

CITY OF KILLEEN
APPLICATION FOR FIREWORKS PUBLIC DISPLAY PERMIT



Name of Applicant: Magic Display LLC

Address: 593 CR 4808, County Road 4808, Copperas Cove, Texas 76522

Telephone: (254) 289-4791 Secondary #: _____

Applicant doing business as: (☒) Individual, (☒) Partnership, (☐) Corporation

DATE OF DISPLAY: Friday, 5 December 2025, Time: 6:00 PM to 6:02 PM

Location of Display (attach site plan): Christmas Tree Lighting, Santa Fe, Killeen, TX

Pyrotechnic operator licensed in Texas who will supervise the display:

Name: Joseph Strunz, Senior Pyrotech, License #: Texas FPO #2006642

Size and Number of Fireworks to be discharged: 1" & 2" 1.4G Professional for close proximity show

Estimate: 20 Comets, 20 Meteors, 20 Mines, 20 Slices, 12 Cakes

Manner and place of storage of fireworks prior to and during the display: Secured, enclosed trailer
near launch site at Santa Fe, Killeen, Texas.

Manufacturer of distributor licensed in Texas who is to supply the fireworks:

Name: Flying Phoenix Fireworks Corp, License #: FWD-209-1964

Texas public Display permit number: 1.4G type not required, local fire marshal only.

In applying for a fireworks public display permit, I certify that I am familiar with and will comply with Section 11-6 of the Killeen Code of Ordinances, Article 5.43-4 of the Texas Insurance Code, Chapter 591, of Title 27 of the Texas Administrative Code and NFPA 1123. I hereby authorize the Fire Marshall to enter, examine, and inspect any premises, building, room or establishment used in connection with the permit for which I am applying to determine compliance with the above provisions.

I understand that I must complete this application and return it to the City Manager's Office at least twenty-one (21) days in advance along with a diagram of the grounds on which the outdoor fireworks display is to be held showing the point at which the fireworks are to be discharged, the location of all buildings, highways and other lines of communication, the lines behind which the audience will be restrained, and the location of other possible overhead obstructions.

Joseph Strunz
Applicant's Signature

7 Sep 2025
Date

Joseph Strunz, Magic Display LLC, CEO
Printed Name



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

09/07/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION** IS **WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER PROFESSIONAL PROGRAM INSURANCE BROKERAGE DIVISION OF SPG INSURANCE SOLUTIONS, LLC 1304 SOUTHPOINT BLVD., #101 PETALUMA CA 94954	CONTACT NAME: PHONE (A/C No. Ext): 415-475-4300 FAX (A/C, No): 415-475-4303 E-MAIL ADDRESS: INSURER(S) AFFORDING COVERAGE INSURER A: Certain Underwriters at Lloyd's, London INSURER B: INSURER C: INSURER D: INSURER E: INSURER F: NAIC # AA-1128623
INSURED Magic Display LLC 593 County Road 4808 Copperas Cove TX 76522	

COVERAGES**CERTIFICATE NUMBER:** BL-005768**REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	☒ COMMERCIAL GENERAL LIABILITY ☒ CLAIMS-MADE ☐ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: ☒ POLICY ☐ PRO-JECT ☐ LOC OTHER:	X	PY/25-0006	02/08/2025	02/08/2026	EACH OCCURRENCE \$ \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ \$50,000 MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ \$2,000,000 PRODUCTS - COMP/OP AGG \$ INCLUDED \$
	AUTOMOBILE LIABILITY ☐ ANY AUTO ☐ OWNED AUTOS ONLY ☐ HIRED AUTOS ONLY ☐ SCHEDULED AUTOS ☐ NON-OWNED AUTOS ONLY		This insurance contract is with an insurer not licensed to transact insurance in this state and is issued and delivered as a surplus line coverage under the Texas insurance statutes. The Texas Department of Insurance does not audit the finances or review the solvency of the surplus lines insurer providing this coverage, and the insurer is not a member of the property and casualty insurance guaranty association created under Chapter 462 Insurance Code. Chapter 225, Insurance Code, requires payment of a 4.85 percent tax on gross premium.			COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	UMBRELLA LIAB EXCESS LIAB DED RETENTION \$	☐ OCCUR ☐ CLAIMS-MADE				EACH OCCURRENCE \$ AGGREGATE \$ \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y / N ☐ N / A				PER STATUTE OTH-ER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

City of Killeen 101 North College Street Killeen, Texas 76541 are Additional Insured as respects the SPFX fireworks display(s) on 12/05/2025 located at City Christmas Tree Lighting, 220 E Avenue D, Killeen, TX 76541. This policy provides a two-year extended reporting period from the date of the display. 30-day notice of cancellation and a 10-day notice for non-payment applies.

CERTIFICATE HOLDER**CANCELLATION**

City of Killeen 101 North College Street Killeen TX 76541	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE
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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED

Underwriter's at Lloyd's, London: Referred to in this endorsement as either the "Insurer" or the "Underwriters"
This endorsement modifies insurance provided under the following:

SECTION III. PERSONS INSURED

In consideration of the premium charged for the Policy, it is hereby understood and agreed that the following entity(ies) is an additional insured pursuant to Section III. e), but only as respects the specific Display or Special Effects listed on the attached Certificate of Insurance:

Name of Person or Organization (Additional Insured):

City of Killeen
101 North College Street
Killeen, Texas 76541

101 North College Street, Killeen, TX 76541

12/05/2025

Any coverage afforded to any above person or entity as an Additional Insured shall apply only with respect to **Bodily Injury** or **Property Damage** directly resulting from (1) the **Named Insured's** ongoing operations performed for such specific person and entity; or (2) acts or omissions of the Additional Insured in connection with their general supervisions of the **Named Insured's** ongoing operations. Coverage for such person or entity as an Additional Insured does not apply to:

- (i) **Personal Injury and Advertising Injury Liability;**
- (ii) Fire Legal Liability;
- (iii) Employee Benefits Liability;
- (iv) **Bodily Injury or Property Damage** which the person or entity is obligated to pay as damages by reason of the assumption of liability under a contract or agreement but this shall not apply to liability for damages the person or entity would have in the absence of the contract or agreement;
- (v) **Property Damage** to: (1) property owned, used or occupied by or rented to such person or entity; (2) property in the care custody, or control of such person or entity or over which such person or entity is for any purpose exercising physical control; or (3) any work, including materials, parts or equipment furnished in connection with such work, which is performed for the person or entity by or on behalf of the **Named Insured**.
- (vi) **Products-Completed Operations Hazards;**
- (vii) Any obligation assumed by the Additional Insured in any contract related to the Display or Special Effects listed in the attached Certificate of Insurance.
- (viii) Such other **Claims, Accidents**, offenses, damages and/or liabilities which may be excluded pursuant to Section V. Exclusions of the Policy.

All other terms, exclusions and conditions of this Policy remain unchanged.



CERTIFICATION - LICENSE - INSURANCE

MDFX (Magic Display FX) LLC is federal and state trained, certified, licensed and insured in commercial industry of explosives and flame productions. MDFX has memberships with leading industries certified and qualified to perform indoor, outdoor, land, water, air, special effects and flame operations.



