



Audit Recommendations
Status Report
As of September 30, 2018





Lee County Port Authority
Audit Recommendation Status Report
As of September 30, 2018



To: The Honorable Linda Doggett, Lee County Clerk of the Circuit Court & Comptroller

From: Tim Parks, Chief Internal Audit Officer/Inspector General
Inspector General Department

Date: October 22, 2018

Re: Lee County Port Authority (LCPA)
Audit Recommendations Status Report as of 9/30/18

Dear Ms. Doggett,

The Inspector General Department (IG) has completed its *LCPA Audit Recommendations Status Report as of 9/30/18*, which reflects the implementation status of outstanding audit report recommendations for the Lee County Port Authority as of September 30, 2018. The report fulfills the IG Department's accountability for reporting on issues through their resolution.

This audit activity conforms to the Institute of Internal Auditor's (IIA) *International Standards for the Professional Practice of Internal Auditing (Red Book)* and the Association of Inspectors General (AIG) *Principles and Standards for Offices of Inspector General*.

The follow-up covered the audits of the LCPA Airport Communications for which a report was issued in February 2018. A summary of the recommendation status is presented in the heading of the attached report.

Should you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Tim Parks".

Tim Parks, Chief Internal Audit Officer/Inspector General
Internal Audit/Inspector General Department
TJP/GK



Lee County Port Authority Audit Recommendation Status Report As of September 30, 2018



LCPA Airport Communications (Project 2017.13, Issued February 2018)

Call taking and Radio Dispatch Monitoring Policy

Observation		Management Response
<p>Airport Communications operates without a policy and procedures to ensure the quality of its main objective. According to APCO International (Association of Public-Safety Communications Officials), two percent of all call taking and radio dispatch should be monitored for quality assurance and quality improvement (QA/QI) purposes. The lack of a QA/QI policy is considered a deficiency in internal controls.</p> <p>The sampled incidents (30) received an overall quality rating of 96 percent. A rating of at least 90 percent is recommended by APCO. Specifically, EMS, Police, and Fire dispatch incidents received an overall percentage rating of 95, 96, & 97 respectively. The incidents were evaluated based on three different categories: Interview Questions, Computer-Aided Dispatch Skills, and Telephone Protocol Skills. EMS related interview questions offer the greatest opportunity for improvement with a score of 89 percent.</p> <p><i>Note: The standards and evaluation templates developed by APCO International and NENA (National Emergency Number Association) were used as a baseline for this section.</i></p>	<p>We recommend that management develop a policy and procedures to ensure the quality of call-taking and radio dispatch. The design and implementation of this policy should be guided by the following five integrated components:</p> <ul style="list-style-type: none">• <i>Risk Assessment</i> – When developing this policy the internal and external risks involved must be considered.• <i>Control Environment</i> - Management must set the "tone at the top" regarding the importance and seriousness of the quality assurance policy and other internal controls.• <i>Control activities</i> – The procedures must be preventative and detective in nature. For example, evaluation of calls should be designed to prevent and detect any quality concerns and hedge against any previously assessed risks.• <i>Communication</i> – All dispatchers must be made aware of this new policy and its procedures along with any modifications thereafter.	<p>Even though the sampled dispatch incidents received an overall rating of 96 percent, we agree with developing procedures for call-taking and radio dispatch by taking into consideration Quality Assurance and Quality Improvement, as well as taking into account risk assessments, the control environment, control activities, communication, and monitoring. These procedures will be developed in accordance with APCO ANSI standards and reflected in an Operating Instruction (OI). We anticipate this task to be completed by June 1, 2018.</p>



Lee County Port Authority Audit Recommendation Status Report As of September 30, 2018



	<p>Evaluation feedback should be documented and communicated on a real-time basis; meaning at least within five days from the original date of the evaluated call and/or dispatch. Operational policies and procedures, along with training material should reflect any noted improvements.</p> <ul style="list-style-type: none"> • <i>Monitoring</i> - Management should regularly monitor this policy and other internal control policies to ensure continuous improvement and that corrective action is taken. 	
Estimated Implementation Date	Revised Implementation Date	Status
6/1/18	1/30/2019	Pending
Last Status Update	Current Recommendation Action	IA Follow-up Notes
10/15/2018	N/A	Status update: Q&A has been developed, however, pending final review. Strategies for implementation are also being developed.
OI-1513 Fire Alarm Control Panel Procedures:		
Observation	Recommendations	Management Response



