

# Firefly Drone Proposal

# FIREFLY DRONE SHOWS

## Park City Municipal Corporation

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Park City Fourth of July Drone Show

Firefly Drone Shows, LLC  
5105 Williams Lake Road  
Waterford MI, 48329  
+1 (248) 461-6615

**Primary Contact:**

Ryan Sigmon, Co-Founder & Partner  
[Ryan@FireflyDroneShows.com](mailto:Ryan@FireflyDroneShows.com)

Office: 1 (248) 461-6615

Cell: 1 (248) 330-5521

**ATTN:**

Jenny Diersen, Special Events Manager  
Park City Municipal Corporation  
P.O. Box 1480  
Park City, UT 84060

## **INTRODUCTION**

In the past, Park City has been famous for its dazzling scenery, shining silver, and even serving as the host for the Olympic winter games. Learning Park City's unique and rich history, it would be a great privilege to further embellish this national landmark by once again dazzling an audience with what makes Park City shine. At Firefly Drone Shows, we specialize in bringing that shine to the sky; with our industry leading technology and Park City's creative vision. Firefly is confident that we can properly service Park City with the most impactful drone show that will reflect this resort town's famous reputation. In the documents below; you'll find all of the necessary details relating to our experience, operation, and costs. We are looking forward to growing our partnership and delivering must-see drone light shows to Park City, Utah.

## **BIOGRAPHY**

It began with three partners and a dream to bring a new eco-friendly, awe-inspiring, and creatively uncapped activation to the event industry. From the ground up, Firefly Drone Shows, LLC was established in 2017. Ensuring the quality and precision in each drone show production and continuing to drive innovation in the industry, Firefly is still operated by its original three partners along with a highly trained network of experts. This includes the development team, production and design team, and operations team. The development team consists of a mixture of in-house and subcontracted industry leading hardware/software developers, innovative autonomous quadcopter flight specialists, as well as master systems engineers that bring Firefly's drone systems to life. Alongside development, Firefly's production team carries each project from any creative vision to a fully programmed drone show. This team consists of industry leading in-house animators, designers, and audio engineers; along with a partnering high-end animation studio. These talented artists bring each idea to life. After programming and animation, Firefly's seasoned pilots, field managers, crew hands, and logistics coordinators successfully deploy each show with precise expertise. Every step of the process, Firefly's experienced drone show producers continue to carry each project's vision all the way to the day of show. Altogether our team of 20+ full-time professionals and network of subcontractors currently design, produce, and perform over 100 shows annually. As the 3rd company in the world to be fully licensed by the FAA; we've performed shows across the entire United States, as well as a handful of countries internationally. Since its conception, Firefly continues to exponentially grow in size and quality to ultimately provide the most impressive productions and memorable drone shows yet. All of Firefly's drone fleets and positioning/communications systems are proprietary and are specifically designed for drone light shows.

Regarding Firefly's stability and accumulated experience; Firefly has successfully persevered through the challenges a new industry may face over time. Through economic dips, computer chip shortages, and a global pandemic that ultimately halted the event industry, Firefly has prevailed with grit and determination to maintain its industry leading and innovative reputation. To this day, over 6 years after its doors have opened, Firefly has honored every contract and does not cease to grow financially, organizationally, and technologically under any circumstances.

## **EXPERIENCE**

Firefly has had the distinct pleasure to work with a number of different clientele. From cities to amusement parks, Some of our clients include; T-Mobile, Capital One, Google Cloud, Xbox, Marvel, Amazon Music, Dell Technologies, Acura, Ford Motor Co, Empire Records, Holiday World, as well as the Canyons Village Management Association to name a few. To view our portfolio, please navigate to our [work page](https://fireflydrones.com/work) on our website (fireflydrones.com/work). There you can find the wide array of different experiences we've greatly enjoyed cultivating over the years.

## **CUSTOMER REFERENCES**

### **Canyons Village Management Association**

*Contact:* Brian Madacsi, President and CEO | (435) 655-2582 | bmadacsi@cvma.com

*Project Overview:* For three consecutive nights on July 1st-3rd, 2022; Firefly performed a 200-drone show at the Forum Festival Event held at Canyons Village. Due to the event's success last year, Firefly will be performing 300-drone shows for four consecutive nights in 2023.

### **City of Sequim, WA**

*Contact:* Barbara Hanna, Marketing Director | (360) 681-3422 | bhanna@sequimwa.gov

*Project Overview:* Since 2020, Firefly has worked with the City of Sequim to plan, design, produce and perform a drone light show for the annual Sunshine Festival. In 2023 Firefly brought out a 200-drone show to the event, and is currently discussing plans for 2024. Our show has been known for bringing out the largest crowds for any event held in Sequim.

### **City of St. Petersburg, FL**

*Contact:* Mr. Tony Leno, Events Director | (727) 893-7850 | Tony.Leno@stpete.org

*Project Overview:* With an estimated audience of over 75,000 guests, Firefly performed a 300 drone show to mark the one year anniversary of the St. Pete Pier. The show was sponsored by Duke Energy and earned a substantial amount of media exposure.

### **Milwaukee Downtown**

*Contact:* Beth Weirick, CEO | 414-220-4700 ext. 1 | bweirick@milwaukeedowntown.com

*Project Overview:* During the pandemic, Milwaukee Downtown and Firefly produced a live streamed drone show for Milwaukee Holiday Lights Festival. This show took place just outside of Downtown Milwaukee, creating a spectacle for many to see live streamed or in person.

## **RECENT CUSTOMER REVIEWS:**

**“AMAZING - Very flexible!... Thanks for a great experience! Very impressed with the front and back end of your event process. Thanks!”**

- Kelly Naze, PRA Senior Event Manager
- ACURA Corporate Event

**“Aaaaaamazing!!! ...Can't wait to work with Firefly and the whole Team again!! From the first email and phone call, Ryan and Team were fantastic partners in creating a flawless and memorable show. When 750 people cheering can be heard blocks away you know it was a fantastic show!! Thank you, Guys!”**

- Sophia Gracia, PRA Event Producer
- Federated Insurance Corporate Event

**“Everyone was amazed and pleased. AMAZING! 10/10 ... Ryan and his team were great to work with on this project. I would highly recommend this company.”**

- Stacy Moreland, Director of Events, EMPIRE
- Aaliyah, Celebration of life/Catalog release

**“Amazing - everyone was blown away... Awesome - they handled everything. I felt very comfortable knowing that they were on top of the details... So much more exciting than a fireworks display and they made the process seamless... Highly recommend using Firefly! Outstanding service, amazing show, very professional!”**

- Christine Smith, VP Marketing for The Dayton Foundation
- Centennial Celebration