Texas State - Certification & License							
	Permit Type	Pyrotechnic Type			Operations		
		Fireworks 1.3G	Fireworks 1.4G, 1.4S	Flame Effects	Assembles Displays	Supervises Displays	Conducts Displays
	FPO - Pyrotechnics	✓	✓	✓	✓	✓	✓
	SEO - Special Effects	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓
	FEO - Flame Effects	✓	✓	✓	✓	✓	✓

✓✓ Using pyrotechnics where performers and audiences are closer to pyrotechnic devices than permitted by NFPA 1123 Code of Fireworks Display.

Federal - Certification & License			
	Permit Type	U.S. DOJ BATFE Federal Explosives License (FEL)	U.S. DOJ BATFE Federal Security Clearance (FSC)
	Explosives	✓	✓

Industry - Professional Specialty Insurance				
 Lloyds	Displays	Pyrotechnics	Flames	Special Effects
	✓	✓	✓	✓



Public Displays – Production: Theme Parks, Concerts, Stadiums, Festivals & Special Events



FIREWORKS PYROTECHNIC OPERATOR'S LICENSE TEXAS DEPARTMENT OF INSURANCE STATE FIRE MARSHAL'S OFFICE

Issued To:
Strunz, Joseph Andrew

License Number
FPO-2006642
Effective Date: 06-03-2015
Expiration Date: 06-03-2026

This will serve as your proof of licensure with the State Fire Marshal's Office.

To receive news and updates from the SFMO concerning fire industry licensing, sign up for the SFMO Licensing eNews updates [on our website](#).

Special Effects – Production: Stage Performance, Close Proximity Performers & Audiences (Indoor/Outdoor Concerts, Theaters, Television Studios & Motion Pictures)



FIREWORKS FLAME EFFECTS OPERATOR'S LICENSE TEXAS DEPARTMENT OF INSURANCE STATE FIRE MARSHAL'S OFFICE

Issued To:
Strunz, Joseph Andrew

License Number
FEO-2661474
Effective Date: 04-26-2021
Expiration Date: 04-26-2026

This will serve as your proof of licensure with the State Fire Marshal's Office.

To receive news and updates from the SFMO concerning fire industry licensing, sign up for the SFMO Licensing eNews updates [on our website](#).

Flame Effects – Production: Stage Performance, Close Proximity Performers & Audiences (Indoor/Outdoor Concerts, Theaters, Television Studios & Motion Pictures)



FIREWORKS SPECIAL EFFECTS OPERATOR'S LICENSE TEXAS DEPARTMENT OF INSURANCE STATE FIRE MARSHAL'S OFFICE

Issued To:
Strunz, Joseph Andrew

License Number
SEO-2661479
Effective Date: 04-26-2021
Expiration Date: 04-26-2026

This will serve as your proof of licensure with the State Fire Marshal's Office.

To receive news and updates from the SFMO concerning fire industry licensing, sign up for the SFMO Licensing eNews updates [on our website](#).



www.magicdisplayfireworks.com



FLAME OPERATING PROCEDURES

MDFX (Magic Display SFX) performs indoor/outdoor flame pyro musicals using only the latest technology and safest in the entertainment industry. Our wave flame devices are N.F.P.A 160 approved and are the same devices used in television, motion picture, Disney World and Universal Studios.

Before the mission is accepted, certain procedures, checks and risk assessments are conducted. If safety requirements are not met, we cannot perform flame pyro musical. Each event is different, in most cases, MDFX can provide a solution that best fits and meets safety requirements.

MDFX Wave Flame Devices (WFD) are self-contained devices with no external fuel lines or tanks which greatly reduce safety hazards. The wave flame devices are mechanically restricted to move only left and right, shoot flames a maximum of 32' outdoor (nozzle #1) and maximum of 4' indoor (nozzle #2). Wave flame performances are pre-scripted to music and computer controlled. Our wave flame devices use two 3 types of liquid fuel, Bioethanol, Isopropanol and Isopar G. MDFX mainly uses Bioethanol or Isopropanol fuel because it burns clean, non-toxic, lower thermal temperatures and eco-friendly. Other flame production companies use a variety devices and fuels that are permissible in their performances, in accordance with N.F.P.A 160, that use *Gasoline*, *Liquefied Natural Gas (LNG)*, *Liquefied Petroleum Gas Propane (LPG)*, and other *Compressed Gases and Cryogenic Fluids in Portable and Stationary Containers, Cylinders and Tanks*. MDFX does not have nor will ever use any of flame devices that support the use of such petroleum fuels or compressed gases.



MDFX Uses Ventless Bio Ethanol Fireplace Fuel

Bioethanol Fuel

Bioethanol - or simply 'ethanol' is a renewable energy source made by fermenting the sugar and starch components of plant by-products - mainly sugarcane and crops like grain, using yeast. It is also made from corn, potatoes, milk, rice, beetroot and recently grapes, banana and dates depending on the country's agricultural strength.

Clean Burning

Eco Smart Fireplaces are fueled by bioethanol, a renewable liquid fuel produced from agricultural by-products which burns clean – non-toxic, no smoke, no sparks. The combustion of bioethanol produces Heat Steam and Carbon Dioxide.

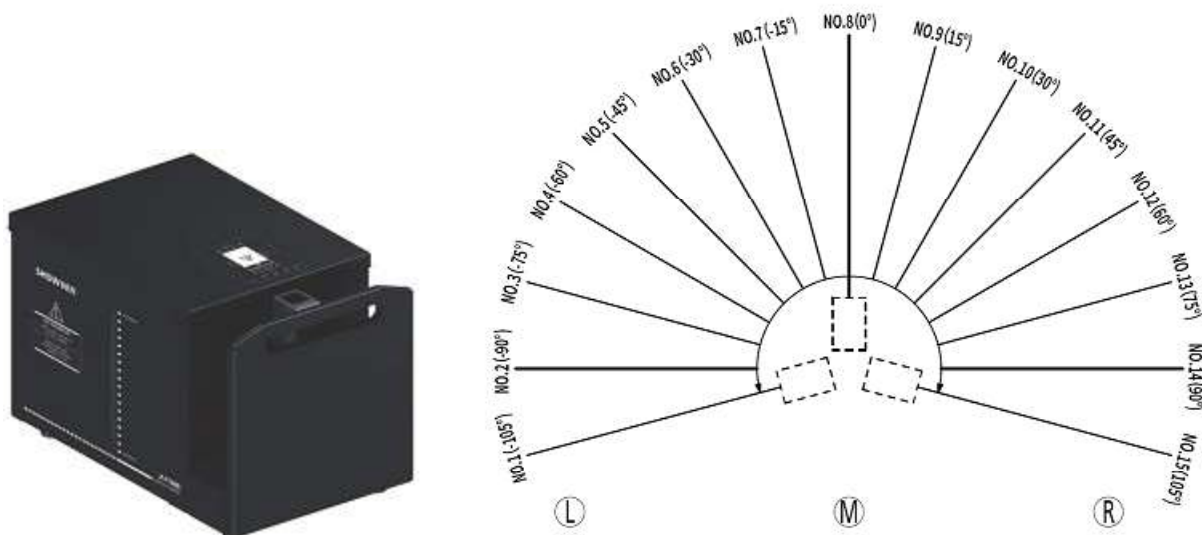
Sustainable

The combustion of bioethanol results in a clean emission: Heat, Steam and Carbon Dioxide. Carbon dioxide is absorbed by plants. It is then processed via photosynthesis to help the plant grow. This infinite cycle of creation and combustion of energy makes bioethanol a carbon neutral fuel source.

