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OFFICE OF THE CITY CLERK

PUBLIC SAFETY COMMITTEE MINUTES

June 24, 2025

The Public Safety Committee of the City of Mesa met in the Study Session room at City Hall, 20 East Main Street, on June 24, 2025, at 2:33 p.m.

COMMITTEE PRESENT	COMMITTEE ABSENT	STAFF PRESENT
Scott Somers, Chairperson	None	Scott Butler
Julie Spilsbury*		Holly Moseley
Rich Adams*		Kelly Whittemore

(*Participated in the meeting through the use of video conference equipment.)

Chairperson Somers conducted a roll call.

1. Items from citizens present.

There were no items from citizens present.

2-a. Hear a presentation, discuss, and receive a briefing on the City's new Public Safety Support Department.

Performance Advisor II Amanda Freeman introduced Andrew Reece, President and Chief Executive Officer with Winbourne Consulting Inc.; Public Safety Support Director Kimberly Meza; Police Chief Ken Cost; Fire Chief Mary Cameli and displayed a PowerPoint presentation. **(See Attachment 1)**

Mr. Reece provided an overview of Mesa's Emergency Communications Service Delivery Model Optimization Project, outlining the scope of the work to evaluate the operations, technology, and processes that support all public safety communications. He stated that the Winbourne team worked collaboratively with the City of Mesa (COM) to evaluate the current operations of emergency communications, specifically the 9-1-1 call center, police and fire emergency dispatch. (See Page 2 of Attachment 1)

Mr. Reece described the expertise and services that Winbourne Consulting Inc. can provide and stated that their primary focus is on public safety communications. He explained the

methodology used to achieve the goals and objectives of the COM and its strong desire to establish a governance structure, which has been critical to the success of the project. He advised that Winbourne will be providing background information and recommendations to help decision makers select a model. (See Pages 3 through 5 of Attachment 1)

Mr. Reece reviewed the challenges with the City's current public safety communications process and the key findings of their survey. He noted the goal is to have a seamless interaction with the City for responses to be selected and deployed as quickly as possible. (See Page 6 of Attachment 1)

In response to multiple questions from Chairperson Somers, Mr. Reece replied that migration to the Emergency Services Internet Protocol-based network (ESInet) and the upgrade to Mesa's telephonic system will make it easier to identify, trace, and determine the cause of dropped cell phone calls. He added that not all providers share cell towers.

Responding to a question posed by Committeemember Adams, Ms. Meza affirmed that the City has protocols for dropped calls and callbacks to ensure that resources are provided if needed.

In response to a question from Chairperson Somers, City Manager Scott Butler explained that the City's technology will integrate seamlessly with the Phoenix Regional Dispatch System and other partners, since everyone will use the same software program.

Responding to a question by Chairperson Somers, Mr. Reece answered that the integration technology will allow jurisdictions to send voice communications; however, data communication will be the responsibility of each jurisdiction to decide and will depend on their ESInet capacity. He reported that establishing processes and procedures is necessary to define who is allowed to access the information. He explained another resource to transmit information is through drone data, which allows for sharing of information with proper training, protocols, and authorizations to easily route calls through any jurisdiction within the state.

Mr. Reece discussed recommendations for the most effective structure to optimize the COM's delivery of public safety communications and advised that establishing a fully integrated communications center would enhance services. He noted that many of Mesa's peers have independent communication centers. (See Page 7 of Attachment 1)

In response to a question from Chairperson Somers, Mr. Butler explained that although the consultants recommend a fully integrated center independent of Police and Fire, the proposal is a hybrid model tailored to Mesa's specific needs.

Ms. Freeman elaborated on the benefits of the hybrid model, which was determined to be the most suitable option for the COM. She stated that creating an independent, neutral third department would relieve Police and Fire of administrative burdens, close current service gaps, and improve efficiency, allowing Police and Fire to focus on their core dispatch responsibilities. She further outlined the advantages of implementing a hybrid model under the guidance of governance. (See Pages 8 and 9 of Attachment 1)

In response to a question from Chairperson Somers, Mr. Butler clarified that Council can vote in favor of a fully integrated system; however, the organizational structure of a hybrid model is

preferred based on departmental feedback. He clarified that the call-taking function is different from the operation control that would be maintained by Police and Fire.

Chief Cost elaborated on the challenges within the Police Department and expressed support of the hybrid model.

Discussion ensued regarding the respective roles of call takers, dispatchers, officers, and first responders to enhance effectiveness and maintain coordination.

Ms. Meza reviewed the updates to the new Public Safety Support Department, an independent department supporting Police and Fire equally. She described the process for call takers, who will serve as fully trained first responders under the unified model, efficiently dispatching information to the appropriate services. (See Page 11 of Attachment 1)

Responding to multiple questions posed by Chairperson Somers, Ms. Meza confirmed that the old model was managed by the Police Department, while the proposed new model would be integrated. She provided information on career growth and promotional opportunities associated with the proposed new model, as well as equalized salaries.

