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# Standard Operating Procedure - Unmanned Aircraft

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This is the standard operating procedure for the Unmanned Aircraft System (UAS) of the Knoxville Police Department and is developed in accordance with Federal Aviation Regulations, the Public Safety Aviation Accreditation Commission, and the Commission on Accreditation for Law Enforcement Agencies Standards. I have reviewed and approved this document for implementation on this date.
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Mission Statement

The Knoxville Police Department’s Unmanned Aircraft System (UAS) Team is dedicated to providing safe and efficient aerial observation and aerial data collection in support of public safety through the use of UAS technology while respecting regulations, the law, and the privacy of the citizens we serve.

Purpose

The Knoxville Police Department Unmanned Aircraft System Team may provide aerial support during investigative missions, tactical response missions, or other emergencies in which there is a real and present danger to the community and property.

This policy is intended to provide personnel with assigned responsibilities associated with the deployment and use of an unmanned aircraft system (UAS) with instructions on when and how this technology and the information it provides may be used for law enforcement and public safety purposes in accordance with law.

I. Function and Administrative Standard of the Unmanned Aircraft System Team

A. This policy is intended to promote the safe and efficient operations of the department’s unmanned aircraft. It is not intended to be all-inclusive, but is a supplement to other department guidelines, Federal Aviation Regulations, aircraft manufacturers’ approved flight manuals, etc. and is written in compliance with US Federal Aviation Administration regulatory compliance, TN State Law, and best practices as prescribed by the Public Safety Aviation Accreditation Commission.

B. This policy also serves as the KPD UAS Team’s comprehensive operations manual. The goal of this policy and manual is to foster safe, legal, ethical, and cost-efficient operations, set clearly defined operational practices, and set parameters for decision-making. All members of the team will be provided a copy of the manual and will demonstrate an understanding of its contents through practices and operations. Members will also carry it with them during all UAS activities. Annual review of the content of this manual will be documented with each member of the team.

C. The Federal aviation regulations defines a small unmanned aircraft system (UAS) as the unmanned aircraft and its associated elements (including communication links and the components that control the small unmanned aircraft) that are required for safe and efficient operation of the aircraft in the national airspace system. Unmanned aircraft means an
aircraft operated without the possibility of direct human intervention from within or on the aircraft.

D. The UAS program will be staffed by members who are mindful of the balance between the Department’s desire and obligations to protect and serve the community and the community’s constitutional rights to privacy. The Knoxville Police Department is aware of citizens’ concerns regarding unwanted intrusion into their personal lives by law enforcement.

E. The Knoxville Police Department’s UAS Team will perform their missions with the highest emphasis on safety, ethics, and the rule of both state and federal laws in all aspects of the program’s operation. The overall goal is to accomplish the mission utilizing risk management as a means of identifying, assessing and mitigating risks. The Knoxville Police Department recognizes no mission is so critical it would necessitate accepting risks that introduce hazards which cannot be mitigated or that require deviation from safety policies, procedures, training standards, or the prudent judgment of the aircrew. Further, no mission is so critical that unethical or legally questionable tactics are permitted. Members of the team will consistently emphasize safety through a systematic program of risk management, standardization, training and leadership. SAFETY, above all else, is the primary concern in each and every operation, regardless of the nature of the mission.

F. UAS Program Budget

1. The UAS team will decide annually the training and equipment needs for the upcoming fiscal year.

2. Funding for equipment and external training will be submitted by the UAS Team Commander on an annual basis. The Team Commander will then be responsible for expenditures of approved funds in accordance with policy and procedures.

I. Transparency

The UAS Team recognizes that for the public to accept and support the use of UAS, the agency must be transparent about the uses of the equipment as long as the impact does not place the mission or investigation in jeopardy.

J. Inquiries and Complaint Processing
Any complaint about the use or operation of the UAS will be filed through the department’s Internal Affairs Unit. Complaints may also be made to the Federal Aviation Administration.

K.  Liaison

1. The UAS team will maintain liaison and working relationships with other agencies that operate inside the same airspace. This relationship will include conversations on operations and best practices flying together, sharing information and polices, and conducting meetings and training as needed to make for a safer and more effective operation for all involved.

2. These agencies include, but are not limited to, the Knox County Sheriff’s Office Aviation Unit, Life Star air ambulance, operations staff from both Downtown Island Airport and McGhee Tyson Airport, and the Federal Aviation Administration, both Nashville and Atlanta offices.

L.  Media Relations

All media requests and relations will be handled in accordance with the Department’s PIO SOP.

II.  Operational Standard

Operations will comply with any federal, state, local laws or regulations that apply to UAS to include those regulations established by U.S. Federal Aviation Administration including 14 Code of Federal Regulations (CFR), PART 107 for U.S. civil operations, applicable certificate(s) of waiver when required, under a blanket COA, or under a jurisdictional COA.

A.  Authorized Uses of Unmanned Aircraft Systems

1. Authorized and appropriate uses of the UAS shall be compliant with TCA 39-13-609 and approved by the UAS Team Commander or their designee.

2. Examples of uses include, but are not limited to, searching for missing persons, situational awareness to assist incident commanders with understanding the scope of a critical incident scene, collecting imagery of crime scenes and traffic accidents scenes, searching for a fugitive, assisting the fire department,
community outreach, providing a visual perspective for traffic/crowd control and safety, and support disaster response.

B. Mission Authorization

All UAS flights and missions will require supervisory review and approval from the UAS Team Commander or his designee. Mission Authorization will be performed in four steps: 1) Preliminary review by team member, 2) Preauthorization by Unit Commander or designee, 3) Reassessment by team member once on scene, and 4) Reauthorization by Unit Commander or designee. Exigent circumstances must exist to deviate from this authorization.

C. Protection of Rights and Privacy

1. Any decision to deploy the UAS will include consideration of the protection of citizens’ civil rights and reasonable expectations of privacy. UAS operators and observers will ensure that operations of the UAS intrude to a minimal extent upon the citizens. UAS Operators will balance all operations with the need to accomplish the mission while maintaining public privacy and the freedom from intrusion.

2. When the UAS is being flown, the onboard cameras will be turned facing away from occupied structures to minimize inadvertent video or still images of uninvolved persons, and will not conduct random surveillance activities.

D. Search Warrants

1. Aerial observations and searches of the ground may, under some circumstances, intrude upon a person’s reasonable expectation of privacy and therefore come under the protection of the Fourth Amendment to the U.S. Constitution. It cannot be assumed that compliance with FAA regulations will automatically satisfy Fourth Amendment requirements.

2. For flights and data collection that require a search warrant prior to flight pursuant to Tennessee State Law, the UAS Unit will seek the assistance of a CID Investigator for writing the warrant. The search warrant affidavit should include the following as a “data collection statement”: 
i. The persons that will have the power to authorize the use of the unmanned aerial vehicle;
ii. The locations in which the unmanned aerial vehicle will operate;
iii. The time period for which the unmanned aerial vehicle will operate in each flight; and
iv. Whether the unmanned aerial vehicle will collect information or data about individuals or groups of individuals, and if so:
   a. The circumstances under which the unmanned aerial system will be used; and
   b. The specific kinds of information or data the unmanned aerial system will collect about individuals and how that information or data will be used, disclosed, and otherwise handled, including:
   i. The period for which the information or data will be retained; and
   ii. Whether the information or data will be destroyed, and if so, when and how the information or data will be destroyed.

E. Prohibiting the Arming of Unmanned Aircraft Systems

Attaching weapons of any type or attaching the means of deploying weapons of any kind to an UAS aircraft is strictly prohibited. This includes any type of projectile, firearm, chemical agent, or electrical current weapon.

III. Team Composition

A. Chain-of-Command

The UAS Team is assigned to the Homeland Security Section of the Patrol Division of the Knoxville Police Department. The Patrol Division Commander appoints a Team Commander to supervise the team. The Team Commander reports directly to the Patrol Division Captain. Team members report to the Team Commander for issues pertaining to the team.

B. UAS Crew Qualifications and Minimum Crew Requirements

1. Members will be added to the UAS team as determined by the Team Commander and the Patrol Division Commander or designee. Members may be added by means of a departmental posting or
based on an individual’s qualifications at the discretion of the Team Commander. As members are added to the team, they will be informed of their responsibilities, duties, and expectations to include long term achievement goals.

2. All training, flights, and certifications/licenses for each member of the UAS team will be documented by the member and made available upon request. All team members will maintain flight logs that include flight time and time flown as well as any time serving as Sensory Operator, Visual Observer, and Mission Coordinator. Team training and performance will be documented by the Team Commander.

3. The uniform for the UAS team will be the KPD training uniform or the team members’ uniform of the day, as directed by the Team Commander. Each member will keep with them safety glasses, sun glasses, and reflective vests for personal protective equipment.

4. All team members will be required to attend monthly training, mission, and any additional training. Any absences must be approved by the Team Commander.

5. Members may be temporarily or permanently removed from flight status (or team membership) at any time by the Team Commander for reasons including performance, proficiency, flight currency, decision making, and attendance

C. UAS Team Commander

1. The Team Commander will be appointed by the Patrol Division Commander and approved by the Chief of Police. The law enforcement aspects of KPD unmanned aircraft operations are ultimately under the command and control of the UAS Team Commander. The Team Commander may delegate team responsibility to UAS team members.

2. While the Commander is not required to be a licensed pilot, they will be a sworn supervisor of the department who has the knowledge, skills, and abilities to safely and effectively manage the operation. The Commander is responsible for overall management and supervision of training and operations, which includes mission approval, budget preparation and control, personnel selection, etc.

3. The UAS Team Commander will also
a. Monitor / update FAA Waivers, as required;
b. Ensure UAS operations are conducted in accordance with waivers, this SOP, any applicable Federal Aviation Regulations and requirements, and Tennessee State law;
c. Ensure the maintenance of training, flight, and maintenance records for each Operator and Visual Observer, as well as individual aircraft;
d. Coordinate UAS training activities and missions;
e. Act as the primary point of contact between the agency and the FAA.

D. Executive Officer/Chief Pilot

The UAS Team Commander may appoint a subordinate member of the team to serve as the Executive Officer and Chief Pilot for the team. This member should be the most experienced pilot on the team and possess the knowledge, attributes, and skills to manage the team in the Commander's absence.

E. Pilots

1. Pilots must be members of the Knoxville Police Department and their participation on the team must be approved by the UAS Team Commander and Patrol Division Commander or designee.

2. A pilot's primary duty is the safe and effective operation of the agency's UAS in accordance with the manufacturers approved flight manual, FAA regulations, Federal, state, and local laws.

3. Team Pilots must maintain a valid driver license and valid FAA Remote Pilot Certificate (Part 107). They must also complete training in accordance with each aircraft manufacturing operating guidelines, pilot ground school, and KPD UAS training.

F. Pilot in Command (PIC)

1. The Pilot in command is a pilot as previously described who is operating the aircraft at the time of flight, regardless of reason (training, mission, demo).

2. In order to fly a mission (other than flights required for training or currency), the PIC must have completed three (3) currency events within the previous 90 days. Currency events include landings, takeoffs, and simulator flights. Pilots who experience a lapse in
currency must perform their currency events under the supervision of a UAS Commander or Chief Pilot. Lapsed currency flights may not be in support of an actual public safety mission.

3. The pilot-in-command (PIC) is directly responsible for and is the final authority over the operation of the unmanned aircraft. PICs have absolute authority to reject a flight based on weather, aircraft limitations, physical condition, etc. No member of any law enforcement agency, regardless of rank, can order a PIC to make a flight when, in the opinion of the PIC, it cannot be performed safely.

4. PICs shall be responsive to the requests of the sensor operator and/or visual observer.

5. PICs may operate camera and related controls at their discretion. The sensor operator will be ready to take control of the cameras at any time.

6. Other than camera controls, the PIC will have no other duty or responsibilities while operating the aircraft.

G. Sensor Operators (SO)

1. The Sensor Operator is responsible for assisting the pilot by operating the camera attached to the aircraft and interpreting downlink data received from the UAS. They will also operate any payload attached to the aircraft.

2. Sensor Operators must have documented training from the vendor or supplier (or from someone already trained and approved by the Team Commander) for the equipment they are operating.

3. The SO is the custodian of evidence. In this capacity, the SO is responsible for the safeguarding and proper processing of any evidence including, but not limited to, digital imagery.

3. In the absence of a Mission Coordinator (MC) the SO will fulfill those assigned duties.

H. Mission Coordinator (MC)
1. The Mission Coordinator is responsible for coordination of the mission, documentation, and liaison with other officers or agencies on the scene.

2. The MC will handle radio communications between ground units, the dispatcher, or other officers.

3. The MC shall remain alert for suspicious persons or activities on the ground near the launch/recovery area. They will also ensure the PIC is not being distracted or interrupted by persons on the scene.

4. The MC will serve as the Safety Officer for the flight ensuring all flight operations personnel understand applicable regulatory requirements, standards, and organizational safety policies and procedures. This does not preclude crew members from being alert for safety issues; everyone is a Safety Officer.

5. The MC will measure PIC and SO performance and compliance with organizational goals, objectives, and regulatory requirements as they impact flight safety.

I. Visual Observers (VO)

1. Visual Observers should be licensed remote pilots so they are familiar with the rules of flight and limitations of the remote aircraft being operated. Anyone acting as a VO must be familiar with the following regulations.
   
   a. 14 CFR 91.111, Operating Near Other Aircraft;
   b. 14 CFR 91.113, Right-of-Way Rules;
   c. 14 CFR 91.155, Basic VFR Weather Minimums, cloud clearance, in-flight visibility;
   d. Glossary of terms including standard ATC phraseology and communication;
   e. The duties and responsibilities listed in this section.

2. The Visual Observer is responsible for assisting the pilot in scanning the airspace surrounding UAS operations. They will maintain visual awareness of the airspace and advise the pilot of any imminent hazards including other aircraft, persons, obstructions, terrain, and adverse weather conditions. The VO will ensure the UAS is yielding to all manned aircraft.
3. The VO should have no other responsibilities so they may remain alert. They will maintain constant verbal communication with the PIC (may be by means of voice or radio). They may only serve as a VO for one aircraft at a time.

4. The VO will handle radio communications with air traffic control and other aircraft by means of an air band radio, and relay that information to the PIC. The VO will assist in airspace de-confliction by transmitting position reports on the local Common Traffic Advisory Frequency (CTAF), when possible.

5. A person not part of the UAS team may be temporarily appointed as a VO at the agreed upon discretion of the PIC and Mission Coordinator. This person must act under the direction of a Senior VO who is a member of the UAS team and meets all the qualifications of this policy. The Temporary VO will solely be responsible for maintaining line of sight coverage and collision avoidance in areas obscured to the Senior VO. Risk management and communication procedures will be discussed between the Senior VO and Temporary VO prior to the flight.

IV. Operational Procedures

A. Minimum Crew Composition for UAS Operations

The minimum crew for any flight will consist of a Pilot-in-Command (PIC) and at least one other crewmember performing the duties of a Visual Observer. The recommended and preferred crew will consist of four members in order to fill all duties safely (PIC, SO, VO, MC).

B. Minimum Crew Documentation for UAS Operations

The Crew must have with them a current copy of the team SOP, FAA Waivers, FAR AIM regulation manual, sectional chart, aircraft manual, aircraft maintenance log, aircraft registration, and aircraft preflight checklist. Each Pilot must also have with them their driver’s license and FAA Remote Pilot License.

C. Flight Restrictions for UAS Operations

1. All Unmanned Aircraft will be operated in accordance with UAS Manufacturer’s manual and recommendations, letters of agreement, waivers, Federal Aviation Regulations, and this standard operating procedure.
2. Whenever possible, only the pilot-in-command and the sensory operator will occupy the flight operations area. All other personnel will observe from a distance that discourages conversational communication with the PIC and SO. Staff other than the PIC and SO may view downlinked imagery via a remote viewing terminal (RVT) located away from the flight operations area.

3. Personal use of departmentally owned UAS aircraft and equipment is prohibited without permission of the Chief of Police.

D. Call Out Procedures

1. Requests for UAS Unit support for planned events should be submitted to the UAS Team Commander in advance of the event. When possible, planned flights should occur on UAS scheduled training days.

2. Requests for immediate support of any unplanned events shall be made to the UAS Team Commander either directly or through dispatch. If the UAS Team Commander cannot be reached, any member of the UAS Team will be contacted.

3. Once a request for UAS response has been approved, the Team Commander (or member contacted in their absence) will notify additional team members. Those members on duty shall be called first, then off duty will be requested until an appropriate number of crew members are responding. Coordination for equipment pick up will be made by those responding. Dispatch will be notified of the mission and location.

4. Any request, either planned or immediate, that would occur outside the City of Knoxville must be first approved by the Patrol Division Commander or their designee.

E. Mission Priorities

1. Several requests for air support may be received simultaneously. Given the limited number of unmanned aircraft and personnel available, it is necessary to prioritize calls for service. In general terms, calls are prioritized as follows (listed in order of importance):
a. Situations involving a potential threat to the safety of any person
b. Search and rescue of innocent victims
c. Searches for fleeing criminal suspects
d. Surveillance of criminal activity or suspects
e. Traffic control operations
f. Requests to support other agencies
g. Photo flights

2. When the KPD UAS team is operating in support of a KPD special team or unit, a liaison from that unit will work directly with the Mission Coordinator. When possible, this should be a member of the UAS team who is also assigned to the team or unit being supported.

F. Crew Members Communication and Coordination

1. All Crew Members will be equipped to communicate verbally, by cellular phone and by radio on a dedicated channel. Redundant communication will help to ensure safety. With that, the use of electronic devices for non-mission related communications shall be prohibited during any phase of flight operations by any member of the UAS crew. The PIC will never operate a communication device while in control of an aircraft.

2. All Crew Members will avoid unnecessary communications with the pilot during takeoff and landing.

3. In an effort to foster safe and effective operations, concern on the part of any crew member should be immediately expressed to the other member. If there is genuine concern on the part of any crew member, the mission should not be accepted or should be terminated.

4. Any Crew Member has the right, as well as the responsibility, to question other crew members whenever there is ambiguity, or when they are uncomfortable with certain procedures, weather, etc.

5. The KPD UAS may be flown in conjunction with other aircraft from other agencies as long as the UAS team has had previous discussion and training with the members of the other aircraft and they maintain radio communications with the aircraft during flights.
Current locations and altitude separations will be consistently communicated.

G. Pre-Flight Actions

1. Prior to any flight, regardless of the mission, the following tasks will be completed by the UAS crew:

   a. Self-assessment of crew’s physical condition;
   b. Consideration for the relevance of the mission;
   c. Determination and compliances of the classification of the airspace in which the flight will be conducted;
   d. Completion of any required notifications to air traffic control or fixed based operations;
   e. Issuance of any required notice to airman (NOTAM);
   f. Check of current and forecasted weather;
   g. A Risk Assessment to address potential hazards and to impose mitigation techniques;
   h. Visual assessment of the flight operations area to identify hazards, such as man-made obstacles and terrain;
   i. Review of the aircraft flight log to ensure no maintenance issues remain unrepaired;
   j. A thorough pre-flight inspection of the UAS utilizing approved checklist;
   k. A pre-mission briefing to all UAS crewmembers;
   l. Establishment of Home Point at take off while ensuring that point is acceptable for emergency landings;
   m. Adjustment of Return to Home altitude and low battery Return to Home level so both are set to the level appropriate for the terrain and mission;
   n. Coordination with other aircraft involved in the mission;
   o. Selection of a launch area clear of obstacles and unauthorized personnel.

2. Any issues or discrepancies found during Pre Flight Actions will be discussed amongst the crew for the safest course of action to proceed. When in doubt, the mission will be postponed or cancelled until repairs can be made or conditions improve.

3. The final responsibility for Pre-Flight Activities and assurance of safe and approved flight rests with the Pilot in Command. Prior to flight, the PIC will familiarize themselves with all available information and intelligence relevant to the flight.
H. Documentation

All flights will be documented in the aircraft logbook, pilot's log, UAS Mission Form (as needed), and KPD UAS Flight Log sheet.

I. Ground Handling

1. The PIC is responsible for operation of UAS in the air and on the ground. They will ensure that no unauthorized items are attached to the aircraft prior to movement. During movement, adequate clearance will be maintained.

2. The PIC and VO must be constantly aware of dangers to ground personnel from the aircraft, rotors, and payload.

3. The PIC will not under any circumstances leave any unauthorized person in charge of the unmanned aircraft controls while the motors are running. If it is necessary for the PIC to leave the unmanned aircraft, the motors will be shut down and the controls deactivated or turned over to another authorized current licensed remote pilot.