MODEL: Showven Circular Wave Flame 1800

3. Firing Angles

The firing angle for CIRCLE FLAMER is $\pm 105^\circ$, from the Audience Side view, there are altogether 15 firing angles as below.





HEALTH, SAFETY AND ENVIRONMENT STATEMENT

MDFX (Magic Display FX) is a small all veteran company with service members that have experience when it comes to safety, health and environment. Solving customer challenges is second only to keeping everyone safe and healthy. We won't compromise our focus on health, safety and environment for better business results. Our commitment to safety will minimize the impact on the environment, control risks to our employees, and maintain safe work practices. Our dedication will match our commitment so that each MDFX employee takes personal ownership of their own safety and the safety of others.

Turning our commitments into practice is at the heart of our journey to ZERO. Simply stated, it's a concerted effort to achieve ZERO health, safety and environmental incidents every day, all the time. Our ZERO goal is to make it happen around the clock, everywhere.

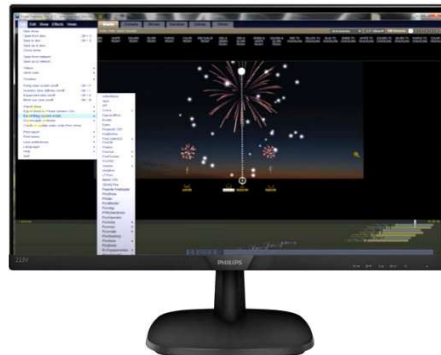
MDFX will continue to keep its strategic focus on these key Health, Safety and Environment areas:

- Effective leadership and commitment
- Continuous improvement of our MDFX Management System
- Training and competency of our employee workforce
- Providing mechanisms for employees to communicate and address risk
- Continuous improvement of technology and processes to mitigate HSE impact
- Verification of performance through robust audits and communication of key findings



DISPLAY FIRING PROCEDURES

Even though the traditional method of hand lighting displays is allowed, MDFX will never hand light pyrotechnics, hand firing is against our company policy. MDFX strictly uses the same computer-controlled firing systems and software as Disney, Six Flags and Sea World theme parks to control the show. We custom program each show and test our firing time scripts through computer 3D animation software back in the studio prior to every show. This helps us to manage and assess each firework type, size, height, burst radius and the effects. We also inject wind direction and speed variables to determine possible hazard. The software helps us determine which firework types are appropriate to use for that event and location. Should a product malfunctions during a show, we can immediate pause/stop the show to assess a situation.





ROOFTOP OPERATING PROCEDURES

MDFX (Magic Display SFX) sometimes receives assignments to shoot displays or other pyrotechnics special effects from rooftop structures, back stage platforms, stadiums and race tracks. All NFPA 1123 safety standards that apply to ground displays also apply to rooftops except there are additional safety requirements and procedures we identified and developed that are not listed in the NFPA 1123 code.

Before the mission is accepted, certain procedures, checks and risk assessments are conducted. If safety requirements are not met, we cannot not shoot from that site. Each event is different, in most cases, MDFX can provide a solution that best fits and meets safety requirements.

Building

- Site Survey - walk through safety inspection of building.
 - Coordinates with Event Coordinator, Facility Manager and AHJ Fire Marshal.
 - Review of structure (business, warehouse, or hazardous storage).
 - Review of type of pyrotechnics or special effects that can be used.
 - Assess adjacent structures, facilities, public roads and forest areas.
 - No health care, schools or church facilities within 600 feet.
 - No hazmat within 800 feet.
 - MDFX personnel will never carry pyrotechnics through work offices or in elevators. We use only stairwells or outside lift.
 - Potential landing areas of fireworks debris being shot from the building.
 - Review of wind direction, speed and weather forecast. Display will be postponed or cancelled if winds exceed 20 mph.
- (See MDFX Annex S - Severe Weather Operational Procedures)**
- Safety Risk Assessment (low, medium or high).

Roof

- Must have at least one acceptable access entrance/exit (egress) point. In some cases, smaller roof may require two access points.
- Roof is structurally stable and supports the weight of personnel, equipment and pyrotechnics used.

- Surface is clean, dry and serviceable. To included free of dry flammable materials such as leaves, branches, dry rotting foundation of structure.
- Roof shall be free of flammable liquids, gases and structures prone to catch fire.
- Ladder or stairs to roof must be serviceable and in safe operating condition and that it can support the weight of personnel and equipment.
- Access door shall be serviceable and safe operating condition.
 - Access door inside lock handle needs to be in “unlocked” position (blocked or strapped) so it is able to open and close from outside during event.
- Review of HVAC systems, air ducts and electrical systems on rooftop. No fireworks will be setup within 25 feet of HVAC, electrical equipment and power cords.

Pyrotechnics

- All pyrotechnics will be electronically control fired by a certified and licensed FPO IAW NFPA 1123 and Texas TAC Code. NOTE: MDFX does not manually light pyrotechnics in any show. Our company policy, everything is controlled by computer systems.
- All pyrotechnic special effect cakes and tubes will be wrapped in foil and placed on a foil surface, sheet metal or metal tray. This serves as a heat shield that prevents fire or damage to roof surface. No pyro will be directly placed on roof without fire shielding. If roof surface is a canvas soft like sponge material, cakes will be placed on plywood and/or weighed down with sand bags as necessary. There is never any drilling or nailing into roof structures.
- During setup, roof access door should be closed (but unlocked) so that personnel and equipment cannot fall down inside through the hatch.
- Final Inspection, display will not start without a joint final safety inspection and approval of setup with AHJ (Authority Having Jurisdiction) Fire Marshal.
- During display, door must be closed to prevent any possible debris or smoke from entering into building.
- After display, fire control systems and modules are immediately disarmed and switched to off. All personnel wait for a 15 min cool down safety period IAW NFPA 1123. This is in case a pyrotechnic is still smoldering and has a potential to go off.
- After 15 min cool down, pyrotechnics are cleared. Event Coordinator, Facility Manager and Fire Marshal are given “all clear” over the radio. Pyro team begins to clear the rooftop of all pyro, equipment and debris. Facility manager is then notified to joint inspect area and secure roof access door.
- Other companies use large larger pyrotechnics. Our policy is never to use any pyrotechnics greater than 3”. Use of rockets or chemical composition sparkling fountains on top of roof is against our policy for they are unpredictable.
- At least one Fire Safety Monitor with communications will be appointed and remain in position at all times once pyrotechnics are in place.
- For safety purposes, no pyrotechnic will be setup near edge of roof. A minimum of 8 feet distance will be maintained. This reduces the risk of the pyrotechnic from falling off roof.

