Office of Inspector General
Audit Report

CONTRACT TOWERS CONTINUE TO PROVIDE COST-EFFECTIVE AND SAFE AIR TRAFFIC SERVICES, BUT IMPROVED OVERSIGHT OF THE PROGRAM IS NEEDED

Federal Aviation Administration

Report Number: AV-2013-009
Date Issued: November 5, 2012

Memorandum

Subject: <u>ACTION</u>: Final Report: Contract Towers
Continue To Provide Cost-Effective and Safe Air
Traffic Services, but Improved Oversight of the
Program Is Needed
Report No. AV-2013-009

Date: November 5, 2012

From: Jeffrey B. Guzzetti
Assistant Inspector General for
  Aviation and Special Program Audits
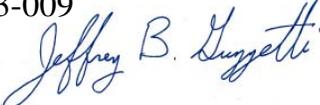
Reply to
Attn. of: JA-10

To: Acting Federal Aviation Administrator

FAA's Federal Contract Tower (FCT) Program (the Program) comprises 250 contract towers in 46 States and 4 U.S. Territories and provides services to a wide range of users, including general aviation, commercial, cargo, and military operators. Since its inception 30 years ago, the Program has been successful in providing low-cost air traffic control services at airports that otherwise would not have received these services, increasing the level of safety at these airports for pilots and the surrounding local communities.

Between 1998 and 2003, we conducted four reviews evaluating various aspects of the FCT Program.[1] Overall, we found that the Program successfully provided air traffic services to low-activity airports at lower costs than the Agency could otherwise provide. We also found little difference in safety or the quality of services provided at low activity towers whether they were operated by FAA or by contractors. Finally, we found that users were supportive of the Program and believed the services they received at contract towers were comparable to FAA towers.

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[1] OIG Report Number AV-1998-147, "Federal Contract Tower Program," May 18, 1998; OIG Report Number AV-2000-079, "Contract Towers: Observations on FAA's Study of Expanding the Program," April 12, 2000; OIG Report Number AV-2002-068, "Audit Report on Subcontracting Issues of the Contract Tower Program," December 14, 2001; OIG Report Number AV-2003-057, "Safety, Cost, and Operational Metrics of the Federal Aviation Administration's Visual Flight Rules Towers," September 4, 2003. OIG reports are available on our Web site at http://www.oig.dot.gov.

The House Committee on Appropriations, in its report accompanying the Fiscal Year (FY) 2011 Transportation, Housing and Urban Development, and Related Agencies bill, requested that we provide an update to our previous reviews. Accordingly, our audit objectives were to evaluate the FCT Program's (1) cost-effectiveness and (2) safety benefits and overall user satisfaction. This audit was conducted in accordance with generally accepted Government auditing standards. Exhibit A details our scope and methodology. Exhibit B lists the organizations we visited or contacted.

RESULTS IN BRIEF

Contract towers continue to provide air traffic control services at a lower cost than similar FAA towers. Based on our review of 30 randomly selected contract and 30 FAA towers with a comparable level of operations, a contract tower cost, on average, about $1.5 million less to operate than a similar FAA tower.[2] This difference was mainly due to lower staffing and salary levels at contract towers versus similar FAA towers. However, there are areas where FAA can strengthen financial controls to better oversee the Program. In particular, the program office does not review annual labor hours worked by the contractors to ensure that staffing provisions in the contract are followed. This lack of oversight could lead to non-compliance with contract requirements and possible overpayments to contractors.

Also, contract towers had a significantly lower number and rate of safety incidents[3] compared to similar FAA towers. For example, the 240 contract towers in our review had 197 safety incidents in FY 2010, compared to 362 at 92 similar FAA towers. FAA safety evaluations also found fewer operational deficiencies with contract towers in areas such as improper radio communications by controllers. In addition, users remain strongly supportive of the Program, citing satisfaction with the quality and safety of its services. However, there are opportunities for FAA to improve safety oversight of contract towers. For example, contract towers are not included in voluntary reporting systems for safety incidents, such as the Air Traffic Safety Action Program (ATSAP) that is currently in place at all FAA facilities.[4] Finally, FAA has recently implemented a new risk-based facility oversight system that relies heavily on reported safety data to determine when towers are reviewed. However, this may cause some contract

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[2] Using FY 2010 data, we compared personnel compensation and benefits, travel and transportation, supplies, materials, and insurance costs for a sample of 30 contract and 30 FAA towers with similar air traffic density.

[3] These safety incidents include operational errors, operational deviations, and runway incursions. An operational error occurs when an air traffic controller does not maintain minimum separation between two aircraft or between an aircraft and terrain or obstacles. An operational deviation occurs when a controller allows an aircraft to enter airspace managed by another controller without prior coordination and approval. A runway incursion is any incident involving an unauthorized aircraft, vehicle, or person on a runway.

[4] ATSAP is a voluntary, non-punitive safety reporting program established by the FAA to encourage air traffic facility employees to voluntarily report safety and operational concerns.

towers to be evaluated less frequently in the future, which would be counter to recent legislation that requires regular safety assessments of contract towers.