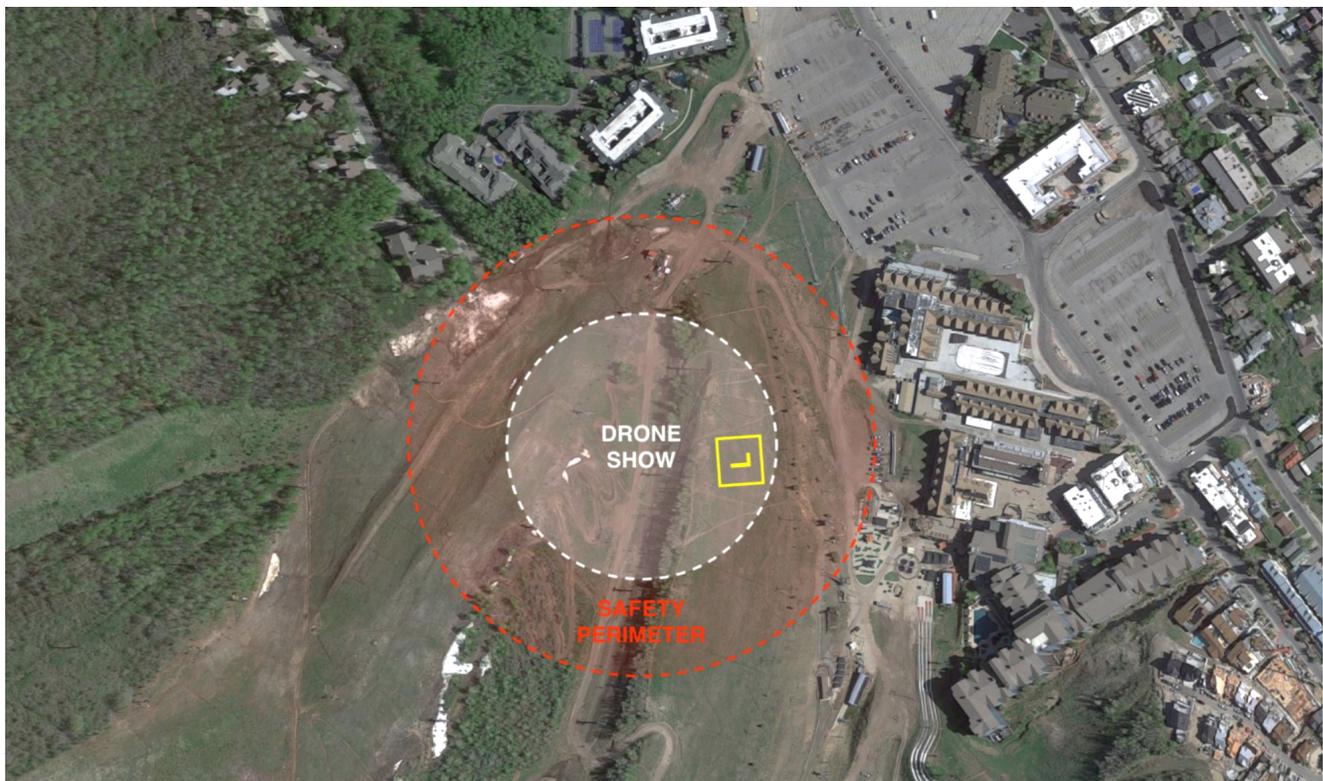
## **OPERATIONS PROPOSAL: OPERATING AREA**

On July 4th, 2023, Firefly Drone Shows LLC proposes the operation of a 200-drone show performance for Park City Municipal Corporation.

**Newly Proposed Location:** 40°39'05"N 111°30'38"W

Safety perimeter map including the launch location provided below:

Park City Municipal Corporation Safety Perimeter Diagram



**Updated location:** The proposed location is provided in the form of longitudinal and latitudinal coordinates and displayed in the site map above. This location is a slight variation of the initially suggested location by Park city. The reasoning for this change is to allow the full size of our drone show formations to be placed out of the general public's common areas nearby the initially suggested location. By relocating the launch location/operating area a few hundred feet southwest, we allow for the drone show safety perimeter to be more manageable to maintain during the duration of the show. By limiting the amount of walkways and high traffic areas, along with eliminating the chance of nearby residence buildings from existing within the safety perimeter, the newly proposed launch location/operating area is Firefly's preferred location. **Please note:** *In the scenario that the newly proposed location is outside of Park City's desired scope, Firefly can certainly explore an updated configuration to better reflect the scope.*

## **OPERATIONS PROPOSAL: FLIGHT PLAN**

### **1.1 Event Details**

**Project:** Park City 4th of July Celebration

**Date:** 7/4/23

**Location:** 40°39'05"N 111°30'38"W

**Time Frame:** 9:30PM - 10:30PM

**Altitude:** 0-400 ft AGL

**NM Radius:** < .10

**Operations Overview:** Firefly will operate 200 sUAS simultaneously under waiver 107W-2022-00713 on the date, time frame, and location specified above. The purpose of the operation is to provide a night time drone light show for the attendees of the Park City 4th of July Event. Only when the operating area is clear of and secure of all bystanders will the operation commence. All appropriate fail safes will be programmed prior to the operation. These include, max altitude, dual layer geofencing, battery voltage, etc. The Remote Pilot in Command (RPIC) will count into the takeoff sequence of the fleet. All Visual Observers (VO's) will be monitoring takeoff to notify the RPIC of any unforeseen issues. Once airborne, the operation will last approximately 15 minutes, making various designs, shapes and text. At the end of the show, all sUAS will return to the grid formation before initiating their return to launch sequence. Once landed they will automatically disarm. No less than 72 hours prior to operation, the local Flight Standards District Office (FSDO) will be notified. No less than 24 hours prior to the operation a Notice to Airmen will be published listing the location and timing details mentioned above.

## **SECTION 2 SAFETY OPERATING PROTOCOLS**

### **2.1 Operating Area Requirements**

#### **2.1.1 Sterile Environment**

All flights will be conducted in a unique and restricted environment. Prior to each flight, the RPIC and the VO must become familiar with the boundaries and topography of the site operating area and the RPIC must take caution not to exceed those boundaries during flight. sUAS operations personnel will sweep and secure the operations area to ensure that the environment remains free of nonparticipating persons and vehicles. Firefly Drone Shows, LLC will coordinate with local jurisdictions to ensure compliance with all local permitting and regulatory requirements.

The operating area consists of any property in which the sUAS are operating directly over top of. Firefly Drone Shows, LLC's personnel will ensure that no nonparticipating persons are allowed within the operating area except those consenting to be involved and necessary for operation.

## 2.2 Failsafe Procedures

### 2.2.1 Lost Link Landing Sequence

In the event that the sUAS loses its data link signal, the aircraft will initiate its Land procedure. Once initiated, the sUAS will enter a hover in its current position and begin to descend slowly. The aircraft is programmed to disarm itself once it reaches the ground, and detects that it is no longer descending.