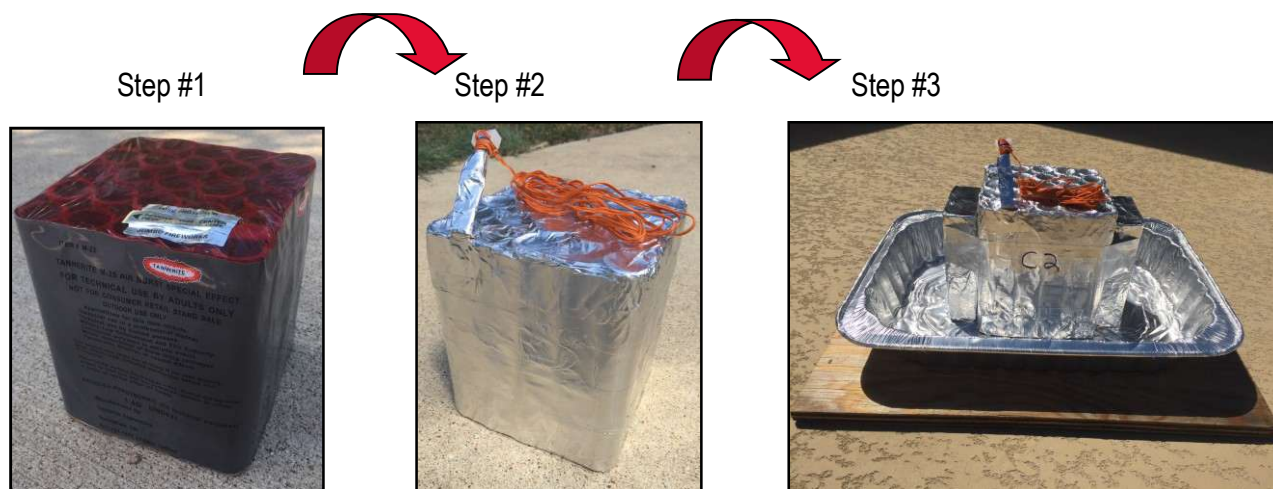
Fire Extinguishers

- IAW NFPA 1123, fire extinguishers are present in case of fire emergency.



- Fire extinguishers points will be identified.
- 2 x Class A 2.5gal Water fire extinguishers.
- 1 x 5lb ABC Dry Chemical fire extinguisher.
- Fire extinguishers will be charged, serviceable and operational.
- Fire extinguishers will be within line of site and reachable in case of fire emergency.
- During night operations, points are marked with red snap chemical lights or reflective tape.

Rooftop Fire Proofing Pyrotechnics



All flammable paper wrappings are removed. Pyrotechnic is wrapped in aluminum heat rated duct tape and secured in aluminum tray. Bottom of aluminum tray is secured to a ½" plywood plank to absorb/distribute shock and prevents heat transfer to rooftop. Should a small fire occur and be sprayed, aluminum tray captures water and venue rooftop remains unharmed and clean.

MDFX only fires pyrotechnics electronically.





SEVERE WEATHER OPERATIONAL PROCEDURES

(Severe weather includes blizzards, thunderstorms, high winds, large hail or tornados)

MDFX (Magic Display FX) will maintain operational control of all display sites during severe weather through the following procedures. These procedures are compatible with Magic Display BATFE (Bureau of Alcohol, Tobacco, Fire Arms and Explosives) and DHS (Department of Homeland Security) Hazardous Materials Security Plan and are designed to prevent unauthorized access to 1.3G and 1.4G explosives materials.

Severe Wind Conditions (Tornado Category F1+; Hurricane C1+)

Reference NFPA 2010 8.1.4.2; 8.1.7

- When there is emanate threat of severe wind conditions, operator will as practical, secure all firing equipment and remove all explosive material from the site for storage in an BATFE approved Type IV magazine.
- If energetic material has been loaded for firing, operator will:
 - If safely possible, remove all explosive material from the site for storage in an approved Type IV magazine
 - If time does not allow for safe removal, operator will coordinate with the AHJ to fire all product before the onset of severe winds to prevent explosive materials from being uncontrollable blown from the display site.

Rain Conditions

- Operator will ensure that loading continues in a safe manner
(Reference NFPA 2010 8.1.7)
 - Product shall not be loaded into wet mortars
 - All product shall be weather wrapped as loaded
 - Proximate devices including one shot comets, gerbs, fountains, SPD's and other effects that by their design, are not able to be wrapped shall not be loaded.
 - Crew shall work in teams with one member loading devices while the other member covers and protects from rain.

Electrical Events

- When lightning is detected within 7 miles of the display site all loading shall halt until conditions improve
 - Operator shall disconnect the firing system from all electrical connections
 - All Modules shall be turned off and antenna receivers folded down
 - All electrical matches shall be stored in wooden case/ready box at least 50 feet from all explosive materials
 - Operator shall keep crew at least 50 feet from all loaded explosives and maintain NFPA spectator distances of at least 70 feet per inch until the material is:
 - Safely removed from the site for storage in an approved Type IV magazine
 - Fired in coordination with the AHJ
 - In the event of uncontrolled electrical ignition
 - Operator will maintain operational control of site
 - Increase the safety distances as warranted
 - Immediately notify MDFX Director of Operations for implementation of **Occurrence Mitigation Plan**

Extreme Temperature

- When temperatures exceed 110° F or are below 28° F loading of the show will be discontinued until conditions return to safe loading temperature range.

High Wind Speeds During Show (15+ MPH Sustained) Reference NFPA 2010 A.8.1.4.2

- In considering when wind speed is excessive for the reasonably safe performance of a fireworks display, operator will judge:
 - The potential for an increased risk of hazardous debris from the display falling into the spectator areas
 - The potential for an increased probability of fire that is made excessively difficult to control
- An increased fallout hazard occurs when the wind is traveling in a direction toward one or more spectator areas. Under these circumstances mitigation strategies that should be considered are as follows:
 - To move the spectators out of the path of the fallout
 - To redirect the fallout by moving the fireworks or re-angling the mortars
 - To increase the separation distance between the fireworks and the spectators
 - To modify the content of the display to eliminate the fireworks of greatest concern
 - To delay the display until the weather conditions have improved

- To implement a combination of these strategies
- Some possible mitigation strategies to be considered regarding fire risks are as follows:
 - To water down the areas and items of concern immediately before the display
 - To redirect the fallout by moving the fireworks or re-angling the mortars
 - To increase the separation distance between the fireworks and the areas containing the fire hazards
 - To modify the content of the display to eliminate the fireworks of greatest concern
 - To increase the amount of suppression equipment and personnel in the immediate area
 - To delay the display until weather conditions have improved
 - Show will be discontinued or cancelled if winds exceed 20 MPH sustained or during gusts above 25 MPH
 - NFPA safety distance will assume to be double at 20 MPH causing the operator to cut the permissible shell diameter in half until winds stabilize below 20 MPH