Ms. Meza outlined the enhanced services that will support the new Public Safety Support Department. (See Page 12 of Attachment 1)

Mr. Butler explained that the COM hired Winbourne Consulting for their expertise and independent perspective. He stated the proposed new model aims to improve employee well-being through mental and physical health opportunities, better facilities, and pay, while at the same time creating a more efficient 9-1-1 response system that reduces response times for residents.

In response to multiple questions from Committeemember Spilsbury, Mr. Butler commented that the extensive work will continue for several years. He emphasized that the Governance Committee is working with leadership to streamline operations and ensure efficiency and safety. He provided an update of the recruitment process for the new Public Safety Support Department, which is currently underway.

Ms. Freeman reviewed the new governance model for Public Safety and the leadership group. She stated that the ultimate goal of the project is to elevate the experience of the residents and visitors who are calling in an emergency. She indicated that all decisions are being made through some level of governance in a collaborative way, and noted that leadership selected an implementation team to improve processes and an employee advisory group to ensure that frontline staff is included throughout the entire process. (See Page 13 of Attachment 1)

In response to multiple questions from Committeemember Adams, Mr. Butler stated that while staff had differing views, compromise was reached, and adjustments will be made as needed while monitoring quality assurance. He stressed the City's commitment to inclusivity and gathering input to shape the communication system according to community needs.

Chairperson Somers commented that Council should receive updates on the project to provide feedback.

Chairperson Somers thanked staff for the presentation.

2-b. Hear a presentation, discuss, and receive an update on Mesa Fire's response to li-ion battery and alternative energy source emergencies, including electric vehicle fires.

Assistant Fire Chief John Locklin introduced Fire Captain Jim Barnhart and displayed a PowerPoint presentation. **(See Attachment 2)**

Captain Barnhart highlighted statistics across the United States related to batteries sold annually and kept in residential structures. He pointed out lithium-ion (li-ion) batteries have become prevalent in most households, and batteries are consumed in nearly every fire. He explained that the use of a battery energy storage system is the most economical solution designed to reduce Mesa's energy consumption; however, he cautioned that when compromised can develop a toxic, flammable, and explosive environment. (See Pages 2 and 3 of Attachment 2)

Captain Barnhart advised that the Fire Safety Institute supplies most of the research on how fires start and provides key recommendations on how to manage them. He shared a video demonstrating how quickly a flame can spread from a lithium battery compared to synthetic fiber. (See Pages 4 and 5 of Attachment 2)

Captain Barnhart showed a video illustrating one of the hazards of li-ion batteries in garages related to electric vehicle (EV) charging and added that EV batteries cause deflagration. (See Page 6 of Attachment 2)

Captain Barnhart discussed the various types of li-ion fires and noted that the unique problem with li-ion batteries is the scope and size of the fires being directly correlated to the size and the state of the charge. He noted the dangers of li-ion fires, citing 56 garbage truck fires between 2019 and 2024, which is an increase of 83% compared to prior years. (See Page 7 of Attachment 2)

In response to a question from Committeemember Spilsbury, Captain Barnhart mentioned that there are many preventative measures that can be taken against li-ion fires, such as community messaging to help spread tools and resources that are needed by citizens. He added that the fires in garbage trucks are due to improper disposal by residents and that fleet drivers are accustomed to disposing loads in a safe area.

Captain Barnhart presented images of li-ion battery energy storage systems for battery recycling, which is part of Mesa's Emergency Environmental Cleanup Contractor. (See Page 8 of Attachment 2)

Captain Barnhart described one of the newest tools for EV fires is an EV blanket, which is a temporary solution until the City develops a better plan. He mentioned that Underwriters Laboratories (UL) and the International Fire Code (IFF) have recommended that the Fire Service not utilize the blanket since more time is needed to develop best practice recommendations. He explained how the use of an EV blanket in a parking garage fire might protect and stop a fire and allow the Fire Department to strategize on removing the vehicle out of a complex occupancy. (See Pages 9 and 10 of Attachment 2)

Responding to a question from Chairperson Somers, Captain Barnhart replied that with the appropriate volume of the flow rates, fire sprinklers are containing EV fires until the Fire Department arrives and will hopefully stop the fire from spreading to additional vehicles.

Captain Barnhart presented an image of a fire from decommissioned EV battery modules illustrating li-ion battery hazards. (See Page 11 of Attachment 2)

Captain Barnhart described the proper process to extinguish the li-ion battery fires; however, there continue to be challenges as staff determines individual plans based on each situation. (See Page 12 of Attachment 2)

In response to a question from Committeemember Spilsbury, Captain Barnhart replied that the City has conducted multiple community outreach efforts to educate residents on the proper disposal of li-ion batteries.

Responding to a question from Chairperson Somers, Assistant Chief Locklin answered that many Valley cities are working towards the full adoption of the 2024 fire code. He noted that most Fire Prevention Divisions are collaborating with Operations to establish consistent best practices across the Valley.

In response to a question from Committeemember Adams, Assistant Chief Locklin commented that the COM has only one electric fire truck, which includes a robust cooling system. He mentioned despite inherent dangers with li-ion batteries, the electric fire truck has temperature monitoring that triggers the fans to operate.

