

# Los Angeles County Sheriff's Department

Audit and Accountability Bureau



## Closed Circuit Television System Audit

Custody Services Division –  
North County Correctional  
Facility

Audit No. 2019-4-A



Alex Villanueva, Sheriff

July 31, 2019

**LOS ANGELES COUNTY SHERIFF'S DEPARTMENT  
Audit and Accountability Bureau**

**CLOSED CIRCUIT TELEVISION SYSTEM AUDIT  
CUSTODY SERVICES DIVISION – GENERAL POPULATION  
NORTH COUNTY CORRECTIONAL FACILITY  
Project No. 2019-4-A  
AUDIT REPORT**

**PURPOSE**

The Audit and Accountability Bureau (AAB) conducted the Closed Circuit Television System Audit – North County Correctional Facility (NCCF) under the authority of the Sheriff of Los Angeles County. The audit was performed to determine how the Los Angeles County Sheriff's Department (Department) complied with the United States Department of Justice (DOJ) Settlement Agreement<sup>1</sup> (Agreement) and the Department's Custody Division Manual (CDM) pertaining to the Closed Circuit Television (CCTV) system.

The AAB conducted this audit under the guidance of Generally Accepted Government Auditing Standards.<sup>2</sup> The AAB determined the evidence obtained was sufficient and appropriate to provide reasonable assurance based on the audit results.

**BACKGROUND**

On July 30, 2015, the Department entered into a joint settlement agreement with the DOJ with the intention of building upon existing measures and sustaining systemic improvements designed to protect inmates from conditions in custody which place them in unreasonable danger.

The Agreement outlines a series of provisions which are intended to provide adequate care, treatment, and living conditions for inmates in the Los Angeles County jail system. In particular, Agreement Recommendation No. 83, addresses the installation of closed circuit security cameras throughout the Department's jail housing and common areas. According to the Agreement, the Department will install a sufficient number of cameras in jail facilities that do not currently have cameras to ensure that all facility common areas have security-camera coverage.

---

<sup>1</sup> The Department entered into a joint settlement agreement with the United States DOJ, which was filed as a complaint in the United States District Court, Central District of California, Western Division, Case No. CV 15-5903, regarding the Los Angeles County Jails.

<sup>2</sup> United States Government Accountability Office, Government Auditing Standards, December 2011.

## **CLOSED CIRCUIT TELEVISION SYSTEM AUDIT - NCCF**

### **Project No. 2019-4-A**

Video surveillance is an “invaluable tool for objective accounting and insight”.<sup>3</sup> The use of surveillance cameras serve as a deterrent for unnecessary and excessive force, assaults, and unlawful injuries. Surveillance cameras enhance the reliability of investigations by allowing the Department the ability to store and review camera footage for the analysis of an incident. Use of these cameras is not simply an invaluable evidentiary tool, but they promote jail order, security, and can quickly absolve jail personnel of frivolous claims by inmates that would otherwise take time to resolve.

According to the Agreement, the CCTV system at the NCCF was to be installed by June 30, 2018. The Custody Compliance and Sustainability Bureau (CCSB)<sup>4</sup> stated the installation of the CCTV system was completed in January 2017. The U.S. District Court Appointed Monitor<sup>5</sup>, issued its Seventh Report, for the period of April 1, 2018, through September 30, 2018. With regard to Agreement Recommendation No. 83, the Department has maintained “Substantial Compliance” at the NCCF.

As defined by the Monitor, "Substantial Compliance" signifies the Department has "achieved compliance with the material components of the relevant provisions of this Agreement in accordance with the [agreed-upon Compliance Measures for assessing Substantial Compliance]". To obtain compliance, the measures must be maintained for twelve-consecutive months.

### **PRIOR AUDIT**

This was the first CCTV Audit at the NCCF conducted by the AAB. In March 2016, the AAB completed a CCTV audit at the Twin Towers Correctional Facility (Project No. 2015-6-A). Four recommendations were made of which three were implemented. Data Systems Bureau (DSB)<sup>6</sup> did not implement the final recommendation.