We are making recommendations to improve FAA's internal controls and oversight of contractual and safety aspects of the FCT Program.

BACKGROUND

In 1982, FAA began the FCT Program as a pilot program to contract air traffic services for five low-activity "level 1" control towers that were closed as a result of the Professional Air Traffic Controllers Organization strike. By 1993, the Program had grown to 27 towers, and in 1994 Congress provided funding for a multi-year program to convert additional FAA low-activity towers to contract operations. The Program was further expanded in 1998 when Congress provided funding for a cost-sharing program, which allows airports that would not normally qualify for the FCT Program access by permitting its sponsors to pay for a portion of the costs to operate the tower, with FAA providing at least 80 percent of the cost.

Today, there are 250 towers in the FCT Program; 228 towers are fully funded by FAA, 16 are part of the cost-share program, and 6 towers are used by the Air National Guard.[5] Three contractors operate the towers in seven geographic areas. The current contracts, which run from February 1, 2010, to September 30, 2014, are worth nearly $600 million. The administrative functions of the Program are overseen by FAA's Contract Tower and Weather Group (CTWG),[6] with safety oversight provided by the Agency's Aviation Safety Organization. FAA is requesting $138 million in FY 2013 to operate the FCT Program, $8 million of which is for the cost-share program.

CONTRACT TOWERS CONTINUE TO PROVIDE COST-EFFECTIVE SERVICES, THOUGH FAA CAN IMPROVE ITS OVERSIGHT OF THE PROGRAM

Contract towers continue to provide cost-effective air traffic services, with the average contract tower costing about $1.5 million less to operate than a comparable FAA tower. This cost difference is primarily due to fewer staff at contract towers who receive lower salaries compared to similar FAA-operated towers. However, FAA can improve oversight of the FCT Program by ensuring annual labor hours worked by the contractors meet contract requirements.

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[5]   The six Air National Guard Towers are included in the FCT Program under a special agreement with the Department of Defense.

[6]   CTWG serves as the technical and programmatic focal point for the Contract Weather Observation (CWO) and FAA Contract Tower (FCT) programs. CTWG establishes standard operating procedures (SOPs) and processes for the CWO and FCT programs to ensure FAA standards, orders, and procedures are achieved in a quality and timely manner.

Operating Costs at Contract Towers Are Significantly Less Than Comparable FAA Towers

Contract towers continue to operate at a lower cost than comparable FAA towers. We selected a statistical sample of 30 contract towers, which we matched with 30 FAA towers with similar air traffic densities.[7] We evaluated the FY 2010 operating costs for each of the contract and FAA towers in our sample to determine the annual cost difference. These costs included air traffic personnel compensation and benefits, travel and transportation, supplies, materials, and insurance. Infrastructure, maintenance, and equipment costs for FAA and contract towers were not included in our analysis because, under terms of the contract, FCT contractors are not responsible for these costs.

Based on our sample, the average cost to operate a contract tower in FY 2010 was about $537,000, compared to $2.025 million to operate an FAA tower, a difference of $1.488 million.[8] The difference in cost is primarily attributable to two factors:

- **Contract towers are staffed at lower levels than comparable FAA towers.** The contract towers in our audit sample had an average of 6 air traffic personnel while the FAA towers had an average of 16 air traffic personnel (see table 1). In FY 2010, staffing levels at the 240 contract towers ranged from 4 to 9 air traffic personnel, while staffing ranges at the 92 FAA towers ranged from 7 to 27 personnel.[9]

- **Contract tower controllers are paid less than FAA controllers.** Contract tower controllers' salaries are based on Department of Labor (DOL) wage rates, which are lower than the salaries paid to FAA controllers. For example, based on current DOL rates, an air traffic controller at a contract tower near Tampa, FL, would receive base pay of about $56,000 per year, whereas an FAA-employed air traffic controller in Sarasota, FL, an area with similar costs of living, would receive base pay ranging from about $63,000 to $85,000 per year, depending on the controller's experience.

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[7] Density is defined as the average number of operations at a tower per hour the facility is open.

[8] FAA's FY 2010 estimated cost to administer the FCT Program ($2.23 million or about $9,000 per FCT) was not included in our cost calculation. See Exhibit E for a summary of our cost difference estimate.

[9] Air traffic personnel are defined as air traffic controllers, supervisors, and management.

Table 1. Cost and Staffing Differences Between 30 Contract Towers and 30 Comparable FAA Towers

	Average Air Traffic Density	Average FY 2010 Cost	Average Number of Air Traffic Personnel
FAA Tower	15.55	$2,025,104	16.23
Contract Tower	15.34	$536,911	6.03
Average Difference	0.21	$1,488,193	10.20

Source: OIG analysis based on FAA data

FAA Can Improve Its Oversight of the Contractual and Operational Aspects of the Program

While contract towers continue to operate at a lower cost than comparable FAA towers, FAA has opportunities to improve its oversight of the contractual and operational aspects of the FCT Program. Our 1998 review of the FCT Program found that contract towers were not staffed in accordance with contractor staffing plans, raising concerns that the Government was being billed for services that were not actually provided. In response to our report, FAA included a provision in subsequent contracts to enhance oversight of contractor performance. This provision requires contractors to submit a staffing plan that includes the number of controllers that will work at the tower and the total annual number of hours those controllers will work, exclusive of vacation, holiday, and sick leave. Once FAA approves the staffing plan, the contractors must comply with the staffing levels and hours of service called for in the plan, and actual hours worked must be within plus or minus 3 percent of the approved plan. If the contractor works less than 97 percent of the hours specified in the contract, the amount paid to the contractor could be reduced for each hour not worked.