Mr. Butler emphasized that the City is currently testing the electric fire truck in a desert environment and will evaluate the findings before determining any future purchases.

Chairperson Somers thanked staff for the presentation.

2-c. Hear a presentation, discuss, and receive an update on Mesa's Drone as a First Responder Program.

Police Aviation Administrator Randy Wilson introduced Drone Program Manager and Fire Captain Cody Clark, Assistant Fire Chief John Locklin, and displayed a PowerPoint presentation. **(See Attachment 3)**

Mr. Wilson provided an overview of the operations of the Drone First Responder (DFR) Program. He stated that his main responsibility is to ensure that the program is in compliance with the Federal Aviation Administration (FAA) and he discussed the industry’s best practices and special permissions that drones must obtain, as well as the air data software that allows for electronic tracking of drones. (See Page 2 of Attachment 3)

In response to multiple questions from Chairperson Somers, Mr. Wilson stated that pilots only need one license to operate the various drones. He explained the process for obtaining a pilot’s license to operate drones and indicated that the Police Department uses an online system, while the Fire Department prefers classroom style. He mentioned that the length of time to obtain a license varies and can take up to 90 days.

Mr. Wilson discussed the updates to the DFR 2.0 Program and the progress that has been made. He reported that there is a docking station hanger for one of the drones that serves as their home location to protect against any elements, and he described some of the enhanced features. He explained software tools that are used for airspace safety, as well as permissions to utilize airspace and codes. He noted once drones are on scene, pilot operators are able to manipulate cameras to provide the best information to personnel on the ground, and the program responds to 238 to 250 calls each night. He discussed several minor issues being considered. He presented a video of a robbery in progress and explained how a drone was able to assist in apprehending a suspect. He commented that helicopters and drones complement each other in providing a successful outcome. (See Pages 3 through 5 of Attachment 3)

Responding to multiple questions from Chairperson Somers, Mr. Wilson reported that the program can be scaled up easily by adding another docking station and additional manpower. He stated he is collaborating with the airports on the FAA process, addressing certain issues, and coordinating the necessary permissions with local towers.

Captain Clark presented an image illustrating the drone as a key asset to protecting the community. (See Pages 7 and 8 of Attachment 3)

Captain Clark described the types of drone assets for Mesa Fire, their uses, qualifications of the pilots, and coverage throughout the city. (See Pages 9 and 10 of Attachment 3)

Captain Clark explained how a drone was able to assist with the extinguishment of a fire and minimize damage to a building when a fire truck could not get a backside angle on the fire due to construction. He outlined the benefits and enhanced features of using drones in search and rescue operations to deliver quicker results and assist in providing necessities to individuals. He elaborated on how drones can also assist with reducing the risk of spreading wildfires. (See Pages 11 through 13 of Attachment 3)

Captain Clark discussed the use of software to manage live streams, and utilizing the same software as other cities to fly drones on one shared airspace to ensure safety. (See Page 14 of Attachment 3)

Captain Clark shared a video of an overhead drone view to help identify potential dangers that a crew on the ground may not be able to see, thus enhancing situational awareness for firefighters. (See Pages 15 and 16 of Attachment 3)

Captain Clark reviewed the capabilities for expanding the drone program and mentioned that currently a drone is being tested that uses Artificial Intelligence (AI) to assist in locating individuals faster. He highlighted the advantages of the Mesa Fire Drone Program. (See Pages 17 and 18 of Attachment 3)

Chairperson Somers thanked staff for the presentation.

3. Adjournment.

Without objection, the Public Safety Committee meeting adjourned at 4:48 p.m.

I hereby certify that the foregoing minutes are a true and correct copy of the minutes of the Public Safety Committee meeting of the City of Mesa, Arizona, held on the 24th day of June 2025. I further certify that the meeting was duly called and held and that a quorum was present.

_____

HOLLY MOSELEY, CITY CLERK

lr
(Attachments – 3)

A New Service Delivery Model

for Mesa Public Safety Communications (MPSC)

Update to Mesa Public Safety Committee Members

June 24, 2025

winbourne

Original Charge to the Consultant

Identify **optimal model** for public safety communications. Address current state challenges while considering emerging industry trends, proven practices, and regional partnerships.

About Winbourne Consulting Inc.

For more than twenty-five years, Winbourne Consulting, Inc. has specialized in **public safety** and technology/telecommunications, serving federal, state, and local governments as well as international clients (600+ U.S. and 20+ countries).

We have provided consulting and project management services to nearly **600 public safety agencies** in the United States and 20 countries. Our clients include **8 of the 10 largest public safety agencies** in the U.S.

- Boston, MA
- DeKalb County, GA
- Cleveland, Ohio

Previous AZ Engagements

- City of Mesa
- Arizona Department of Public Safety
- Maricopa County, AZ Sheriff's Office
- City of Peoria, AZ

About Winbourne Consulting Inc.

Winbourne **delivers leading edge, results-oriented** technology, operational and management consulting services that support the delivery of integrated Public Safety solutions and services.