In September 2017, the AAB completed a CCTV audit for Custody Division at the Century Regional Detention Facility (Project No. 2017-6-A). There were two recommendations, which have been implemented.

---

<sup>3</sup> Reports of the Citizens' Commission on Jail Violence, September 2012.

<sup>4</sup> The CCSB conducts assessments at each custody facility to ensure compliance with the provisions of various court actions and adherence to policies and procedures.

<sup>5</sup> The Monitor was appointed by the U.S. District Court to report the Department's compliance with the Agreement to the County, the DOJ, and the Court.

<sup>6</sup> The DSB operates under the Technology and Support Division. Their function is to plan, develop, coordinate, and manage information technology for the Department.

**CLOSED CIRCUIT TELEVISION SYSTEM AUDIT - NCCF**  
**Project No. 2019-4-A**

**METHODOLOGY**

**Scope**

The audit encompassed two main objectives regarding the review of CCTV:

- Continuous Recording of Cameras - To determine if the cameras recorded continuously within the 24-hour time period.
- Watch Commander Responsibilities - To determine if the Watch Commanders documented their CCTV inspection during each shift. In addition, to determine if a malfunction occurred, did the log include the required notification.

Auditors conducted a physical inspection of the CCTV system at the NCCF on February 12, 2019, a review of camera recordings, and an examination of the NCCF Watch Commander Logs. The applicable CDM sections were used in this audit.

**Audit Time Period**

The audit time period was from January 13, 2019, through February 12, 2019.

*This space intentionally left blank*

## **CLOSED CIRCUIT TELEVISION SYSTEM AUDIT - NCCF**

### **Project No. 2019-4-A**

#### **Audit Population**

Auditors identified varying populations in order to examine the different aspects of the two objectives.

The population for Objective No. 1 consisted of CCTV recordings from the NCCF. A total of 779 CCTV cameras were identified by Data Systems Bureau and Facilities Services Bureau<sup>7</sup>, and verified through the FLIR Systems Inc.<sup>8</sup> security camera software, which shows an inventory of active cameras. The 779 CCTV cameras were utilized for the audit time period of 31 days, resulting in 24,149 camera recordings.<sup>9</sup> A total of 24,149 camera recordings from 779 CCTV cameras were identified. The 24,149 recordings were used to obtain a statistically valid sample from the population for a sample size of 96 recordings from 92 CCTV cameras.<sup>10</sup>

The population for Objective No. 2 consisted of Watch Commander Logs for the same audit time period of 31 days. Each day consisted of three 8-hour shifts (EM, AM, and PM)<sup>11</sup> for a total of 93 Watch Commander logs evaluated for this objective.

*This space intentionally left blank*

---

<sup>7</sup> The Department's Facilities Services Bureau installed the cameras for the CCTV system at the NCCF.

<sup>8</sup> The Department's CCTV software is manufactured by FLIR Systems Inc.

<sup>9</sup> Each camera recording consisted of a 24-hour period starting at midnight of the selected day to 2359 of the following day.

<sup>10</sup> Using a statistical one-tail test with a 95% confidence level and a 4% error rate, a statistically valid sample was obtained.

<sup>11</sup> EM shift is from 2200 to 0600, AM shift is from 0600 to 1400, and PM shift is from 1400 to 2200.

**CLOSED CIRCUIT TELEVISION SYSTEM AUDIT - NCCF**  
**Project No. 2019-4-A**

**AUDIT DETAILS AND RESULTS**

**Objective No. 1 – Fixed video surveillance camera recorded continuously**

Criteria

Custody Division Manual, Section 7-06/010.00, Video Recording Procedures, (March 2019), states:

*Retention of Recordings*

*...Fixed video surveillance cameras will record continuously...*

Procedures

Auditors reviewed video recordings to determine if the cameras recorded continuously for a specified 24-hour time period.

Results

Eighty-six of the 96 (90%) CCTV camera recordings met the criteria. Auditors discovered ten recordings contained interruptions in the continuous recording of video.

While reviewing video recordings, auditors also discovered one of the cameras was not in working order for a period of approximately five months.