However, our current audit found that the effectiveness of this control is limited because FAA does not review the actual annual hours worked by contractors or verify that the hours billed by contractors are accurate. According to a CTWG official, no one in the Agency's contracting office had reviewed the actual annual hours worked by the three contractors to ensure they met contractual requirements. Instead, the program office only reviewed monthly reports provided by the three contractors and accepted those reports. As a result, FAA may be paying for services that have not been provided and missing opportunities to recoup funds due to the lack of a validation process.

In addition, officials from the CTWG office were not aware of staffing practices at some contract towers. According to a CTWG official, none of the contractors had submitted staffing plans for contract towers that included part-time staffing. However, we found two towers during our site visits that used an alternative work schedule allowing two employees or more to voluntarily share the responsibilities

of one full-time position, and receive salary and benefits on a pro-rata basis. The contract does not prohibit part-time employees at contract towers but CTWG officials were unaware of the job-sharing at these two towers until we brought it to their attention.

WHILE CONTRACT TOWERS CONTINUE TO PROVIDE SAFE SERVICES AND ARE SUPPORTED BY USERS, ADDITIONAL OVERSIGHT IS NEEDED

Overall, contract towers had a lower number and rate of safety incidents. FAA facility evaluations also found fewer safety/operational-related issues with contract towers than with comparable FAA towers. In addition, users continue to support the Program and are satisfied with the safety and quality of the services provided by contract towers. However, there are opportunities for FAA to improve safety oversight of contract towers. For example, contract towers do not have voluntary reporting systems for safety incidents that are similar to FAA towers. In addition, FAA's new risk-based oversight system may cause some low-risk towers, such as contract towers, to be evaluated less frequently in the future.

Contract Towers Have a Lower Number of Reported Safety Incidents and Deficiencies Than Comparable FAA Towers

We compared the 240 contract towers and 92 comparable FAA towers[10] and found that in FY 2010 contract towers reported both a lower number and rate of safety incidents than comparable FAA towers (see table 2).

Table 2. Number and Rate of FY 2010 Safety Incidents at Comparable Contract and FAA Air Traffic Control Towers

	Total Number of Safety Incidents			Incident Rate Per One-Million Operations		
Towers	Operational Errors	Operational Deviations	Runway Incursions	Operational Errors	Operational Deviations	Runway Incursions
240 Contract	18	12	167	1.24	0.83	11.55
92 FAA	52	35	275	4.54	3.06	24.01

Source: OIG analysis of FAA data

Contract towers also had a significantly lower number of deficiencies identified by FAA during facility evaluations. FAA conducts these periodic evaluations to determine if air traffic facilities, including contract towers, are in compliance with FAA directives and to identify possible safety, procedural, training, and/or administrative deficiencies. Using the same audit sample that we used for our cost comparison, we reviewed facility evaluations for 30 contract towers conducted

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[10] See Exhibit A for an explanation of how our universe of contract towers and comparable FAA towers were selected.

between May 2006 and September 2010 and 30 comparable FAA towers conducted between January 2007 and September 2010. These evaluations identified a total of 156 deficiencies at the 30 contract towers and 338 deficiencies at the 30 FAA towers. Some of the identified deficiencies at both contract and FAA towers included outdated or incomplete training records, managers inadequately conducting facility quality assurance reviews, controller supplemental training not being completed, and improper position relief briefings and radio communications by controllers.

Users Are Satisfied With the Level and Quality of Service Provided by Contract Towers

As we have reported previously, pilots, flight instructors, airport officials, fixed-based operators, as well as representatives from airport and general aviation organizations, support the FCT Program. Specifically, users at 12 randomly selected contract towers and 7 randomly selected FAA towers were satisfied with the services provided by contract towers and the 3 contractors and believed the services they receive were comparable to similar FAA towers. In several instances, pilots were surprised to learn that towers they frequently interacted with were actually contract towers, and described the services provided by similar FAA and contract towers as "seamless."

National and facility officials from the National Air Traffic Controllers Association (NATCA), who represent controllers at 63 contract towers, similarly support the cost-share portion of the Program. However, they had concerns regarding controller staffing and training at contract towers that they believe could compromise safety. They noted that contract towers have much lower staffing levels than comparable FAA towers, are often single-staffed for portions of the day, and that controller certification training at contract towers can take as little as 30 days, while at an FAA facility it can take from 1 to 5 years.