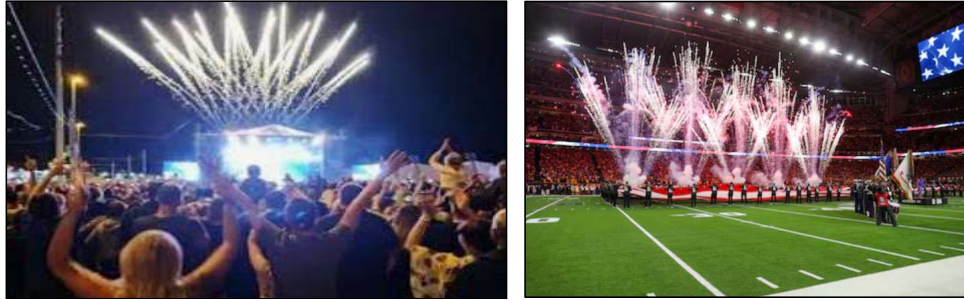


CONCERT & FESTIVAL OPERATIONS

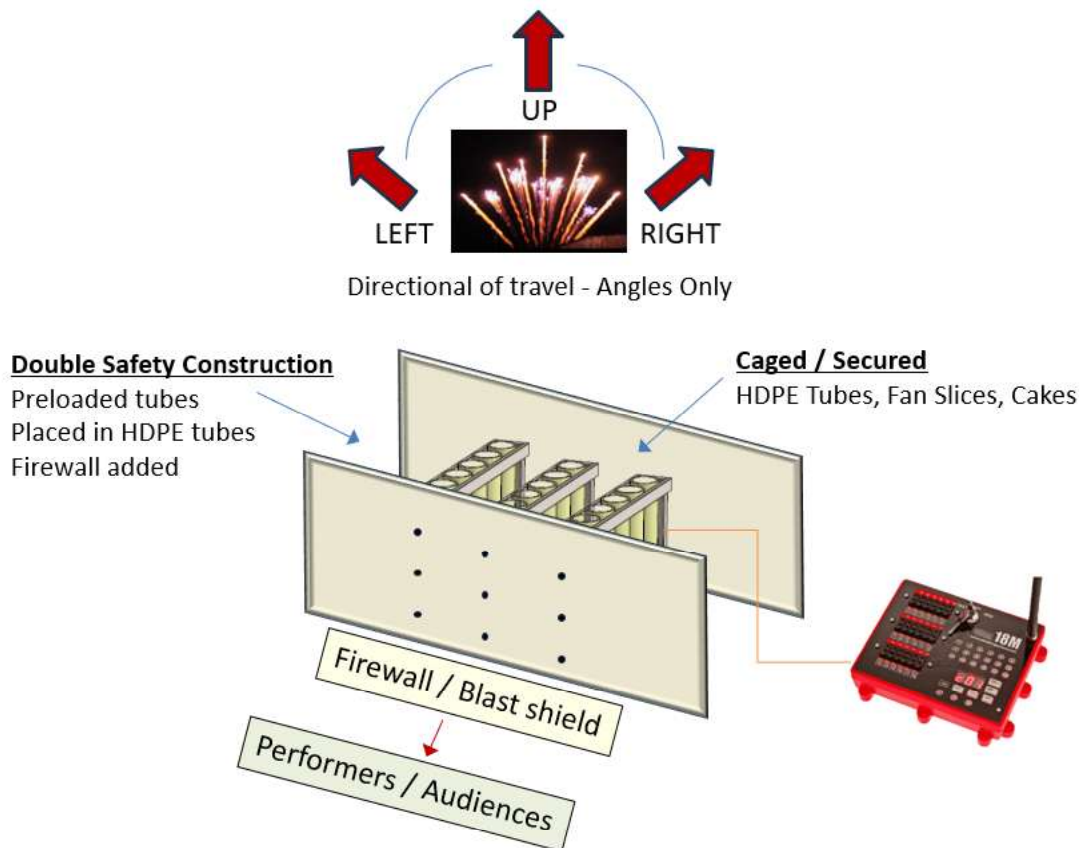
MDFX (Magic Display SFX) works jointly with stage producers, performers and DJs during both indoor and outdoor festival activities. All NFPA 1123 and NFPA 1126 audience close proximity pyrotechnic safety standards are applied. Each event is different, site surveys are conducted and safety plans are developed. Some events require rehearsals with the producer, performers, roadies, security personnel and staff so everyone is aware where the pyrotechnics are placed. Safety distance yellow tape is marked on the floor on stages, and a copy of script with timeline are distributed so everyone knows when special effects go off.

Pyrotechnics - Special Effects

- MDFX only uses computer system-controlled devices and Pro1.4g professional stage production pyrotechnics during these events.
- Pyrotechnics are never fired over the audience.
- Close proximity pyrotechnics are surrounded by a firewall to shield audience.
- Safety distance for pyrotechnic devices is a minimum of 15' to performers.
- For large performances with stage pyrotechnics, joint inspection with AHJ is conducted.



Setup construction of close proximity pyrotechnics stages and stadiums



Electrical - Special Effects

MDFX uses the following non-pyrotechnic stage production DMX controlled electric devices

DMX Stage Production Electrical Devices		
Truss LED PAR lights	Fury Jets (LED Flames)	Snow Machines
Strobe lights	Fog Machines	Cold Spark Machines
Spotlights	Haze Machines	Bubble Machines
Gobo Moving Heads	Lasers	Confetti Cannons
Skylights	Cryo Jets	Flame Machines

Electrical Devices

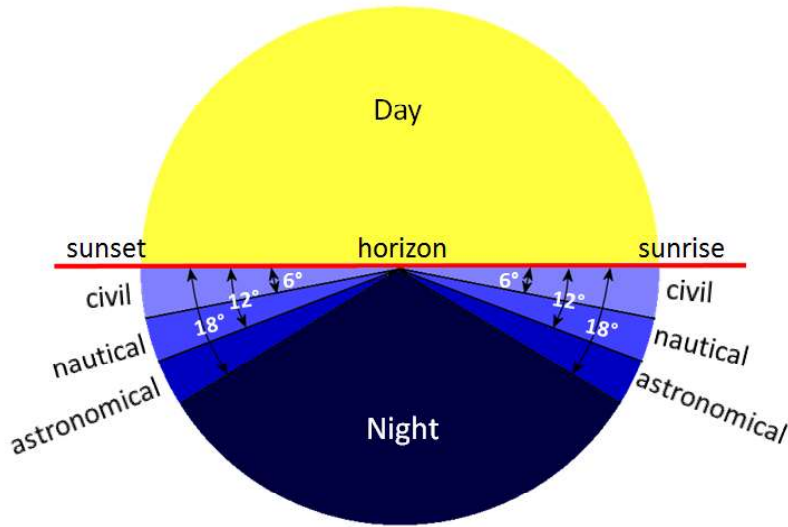
- Inspection of electric devices and cabling prior to start event.
- No bare wires and correct power rating to prevent overloading outlets.
- Electrical devices placed where they are not hazardous to audience and performers.

Outdoor Power Generators

Sometimes electrical power is unavailable and MDFX supplies generator power. Electrical safety is incorporated into the production. Proper and adequate power is critical to production.