- Technology Planning & Implementation
- Operations and Staffing Assessment
- Next Generation 911 (NG911)
- Consolidation and Governance Planning
- Strategic Planning
- Big Data and Analytics
- Body Worn Cameras and Digital Evidence
- Network Planning and Design
- Smart Cities
- 311/Customer Relationship
- Cybersecurity
- Mission Critical Facility Design

CLIENT SATISFACTION

The caliber of our client services is validated each year through client satisfaction surveys. For the last 16 years, our firm has consistently achieved a **Highly Satisfied rating of 97-99%** from our clients.

https://www.w-llc.com/
https://www.linkedin.com/company/winbourne-consulting-llc/
https://www.youtube.com/@winbourneconsulting

The Winbourne Methodology

Tasks 1 to 3

Confirm Project **Goals,** Establish **Governance** and Understand **Strategic Priorities**

Task 4

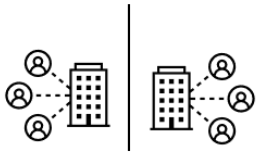
Evaluate 'As-Is' State

- Conduct **Communications interviews** and job **observations**
- Survey Police **Officers** and **Firefighters**
- Meet with **regional partner** representatives
- **Validate 'as-is'** state and collect follow up data
- **Summarize** implications for operating model design

Tasks 5 to 7

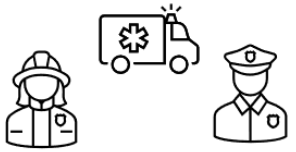
Define **Decision-Making** Process, Design Options, and Support Selection of New Model

Challenges With The Current Model



1. Intaking, Triaging, and Processing **911 Calls**

*Call **transfers** slow intake; Sizable **non-emergency** volumes distract from core mission*

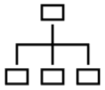


2. Identifying **Joint Incidents** & Assigning Responders

*Joint response policy lacking; **ring down** ineffective for activating incidents/exchanging information; diminished situational awareness*

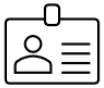
5. Evaluating **Performance**

***End-to-end performance** of Mesa's public safety response is not easily measured, hindering accountability*



3. Delivering Needed **Mission Support** Capabilities

*Administrative **duplication** (hiring, IT); critical **gaps** (QA), technology **not integrated** for sharing information*



4. Hiring, Training, and **Staffing** the Work

*Separate **classification** structures; competition for similar **skills**; untapped surge **capacity**; limited **mobility***

Consultant Recommendations

Can Mesa Maintain But Improve the **Status Quo?**

NO, continuing with current structures and operating practices is not operationally viable and cannot sustain growth in community needs.

Should Mesa Establish a **Fully Integrated** Communications Center?

YES, consolidation of Call Taking/Dispatching maximizes operational effectiveness and promotes business and administrative efficiencies.

Arriving at the Final Decision

Seeking Inputs from Public Safety Leadership & Labor

Equal partners, shared performance goals

- Handle all calls through a **single intake** by **Unified Call Takers**; no more handshakes or handoffs
- Maintain public safety (MPD, MFMD) **ownership and** operational **control** over **dispatching**
- Share **business/administrative services** to close gaps and reduce duplication

Arriving at the Final Decision

Seeking Inputs from Public Safety Leadership & Labor

- Coordinate policies, harmonize record keeping, and exchange information real-time to facilitate **joint response**

- **Collocate** all Call Taking, Dispatching positions in a single location to improve situational awareness for joint incidents and speed response

- **Formalize governance** to ensure coordinated strategic planning and operational decision-making among all public safety agencies

Consolidated Call Taking & Dedicated Dispatching

Why This Is The Best Option for Mesa

- **Reduces Response Times** for Fire and Medical Incidents
- Recognizes **Joint Incidents** Accurately (Single Stage) and Swiftly
- Equips All Public Safety Partners w/Relevant **Information** Simultaneously
- Enhances **Communications** Across On-Scene Responders
- Promotes **Safety** of On-Scene Responders
- Offers Callers a **Seamless** Experience
- Provides Employees w/ an **Enriched Role**

What Needs to Change?

Creating a New Public Safety Support Department

- House **Unified Call Taking** Function to Handle Police, Fire, and Medical Calls for Mesa and Regional Partners
- House Current **Forensics Services** Capabilities to Maintain Independence of Operations and Outcomes
- Close Existing Capability Gaps in **Business Services** and Eliminate Duplication in **Administrative Areas** by Sharing These Services
- Address High Volume of **Non-Emergency Calls** With New Servicing and Staffing Strategy

What Needs to Change?

Sharing Business and Core Services

Business Services

Not Staffed or Under-Resourced Currently

- Performance Measurement
- Business Analytics
- Reporting
- Quality Assurance
- Inquiries
- Community Engagement

Core Administrative Services

Duplicated in Police and Fire and Medical Comms

- Human Resources
- Budget & Financial Management
- Procurement
- Technology
- Telecommunications
- Facilities Management

Future: Centralize Business and Core Services

for Call Taking, Police Dispatching, and Fire and Medical Dispatching

Instead of adding positions to current groups to close capability gaps, centralize business functions and staff to serve all groups, reducing number of staff needed. Centralize core services to reduce burden on administrative areas.