Despite NATCA's concerns, FAA safety officials, local airport officials, pilots, and other contract tower users generally stated that contract towers operate safely and did not have concerns about staffing practices, including periods of single staffing. In one case, a representative from a general aviation organization stated that she received excellent services from a contract tower in West Virginia, even during a time of day when it was staffed with only one controller. Airport and general aviation representatives also stated that without the FCT Program many small airports would not have the financial resources needed to operate these towers and believed that towers with periods of single-staffing would be safer than having no tower at all.

With regard to concerns over training time, FAA's CTWG approves staffing levels for contract towers and requires contract tower controllers to meet the same

certification requirements as FAA controllers and to be certified by FAA. In addition, most contract tower controllers are former FAA or military controllers who must have a Control Tower Operator license and between 6 months and 2 years experience in order to be hired. Conversely, FAA generally hires controllers for its air traffic facilities with little or no air traffic experience who require more training in order to certify at its facilities.

Accurate Incident Reporting at Contract Towers Is Critical to Maintaining Safety

While contract towers continue to operate in a safe and efficient manner, there are improvements that FAA can make to ensure the Program's continued safety, particularly in safety incident reporting. Contract towers must follow the same process for reporting and documenting safety incidents as FAA facilities. However, according to two FAA studies conducted between 2009 and 2010, contract towers had a lower number of reported runway incursions than comparable FAA towers between FY 2001 and FY 2008, and in FY 2009 contract towers had a lower runway incursion reporting rate than FAA towers.[11] During subsequent FAA facility evaluations of 17 contract towers, the Agency determined that about 30 percent of the contract tower controllers interviewed did not know the current definition of a runway incursion and 40 percent did not know the criteria for classifying a runway incursion. FAA also found that two-thirds of facilities reviewed had not submitted runway safety action plans for the previous 2 years.

In light of these findings, managers from FAA's Runway Safety Program Office met with contractors and emphasized the importance of runway incursion prevention and reporting. Subsequently, a 2010 FAA study found that more recent data showed runway incursions reporting at contract towers had increased sharply. However, contract towers still must rely on controllers to self-report safety incidents, and unlike FAA air traffic control facilities, contract towers are not included in voluntary reporting systems such as ATSAP, which allows controllers to report safety violations without fear of reprisal through legal or disciplinary actions. FAA is taking steps to include contract towers into a voluntary reporting system, but has yet to require contractors to implement a similar system.

Contract Towers May Not Receive the Same Level of Safety Oversight in the Future

FAA will have to determine if its new facility oversight system will sufficiently monitor contract towers. Prior to October 2010, facility safety evaluations, FAA's key mechanism to oversee contract towers, were conducted every 3 years for all FAA and contract towers. In January 2012, FAA transitioned to a risk-based

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[11] "Study of Runway Incursion Reporting at Federal Contract Towers," ATO's Office of Safety, December 2010.

oversight system as its primary method to oversee air traffic facilities. Under the new system, safety incident data entered by air traffic personnel is analyzed to determine if specific safety problems or trends exist at air traffic facilities. Based on this analysis, FAA will then focus its oversight to respond to those trends. However, if data are unavailable due to a lower rate of occurrence, are unreliable, or there are no trends to analyze, some low risk towers, including contract towers, could go years without being evaluated. Should there be lengthy periods between reviews of contract towers under this risk-based system, the system may not meet the intent of new legislation[12] that requires the Secretary to "establish uniform standards and requirements for regular safety assessments" of contract towers.

CONCLUSION

The FCT Program has successfully contributed to FAA's goal of ensuring the safety and cost-effectiveness of the air traffic control system. However, the continued success of the Program will depend on effective follow through by FAA to enhance how it collects and uses safety data on contract towers so that they receive the appropriate level of oversight and to improve controls over the Program's contractual aspects to protect against any potential misuse of funds.

RECOMMENDATIONS

We recommend that FAA:

1. Develop a process to validate invoices and timecards submitted by FCT contractors annually to (a) ensure that hours billed were actually worked and met contract requirements, and (b) recover any overpayments made to the contractors.

2. Modify FCT contracts to incorporate a voluntary reporting system, such as ATSAP, at contract towers to ensure more comprehensive reporting of safety incidents.

3. Implement a policy that will ensure its risk-based facility oversight system allows for regular assessments of contract towers, as prescribed by Congress.

AGENCY COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

We provided FAA with our draft report on September 5, 2012, and received its formal response on October 10, 2012. FAA's response is included in its entirety as an appendix to this report. FAA concurred with all three of our recommendations

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[12] FAA Modernization and Reform Act of 2012, Sec. 147, Public Law 112-95, February 14, 2012.

and proposed appropriate action plans. Based on FAA's response, we believe the Agency met the intent of all three recommendations and we consider them resolved pending completion of the planned actions.

Since we issued our draft report, FAA has taken steps to improve its oversight of the Program, which is cited in the Agency's response. These steps include developing new procedures to ensure contractual staffing requirements are met—such as revising the audit process to validate contract tower controller timecards—and conducting quarterly reviews of vendor's monthly staffing reports for actual hours worked compared with the base-lined contract. FAA has also modified the vendors' contracts to require a voluntary reporting system at contract towers, and is finalizing its new risk-based oversight system that will provide safety oversight of all air traffic facilities, including contract towers. However, FAA's response indicates that the Agency will not implement these changes until the end of this year or the beginning of next year. We believe that implementing these changes is critical to ensure the safety and financial success of the Program. Accordingly, we request that FAA provide us with documentation once the new procedures have been implemented.