### 2.2.2 Lost GPS Signal Landing Sequence

In the event that the sUAS loses its GPS signal, the aircraft will initiate its landing procedure. During the landing procedure, the sUAS will enter a stabilized hover and begin to descend slowly. The aircraft is programmed to disarm itself once it reaches the ground, and detects that it is no longer descending.

### 2.2.3 Aircraft Failure Procedure

In the event that an individual or multiple sUAS have an in-flight failure, the FFDS will immediately detect the issue and disarm the aircraft allowing it to fall safely within the sterile operating area.

In the unlikely event that the FFDS does not trigger the sUAS to disarm, the RPIC has the ability to manually disarm any sUAS from the Ground Station. If the RPIC or any of the VOs notice an in-flight failure the RPIC will identify which sUAS in the swarm are having a failure by using all available flight data. The GCS provides the RPIC with a 3D visual representation of all aircrafts in flight which includes the aircraft's position, orientation, vibration, speed, and other critical flight data. Using this data the RPIC can pinpoint which sUAS are having a failure.

Once all the sUAS with the failures are identified, the PIC has the following abilities.

- Hold the sUAS in its current position;
- Land the sUAS;
- Put the sUAS into Return to Home; and
- Disarm the aircraft.

The RPIC will use his or her best judgment to remedy the failure and safely fly the sUAS(s) with the failures away from the swarm and land it in a safe area.

### 2.2.4 Ground Control Station Failure

The GCS will consist of at least two computers to control the sUAS swarm. One computer will be the primary GCS and the second computer will be used as a backup GCS. Both the primary and backup GCS will be running the GCS software simultaneously. In addition, both the primary and backup GCS will have a secondary GCS software installed to control the drones in the event that there is a software failure.

In the event that the primary GCS fails, the RPIC will use the backup GCS to regain control of the sUAS swarm and land safely. If the RPIC determines that the GCS failure is not caused by the computer and that the failure is due to the GCS software, the RPIC can use either the primary or backup GCS computer to run the secondary GCS software to regain control of the sUAS swarm and land safely.

### 2.2.5 Flight Operation Boundary Recovery Sequence

In the event that a sUAS comes in contact with any part of the first layer of the Fly Fence during a mission, the sUAS will immediately hold position and land in a safe and controlled manner.

In the event that a flyaway aircraft is experiencing a severe in-flight failure causing the aircraft to quickly fly out of the first layer of the Fly Fence, the second layer of the Fly Fence will immediately disarm the aircraft when it crosses through the boundary causing the drone to fall to the ground safely within the sterile environment.

### 2.2.6 Intruding Personnel Procedure

In the event that a person is detected within the operating area, the VOs will immediately notify the RPIC of the intruding person and their location. The RPIC, using the ground station controls and information, will then navigate any and all sUAS away from the intruding person and to a safe area to land as quickly and safely as possible.

### 2.2.7 Intruding Aircraft Procedure

In the event that an aircraft is detected in the sterile operating area, the RPIC will immediately navigate any or all sUAS away from the detected aircraft and land the sUAS as quickly and safely as possible.

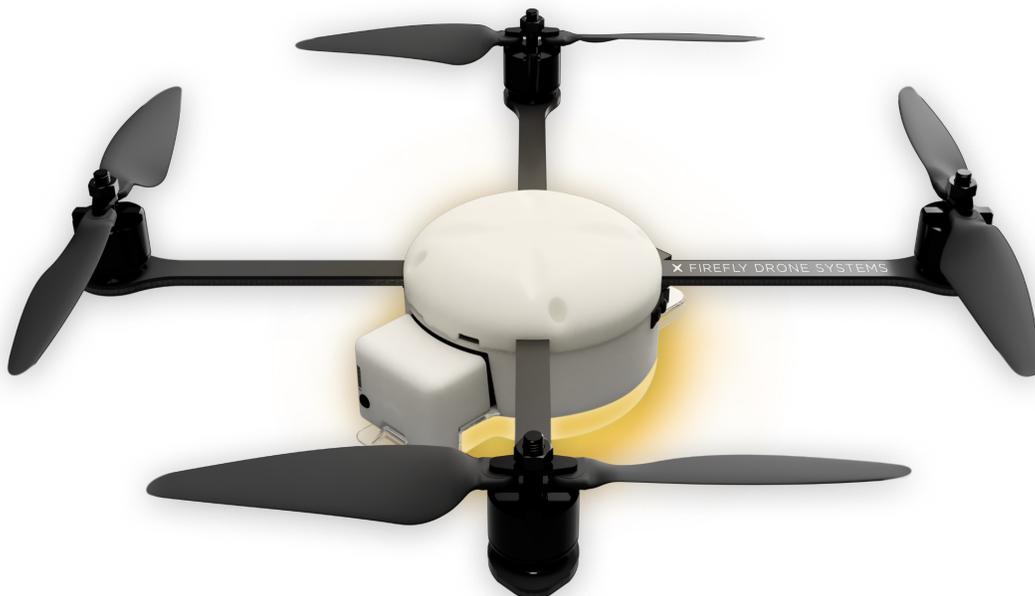
In the unlikely event that an aircraft does enter the sterile operating area during a loss link Land procedure, the RPIC, with the help of any and all VOs, will determine which sUAS pose a threat to the detected aircraft. Once determined, the RPIC, will kill power to the threatening sUAS and allow them to fall within the sterile operating area to get them out of harm's way of the detected aircraft intruding on the operating area.

## SECTION 3 AIRCRAFT DETAILS AND LIMITATIONS

3.1. Model - FireflyV1.0 is an F330 sized Quadcopter built and maintained by Firefly. Our drones have been designed specifically for the purpose of drone light displays.

### 3.2. Aircraft Specifics

- Operating mass of 2.2lbs
- Top speed of 15mph per FAA waiver
- 9 inch propellers
- Flight time 22 min
- Wind threshold of 25 mph at 400ft
- Max ceiling 400 per FAA waiver
- Powered by 3s 4400mah Lipo Battery
- Three Quarter View Below:



## PRODUCTION TIMELINE

Action Item	Date Completed
Initial Creative Call	Jun 5, 2023
Initial Design Preview Presented	Jun 16, 2023
Creative Finalized	Jun 23, 2023
Rehearsal at Test Field	Jun 26, 2023
Safety Call	Jul 26, 2023
Logistics Finalized	Jun 28, 2023
Load-in Onsite	Jul 4, 2023 3:00pm
Sound Check	Jul 4, 2023 5:00pm
Sunset	Jul 4, 2023 9:00pm
Safety Perimeter Secured	Jul 4, 2023 9:00pm
Showtime	Jul 4, 2023 9:30pm
Safety Perimeter Lifted	Jul 4, 2023 9:45pm
Load-out	Jul 4, 2023 11:00pm

***Please Note:** This timeline serves as an estimate for lead time and planning purposes. However these are set dates and times above, Firefly is capable of accommodating our client's desired production timeline to the best of our ability.*

## IN CLOSING

Once again, Firefly would like to formally thank the Park City Municipal Corporation for the opportunity to reply to this RFP related to the Park City 4th of July celebration. As stated before, we are keen on building a working relationship and will continue to offer premium drone light show solutions for your events to come. Having the experience of performing drone shows in a familiar location and the passion to bring Park Cities creative vision to life, Firefly is confident that we can properly service Park City with the most impactful drone show that will reflect this resort town's famous reputation.