*This space intentionally left blank*

**CLOSED CIRCUIT TELEVISION SYSTEM AUDIT - NCCF**  
**Project No. 2019-4-A**

The results are summarized in Table No. 1

**Table No. 1 – Video Recording Interruptions**

	<b>Camera Location</b>	<b>Number of Interruptions</b>	<b>Duration of Interruptions</b>	<b>Date of Interruptions</b>	<b>Reason for Interruptions</b>
1	300 - Sew SS 2 (Right)	18	A minute or under	1/14/2019	Unknown
2	300 Kitchen Cart Corridor Sally	2	12 minutes and 1 minute	1/16/2019	Power Outages
3	500 From Main Corridor	2	12 minutes and 1 minute	1/16/2019	Power Outages
4	SS515 + DayRM Corridor	2	12 minutes and 1 minute	1/16/2019	Power Outages
5	Dorm 622 (Left)	2	12 minutes and 1 minute	1/16/2019	Power Outages
6	Dorm 617 (Center)	2	3 hours and half an hour	1/17/2019	Power Outages
7	300 Kitchen - ODR Dishwasher	2	3 Minutes and half a minute	1/17/2019	Power Outages
8	Dorm 722 (Right)	2	3 hours and half an hour	1/17/2019	Power Outages
9	915 Officer D Row (Front)	2	3 hours and half an hour	1/17/2019	Power Outages
10	* Bakery Storage 3	No video recording	No video recording	2/7/2019	Unknown

\* Video camera was down from 10/3/2018 through 2/19/2019.

*This space intentionally left blank*

**CLOSED CIRCUIT TELEVISION SYSTEM AUDIT - NCCF  
Project No. 2019-4-A**

**Objective No. 2 – Watch Commander Responsibilities**

**Objective No. 2(a) - Watch Commander Log documented CCTV inspection**

Criteria

Custody Division Manual, Section 7-06/010.00, Video Recording Procedures, (March 2019), states:

*Fixed Video Equipment Inspection*

- *The watch commander shall confirm all surveillance cameras are properly functioning and recording at the beginning of each shift by logging into the system...*
- *...The fixed video equipment inspection shall be documented in the facility Watch Commander's Log.*

Procedures

The Watch Commander Logs were reviewed to determine if the Watch Commanders documented their inspection to confirm the CCTV cameras were functioning and recording during each shift.

Results

All of the 93 Watch Commander Logs (100%) met the criteria.

*This space intentionally left blank*



**CLOSED CIRCUIT TELEVISION SYSTEM AUDIT - NCCF**  
**Project No. 2019-4-A**

**Objective No. 2(b) – Watch Commander Log documented camera malfunction**

Criteria

Custody Division Manual, Section 7-06/010.00, Video Recording Procedures, (March 2019), states:

*Fixed Video Equipment Inspection*

- *...The watch commander shall notify the designated video manager of any malfunctions, submit necessary work orders through proper channels (e.g. the online HelpDesk etc.), and document all actions taken in the Watch Commander's Log, including who was notified and the requested corrective action;...*

Procedures

The Watch Commander Logs were reviewed to determine if the Watch Commanders documented a camera malfunction. Eighty-nine of the 93 logs did not document a malfunction and were excluded from review. Therefore, auditors reviewed four logs to determine if the log included the following: notification to the video manager<sup>12</sup>, submission of necessary work orders, documentation of all actions taken in Watch Commander Log, documentation of the person notified, and the requested corrective action.

Results

All four Watch Commander Logs (100%) met the criteria.

---

<sup>12</sup> Video manager responsibilities may be assigned to sworn or professional staff personnel who are tasked with receiving the malfunction notifications. The NCCF has a sworn staff member assigned as the video manager.