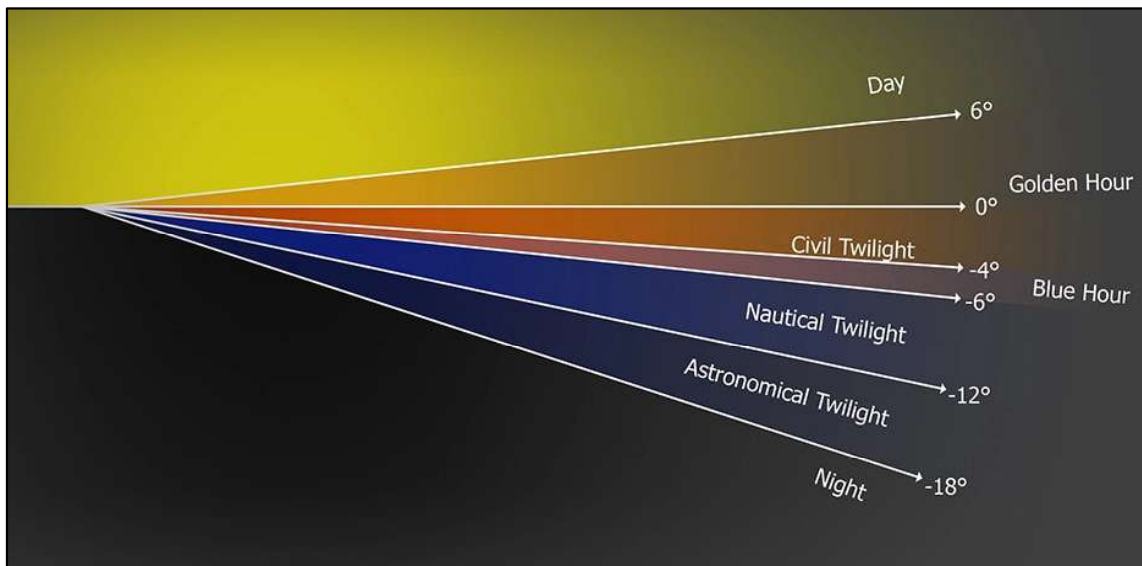
- Generator(s) are deployed downwind of audience
- Have power meter to measure power draw to prevent overload.
- Deployed a minimum of 100' from structures and audience.
- Exhaust facing away from audience, performers and structures.
- Sound wall placed on one side of generator that muffles the engine sound by 90%.
- Generator site is level and clear of all grass and flammable debris.
- Generator is grounded to ground with brass grounding rod.
- Site has 1 x fire extinguisher 10' away.
- Fuel can(s) is placed up wind and 50' away from generator(s).
- No less than 10 AWG extension cords will be used to carry amperage beyond 50'
- NEMA Spider/Gypsy/Extreme power junction boxes w/breakers used for multi electrical devices.
- Inclement weather, all breaker boxes and cable connectors weather proofed as needed.
- Incoming storm, all electrical items are turned off, unplugged, and covered to protect equipment.



DISPLAY TIME ZONE TABLE

EARLIEST TIME: for public displays is at the end of *Nautical Twilight* and start of *Astronomical Twilight* usually 9:15 or 9:20 PM during Spring/Summer months.

BEST TIME: for maximum visual effects, best time to start display is the “sweet spot”, which is end of *Astronomical Twilight* and start of *Night*, usually 9:30 PM.





DRONE AIR OPERATIONS

MDFX sometimes conducts drone operations in our shows to record and improve our training. Our Drones are registered and licensed within FAA regulations. We stay in within our sector, keep a Visual Line of Sight (VLOS), never fly above the altitude of 400' feet and stay within Class G uncontrolled air spaces.



**Federal Aviation
Administration**

Small UAS Certificate of Registration

REGISTERED OWNER: **Joseph Strunz**

REGISTRATION NUMBER: **FA3PF4W4MM**

ISSUED: **05/07/2025**

EXPIRES: **05/07/2028**



TRUST

The Recreational UAS Safety Test (TRUST) Completion Certificate

Name:

Joseph Strunz

Authentication Token:

TRST78416925060

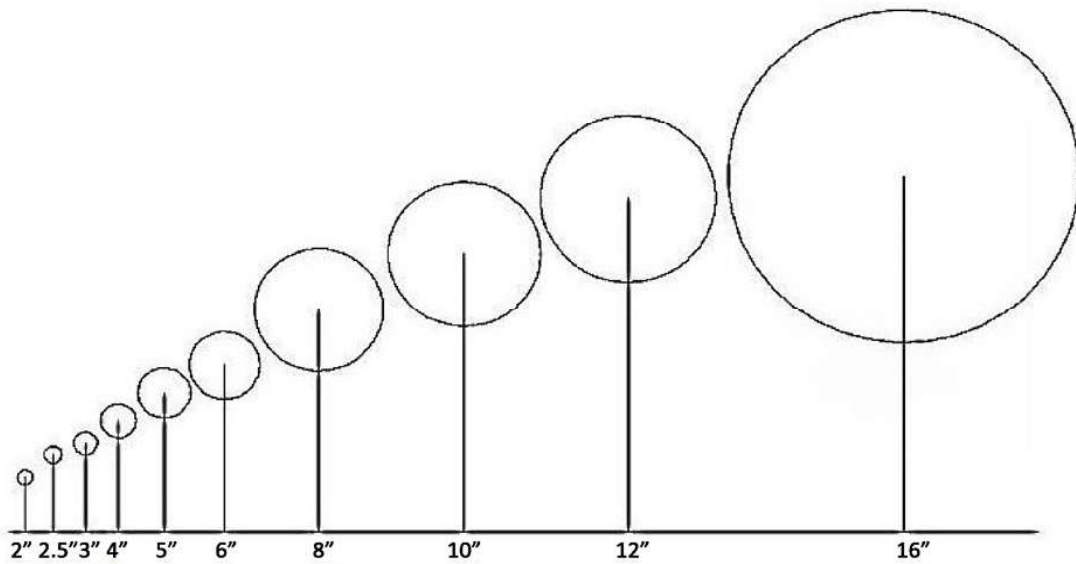
Issued by:

Drone Trust on 8 May 2025



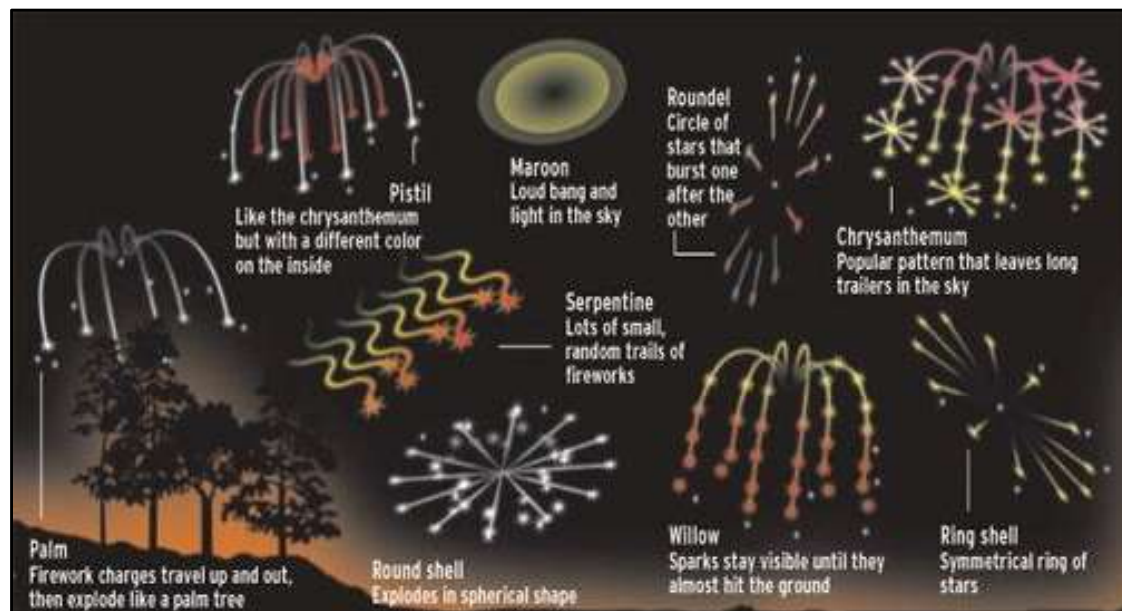
TYPICAL 1.3G AERIAL SHELL PERFORMANCE TABLE

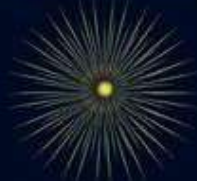
BURST DIAMETER	43' 49' 66' 98' 148' 197'	361'	426'	492'	984'
RISEING HEIGHT	164' 230' 263' 328' 410' 492'	656'	820'	984'	1,050'