4. Only mission essential personnel will be in proximity to UAS launch and recovery activities.

5. There will be no smoking allowed within 50 feet of aircraft, and a fire extinguisher must remain accessible to the crew at all times while an aircraft is unpacked.

6. When operating near populated areas, the PIC or MC will ensure that a “defined incident perimeter” exists, and all persons not directly related to the mission are inside structures or vehicles to limit the potential of persons being present beneath the UAS flight path.

7. Upon “Repack” of the aircraft, the PIC or their designee will ensure that all items are returned to their proper place in accordance with the team's inventory checklist. All items shall be properly stored so that all equipment is ready for the next mission.

J. Weather Minimums
1. Prior to initiating a flight, the UAS crew shall obtain a full weather briefing and conduct personal observations. These observations shall not only be from the reporting weather station, but on site of the flight. The crew will ensure they gather enough information to make themselves familiar with the weather situation existing throughout the area of operation.

2. Subsequent to the original weather briefing the crew may obtain sufficient weather information to ensure that the flight(s) may continue safely. The frequency of these additional weather checks will be determined by the speed at which weather conditions are changing. Rapidly changing conditions require more frequent weather updates.

3. The PIC is ultimately responsible for making the decision on whether safe and appropriate weather conditions exist for the flight to occur. Consideration must also be given to the anticipated flight time and time frame for approaching weather.

4. Weather minimums for UAS Operations include:
   a. No precipitation of any type or quality;
   b. Clearance from clouds in accordance with FAA requirement for UAS flights, to include the ability to conduct the flight at least 500’ beneath any cloud ceiling and at least 2000 feet horizontally from clouds;
   c. Visibility of at least 3 statute miles (measured from the UAS control station);
   d. No operations will be conducted when the ceiling is less than 1,000 feet AGL.

5. Maximum wind limitations shall be established pursuant to the UAS manufacturer’s recommendations. In addition to system recommendations, consideration should be given to the individual pilot's level of experience.

6. Weather minimums are not applicable to indoor operations.

K. Maximum Altitudes and Minimum Standoff Distances

1. The maximum altitude for flight (AGL, above ground level) in accordance with Part 107 operation FAA regulations is 400 feet. Flight may be higher than 400 feet AGL as long as the aircraft is within 400 feet of a structure.
2. Minimum standoff distances from people and objects shall be determined with the PIC before the flight. This decision will take into consideration the capabilities of the UAS being operated, the nature of the mission, current conditions, visibility and light level, and experience of the pilot. Under no circumstances should safety be compromised to get closer to an object.

L. Line of Sight

The aircraft will be operated within visual line of sight (VLOS) of the PIC or a VO at all times, using only human vision unaided by any device other than corrective lenses, unless an active FAA Waiver is in place.

M. Airspace Restrictions

Flights must be in compliance with FAA regulations for UAS operation and altitude limits. This includes airspace and proximity to airports. If the flight is being performed within controlled airspace, or near any airport or aircraft operating site, notification (by air radio or telephone) of the intended operation will be provided prior to take-off.

N. Night Time Flying

1. Night time flights require an FAA waiver (evening civil twilight is the period of sunset until 30 minutes after sunset and morning civil twilight is the period of 30 minutes prior to sunrise until sunrise). No flights shall occur without being in compliance with such waiver and all flights will be in accordance with any prescribed guidelines within the waiver.

2. Safety measures that will be followed for night flights will include:
   a. Use of marker/anti-collision lights on the aircraft that can be seen 360 degree around the aircraft;
   b. Maintenance of a contestant comparison between the aircraft’s actual location and where that point is on a daytime satellite image of the area. This can be done by use of the moving map on the UAS app and comparing it to a Google Map image.
   c. Review of possible visual illusions caused by darkness while understanding physiological conditions may degrade night vision prior to night flight.
   d. If night vision goggles are utilized by the Visual Observer, a second Visual Observer will be used also with unaided vision. The second VO is to eliminate the sole reliance on the NVG.
Anyone using NVG must have received documented training from the KPD Special Operations Squad to include use, limitations, inspection, and care of the unit. Any crew member using NVG must complete this training annually.

O. Aircraft Battery Use
1. Batteries shall be recharged in accordance with the manufacturers’ recommendations. Lithium-Ion batteries shall not remain in a powered charger unattended. All crew members must remain conscious of the fire hazard associated with UAS batteries and take proper precautions to mitigate damage and danger should a fire occur, including keeping a fire extinguisher accessible at all times.

2. Care must be taken for batteries to keep them from extreme hot and cold temperatures. Extreme temperatures can effect-battery life cycle, efficiency, charging rate, and overall safety.

3. UAS operators are prohibited from beginning a flight unless there is enough available power for the UAS to conduct the intended operation.

4. Pilots and Sensor Operators will actively monitor the battery status to ensure safe levels of operation. At no time will the aircraft be operated at a distance where it cannot, under its own power, return to the origination point.

P. Fire Extinguisher

A fire extinguisher, appropriate for the types of hazards encountered (batteries, plastics, combustible material encountered on the ground), will be readily available at all times.

Q. Flight Time Limitations and Crew Rest Requirement

1. During any duty period the total flight time of any PIC or VO may not exceed 6 hours. While limitations and rest should apply to all UAS crew members, it will be mandatory for PIC and VOs. These rest requirements do not prohibit a crew member from being called back to work after a normal shift as long as total duty time (flight and normal) does not exceed 16 hours in a 24 hour period.

2. A crewmember shall have the self-discipline to terminate or decline a mission if, in the member’s determination, they would be unsafe to perform the flight due to fatigue or other factors.
R. Post Flight Actions

1. At the conclusion of flight operations, necessary notifications will be made to air traffic control, fixed base operations, etc. that the flight has concluded.

2. Digital media evidence will be downloaded and transferred in accordance with the digital media evidence policies.

3. A thorough inspection will be conducted of the UAS immediately after the completion of the mission to ascertain if any damage was sustained during operation. If necessary, the aircraft will be serviced so that it is immediately available for the next flight.

4. All UAS Flights will be documented on a KPD UAS Flight Log and will be tracked electronically on the aircraft software. Any UAS Mission will also require the completion of a KPD UAS Mission Form. Both of these documents will be stored with the Team Commander. Necessary entries will be made into the aircraft flight log, crew member logs, mission forms, and other applicable reports.

5. After Action Debriefings will occur with the UAS team for all missions to discuss and critique tactics used and their effectiveness and outcomes. Additional debriefings may occur with other teams or agencies as needed.

6. Batteries will be placed on charge and all equipment readied to ensure their operability for future flights.

V. Digital Media Evidence (DME)

A. Due to the tremendous size of the digital files captured by the high-resolution camera equipment on the UAS, it will be standard procedure to not record while the aircraft is flying (other than those specifically necessary for the mission) or while conducting image capture training.

B. In order to safeguard the privacy of the citizens, collection of data to include, but not limited to, digital photographs, digital video, and infrared images, will be limited to the extent absolutely necessary to accomplish the current mission. All data collected will be relevant and in accordance with TN Code Annotated 39-13-609 Freedom from Unwarranted Surveillance Act and the 4th Amendment of the U.S. Constitution.
C. Data Storage

1. At the conclusion of a mission flight, all DME will be copied from the aircraft SD card to a data storage device, marked as ‘Original Full Content,’ and logged in to confiscations. A copy will also be made for the requesting officer. The DME will then be copied to an external hard drive that remains with the Team Commander. The SD card will then be deleted for use in future flights. DME obtained from training flights will be downloaded to an electronic storage device (USB drive or external hard drive) for training use.

2. Only data that has evidentiary value will be retained after the mission has been concluded. Said data will be safeguarded to protect the privacy of citizens who may be depicted in the data. All other data will be destroyed through electronic deletion within 3 business days of conclusion of the flight. Digital logs of aircraft mission profiles are exempt from this requirement. Storage of data will be in accordance with current policies utilized by the KPD Forensics Unit SOP for the storage of DME (photos and video).

3. Personnel shall not edit, alter, erase, duplicate, copy, share, or otherwise distribute in any manner UAS DME without prior authorization from the UAS Team Commander and the officer who originally requested the imagery be obtained. All downloads, alterations, copies, and deletions will be logged on Mission Form.

5. The release of any stored DME will be in accordance with departmental policy.

VI. Documentation

A. Annual Report

In an effort to keep the department, its command staff, and the community informed of the utilization and effectiveness of the UAS program, an Annual Report will be submitted by the UAS Team Commander. The team’s annual report will be included in the department’s Annual Report which is made available to the public. This report will summarize training, operations, and significant issues related to the team for the year. Quarterly inventory and equipment reports will be submitted to the Patrol Division Commander, or designee, and the Accreditation Unit.
VII. Safety

A. Safety Management System

1. The safety of the public, first responders, and UAS Team Members is the highest priority. The team is committed to providing safe working conditions with the objective of having an accident free work environment. An open reporting culture without disciplinary action against persons reporting safety hazards and concerns will be in place. Whether training or operational, any member of the team can cancel and ground a mission for perceived safety concerns until the concern can be discussed, clarified, and mitigated. No one (regardless of rank or position) may order a pilot to fly an aircraft when, in the opinion of the pilot, it cannot be done safely.

2. While the role of Safety Officer generally falls within the duties of the Mission Coordinator, it is the duty of every UAS team member to understand their role and remain vigilant to factors and conditions that pose a safety concern. All members are responsible for identifying, reporting, and mitigating hazards. If any member observes, or has knowledge of, an unsafe or dangerous act committed by another member the Team Commander is to be notified immediately so that corrective action may be taken.

3. Safety Management contributions may come in many forms and includes always operating in the safest manner practicable, never taking unnecessary risks, recognizing that safe does not mean risk free, and holding team members accountable. Any safety hazard, whether procedural, operational, or maintenance related should be identified and corrected as soon as possible. Any suggestions in the interest of safety should be made to the rest of the team without reservation.

4. UAS Team Members will receive documented safety training by way of Private Pilot Ground School, aircraft manufacturer guidelines, and other pertinent material from the unmanned flight community brought to the attention of any team member.

5. All UAS Team flight crew personnel will adhere to the following safety principles:

   a. Conduct a map or photo review to identify any potential hazards.
b. Ensure that sound flight principles and procedures are followed for all operations regardless of mission urgency.
c. Recommend risk reduction procedures to enhance aviation unit safety.
d. Refrain from electronic messaging or texting during flight operations (for the PIC or VO).
e. Report hazards and unsafe conditions or acts to the mission coordinator.
f. Make on-the-spot corrections of unsafe conditions.

6. Any member of the UAS team that comes in contact with safety related information will share it with all personnel by way of electronic email for quickest dissemination. The information will then be discussed at the next training session with hard copies provided to all members and to each aircraft book.

7. Safety training will include risk control measures, the safety management system as it relates to individual responsibilities, and general hazards associated with UAS operations.

B. Safety Risk Assessment & Mitigation

1. By their very nature, public safety UAS operations involve some element of risk. Risk Assessment and Mitigation is a formal process that ensures analysis, assessment, and control of the safety risks in operations. It also determines and analyzes the risk factors related to the severity and likelihood of potential events associated with known hazards and identifies appropriate risk mitigation strategies.

2. At a minimum the risk assessment process shall:

   a. Use a collective and comprehensive strategy that considers the severity and probability of a hazard;
   b. Identify, assess, and calculate an overall level of risk associated with the hazard;
   c. Determine when to elevate the decision for risk acceptance to a higher level;
   d. Analyze the risk and develop mitigation measures;
   e. Develop a means to track corrective actions and their effectiveness.

C. Safety Stand Down
1. A safety “stand down” will be conducted annually. During a stand down all members with unmanned aviation responsibilities assemble to review the Team’s safety program. It is also an opportunity to identify potential hazards, update emergency notification forms, conduct safety training, etc. During the safety stand down meeting, normal operations are suspended to assure that all members are focused on the safety of the program.

2. As part of the Safety Stand Down, the UAS team commander will evaluate operational data to ensure the effectiveness of safety risk controls and assess system performance.

3. A review of this SOP will take place during the annual safety “stand down” meeting.

D. Medical Condition of Team Members

1. Each member shall report to work rested and emotionally prepared for the task at hand.

2. Physical illness, exhaustion, emotional problems, etc. can seriously impair judgment, memory and alertness. The safest rule is not to act as a flight crew member when suffering from any of the above. Unit members are expected to ground themselves when these problems could reasonably be expected to affect their ability to perform flight duties.

3. A self-assessment of physical condition shall be made by all flight crew members during preflight activities.

4. No member shall act as an air crew member within eight hours after consumption of any alcoholic beverage (FAR 91.17).

5. Should a member of the crew develop fatigue or a sudden illness, the flight will be terminated as soon as practical until a replacement crew member can be placed into the mission.

E. Emergency Response Plan (ERP)

1. During UAS operations, emergency situations may develop at any time. The primary concern in such incidents is the prevention of injury to persons on the ground and/or other users of the airspace. Secondary concerns include protection of property in the air and on the ground.
2. Following a UAS accident involving death or serious injury to any person; any loss of consciousness; damage to any property other than the unmanned aircraft where the cost of repair (including materials and labor) exceeds $500; or in the event the total loss of the fair market value of the property destroyed exceeds $500, the aircrew shall do the following:

   a. Immediately notify dispatch and request needed assistance;
   b. Render first aid to the injured;
   c. Secure the scene and ensure the aircraft and its contents are moved only to the extent necessary to remove injured persons, protect the public from injury, and/or protect the wreckage from further damage;
   d. Make notification to the Team Commander, or designee, who will respond to the scene and coordinate accident investigation efforts. They will also make KPD Command Staff Notifications.
   e. Notify the FAA (and NTSB if instructed to do so by FAA);
   f. Survey and document the damage to the aircraft and/or other property with aid of KPD Forensics Unit;
   g. Identify witnesses to the incident and document their statements and contact information;
   h. Provide any additional assistance or information requested by the FAA and NTSB.
   i. Complete a City of Knoxville Incident Report.

3. The FAA must also be notified within 24 hours of any flight that results in an unsafe/abnormal operation:
   a. Total loss of UAS (unrecovered fly-away);
   b. A malfunction or failure of the UAS on-board flight control system;
   c. A malfunction or failure of ground control station flight control hardware or software (other than loss of control link);
   d. A power plant failure or malfunction;
   e. An in-flight fire;
   f. An aircraft collision involving other aircraft;
   g. A deviation from an ATC clearance and/or Letter(s) of Agreement/Procedures.

VIII. Training
A. Any person who will operate a KPD UAS or serve as a member of the flight crew shall receive initial and refresher training to maintain flight currency. Such training will be documented and includes instruction in the following areas:
   1. Fundamentals of aviation
   2. Applicable Federal Aviation Regulations (FAR’s)
   3. Public Aircraft Operations
   4. Safety Management Systems (SMS)
   5. Community concerns regarding the use of UAS by government agencies, state and local laws pertaining to UAS operations, and liability and legal issues.

B. Training objectives will vary depending on whether the member is new to unmanned aviation or an experienced member. Objectives should challenge the member to increase their competency in the knowledge and skills necessary to perform safe UAS operations.

C. Any member who fails to successfully complete or maintain proficient training may be subject to removal from the team.

D. Pilot Training Requirements
   1. In addition to the certification requirements of the Federal Aviation Regulations, before a pilot may act as a Remote Pilot in Command they shall receive documented training and demonstrate proficiency in the following areas:
      a. Program policies and procedures
      b. Requirements of the program’s FAA Certificate of Authorization, and/or Part 107 waiver(s)
      c. Weather considerations
      d. Orientation to airspace, airports, heliports, heli-spots or any approved landing zones in the local operating area
      e. Safe operation of the aircraft throughout all phases of flight
      f. Specialized equipment operations and use (FLIR, night vision, etc.)

   2. In-house training will be conducted in addition to external training to ensure the most up-to-date and diverse training.

F. Sensor Operator Training Requirement
Any crewmember acting as a sensor operator will receive at a minimum the following training and demonstrate proficiency before acting in the capacity:
1. Aircraft and sensor preflight procedures and checklist
2. Aircraft launch and recovery procedures
3. Battery use and change procedures
4. Sterile cockpit procedures
5. Program policies and procedures
6. Digital Media Evidence (DME) chain of custody policy
7. Crew resource management (CRM)
8. Fire safety and response
9. Emergency procedures
10. Legal and regulatory issues

G. Visual Observer Training Requirements

1. Any crewmember acting as a visual observer will be sufficiently briefed prior to flight with emphasis on:
   a. Maintaining effective communication with the RPIC;
   b. Clear definition of launch and recovery location;
   c. Scanning airspace for potential collision hazards and maintain awareness of the position of the aircraft through direct visual observation.

2. While it is strongly preferred that VOs be members of the UAS team, they may be selected by an RPIC to perform those duties during a specific mission if staffing, time, or the operation require more personnel than the team has present. It is critical that the VO be briefed as to their role in the operation and an assessment be made by the RPIC as to their capability to perform this role.

H. Monthly Training

At scheduled monthly UAS Team training, recurrent training for all pilots and sensor system operators/visual observers will be conducted. The UAS Team Commander or their designee is responsible for organizing these training sessions. Examples of training may include safety, respect for the law and citizens’ privacy, crew resource management, “lessons learned” in previous deployments, currency and skill building flight, and maintenance.

I. Pilot Recurrent Training
1. The UAS Team Commander, along with the team’s Chief Pilot, will continuously evaluate the practical skills of pilots in the performance of missions and trainings. This evaluation will be conducted annually by way of a recurrent flight with the results documented. These performance standards will be relevant to the duties of the pilot, the unit’s mission statement, the scope of service, and will include the following:
   a. The safe operation of the aircraft throughout all phases of flight to include: proper and effective use of aircraft checklists; effective crew coordination; proficiency of tasks associated with the missions performed by the unit (scenario based training); safe and effective mission planning; program policies and procedures; legal and regulatory mandates; operation of aircraft in accordance with the applicable OEM manual.
   b. Hazard identification & risk management including judgment and decision making, human factors, stress management in all phases of flight, interpersonal communications between crewmembers, workload management, distractions, emergency procedures, aircraft limitations, and situational awareness.
   c. Execution of proper emergency procedures appropriate to a given situation.

2. Recurrent training is not limited to actual pilot skills but also includes knowledge of all pertinent unmanned aircraft system matters.

3. Failure to demonstrate proficiency may result in removal from the Unmanned Aircraft Systems Team.

J. Training Records

Training records will be maintained for all UAS Team members. Records can be kept in written or electronic form and will include the following information at a minimum:

1. Name, pilot certificate number and a listing of all ratings;

2. Documentation showing the date of successful completion of initial and recurrent training for all personnel required to receive such
training, including copies of certificates of training or other proofs of compliance;

3. For pilot proficiency, the documentation or checklist used to record pilot proficiency check flights. For non-pilot crew, evaluations and certifications, where applicable;

4. Documentation related to any training failures or inability to successfully complete any required training, including check flights, and what remedial action was taken to satisfactorily complete the required training;

5. The make, model and type of aircraft or flight training equipment used to conduct the training.

6. The UAS team will retain these records and copies of all pilot proficiency check flights, crewmember evaluations, and certifications for a minimum of five years after the individual leaves the UAS program.

IX. UAS Maintenance

A. Unmanned Aircraft System Maintenance Standards

1. Properly maintained UAS are essential to safe operations. Compliance with manufacturer’s scheduled maintenance, preflight inspections, and immediate repair of mechanical problems ensure the availability and safety of unmanned aircraft.

2. The KPD UAS Team will maintain their systems in compliance with requirements of the Federal Aviation Administration and Original Equipment Manufacturer maintenance requirements or recommendations. In addition to maintenance regulations and OEM requirements, the team will establish a maintenance program for the UAS being operated. This includes preflight checklists.

3. The airworthiness of UAS must be assured and is dependent upon scheduled maintenance, thorough inspections and timely correction of discrepancies. It is incumbent on crewmembers to ensure their system(s) are airworthy at all times.

4. All maintenance completed (both software and hardware) is documented in the aircraft logs. This information will include at a minimum date, work performed, by whom, and operational flight
check results. This will include deferred and outsourced maintenance.

B. Pre-Flight Inspections

1. All UAS will have a written checklist that outlines the specific actions to be performed during pre-flight inspections to determine that the system is airworthy and ready for flight. Completion of these checklists are required prior to all flights for a mission. Reevaluation of the checklist is not necessary between landings for battery changes unless a member of the crew determines it is appropriate.

