get a copy of paperwork packet from PSB. Packet includes: operator staff credentials, delivery routing of fireworks, insurance, technician operating plan, certification of mortars, site plan, contact numbers, times, permit approvals, etc.

**SECURITY:**

- FMB Personnel to verify Operator staff as per approved application: \_\_\_\_\_  
\_\_\_\_\_
- Fireworks are not to be left unattended at any time upon arrival at the display site. Fireworks or Pyrotechnic materials shall be protected from direct access by the public. (NFPA 1123-7.5.7.1)

**COMMUNICATIONS & SUPPLIES:**

- FMB Personnel to verify Nextel, cell phone, and/or radio communications have been established between site supervisor, operators, technicians, FMB Personnel.
- FMB personnel to have the following items: fire line tape, binoculars, cell phone, walkie-talkie, and/or radio communications with dispatch, display operators, city representative and fire watch personnel. Fire watch personnel to bring personal items such as water, food, sun screen, and bug spray, etc.; as fire watch personnel can not leave area during assigned fire watch detail.

## GENERAL SITE SET-UP:

- Have the road access points between the general public and the display area and fall out area been secured with barricades, security, staff, cones, and fire line tape, etc.?
- Have the display area and the fall out areas been secured from foot traffic?
- Mortars shall be inspected carefully for defects, such as dents, bent ends, damaged interiors, and damaged plugs. Defective mortars shall not be used. (NFPA 1123-4.3.1)
- Mortars shall be positioned and spaced so that shells are propelled over the fallout area and to afford maximum protection to the shooter and loader. BSO approved mortar placement and distances is for vertical mortar placement. (NFPA 1123-4.3.2)
- Mortars shall be inspected before first shells are loaded to ensure that no water or debris has accumulated in bottom of the mortar. (NFPA 1123-4.3.6)
- Shells shall be inspected by operator or assistants following delivery to display site. Any shells having tears, leaks, broken fuses, or signs of having been wet shall be set aside and not fired. Limited repairs are permitted. (NFPA 1123-4.2.3.2)
- FMB personnel are to verify quantity, quality and size of shells being used by operator through delivery slips, approved paperwork packet and/or physical shells identification.
- Weather-resistant coverings are placed over the mouth of mortars whenever there is imminent danger of water collecting in mortars. (NFPA 1123-4.4.3.2)

## BURIED MORTARS:

- Paper mortars paced on damp ground or sand more than 12 hours prior to display, shall be placed in water resistant bag or otherwise protect against dampness. (NFPA 1123-4.4.3)
- Mortars shall be buried to a depth of at least 2/3 to 3/4 of their length, either in the ground or above ground troughs or drums. (NFPA 1123-4.4.2)
- Troughs or drums used shall be filled with sand or soft dirt. (NFPA 1123-4.4.6.1)
- Troughs reinforced and braced in two places on sides no greater than every 4 feet. (NFPA 1123-4.4.6.2)

## RACK MORTARS:

- Single-break shells not exceeding 6 in. in diameter shall be permitted to be fired from securely positioned mortar racks. (NFPA 1123-4.5.1)  
Single-break 7 in. or 8 in. shells are permitted to be fired in a non metallic rack, with an electrical or equivalent remote ignition and shells are not chain fused to any other shells. (NFPA 1123-4.5.3)
- Mortar racks are properly braced by stakes, legs, a-frame, or side boards. (NFPA 1123-4.5.5)

- Chain fused mortars 3 in. or less in diameter are limited to a maximum of 15 mortars per unit; 4 in. maximum 12 per unit; 5 in. to 6 in. maximum 10 per unit; boxed finales items containing tubes 2.5 in. or less are excluded. (NFPA 1123-4.6.2.1)
- Minimum secured distances from spectators, (diameter of site): 3 in. mortar size – 420 ft., 4 in. – 560 ft., 5 in.-700 ft., 6 in. - 840' ft., 7 in.- 980 ft., 8 in.-1120 ft., 10" in.-1400 ft., 12 in.-1680 ft. This does not include fallout area. See site plan approval in paperwork packet. (NFPA 1123-Table 5.1.3.1)

#### **ELECTRONIC FIRING:**

- All electrically fired displays shall have a solid barrier located at least 100 feet from the mortar location from which all operators shall control the display except barges. (Broward County Local Amendments, F-120.1.6.2.8.1.2)
- Manufacturer of electrical firing units shall supply specifications & instruction for proper set up and use of each unit. (NFPA 1123-9.2.1.1)

#### **ELECTRONIC FIRING (cont):**

- Electrical firing units shall be set up and located so that there is a clear line of sight to the mortars and to other parts of the discharge site. (NFPA 1123-9.3.2)
- Manual electrical firing units shall include a key operated switch or similar device. (NFPA 1123-9.2.2)
- Manual electrical firing units shall have two (2) positive actions to apply a firing current to an electric match. (NFPA 1123-9.2.3)
- Switches used to apply power shall indicate the function(s) of each switch. (NFPA 1123-9.2.4)
- A light, beeper or both shall activate when a manual electrical firing unit is armed. (NFPA 1123-9.2.5)
- Automatic electrical firing units shall incorporate some form of a “dead-man switch”, so that all firings cease the moment that the switch is released. (NFPA 1123-9.2.7)
- Only those persons necessary for the firing of the display shall be permitted in the vicinity of the electrical firing unit during the display. (NFPA 1123-9.3.3)
- Prior to arming the electrical firing unit for firing, the shooter controlling the unit shall confirm that no personnel are present in the electrically ignited mortar area. (NFPA 1123-9.4.1)
- The shooter controlling the electrical firing unit shall be provided with means of communicating with the operator. (NFPA 1123-9.4.2)
- After the completion of display, the electrical firing unit shall be switched off and all cables disconnected prior to any clean up or other work at display site. (NFPA 1123-9.5.1)