Lee County Port Authority Audit Recommendation Status Report As of September 30, 2018



<p>The OI-1513 procedures focus on alarm activation in specific locations: Terminal, Freight Facility, Training and Conferences Center, and Vehicle Maintenance Facility. We focused primarily on alarms within the terminal facility. We examined a total of 4 incidents (3 Fire Alarms and 1 Supervisory Event) initiated by the FACP. Overall, the dispatchers followed proper protocol in responding to the fire alarm activations within the sample. We offer recommendations to enhance control over activation and response to alarms.</p> <p><i>False Alarms:</i> OI-1513 defines a false alarm as an unwarranted system event typically caused by mischief, man-made disturbances, environmental conditions, equipment malfunction, or unknown stimulus. All alarms are to be initially treated as a normal activation. We identified various days with a high number of panel resets, alarm silence, or a disabling of the system that lacked evidence to indicate the events were investigated to conclude that a false alarm occurred; or at a minimum that dispatchers were adequately notified of the specific events that caused the false activations. There was a lack of procedures to address the repeated false activations.</p>	<p>We recommend that OI-1513 be revised to include procedures to address repeated false activations caused by inspections, maintenance, repairs, etc. These revisions should include procedures to improve communication and situational awareness.</p> <p><i>Timing of response activities:</i> All three of the sampled fire alarms exceeded the 180 second (3 minute) threshold. Therefore, an evacuation announcement was triggered for each of the alarms. A supervisory event does not trigger an evacuation announcement. However, it was included in our sample population since the initial procedures are similar to a fire alarm.</p> <p><i>Recommendations:</i></p> <p>We recommend that management design and implement fire alarm control panel training for dispatchers. The curriculum should be geared towards deciphering the fire alarm panel codes and locations of fire alarm detection system (pull stations, flow switches, smoke detectors, heat detectors, duct detectors, and tamper switches) throughout all facilities. Management should also consider upgrading the panel monitoring display to be more user-friendly</p>	<p>In an effort to prevent inadvertent terminal evacuation scenarios, preventative maintenance (PM) activity on the airport's fire alarm and suppression system will be planned well in advance and scheduled after the last flight of the day. We recognize the potential to misinterpret an alarm activated by PM activity with an actual alarm due to valid sources of heat or smoke; therefore, AirComm will make every effort to position a technician inside AirComm during PMs to assist the Dispatchers with interpreting and reacting to the fire alarm control panel activity. OI-1513 will be updated to reflect these recommended changes.</p> <p>In addition, the current Fire Alarm Control Panel training program for the AirComm dispatchers will include an expanded systems knowledge component and response protocols for ARFF, Operations and Maintenance <i>personnel</i>. The Fire Alarm Control Panel refresher training will be administered on an annual basis.</p>
--	---	--



Lee County Port Authority Audit Recommendation Status Report As of September 30, 2018



Exhibit 1: False Activations:

Date	Type of Action Taken	Number of Occurrence
6/28/2017	Activate Reset	16
8/11/2017	Activate Reset	9
8/16/2017	Disabled & Enabled Devise	1
8/17/2017	Alarm Silence	31

and easier to read.

Timing of response activities: The arrival on scene is often delayed by the responding department's inability to quickly locate the incident location. Thus, multiple dispatch announcements of the alarm type and location are required. The average arrival time was approximately 1 minute and 59 seconds from the initial dispatch. Additionally, dispatchers are unable to initiate radio communication (forced radio silence) until the Westnet alerting cycle is complete. The alerting cycle is hindering and delaying the initial response time of other departments (Police, Operations, and Maintenance).

