February 25, 2021
14.2

TO: The Honorable Board of Police Commissioners

FROM: Chief of Police

SUBJECT: SMALL UNMANNED AERIAL SYSTEM AUDIT (AD NO. 20-004)

RECOMMENDED ACTION

It is recommended that the Board of Police Commissioners REVIEW and APPROVE the attached Small Unmanned Aerial System Audit.

DISCUSSION

Audit Division conducted the Small Unmanned Aerial System Audit to evaluate compliance with Department policies and procedures.

If additional information regarding this audit is required, please contact Ms. Trina Unzicker, Commanding Officer, Audit Division, at (213) 486-8480 or Ms. Lizabeth Rhodes, Director, Office of Constitutional Policing and Policy, at (213) 486-8730.

Respectfully,

MICHEL R. MOORE
Chief of Police

Attachment
SMALL UNMANNED AERIAL SYSTEM
AUDIT

(AD No. 20-004)

Conducted by
AUDIT DIVISION

MICHEL R. MOORE
Chief of Police

February 2021
# TABLE OF CONTENTS

**Small Unmanned Aerial System Audit**  
AD No. 20-004

<table>
<thead>
<tr>
<th>Section</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>OVERVIEW</td>
<td>1</td>
</tr>
<tr>
<td>BACKGROUND</td>
<td>1</td>
</tr>
<tr>
<td>SCOPE AND METHODOLOGY</td>
<td>2</td>
</tr>
<tr>
<td>DETAILED FINDINGS</td>
<td>3</td>
</tr>
<tr>
<td>Objective No. 1 – Department Employees Trained and Certified to Pilot Small Unmanned Aerial System</td>
<td>3</td>
</tr>
<tr>
<td>Objective No. 2 – Permissible Deployment of Small Unmanned Aerial System</td>
<td>3</td>
</tr>
<tr>
<td>Objective No. 3 – Required Approval Obtained Prior to Deployment</td>
<td>4</td>
</tr>
<tr>
<td>Objective No. 4 – Documentation of Review, Inspections, and Timeliness of Reporting</td>
<td>5</td>
</tr>
<tr>
<td>Objective No. 4(a) – Small Unmanned Aerial System Deployment Log Forwarded Within Two Business Days</td>
<td>5</td>
</tr>
<tr>
<td>Objective No. 4(b) - Documentation of Review of the Small Unmanned Aerial System Deployment</td>
<td>6</td>
</tr>
<tr>
<td>Objective No. 4(c) – Inspections of the Small Unmanned Aerial System Deployments Conducted – Performance Assessment</td>
<td>6</td>
</tr>
<tr>
<td>Objective No. 5 – Inventory of Department Small Unmanned Aerial System – Performance Assessment</td>
<td>7</td>
</tr>
<tr>
<td>Objective No. 6 – Exclusive Assignment of Small Unmanned Aerial System</td>
<td>7</td>
</tr>
<tr>
<td>RECOMMENDATION</td>
<td>8</td>
</tr>
<tr>
<td>ACTIONS TAKEN/MANAGEMENT’S RESPONSE</td>
<td>8</td>
</tr>
<tr>
<td>APPENDIX – Signatures</td>
<td></td>
</tr>
<tr>
<td>ADDENDUM – Counter-Terrorism and Special Operations Bureau’s Response to Audit Findings</td>
<td></td>
</tr>
</tbody>
</table>
Small Unmanned Aerial System Audit  
Conducted by  
Audit Division  
2020

OVERVIEW

Audit Division (AD) evaluated the Los Angeles Police Department’s (Department) adherence to policies and procedures guiding the use of Small Unmanned Aerial System (sUAS). Auditors reviewed the following objectives: 1) Department employees trained and certified to pilot sUAS; 2) permissible deployment of sUAS; 3) required approvals obtained prior to deployment; 4) documentation of inspections, and timeliness of reporting; 5) sUAS inventory; and, 6) assignment of sUAS. This is AD’s first sUAS audit and there are no prior related recommendations.