2. The Discrepancy Reporting System shall be followed if problems are noted.

3. The Aircraft Flight Log will be reviewed prior to flight and the appropriate data entered at the end of each flight.

C. Aircraft Maintenance

1. Any maintenance or modifications performed to aircraft beyond that prescribed by preflight checklists, cleaning, or battery maintenance (to include software updates, parts replacement, modifications, etc.). will be approved by the Team Commander.

2. The Team Commander will approve the person performing the work, ensuring that person has the training or qualifications to perform the work being completed safely and in accordance with best practice and manufacture guidelines. This maintenance will be documented in the aircraft’s log.

3. Following any maintenance, an operational test flight check will be performed by a licensed Pilot designated by the Team Commander to validate the maintenance that was performed and ensure that the results of the test flight are documented in the appropriate maintenance records.

4. This test flight will include at a minimum the following checks:
   a. Preflight inspection
   b. Start-up procedures
   c. Electronics systems check
   d. Low altitude hover check
   e. Flight control function check
f. Altitude control function check

g. Perform one full flight

h. Shutdown procedures

i. Post-flight inspection

D. Outsourced Maintenance

In the event outsourced UAS maintenance is required, the team commander and Chief Pilot will agree on the person completing the work, ensure they comply with this policy, and provide oversight of the maintenance contractor and the work performed. The documentation of the work performed will be added to the aircraft’s log.

E. Maintenance Discrepancy Reporting

1. Any maintenance needs noted by a crew member will be documented in the aircraft’s log.

2. The member discovering the issue will immediately notify the Team Commander and all team members.

3. In addition to that notification, tape will be placed over the battery hull of the aircraft signifying it is out of service until repairs can be made. A full-size piece of paper noting ‘Out of Service’ and the issue will be placed in the top of the aircraft storage container. Once repairs have been made by an authorized person, and the aircraft returned to service, a notification will go out to all team members.

4. Software, hardware, and firmware updates will be documented via discrepancy reporting system as well.

F. Specialized Mission Equipment Maintenance

1. Inspection and maintenance of specialized equipment is critical to safe and effective operations. This equipment includes payloads, camera, FLIR/night vision, communications, tablets, and computers.

2. These items will be inspected prior to use and any maintenance or repairs will only be performed by certified parties. Records of any repairs will be documented in a separate Specialized Mission Equipment log.
G. Storage

Storage of UAS (to include aircraft, batteries, controllers, etc.) will be in a location that affords security and protection from the elements (extreme heat/cold, moisture, dust). All members of the UAS Team will have access to the equipment at all times.

X. UAS System and Equipment Requirements

A. Aircraft and equipment being considered for acquisition by the KPD UAS Team will be evaluated through demonstration and performance testing to determine its airworthiness in adverse conditions, capabilities, ability to perform agency missions, manufacture support, data link capabilities and security.

B. Aircraft will be from a reputable manufacturer and preferred from the commercial grade category. Other considerations should include standardized operational checklists, ability to verify the connectivity/control link, ability to monitor the battery levels, ability to monitor the altitude of the UAV at the GCS, tamper-proof flight time recorder, viewable flight telemetry, ability of the UAV to autonomously execute a specific protocol in the event of loss of the command, and anti-collision lighting system.

C. All aircraft utilized by the KPD UAS Team will be properly registered with the FAA for commercial use with its assigned registration number affixed to the aircraft. A printed copy of the registration will be maintained with the aircraft at all times.
XI. Glossary of Terms

**Aircraft Flight Log** - Flight record book kept in the UAS storage case

**Certificate of Waiver or Authorization (COA)** - Document issued by the Federal Aviation Administration that authorizes public aircraft operations in the National Airspace System (NAS). A certificate of waiver will also allow a small UAS civil operation to deviate from certain provisions of Part 107 if the Administrator finds that the proposed operation can be safely conducted under the terms of that certificate of waiver.

**Civil Aircraft** - All aircraft not public aircraft.

**Control Station** - A “control station” is the interface used by the remote pilot to control the flight path of the unmanned aircraft.

**Currency** - A requirement of a pilot to have recently demonstrated proficiency in knowledge and skill to perform safe and adequate flight. The pilot must have been quizzed and observed by someone designated by the department to evaluate their performance. Currency events include landings, takeoffs, and simulator flights. Pilots who experience a lapse in currency must perform their currency events under the supervision of a UAS Commander or Chief Pilot.

**Data Communication Links** - All links between the unmanned aircraft and the control station, which includes the command, status, communications, and sensor/payload links.

**Digital Media Evidence (DME)** - Digital recording of images, sounds, and associated data with probative value stored or transmitted in binary form. The term DME used in this document refers specifically to video and the metadata associated with that form of DME.

**Federal Aviation Regulation, Part 107** - Small Unmanned Aircraft System - Regulations that apply to airman certification, and operation of civil small unmanned aircraft systems.

**Model Aircraft** - An unmanned aircraft that is capable of sustained flight in the atmosphere, flown within visual line of sight of the person operating the aircraft, and flown only for hobby or recreational purposes.

**National Airspace System (NAS)** - The common network of U.S. airspace — air navigation facilities, equipment, and services; airports or landing areas, etc.
**Personally Identifiable Information (PII) 2** - Information that can be used to distinguish or trace an individual’s identity, either alone or when combined with other personal information that is linked or linkable to a specific individual.

**Presidential Executive Order 13688 - Federal Support for Local Law Enforcement Equipment Acquisition (EO)** - Issued by President Barack Obama on January 16, 2015, established a Law Enforcement Equipment Working Group (WG). The WG established minimum requirements for agencies requesting Federal government funding or surplus property transfers for unmanned aircraft.

**Presidential Memorandum: Promoting Economic Competitiveness While Safeguarding Privacy, Civil Rights, and Civil Liberties in Domestic Use of Unmanned Aircraft System (PM)** - Issued by United States President Barack Obama on February 15, 2015, established requirements for Federal agencies using unmanned aircraft and for state and local agencies using Federal grant funds to acquire UAS.

**Preventive Maintenance** - Simple, or minor adjustments or the replacement of small standard parts not involving complex assembly operations.

**Remote Pilot in Command (RPIC)** - The remote pilot in command has the final authority and responsibility for operation and safety of a small UAS operation.

**Scheduled Maintenance** - Periodic maintenance on aircraft at known intervals.

**Small Unmanned Aircraft** - A small unmanned aircraft is an unmanned aircraft weighing less than 55 pounds, including everything that is on board or otherwise attached to the aircraft.

**Unmanned Aircraft System (UAS)** - An unmanned aircraft and its associated elements (including communication links and the components that control the unmanned aircraft) that are required for the safe and efficient operation of the unmanned aircraft in the NAS.

**UAS Flight Crewmember** - A UAS flight crewmember includes the remote pilot in command, person manipulating the flight controls of the sUAS and visual observers (VO). It may also include other persons as appropriate or required to ensure safe operation of the aircraft.

**Unmanned Aircraft (UA)** - An aircraft that is operated without the possibility of direct human intervention from within or on the aircraft. Also called Remote Piloted Aircraft and “drones.”
**Unscheduled Maintenance** – Repairs to aircraft in response to mechanical deficiencies.

**Visual Line-of-Sight (VLOS)** – The RPIC, the visual observer (if one is used), and the person manipulating the flight control of the small UAS must be able to see the unmanned aircraft throughout the entire flight in order to: (1) know the unmanned aircraft’s location; (2) determine the unmanned aircraft’s attitude, altitude and direction of flight; (3) observe the airspace for other air traffic or hazards; and (4) determine that the unmanned aircraft does not endanger the life or property of another. This VLOS ability must be exercised throughout the entire flight of the small unmanned aircraft by either: (1) the visual observer; or (2) the RPIC and person manipulating the flight controls of the small UAS (if that person is not the RPIC).

**Visual Observer** – If used, a UAS flight crewmember designated by the RPIC to assist with the responsibility to see and avoid other air traffic or objects aloft or on the ground.

**Acronyms**
AC Advisory Circular  
AFD Airport Facility Directory  
AGL Above Ground Level  
AIM Aeronautical Information Manual  
AMB Air Mission Brief  
AMC Air Mission Commander  
ARTCC Air Route Traffic Control Center  
ATC Air Traffic Control  
ATCT Air Traffic Control Tower  
ATM Air Traffic Management  
ATO Air Traffic Organization  
CFR Code of Federal Regulations  
CL Checklist  
COA Certificate of Authorization  
CTAF Common Traffic Advisory Frequency  
FAA Federal Aviation Administration  
FCC Federal Communications Commission  
FAR Federal Aviation Administration Regulation  
FOD Foreign Object Debris  
FSS Flight Service Station  
GCS Ground Control Station  
IAW In accordance with  
LEA Law Enforcement Agency  
NAS National Airspace  
NOTAM Notice to Airmen  
NM Nautical Miles  
NTSB National Transportation Safety Bureau
OIC Officer in Charge
PIC Pilot in Command
RP Remote Pilot
RPA Remotely Piloted Aircraft
RPAS Remotely Piloted Aircraft System
RTH Return to Home
SMS Safety Management System
SOP Standard Operating Procedures
SVFR Special Visual Flight Rules
TSA Transportation Security Administration
UAS Unmanned Aircraft System (includes the UAV, pilot, ground control station etc.)
UAV Unmanned Aerial Vehicle (vehicle Only)
VFR Visual Flight Rules
VLOS Visual Line of Sight
VMC Visual Meteorological Conditions
VO Visual Observer
As part of the equipment on the COVID-19 grant application we did request a drone. As per the award language, any purchase of an “unmanned aircraft system” requires special permission from the DOJ through a secondary application process.

No funds under this award may be expended on individual items costing $500,000 or more, or to purchase Unmanned Aerial Systems (UAS), Unmanned Aircraft (UA) and/or Unmanned Aerial Vehicles (UAV) without prior written approval from BJA. Prior approval must be obtained post-award through the submission and approval of a Grant Adjustment Notice (GAN) through OJP’s Grant Management System.

In our grant application we had budgeted for an all-weather drone at a cost of $36,000. To date no action has been taken for this item. And yes, Sammy, the COVID grant is through the Department of Justice, Office of Justice Programs, Bureau of Justice Assistance. So the memo you provided is applicable to the COVID-19 grant. If it is determined that we cannot comply with the malware/cyber prevention standards then it will not be an option. However, paragraph c of the memo could still maintain the drone as an option...

Those of us in the grants office will await an Executive decision before we submit a GAN requesting the drone. Thanks for sending along the DOJ memo – we will keep a copy in the COVID grant folder.

Val

See attached concerning DOJ funds for drone purchases. I do not think we can meet the malware/cyber prevention standards. Is the COVID grant we currently have a drone on connected to DOJ?

Lt. Sammy Shaffer
Management Services - Training Director
Knoxville Police Dept, TN
865.215.1301
FYI, please disseminate per your policy. Restricted to law enforcement and those using DOJ funds for UAS programs.

v/r

Charles T. Phillips  
Special Agent, AXE-810  
Law Enforcement Assistance Program  
Federal Aviation Administration  
Alabama, Mississippi, Kentucky, Tennessee, North Carolina  
Charles.Phillips@FAA.GOV  
O: 404.305.6759  
C: 404.291.2378

Only two persons have ever given their life for you.

Jesus Christ and a Soldier
See attached concerning DOJ funds for drone purchases. I do not think we can meet the malware/cyber prevention standards.
Is the COVID grant we currently have a drone on connected to DOJ?

Lt. Sammy Shaffer
Management Services - Training Director
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Fyi, please disseminate per your policy. Restricted to law enforcement and those using DOJ funds for UAS programs.

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Charles.Phillips@FAA.GOV
O: 404.305.6759
C: 404.291.2378

Only two persons have ever given their life for you.
Jesus Christ and a Soldier
Hi Kenny,

I should have a draft for the drone legislation by the end of the week. Hopefully we can talk tomorrow about the first two ideas tomorrow to look at trying to get those moving as well.

Best,

Austin Deal  
Legislative Assistant to Senator Becky Massey  
Cordell Hull Building, Suite 776  
425 5th Ave North  
Nashville, TN 37243  
Office: 615-741-1648  
austin.deal@capitol.tn.gov

On 9/24/20, "Kenny Miller" <kmiller@knoxvilletn.gov> wrote:

Austin,

I have attached my legislative ideas for the next session. Becky asked that I send them to you to try and get them in the queue. I will be in touch to talk about the verbiage.

There was drone legislation last year, but it needs to be improved on this year.

Deputy Chief Kenny Miller  
Knoxville Police Department  
(865)215-7549

-----Original Message-----
From: Austin Deal <austin.deal@capitol.tn.gov>
Sent: Tuesday, September 15, 2020 2:58 PM
To: Kenny Miller <kmiller@knoxvilletn.gov>
Cc: Eve Thomas <ethomas@knoxvilletn.gov>; Ronald Green <rgreen@knoxvilletn.gov>; Cynthia Gass <cgass@knoxvilletn.gov>
Subject: RE: Meeting with Chief

I have it down!

Austin Deal  
Legislative Assistant to Senator Becky Massey  
Cordell Hull Building, Suite 776  
425 5th Avenue North  
Nashville, Tennessee 37243
Office: 615-741-1648
austin.deal@capitol.tn.gov

-----Original Message-----
From: Kenny Miller <kmiller@knoxvilletn.gov>
Sent: Tuesday, September 15, 2020 11:57 AM
To: Austin Deal <austin.deal@capitol.tn.gov>
Cc: Eve Thomas <ethomas@knoxvilletn.gov>; Ronald Green <rgreen@knoxvilletn.gov>; Cynthia Gass <cgass@knoxvilletn.gov>
Subject: RE: Meeting with Chief

That works for me.

Deputy Chief Kenny Miller
Knoxville Police Department
(865)215-7549

-----Original Message-----
From: Austin Deal [mailto:austin.deal@capitol.tn.gov]
Sent: Tuesday, September 15, 2020 12:05 PM
To: Kenny Miller <kmiller@knoxvilletn.gov>
Cc: Eve Thomas <ethomas@knoxvilletn.gov>; Ronald Green <rgreen@knoxvilletn.gov>; Cynthia Gass <cgass@knoxvilletn.gov>
Subject: Re: Meeting with Chief

9:30am Wednesday?

Austin Deal
Legislative Assistant to Senator Becky Massey Cordell Hull Building, Suite 776
425 5th Ave North
Nashville, TN 37243
Office: 615-741-1648
austin.deal@capitol.tn.gov

On 9/15/20, 10:39 AM, "Kenny Miller" <kmiller@knoxvilletn.gov> wrote:

Unfortunately, I have a commitment at 3:00 on Tuesday, but I am free all day Wednesday and Friday.

Sent from my iPhone

> On Sep 15, 2020, at 9:53 AM, Austin Deal <austin.deal@capitol.tn.gov> wrote:
> 
> > She has something till 2pm, could we do 2:30?
> >
> > Austin Deal
> > Legislative Assistant to Senator Becky Massey
> > Cordell Hull Building, Suite 776
> > 425 5th Avenue North
> > Nashville, Tennessee 37243
Office: 615-741-1648
austin.deal@capitol.tn.gov

After coordinating our schedules, it appears that we can meet at 1:30 pm on Tuesday, September 22, 2020 in Chief Thomas's Conference Room if Senator Massey is agreeable.

Please let me know.

Thanks,

Sent from my iPhone

On Sep 10, 2020, at 1:17 PM, Austin Deal <austin.deal@capitol.tn.gov> wrote:

Monday works!

Austin Deal
Legislative Assistant to Senator Becky Massey Cordell Hull Building,
Suite 776
425 5th Avenue North
Nashville, Tennessee 37243
Office: 615-741-1648
austin.deal@capitol.tn.gov


-----Original Message-----
From: Kenny Miller <kmiller@knoxvilletn.gov>
Sent: Thursday, September 10, 2020 12:16 PM
To: Austin Deal <austin.deal@capitol.tn.gov>
Subject: Re: Meeting with Chief

Absolutely, I will be back in the office on Monday, can we finalize a date and time then or do you need to finalize it sooner?

Sent from my iPhone

On Sep 10, 2020, at 12:14 PM, Austin Deal <austin.deal@capitol.tn.gov> wrote:

Hi Kenny,
Senator Massey asked for me to set up a time to meet with yourself and Chief Eve and other KPD to just meet and see what if there is anything you need from them.

She was hoping to also invite the delegation after we can set up a time.

Thanks,

Austin Deal
Legislative Assistant to Senator Becky Massey Cordell Hull Building,
Suite 776
425 5th Avenue North
Nashville, Tennessee 37243
Office: 615-741-1648
austin.deal@capitol.tn.gov

Sent from my iPhone
Thanks

Sent from my iPhone

> On Jun 5, 2020, at 4:55 PM, Austin Deal <austin.deal@capitol.tn.gov> wrote:
> 
> Hi Kenny,
> 
> Got your voicemail, I was off today. The Drone legislation did not pass and was not deemed time sensitive or Covid related so they would not allow us to pass it. We will be willing to try it next year.
> 
> Sorry!
> 
> Austin Deal
> Legislative Assistant to Senator Becky Massey
> Cordell Hull Building,
> Suite 776
> 425 5th Ave North
> Nashville, TN 37243
> Office: 615-741-1648
> austin.deal@capitol.tn.gov
Kenny Miller

From: Kenny Miller
Sent: Tuesday, May 12, 2020 9:59 AM
To: Samuel P Shaffer
Subject: FW: New PERF report about drones

FYI

Deputy Chief Kenny Miller
Knoxville Police Department
Patrol Commander
(865)215-7548

From: perf@memberclicks-mail.net [mailto:perf@memberclicks-mail.net]
Sent: Monday, May 11, 2020 10:03 AM
To: Kenny Miller
Subject: New PERF report about drones

Dear PERF member,

I’m writing to send you a new PERF report about one of the most innovative technologies in policing today—drones.

This report is about two separate but related issues: (1) the use of drones by police agencies to protect public safety and (2) the careless use of drones by the public in ways that may endanger public safety, and criminal use of drones to facilitate acts of terrorism or other crimes.


Nearly every day there are news reports of police using drones to support operations such as search and rescue missions, crime scene photography, locating armed and dangerous suspects, and accident reconstruction.

In fact, some departments are currently using drones to help enforce social distancing restrictions and stay-at-home orders during the COVID-19 pandemic.

The use of drones is undoubtedly a growing trend. In September 2018, PERF began researching drone use by police agencies and distributed surveys to 860 police departments across the nation. Of the 282 departments that responded to PERF’s survey, 47 percent reported using drones and another 34 percent said they are interested in purchasing them in the future.

Yet, many agencies interested in starting a drone program aren’t sure where to begin. With so many drones on the market, how does an agency choose the right one? What other equipment is needed? What sources of funding are available?
To address these questions and produce policy guidance for law enforcement agencies, PERF—with support from the U.S. Department of Justice’s Office of Community Oriented Policing Services and in cooperation with the U.S. Department of Homeland Security—hosted a two-day national conference to discuss promising practices and lessons learned from drone deployments by leading departments. Our report presents recommendations and resources for police agencies that are looking to implement a drone program in a safe and effective manner.

During the conference, participants also discussed the separate issue of what law enforcement agencies must begin to do to reduce the threat of malicious use of drones by criminals, terrorists, or criminal organizations for criminal acts (e.g., to attack members of the public or commit acts of mass destruction).

**The United States remains extremely vulnerable to drone attacks.** Local police and sheriffs’ departments still are unable to purchase or use most radio frequency-based counter-drone technologies, because of concerns such as the danger of interference with air traffic radio signals in the National Airspace System. Despite these limitations on local police authority, PERF’s report provides practical recommendations on how police organizations can begin preparing for and responding to unlawful drone use, including terrorist attacks.

We hope you find this report useful.

Best,

Chuck
Maggi,

Do I need to forward Ron’s changes to Becky’s office or have you done that?

Deputy Chief Kenny Miller  
Knoxville Police Department  
Patrol Commander  
(865)215-7548

Maggi, FYI, my comments were directed to the Staples bill, but many of them still apply to the Massey bill. Per my conversation with Kenny, here’s a proposed rewrite:

(g) Notwithstanding subsection (e), video collected or obtained by use of a drone pursuant to subdivision (d)(2)(H) must:
   (1) Be made publicly available for viewing via the internet within one (1) day of collection of the video; and
   (2) Be deleted within three (3) days of collection of the video unless the video is directly relevant to an ongoing investigation or criminal prosecution. If the evidence, information, or other data collected or obtained is directly relevant to an ongoing investigation or criminal prosecution, the video must be retained and deleted by the collecting law enforcement agency in accordance with the same criteria, policies, and procedures used by the agency for evidence collected by methods other than a drone.