ACTIONS REQUIRED

FAA's planned actions for all three recommendations are responsive, and its target action dates for the recommendations are appropriate. However, in accordance with DOT Order 8001.C, we request that FAA provide our office with documentation showing that it has implemented the new oversight procedures by the target action dates indicated in its response.

We appreciate the courtesies and cooperation of FAA representatives during this audit. If you have any questions regarding this report, please contact me at (202) 366-0500, or Robert Romich, Program Director, at (202) 366-6478.

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cc: DOT Audit Liaison, M-1
    FAA Audit Liaison, AAE-100

EXHIBIT A. SCOPE AND METHODOLOGY

We conducted our work from June 2011 through September 2012 in accordance with generally accepted Government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

To determine the cost effectiveness of the FCT Program, we utilized a universe of 240 contract towers that as of February 2011 were under contract with FAA, and excluded 6 towers in the Program that were operated on behalf of the Air National Guard. We also utilized a universe of 92 FAA towers that the CTWG provided us in February 2011 that it considered comparable to contract towers based on ATC Levels and FY 2010 total number of operations. The OIG statistician, using FY 2009 and FY 2010 numbers of operations and hours of service, calculated the average density for each of the towers in the universe. The statistician then selected a probability proportional to size (where size was density) sample of 30 contract towers, which we used to select 30 similar FAA towers by matching the average density of each contract tower to a FAA tower. Then, we reviewed the FCT contract and determined FAA costs compared to contractor costs. We analyzed cost figures obtained from FAA's Office of Budget for each of the 30 contract towers and 30 similar FAA towers. These costs included personnel compensation and benefits, travel and transportation, supplies, materials, and insurance. Infrastructure, maintenance, and tower equipment costs were not included in our analysis. Based on the sample of 30 FAA and 30 contract towers, we calculated the FY 2010 average cost to operate an FAA tower and a contract tower and the difference in FY 2010 average cost between the two groups.

To determine air traffic staffing levels at FAA and contract towers, we analyzed staffing data obtained from FAA's Office of Financial Services and FAA's Contract Tower and Weather Group for 92 FAA towers and 240 contract towers. We included air traffic controllers, supervisors, and air traffic management in our calculation of staffing levels.

To evaluate management controls established by FAA to administer the FCT Program, we reviewed contractual agreements between FAA and FCT contractors and FAA Orders on policies and procedures for administering the Program. We held interviews and obtained information from FAA officials in the Air Traffic Organization (ATO), Office of Financial Services, and the Office of Aviation Policy and Plans. We also interviewed officials from the three FCT contractors.

To evaluate the safety of operations between FAA and contract towers, we reviewed incident data for each of the 240 contract towers and 92 FAA towers for

FY 2010 provided by ATO's Office of Safety (ATO-S). We then calculated the rate of operational errors/deviations and runway incursions per million operations for 240 contract towers and 92 FAA towers. In addition, we reviewed facility safety evaluations conducted by FAA between May 12, 2006 and September 29, 2010 for 30 contract towers and between January 24, 2007 and September 29, 2010 for 30 FAA towers from FAA's Facility Safety Assessment System (FSAS). We identified deficiencies and determined whether our sample of 30 FAA and 30 contract towers were in compliance with FAA directives and procedures. We also interviewed officials from FAA's ATO, FCT contractors, and personnel from 7 FAA and 12 contract towers. We reviewed FAA's 2010 Study of Runway Incursion Reporting at Federal Contract Towers and analyzed FAA Orders concerning Quality Assurance and Quality Control. Lastly, we reviewed Congressional language contained in FAA's Modernization and Reform Act of 2012.

To determine the quality of service provided by contract towers and user satisfaction, we visited 7 FAA towers and 12 contract towers which were selected using a stratified probability proportional to size with replacement sample design. At these facilities we met with Air Traffic Managers, union officials, pilots, fixed base operators, airport directors. We also met with representatives from airport and general aviation organizations and NATCA.

Exhibit A. Scope and Methodology

EXHIBIT B. ORGANIZATIONS VISITED OR CONTACTED

FAA Headquarters, Washington, DC

Air Traffic Organization

- Contract Tower and Weather Group (CTWG)
- Mission Support
- Strategic Planning and Performance Group
- Office of Safety

Office of Financial Services

- ATO Finance
- Office of Budget
- Office of Acquisition and Business

Policy, International Affairs and Environment

- Office of Aviation Policy and Plans

FAA Field Locations

- Office of Safety, Quality Assurance Group and Quality Control Group, Fort Worth, Texas

FAA Air Traffic Control Towers

- Addison Tower, Addison, Texas
- Fort Lauderdale Executive Tower, Fort Lauderdale, Florida
- Hillsboro Tower, Hillsboro, Oregon
- Meacham Tower, Fort Worth, Texas
- Palomar Tower, Carlsbad, California
- Santa Monica Tower, Santa Monica, California
- Vero Beach Tower, Vero Beach, Florida