After assessing all sUAS deployments between January 2019 and July 2020, AD determined that:

- Department employees assigned an sUAS were trained and certified to pilot the craft 100 percent of the time (Objective No. 1);
- Each sUAS was deployed based on permissible circumstances or types of incidents 100 percent of the time (Objective No. 2);
- Required Department command staff approval to deploy the sUAS was obtained 18 percent of the time (Objective No. 3);
- Each sUAS deployment was reviewed by Department command staff and performed in a timely manner 100 percent of the time (Objective No. 4a and 4b);
- Quarterly inspections of the sUAS program were completed 100 percent of the time (Objective No. 4c);
- The sUAS was identified and accounted for during an inventory of the Department 100 percent of the time (Objective No. 5); and,
- The sUAS was assigned exclusively to Remote Pilot in Charge (RPIC) zero percent of the time (Objective No. 6).

BACKGROUND

In 2012, the Federal Aviation Administration (FAA) announced that the agency was working on protocols to integrate sUAS into the national airspace. This announcement generated a considerable amount of interest within the law enforcement community and the Department subsequently announced that sUAS management would be directed by Air Support Division (ASD).

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1 This audit was conducted as part of the Annual Audit Plan for 2020 and in accordance with generally accepted government auditing standards issued by the U.S. Government Accounting Office, December 2018 revision.
In 2019, after a two-year pilot program, the Board of Police Commissioners (BOPC) approved strict guidelines for the Department’s use of the sUAS to provide enhanced situational awareness in specific tactical situations such as a barricaded suspect, active shooter incidents, or assessments of explosive devices. Under the rules of the pilot program, use of an sUAS must be approved by the Counter-Terrorism and Special Operations Bureau (CTSOB) Deputy Chief in conjunction with a notification to the Chief of Police. The BOPC required the Department to submit reports documenting each sUAS operation and make these reports available for auditors’ review.

SCOPE AND METHODOLOGY

The period assessed for the deployments of the sUAS was January 1, 2019 through July 1, 2020 and included all sUAS deployments during that period to better evaluate the Department’s adherence to policy approved by the BOPC. The Department has five sUAS and 11 sUAS pilots. Each of those pilots are assigned to the Special Weapons and Tactics (SWAT) team under Metropolitan Division command. The sUAS are also authorized for emergency use pertaining to investigations under Hazardous Devices and Materials Section (HDMS), however, there were no HDMS deployments during the assessed time period of this audit.

There were 11 total sUAS deployments during the audit period and the table below summarizes the audit findings:

**Findings by Objective**

<table>
<thead>
<tr>
<th>Obj. No.</th>
<th>Description of Audit Objectives</th>
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<th>Percent Meeting Standards</th>
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</thead>
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<td>100%</td>
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<td>3</td>
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<td>Inventory of Department Small Unmanned Aerial System – Performance Assessment</td>
<td>5 Evaluated</td>
<td>Objective Met</td>
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<tr>
<td>6</td>
<td>Exclusive Assignment of Small Unmanned Aerial System</td>
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</table>

*See Special Order No. 8 dated September 26, 2019 “Small Unmanned Aerial System Program Deployment Guidelines and Procedures.”*
DETAILED FINDINGS

Objective No. 1 – Department Employees Trained and Certified to Pilot Small Unmanned Aerial System

Criteria

The FAA requires that a person operating an sUAS, the RPIC, must hold a Remote Pilot Airman Training certificate. The RPIC is a specially-trained officer assigned to SWAT who has a remote pilot certificate with an sUAS rating and is responsible for the safe operation of the sUAS.  

Audit Procedures

Auditors reviewed the remote pilot FAA certifications for all 11 RPIC officers to verify that each RPIC officer possessed a valid operating certificate. The Department met the standard if the certificates were current.

Findings

Each of the 11 Department RPIC officers (100%) met the standard.

Objective No. 2 – Permissible Deployment of Small Unmanned Aerial System

Criteria

An sUAS may be deployed to provide enhanced situational awareness solely during the following circumstances or types of incidents:

- Barricaded suspects;
- Active shooter incidents;
- Assessments of explosive devices and explosions;
- Hostage situations;
- Natural disasters;
- Hazardous materials incidents;
- Search and rescue operations;
- Warrant services; and,
- Perimeter searches of armed suspects with superior firepower, an extraordinary tactical advantage, or who are wanted for assault with a firearm against a police officer.