Ron and Maggi, did either of you have any concerns over this Drone legislation. I’m ok with it as long as:

1. We are not required to film whenever it is in use and
2. We are not required to post video for public view that is evidence in an ongoing case.
3. We have broad discretion to deploy it at the listed events to include protests.

Unless I am misreading it, I believe we are good on all three points,
Sent from my iPhone

Begin forwarded message:

From: "Maggi M. Duncan" <maggi@tacp.org>
Date: January 14, 2020 at 9:43:14 PM EST
To: "jryall@memphistn.gov" <jryall@memphistn.gov>, Mike Hagar <mike.hagar@nashville.gov>, Zayid Saleem <Zayid.Saleem@memphistn.gov>, Kenny Miller <kmiller@knoxvilletn.gov>
Subject: Massey Drone Bill Draft 1 - 011523.pdf

This is a draft of the drone bill. Please look it over and let me know your thoughts so I can try to make some changes if possible before it is filed.

Thank you
Deputy Chief Kenny Miller
Knoxville Police Department
Patrol Commander
(865)215-7548

-----Original Message-----
From: Maggi M. Duncan [mailto:maggi@tacp.org]
Sent: Tuesday, January 14, 2020 9:43 PM
To: jryall@memphistn.gov; Mike Hagar; Zayid Saleem; Kenny Miller
Subject: Massey Drone Bill Draft 1 - 011523.pdf

This is a draft of the drone bill. Please look it over and let me know your thoughts so I can try to make some changes if possible before it is filed.

Thank you
AN ACT to amend Tennessee Code Annotated, Title 38 and Title 39, Chapter 13, relative to drones.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF TENNESSEE:

SECTION 1. Tennessee Code Annotated, Section 39-13-609(d)(2), is amended by adding the following as new subdivisions:

(H) To provide aerial coverage when deployed for the purpose of providing or enhancing security for an event open to the public and where attendance is expected to exceed one hundred (100) persons, including, but not limited to, music concerts, athletic events, festivals, fairs, and other outdoor events; or

(I) To investigate the scene of a crime that is occurring or has occurred;

SECTION 2. Tennessee Code Annotated, Section 39-13-609, is amended by adding the following as a new subsection:

(g) Notwithstanding subsection (e), video collected or obtained by use of a drone pursuant to subdivision (d)(2)(H) must:

(1) Be made publicly available for viewing via the internet within one (1) day of collection of the video; and

(2) Be deleted within three (3) days of collection of the video unless the video is directly relevant to both the lawful reason the drone was being used and to an ongoing investigation or criminal prosecution. If the evidence, information, or other data collected or obtained is directly relevant to both, the video must be retained and deleted by the collecting law enforcement agency in accordance with the same criteria, policies, and procedures used by the agency for evidence collected by methods other than a drone.
SECTION 3. This act shall take effect upon becoming a law, the public welfare requiring it.
As to number 2, that’s not what the bill says. There’s nothing in (g)(2) that relieves you of the obligation of online posting if you determine the video is relevant to an ongoing investigation or prosecution.

As to number 1, why would you not want to record video? If you find out later a criminal act occurred, you couldn’t use the footage to look for evidence. And if you became aware of a criminal event while filming (pipe bomb explodes, for example) and started recording, all you would have is the aftermath of the event, which wouldn’t be anywhere near as useful as the lead-up.

I’d also like to point out a potential hole in existing law that seems quite large to me—where TCA 39-13-609(c) says that a drone may be used to search for and collect evidence or “obtain information or other data”:

1. If used in compliance and consistent with applicable federal aviation administration rules, exemptions, or other authorizations; and
2. (A) if the agency first obtains a search warrant signed by a judge authorizing the use of a drone;
   or
   (B) if a judicially recognized exception to the warrant requirement exists at the time of use.

Now, I haven’t yet looked for one, but I’m betting that I can find a published opinion that says there’s no reasonable expectation of privacy barring filming in areas are open to the public. In fact, some of the red light camera decisions say something to that effect. I haven’t really pushed this argument because I didn’t want someone to come along and close the hole (which may have been placed there quietly and intentionally). If my argument is correct, then this amendment puts you in a worse position because of the online posting requirement.

Allow me just one more minute to vent about this particular statute. I think it’s ridiculous to prohibit law enforcement from doing something (using a drone to see what’s open to the public to see) that I, as a private citizen, could do without any restrictions whatsoever, so long as the FAA is okay with my operations. We might as well just wait for Google Earth (or SkyNet or whoever else wants to do it) to do a live video feed of the entire globe and pay whatever they’re going to charge for the feed.

Okay, I’m finished now. If you fix the language in (g)(2) to exclude video that has value to an ongoing investigation or prosecution from the online posting requirements, I suppose it’s okay, but the more you add to it, the further you get from being able to use the “exception to the search warrant requirement” argument.

Ron and Maggi, did either of you have any concerns over this Drone legislation. I’m ok with it as long as:

1. We are not required to film whenever it is in use and
2. We are not required to post video for public view that is evidence in an ongoing case.
3. We have broad discretion to deploy it at the listed events to include protests.
Unless I am misreading it, I believe we are good on all three points,

Sent from my iPhone

Begin forwarded message:

From: "Maggi M. Duncan" <maggi@taep.org>
Date: January 14, 2020 at 9:43:14 PM EST
To: "jryall@memphistn.gov" <jryall@memphistn.gov>, Mike Hagar <mike.hagar@nashville.gov>, Zayid Saleem <Zayid.Saleem@memphistn.gov>, Kenny Miller <kmiller@knoxvilletn.gov>
Subject: Massey Drone Bill Draft 1 - 011523.pdf

This is a draft of the drone bill. Please look it over and let me know your thoughts so I can try to make some changes if possible before it is filed.

Thank you
Kenny Miller

From: Kenny Miller  
Sent: Friday, January 10, 2020 3:11 PM  
To: Lane, Troy; Ronald Mills; Maggi Duncan; Eve Thomas  
Cc: Samuel P Shaffer  
Subject: FW: Drone Legislation  
Attachments: image001.jpg; ATT00001.htm; HB1580.pdf; ATT00002.htm

Upon review I am ok with the wording in this amendment to 39-13-609. While it does require us to make video footage available for public viewing within 1 day of collection, it does not require us to record.

First, by using the verbiage “not limited to” it expands our ability to view protests and public disturbances.

With this legislation, we can observe the event in real time and start recording if and when a crime is observed. If we record a crime it is protected and that footage will not need to be posted online.

I am also ok with the 100 person minimum, because it is based on “expected” attendance.

If this is all we can get this year. I will take it.

Please correct me if I am wrong, Thanks

Deputy Chief Kenny Miller  
Knoxville Police Department  
Patrol Commander  
(865)215-7548

From: Lane, Troy [mailto:tlane15@utk.edu]  
Sent: Friday, January 10, 2020 8:48 AM  
To: Kenny Miller  
Subject: Fwd: Drone Legislation

Here you go.

Sent from my iPhone. Please forgive any minor grammatical or "autocorrect" errors.

Begin forwarded message:

From: "Warren, Josh" <josh.warren@tennessee.edu>  
Date: January 9, 2020 at 11:37:14 EST  
To: "Lane, Troy" <tlane15@utk.edu>  
Cc: "Freeland, Annie" <annie.freeland@tennessee.edu>  
Subject: Drone Legislation

Chief Lane,
I hope this finds you well. I am attaching recently filed legislation that creates an exemption to the search warrant requirement for drones used to provide security at events open to the public with attendance expected to exceed 100 people and creates an accompanying data retention standard.

We thought it would be helpful to check with you to if this legislation would impact your work or your collaboration with local law enforcement. Any information that you could provide would be helpful.

Thank you,

Josh
I believe we got some specs on mapping software to put on the drones we already have. I thought it was for reconstructing crashes.

Sent from my iPhone

On Jun 13, 2019, at 2:21 PM, Donald Jones <djonessknoxtvltn.gov> wrote:

I will find out from Sammy. We already have two Drones we operate however they don’t have the mapping capability that the reconstruction folks could use.

Capt Don Jones
Patrol Division Captain
Knoxville Police Department
865-215-7207

On Jun 13, 2019, at 2:13 PM, Ronald Green <rgreen@knoxtvltn.gov> wrote:

Can you advise on this please? Don’t we already have drones?

Deputy Chief Ronald K. Green
Management Services Division
Knoxville Police Department
rgreen@knoxtvltn.gov
865-215-7339

Could you please read message below from Zak with Array Drones Inc.? Please let us know what opportunities this company may have to work with KPD?

Thanks!

Patricia Inés Robledo
Business Liaison
City of Knoxville
From: Array Drones Inc [mailto:zmasingale@arraydrones.com]
Sent: Wednesday, June 12, 2019 5:16 PM
To: Patricia Robledo
Subject: KPD Drones and Services

Hey Patricia!

It was great to talk to you about drones the other day! Sorry for the delay in getting back with you.

If I may, I would like the opportunity to present our services to you and the police force of KPD. As we discussed, I was informed that KPD is interested in acquiring drones for their police department to use in their day to day operations.

We are a drone service provider, however, we do consulting with many different companies and agencies and teach them how to use drones to their maximum potential within their operations.

Check out the link below for a taste of what we can offer you!

- Orlando 3-D Mapping.m4v
- Police:Crash:3-D.m4v
- Car Wreck:3-D Mapping.m4v

We specialize in mapping services. That means that we can create many types of interactive models. Those links attached are interactive 3-D models. These models are extremely reliable. The applications you can use these 3-D models in are endless.

For example: If there is a accident, you can easily documentable the accident in 3-D, take post measurement readings from your computer (or mobile device), and many more features...

Creating these models takes (on average) 5-10 minutes (depending the size of the target)
Also, if you all would be interested, we are working on building a drone so small that it can fit in the palm of your hand. Our goal is to make this drone only be used by police departments where in rough situations, they can fly up to the threat, and get complete situational awareness of the situation, and not risk loosing thousands of dollars in a drone. We are trying to find agencies that want to field test them for us at no cost. Let me know if you all would be interested.

But nevertheless, we would love to partner up with you all to take KPD (and the city of Knoxville) to the next evolution in their operations. Let me know what your schedule looks like.
and if you all have any questions, please let me know!

Find our website below, as well as our contact.

Thank you again Patricia!

P.S. - We are a registered vendor through the city of Knoxville.
- Thanks

--

Title:
Zak Masingale, CEO

Contact:
(865) 242-1103
zmasingale@arraydrones.com
https://www.arraydrones.com

Locations:
Tennessee, Georgia, Alabama,
Florida, Mississippi, Arkansas,
South Carolina, North Carolina
Virginia, Kentucky, West Virginia,
Oklahoma, Texas, Louisiana,
Indiana, Missouri, Illinois, Ohio,
Kansas,

-Array Drones Inc
  We Are The Skies
  We Are The Future

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--
Title:
Zak Masingale, CEO

Contact:
(918) 892-0331
zmasingale@arraydrones.com
https://www.arraydrones.com

Locations:
Tennessee, Georgia, Alabama,
Florida, Mississippi, Arkansas,
South Carolina, North Carolina
Virginia, Kentucky, West Virginia,
Oklahoma, Texas, Louisiana,
Indiana, Missouri, Illinois, Ohio,
Kansas,

-Array Drones Inc
  We Are The Skies
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Current Drone Legislation

1. Amends TCA 39-13-609 “Freedom from Unwarranted Surveillance Act” which states:
   a. A drone may be used as described below without a search warrant or recognized warrant exception:
      i. To counter a high risk of a terrorist attack by a specific individual when the US Homeland Security office has obtained credible intel of such a risk.
      ii. Prevent imminent danger to life when there is reasonable suspicion immediate action is needed.
      iii. Searching for a fugitive, escapee or monitoring a hostage situation.
      iv. Searching for a missing person
      v. Investigating a vehicle crash on a public right of way or publicly accessible area.
      vi. Investigating of a criminal offense on public property.
      vii. Fire investigations
   b. Must be deleted within 3 business days.
      i. Unless relevant to an ongoing investigation or criminal prosecution.
      ii. Not admissible if above exceptions are not honored.

New Drone Legislation Amendment

1. SB 258 amends 39-13-609 as described below:
   a. To allow LE agencies to provide aerial drone coverage to:
      i. Enhance security for events open to the public to include but not limited to:
         1. Music concerts
         2. Athletic events
         3. Festivals
         4. Protests
         5. And other outdoor events
   b. To provide aerial coverage in case of a natural disaster when the state has declared a state of emergency.
   c. To investigate the scene of a crime that is occurring or has occurred.
   d. Expands the destruction of the video from 3 days to 30 business days.

Justifications:

- Drone footage will allow departments to more effectively prosecute rioters by identifying violators in large scale crowds that turn violent. Helps prevent a mass arrests scenario where peaceful protesters are arrested with rioters. Gives much more credibility to the actions of officers on scene. We know many charges were dismissed against protesters throughout the country.
- Provides a bird’s eye view of the actions taken by officers and protesters. Holds law enforcement accountable while protecting them against false allegations.
I have attached two summaries that you may find helpful about the drone legislation and the anti-doxxing legislation.

Deputy Chief Kenny Miller
Knoxville Police Department
In terms of section (l), I wanted to expand aerial coverage from publicly owned property to include private property where a crime has occurred. As it currently reads we are only allowed to deploy a drone to photograph, record and draw a scale diagram of crime scenes on publicly owned property. We already use a Farro laser scanner to do this, but new drone software is far more efficient on outdoor scenes.

A few observations:

- What is the intended interplay between existing subsection (d)(2)(F) which deals with “where a criminal offense has occurred” on public property and the new subsection (l) which covers the investigation of “the scene of a crime that is occurring or has occurred.”? They use slightly different language, so if that wasn’t intentional, we might consider the possible interpretation of that by the courts. For example, the existing subsection would seem to allow us to investigate an ongoing crime on public property, even where we don’t have a “crime scene” to process. The proposed subsection reads as if we are able to use the drone to investigate the crime scene, but calls into question whether that includes using the drone to provide a better view as we coordinate ground units, but not necessarily using them to investigate the crime scene (i.e., collecting evidence, etc.). I’m not suggesting that anything has to be changed, just wondering whether the distinction was intentional, and if so why.

- I don’t have any issues with the retention piece, but I think it’s likely to run into significant resistance from privacy advocates. Specifically, the retention of images not related to an ongoing criminal investigation.

Can you please look this over and give me your input? Thank you.
Begin forwarded message:

From: "Zoe K. Sams" <zksams@tndagc.org>
Date: December 23, 2020 at 10:46:09 AM CST
To: Jimmy Musice <Jimmy.Musice@tn.gov>, "Maggi M. Duncan" <maggio@tacp.org>, Mike Agee <magee.acs@gmail.com>, Elizabeth Stroocker <Elizabeth.Stroocker@tn.gov>, Jeff Bledsoe <jeffbledsoe@tnsheriffs.com>, Bryan Noel <Bryan.Noel@tn.gov>, "Gilder, Christopher (MNPD)" <chris.gilder@nashville.gov>
Cc: "Guy R. Jones" <grjones@tndagc.org>
Subject: Drone bill draft

Good Morning Everyone,

I have attached my attempt at fixing the "plain sight" issue in the current drone language. Please look over and feel free to suggest changes!

Thanks,

Zoë Sams | Deputy Director
District Attorneys General Conference
226 Anne Dallas Dudley Blvd., Suite 800
Nashville, TN 37243-0890
Office: (615) 532-1847
Mobile: (615) 939-1753
Fax: (615) 741-7459

LEGAL CONFIDENTIAL: The information in this e-mail and in any attachment may contain information that is privileged either legally or otherwise. It is intended only for the attention and use of the named recipient. If you are not the intended recipient, you are not authorized to retain, disclose, copy or distribute the message and/or any of its attachments. If you received this e-mail in error, please notify me and delete this message.
In terms of missing persons, I would assume the law is referring to a person(s) reported missing? You could have a situation where several people are stranded but no one has been reported missing. If we feel like part (B) will legally cover us in this scenario, then I am ok with leaving this out. For part (B) to work however we will need the use of drones at natural and manmade disasters.

To some extent it is with regard to imminent threats to life and looking for missing persons. Arguably, I don’t think it covers damage assessments or recovery efforts (i.e., looking for deceased persons).

(A) To counter a high risk of a terrorist attack by a specific individual or organization if the United States secretary of homeland security determines that credible intelligence indicates that there is such a risk;
(B) To prevent imminent danger to life where there is reasonable suspicion that, under particular circumstances, immediate action is needed;
(C) To provide continuous aerial coverage when law enforcement is searching for a fugitive or escapee or is monitoring a hostage situation;
(D) To provide more expansive aerial coverage when deployed for the purpose of searching for a missing person;
(E) To investigate motor vehicle accidents that occur within the traffic right-of-way or an area open to the public;
(F) Where a criminal offense has occurred on publicly owned property, as defined in § 6-54-127(b), or where the law enforcement agency has reasonable suspicion that a criminal offense has occurred on such property; or
(G) At the scene of a fire investigation.

Kenny, I would have to double check but I believe it that’s in the current code and this bill wouldn’t delete that. I’m in San Antonio today, but Chris will know that for sure. I can look it up later when I get back to the house.

Maggi McLean Duncan
Tennessee Association of Chiefs of Police
615-566-4398

On Dec 28, 2020, at 11:28 AM, Kenny Miller <kmiller@knoxvilletn.gov> wrote:
I would like to add wording for aerial coverage of natural or manmade disasters to assess damage or facilitate the rescue of injured, deceased or stranded persons?

That is all I would currently add. Thank you for your work on this and let me know if I can be of further help.

Deputy Chief Kenny Miller
Knoxville Police Department

Sent from my iPhone

On Dec 28, 2020, at 10:57 AM, Maggi M. Duncan <maggi@tACP.org> wrote:

Can you please look this over and give me your input? Thank you

Maggi McLean Duncan
Tennessee Association of Chiefs of Police
615-566-4398

Begin forwarded message:

From: "Zoe K. Sams" <zksams@tndagc.org>
Date: December 23, 2020 at 10:46:09 AM CST
To: Jimmy Musice <Jimmy.Musice@tn.gov>, "Maggi M. Duncan" <maggi@tACP.org>, Mike Agee <magee.acs@gmail.com>, Elizabeth Stroeker <Elizabeth.Stroeker@tn.gov>, Jeff Bledsoe <jeffbledsoe@tnsheriffs.com>, Bryan Noel <Bryan.Noel@tn.gov>, "Gilder, Christopher (MNPD)" <chris.gilder@nashville.gov>
Cc: "Guy R. Jones" <grjones@tndagc.org>
Subject: Drone bill draft

Good Morning Everyone,

I have attached my attempt at fixing the "plain sight" issue in the current drone language. Please look over and feel free to suggest changes!

Thanks,

Zoë Sams | Deputy Director
District Attorneys General Conference
226 Anne Dallas Dudley Blvd., Suite 800
Nashville, TN 37243-0890
Office: (615) 532-1847
Mobile: (615) 939-1753
Fax: (615) 741-7459
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<image001.png>
<Drone bill zs edits.docx>
Can you please look this over and give me your input? Thank you

Maggi McLean Duncan
Tennessee Association of Chiefs of Police
615-566-4398

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Date: December 23, 2020 at 10:46:09 AM CST
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Cc: "Guy R. Jones" <grjones@tndagc.org>
Subject: Drone bill draft

Good Morning Everyone,

I have attached my attempt at fixing the “plain sight” issue in the current drone language. Please look over and feel free to suggest changes!

Thanks,

Zoe Sams | Deputy Director
District Attorneys General Conference
226 Anne Dallas Dudley Blvd., Suite 800
Nashville, TN 37243-0890
Office: (615) 532-1847
Mobile: (615) 939-1753
Fax: (615) 741-7459

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AN ACT to amend Tennessee Code Annotated, Title 39, Chapter 13, Part 6, relative to law enforcement.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF TENNESSEE:

SECTION 1. Tennessee Code Annotated, Section 39-13-609(d)(2) is amended by adding the following as new subdivisions:

(H) To provide aerial coverage when deployed for the purpose of providing or enhancing security for an event open to the public including, but not limited to, music concerts, athletic events, festivals, protests, and other outdoor events; or

(I) To investigate the scene of a crime that is occurring or has occurred.