New Governance Model for Public Safety

Who?

Assistant City Manager (Chair)

Chief, MFMD

Assistant Chief, MFMD

Chief, MPD

Assistant Chief, MPD

Director of Mesa Public Safety Support

Deputy Director of Mesa Public Safety Support

Implementation Manager

Role

Working **collaboratively to prepare for the future** of public safety communications (e.g., plans, budgets, operational direction, technology investments).

Questions?

Appendix

What's Changing?

The Move to Unified Call Taking

Today: Multiple Intakes

Police
Communications

- Police **Call Taking**
- **Call Triage** for Fire & Medical Calls
- Police Dispatching

Fire & Medical
Communications

- Fire & Medical **Call Taking**
- Fire & Medical Dispatching

Future:
*Consolidating Call Taking functions supports the shift to '**single intake**'.*

All **Call Taking** *(Separate Group, Single Intake)*

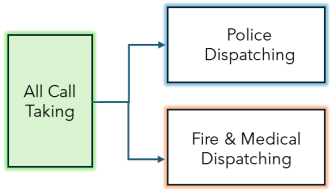
→ Police Dispatching

→ Fire & Medical Dispatching

*The **new civilian group** will handle **all** emergency and non-emergency **calls**.*

Unified Call Taking

What Does Single Intake Mean?



A **universal** or unified **call taking** model involves processing emergency calls via a single Call Taker that handles the call from pickup to placement of the incident in the dispatching queue(s). The single Call Taker:

- Gathers all relevant information from the caller
- Determines the nature and location of the incident
- Identifies which public safety services are needed to mobilize response
- Assesses criticality or priority of the response
- Provides pre-arrival instructions for medical calls
- Moves the incident to the respective queue(s) for dispatching

Consolidated Call Taking

Who Does It? Several Examples

- Tucson, AZ
- San Francisco, CA
- Denver, CO
- Washington, DC
- Miami-Dade County, FL
- Seminole County, FL
- Tallahassee/Leon County, FL
- Chatham County, GA
- Honolulu, HI
- Montgomery County, MD
- North Shore Regional 911, MA
- Hennepin County, MN
- Minneapolis, MN
- Nashville, TN
- Norfolk, VA
- Virginia Beach, VA
- Fairfax County, VA
- Seattle, WA

What's Changing?

Ownership of Public Safety Dispatching

- MPD and MFMD will have **organizational ownership** of Police Dispatching and Fire and Medical Dispatching, respectively

- The two Dispatching groups will focus solely on **assigning and communicating with**/supporting police, fire and rescue, and medical **units**; no more divided attention

- On-site **uniform presence** in the Communications Center will sustain a strong link to public safety operations, ensure ready access to operational expertise, and provide regional partners with a dedicated liaison

LI-ION BATTERY EMERGENCY

ALTERNATIVE ENERGY SOURCES

Public Safety Committee
June 24, 2025
Assistant Fire Chief John Locklin
Fire Captain Jim Barnhart