## 200 DRONE SHOW ESTIMATE

Firefly Drone Shows, LLC  
 5105 Williams Lake Road  
 Waterford, MI 48329  
 www.FireflyDroneShows.com



### Estimate

**ADDRESS**

Park City Municipal  
 Corporation  
 ATTN: Jenny Diersen  
 P.O. Box 1480  
 Park City, UT 84060

ESTIMATE # 1543

DATE 04/27/2023

EXPIRATION DATE 07/01/2023

**JOB NUMBER**

July 4th, 2023

ACTIVITY	QTY	RATE	AMOUNT
Drone Light Show - 200 Drones, 15 minutes - Date: July 4th, 2023 - Location: Park City, UT	1	40,000.00	40,000.00
Custom Show Design & Animation - 6 Custom Formations (Creative TBD)	6	1,500.00	9,000.00
Travel, Logistics, Lodging & Per Diem - 4 Person Crew	1	3,500.00	3,500.00
Firefly Introductory Discount Applied - 20%	1	0.00	0.00

SUBTOTAL	52,500.00
DISCOUNT 20%	-10,500.00
<b>TOTAL</b>	<b>\$42,000.00</b>

# INSURANCE



FIREURO-01

PGYBEN

## CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
05/02/2023

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).

<b>PRODUCER</b> MFE Insurance Brokerage 1019 E. 4th Pl. Los Angeles, CA 90013		<b>CONTACT NAME:</b> PHONE (A/C, No, Ext): (213) 634-2500      FAX (A/C, No): (213) 640-5000 E-MAIL ADDRESS: certs@mfeinsurance.com	
		INSURER(S) AFFORDING COVERAGE      NAIC #	
<b>INSURED</b>  Firefly Drone Shows, LLC 5105 Williams Lake Road Waterford, MI 48329		INSURER A : <b>Hiscox Insurance Company</b> INSURER B : <b>Travelers Insurance Company</b> INSURER C : <b>Mitsui Sumitomo Insurance USA, Inc.</b> INSURER D : <b>Starr Indemnity &amp; Liability Company</b> INSURER E : INSURER F :	

**COVERAGES**      **CERTIFICATE NUMBER:**      **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 INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
<b>A</b>	<input checked="" type="checkbox"/> <b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:	<input checked="" type="checkbox"/>		P101.564.588.1	2/23/2023	2/23/2024	EACH OCCURRENCE \$ <b>1,000,000</b> DAMAGE TO RENTED PREMISES (Ea occurrence) \$ <b>100,000</b> MED EXP (Any one person) \$ <b>5,000</b> PERSONAL & ADV INJURY \$ <b>1,000,000</b> GENERAL AGGREGATE \$ <b>2,000,000</b> PRODUCTS - COMP/OP AGG \$ <b>2,000,000</b> \$
<b>B</b>	<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> Sch Auto PD Ded \$500 <input checked="" type="checkbox"/> HireAutoPD Ded \$1000 <input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> OCCUR CLAIMS-MADE DED    RETENTION \$			BA-6S600635	8/19/2022	8/19/2023	COMBINED SINGLE LIMIT (Ea accident) \$ <b>1,000,000</b> BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ <b>Auto PD Incl.</b> \$ EACH OCCURRENCE \$ AGGREGATE \$ \$
<b>C</b>	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> Y / N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) <input checked="" type="checkbox"/> Y    N / A If yes, describe under DESCRIPTION OF OPERATIONS below			WCP9115212	6/6/2022	6/6/2023	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ <b>1,000,000</b> E.L. DISEASE - EA EMPLOYEE \$ <b>1,000,000</b> E.L. DISEASE - POLICY LIMIT \$ <b>1,000,000</b>
<b>D</b>	<b>Aviation Liability</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	600006829-02	6/7/2022	6/7/2023	\$ <b>1,000,000</b>

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)  
 Certificate Holder is named as Additional Insured with respect to the operations of the named insured per written contract.

<b>CERTIFICATE HOLDER</b>  Park City Municipal Corporation P.O. Box 1480 Park City, UT 84060	<b>CANCELLATION</b>  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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# Open Sky Proposal



# OPEN SKY

## DRONE LIGHT SHOWS

### RFP Response for Park City Fourth of July Drone (UAV) Show

Date: May 22, 2023

To: Park City Municipal Corporation (the "Client")

Project Reference: PCMC 4th of July Show 2023

From: Nate Mortensen, CEO of Open Sky Productions, LLC (the "Company")

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- 1) Introduction: Open Sky was founded in Midway, UT with the goal of bringing a sustainable, safe and memorable entertainment alternative to events. We believe in working with our clients as long term partners, clearly communicating the process of drone light shows, and leaving a memorable impact on the audiences we entertain. As Utah's first drone light show company, we are excited to partner with Park City Municipal Corporation on a July 4th show that embodies the personality of the world famous resort town. No other drone company in the world has flown more shows in the state of Utah than Open Sky and we are dedicated to the communities in which we live, work and recreate.
  
- 2) Key Information:
  - a) Show Date: July 4, 2023
  - b) Show Size: 150 drones
  - c) Launch Time: between 9:30-10:00 pm local time (as weather and event timing dictates)
  - d) Venue Name: Park City Mountain Resort (First Time Lift Parking Lot)
  - e) Venue Address: 1493 Lowell Ave, Park City, UT 84060
  - f) Budget: \$45,000
  - g) Show Design: Custom
  
- 3) Company Bio and Information:
  - a) Relevant Experience:
    - i) Founded in 2021, Open Sky Productions brings imagination to life through awe-inspiring drone light displays across the USA. Our mission is to deliver a professional, unique, and memorable experience for our clients and their audience. Collectively the founders have spent over 30 years starting, leading and growing companies in the events, entertainment, and technology industries. The Company has flown over 50 drone light shows across the country in the last 12 months including over 20 shows in Utah for cities, universities, public companies, and private events. Our drone light shows typically range between 100-200 drones with a 10-13 min flight time. Living in the local communities of the Wasatch front and back, we specialize in delivering shows at high altitude and across various weather conditions.
  