**CLOSED CIRCUIT TELEVISION SYSTEM AUDIT - NCCF**  
**Project No. 2019-4-A**

The audit yielded the following results:

**Table No. 2 - Summary of Audit Results**

<b>Objective No.</b>	<b>Audit Objectives</b>	<b>Met the Criteria</b>
<b>1</b>	<b>CCTV RECORDED CONTINUOUSLY</b>	
	<i>Fixed video surveillance camera recorded continuously</i>	<b>90%</b>
<b>2</b>	<b>WATCH COMMANDER RESPONSIBILITIES</b>	
2(a)	<i>Watch Commander Log documented CCTV inspection</i>	<b>100%</b>
2(b)	<i>Watch Commander Log documented camera malfunction</i>	<b>100%</b>

*This space intentionally left blank*

**CLOSED CIRCUIT TELEVISION SYSTEM AUDIT - NCCF**  
**Project No. 2019-4-A**

**ADDITIONAL INFORMATION**

Recently, the Custody Services Division Assistant Sheriff inquired about the quality of CCTV recordings. An important measurement of video quality is frames per second (fps). Frames per second is a measurement of how many unique consecutive images a camera system records per second.

The following information was provided by DSB. The CCTV cameras at the NCCF currently have a setting of 10fps. The Department's frame rate is set to allow video recordings to be retained for the mandated period of one year. Frame rate has an effect on the way motion is perceived in a video. The lower the frame rate, the increased likelihood a camera may not capture some details of the movement. While 10fps allows the Department to capture pertinent information on a video recording, an increase in frames per second may improve the CCTV recording quality. Increasing the CCTV frame rate would require the Department to invest in increased storage. In addition, the Department would have to monitor the network infrastructure to ensure it can sustain the increase of data traffic from the cameras.

Lastly, auditors discovered the NCCF utilizes FLIR Systems Inc. cameras with exception of one Pelco Inc.<sup>13</sup> camera. Per DSB, some FLIR cameras fail frequently for unidentified reasons prompting the installation of a single camera by the vendor Pelco. This camera is being tested to determine a possible transition to this vendor.

*This space intentionally left blank*

---

<sup>13</sup> Pelco Inc. is a security and surveillance technologies company.

**CLOSED CIRCUIT TELEVISION SYSTEM AUDIT - NCCF**  
**Project No. 2019-4-A**

**CONCLUSION**

The AAB auditors performed analyses and made assessments to identify areas that needed improvement. The AAB considers the results of this audit to be a helpful management tool for all Department personnel. The evidence presented provides reasonable assurance that Department personnel are adhering to policies and procedures regarding the CCTV system at NCCF.

**RECOMMENDATIONS**

When Departmental policies and procedures are not adhered to, it may result in an increased risk to the Department. Department management should disseminate the results of this audit to its personnel. Additionally, as best practice, Department management is encouraged to conduct recurring and ongoing briefing of policies and procedures. The AAB considers the results of this audit to be a helpful management tool and therefore, makes the following recommendation:

1. It is critical that malfunctioning cameras, caused by interruptions, be restored as soon as possible to ensure the continuous recording of fixed video surveillance. It is recommended that the Watch Commander duties include verifying that the CCTV system is fully operative after an interruption occurs.

**Views of Responsible Officials**

On July 16, 2019, Custody Division Operations command staff submitted a formal response to the AAB concurring with the audit results. A copy of the audit was provided to the Office of Inspector General.

*This space intentionally left blank*

**CLOSED CIRCUIT TELEVISION SYSTEM AUDIT - NCCF**  
**Project No. 2019-4-A**

This audit was submitted on this 31<sup>st</sup> day of July 2019, by the Audit and Accountability Bureau.

*Original signature on file at AAB*

---

NANCY RUANO  
Project Manager, Law Enforcement Auditor  
Audit and Accountability Bureau  
Los Angeles County Sheriff's Department

*Original signature on file at AAB*

---

KENJI MASHIKO  
Assistant Project Manager, Sergeant  
Audit and Accountability Bureau  
Los Angeles County Sheriff's Department

*Original signature on file at AAB*

---

M. ROWENA NELSON  
Head Compliance Officer  
Audit and Accountability Bureau  
Los Angeles County Sheriff's Department

*Original signature on file at AAB*

---

ERIC I. STRONG  
Acting Captain  
Audit and Accountability Bureau  
Los Angeles County Sheriff's Department