Li-Ion Battery Devices


Pacemakers

Cameras


Smartphones


Laptops

Watches


Power Banks

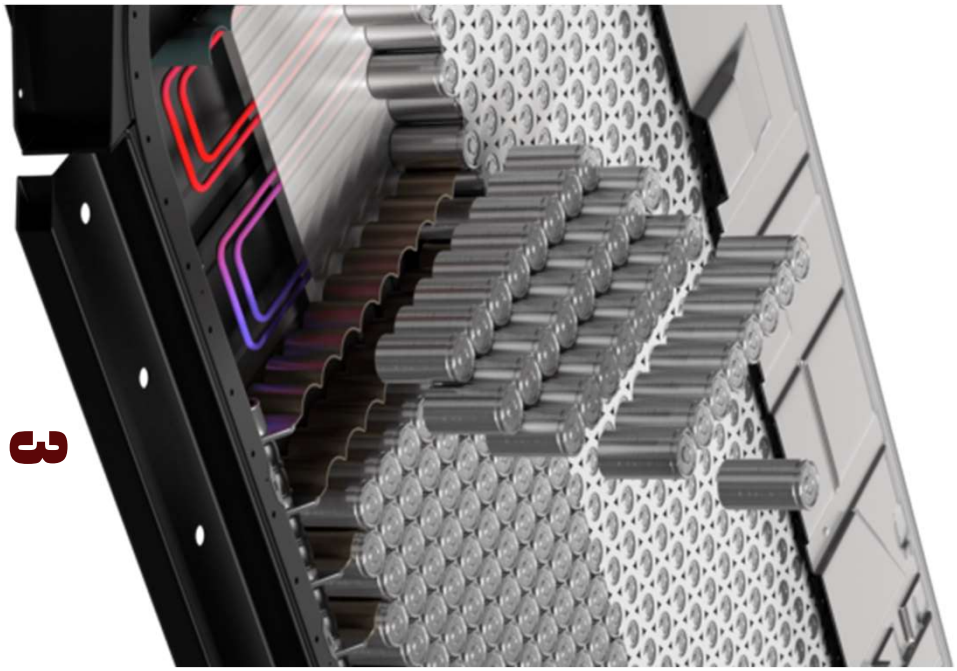

Alarm Systems


Power Tools


Mobility Scooters


Golf Carts


Li-ion 18650C 2200mAh 3.7V



https://vimeo.com/840506506/794be3c4ff?share=copy

https://www.facebook.com/watch/?v=523184239816164

Flame Spread Comparison: Lithium Ion Battery vs. Synthetic Materials


Examples of Lithium Battery Fires
Share
FIRECHIEF®
making the world a safer place
Phone Fires
E-Cig Fires
Powerbank Fires
Laptop Fires
E-Scooter Fires
E-Bike Fires
Recycling Centre Fires
Battery Energy Storage System (BESS) Fires
Electric Vehicle (EV) Fires
https://lithiumbatteryrange.firechiefglobal.com/
Pause (k)

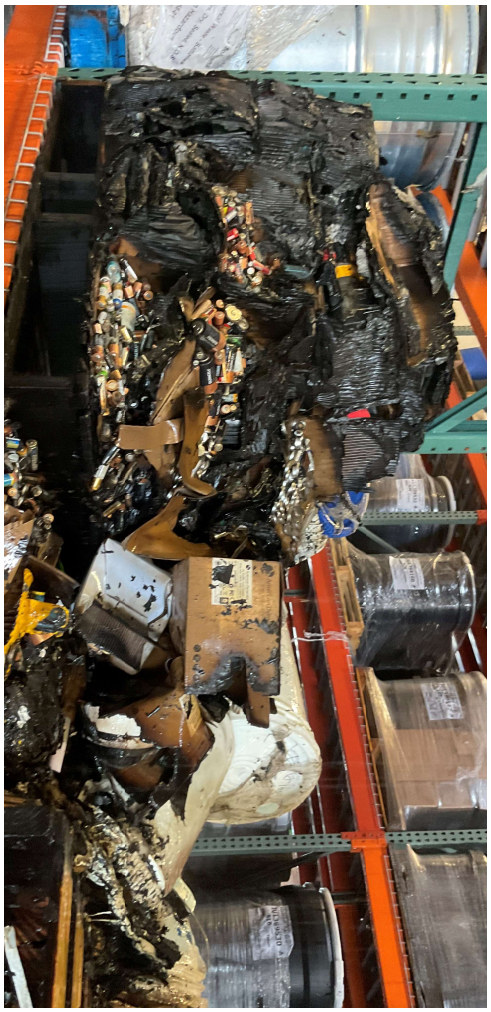



Photo Anthony Millan / Facebook


12

Thank You

Unmanned Aircraft System Update

POLICE
MESA
ARIZONA

June 24, 2025

UAS-DFR Program Recap:

- Aviation Administrator
  - UAS Program Manager
- UAS Program Assistant (Decision Package)
  - Direct supervision of the Departments Unmanned Aircraft System (UAS) Program,
  - Monitors compliance FAA Regulation, FAA authorizations & waivers, MPD Policy relevance,
  - UAS Pilot initial & recurrent training, UAS Pilot coverage,
  - UAS model vs. mission requirements,
  - UAS effectiveness / usage,
  - UAS maintenance requirements.
- UAS-DFR Program Recap
  - 5 RRPIC Pilots / 2 drones
  - Pilots based in RTCC / UAS based 20 E. Main
- UAS Program Recap
  - 75 RPIC Pilots / 57 drones
  - AirData Software
- FAA Authorization
  - FAA Certificate of Waiver / Authorization

Drone First Responder (DFR) 2.0:

- Program Description
  - RMS-CAD CFS
  - Based at Mesa City Plaza
  - No Rooftop Personnel
  - RRPIC in RTCC
  - Automated vs. Autonomous