Federal Contract Towers

- Albert Whitted Tower, St. Petersburg, Florida
- Danbury Tower, Danbury, Connecticut
- Gainesville Tower, Gainesville, Florida
- Georgetown Tower, Georgetown, Texas
- Goodyear Tower, Phoenix, Arizona
- Jefferson Tower, Jefferson City, Missouri
- Joplin Tower, Webb City, Missouri
- Oxford Tower, Oxford, Connecticut
- Ryan Field Tower, Tucson, Arizona
- Salem-McNary Field Tower, Salem, Oregon
- Southwest Oregon Regional North Bend Tower, North Bend, Oregon
- Sugar Land Tower, Sugar Land, Texas

FCT Program Contractors

- Midwest Air Traffic Control Service, Inc.
- Robinson Aviation (RVA), Inc.
- Serco, Inc.

Industry Groups

- National Air Traffic Controllers Association (NATCA)
- Aircraft Owners and Pilots Association (AOPA)
- American Association of Airport Executives (AAAE)
- National Business Aviation Association (NBAA)

Exhibit B. Organizations Visited or Contacted

EXHIBIT C. LIST OF CONTRACT TOWERS (AS OF MAY 2012)

State	Airport Name	Tower ID	State	Airport Name	Tower ID
AK	Bethel	BET	CT	Tweed-New Haven	HVN
AK	Kenai	ENA	CT	Waterbury	OXC
AK	King Salmon	AKN	FL	Albert Whitted	SPG
AK	Kodiak	ADQ	FL	Boca Raton	BCT
AL	Brookley	BFM	FL	Cecil Field	VQQ
AL	Dothan	DHN	FL	Charlotte County Airport	PGD
AL	Tuscaloosa Municipal	TCL	FL	Flagler County Airport	XFL
AR	Fayetteville	FYV	FL	Gainesville	GNV
AR	Northwest Arkansas Regional	XNA	FL	Hollywood/North Perry	HWO
AR	Rogers Municipal-Carter Fld (CS)	ROG	FL	Jacksonville/Craig	CRG
AR	Springdale Municipal (CS)	ASG	FL	Key West	EYW
AR	Texarkana Muni/Webb Fld	TXK	FL	Kissimmee Municipal	ISM
AZ	Chandler	CHD	FL	Lakeland Municipal	LAL
AZ	Flagstaff Pulliam	FLG	FL	Leesburg Regional	LEE
AZ	Glendale	GEU	FL	Melbourne	MLB
AZ	Goodyear	GYR	FL	Naples	APF
AZ	Laughlin International	IFP	FL	New Smyrna Beach Municipal Arpt	EVB
AZ	Ryan Field	RYN	FL	Ocala Airport	OCF
AZ	Williams Gateway	IWA	FL	Opa Locka	OPF
CA	Castle	MER	FL	Ormond Beach Municipal	OMN
CA	Chico Municipal	CIC	FL	Page Field	FMY
CA	Fullerton	FUL	FL	Panama City/Bay County	ECP
CA	Hawthorne	HHR	FL	Pompano Beach	PMP
CA	Mather	MHR	FL	St Augustine	SGJ
CA	Modesto	MOD	FL	Stuart/Whitham	SUA
CA	Oxnard	OXR	FL	Titusville/Cocoa	TIX
CA	Palmdale	PMD	GA	Anthens Municipal	AHN
CA	Ramona	RNM	GA	Fulton County	FTY
CA	Redding	RDD	GA	Gwinnett County	LZU
CA	Riverside	RAL	GA	Macon	MCN
CA	Sacramento Executive	SAC	GA	Mc Collum	RYY
CA	Salinas Municipal	SNS	GA	SW Georgia/Albany-Dougherty	ABY
CA	San Carlos	SQL	GU	Agana, Guam	GUM
CA	San Diego Brown Field	SDM	HI	Kalaeloa (John Rogers Field) (ANG)	JRF
CA	San Luis Obispo	SBP	HI	Keahole-Kona	KOA
CA	Santa Maria	SMX	HI	Lihue	LIH
CA	Victorville	VCV	HI	Molokai	MKK
CA	Whiteman	WHP	IA	Dubuque	DBQ
CA	William J. Fox/Lancaster	WJF	ID	Friedman Memorial/Hailey	SUN
CO	Eagle County	EGE	ID	Idaho Falls	IDA
CO	Front Range	FTG	ID	Lewiston-Nez Perce County	LWS
CO	Grand Junction	GJT	ID	Pocatello Municipal	PIH
CT	Bridgeport	BDR	IL	Bloomington/Normal	BMI
CT	Danbury Municipal	DXR	IL	Decatur	DEC
CT	Groton- New London	GON	IL	So. Illinois/Carbondale	MDH
CT	Hartford-Brainard	HFD	IL	St. Louis Regional	ALN

Exhibit C. List of Contract Towers (as of May 2012)