SECTION 2. Tennessee Code Annotated, Section 39-13-609(e)(2)(A), is amended by deleting the subdivision and substituting instead the following:

(A) Be deleted within thirty (30) business days of collection unless the evidence, information, or other data is directly relevant to the lawful reason the drone was being used and or to an ongoing investigation or criminal prosecution. If the evidence, information, or other data is directly relevant to both either, it shall be retained and deleted by the collecting law enforcement agency in accordance with the same criteria, policies, and procedures used by the agency for evidence collected by methods other than a drone;

SECTION 3. This act shall take effect upon becoming a law, the public welfare requiring it.
Here is the current legislation, but it does not have the exception for natural disasters.

Deputy Chief Kenny Miller
Knoxville Police Department
(865)215-7339
kmiller@knoxvilletn.gov

-----Original Message-----
From: Austin Deal [mailto:austin.deal@capitol.tn.gov]
Sent: Tuesday, October 20, 2020 9:54 AM
To: Kenny Miller; Maggi Duncan; Jimmy Musice
Subject: FW: Drone Bill Draft

Here is the attached Drone Legislation, let me know if you see any changes needed.

Austin Deal
Legislative Assistant to Senator Becky Massey Cordell Hull Building, Suite 776
425 5th Ave North
Nashville, TN 37243
Office: 615-741-1648
austin.deal@capitol.tn.gov

From: Elizabeth Insogna <elizabeth.insogna@capitol.tn.gov>
Date: Monday, October 19, 2020 at 2:43 PM
To: Austin Deal <austin.deal@capitol.tn.gov>
Subject: Drone Bill Draft

Hey Austin-

I have attached a draft of the drone bill using the language you submitted. Please let me know if Senator Massey would like to have any changes made or if the bill can go forward in its current form. Thanks.

Elizabeth B. Insogna
Legislative Attorney
Tennessee General Assembly, Office of Legal Services
(615) 741-8755
elizabeth.insogna@capitol.tn.gov
AN ACT to amend Tennessee Code Annotated, Title 39, Chapter 13, Part 6, relative to law enforcement.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF TENNESSEE:

SECTION 1. Tennessee Code Annotated, Section 39-13-609(d)(2), is amended by adding the following as new subdivisions:

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SECTION 3. This act shall take effect upon becoming a law, the public welfare requiring it.
Austin and Maggie,

Captain Brian Evans posed an in interesting question, Do we need to add an exception that would cover search and rescue efforts during a natural or manmade disaster. This would allow us to survey flood and wind damaged areas that may not be easily accessible. The red exception below is currently in the law but I am unsure if that goes far enough.

"If the law enforcement agency possesses reasonable suspicion that, under particular circumstances, swift action is needed to prevent imminent danger to life;"

Deputy Chief Kenny Miller
Knoxville Police Department
(865)215-7339
kmiller@knoxvilletn.gov

From: Austin Deal [mailto:austin.deal@capitol.tn.gov]
Sent: Thursday, November 19, 2020 12:28 PM
To: Kenny Miller; Maggi Duncan
Subject: Drone Legislation

This might be the exact version I sent you before but just double checking to see if there were any changes needed.

Thanks,

Austin Deal
Legislative Assistant to Senator Becky Massey
Cordell Hull Building, Suite 776
425 5th Avenue North
Nashville, Tennessee 37243
Office: 615-741-1648
austin.deal@capitol.tn.gov
That is a valid point. It is a use we have been requested for from EMA just this past year, and I was just on a call this morning of a state exercise in August for that very thing. It may be beneficial to have wording in TCA because if we notice something criminal in the course of an emergency management flight, the legality of the beginning of that case may be questioned.

Lt. Sammy Shaffer
Management Services - Training Director
Knoxville Police Dept, TN
865.215.1301

Just throwing this out..... not sure if it would even need to be included..... I see exceptions for security at the events, festivals, and other things that are specifically spelled out and the part b of criminal investigations...

Is it worth including any type of disaster that would not fall under a crime or enhancing security ......or would that be covered under something we already have......... for example a landslide, snow event, storm damage, flooding  ??

Thoughts ?

Captain Brian Evans
West District – Patrol
865-215-7423
bevans@knoxvilletn.gov

Are we missing anything?

Deputy Chief Kenny Miller
Knoxville Police Department
(865)215-7339
kmiller@knoxvilletn.gov

From: Austin Deal [mailto:austin.deal@capitol.tn.gov]
Sent: Thursday, November 19, 2020 12:28 PM
To: Kenny Miller; Maggi Duncan
Subject: Drone Legislation

This might be the exact version I sent you before but just double checking to see if there were any changes needed.

Thanks,

Austin Deal
Legislative Assistant to Senator Becky Massey
Cordell Hull Building, Suite 776
425 5th Avenue North
Nashville, Tennessee 37243
Office: 615-741-1648
austin.deal@capitol.tn.gov
From: Brian Evans  
Sent: Thursday, November 19, 2020 2:44 PM  
To: Kenny Miller; Samuel P Shaffer  
Subject: RE: Drone Legislation

Just throwing this out...... not sure if it would even need to be included..... I see exceptions for security at the events, festivals, and other things that are specifically spelled out and the part b of criminal investigations...

Is it worth including any type of disaster that would not fall under a crime or enhancing security ....or would that be covered under something we already have.......... for example a landslide, snow event, storm damage, flooding ??

Thoughts ?

Captain Brian Evans  
West District – Patrol  
865-215-7423  
bevans@knoxvillean.gov

From: Kenny Miller <kmiller@knoxvillean.gov>  
Sent: Thursday, November 19, 2020 2:00 PM  
To: Samuel P Shaffer <sshaffer@knoxvillean.gov>; Brian Evans <bevans@knoxvillean.gov>  
Subject: FW: Drone Legislation

Are we missing anything?

Deputy Chief Kenny Miller  
Knoxville Police Department  
(865)215-7339  
kmiller@knoxvillean.gov

From: Austin Deal [mailto:austin.deal@capitol.tn.gov]  
Sent: Thursday, November 19, 2020 12:28 PM  
To: Kenny Miller; Maggi Duncan  
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Thanks,

Austin Deal  
Legislative Assistant to Senator Becky Massey  
Cordell Hull Building, Suite 776  
425 5th Avenue North  
Nashville, Tennessee 37243  
Office: 615-741-1648  
austin.deal@capitol.tn.gov
I think it looks good. The two issues have been public event monitoring and the quick turn around for deletion, both of which are addressed here.
I have attached what I have for current law as a reference.
Thank you for pushing this along.

Lt. Sammy Shaffer
Management Services - Training Director
Knoxville Police Dept, TN
865.215.1301

Are we missing anything?

Deputy Chief Kenny Miller
Knoxville Police Department
(865)215-7339
kmiller@knoxvilletn.gov

This might be the exact version I sent you before but just double checking to see if there were any changes needed.

Thanks,

Austin Deal
Legislative Assistant to Senator Becky Massey
Cordell Hull Building, Suite 776
425 5th Avenue North
Nashville, Tennessee 37243
Office: 615-741-1648
austin.deal@capitol.tn.gov
Are we missing anything?

Deputy Chief Kenny Miller  
Knoxville Police Department  
(865)215-7339  
kmiller@knoxvilletn.gov

From: Austin Deal [mailto:austin.deal@capitol.tn.gov]  
Sent: Thursday, November 19, 2020 12:28 PM  
To: Kenny Miller; Maggi Duncan  
Subject: Drone Legislation

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Thanks,

Austin Deal  
Legislative Assistant to Senator Becky Massey  
Cordell Hull Building, Suite 776  
425 5th Avenue North  
Nashville, Tennessee 37243  
Office: 615-741-1648  
austin.deal@capitol.tn.gov
This might be the exact version I sent you before but just double checking to see if there were any changes needed.

Thanks,

Austin Deal
Legislative Assistant to Senator Becky Massey
Cordell Hull Building, Suite 776
425 5th Avenue North
Nashville, Tennessee 37243
Office: 615-741-1648
austin.deal@capitol.tn.gov
AN ACT to amend Tennessee Code Annotated, Title 39, Chapter 13, Part 6, relative to law enforcement.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF TENNESSEE:

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SECTION 3. This act shall take effect upon becoming a law, the public welfare requiring it.
From: Eve Thomas
Sent: Wednesday, October 21, 2020 3:43 PM
To: Kenny Miller
Subject: RE: Drone Bill Draft

I like it...short and to the point (for now)!

Eve M. Thomas
Chief of Police
Knoxville Police Department
(865)215-7229

-----Original Message-----
From: Kenny Miller
Sent: Wednesday, October 21, 2020 3:41 PM
To: Eve Thomas
Subject: FW: Drone Bill Draft

FYI

Deputy Chief Kenny Miller
Knoxville Police Department
(865)215-7339
kmiller@knoxdetn.gov

-----Original Message-----
From: Austin Deal [mailto:austin.deal@capitol.tn.gov]
Sent: Tuesday, October 20, 2020 9:54 AM
To: Kenny Miller; Maggi Duncan; Jimmy Musice
Subject: FW: Drone Bill Draft

Here is the attached Drone Legislation, let me know if you see any changes needed.

Austin Deal
Legislative Assistant to Senator Becky Massey Cordell Hull Building, Suite 776
425 5th Ave North
Nashville, TN 37243
Office: 615-741-1648
austin.deal@capitol.tn.gov<mailto:austin.deal@capitol.tn.gov>

From: Elizabeth Insogna <elizabeth.insogna@capitol.tn.gov>
Date: Monday, October 19, 2020 at 2:43 PM
To: Austin Deal <austin.deal@capitol.tn.gov>
Subject: Drone Bill Draft

Hey Austin-
I have attached a draft of the drone bill using the language you submitted. Please let me know if Senator Massey would like to have any changes made or if the bill can go forward in its current form. Thanks.

Elizabeth B. Insogna
Legislative Attorney
Tennessee General Assembly, Office of Legal Services
(615) 741-8755
elizabeth.insogna@capitol.tn.gov
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SECTION 3. This act shall take effect upon becoming a law, the public welfare requiring it.
I like it, Thank you!

Deputy Chief Kenny Miller
Knoxville Police Department
(865)215-7339
kmiller@knoxvilletn.gov

-----Original Message-----
From: Austin Deal [mailto:austin.deal@capitol.tn.gov]
Sent: Tuesday, October 20, 2020 9:54 AM
To: Kenny Miller; Maggi Duncan; Jimmy Musice
Subject: FW: Drone Bill Draft

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Austin Deal
Legislative Assistant to Senator Becky Massey Cordell Hull Building, Suite 776
425 5th Ave North
Nashville, TN 37243
Office: 615-741-1648
austin.deal@capitol.tn.gov

From: Elizabeth Insogna <elizabeth.insogna@capitol.tn.gov>
Date: Monday, October 19, 2020 at 2:43 PM
To: Austin Deal <austin.deal@capitol.tn.gov>
Subject: Drone Bill Draft

Hey Austin-

I have attached a draft of the drone bill using the language you submitted. Please let me know if Senator Massey would like to have any changes made or if the bill can go forward in its current form. Thanks.

Elizabeth B. Insogna
Legislative Attorney
Tennessee General Assembly, Office of Legal Services
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elizabeth.insogna@capitol.tn.gov
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SECTION 3. This act shall take effect upon becoming a law, the public welfare requiring it.
Re: UAV vendor training

Samuel P Shaffer <sshaffer@knoxvilletn.gov>

To: John Kiely <jkiely@knoxvilletn.gov>; Donald Jones <djones@knoxvilletn.gov>; Ronald Green <rgreen@knoxvilletn.gov>; Jeff Stiles <jstiles@knoxvilletn.gov>
Cc: Monty Houk <mhouk@knoxvilletn.gov>

UAV operators are
J. Holmes - OCU/Overdose
B. Stryker - OCU
T. Epps - ROS
T. Turner - East D
M. Tucker - East E
D. Gerlach - West C

Sgt. Sammy Shaffer
Special Services - Patrol Division
Knoxville Police Dept, TN

From: John Kiely
Sent: Wednesday, December 6, 2017 1:59:48 PM
To: Donald Jones; Ronald Green
Cc: Samuel P Shaffer; Monty Houk
Subject: Re: UAV vendor training

Sounds good

Captain John Kiely
Knoxville Police Department
West District Commander
(865) 215-7423

From: Donald Jones
Sent: Wednesday, December 6, 2017 12:30:48 PM
To: Ronald Green
Cc: Samuel P Shaffer; John Kiely; Monty Houk
Subject: Re: UAV vendor training

Sammy will give you the names

Captain Don Jones
Patrol
Division Captain
Knoxville Police Department
865-215-7207

From: Ronald Green
Sent: Wednesday, December 6, 2017 12:21:21 PM
To: Donald Jones
Cc: Samuel P Shaffer; John Kiely; Monty Houk
Subject: Re: UAV vendor training

And do we know which officers are going?

Captain Ronald Green  
East District Commander  
Knoxville Police Department  
865-215-1288  
rgreen@knoxvilletn.gov<mailto:rgreen@knoxvilletn.gov>

On Dec 6, 2017, at 11:04 AM, Donald Jones <djones@knoxvilletn.gov<mailto:djones@knoxvilletn.gov>> wrote:

We need to get it done. Have the Captains see if it affects their Staffing those days

Captain Don Jones  
Patrol  
Division Captain  
Knoxville Police Department  
865-215-7207

From: Samuel P Shaffer  
Sent: Wednesday, December 6, 2017 8:41 AM  
To: Donald Jones  
Subject: UAV vendor training

Captain, I just heard from our Drone vender and finally got him pinned down for the training he owes us. He is offering next Thursday and Friday the 14th and 15th. It is short notice but want to get him while I can. We were already planning to train on Friday the 15th so really just asking for one more day. This would be three from Patrol and three from CID. Let me know if this is okay and I will finalize it with him. Thank you sir

Sent from my U.S. Cellular® Smartphone
Re: Training Dates for Knoxville PD

Samuel P Shaffer <sshaffer@knoxvilletn.gov>
Thu 12/7/2017 1:40 PM
To: Jason Thomas <jtcountry@gmail.com>
Also if you can bring some extra batteries it will help keep things going

Sent from my U.S. Cellular® Smartphone

-------- Original message --------
From: Jason Thomas <jtcountry@gmail.com>
Date: 12/7/17 8:45 AM (GMT-06:00)
To: Samuel P Shaffer <sshaffer@knoxvilletn.gov>
Subject: Re: Training Dates for Knoxville PD

Sammy

Ok keep me posted so I can make hotel arrangements. If you can't do it next week let me know today so I can drop off that box to you or somebody else tomorrow when I head east. The battery issue I don't think I can do anything now due to the time, if it was closer to delivery then most definitely. I can always ask.

Talk to you soon

Sent from my iPhone

Jason Thomas

On Dec 6, 2017, at 4:13 PM, Samuel P Shaffer <sshaffer@knoxvilletn.gov> wrote:

I am working to try and get next Thursday and Friday. Let's plan for it and I will keep you posted. You can just bring the controller then. We will not need it before. Also, on the 600, we had a battery that is showing a bad cell. Not sure if John talked to you about this or not. Is it possible to swap out that TB47S battery? Thanks for working with us and hope to see you next week.

Sgt. Sammy Shaffer

Special Services - Patrol Division

Knoxville Police Dept, TN

From: Jason Thomas <jtcountry@gmail.com>
Sent: Wednesday, December 6, 2017 7:56:56 AM
Sammy

I am headed to Raleigh NC this Friday morning and can drop it off to you before I leave. Let me know what your schedule is mid morning, where you will be at, and the best way to reach you.

Also, it looks like I can do next Thurs and Friday (Dec. 14 & 15).

Let me know,

Thanks

Sent from my iPhone

Jason Thomas

On Dec 6, 2017, at 6:24 AM, Samuel P Shaffer <sshaffer@knoxvilletn.gov> wrote:

If Friday won’t work we will schedule something for January. Also if it won’t work I will be in Nashville Thursday and Friday this week is there anyway I can swing by for that other controller. Thank you

Sent from my U.S. Cellular® Smartphone

-------- Original message --------
From: Jason Thomas <jtcountry@gmail.com>
Date: 12/5/17 5:23 PM (GMT-05:00)
To: Samuel P Shaffer <sshaffer@knoxvilletn.gov>
Subject: Re: Training Dates for Knoxville PD

Sammy

December is so full, but I might be able to get something done next week. Last minute I know but Christmas is coming soon. Ideas??

Thanks

Sent from my iPhone

Jason Thomas

On Nov 15, 2017, at 8:05 PM, Samuel P Shaffer <sshaffer@knoxvilletn.gov>
I'm sorry, when I never heard back, I did not submit the dates up the chain. Now, with the holiday next week, I will not get it through in time.

What do you have in December? I also wanted to see about dropping to 2 days instead of 3. This may be easier on both of us. As I consider what we discussed for training, I feel we could eliminate some of the repetition as we are conducting regular training ourselves, and the distracted exercises, while relevant, would not occur here with the way we set up security on the operator. I would like to see us focus on the details and 'behind the scene' of the aircraft, apps, and cameras along with some scenarios like you mentioned.

Let me know what you think along with what date ranges you have. The sooner I can pass them up, the more likely to be approved.

Thank you!!
Sammy

Sgt. Sammy Shaffer
Special Services - Patrol Division
Knoxville Police Dept, TN

From: Jason Thomas <jtcountry@gmail.com>
Sent: Wednesday, November 15, 2017 2:27:00 PM
To: Samuel P Shaffer
Subject: Re: Training Dates for Knoxville PD

Sammy

Just making sure Dec is still good.

Sent from my iPhone

Jason Thomas

On Oct 24, 2017, at 11:12 AM, Samuel P Shaffer <sshaffer@knoxxvilletn.gov> wrote:

Nov 20-22
Dec 4-6
Re: Training Dates for Knoxville PD

Samuel P Shaffer <sshaffer@knoxvillete.n.gov>
Tue 10/24/2017 12:12 PM
To: Jason Thomas <jtcountry@gmail.com>
Nov 20-22
Dec 4-6
What works best for you?

Sgt. Sammy Shaffer
Special Services - Patrol Division
Knoxville Police Dept, TN

From: Jason Thomas <jtcountry@gmail.com>
Sent: Thursday, October 19, 2017 12:18:39 PM
To: Samuel P Shaffer
Subject: Re: Training Dates for Knoxville PD

Sammy

Will call you today. Yes I do remember that, have it in a box for ya.

Sent from my iPhone

Jason Thomas

On Oct 19, 2017, at 9:00 AM, Samuel P Shaffer <sshaffer@knoxvillete.n.gov> wrote:

Look forward to hearing from you. Also, John said to remind you about our controller that was taken for repair/replacement.
Thanks again!

Sgt. Sammy Shaffer
Special Services - Patrol Division
Knoxville Police Dept, TN

From: Jason Thomas <jtcountry@gmail.com>
Sent: Wednesday, October 18, 2017 7:50:05 AM
To: Samuel P Shaffer
Subject: Re: Training Dates for Knoxville PD

Ok

Sent from my iPhone

Jason Thomas

On Oct 17, 2017, at 11:12 PM, Samuel P Shaffer <sshaffer@knoxvillete.n.gov> wrote:

https://outlook.office.com/mail/search/id/AAQkADEzxZTkoZGy6LWE5MmEtNDg1MS05ODhLWQ0MTiwNTE1ZjhmZQAQAA9AJloFSSpDiabnPgLNoE...
Thanks for the quick reply.
865-755-5713

I am in a conference, so please leave a message if I don’t answer.
Thanks!

Sgt. Sammy Shaffer
Special Services - Patrol Division
Knoxville Police Dept, TN

From: Jason Thomas <jtcountry@gmail.com>
Sent: Tuesday, October 17, 2017 11:57:42 PM
To: Samuel P Shaffer
Subject: Re: Training Dates for Knoxville PD

Sammy

Yes let’s set up a good date!
What’s your number so we can connect tomorrow?