Recommendations:

To improve response time, we recommend that management design and continuously offer inter-departmental training that focuses on fire alarm detection system locations. The possibility of improving the technology used to respond to fire alarms should be explored. For example: Implement hand held devices that simultaneously alert the responders with real-time audio and visual incident data. The visual communication of alarm type



Lee County Port Authority Audit Recommendation Status Report As of September 30, 2018



	<p>and location could increase the efficiency of relaying critical information. The Westnet fire station alerting system should be enhanced to allow for radio dispatch during the fire station alerting cycle.</p> <p><i>Note: The OI-1513 was revised effective 12/12/2017. This revision does not include the observations and recommendations of this report.</i></p>	
Estimated Implementation Date	Revised Implementation Date	Status
6/1/18	N/A	Implemented
Last Status Update	Current Recommendation Action	IA Follow-up Notes
10/15/2018	N/A	<p>The OI-1513 was revised on 1/11/2018 to include:</p> <p>VIII. PERIODIC INSPECTIONS</p> <p>B. Any maintenance or testing of the fire alarm system must be coordinated with LCPA Maintenance, ARFF, Operations & Safety, and Air Comm Central.</p> <p>C. All testing being conducted by Airport Maintenance, Contractors or Tenants which has the chance of audible or visible messaging activation will be conducted after the last flight.</p> <p>Additionally, the IA reviewed the content of the newly developed Initial Dispatch Workflow</p>



Lee County Port Authority Audit Recommendation Status Report As of September 30, 2018



		<p>course. A completion report serves as evidence dispatchers completed the one hour training on or about 9/21/2018.</p> <p>The IA examined an email dated 9/18/2018 alerting AirComm of a fire alarm testing starting after last flight.</p>
Culture and Working Environment		
Observation	Recommendations	Management Response
<p>We administered a culture questionnaire that focuses on people, culture, and leadership. The questionnaire was conducted with 89 percent participation, and we obtained an average score of 65 percent. The following results were noted:</p> <ul style="list-style-type: none"> <i>Culture:</i> According to survey feedback the department's culture received the lowest rating. <i>Communication:</i> Results indicated that the communication level was lacking thoroughness and timeliness. <p>We actively engaged management and staff during our inquiries to identify tangible opportunities to improve the overall work culture of Airport Communications. We concluded that the perceived work/life balance and professional growth to be among the greatest challenges to improve retention rates.</p> <ul style="list-style-type: none"> <i>Work/Life Balance:</i> There was a perceived negative impact on the work/life balance within the Center. <i>Professional Growth:</i> There is minimal opportunity for growth within the Center. 	<p>Culture: We recommend the design and implementation of a policy that facilitates a formal post-hire and exit interview process. These interviews should be conducted in person and by an independent party (e.g., Human Resources) in order to further stimulate effective dialogue. These types of interviews are a critical tool in understanding what is working and what is not. They allow management to be proactive versus reactive in implementing change to address deficiencies. A new employee follow up meeting should be conducted during the first 30, 60 or 90 days of employment. Since the work load and job responsibility increase exponentially after becoming certified, a post hire meeting should include the first year of employment.</p> <p>Communication: We recommend that management continuously obtain, disseminate and share relevant information. Moreover, other departments bear</p>	<p>We agree with the recommendation that a third party, such as Human Resources (HR), conduct formal post-hire and exit interviews with dispatchers. Doing so will provide a better gauge on what practices are working well and where improvements could be made. Likewise, we agree with formalizing the progress review of newly hired dispatchers to better gauge employee enthusiasm, morale and professional development within the first 90 days of employment. To improve communications within the center, we have instituted the practice of placing a dispatcher, based on availability and current workload, in the morning Operations briefs which are conducted in the Airport Command Center.</p> <p>The concept of promoting staff from within the department is an objective that has always been considered and acted upon by management. Currently, the department has allocated four (4) part-time positions. These positions are AirComm</p>



Lee County Port Authority Audit Recommendation Status Report As of September 30, 2018