State	Airport Name	Tower ID	State	Airport Name	Tower ID
IL	Waukegan Regional	UGN	MS	Hawkins Field	HKS
IL	Williamson County (CS)	MWA	MS	Meridian/Key Field (ANG)	MEI
IN	Monroe County/ Bloomington (CS)	BMG	MS	Olive Branch	OLV
IN	Columbus Municipal	BAK	MS	Stennis	HSA
IN	Gary Regional	GYY	MS	Tupelo Regional	TUP
IN	Muncie/Delaware County (CS)	MIE	MT	Gallatin Field/Bozeman	BZN
KS	Forbes Field	FOE	MT	Kalispell/Glacier Park	GPI
KS	Garden City Regional Airport (CS)	GCK	MT	Missoula	MSO
KS	Hutchinson Municipal	HUT	NC	Concord	JQF
KS	Johnson County Executive	OJC	NC	Hickory	HKY
KS	Manhattan Regional	MHK	NC	Kinston	ISO
KS	New Century	IXD	NC	New Bern	EWN
KS	Philip Billard Municipal	TOP	NC	Smith Reynolds (Winston Salem)	INT
KS	Salina Municipal	SLN	ND	Minot	MOT
KY	Barkley Regional	PAH	NE	Central Nebraska/Grd Island (CS)	GRI
KY	Owensboro/Daviess County	OWB	NH	Boire Field/Nashua	ASH
LA	Acadiana Regional	ARA	NH	Lebanon Municipal	LEB
LA	Alexandria International (ANG)	AEX	NJ	Trenton	TTN
LA	Chennault	CWF	NM	Double Eagle II	AEG
LA	Houma Terreborne	HUM	NM	Farmington Municipal	FMN
LA	Shreveport-DT	DTN	NM	Lea County/Hobbs (CS)	HOB
MA	Barnes Municipal	BAF	NM	Santa Fe County Municipal	SAF
MA	Beverly	BVY	NV	Henderson	HND
MA	Hyannis	HYA	NY	Francis F. Gabreski	FOK
MA	Lawrence	LWM	NY	Niagara Falls	IAG
MA	Martha's Vineyard	MVY	NY	Rome-Griffiss	RME
MA	New Bedford	EWB	NY	Stewart	SWF
MA	Norwood	OWD	NY	Tompkins County	ITH
MA	Worcester	ORH	OH	Burke Lakefront	BKL
MD	Easton	ESN	OH	Cincinnati Muni/Lunken	LUK
MD	Frederick	FDK	OH	Columbus Airport (Bolton Field)	TZR
MD	Martin State	MTN	OH	Cuyahoga County	CGF
MD	Salisbury-Wicomico County	SBY	OH	Ohio State University	OSU
MD	Washington Co. Reg'l/ Hagerstown	HGR	OK	Ardmore Municipal (CS)	ADM
MI	Battle Creek	BTL	OK	Enid Woodring Muni	WDG
MI	Detroit City	DET	OK	Lawton Municipal	LAW
MI	Jackson (CS)	JXN	OK	Stillwater	SWO
MI	Sawyer Gwinn	SAW	OK	Univ of Oklahoma/Westheimer	OUN
MN	Anoka	ANE	OK	Wiley Post	PWA
MN	St. Cloud Regional	STC	OR	Klamath Falls (ANG)	LMT
MO	Branson Airport	BBG	OR	McNary Field	SLE
MO	Columbia	COU	OR	Medford	MFR
MO	Jefferson City Memorial (CS)	JEF	OR	Pendleton Municipal	PDT
MO	Joplin Regional (CS)	JLN	OR	Redmond	RDM
MO	Rosecrans Mem'l/St. Joseph (ANG)	STJ	OR	Southwest Oregon Regional	OTH
MP	Saipan International	GSN	OR	Troutdale	TTD
MS	Golden Triangle Regional Airport	GTR	PA	Arnold Palmer Regional	LBE
MS	Greenville Municipal	GLH	PA	Capital City	CXY

Exhibit C. List of Contract Towers (as of May 2012)