Thanks

Sent from my iPhone

Jason Thomas

On Oct 17, 2017, at 6:56 PM, Samuel P Shaffer <sshaffer@knoxvilletn.gov> wrote:

Jason,
Checking in to see if we can get together for our training. We are
starting to gain a little speed with our program and really need to
get done. Also, my bosses are starting to ask if we have it done so
we can 'close out' the process and purchase.
I know your busy and things fill up fast. Please let me know when
you are available and I will do what I can to make it happen on our
end.
Thank you!
Sammy

Sgt. Sammy Shaffer
Special Services - Patrol Division
Knoxville Police Dept, TN

From: Samuel P Shaffer
Sent: Monday, August 21, 2017 8:01 AM
To: Jason Thomas
Subject: Re: Training Dates KPD

Jason,
Good to hear from you. I certainly understand the busy. Same here. I would like to do three day together. Looking at the following

Anytime week of Oct 30
Nov 20-22
Anytime week of Nov 27

Let me know if any of these work for you (if more than 1, first choice and 2nd choice). I will then submit them to the bosses for approval.

Thanks and we will be in touch!
Sammy

Sgt. Sammy Shaffer
Special Services - Patrol Division
Knoxville Police Dept, TN

From: Jason Thomas <jtcountry@gmail.com>
Sent: Friday, August 18, 2017 10:35:05 AM
To: Samuel P Shaffer
Subject: Re: Training Dates KPD

Sammy

Ok we are just now looking at some openings in the schedule for this September. It's been a super busy summer and the fall is filling up quick, so I'd like to get something on the books for you guys finally. Are you able to work out 3 days training or will you need to break it up into 3 One day sessions for scheduling reasons?

Let me know thanks!

Sent from my iPhone

Jason Thomas

On Jul 3, 2017, at 5:32 PM, Samuel P Shaffer <sshaffer@knoxxilletn.gov> wrote:

John, Thanks for coordinating. Jason, good to finally get on the email group with you. I apologize that our agency has been very delayed in getting our training done after your delivery of the two UAV. We all are busy these days, so lets start kicking dates back and forth.
Unfortunately (or it may be better for you) it is too late for me to get approval to bring the guys in next week. Can we look at August? I will let you start with what you have available. Thanks again and I look forward to working with you.

Sgt. Sammy Shaffer
Special Services - Patrol Division
Knoxville Police Dept, TN

From: Jason Thomas <jtcountry@gmail.com>
Sent: Saturday, July 1, 2017 9:43 AM
To: John A Holmes
Subject: Re: Training Dates

John

Sorry for the delay however we are slammed, which is good and bad. I'm still waiting to find out if I will have any time the week of July 10th due to contracts already out and scheduled, but waiting for final approval. If I can make it work it might be for a day or two but I might have to split it up if possible to get you guys trained as soon as possible. Talk to you soon.

Thanks!

Sent from my iPhone

Jason Thomas

On Jun 13, 2017, at 12:55 PM, John A Holmes <jaholmes@knoxvilletn.gov> wrote:

Yeah no problem.

His name is Sgt. Sammy Shaffer and his email is: sshaffer@knoxvilletn.gov

Thanks
Hey John!!

How are ya!!?!?! Let me check for sure but I think we get back to town sometime that week and might be able to squeeze ya in. I guess being busy is good sometimes. Can you pass along his email so I can get him in the loop?

Thanks
Sent from my iPhone

Sending from my Gmail because my outgoing server on my phone needs to be reset.

Sent from my iPhone

Jason Thomas
> On Jun 12, 2017, at 10:49 PM, John A Holmes <jaholmes@knoxvillete.gov> wrote:
> > Hey Jason,
> > > Hope all is well with you and work. I meant to get back with you sooner but I've been extremely busy. Sgt. Shaffer who is over the team asked me to check with you to see if you were available the week of July 10th for training. If not then any possible dates in August?
> > > Thanks again,
> > > John
> > > Sent from my iPad Air
City of Knoxville Purchasing Division

Table of Contents

Contract/PO #: 00 179424
Bid Name: Unmanned Aerial Vehicle
Invitation to Bid Bid #: RFP RFQ LOI
Bid/RFP/RFQ/LOI Publish Date: 10/29/16 Opening Date: 7/14/11

Left Side of Folder

File Arrangement Checklist
Correspondence/Emails

Right Side of Folder

Tab A - Award Documents
Amendments
Notice to Proceed
Contract/Purchase Order
Insurance Certificates
Bonds

Tab B - Successful Bid/Professional Packet.
Negotiation Documentation
Bid/Proposal with forms

Tab C - Other Bids/Proposals
Bids/Proposals with forms

Tab D - Bid Process
Request for Contract to Law Dept
Bid Tabulation
Copy of Bid Bond Checks
Addenda
ITB/RFP/RFQ
Newspaper Ad
Bidder List
Project Maps/Plans/Specs

Map Drawer

File Number of 1
CITY OF KNOXVILLE  
OFFICE OF THE PURCHASING AGENT  
P.O. BOX 1631  
400 MAIN ST., ROOM 667  
KNOXVILLE, TN  37901  

July 25, 2016

Buyer:  T Bukvic

SHIP TO: Do Not Deliver

Issued to:  
Ghost Tracs, LLC  
923 Oldham Dr #122  
Bolensville, TN 37135

BILL TO: Knoxville Police Department  
Attn: Janice Marston  
600 E. Howard Baker, Jr. Ave  
Knoxville, TN 37915

TERMS: Net 30  
FOB

Notes: For delivery instructions and training set-up please contact Keith Debow <kdebow@knoxvilletn.gov>.

This PO reflects all of the requirements specified on the ITB - Unmanned Aerial Vehicle.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity/ Unit</th>
<th>Price</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Unmanned Aerial Vehicle system specifications per posted ITB  (Quantity 1 - DJI Inspire Pro Black and Quantity 1 - DJI Matrice 600, Delivery, Set-up, and Training).</td>
<td>1 Each</td>
<td>37217.00</td>
<td>37,217.00</td>
</tr>
</tbody>
</table>

TERMS AND CONDITIONS - READ CAREFULLY:
1. Normally payment will be made within 30 days unless discount terms state otherwise.
2. The right is reserved to cancel this order if not filled within the contract time.
3. Each shipment should be covered by a separate invoice.
4. The conditions of this order are not to be modified by any verbal understanding.
5. Goods must be billed at price stated on above order.
6. Acceptance of this order includes acceptance of all terms, delivery instructions, specifications and conditions stated on this page and the attached page entitled "Indemnification Clause".
7. IMPORTANT: Invoices and packages must bear this ORDER NUMBER.
8. It is a condition of this order, and it is given upon the express understanding and agreement that in case any article sold and delivered to the City hereunder, shall be protected by any patent or copyright, that the seller shall indemnify and save harmless the City from any judgments, costs, or other expense or loss on account of any such patent or copyright and shall at own expense defend any suits that might be brought against the City by any person or persons whatsoever on account of the use or sale of any patented or copyrighted article purchased by the City in violation or infringement of rights under any such patent or copyright.

PO TOTAL: $37,217.00

Boyce H. Evans  
Purchasing Agent
TO: Purchasing Agent  
City of Knoxville  
Suite 667-674  
City/County Building  
400 Main Street  
Knoxville, TN 37902

Having carefully examined the specifications entitled “Unmanned Aerial Vehicles” to open on July 14, 2016, at 11:00:00 a.m. and the other Contract Documents and addenda, and having familiarized ourselves with the existing conditions of the job, we hereby propose to furnish the supervision, labor, materials, equipment, delivery, and services to do the work as stated for the following sum:

<table>
<thead>
<tr>
<th>BID: Total charge: $37,217</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Option Pricing:</strong></td>
</tr>
<tr>
<td>Quantity four iPad mini 2, 64GB WiFi $375.10 each x 4 = $1,500.40 quantity 4</td>
</tr>
<tr>
<td>Quantity four iPad mini 2 cases, black in color $121.75 each x 4 = $487.01 quantity 4</td>
</tr>
</tbody>
</table>

Firm Name: GHOST TRACS, LLC

Official Address: PO Box 122 Knoxville Rd.  
Knoxville TN 37935  
Principal: 5200 Hend Rd PBE FL 33418

(By)  
Name: JASON T. McCAIN  
Title: Manager

Date: 11/July/2016

Email address: JASON@GHOSTTRACS.COM

Telephone: 615-567-3945
CITY OF KNOXVILLE
INVITATION TO BID

Unmanned Aerial Vehicle for KPD

Sealed bids, invited by the City of Knoxville, will be received by the Office of the Purchasing Agent of the City of Knoxville, in Room 667-674, City County Building; 400 Main Avenue; Knoxville, Tennessee, until 11:00:00 a.m. (Eastern Time) on July 14, 2016, at which time they will be opened and publicly read aloud and a purchase order issued as soon thereafter as practicable.

The City of Knoxville is requesting bids for unmanned aerial vehicles (UAV), accessories, and training per the specifications included below. **Bidders offering other than the named components shall not be accepted.**

**SPECIFICATIONS**

**Quantity 1 – DJI Inspire Pro Black Edition**
- 4K Zenmuse X5 3-axis stabilization Gimbal camera
- Live, wireless HD video transition via LightBridge
- Red and blue LED strobe package with strobe control module, remote on-off wireless systems with wireless remote, and 800 mAh 3S 11.1V LIPO battery
- Two approximately 16.5” x 6.35” removable black carbon fiber identified panels indicating “POLICE” in white weather resistant vinyl
- One aircraft slave controller
- Four blacked out TB48 batteries
- Three 100W chargers
- One travel case with Knoxville Police Department logo
- One set of extra props/propellers
- FLIR VUE 336 9mm, 60Hz with DronExpert remote controlled Gimbal
- DronExpert FLIR remote controller with touch LCD
- Two sets of heavy duty 4" USB shielded lighting cords
- Carbon fiber inspire leg extensions for tall grass landings, to be used primarily for long term high risk surveillance deployment
- Inspire “Drop Phone” remote controlled deployment case
- Two user manuals

**Quantity 1 – DJI Matrice 600**
- A3 flight controller
- Live, wireless HD video transmission via LightBridge 2
- Red and blue LED strobe package with strobe control module, remote on-off wireless system with wireless remote
- Removable black carbon fiber identified panels indicating “POLICE” in white weather resistant vinyl
- One aircraft slave controller
- One travel case with KPD logo
- One set of extra props/propellers
- FLIR VUE 336 9mm, 60 Hz with DropExpert remote controlled Gimbal
- DronExpert FLIR remote controller with touch LCD
- Two sets of heavy duty 4" USB shielded lighting cords
- One set of extra batteries for DJI Matrice 600
- One extra aircraft battery bank charger
Camera mount system for Zenmuse X5 3-axis stabilization Gimbal camera
4K Zenmuse X5 3-axis stabilization Gimbal camera
One Flysight 32 channel 2.4G HD downlink Black Pear monitor for FLIR ground station
One secure HD video downlink package 1080P@60fps, up to 3,300 ft range LoS (Connex)
One Zenmuse GCU navigation assist
Two user manuals

The winning bidder shall provide delivery, set-up, and a minimum two-hour training time at the Knoxville Police Department upon delivery. Additionally, the winning bidder shall provide three 8-hour days of training, for a total of 24 hours. The training shall take place at the Knoxville Police Department Training Academy, and shall focus on the use of the products, liabilities, and the current laws in regards to the use of the above stated devices.

The winning bidder shall offer a two week turnaround response time to diagnose and repair any equipment failure, crash, or anomaly. The bidder shall communicate any repair costs in writing to the City representative, and obtain the City representative’s written repair approval, prior to proceeding with the said repairs.

The winning bidder shall include a one-year product labor and service warranty on all equipment malfunctions, failures, and anomalies due to manufacturer’s defects.

Option Pricing
The bidders shall provide an option pricing for the following:
- Quantity four iPad mini 2, 64GB WiFi
- Quantity four iPad mini 2 cases, black in color

BID SUBMISSION REQUIREMENTS
Bidders must furnish the following information in writing with their submission:

1. Bid Form showing bidder’s name, address, quoted price, business license number, date of expiration of business license. A copy of the bidder’s current business license may be submitted in lieu of providing the license expiration date.
2. Warranty Information
3. Non-Collusion Affidavit

GENERAL INFORMATION

1. Sealed bids will be received by the Purchasing Agent of the City of Knoxville in Room 667-674, City/County Building; 400 Main Avenue; Knoxville, Tennessee 37902 until July 14, 2016, at 11:00:00 a.m., at which time they will be publicly opened and read aloud and the contract awarded as soon as practicable. No bid will be received or accepted after the above-specified time for the opening of bids. Bids that arrive late due to the fault of U. S. Postal Service, United Parcel Service, DHL, FEDEX, any delivery/courier service, or any other carrier of any sort are still considered late and shall not be accepted by the City. Such bids shall remain unopened and will be returned to the submitting entity upon request.

2. The City of Knoxville reserves the right to reject any or all bids, to accept or reject any items thereon, to waive technicalities or informalities, to split orders if in the best interest of the City, to evaluate bids by various criteria, and to accept any bid which, in its opinion, may be for the best interest of the City.

3. Included in the Invitation to Bid is an affidavit in proof that the undersigned has not entered into
any collusion with any person in respect to this bid or any other bid. The Bidder will be required to execute and submit this affidavit with the sealed bid.

4. Each bid must be submitted in a sealed envelope, addressed to the Purchasing Agent, City of Knoxville, Room 667-674, City/County Building, 400 Main Street, Knoxville, Tennessee, 37902. Each sealed envelope containing a bid must be plainly marked on the outside as: “Unmanned Aerial Vehicle.”

5. **NO CONTACT POLICY:** After the posting of this solicitation to the Purchasing Division’s website, any contact initiated by any proposer with any City of Knoxville representative concerning this proposal is strictly prohibited, unless such contact is made with the Purchasing Division representative listed herein or with said representative’s authorization. Any unauthorized contact may cause the disqualification of the proposer from this procurement transaction.

6. **INCLEMENT WEATHER:** During periods of inclement weather, the Purchasing Division will enact the following procedures with regard to solicitations and weather delays:
   - If City offices are closed due to inclement weather on the date that bids/proposals/qualifications/letters of interest are due into the Purchasing Office, all solicitations due that same day will be moved to the next operational business day.
   - The City of Knoxville shall not be liable for any commercial carrier’s decision regarding deliveries during inclement weather.

7. All bids must be made on the Bid Form supplied with the contract documents, and no interlineations, excisions, or special conditions shall be made or included in the Bid Evaluation Sheet by the Bidder. **Any bid on which there is an alteration of or departure from the Bid Form may be considered irregular and may be rejected.** All bids must be signed in full by the Bidder or Bidders in their business name or style when submitted and must show his or their complete address.

8. No bidder may withdraw his bid for a period of 60 days after the actual date of the opening thereof.

9. Prior to submitting their bids, bidders are to be registered with the Purchasing Division by setting up a Vendor Self-Service Account. Instructions for registering on-line are available at [www.knoxvilleetn.gov/purchasing](http://www.knoxvilleetn.gov/purchasing). **Bid submissions from un-registered bidders may be rejected.**

10. Payment for completed services delivered to and accepted by the City shall be at the contract price.

11. State make or brand on each item. If quoting on other than the make, model, or brand specified, the manufacturer's name and catalog number must be given, along with warranty information and detailed specifications. Because the City is committed to environmentally sound practices, brands are expected to be procured with environmental responsibility in mind.

12. Time of delivery is part of the consideration and must be stated in definite terms; time of delivery is guaranteed by the bidder and must be adhered to upon award. If time varies on different items, the bidder shall so state.

13. All quotations must be signed with the firm name and by a responsible officer or employee. Obligations assumed by such signature must be fulfilled.
14. Bidders shall verify bids before submission, as bids cannot be withdrawn or corrected after being opened. Bids will be evaluated by unit price.

15. If federal excise tax applies, show amount of same and deduct. Bear in mind that the City is exempt from Tennessee sales tax.

16. Prices are considered FOB Knoxville unless otherwise stated in the Invitation to Bid.

17. By execution and delivery of a bid submission, the bidder agrees that any additional terms and conditions, whether submitted to the City purposely or inadvertently, shall have no force or effect.

18. Regarding the Equal Business Opportunity Program contracting, the appropriate Form 1 or Form 2 must be submitted with the bid. Successful bidders who include Form 1 with their bid, stating their intent to use MOP or WOB subcontractors for any part of the contract, will be required to submit Form III, Statement of Payments to MOP/WOB Subcontractor(s) & Supplier(s). Contractors will use Form III to report the amount(s) they have paid to MOP and/or WOB subcontractors on June 30th and December 31st of each year during the life of the contract and with the final payment. Failure to submit this reporting data may result in a delay of payments. Final payment will not be released by the City until Form III is submitted.

19. Bidders must comply with the President’s Executive Orders No. 11246 and 11375 which prohibit discrimination in employment regarding race, color, religion, sex or national origin. Bidders must maintain or provide for their employees any facilities that are segregated on the basis of race, color, religion or national origin. Bidders must also comply with Title VI of the Civil Rights Act of 1964, Copeland Anti-Kick Back Act, the Contract Work Hours and Safety Standard Act, Section 402 of the Vietnam Veterans Adjustment Act of 1974 and Section 503 of the Rehabilitation Act of 1973, all of which are herein incorporated by reference.

20. All bidders must comply with Title VI of the Civil Rights Act of 1964, as codified in 42 U.S.C. 2000d. The successful bidder must follow Title VI guidelines in all areas including hiring practices, open facilities, insurance, and wages. The City of Knoxville reserves the right to review all compliance records by a contract compliance officer designated by the City.

21. No interpretation of the meaning of the plans, specifications, or other pre-bid documents will be made to any bidder orally. Each request for such interpretation should be in writing addressed to Procurement Specialist for the City of Knoxville, 400 Main Street, Room 667, Knoxville, TN 37902, or emailed to her at tlvkvic@knoxvilletn.gov. To be given consideration, such requests/questions must be received at least five (5) business days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be posted to the City’s website at www.knoxvilletn.gov/purchasing. Submitting organizations are strongly encouraged to view this website often to see if addenda are posted. Failure of any bidder to receive such addendum or interpretation shall not relieve such bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the Contract Documents.

22. Attention of all bidders is directed to the set off provision contained in Article II, Section 24-33, entitled, "Debts owed by persons receiving payments other than salary", and Section 2-1049 entitled "Receipt of benefits from City contracts by council members, employees, and officers of the City" of the Code of the City of Knoxville.

23. Before a Purchase Order is issued, the submitting entity, if selected, must provide the City Purchasing Division with a copy of its valid business license or with an affidavit explaining why it is
exempt from the business licensure requirements of the city or county in which it is headquartered. If a contract is signed, the contractor's business license shall be kept current throughout the duration of the contract, and the contractor shall inform the City of changes in its business name or location. Any Agreement to purchase resulting from this Invitation to Bid shall be governed by and construed in accordance with the substantive laws of the State of Tennessee and its conflict of laws provisions. Venue for any action arising between the City and the Vendor from the Agreement shall lie in Knox County, Tennessee.

24. By acceptance and delivery of the Purchase Order resulting from the award of this Invitation to Bid, the Vendor agrees to the following:

Contractor shall defend, indemnify and hold harmless the City, its officers, employees and agents from any and all liabilities which may accrue against the City, its officers, employees and agents or any third party for any and all lawsuits, claims, demands, losses or damages alleged to have arisen from an act or omission of Contractor in performance of this Agreement or from Contractor's failure to perform this Agreement using ordinary care and skill, except where such injury, damage, or loss was caused by the sole negligence of the City, its agents or employees.

Contractor shall save, indemnify and hold the City harmless from the cost of the defense of any claim, demand, suit or cause of action made or brought against the City alleging liability referenced above, including, but not limited to, costs, fees, attorney fees, and other expenses of any kind whatsoever arising in connection with the defense of the City; and Contractor shall assume and take over the defense of the City in any such claim, demand, suit, or cause of action upon written notice and demand for same by the City. Contractor will have the right to defend the City with counsel of its choice that is satisfactory to the City, and the City will provide reasonable cooperation in the defense as Contractor may request. Contractor will not consent to the entry of any judgment or enter into any settlement with respect to an indemnified claim without the prior written consent of the City, such consent not to be unreasonably withheld or delayed. The City shall have the right to participate in the defense against the indemnified claims with counsel of its choice at its own expense.

Contractor shall save, indemnify and hold City harmless and pay judgments that shall be rendered in any such actions, suits, claims or demands against City alleging liability referenced above.