  - b) Company Founders:
    - i) Ryan Davis - Board Member: Ryan is the founder of Ice Castles, an award-winning frozen attraction

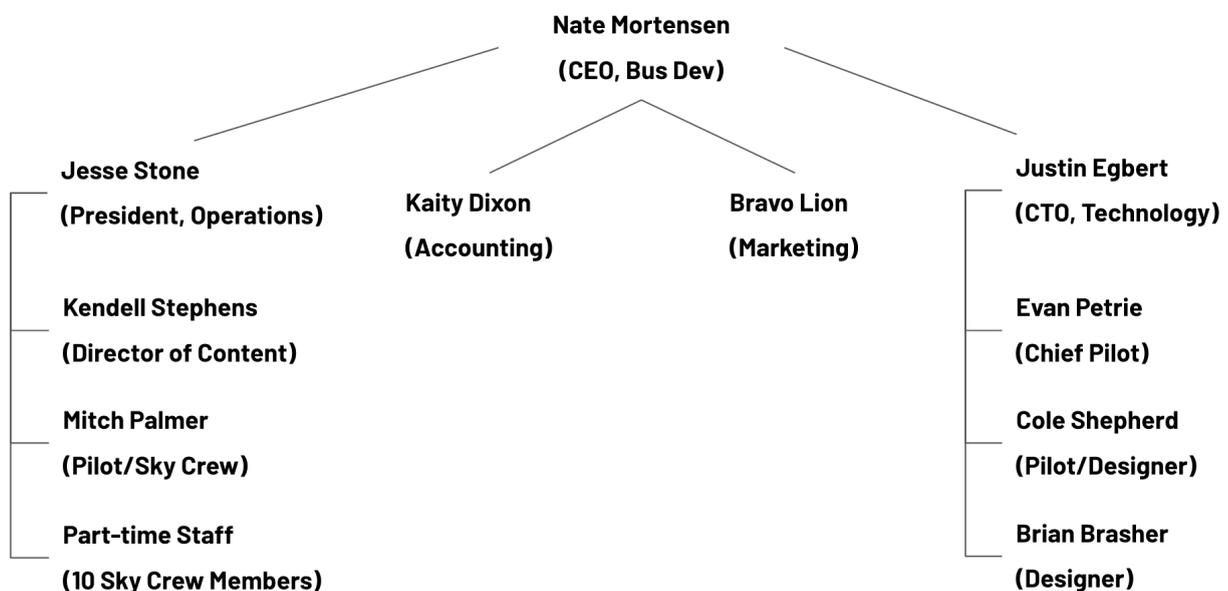
located in five cities across North America originating in Midway, UT. He has also founded other companies specializing in outdoor entertainment experiences like Christmas in Color and Slide the Slopes. Additional information can be found on his [LinkedIn](#) profile.

- ii) Jesse Stone - President: Jesse was one of the first employees at Ice Castles and helped the company expand to new locations across the US and internationally. He is the hands-on team crew leader for Open Sky overseeing operations. Additional information can be found on his [LinkedIn](#) profile.
- iii) Nate Mortensen - CEO: Nate's experience includes time in the semiconductor, aerospace, solar and software industries. Most recently he was the CEO of Omadi Inc, a venture backed software company serving the towing and recovery market. Nate runs sales, business development, and accounting for Open Sky. Additional information can be found on his [LinkedIn](#) profile.
- iv) Justin Egbert - CTO: Justin leads Open Sky's technology and design teams due to his experience in software development. His background includes time spent in electronic hardware technology and Southwest Airlines. Additional information can be found on his [LinkedIn](#) profile.

c) Company Organization:

- i) Structure and Processes: The Company is organized into three departments (business development, technology, and show operations). The initial client facing responsibilities fall under the direction of Nate until a contract is signed. At that point, a show kickoff call is scheduled with the client and a representative from each department to coordinate the initial show operations plan and show design. Justin's team will ensure the show design elements are completed and approved by the client while Jesse's team ensures all operational planning is set for the show.

ii) Company Org Chart:



4) Company Experience & References:

a) Industry Experience:

- i) Outdoor Entertainment & Drone Technology: The founders of the Company have run companies attracting over 5 million visitors per year in multiple locations across all seasons. After significant research, we believed that drone light shows would be another entertainment avenue to harness our collective experience and decided to purchase our drone hardware and software from our US based manufacturer Verge Inc. The Verge platform offers an integrated solution without the need for additional plug-ins from foreign based companies and provides real-time support to our pilots during shows (when needed).

- ii) Drone Certifications: Our pilots have completed a three day certification course by Verge, have passed the FAA Part 107 remote pilot exam, and hold a current UAS remote pilot's license. Many of our pilots also build drones as a hobby and hold degrees in mechanical engineering and computer science. Our crew members are received training as visual observers to maintain and enforce FAA safety protocols before, during and after our light shows. Pilot licenses and training certificates are available upon further request.
- iii) Financial Stability: The Company has been self funded by the founders and through cash flow from business operations. We have seen consistent growth each month and have tripled our show capacity within the last 3 months. Open Sky is an LLC registered in the state of Utah and maintains current business licenses. The company has sufficient cash and contracted business to remain solvent well beyond 2023.

b) Client References:

- i) **Client:** Town of Tusayan, Arizona  
**Contact Name:** Charlie Hendrix, Town Manager  
**Contact Email:** tusayantownmanager@tusayan-az.gov  
**Phone:** 928-637-4297
- ii) **Client: Sandy City, Utah**  
**Contact Name:** Monica Zoltanski, Mayor  
**Contact Email:** mayor@sandy.utah.gov  
**Phone:** 801-568-7109
- iii) **Client: Cottonwood Heights, Utah**  
**Contact Name:** Ann Eatchel, Culture Manager  
**Contact Email:** AEatchel@ch.utah.gov  
**Phone:** 801-944-7040
- iv) **Client: Utah Recreation and Parks Association**  
**Contact Name:** LeeAnn Powell, URPA Executive Director  
**Contact Email:** lpowell@urpa.org  
**Phone:** 801-782-5512
- v) **Client: River Bottoms Ranch, Midway, Utah**  
**Contact Name:** Janica Horner, Owner  
**Contact Email:** janica@riverbottomsranch.com  
**Phone:** 801-552-3167
- vi) Sample of our happy clients in 2022 and 2023 include:



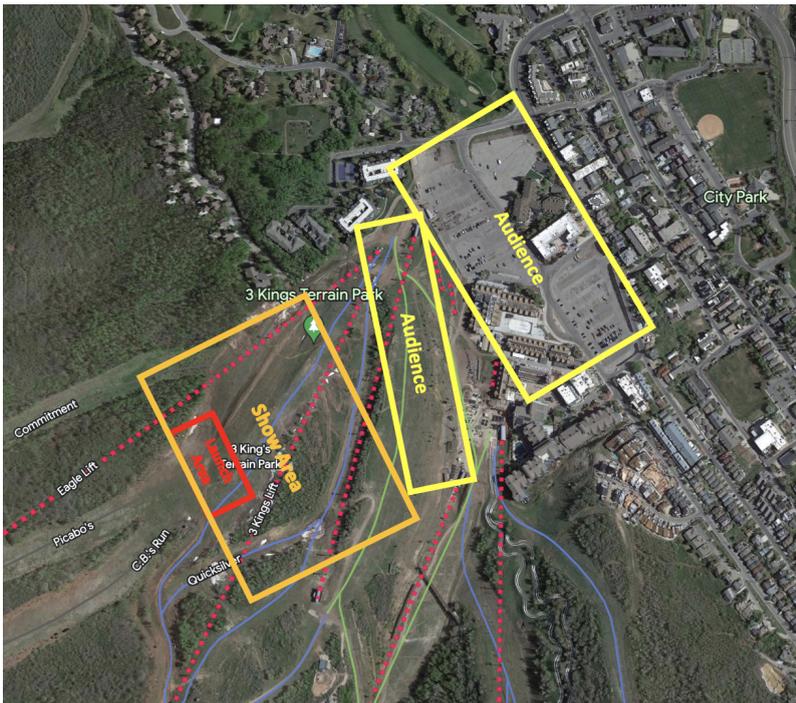
Our Clients:

5) Event Proposal:

- a) Timeline & Process: Following the selection process, Open Sky proposes the following timeline and process to meet the requirements of this RFP.
- i) June 1st: Provide Client with COIs & set up the show kickoff meeting
  - ii) June 5th or 6th: Hold the kickoff meeting in person (with virtual option)
    - (1) Team introductions
    - (2) Confirm show timeline
    - (3) Review the proposed site plan options
    - (4) Discuss initial show design and music ideas
  - iii) June 7th: In-person launch site walkthrough and confirm final site plan
  - iv) June 9th: Review and approve the show design storyboard (sequencing of drone animations)
  - v) June 16th: 1st review of animated show rendering & implement suggested edits
  - vi) June 22st: 2nd review of animated show rendering & implement suggested edits
  - vii) June 26th: Provide final animated show rendering with synchronized music ([example](#))
  - viii) June 20th-30th: Optional daytime test flight and signal check to confirm optimal show direction, viewing obstructions, and altitudes
  - ix) June 29th: Final operations call to confirm plan for July 4th
    - (1) Load-in/out timeline
    - (2) On-site contacts
    - (3) Communication methods
  - x) June 29th: File NOTAM with FAA (special authorization not needed as this show is in Class G airspace)
  - xi) June 30th-July 4th: Monitor weather forecast (communicate adjustments as needed)
- b) Show Day Operations Timeline: Proposed schedule for the July 4, 2023
- i) July 4th
    - 1:00pm: Arrive on site with equipment and charged batteries
    - 2:00pm: Launch location setup begins
    - 3:30pm: Initial launch setup complete
    - 4:00pm: Audio for ski hill setup and sound check complete
    - 4:30pm: Double check show parameters and safety scan
    - 5:00pm: Confirm audio files ready with Park City Resort sound system and/or radio transmission
    - 5:30pm: Show upload to drones complete
    - 6:00pm: Drone safety checks and hover test complete
    - 8:00pm: Confirm current weather conditions and anticipated launch time
      - (a) Schedule will be adjusted accordingly pending final launch time between 9:30-10:00pm
    - 8:30pm: Turn on drones and prep for launch
    - 9:15pm: Final safety check and visual observes move to key locations, start fog machines
    - 9:25pm: 5 min notice to launch given to audio personnel and event organizers
    - 9:29pm: 1 min notice given to key personnel
    - 9:30pm: 20 second countdown to launch begins
    - 9:30pm: Show launches with music
    - 9:45pm: Show lands and load out begins
    - 11:15pm: Load out complete and Open Sky departs event location

c) Flight Plan & Site Map:

- i) Launch area requirements for a 150 drone show: 3,000 sqft, relatively flat slope, grass below 2.5 inches
- ii) Best viewing experience for the audience is to watch the launch & landing sequence
- iii) Proposed site map:



- iv) We recommend the launch site at the rear of the show area and bring drones closer to the audience while maintaining the safety perimeter
  - v) Optimal viewing distance for a 150 drone show is 500-2,000 ft away
  - vi) Open Sky can provide reasonable audio equipment for spectators on the ski hill
  - vii) The elevated launch location allows for a comfortable viewing angle
  - viii) The show angle can be confirmed during the test flight to maximum visibility for the audience and the city
  - ix) The show will be flown within the bowl of the ski runs projecting North East toward the parking lot
- d) Required Certifications: The company possesses the required FAA Part 107 waiver for swarm drone light shows. Our operators are certified UAS pilots and have each flown dozens of shows on the Verge flight system. The Company's approved Part 107 waiver reference number is 107W-2022-01195.
- e) Included Services: The proposed budget for this show includes all planning and production services required for a successful drone light show.
- i) FAA waiver and required flight authorizations or notifications
  - ii) In-person show kickoff meeting
  - iii) Event planning coordination
  - iv) In-person site walkthrough
  - v) Optional daytime test flight
  - vi) Custom show design approved by Client
  - vii) Programmed music soundtrack
  - viii) 12-14 minute show duration with 150 drones
  - ix) Set up, flight, and dismantle of equipment
  - x) Media Package that includes an event highlight video of at least 60 seconds
  - xi) Price is inclusive of travel, freight, lodging and meals

6) Show Budget & Discount:

- a) Proposed all-inclusive price of the July 4th, 2023 drone light show: \$45,000
  - i) Standard July 4th price per drone is \$500 for a \$75,000 total price
  - ii) A \$30,000 total discount is being applied that includes
    - (1) 20% local show discount (\$15,000)
    - (2) 20% first time show discount (\$15,000)
  - iii) Additionally, the company is offering Park City a 50% discount for an additional show during an non-peak date to be used prior to July 1st, 2024
  
- b) Anticipated Costs
  - i) Design: \$5,000-\$7,500 for the custom show
  - ii) Event Coordination & Planning: \$5,000-\$7,500 for meetings, planning, scheduling, and coordination
  - iii) Test Flight: \$5,000 for crew, design changes, logistics and hardware
  - iv) Media Package: \$2,500 for videography, editing, and photos
  - v) Crew: \$2,500-\$3,000 for 5-7 crew members, pilot services and visual observers
  - vi) Travel: \$500 for fuel and equipment
  - vii) Meals: \$500 for crew of 5-7 members over 3 meals
  - viii) Insurance Allocation: \$2,500 for general, aviation, professional, and automotive liability policies
  - ix) Hardware and Software: \$10,000 in hardware maintenance, repair, and software license fees

7) Supplemental Content Examples:

- a) Drone Light Show Highlight Videos
  - i) [Salt Flats Show Highlights](#)
  - ii) [URPA Drone Show Highlights](#)
  - iii) [Sandy City Christmas Lighting Show](#)
  - iv) [Salt Lake City Illuminate Show](#)
  - v) [Thanksgiving Point Show](#)
  - vi) [Area15 Las Vegas Event Highlights](#)
  - vii) [Port of Redwood City Event Highlights](#)
  - viii) [Steamboat Springs Event Highlights](#)
  
- b) Rendered Show Videos with Audio - 150 Drones
  - i) [July 4th Sample Show](#)
  - ii) [UT Dallas Commencement Show](#)
  - iii) [San Antonio Show](#)
  - iv) [Show Size Example Video 100, 150, 200 Drones](#)
  
- c) Sandy City Vendor of the Year Video: [Here](#)



# Skyworx Proposal



May 19, 2023

**Park City Municipal Corporation**

c/o Jenny Diersen

P.O. Box 1480

Park City, Utah 84060

**Subject: Proposal for Drone Light Show / 4th of July**

PCMC,

As a pioneer in the field of drone light shows, we at Skyworx are committed to providing safe and awe-inspiring entertainment while prioritizing the use of renewable resources and minimizing our environmental impact.

Skyworx, founded in 2019 by a former Aerospace Engineer, specializes in advanced commercial drone operations and has contracted for NASA, DoD, FAA, and numerous US Corporations. In 2022, Skyworx partnered with GTN, a global broadcast media advertising company, that has been in business for over 25 years and is publicly traded. We put together a world-class light show organization with operations in the US, Australia, Canada, the UK, Europe, and Dubai. The US team for this show would consist of a 3D design and light projection technician who taught 3D design at Boise State University, a chief pilot and air force veteran, and a commercial drone pilot who specializes in close-proximity asset inspections and swarm flight.

Skyworx has designed, programmed, and executed numerous shows. A few notable examples of our work include performances for iHeartRadio, Disney-Marvel, Versace, Australian Open, City of Hollywood, The Corrs, KISS Tour, National Rugby League Finals, and many more. Most recently, we were able to execute arguably one of the most complex shows to date for the [Boston Red Sox](#). This was originally deemed an impossible traversal by 3 of our competitors. Additional shows in our portfolio can be found on our website linked here: <https://www.skyworx.show/>.

Drone light shows reinforce the goals of environmental preservation by utilizing advanced drones with electric propulsion systems that minimize carbon emissions and noise pollution. We aim to avoid sensitive ecological areas and wildlife habitats in our flight patterns. We pride ourselves on our ability to avoid single-use products in all parts of the process. The logistics and planning behind these shows demonstrate a commitment to preserving the natural surroundings of wherever we perform. On top of this, our mesmerizing drone formations create a sense of community among visitors and residents alike, fostering a shared experience and promoting a positive and inclusive atmosphere. All of which align with Park City's goals as a community.

Please find below an outline of our proposal:

1. Conceptual Design:

- a. Duration: The drone light show will last approximately 15 minutes, capturing the essence of the 4th of July celebrations.
- b. Theme: The show will be themed around the spirit of independence, patriotism, and the beauty of our natural surroundings.
- c. Visual elements: The show would be able to incorporate iconic American symbols, such as the flag, Statue of Liberty, and fireworks, rendered through intricate drone formations.
- d. Collaboration: Our team will work closely with city officials to present a computer generated simulation of the show.

2. Drone Operations:

- a. Flight Patterns: While ensuring maximum visibility for the audience, we will meticulously plan flight patterns that avoid sensitive ecological areas and wildlife habitats.
- b. Visuals: Drones will display anywhere from 10-15 images during the show.
- c. Logistics and Delivery: Equipment will be staged at the event prior to the dates of the show. All equipment will be inspected and charged.
- d. Compliance with Regulations: Our operations will adhere to all local, state, and federal regulations governing drone flight, ensuring safety and legality.
- e. See Appendix for general flight area of operations.

3. Safety Measures:

- a. Highly Trained Pilots: Our team is composed of highly skilled and certified drone pilots with extensive experience in executing complex aerial performances.
- b. Risk Assessments: Prior to the event, we will conduct thorough risk assessments to identify and mitigate any potential safety hazards.
- c. Emergency Protocols: We will have contingency plans in place to handle unforeseen circumstances, such as adverse weather conditions, equipment malfunctions, and crowd interference.
- d. Coordination with Authorities: We will collaborate closely with local authorities and members of the PCMC to ensure a seamless and safe operation.
- e. Our risk management strategy already allows us to meet your insurance requirements.



4. Projected Cost Breakdown:
  - a. Labor: \$8,000
  - b. Room and Board: \$4,000
  - c. Transportation: \$4,500
  - d. Logistics: \$7,000

For the PCMC approved amount of \$45,000, Skyworx will provide the following services:

1. Primary show on July 4th\*
2. Bonus show on July 3rd\*
3. Flight count of 300 drones for each show
4. Professional video recap of performance (via ground and air cameras)

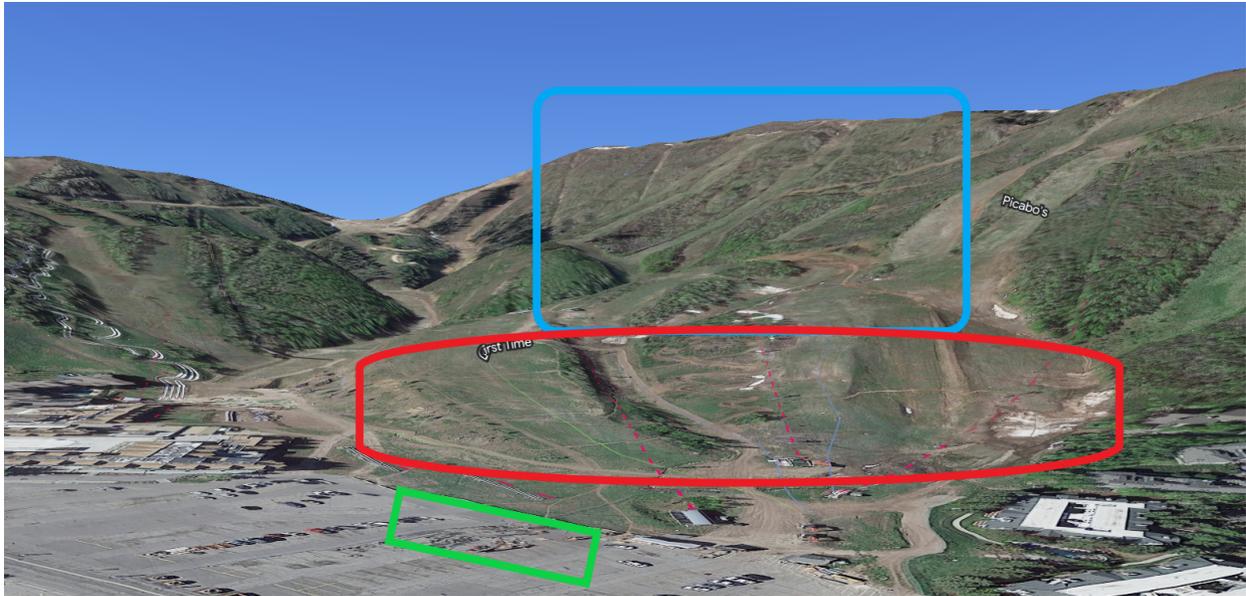
\*length of show can be doubled if you choose to split the fleet of 300\*

We are confident that our environmentally friendly drone light show will not only captivate your audience but also align perfectly with your event and city's commitment to environmental sustainability and sense of community values. Our team at Skyworx is excited to collaborate with you and make this year's 4th of July celebration an unforgettable experience for all attendees.