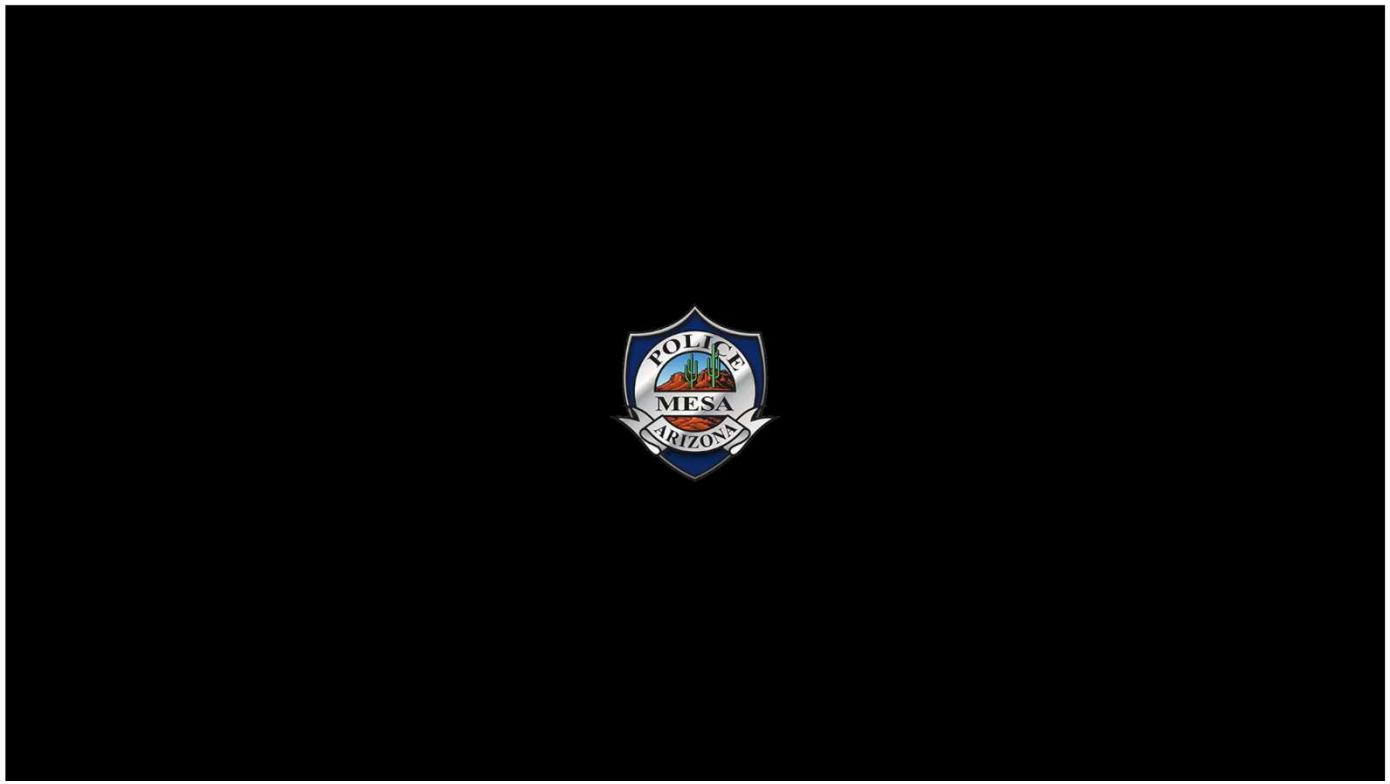
- Program Inception
  - May 2024 (1.0)
  - March 2025 (2.0)
- DFR Staffing
  - 5 RRPIC's (RTCC)
  - 1 Program Sgt.
- UAS / Drone / Hangar-Docking Station
  - 1 Hextronics Atlas Hangar / Docking Station (55x43x39 / 415 lbs)
  - 1 M350RTK (51 mph / Battery Life 45-50 min / 32 inches square / 20.2 lbs)

Drone First Responder (DFR) 2.0:

- Radar Collision Avoidance Area / Detect and Avoid (DAA)

  RPIC - VO Monitor / 2.5nm (2.8m) radius / FR-BVLOS-w/o VO, 400’ AGL
  Radar - DAA - 3.7nm (4.2m) Collision Avoidance / FCC License - Pending Authorization

Drone First Responder (DFR) 2.0:



QUESTIONS

DRONES IN PUBLIC SAFETY: ADVANCING FIREFIGHTING, SEARCH & RESCUE, AND WILDLAND PREVENTION

Public Safety Committee
June 24, 2025
Assistant Fire Chief John Locklin
Fire Captain Cody Clark

MODERN TOOLS FOR MODERN CHALLENGES

- Mesa Fire integrates advanced tech to protect our community.
- Unmanned Aerial Systems (UAS), or drones, are a key asset.

MESA FIRE DRONE ASSETS

- 1 DJI M30T – Long-range, thermal & zoom, all-weather capable (122 degrees, 33mph wind, rain)

- 3 DJI M3T – Compact, fast deployment, thermal imaging

- 1 DJI M3E – Used by certified fire investigators for mapping, investigation & documentation

24/7 UAS COVERAGE ACROSS THE CITY

- FAA Part 107 Certified Pilots on Battalions 202, 203, 204
- All 3 shifts covered for 24/7 drone response
- Pilots maintain FAA standards through regular training

DRONES ENHANCE FIREGROUND SAFETY & STRATEGY

- Thermal imaging reveals hotspots through smoke
- Overhead views support tactical decisions
- Safe structural fire support from a distance
- Improves situational awareness at incident start