#### **SAFETY:**

- Have FMB personnel, city staff, DLE, and/or security present for crowd control.
- Fire protection and other emergency response personnel and their vehicles shall remain at or beyond the perimeter of the display site during the actual firing of the display. (NFPA 1123-5.1.6)

- Fire watch personnel (FMB) are to be stationed accordingly, 1-2 person(s) in the crowd area (depending on size of the crowd and a person beyond the perimeter of the display site but in visual contact with display site.
- Radio communication with display operator, fire watch detail, fire prevention personnel, and event coordinator will need to be established with city radios and/or Nextel.
- Ladders placed near display site to check the buildings (flat roofs) and covered walks, when applicable.
- Sprinklers in the area of the display site have been inactivated, when applicable.
- Local airports have been notified of display (Ft. Lauderdale/Hollywood Int'l, North Perry, and Ft. Lauderdale Executive)
- Personnel in the discharge site shall have proper safety gear (head protection, eye protection, hearing protection, foot protections, and shall wear cotton, wool, or similarly flame-resistant, long sleeved, long legged clothing. (NFPA 1123-8.1.3.4)
- Check weather report. High winds 17 knots (20 mph), precipitation or other adverse weather conditions prevail such that a significant hazard existing in the opinion of the operator or the authority having jurisdiction, the fireworks display shall be postponed until weather conditions improve to a reasonable level. FMB personnel to contact on duty Fire Marshal. (Broward County Local Amendments F-120.4.2 and F-120.4.2.1)
- No smoking within 50 ft. of where fireworks are present. (Broward County Local Amendments, F-120.4.3)
- Minimum two (2) each, 2½ gallons pressurized water extinguisher in discharge area. (Broward County Local Amendments, F-120.4.6)
- Waiting period after discharge of display is a minimum of 15-20 minutes before checking area.
- Is there sufficient lighting for operator to check area for misfired shells?

#### **OFFSHORE AND BARGE SHOOTS:**

##### **(Below are additional requirements for this type of shoot)**

- Fireworks display shall only be permitted on approved barges meeting NFPA 1123 and Broward County Local Amendment, F-120.3.1.
- A valid copy of a current US Coast guard permit of operation shall be provided for each barge display, if required by US Coast Guard. (Broward County Local Amendment, F-120.3.2)
- At least 2 chase boats shall be provided to maintain a clear separation distance of at least 1,000 feet radius around barge from other vessels, structures, and the beach. (Broward County Local Amendment, F-120.3.3)
- Two-way compatible communication shall be provided for use by fire rescue and law enforcement personnel, chase boats and barge crew. (Broward County Local Amendment, F-120.3.4)
- Stabilization shall be provided to secure the barge and prevent rotation from wind, water current, and firing angle. (Broward County Local Amendment, F-120.3.5.1)

- Inspection of the barge by the Fire Department shall occur at least one to two hours prior to scheduled departure for sea. (Broward County Local Amendment, F-120.3.5.2)
- Floating vessels and platforms that are manned during electrical firing shall have a safety shelter, meeting the following: sufficient size to accommodate all personnel, have a minimum of 3 sides and roof, walls and roof construction of a minimum 3/4 " plywood. (NFPA 1123-6.2.3)
- The positions of mortars on floating vessels/platforms shall comply with minimum safety distance requirements as outlined in NFPA 1123, Table 5.1.3.1.
- The types of fireworks and placement of fireworks launch tubes and accompanying equipment shall be such that, when fired, the stability of the site structures and seaworthiness of the floating vessel/platforms shall not be jeopardized. (NFPA 1123-6.2.2)
- All barges in Port Everglades are not permitted to connect the receivers for live conductivity to the firework shells until the barge has cleared the Port Everglades and land areas, for safety purposes, **as per the Fire Marshal's mandate.**
- Barges that are unmanned for the display must have an authorized operator technician brought to the barge site for connection of the receivers after it has left Port Everglades and land areas and a safe distance according to the shell sizes with relation to the display site diameters.
- After display has concluded, a cool down period of 15-20 minutes is given prior to the technician reentering the barge to disconnect (removing power sources) to receivers and evaluate any potential shells that did not fire prior to barge returning to the land areas and Port Everglades.
- BSO Fire Boat **MUST** remain a safe distance from the minimum display site diameter which is 1680 ft., for 12 in. shells, not including a fall out area of about 500 ft. The BSO Fire Boat is dedicated for the entire before and after display.

\_\_\_\_\_  
Fireworks Operator/Site Supervisor

\_\_\_\_\_  
Fire Safety inspector

\_\_\_\_\_  
Fire Safety Inspector

Date \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_