<p>It is worth mentioning that this profession has inherently high levels of turnover; APCO estimates that 97 percent of dispatchers will not work long enough in this field to retire. However, we noted that six of the dispatchers that resigned or retired during 2016 and 2017 had an average 18 years of service.</p> <p>The perceived negative impact on the work/life balance within the department is a combination of two main factors; a reduction in certified dispatchers and the department's scheduling policy. As a result, dispatchers are regularly required to work extended overtime and cover shifts on scheduled days off. To substantiate the employees' work/life balance, the 2017 calendar year total actual hours were compared to estimated standard hours of 9,900 and 8,600 respectively. The sampled employees worked approximately 1,300 additional hours between 01/01/2017 – 9/13/2017. This condition may lead to higher stress levels, diminished morale, and ultimately perpetuate turnover.</p> <p><i>Note: Estimated standard hours were calculated using a regular full time dispatcher's schedule of 48 and 36 hours biweekly and taking into account total scheduled PTO of approx. 522 hours. We sampled dispatchers with the department from January 1, 2017 through September 13, 2017, noting 6. We determine 36 work weeks (1/1/2017 – 9/13/2017) or 18 biweekly periods at 48 hours and 18 biweekly at 36 hours.</i></p> <p>The reduction in staffing levels was caused by the</p>	<p>accountability for keeping the Airport Communications Center "in the know" of all relevant circumstances. We recommend regular dispatcher briefings to discuss agenda, initiatives, and activities occurring throughout the facility. This will help strengthen cohesiveness, awareness, and build a team attitude.</p> <p>Work/Life Balance – Turnover: We recommend that management develop and maintain a recruiting process that accounts for the retirement of long-term employees and the inherent delay created by the 232 hour Public Safety Telecommunication training and exam requirement.</p> <p>Work/Life Balance – Scheduling: Refer to the Dispatcher Scheduling section of this report for related observations and recommendations.</p> <p>Professional Growth: We recommend that management implement a program to promote from within the department. One strategy would be to add Call-taker positions. A Call-taker offers a viable solution to the current staffing needs. This position requires no telecommunication training and exam, has a lower starting hourly wage, and relieves current dispatchers from answering non-emergency calls. This position would also serve as a platform to acclimate candidates to the job requirements and duties of a dispatcher.</p>	<p>Specialists (i.e., "Call-Takers"). The roles, responsibilities, aptitude, and skill levels of AirComm Specialists are quite different from the roles, responsibility, aptitude, and skill level of AirComm Dispatchers. Therefore, the concept of implementing a programmed promotional track from AirComm Specialist to AirComm Dispatcher may be difficult to achieve with all personnel. However, if the call-taker has the skills required to be a dispatcher, the likelihood of achieving the promotion is high.</p> <p>We are in full agreement that shift-level leadership positions should be implemented. Doing so provides for increased accountability, standardization, performance, and growth opportunity for AirComm Dispatchers. This objective is emphasized in the "#4 Dispatcher Scheduling" response.</p>
--	--	--



Lee County Port Authority Audit Recommendation Status Report As of September 30, 2018



<p>retirement of seasoned dispatchers and some new hires deciding that the job was not a good fit for them. We noted that 60 percent of the dispatchers that resigned or retired during 2016 and 2017 had an average 18 years of service, and 40 percent of all recent hires resigned or transferred out prior to their 5th year anniversary. Two dispatchers resigned within 100 days of being hired.</p> <p>We analyzed the promotional growth of current dispatchers and those that retired, resigned or transferred out during 2016 and 2017 and noted:</p> <ul style="list-style-type: none"> • 80 percent of the dispatchers that retired, resigned or transferred out during this period were never promoted beyond dispatcher I. • From the 8 current certified dispatchers with 5 years of service on average, none has received a promotion beyond the dispatcher II level. • There was no formal exit interview process to obtain candid assessments of the organization's environment and culture. 	<p>Airport Communications' organizational structure could benefit from adding Shift Supervisors. It could incentivize and reward employees for their longevity, proficiency, and dedication to the department. It would offer the opportunity for additional promotions. This role would serve to facilitate continuous oversight and accountability throughout a 24 hour period.</p>	
Estimated Implementation Date	Revised Implementation Date	Status
6/30/2018	1/30/2019	In-Progress
Last Status Update	Current Recommendation Action	IA Follow-up Notes
10/15/2018	N/A	<p>Implemented: The department has implemented a message board that lists important messages. The board has several categories i.e., APD/ARFF/OPS; Events/Flights; Construction/Tenants; What's Broken; Department News/Projects; Interesting Call/News; Misc. The IA examined a screen shot</p>



Lee County Port Authority Audit Recommendation Status Report As of September 30, 2018