FASTER FINDS, SAFER RESCUES

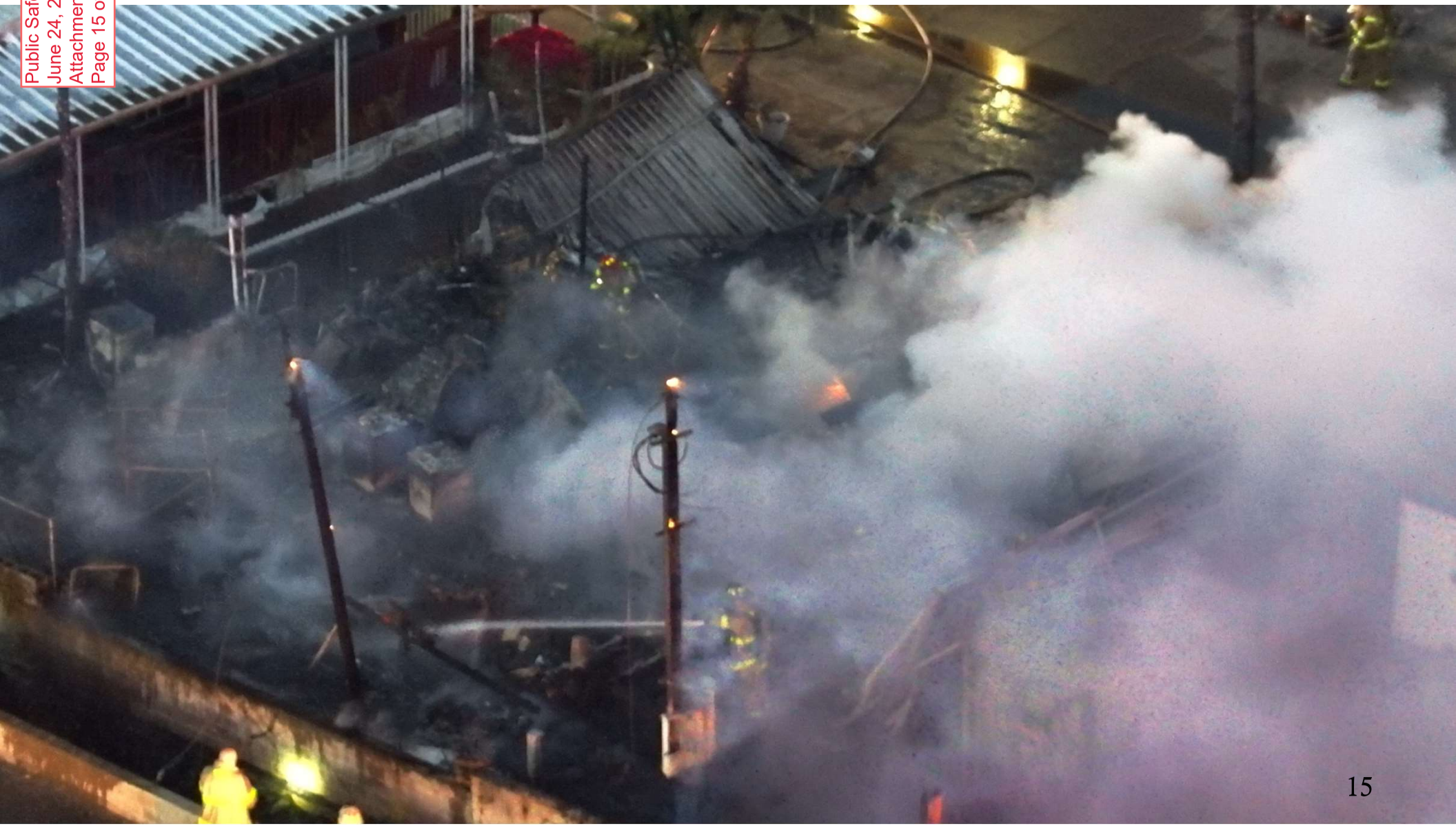
- Reduced search time in lost person & flood cases
- Payload allows rapid delivery of hydration or floatation devices
- Thermal & spotlight for night ops
- Ability to pre-program victim GPS coordinates or search patterns

PROACTIVE WILDFIRE RISK MANAGEMENT

- Mapping interface areas to monitor fuel loads
- Tracking vegetation overgrowth and risk areas
- Supports prevention strategies and planning
- Multiple neighborhoods signing up for Firewise program
- https://cloud.pix4d.com/dataset/2168507/map?shareToken=211acd61-4086-4037-bf55-9b8ebeef410a (Madrid map)

SHARED AIRSPACE, SHARED MISSION

- Interoperable with Gilbert, Tempe, Queen Creek, Phoenix, Police and Fire departments.
- Joint drone missions and unified live video feeds
  (ability to stream to any of the listed cities command and receive their feed, steam to the RTCC. and alarm room)
- Airspace deconfliction protocols in place via shared mission.



EXPANDING CAPABILITIES

- Future immediate response from multiple locations controlled via Drone First Responder
- Additional devices for heavier payloads and ability to fly indoors
- AI-assisted hazard detection and predictive mapping

MESA FIRE DRONE PROGRAM: A FORCE MULTIPLIER

- Enhances firefighter safety
- Accelerates search and rescue
- Improves wildfire preparedness
- Enables multi-agency operations
- 24/7 mission-ready coverage

THANK YOU

- Thank you for supporting innovation in public safety.
- Questions?