The indemnification and hold harmless provisions of this Agreement shall survive termination of the Agreement.
State of ________________

County of ________________

MATTHEW COOPER, being first duly sworn, deposes and says that:

(1) He is owner, partner, officer, representative, or agent of GHOST TRACS LLC, the Bidder that has submitted the attached Bid;

(2) He is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;

(3) Such Bid is genuine and is not a collusive or sham Bid;

(4) Neither the said Bid nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly, with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from proposing in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm, or person to fix the price or prices in the attached Bid or of any other Bidder, firm, or person to fix any overhead, profit, or cost element of the bid price or the bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Knoxville or any person interested in the proposed Contract; and

(5) The price or prices quoted in that attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affidavit.

Signed: _______________________

Title: ________________

GHOST TRACS LLC.

Subscribed and sworn to before me this ___________ day of ___________, 2016.

My commission expires: __________

__________________________
Detail by Entity Name

Florida Limited Liability Company

GHOST TRACS, LLC

Filing Information

Document Number L15000180407
FEI/EIN Number NONE
Date Filed 10/23/2015
State FL
Status ACTIVE

Principal Address

5220 HOOD RD
PALM BEACH GARDENS, FL 33418

Mailing Address

PO BOX 122
NOLENSVILLE, TN 37135

Registered Agent Name & Address

MCGARRAUGH, JASON T, MR
5220 HOOD RD.
PALM BEACH GARDENS, FL 33418

Authorized Person(s) Detail

Name & Address

Title MGR

MCGARRAUGH, JASON T
PO BOX 122
NOLENSVILLE, TN 37135

Title MGR

MCGARRAUGH, KELLI J
PO BOX 122
NOLENSVILLE, TN 37135
Annual Reports

No Annual Reports Filed

Document Images

10/23/2015 -- Florida Limited Liability

View image in PDF format
Bid: Unmanned Aerial Vehicle for KPD

By: Ghost Tracs, LLC

BID ERROR NOTED ONLINE:

Please note that Apple does not sell iPad Mini2's in 64GB. They offer it in the 32GB. If it is required to be 64GB, Apple sells the iPad Mini4 which will allow for the larger amount of storage. We made a notation on the First Page of the Bid Form and initialed it with the corrected GB capacity with the correlated price.
SECTION I

EQUAL BUSINESS OPPORTUNITY PROGRAM
"GOOD FAITH EFFORT PLAN"

The City of Knoxville strongly encourages contractors to employ minority owned businesses and women owned businesses as subcontractors whenever feasible. This is viewed favorably by the City of Knoxville. In fact, the City's goal for minority and women owned business participation is 10 percent of the contract amount.

Prime contractors will consider all competitive sub-bids and quotations received from minority owned businesses (MOB) and women owned businesses (WOB). When a subcontract is not awarded to the MOB/WOB submitting the lowest bid, the prime contractor must document the reason(s) the award was not made in writing. If the Contractor terminates an agreement and/or subcontract with a MOB/WOB, then the contractor is required to strongly consider selection of another MOB or WOB as a replacement.

GOOD FAITH EFFORTS

1. Soliciting through all reasonable and available means.
   a. Advertising
   b. Written notices to all certified MOB's and WOB's who have the capability to perform the work or provide the service.
   c. Solicitation of interest must be within sufficient time to allow MOB's and WOB's to respond to the solicitation.
   d. Faxes, direct mailings, and telephone requests.

2. Providing interested MOB's and WOB's with adequate information about plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

3. Negotiating in good faith with interested MOB's and WOB's.
   a. It is the bidder's/proposer's responsibility to make opportunities available to MOB's and WOB's subcontractors and suppliers and to select opportunities consistent with the available MOB/WOB business subcontractors and suppliers. Evidence of such negotiations includes the names, addresses, and telephone numbers of MOB's and WOB's considered.
(1) A description of the specifications for the work selection for subcontracting
(2) Evidence why agreements could not be reached for MOB’s and WOB’s to perform the
work.

4. Effectively using the services of available minority, women contractor groups, local minority and
women business assistance offices, small business groups, and other organizations on a case-by-case
basis to provide assistance in the recruitment and placement of minority/women business.

SECTION II

MOB/WOB SUBMITTAL TIME FRAME

The Contractor will submit the following forms with the bid/proposal:

1. "Statement of Intent for MOB/WOB Utilization" (Form I Attached)

This form will be submitted by the bidder/proposer if he/she plans to subcontract any portion(s) of the
work with a MOB and/or a WOB. This form illustrates the areas the Contractor has identified as
potential MOB and/or WOB subcontract opportunities and the dollar value associated with these
opportunities. The purpose of “Form I” is to measure the Contractor's "Good Faith Efforts." It does
not commit the prime to subcontracting these areas only to MOB and WOB firms or release the prime
from negotiating with MOB/WOB firms for subcontract opportunities.

OR

2. "Statement of Intent of Performing Work Without Subcontracting" (Form II
Attached)

This form will be submitted if the bidder/proposer does not plan to subcontract any portion(s) of the
work and if there are not any sufficient material purchases in which MOB/WOB firms can be utilized.
The bidder/proposer must certify that this has been a typical practice on projects of similar scope and
dollar value. By submittal of Form II, the Contractor certifies that:

(1) He/she does not typically subcontract on projects of similar scope and dollar value.

(2) He/she will not enter into any subcontract for duration of the project, and if he/she does decide to
subcontract any portion of the work, he/she will: notify the City immediately of the decision to
subcontract and adhere to the provision of "Good Faith Efforts" in filling that subcontract
opportunity.

The Purchasing Division may request the apparent low bidder/proposer to provide additional
information to clarify the bidder’s/proposer’s responsiveness and intent in this regard.

These documents will be received by the Purchasing Division upon submission of a proposal/bid.
Additionally, prime contractors who submit Form I stating their intent to use MOB or WOB
subcontractors for any part of the contract are required to report the amount(s) they have paid to these
subcontractors on June 30th and December 31st of each year. Failure to submit this reporting data may result in a delay of payments. At the time of the final request for payment, the prime shall submit a Statement of Final Payments to MOB and WOB Subcontractors and Suppliers (Form III attached). Final payment will not be released by the City until Form III is submitted.

SECTION III
DEFINITIONS

Minority: A person who is a citizen or lawful admitted permanent resident of the United States and who is a member of one (1) of the following groups:

a. Black American, which includes persons having origins in any of the Black racial groups of Africa;
b. A Hispanic American, which includes persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race;
c. Native American, which includes persons who are American Indians or Alaska Native;
d. An Asian-Indian American, which includes persons whose origins are from Indian, Pakistan or Bangladesh.
e. An Asian Pacific Islander, which includes persons whose origins are from Japan, China, Taiwan, Korea, Vietnam, Laos, Cambodia, the Philippines, Samoa, Guam, the U. S. Trust Territories of the Pacific and Northern Marinas.

Minority-Owned Business (MOB), Women-Owned Business (WOB): A business which is at least (51%) owned and controlled by minority group members or European American female(s). A MOB/WOB is bonafide only if the minority group interests are real and continuing and not created solely to meet the MOB/WOB requirement. In addition, the MOB/WOB must perform satisfactory work or services to provide supplies under the contract and not act as a mere conduit. In short, the contractual relationship must be bonafide. Certification of minority owned businesses and women owned businesses is provided by City Community Relations Office.

Owned and Controlled: A business which is (1) a sole proprietorship legitimately owned by an individual who is a minority or European American female; (2) a partnership or joint venture controlled by minorities or European American females, and in which at least (51%) of the beneficial ownership interests legitimately are held by minorities or European American females; or (3) a corporation or other entity controlled by minorities or European American females, and in which at least 51% of the voting interests and 51% of the beneficial ownership interests are legitimately held by minorities or European American females. In addition, these persons must control the management and operation of the business on a day-to-day basis.

Subcontractor: Any named person, firm, partnership, or corporation which supplies any work, labor, services, supplies, equipment, materials, or any combination of the foregoing contract with the contractor on a public contract.
FORM I

STATEMENT OF INTENT OF MOB/WOB UTILIZATION
(TO BE SUBMITTED WITH THE BID/PROPOSAL)

We, ____________ GHOST TRACS LLC ________________, do certify that on the
(Bidder/Proposer)
__________________________
(Unnamed Aerial Vehicle for KPD)
(Project Name)
__________________________
(Dollar Amount of Bid)

MOB/WOB’s will be employed as subcontractor(s), vendor(s), supplier(s), or professional service(s). The estimated dollar value of the amount that we plan to pay the MOB or WOB subcontractor(s), vendor(s), supplier(s), or professional service(s) is $ ________________.

<table>
<thead>
<tr>
<th>Description of Work</th>
<th>MOB Amount</th>
<th>WOB Amount</th>
<th>Name of MOB/WOB</th>
</tr>
</thead>
<tbody>
<tr>
<td>M/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<tr>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

The undersigned understands that they are to report the annual amount disbursed to these MOB(s)/WOB(s) on June 30th of each year. Moreover, the undersigned understands that he/she is required to report the total amount disbursed to MOB(s)/WOB(s) for this project at the completion of the project and that payments may be withheld until these reporting requirements are met.

DATE: 12 July, 2016
COMPANY NAME: GHOST TRACS LLC

SUBMITTED BY: Janice McGoogan
(Authorized Representative)

TITLE: Manager

ADDRESS: P.O. Box 122

CITY/STATE/ZIP CODE: Nolensville TN 37135

TELEPHONE NO: 615-719-2972
FORM II

STATEMENT OF INTENT TO PERFORM WORK WITHOUT SUBCONTRACTING
(TO BE SUBMITTED WITH BID/PROPOSAL)

We, ___________ GHOST TRACKS LLC ___________, hereby certify that it is our
(Bidder/Proposer)

intent to perform 100% of the work required for the __________________________

__________________________ Aerial Vehicle for KPD ________________ contract.
(Name of Project)

In making this certification, the Bidder/Proposer states that:

1. It is a normal business practice of the bidder/proposer to perform all elements of
this type contract with its own work forces without the use of subcontracts.

AND

2. If it is necessary to subcontract some portion of the work at a later date, the
bidder/proposer will comply with all requirements of the "Good Faith Efforts"
in providing equal opportunity to MOB/WOB Firms to subcontract the work.

The undersigned hereby certifies that he/she has read the terms and agrees to the terms of this
statement.

Signature and title of authorized official of the company and the date must be properly executed
on this document and a list of previous projects of similar scope and dollar value as stated in
Section II attached or the bid may be deemed non-responsive.

DATE: 12 July, 2016 COMPANY NAME: ___________ GHOST TRACKS LLC

SUBMITTED BY: ___________ M. M. G. ___________
(Authorized Representative)

TITLE: Manager

ADDRESS: PO Box 122

CITY/STATE/ZIP CODE: Nashville TN 37135

TELEPHONE NO: 615-749-2972
Bid: Unmanned Aerial Vehicle for KPD

By: Ghost Tracs, LLC

Warranty Information

Ghost Tracs LLC will be the main point of contact for all warranty related issues, and may suggest outsourcing repair if by doing so will be in the benefit of the owner (Knoxville Police Department, KPD). Ghost Tracs LLC honors all work (labor) and products (service) related to the Law Enforcement upgrade for a period of 12 months from date of delivery. The warranty for the law enforcement upgrade only includes product failure, and does not include repair necessary from use in special operation environments, crash, misuse, or any acts of God, Terrorism, or other unforeseen emergency that any prudent person would understand that it was beyond our control. The warranty for the aircraft and all related flying parts with be through authorized DJI Repair Centers, specifically Drone Nerds. If any special repair that is not able to be handled by Ghost Tracs LLC, or by our partners, we will outsource the repair keeping the owners (KPD) best interest in mind. Ghost Tracs LLC will require the aircraft to be shipped to our facility for repair, unless other arrangements are made that is beneficial to both parties. Unless otherwise noted, or agreed to in writing, the owner will be required to pay for shipping of warranty related issues. Our goods come with guarantees that cannot be excluded under local consumer law. The benefits we provide under the DJI Warranty Service are in addition to other rights and remedies you may have at law. The DJI Warranty Service is not intended to limit, modify or restrict your consumer guarantee rights in any way.

DJI agrees to repair or replace a product during the warranty period (see Warranty Period of Main Parts) subject to the conditions outlined below. If the problem is not covered under the DJI Warranty Service, you may have to pay for the cost of return delivery and testing the product. We’ll tell you beforehand if that is the case. If the to-be-repaired part is out of warranty while other parts are still in warranty, you may have to pay for the repair cost of this part.

1. You will only be eligible for our DJI Warranty Service where the following conditions are met:
   a. The product must not have been subjected to abnormal or unauthorized used, as intended by the manufacturer during the warranty period.
   b. No unauthorized disassembling, modification or installation has been performed on the product or a component.
   c. Product labels, Serial Numbers, waterproof mark, false proof mark, etc. show no signs of tampering or altering.
   d. You provide a valid proof-of-purchase, receipt or order number (for DJI Direct Sales).

2. The following situations are not covered by the DJI Warranty Service:
   a. Crash or fire damage caused by non-manufacturing factors.
b. Damage caused by unauthorized modification, disassembly, shell opening not in accordance with official instructions or manuals.

c. Damage caused by improper installation, incorrect use or operation not in accordance with the official instructions or manuals.

d. Damage caused by unauthorized repair.

e. Damage caused by unauthorized modification of circuits, mismatch or misuse of battery and charger.

f. Damage caused by flights which did not follow the instruction manual recommendations.

g. Damage caused by operation in bad weather (i.e. strong wind, rain, sand/dust storm, etc.)

h. Damage caused by operating the unit in an environment with electromagnetic interference (i.e. a mining area, close to radio transmission towers, high-voltage wires, substations, etc.).

i. Damage caused by operating the unit in an environment suffering from interference with other wireless devices (i.e. transmitter, video-link, Wi-Fi signals, etc.).

j. Damage caused by operating the unit at a weight greater than the safe takeoff weight as specified by the instruction manuals.

k. Damage caused by a forced flight when components have aged or been damaged.

l. Damage caused by reliability or compatibility issues when using unauthenticated third-party parts.

m. Damage caused by operating the unit with a low charged or defective battery.

n. Respective product has not been sent back to DJI 7 calendar days after warranty service confirmation from DJI.

3. Essential Information for Warranty Service

a. Customers are responsible for shipping costs when sending product(s) in for return, repair or replacement under the DJI Warranty Service.

b. Technical staff of after-sales service centers will examine the returned product to identify the problem. If it is a quality problem with the product itself, DJI will accept test, material, labor, and delivery costs for sending the repaired product back to the customer.

c. If DJI determines that the product is not covered under the DJI Warranty Service, the customer will have to pay the cost of repair and return delivery prior to repairing or sending the product. Examination, material and labor costs will be charged according to the nature of the problem. We'll tell the customer beforehand what the costs will be.

d. Please note that products and components presented for repair may be replaced by refurbished goods of the same type rather than being repaired. Refurbished parts may be used to repair the products.

e. Please be aware that where the product is capable of retaining user-generated data, this may be lost during the repair process. We therefore recommend that you back up your data prior to any repair.

f. Customers can obtain warranty service only at a designated DJI repair center in the
region where he/she purchased the product. However, depending on part availability, customers can obtain cross-regional repair service at an additional charge.
g. The customer can call DJI repair center for more information about the DJI Warranty Service repair process.

### Inspire 1

<table>
<thead>
<tr>
<th>Component</th>
<th>Warranty Details</th>
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</thead>
<tbody>
<tr>
<td>Gimbal Camera</td>
<td>12 Months</td>
</tr>
<tr>
<td>Whole Units (except gimbal camera, and battery)</td>
<td>12 Months and Flight Hour less than 200 Hours</td>
</tr>
<tr>
<td>Battery</td>
<td>6 Months and Charge Cycle less than 200 Times</td>
</tr>
<tr>
<td>Battery Charging Hub</td>
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<tr>
<td>Propeller</td>
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<tr>
<td>Remote Control</td>
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### Flying Controllers for A3

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<tr>
<td>MC</td>
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<tr>
<td>IMU</td>
<td>12 Months</td>
</tr>
<tr>
<td>PMU</td>
<td>12 Months</td>
</tr>
<tr>
<td>LED</td>
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<tr>
<td>GPS</td>
<td>6 Months</td>
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### Flying Controllers for A2

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<tr>
<td>IMU</td>
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<tr>
<td>GPS</td>
<td>6 Months</td>
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### Data Link & Lightbridge

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<tr>
<td>Transmitter</td>
<td>12 Months</td>
</tr>
<tr>
<td>Receiver</td>
<td>12 Months</td>
</tr>
</tbody>
</table>

### Customer Paid Repair Service

DJI also provides our customers with an optional customer paid repair service for products that do not meet the conditions of our Warranty Service or which are not covered by the Consumer Guarantees. For the paid repair services we offer, you will be
charged for diagnostics, labor, materials, tax, repair and delivery.
If you request not to proceed with these repair services, you will be liable for payment of return delivery of your product(s), as well as the cost of diagnosis. We will tell you what these costs will be, before you return a product to us for diagnosis. Diagnosis is free of charge if the product is within the terms of DJI Warranty Service, Refund and Replacement Policy or is covered by the Consumer Guarantees.
Bid: Unmanned Aerial Vehicle for KPD

By: Ghost Tracs, LLC

Delivery & Set Up/Training

Ghost Tracs LLC will offer a minimum two-hour training time at the Knoxville Police Department upon delivery. Additionally, Ghost Tracs LLC will provide three 8-hour days of training, for a total of 24 hours. The training shall take place at the Knoxville Police Department Training Academy, and shall focus on the use of the products, liabilities, and the current laws in regards to the use of the above stated devices.

Ghost Tracs LLC will offer a two week turnaround response time to diagnose and repair any equipment failure, crash, or anomaly. The bidder shall communicate any repair costs in writing to the City representative, and obtain the City representative’s written repair approval, prior to proceeding with the said repairs.

[Signature]

Ghost Tracs LLC
CITY OF KNOXVILLE
INVITATION TO BID

Unmanned Aerial Vehicle for KPD

Sealed bids, invited by the City of Knoxville, will be received by the Office of the Purchasing Agent of the City of Knoxville, in Room 667-674, City County Building; 400 Main Avenue; Knoxville, Tennessee, until 11:00:00 a.m. (Eastern Time) on July 14, 2016, at which time they will be opened and publicly read aloud and a purchase order issued as soon thereafter as practicable.

The City of Knoxville is requesting bids for unmanned aerial vehicles (UAV), accessories, and training per the specifications included below. **Bidders offering other than the named components shall not be accepted.**

SPECIFICATIONS

**Quantity 1 – DJI Inspire Pro Black Edition**
- 4K Zenmuse X5 3-axis stabilization Gimbal camera
- Live, wireless HD video transition via LightBridge
- Red and blue LED strobe package with strobe control module, remote on-off wireless systems with wireless remote, and 800 mAh 3S 11.1V LIPO battery
- Two approximately 16.5” x 6.35” removable black carbon fiber identified panels indicating “POLICE” in white weather resistant vinyl
- One aircraft slave controller
- Four blacked out TB48 batteries
- Three 100W chargers
- One travel case with Knoxville Police Department logo
- One set of extra props/propellers
- FLIR VUE 336 9mm, 60Hz with DronExpert remote controlled Gimbal
- DronExpert FLIR remote controller with touch LCD
- Two sets of heavy duty 4” USB shielded lighting cords
- Carbon fiber inspire leg extensions for tall grass landings, to be used primarily for long term high risk surveillance deployment
- Inspire “Drop Phone” remote controlled deployment case
- Two user manuals

**Quantity 1 – DJI Matrice 600**
- A3 flight controller
- Live, wireless HD video transmission via LightBridge 2
- Red and blue LED strobe package with strobe control module, remote on-off wireless system with wireless remote
- Removable black carbon fiber identified panels indicating “POLICE” in white weather resistant vinyl
- One aircraft slave controller
- One travel case with KPD logo
- One set of extra props/propellers
- FLIR VUE 336 9mm, 60Hz with DropExpert remote controlled Gimbal
- DronExpert FLIR remote controller with touch LCD
- Two sets of heavy duty 4” USB shielded lighting cords
- One set of extra batteries for DJI Matrice 600
- One extra aircraft battery bank charger
- Camera mount system for 4K Zenmuse X5 3-axis stabilization Gimbal camera
- 4K Zenmuse X5 3-axis stabilization Gimbal camera
- One Flysys 3G channel 2.4G HD downlink Black Pear monitor for FLIR ground station
- One secure HD video downlink package 1080P@60fps, up to 3,300 ft range LoS (Connex)
- One Zenmuse GCU navigation assist
- Two user manuals

The winning bidder shall provide delivery, set-up, and a minimum two-hour training time at the Knoxville Police Department upon delivery. Additionally, the winning bidder shall provide three 8-hour days of training, for a total of 24 hours. The training shall take place at the Knoxville Police Department Training Academy, and shall focus on the use of the products, liabilities, and the current laws in regards to the use of the above stated devices.