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Audit Procedures

Special Weapons and Tactics and HDMS personnel are responsible for maintaining, operating, and completing documentation for each sUAS deployment. Auditors reviewed the 11 sUAS Deployment Logs (Log) to determine if each of the sUAS deployments adhered to Department policy. The Department met the standard if the sUAS deployments were deployed based on the permissible circumstances or types of incidents listed above.

Findings

Each of the 11 deployments (100%) met the standard.

Objective No. 3 – Required Approval Obtained Prior to Deployment

Criteria

The CTSOB is responsible for the oversight and evaluation of the sUAS Program. Any deployment of an sUAS shall be approved by the on-scene or responding CTSOB Staff Officer (i.e., Commander), and the Commanding Officer (CO; i.e., Deputy Chief) of CTSOB. If an incident requires the response of personnel assigned to the Bomb Squad and/or the HDMS, the CO, Emergency Services Division (ESD), shall also respond to the scene.5

Audit Procedures

Auditors reviewed the Logs for all 11 deployments to determine if the identified CTSOB Staff Officer and CO approving sUAS use were properly documented. The Log contained one field to document CTSOB review. The Department met the standard if documentation showed that both the on-scene or responding CTSOB Staff Officer (i.e. Commander), and the CTSOB CO (i.e. Deputy Chief) approved the deployment of the sUAS.

Findings

Two of the eleven sUAS deployments (18%) met the standard. The nine deployments that did not meet the standard did not identify the on-scene or responding CTSOB Staff Officer (i.e. Commander). The CO, CTSOB was notified of these deployments and indicated that the Department Manual should be amended to state that any deployment of an sUAS shall be approved by the CO, CTSOB, or in the CO’s absence, the Acting CO, CTSOB. After this audit was conducted, the BOPC approved Special Order No. 33 dated December 8, 2020 (Small Unmanned Aerial System Program Deployment Guidelines and Procedures - Revised) that addressed approvals (see Recommendation and Actions Taken/Management’s Response).

Objective No. 4 – Documentation of Review, Inspections, and Timeliness of Reporting

Timely reviews and inspections are necessary to analyze and assess the use of an sUAS and measure adherence to deployment and accountability rules.

Objective No. 4(a) – Small Unmanned Aerial System Deployment Log Forwarded Within Two Business Days

Criteria

After each deployment of an sUAS, the assigned SWAT or HDMS Officer in Charge (OIC) shall complete the Log and ensure that a copy is forwarded to the CO, CTSOB, and Director, Office of Special Operations (OSO), within two business days after resolution of the incident.6

Audit Procedures

Auditors reviewed all 11 Logs to determine if they were forwarded to the CO, CTSOB, and Director, OSO within two business days after resolution of the incident. While there is no standard method to determine when a document is forwarded, Department entities usually mark incoming correspondences with “received” and a date stamp as proof of receipt on an Official Correspondence Review, Form 15.75.00. It should be noted that three of the 11 Logs did not include such a form. Auditors could not determine incident resolution timeliness and therefore these three Logs were removed from the population and eight Logs were assessed for this Objective. The CO, CTSOB was notified of the missing forms. The three sUAS incident numbers with missing Official Correspondence Review Forms are:

- 190508004901;
- 190717001014; and,
- 191002005940.

Auditors used the date stamp to determine if a copy of the Log was forwarded within two business days and allowed an additional business day for delivery because auditors could not otherwise accurately ascertain the forwarded date. The Department met the standard if the Official Correspondence Review Form was stamped “received” by both CTSOB and OSO within the adjusted period as described above and after the resolution of the incident.

Findings

Each of the eight Logs (100%) met the standard.

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Objective No. 4(b) – Documentation of Review of the Small Unmanned Aerial System Deployment

Criteria

After each deployment of an sUAS, the assigned SWAT or HDMS OIC shall complete the Log. The CTSOB will be responsible for the oversight and evaluation of the sUAS Program.7

Audit Procedures

The Log contained four specifically designated fields for signature review approvals: 1) OIC, 2) C/O, 3) CTSOB, and, 4) OSO. Auditors reviewed all sUAS Logs to determine whether reviews were completed by all the above as evidenced by the required signatures. The Department met the standard if the reviews were completed as evidenced by all four signatures.