		<p>noting 30 messages in total. All staff members are able to edit and update the board content accordingly.</p> <p>AirComm is conducting regular staff meetings. We examined evidence of attendance roster for meetings held on 7/31/2018 (shift AC) and 8/2/2018 (shift BD).</p> <p>One specialist position has been filled. Per inquiry of Mark Adams, Director of Aviation Security & Technology, an additional specialist position has been approved.</p> <p>In progress: 90 day post-hire and exit interview; supervisor position filled.</p>
Dispatcher Scheduling		
Observation	Recommendation	Management Response
<p><i>Methodology and results:</i> Airport Communication Center is tasked with handling emergency and non-emergency calls and radio dispatch. This requires the scheduling of certified dispatchers on a continuous 24 hours, 7 days, and 365 days a year basis. Generally, dispatchers work 12 hour shifts from 4:30 am to 4:30 pm or 4:30 pm to 4:30 am with alternating 36 and 48 hour workweek schedules. The department employed eight certified dispatchers and two in training as of the audit date. We reviewed the efficiency and effectiveness of the department's scheduling methodology.</p> <p><i>Note: The quantitative analyses below are limited to the data of incoming telephone calls during the 2016 calendar year and therefore, exclude communications initiated by</i></p>	<p>We recommend that management review the scheduling methodology to determine its appropriateness and cost effectiveness. Alternatively, the use of a shift scheduling software to determine the actual number of dispatchers required is recommended.</p> <p>Management often schedules a third Dispatcher on shift to hedge against a scheduled employee not reporting to work. This practice is preemptive and concurrently inefficient, and it regularly results in the excess use of resources.</p>	<p>Call volume data limited to only phone activity does not fully reflect the total workload of the AirComm Dispatchers. However, we do recognize the correlation between call-volume and airline passenger activity with the work-load in AirComm.</p> <p>We will evaluate the concept of "on-call" scheduling as the means to better prepare for shift call-outs. We think it is neither prudent nor wise to schedule only one (1) qualified dispatcher for any period of the day due to the criticality of duties and potential work-load during airport emergency situations. The after-action report from last year's active shooter exercise revealed the two AirComm</p>



Lee County Port Authority Audit Recommendation Status Report As of September 30, 2018



<p><i>radio transmission and other assigned tasks performed by a dispatcher.</i></p> <p>The Erlang C formula is widely recognized throughout the telecommunication industry as an accurate tool to determine the minimum number of dispatchers required to handle incoming calls. We used the formula to assess the scheduling methodology. We utilized the web based software Agenses to complete the mathematical formula which requires three main components:</p> <ul style="list-style-type: none"> • Total number of calls received • Average time per call in seconds • Desired level of service (max wait time for a call to be answered) <p>To select our sample we used the following criteria:</p> <ul style="list-style-type: none"> • 24 hour period with the highest call load (omit any outlier days) • 24 hour period with the lowest call load <p>24 hour period within +- 2 calls of the average</p> <p>The results of the analysis indicate that over-staffing generally occurred when more than one dispatcher was scheduled during the 4:30 pm to 4:30 am night shift. Moreover, the scheduling of more than two dispatchers during the day shift was considered over-staffing.</p> <p>As summarized in Exhibit 3, the months with the highest (January, February, March) and lowest (July, September,</p>	<p><i>Recommendations:</i> Management is encouraged to consider implementing other viable and feasible solutions as listed below in order to mitigate against a last-minute call out.</p> <ul style="list-style-type: none"> ▪ On-call scheduling that requires a designated employee to be available within a reasonable time. ▪ A non-certified call-taker position is an effective solution to reduce the per hour cost. This role could serve to handle non-emergency calls and allow the certified dispatchers to handle emergency calls for service and alarms. ▪ Incorporating a Shift Supervisor would ensure resources are available while providing immediate oversight, accountability, and guidance throughout a 24 hour period. <p>We recognize that the Airport Communications Center is unlike a typical communication center, and this presents unique challenges when scheduling dispatchers. For instance, radio dispatches are not always driven by emergency calls (e.g., Fire Alarm Control Panel Activation, and Access System alerts). These require a dispatcher's critical attention and they are completely unforeseeable. Airport</p>	<p>Dispatchers were easily overwhelmed during that highly critical scenario. Therefore, reducing staff to one (1) dispatcher in AirComm, even for a short period of time, significantly increases the risk to RSW's employees, customers and passengers.</p> <p>Currently, AirComm has twelve (12) full-time Dispatchers. Per the audit's recommendation, we evaluated existing shift configurations with the goal of reducing scheduled staff to a minimum of two (2) qualified dispatchers during times of reduced call-volume and activity. There are currently four (4) teams made up of three (3) dispatchers. Moving forward, we plan to create two (2) team supervisors who will promote from within the existing ranks. This change addresses one of the recommendations in "<i>#3 Culture and Working Environment.</i>" We recognize the need for supervisory leadership in AirComm, especially during the busiest call-volume times of the day. Training and promoting two (2) dispatchers as supervisors will help fill the gap when the manager is off duty. Additionally, the supervisor will be able to step in when dispatchers call out sick, which will, in turn, reduce the overtime budget significantly.</p> <p>With these changes, we propose to create two (2) teams made up of five (5) dispatchers. The new team schedule would include two (2) qualified dispatchers working between 0530 & 1730 and two</p>
--	---	---