Thank you for considering our proposal, and we look forward to the possibility of working together.

Sincerely,  
Brian Grant  
VP of Sales  
Skyworx Drone Light Shows, LLC  
410-916-0109  
brian@skyworx.show

## Appendix



\*actual flight area might vary\*

Green - ground operations area

Blue - flight area of drones

Red - safety area, sterile during the show

# Evaluator Conflict Statement Form

## **RFP EVALUATOR CONFLICT OF INTEREST/CONFIDENTIALITY STATEMENT**

Your willingness to participate as an RFP evaluation committee member is an integral part of the procurement process. To assure the integrity of the RFP process, all RFP evaluation committee members, including any paid consultants, are required to complete the RFP Conflict of Interest/Confidentiality Statement. The following policies are applicable to this process:

**Conflict of Interest.** A conflict of interest or the appearance of a conflict of interest may occur if you are directly or indirectly involved with an organization that has submitted a proposal for evaluation. Prior to reviewing any proposals, you must inform Park City Municipal Corporation (PCMC) of any potential conflicts of interest. If you become aware of any potential conflict of interest as you review a proposal, you must immediately notify PCMC. You may be disqualified as an RFP evaluation committee member if you conduct yourself in a way that could create the appearance of bias or unfair advantage with or on behalf of any competitive proposer, potential proposer, agent, subcontractor, or other business entity, whether through direct association with contract representatives, indirect associations, through recreational activities or otherwise.

**Confidentiality.** The competitive procurement process and the obligations imposed by Utah state law requires that PCMC ensures that the competitive process operates in a fair and equitable manner. As an RFP evaluation committee member, you may have access to information not generally available to the public and are charged with special professional and ethical responsibilities. All documents and information pertaining to the RFP responses are considered to be confidential information. This information may include information about proposers that is to be used only during the evaluation process, and for discussion only with fellow RFP evaluation committee members. You shall not communicate the committee's deliberations, evaluation, scoring, or status of any proposal or business entity at any time prior to, during, or after the procurement process. You shall not use such information obtained as an RFP evaluation committee member for either personal benefit, pecuniary or otherwise, or copy and/or disseminate any portion of any proposal at any time prior to, during, or after the procurement process.

## **RFP EVALUATOR CONFLICT OF INTEREST/CONFIDENTIALITY STATEMENT**

I, \_\_\_\_\_, as a member of the RFP evaluation committee for Park City Municipal Corporation (PCMC) (Fourth of July Drone Show RFP) represent as follows:

1. I, to the best of my knowledge, do not have a conflict of interest with currently responding vendors or contractors in which the potential exists for my personal financial interests, or for the personal financial interests of a family member, to influence, or have the appearance of influencing my judgment in the execution of my evaluation committee duties and responsibilities.
2. I, to the best of my knowledge, do not participate in social activities with currently responding vendors or contractors that: (a) will interfere with the proper performance of my duties; (b) will lead to disqualification of me from the procurement process; or (c) would appear to a reasonable person to undermine my independence, integrity, or impartiality.
3. I have not received any compensation from any employee, consultant, or anyone working for any vendor or contractor currently responding to a solicitation.
4. I will not participate in any discussions or decisions relating to this RFP, if I have any type of personal relationship, favoritism, or bias that would appear to a reasonable person to influence my independence in performing my assigned evaluation committee duties and responsibilities, or prevent me from fairly and objectively evaluating a proposal.
5. I will conduct the evaluation in a manner that ensures a fair and competitive process and avoids the appearance of impropriety.
6. I understand that all information contained in the proposals and information regarding the evaluation process is protected and cannot be released or discussed in any manner with other offerors or individuals not involved in the evaluation process. I agree that I will not discuss or share any information provided in the proposals or interviews with anyone other than the selection committee members and PCMC representatives prior to the completion of the evaluation and selection process and I will not discuss or disseminate the deliberations of the selection committee, the basis for the selection, or any information identified as protected.

**I have read this document and understand my obligations as explained herein. I further understand that I must immediately advise PCMC, in writing, if a conflict currently exists or arises during my term of service as an RFP evaluation committee member.**

Evaluator Signature: \_\_\_\_\_ Date: \_\_\_\_\_

# Evaluation Criteria

Exhibit B: Evaluation Criteria and Basis for Award

**Request for Proposals  
Park City Fourth of July Drone Show**

**Section III. Content of Proposal and  
Evaluation Criteria and Basis for Award**

- A. Initially, a review of each proposal will be completed by Special Event, Police, Emergency Management and Building Departments to ensure compliance with the terms, conditions and requirements of the RFP. Any proposals that fail to meet all the Minimum Qualifications listed in Section III of the RFP may be deemed non-responsive.

Each member of the selection committee shall use the evaluation criteria and percentage weights below to establish their own ranking of the Respondents. The committee shall then use these individual rankings to establish an aggregate ranking of all the acceptable proposals.

1. Bio and Experience – (50%)
  - a. Respondent's ability, capacity, and skill to perform or provide the required services, listed in Section II of the RFP.
  - b. Respondent's current business license and organizational structure.
  - c. Respondent's Event Planning history, with an emphasis on the past three (3) years. Including any history working with City Municipalities and public programs.
  - d. Respondent provided at least two references including names and phone numbers.
2. Proposal (25%)
  - a. Clarity of proposal.
  - b. Respondent can achieve the fast-paced timeline as noted in the RFP.
  - c. Respondent's Process and method to complete the project.
3. Budget - (25%)
  - a. Clarity of budget.

## Exhibit B: Evaluation Criteria and Basis for Award

- b. Respondent can produce and meet insurance requirements.

### B. INTERVIEWS

The City reserves the right to conduct interviews with the highest-ranked Respondent(s). Interview requirements will be provided to those Respondent(s) selected for further consideration. Respondents are reminded that the selection committee shall look at the reasonableness of all aspects of the proposal and shall, in the selection committee's sole judgment, choose the Respondent with the best overall proposal.