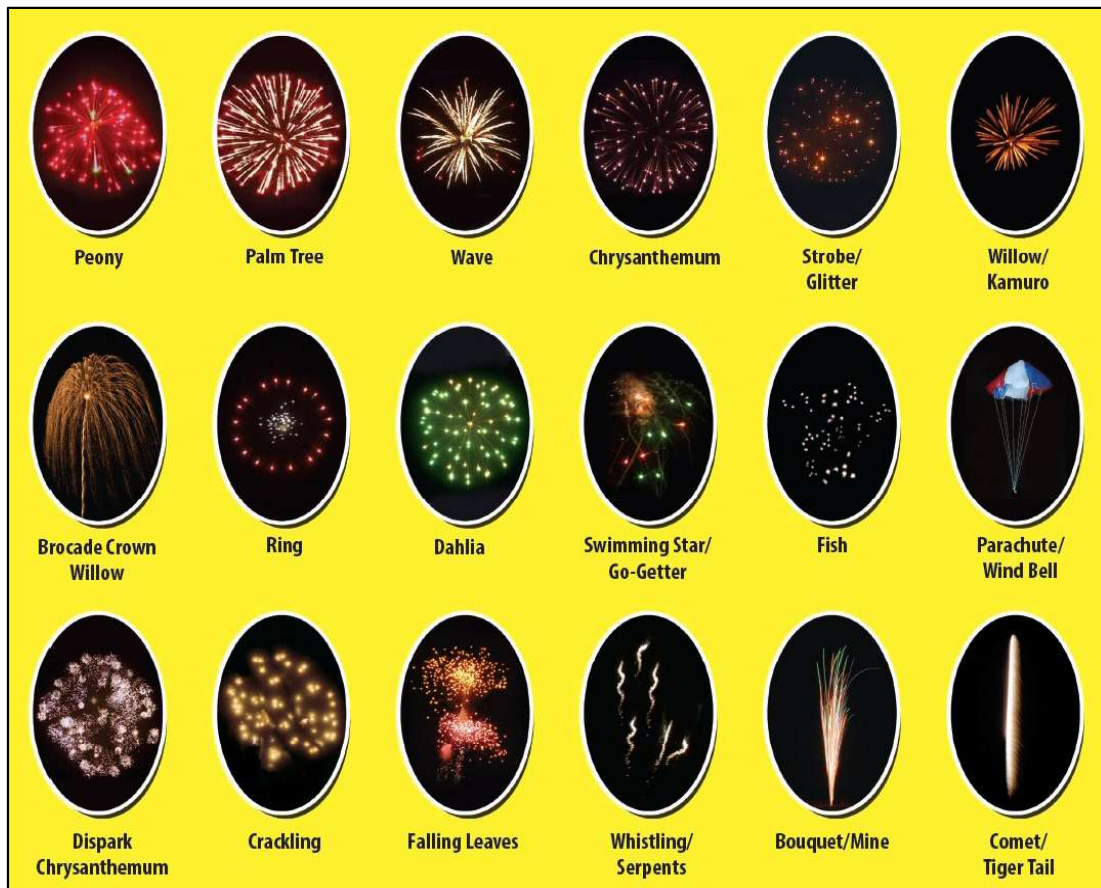




SHELL & SPECIALTY EFFECTS GUIDE



Brocade  Common term that describes an effect of woven gold clusters usually bound together within a star burst.	Chrysanthemum  A perfectly spherical burst of tailed stars, very much like the flower it represents.	Comet  A star or other projectile which leaves a glittering, persistent trail behind it.	Crossette  A set of stars that each split into four or five stars and leave a trail as they map the skies.
Green Bees  A swarm or cluster of points of light that move and dissipate under their own power. Similar to Fish but less vigorous and generally less persistent.	Glitter  A constant spray of strobing glitter effect usually referring to cones and fountains	Palm  Bright arms of cascading, long lasting stars, shaped to permeate outward like the branches of a palm tree, usually made up of gold or silver stars.	Pearls  A set of bright glowing stars that do not leave a trail but silently rise and dissolve into the heavens.
Peony  Well used term to describe a perfect expanding sphere of stars that usually change colour as they burst outwards.	Pistil  A central effect sometimes palm like that can be added to a Peony or Chrysanthemum for bigger impact.	Silver Fish  Invariably silver and preceded by a beautiful blue tracer star, they wriggle and swim away from the centre in a silently mesmerizing dance.	Spinner  An aerial effect that is usually accompanied by a whirling sound as the stars spin and whirl individually and synchronised to others.
Stars  A glowing, flaming ball of coloured light or colourless crackle that can rise on their own or burst into variegated mini star-shells.	Strobe  An effect that flickers and flashes in the sky like a gallery of flash bulbs.	Tail  The comet like trail that is left behind the star.	Willow or Falling Leaves  A star burst where all the stars "fall" out of the rocket or star-shell and gently drift down to earth to give a delightful effect, best in gold.