Lee County Port Authority Audit Recommendation Status Report As of September 30, 2018



<p>October) call volume showed that there were 5,926 and 5,439 scheduled hours during the 4:30 am to 4:30 pm and 4:30 pm to 4:30 am shifts respectively. Approximately 2,599 of these hours were due to scheduling more than 2 dispatchers on a shift or a single shift greater than 12 hours. Specifically, 1,072 hours were scheduled during 4:30 pm - 4:30 am.</p> <p><i>Policy restrictions:</i> The inefficiencies in scheduling are primarily due to the scheduling restrictions imposed by OI-3600 Airport Communications Center Missions and Methods. OI-3600 requires a minimum of two fully trained and qualified dispatchers on staff for each shift.</p>	<p>Communications is also assigned the responsibility to monitor security cameras, create work orders for every request that is called into the Center, and receive administrative related calls during after-hours. On the other hand, the Center's call volume is primarily driven by airport traffic and thus relatively predictable as indicated by Exhibit 5.</p> <p>We recommend that management consider leveraging and incorporating useful and reliable historical data such as total passenger statistics into the scheduling model in order to forecast with greater accuracy the number of dispatchers required on each shift.</p> <p>We also examined the distribution of calls throughout a 24 hour period. There is a noted fluctuation in the number calls received during specific blocks of time. Consequently, call activity increased by 39,833 during 7 am to 6 pm.</p> <p>As noted in Exhibit 6, 74,012 or 68 percent of total calls were received during 7 am - 6 pm. Conversely, a total of 34,179 or 32 percent of total calls were received between 7 pm - 6 am. This pattern remained constant at 68 percent and 32 percent</p>	<p>(2) qualified dispatchers working between 1730 & 0530. The team supervisors would be assigned to work twelve (12) hour shifts while overlapping both shifts on the team. There would be one (1) swing-shift dispatcher assigned daily between 1030 & 2230. Each team would also have two (2) part-time AirComm Specialists assigned during the highest call-volume times of the day to assist with non-dispatcher, non-emergency types of calls (paging, lost & found, general information, call-taking during heavy AirComm activity, etc.).</p> <p>We believe these team, shift, and schedule changes better align our dispatchers with the heaviest daily call volumes and will help to reduce overtime, staff shortages from sick call-outs, and PTO scheduling challenges. Over the next year, we will track the activity and tasking of the AirComm Specialist and if deemed appropriate, we will make adjustments to those staffing levels to better align call volume to personnel required.</p>
--	--	---



Lee County Port Authority Audit Recommendation Status Report As of September 30, 2018



	<p>regardless of the seasonality of the surrounding area, as reflected by Exhibit 7.</p> <p>We recommend that management consider adjusting the start and end time of 4:30 am - 4:30 pm & 4:30 pm - 4:30 am to reflect actual call volumes. This would facilitate a scheduling policy that is primarily driven by call volume. Additionally, if the call-taker position is added to Airport Communication Center (as previously recommended) their start and end time could be flexible to the anticipated call volume. This would provide maximum coverage and ensure their continuous productivity.</p>	
Estimated Implementation Date	Revised Implementation Date	Status
12/31/2018	10/15/2018	Implemented
Last Status Update	Current Recommendation Action	IA Follow-up Notes
10/15/2018	N/A	Based on current staff levels, we examined a revised work schedule for 2018 that indicates a new start time of 0530 & 1730 and 1730 & 0530. A swing-shift dispatcher assigned daily between 1030 & 2230. A part-time AirComm Specialist assigned during 1000 & 1600.