Findings

Each of the 11 Logs (100%) met the standard.

Objective No. 4(c) – Inspections of the Small Unmanned Aerial System Deployments Conducted – Performance Assessment

Criteria

The Program Manager shall conduct a monthly inspection of logged missions comparing data downloaded from the sUAS to ensure all flight time, including training flight time, is accounted for. The inspection will include the total number of missions for the reporting period, total flight time for the reporting period, and matrix of mission purposes. The Program Manager is a supervisor assigned to ASD responsible for ensuring compliance with laws and regulations, acquiring FAA waivers and certificates of authorization, training of sUAS operators, and providing information and assessments for the evaluation of the program.8

Audit Procedures

Auditors learned from ASD that quarterly inspections are conducted in lieu of monthly inspections. This practice is based on direction from the CTSOB, CO that monthly inspections are impractical at this time due to the low number of sUAS deployments and instead may be completed quarterly. Auditors therefore assessed the completion of quarterly inspections and treated this Objective as a performance assessment. As the likelihood of sUAS deployments increases, all future audits will be assessed for monthly inspections as required by Department policy.

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The Department met the Objective if all inspections were completed on a quarterly basis.

Conclusion

Each of the four quarterly inspections were completed and therefore the Objective was met.

Objective No. 5 – Inventory of Department Small Unmanned Aerial System – Performance Assessment

Criteria

The CTSOB is responsible for the oversight and evaluation of the sUAS Program.⁹

Audit Procedures

Auditors identified that all five sUAS were purchased using funds donated by either the Los Angeles Police Foundation or the William H. Parker Foundation. Additionally, using a list of the five sUAS serial numbers and corresponding FAA drone registration numbers, auditors confirmed that the sUAS are maintained and secured at Metropolitan Division. Auditors noted that CTSOB is responsible for maintaining and securing equipment, therefore, the Department met the goal if the identifying serial number on the sUAS corresponded with its assigned FAA drone registration number.¹⁰

Conclusion

Each of the five sUAS serial numbers matched and corresponded to their respective FAA registration numbers; therefore, the Objective was met.

Objective No. 6 – Exclusive Assignment of Small Unmanned Aerial System

Criteria

The sUAS will be assigned exclusively to the RPIC and operated in coordination with the Program Manager from ASD.¹¹

Audit Procedure

¹⁰ This Objective is a performance assessment because while CTSOB is responsible for the oversight and evaluation of the sUAS Program, there is no specific policy that governs how sUAS must be maintained and secured.
Small Unmanned Aerial System Audit
Page 8 of 8

The Department met the standard if the Program Manager provided documentation to indicate that each sUAS is exclusively assigned to an individual RPIC. Auditors discussed this Objective with ASD personnel who confirmed that each sUAS is not exclusively assigned to individual RPICs.

Findings

None of the sUAS (0%) met the standard. The CO, CTSOB was notified of this result who clarified that the criterion above means that an sUAS can only be assigned to a qualified RPIC at the scene of a deployment, not that a specific sUAS is exclusively assigned to a specific RPIC. The CO, CTSOB indicated that the Department Manual should be amended to clarify this point (see Recommendation and Actions Taken/Management’s Response).

RECOMMENDATION

It is recommended that CTSOB revisit and amend Department Manual Section 1/420.56 to address areas that were found to have policy and procedural issues based on the Small Unmanned Aerial System Audit (see Objective Nos. 4(c) and 6).

ACTIONS TAKEN/MANAGEMENT’S RESPONSE

A draft of this report was provided to the Director, Office of Special Operations; CO, CTSOB; CO, Metropolitan Division; and, the CO, Air Support Division, who were in general agreement with the findings. The CO of CTSOB provided a detailed response to the findings on behalf of all commands that is attached to this report. Below is a summary of the response:

- Regarding Objective No. 3 findings, CTSOB indicated that the intent of Special Order No. 8 regarding approval was that final approval must come from the CO of CTSOB at the Deputy Chief level. Special Order No. 8 was amended, on December 8, 2020, to state that any deployment of an sUAS shall be approved by the CO of CTSOB, or in their absence, the Acting CO of CTSOB.