The winning bidder shall offer a two week turnaround response time to diagnose and repair any equipment failure, crash, or anomaly. The bidder shall communicate any repair costs in writing to the City representative, and obtain the City representative’s written repair approval, prior to proceeding with the said repairs.

The winning bidder shall include a one-year product labor and service warranty on all equipment malfunctions, failures, and anomalies due to manufacturer’s defects.

Option Pricing
The bidders shall provide an option pricing for the following:
- Quantity four iPad mini 2, 64GB WiFi
- Quantity four iPad mini 2 cases, black in color

BID SUBMISSION REQUIREMENTS
Bidders must furnish the following information in writing with their submission:

1. Bid Form showing bidder’s name, address, quoted price, business license number, date of expiration of business license. A copy of the bidder’s current business license may be submitted in lieu of providing the license expiration date.
2. Warranty Information
3. Non-Collusion Affidavit

GENERAL INFORMATION

1. Sealed bids will be received by the Purchasing Agent of the City of Knoxville in Room 667-674, City/County Building; 400 Main Avenue; Knoxville, Tennessee 37902 until July 14, 2016, at 11:00:00 a.m., at which time they will be publicly opened and read aloud and the contract awarded as soon as practicable. No bid will be received or accepted after the above-specified time for the opening of bids. Bids that arrive late due to the fault of U. S. Postal Service, United Parcel Service, DHL, FEDEX, any delivery/courier service, or any other carrier of any sort are still considered late and shall not be accepted by the City. Such bids shall remain unopened and will be returned to the submitting entity upon request.

2. The City of Knoxville reserves the right to reject any or all bids, to accept or reject any items thereon, to waive technicalities or informalities, to split orders if in the best interest of the City, to evaluate bids by various criteria, and to accept any bid which, in its opinion, may be for the best interest of the City.

3. Included in the Invitation to Bid is an affidavit in proof that the undersigned has not entered into
any collusion with any person in respect to this bid or any other bid. The Bidder will be required to execute and submit this affidavit with the sealed bid.

4. Each bid must be submitted in a sealed envelope, addressed to the Purchasing Agent, City of Knoxville, Room 667-674, City/County Building, 400 Main Street, Knoxville, Tennessee, 37902. Each sealed envelope containing a bid must be plainly marked on the outside as: "Unmanned Aerial Vehicle."

5. **NO CONTACT POLICY:** After the posting of this solicitation to the Purchasing Division’s website, any contact initiated by any proposer with any City of Knoxville representative concerning this proposal is strictly prohibited, unless such contact is made with the Purchasing Division representative listed herein or with said representative’s authorization. Any unauthorized contact may cause the disqualification of the proposer from this procurement transaction.

6. **INCLEMENT WEATHER:** During periods of inclement weather, the Purchasing Division will enact the following procedures with regard to solicitations and weather delays:
   - If City offices are closed due to inclement weather on the date that bids/proposals/qualifications/letters of interest are due into the Purchasing Office, all solicitations due that same day will be moved to the next operational business day.
   - The City of Knoxville shall not be liable for any commercial carrier's decision regarding deliveries during inclement weather.

7. All bids must be made on the Bid Form supplied with the contract documents, and no interlineations, excisions, or special conditions shall be made or included in the Bid Evaluation Sheet by the Bidder. **Any bid on which there is an alteration of or departure from the Bid Form may be considered irregular and may be rejected.** All bids must be signed in full by the Bidder or Bidders in their business name or style when submitted and must show his or their complete address.

8. No bidder may withdraw his bid for a period of 60 days after the actual date of the opening thereof.

9. Prior to submitting their bids, bidders are to be registered with the Purchasing Division by setting up a Vendor Self-Service Account. Instructions for registering on-line are available at www.knoxvillete.gov/purchasing

   **Bid submissions from un-registered bidders may be rejected.**

10. Payment for completed services delivered to and accepted by the City shall be at the contract price.

11. State make or brand on each item. If quoting other than the make, model, or brand specified, the manufacturer’s name and catalog number must be given, along with warranty information and detailed specifications. Because the City is committed to environmentally sound practices, brands are expected to be procured with environmental responsibility in mind.

12. Time of delivery is part of the consideration and must be stated in definite terms; time of delivery is guaranteed by the bidder and must be adhered to upon award. If time varies on different items, the bidder shall so state.

13. All quotations must be signed with the firm name and by a responsible officer or employee. Obligations assumed by such signature must be fulfilled.
14. Bidders shall verify bids before submission, as bids cannot be withdrawn or corrected after being opened. Bids will be evaluated by unit price.

15. If federal excise tax applies, show amount of same and deduct. Bear in mind that the City is exempt from Tennessee sales tax.

16. Prices are considered FOB Knoxville unless otherwise stated in the Invitation to Bid.

17. By execution and delivery of a bid submission, the bidder agrees that any additional terms and conditions, whether submitted to the City purposely or inadvertently, shall have no force or effect.

18. Regarding the Equal Business Opportunity Program contracting, the appropriate Form 1 or Form 2 must be submitted with the bid. Successful bidders who include Form 1 with their bid, stating their intent to use MOB or WOB subcontractors for any part of the contract, will be required to submit Form III, Statement of Payments to MOB/WOB Subcontractor(s) & Supplier(s). Contractors will use Form III to report the amount(s) they have paid to MOB and/or WOB subcontractors on June 30th and December 31st of each year during the life of the contract and with the final payment. Failure to submit this reporting data may result in a delay of payments. Final payment will not be released by the City until Form III is submitted.

19. Bidders must comply with the President's Executive Orders No.11246 and 11375 which prohibit discrimination in employment regarding race, color, religion, sex or national origin. Bidders must not maintain or provide for their employees any facilities that are segregated on the basis of race, color, religion or national origin. Bidders must also comply with Title VI of the Civil Rights Act of 1964, Copeland Anti-Kick Back Act, the Contract Work Hours and Safety Standard Act, Section 402 of the Vietnam Veterans Adjustment Act of 1974 and Section 503 of the Rehabilitation Act of 1973, all of which are herein incorporated by reference.

20. All bidders must comply with Title VI of the Civil Rights Act of 1964, as codified in 42 U.S.C. 2000d. The successful bidder must follow Title VI guidelines in all areas including hiring practices, open facilities, insurance, and wages. The City of Knoxville reserves the right to review all compliance records by a contract compliance officer designated by the City.

21. No interpretation of the meaning of the plans, specifications, or other pre-bid documents will be made to any bidder orally. Each request for such interpretation should be in writing addressed to Procurement Specialist for the City of Knoxville, 400 Main Street, Room 667, Knoxville, TN 37902, or emailed to her at tbugvic@knoxvilleetn.gov. To be given consideration, such requests/questions must be received at least five (5) business days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be posted to the City's website at www.knoxvilleetn.gov/purchasing. Submitting organizations are strongly encouraged to view this website often to see if addenda are posted. Failure of any bidder to receive such addendum or interpretation shall not relieve such Bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the Contract Documents.

22. Attention of all bidders is directed to the set off provision contained in Article II, Section 24-33, entitled, "Debts owed by persons receiving payments other than salary", and Section 2-1049 entitled "Receipt of benefits from City contracts by council members, employees, and officers of the City" of the Code of the City of Knoxville.

23. Before a Purchase Order is issued, the submitting entity, if selected, must provide the City Purchasing Division with a copy of its valid business license or with an affidavit explaining why it is
exempt from the business licensure requirements of the city or county in which it is headquartered. If a contract is signed, the contractor's business license shall be kept current throughout the duration of the contract, and the contractor shall inform the City of changes in its business name or location. Any Agreement to purchase resulting from this Invitation to Bid shall be governed by and construed in accordance with the substantive laws of the State of Tennessee and its conflict of laws provisions. Venue for any action arising between the City and the Vendor from the Agreement shall lie in Knox County, Tennessee.

24. By acceptance and delivery of the Purchase Order resulting from the award of this Invitation to Bid, the Vendor agrees to the following:

Contractor shall defend, indemnify and hold harmless the City, its officers, employees and agents from any and all liabilities which may accrue against the City, its officers, employees and agents or any third party for any and all lawsuits, claims, demands, losses or damages alleged to have arisen from an act or omission of Contractor in performance of this Agreement or from Contractor's failure to perform this Agreement using ordinary care and skill, except where such injury, damage, or loss was caused by the sole negligence of the City, its agents or employees.

Contractor shall save, indemnify and hold the City harmless from the cost of the defense of any claim, demand, suit or cause of action made or brought against the City alleging liability referenced above, including, but not limited to, costs, fees, attorney fees, and other expenses of any kind whatsoever arising in connection with the defense of the City; and Contractor shall assume and take over the defense of the City in any such claim, demand, suit, or cause of action upon written notice and demand for same by the City. Contractor will have the right to defend the City with counsel of its choice that is satisfactory to the City, and the City will provide reasonable cooperation in the defense as Contractor may request. Contractor will not consent to the entry of any judgment or enter into any settlement with respect to an indemnified claim without the prior written consent of the City, such consent not to be unreasonably withheld or delayed. The City shall have the right to participate in the defense against the indemnified claims with counsel of its choice at its own expense.

Contractor shall save, indemnify and hold City harmless and pay judgments that shall be rendered in any such actions, suits, claims or demands against City alleging liability referenced above.

The indemnification and hold harmless provisions of this Agreement shall survive termination of the Agreement.
CITY OF KNOXVILLE

BID FORM

TO: Purchasing Agent
City of Knoxville
Suite 667-674
City/County Building
400 Main Street
Knoxville, TN 37902

Having carefully examined the specifications entitled “Unmanned Aerial Vehicles” to open on July 14, 2016, at 11:00:00 a.m. and the other Contract Documents and addenda, and having familiarized ourselves with the existing conditions of the job, we hereby propose to furnish the supervision, labor, materials, equipment, delivery, and services to do the work as stated for the following sum:

BID: Total charge: $______________

Option Pricing:
Quantity four iPad mini 2, 64GB WiFi $________ each x 4 = $________ quantity 4
Quantity four iPad mini 2 cases, black in color $________ each x 4 =________ quantity 4

Firm Name: ____________________________________________

Official Address: _________________________________________
_____________________________________________________
_____________________________________________________

(By) ____________________________________________________ (Name Typed)

(Title) __________________________________________________

Date __________________________

Email address __________________________

Telephone __________________________
NON-COLLUSION AFFIDAVIT OF PRIME BIDDER

State of __________________________

County of __________________________

____________________________________, being first duly sworn, deposes and says that:

(1) He is owner, partner, officer, representative, or agent of __________________________, the Bidder that has submitted the attached Bid;

(2) He is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;

(3) Such Bid is genuine and is not a collusive or sham Bid;

(4) Neither the said Bid nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly, with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from proposing in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm, or person to fix the price or prices in the attached Bid or of any other Bidder, firm, or person to fix any overhead, profit, or cost element of the bid price or the bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Knoxville or any person interested in the proposed Contract; and

(5) The price or prices quoted in that attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affidavit.

Signed: ______________________________

Title: ________________________________

Subscribed and sworn to before me this _____ day of ________, 2____.

My commission expires: ________________________________
SECTION I

EQUAL BUSINESS OPPORTUNITY PROGRAM
"GOOD FAITH EFFORT PLAN"

The City of Knoxville strongly encourages contractors to employ minority owned businesses and women owned businesses as subcontractors whenever feasible. This is viewed favorably by the City of Knoxville. In fact, the City’s goal for minority and women owned business participation is 10 percent of the contract amount.

Prime contractors will consider all competitive sub-bids and quotations received from minority owned businesses (MOB) and women owned businesses (WOB). When a subcontract is not awarded to the MOB/WOB submitting the lowest bid, the prime contractor must document the reason(s) the award was not made in writing. If the Contractor terminates an agreement and/or subcontract with a MOB/WOB, then the contractor is required to strongly consider selection of another MOB or WOB as a replacement.

GOOD FAITH EFFORTS

1. Soliciting through all reasonable and available means.
   a. Advertising
   b. Written notices to all certified MOB’s and WOB’s who have the capability to perform the work or provide the service.
   c. Solicitation of interest must be within sufficient time to allow MOB’s and WOB’s to respond to the solicitation.
   d. Faxes, direct mailings, and telephone requests.

2. Providing interested MOB’s and WOB’s with adequate information about plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

3. Negotiating in good faith with interested MOB’s and WOB’s.
   a. It is the bidder’s/proposer’s responsibility to make opportunities available to MOB’s and WOB’s subcontractors and suppliers and to select opportunities consistent with the available MOB/WOB business subcontractors and suppliers. Evidence of such negotiations includes the names, addresses, and telephone numbers of MOB’s and WOB’s considered.
(1) A description of the specifications for the work selection for subcontracting
(2) Evidence why agreements could not be reached for MOB’s and WOB’s to perform the work.

4. Effectively using the services of available minority, women contractor groups, local minority and women business assistance offices, small business groups, and other organizations on a case-by-case basis to provide assistance in the recruitment and placement of minority/women business.

SECTION II

MOB/WOB SUBMITTAL TIME FRAME

The Contractor will submit the following forms with the bid/proposal:

1. "Statement of Intent for MOB/WOB Utilization" (Form I Attached)

This form will be submitted by the bidder/proposer if he/she plans to subcontract any portion(s) of the work with a MOB and/or a WOB. This form illustrates the areas the Contractor has identified as potential MOB and/or WOB subcontract opportunities and the dollar value associated with these opportunities. The purpose of "Form I" is to measure the Contractor's "Good Faith Efforts." It does not commit the prime to subcontracting these areas only to MOB and WOB firms or release the prime from negotiating with MOB/WOB firms for subcontract opportunities.

OR

2. "Statement of Intent of Performing Work Without Subcontracting" (Form II Attached)

This form will be submitted if the bidder/proposer does not plan to subcontract any portion(s) of the work and if there are not any sufficient material purchases in which MOB/WOB firms can be utilized. The bidder/proposer must certify that this has been a typical practice on projects of similar scope and dollar value. By submittal of Form II, the Contractor certifies that:

(1) He/she does not typically subcontract on projects of similar scope and dollar value.

(2) He/she will not enter into any subcontract for duration of the project, and if he/she does decide to subcontract any portion of the work, he/she will: notify the City immediately of the decision to subcontract and adhere to the provision of "Good Faith Efforts" in filing that subcontract opportunity.

The Purchasing Division may request the apparent low bidder/proposer to provide additional information to clarify the bidder's/proposer's responsiveness and intent in this regard.

These documents will be received by the Purchasing Division upon submission of a proposal/bid. Additionally, prime contractors who submit Form I stating their intent to use MOB or WOB subcontractors for any part of the contract are required to report the amount(s) they have paid to these
subcontractors on June 30th and December 31st of each year. Failure to submit this reporting data may result in a delay of payments. At the time of the final request for payment, the prime shall submit a Statement of Final Payments to MOB and WOB Subcontractors and Suppliers (Form III attached). Final payment will not be released by the City until Form III is submitted.

SECTION III
DEFINITIONS

Minority: A person who is a citizen or lawful admitted permanent resident of the United States and who is a member of one (1) of the following groups:

a. Black American, which includes persons having origins in any of the Black racial groups of Africa;
b. A Hispanic American, which includes persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race;
c. Native American, which includes persons who are American Indians or Alaska Native;
d. An Asian-Indian American, which includes persons whose origins are from Indian, Pakistan or Bangladesh.
e. An Asian Pacific Islander, which includes persons whose origins are from Japan, China, Taiwan, Korea, Vietnam, Laos, Cambodia, the Philippines, Samoa, Guam, the U. S. Trust Territories of the Pacific and Northern Marinas.

Minority-Owned Business (MOB), Women-Owned Business (WOB): A business which is at least (51%) owned and controlled by minority group members or European American female(s). A MOB/WOB is bonafide only if the minority group interests are real and continuing and not created solely to meet the MOB/WOB requirement. In addition, the MOB/WOB must perform satisfactory work or services to provide supplies under the contract and not act as a mere conduit. In short, the contractual relationship must be bonafide. Certification of minority owned businesses and women owned businesses is provided by City Community Relations Office.

Owned and Controlled: A business which is (1) a sole proprietorship legitimately owned by an individual who is a minority or European American female; (2) a partnership or joint venture controlled by minorities or European American females, and in which at least (51%) of the beneficial ownership interests legitimately are held by minorities or European American females; or (3) a corporation or other entity controlled by minorities or European American females, and in which at least 51% of the voting interests and 51% of the beneficial ownership interests are legitimately held by minorities or European American females. In addition, these persons must control the management and operation of the business on a day-to-day basis.

Subcontractor: Any named person, firm, partnership, or corporation which supplies any work, labor, services, supplies, equipment, materials, or any combination of the foregoing contract with the contractor on a public contract.
FORM I

STATEMENT OF INTENT OF MOB/WOB UTILIZATION
(TO BE SUBMITTED WITH THE BID/PROPOSAL)

We, ________________________________ (Bidder/Proposer), do certify that on the
____________________________________ (Project Name)
____________________________________ (Dollar Amount of Bid)

MOB/WOB’s will be employed as subcontractor(s), vendor(s), supplier(s), or professional
service(s). The estimated dollar value of the amount that we plan to pay the MOB or WOB
subcontractor(s), vendor(s), supplier(s), or professional service(s) is $___________________________.

<table>
<thead>
<tr>
<th>Description of Work</th>
<th>MOB Amount</th>
<th>WOB Amount</th>
<th>Name of MOB/WOB</th>
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The undersigned understands that they are to report the annual amount disbursed to these
MOB(s) / WOB(s) on June 30th of each year. Moreover, the undersigned understands that he/she
is required to report the total amount disbursed to MOB(s) / WOB(s) for this project at the
completion of the project and that payments may be withheld until these reporting requirements
are met.

DATE: __________________ COMPANY NAME: ____________________________

SUBMITTED BY: __________________ (Authorized Representative)

TITLE: ____________________________

ADDRESS: ____________________________

CITY/STATE/ZIP CODE: ____________________________

TELEPHONE NO: ____________________________
FORM II

STATEMENT OF INTENT TO PERFORM WORK WITHOUT SUBCONTRACTING
(TO BE SUBMITTED WITH BID/PROPOSAL)

We, ___________________________________________, hereby certify that it is our
(Bidder/Proposer)

intent to perform 100% of the work required for the _____________________________
contract.

(Name of Project)

In making this certification, the Bidder/Proposer states that:

1. It is a normal business practice of the bidder/proposer to perform all elements of
   this type contract with its own work forces without the use of subcontracts.

   AND

2. If it is necessary to subcontract some portion of the work at a later date, the
   bidder/proposer will comply with all requirements of the "Good Faith Efforts"
   in providing equal opportunity to MOB/WOB Firms to subcontract the work.

The undersigned hereby certifies that he/she has read the terms and agrees to the terms of this
statement.

Signature and title of authorized official of the company and the date must be properly executed
on this document and a list of previous projects of similar scope and dollar value as stated in
Section II attached or the bid may be deemed non-responsive.

DATE: __________________ COMPANY NAME: ____________________________

SUBMITTED BY: ___________________ (Authorized Representative)

TITLE: ___________________________

ADDRESS: _______________________

CITY/STATE/ZIP CODE: __________________________

TELEPHONE NO: ____________________________
FORM III

STATEMENT OF PAYMENTS TO MOB/WOB SUBCONTRACTOR(S) & SUPPLIER(S)
(TO BE SUBMITTED ON JUNE 30 AND DECEMBER 31 OF EACH YEAR FOR THE
LIFE OF THE CONTRACT AND TO BE WITH FINAL PAYMENT REQUEST)

Project:
Contract#: ________________________________

Contractor's
Name: ____________________________________

<table>
<thead>
<tr>
<th>Cert. #</th>
<th>MOB</th>
<th>WOB</th>
<th>Name of Firm / Address &amp; Phone#</th>
<th>Total Amount Paid</th>
<th>Contact Person</th>
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I hereby certify that this statement is true and that above payments have been made.

Contractor: ________________________________________________

Address: __________________________________________________

By:
  Contractor's Signature _____________________________________ Title

Subscribed and sworn to before me this ___________ day of ___________ 20__

Notary
Public: ____________________________________________________

My Commission
Expires: _____________________________________________________