DRAFT

ANNEX Z: Site Survey



Magical Christmas Tree Lighting Show Production

City of Killeen, Friday, 5 Dec 2025

Site Survey Production Plan - 220 E Avenue D, Killeen, TX 76541

Update

7 September 2025

Show Time: **6:00 PM, Friday, 5 DEC 2025**



Sunrise: **7:15 AM**



Sunset: **5:28 PM**

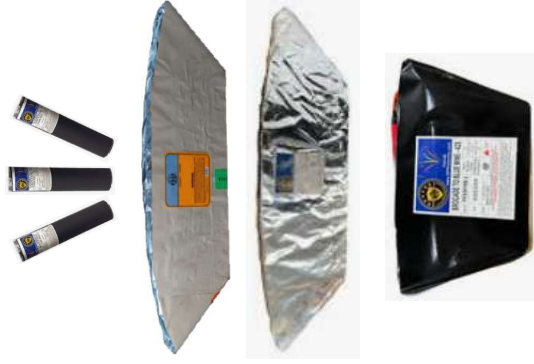
Grid Coordinates: 31.120127, -97.728493

1.4G Pyrotechnics

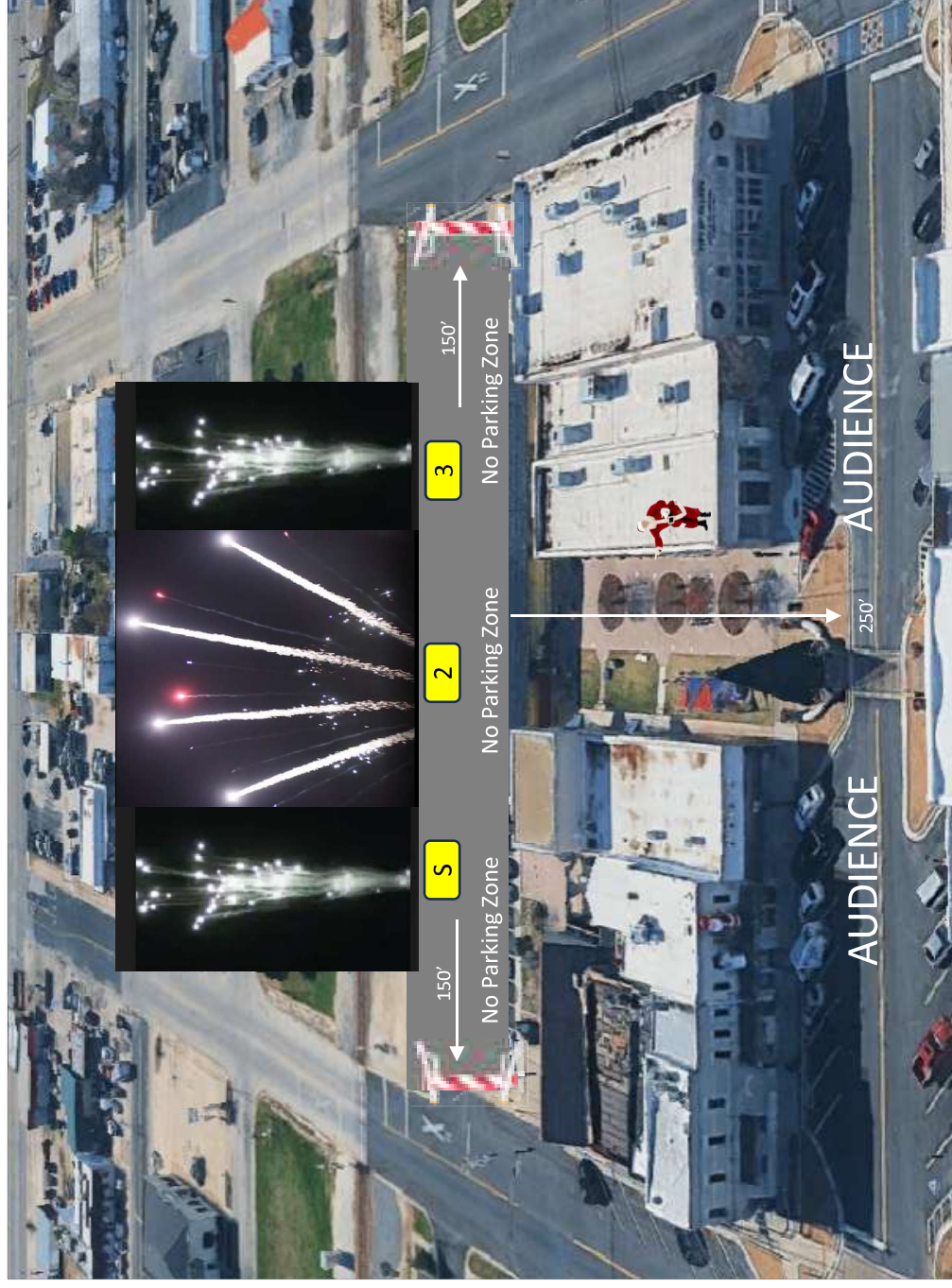
1" & 2" caliber Meteors,
Comets, Mines, Fan Slices
and Cakes. (Altitude 200')

- ✓ **NFPA 1123 & 1126**
- ✓ **Safety Radius 140'**

Minimum Ground Safety
Distance to Audience is
250' ft.



Back Side of Event – Parking Lot Behind Chambers of Commerce



Show Time: 6:00 PM, Friday, 5 DEC 2025

Sunrise: 7:15 AM

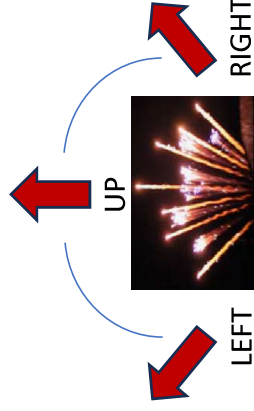
Sunset: 5:28 PM

Grid Coordinates: 31.120127, -97.728493

Example of Pyrotechnics Safe Construction Station

2 Levels of Safety

1. Preloaded tube inside HDE Tube.
2. Boxed in Treated Plywood Firewall

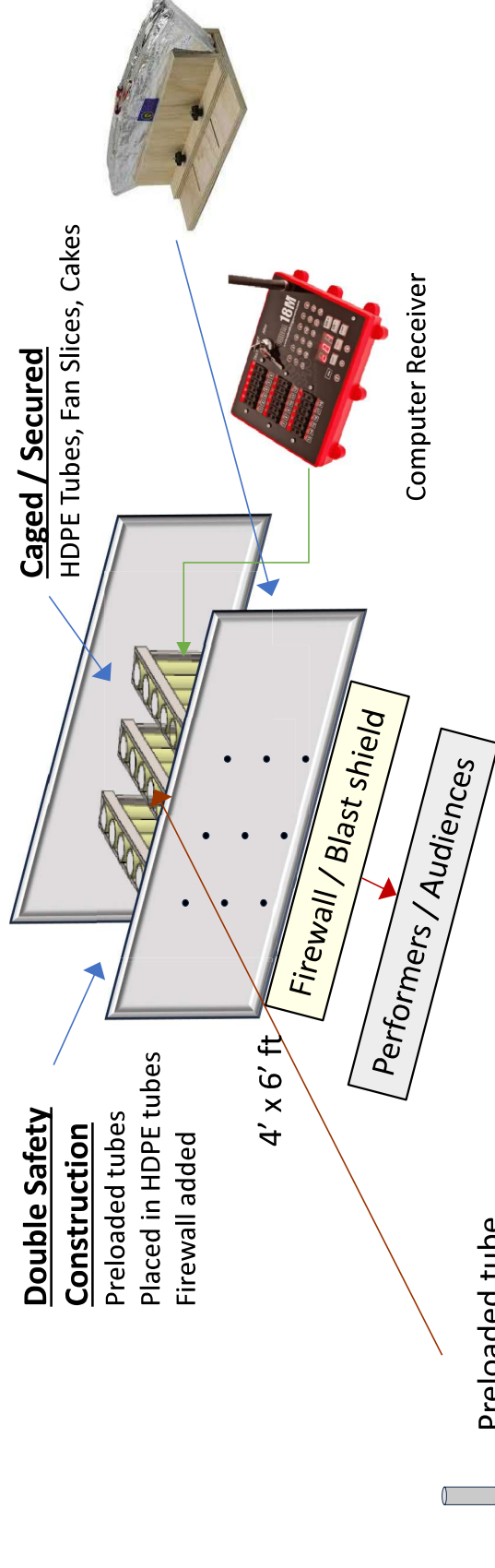


Direction of Flight - Angle Only Pyrotechnics

Double Safety Construction

Preloaded tubes
Placed in HDPE tubes
Firewall added

Caged / Secured
HDPE Tubes, Fan Slices, Cakes



Preloaded tube

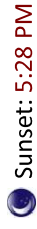
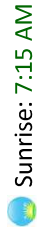
Fan Slice

Cake

Computer Receiver

NOTE: Only 1.4G Professional Low Explosive Pyrotechnics are used for behind concert stages and stadiums for close audience.

Show Time: 6:00 PM, Friday, 5 DEC 2025



Grid Coordinates: 31.120127, -97.728493

Professional Christmas Tree Lighting - Samples of Pyrotechnics used