- Regarding Objective No. 6 findings, CTSOB indicated that the intent of Special Order No. 8 is that an sUAS can only be assigned to a qualified RPIC at the scene of a deployment. It was not intended to mean that a specific sUAS is exclusively assigned to a specific RPIC. Special Order No. 8 was amended, on December 8, 2020, to state that an sUAS can only be assigned to a qualified RPIC at the scene of a deployment.
APPENDIX

Audit Division Contact: Police Performance Auditor III Hezkeal Ayele, N6038, (213) 486-8312 or N6038@LAPD.Online

Staff Acknowledgments: In addition to the contact named above, Police Officer III Jason Khzouz, 34112, made key contributions to this report.

HEZKEAL AYELE
Project Manager, Audit Division

DAVID ROSENTHAL
Officer in Charge, Audit Division

TRINA UNZICKER
Commanding Officer, Audit Division
OFFICIAL CORRESPONDENCE REVIEW FORM

INITIATED BY: (NAME, BUREAU OR DIVISION, ETC)
PETER A. ZARCONE, Deputy Chief
Commanding Officer
Counter Terrorism and Special Operations Bureau

DATE:
September 29, 2020

STAFF OFFICER ASSIGNED: (NAME, BUREAU OR DIVISION, PHONE EXTENSION, ETC)
Lieutenant Lonnie Tiano, Serial No. 25071, (213) 486-8780, CTSOB, Adjutant

SUBJECT:
RESPONSE TO SMALL UNMANNED AERIAL SYSTEMS AUDIT

<table>
<thead>
<tr>
<th>Routing Order</th>
<th>Reviewer Initials</th>
<th>DIVISION / BUREAU / OFFICE</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
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REFERENCE NUMBERS:

OSO #: CTSOB #: SOG #: CTG #: DIVISION #: REwEIVED

RECEIVED SEP 29 2020
OCT 30 2020 THE DIRECTOR, OBO
Office of Constitutional Policing and Policy
September 29, 2020
1.15

TO: Commanding Officer, Audit Division

FROM: Commanding Officer, Counter-Terrorism and Special Operations Bureau

SUBJECT: RESPONSE TO SMALL UNMANNED AERIAL SYSTEMS AUDIT

This correspondence is in response to the 2020 audit that was conducted by Audit Division (AD) regarding the adherence to policies and procedures surrounding the use of Small Unmanned Aerial Systems (sUAS). Audit Division identified concerns with Objective No. 3, Required Approval Obtained Prior to Deployment, and Objective No. 6, Exclusive Assignment of Small Unmanned Aerial Systems.

Objective No. 3
Required Approval is covered in Special Order No. 8 which states that “any deployment of an sUAS shall be approved by the on-scene or responding CTSOB Staff Officer (i.e., Commander) and the Commanding Officer (i.e., Deputy Chief) of CTSOB. Because the log only captures the approval of one CTSOB approval authority, AD found that required approvals were not obtained in nine of eleven deployments. The intent of Special Order No. 8 regarding approval was that final approval must come from the Commanding Officer of CTSOB at the Deputy Chief level rather than allowing a subordinate on scene to do so. That requirement was met in all eleven deployments, notwithstanding whether a subordinate’s approval was documented. To eliminate confusion, Special Order No. 8 will be amended to state simply that any deployment of an sUAS shall be approved by the Commanding Officer of CTSOB, or in his absence, the Acting Commanding Officer of CTSOB.

Objective No. 6
Objective No. 6 pertains to the exclusive assignment of an sUAS to a Remote Pilot in Charge (RPIC). Special Order No. 8 states, “The sUAS will be assigned exclusively to the RPIC and operated in coordination with the Program Manager from Air Support Division”. This means that an sUAS can only be assigned to a qualified RPIC at the scene of a deployment. It was not intended to mean that a specific sUAS is exclusively assigned to a specific RPIC. A qualified RPIC did operate the sUAS in all eleven deployments. Special Order No. 8 will be amended to clarify this point.

If you have any questions, please have a member of your staff contact Commander Howard Leslie, Special Operations Group, at (213) 486-0142.

PETER A. ZARCONÉ, Deputy Chief
Commanding Officer
Counter-Terrorism Special Operations Bureau