State	Airport Name	Tower ID	State	Airport Name	Tower ID
PA	Lancaster	LNS	TX	Sugarland	SGR
PA	University Park	UNV	TX	Tyler	TYR
PA	Williamsport/Lycoming Co. (CS)	IPT	TX	Victoria	VCT
PR	Isla Grande	SIG	TX	Waco	CNW
PR	Rafael Hernandez (Aquadilla)	BQN	UT	Ogden-Hinckley Municipal	OGD
SC	Donaldson Center	GYH	UT	Provo Municipal	PVU
SC	Grand Strand/Myrtle Beach	CRE	VA	Charlottesville-Albemarle	CHO
SC	Greenville Downtown	GMU	VA	Lynchburg	LYH
SC	Hilton Head Airport	HXD	VI	Henry E. Rohlsen Airport	STX
SD	Rapid City Regional	RAP	WA	Bellingham Intl	BLI
TN	McKeller-Sipes	MKL	WA	Felts Field	SFF
TN	Millington	NQA	WA	Olympia	OLM
TN	Smyrna	MQY	WA	Renton	RNT
TX	Arlington Municipal	GKY	WA	Tacoma Narrows	TIW
TX	Brownsville Intl	BRO	WA	Walla Walla Regional (CS)	ALW
TX	Denton Municipal	DTO	WA	Yakima	YKM
TX	Easterwood	CLL	WI	Appleton	ATW
TX	Fort Worth-Spinks (CS)	FWS	WI	Central Wisconsin	CWA
TX	Georgetown	GTU	WI	Chippewa Valley (Eau Claire)	EAU
TX	Grand Prairie (CS)	GPM	WI	Kenosha Muni	ENW
TX	Laredo Int'l	LRD	WI	La Crosse	LSE
TX	Lonestar Executive Airport	CXO	WI	Rock County	JVL
TX	McAllen	MFE	WI	Timmerman	MWC
TX	McKinney Municipal	TKI	WI	Waukesha County	UES
TX	New Braunfels Municipal	BAZ	WI	Wittman Regional	OSH
TX	Redbird	RBD	WV	Greenbrier Valley	LWB
TX	Rio Grand Valley (Harlingen)	HRL	WV	Morgantown	MGW
TX	San Angelo/Mathis Field	SJT	WV	Parkersburg/Wood County	PKB
TX	San Marcos	HYI	WV	Wheeling Ohio County	HLG
TX	(Galveston) Scholes Int'l	GLS	WY	Cheyenne (ANG)	CYS
TX	Stinson Municipal	SSF	WY	Jackson Hole	JAC

ANG: Air National Guard Tower; CS: Cost-Share Tower
Source: FAA

Exhibit C. List of Contract Towers (as of May 2012)

EXHIBIT D. LIST OF 92 COMPARABLE FAA TOWERS

State	Tower Name	Tower ID	State	Tower Name	Tower ID
AK	Juneau Tower	JNU	IL	Aurora Tower	ARR
AK	Merrill Tower	MRI	IL	Chicago Executive Tower	PWK
AZ	Falcon Tower	FFZ	IL	Downtown Tower	CPS
AZ	Grand Canyon Tower	GCN	IL	Dupage Tower	DPA
AZ	Prescott Tower	PRC	IN	Lafayette Tower	LAF
AZ	Scottsdale Tower	SDL	KY	Bowman Tower	LOU
CA	Brackett Tower	POC	LA	Lakefront Tower	NEW
CA	Burbank Tower	BUR	MA	Hanscom Tower	BED
CA	Camarillo Tower	CMA	MA	Nantucket Tower	ACK
CA	Chino Tower	CNO	MD	Andrews Tower	ADW
CA	Concord Tower	CCR	MI	Ann Arbor Tower	ARB
CA	El Monte Tower	EMT	MI	Pontiac Tower	PTK
CA	Gillespie Tower	SEE	MI	Traverse City Tower	TVC
CA	Hayward Tower	HWD	MI	Willow Run Tower	YIP
CA	Livermore Tower	LVK	MN	Crystal Tower	MIC
CA	Monterey Tower	MRY	MN	Flying Cloud Tower	FCM
CA	Montgomery Tower	MYF	MN	St Paul Tower	STP
CA	Napa Tower	APC	MO	Downtown Tower	MKC
CA	Ontario Tower	ONT	MO	Helena Tower	HLN
CA	Palm Springs Tower	PSP	MO	Spirit Tower	SUS
CA	Palo Alto Tower	PAO	ND	Grand Forks Tower	GFK
CA	Palomar Tower	CRQ	NE	Eppley Tower	OMA
CA	Reid-Hillview Tower	RHV	NE	Lincoln Tower	LNK
CA	Sacramento Tower	SMF	NH	Manchester Tower	MHT
CA	San Diego Tower	SAN	NJ	Caldwell Tower	CDW
CA	San Jose Tower	SJC	NJ	Morristown Tower	MMU
CA	Santa Monica Tower	SMO	NJ	Teterboro Tower	TEB
CA	Sonoma Tower	STS	NV	North Las Vegas Tower	VGT
CA	Stockton Tower	SCK	NY	Farmingdale Tower	FRG
CA	Torrance Tower	TOA	NY	Islip Tower	ISP
CO	Broomfield Tower	BJC	NY	Poughkeepsie Tower	POU
CO	Pueblo Tower	PUB	NY	Westchester Tower	HPN
CT	Bradley Tower	BDL	OR	Hillsboro Tower	HIO
DE	Wilmington Tower	ILG	PA	Allegheny Tower	AGC
FL	Fort Lauderdale Executive Tower	FXE	PA	Northeast Philadelphia Tower	PNE
FL	Orlando Executive Tower	ORL	PR	San Juan Tower	SJU
FL	Pensacola Tower	PNS	TX	Addison Tower	ADS
FL	Sarasota Tower	SRQ	TX	Alliance Tower	AFW
FL	St Lucie Tower	FPR	TX	Beaumont Tower	BPT
FL	St Petersburg Tower	PIE	TX	Hooks Tower	DWH
FL	Tamiami Tower	TMB	TX	Meacham Tower	FTW
FL	Vero Beach Tower	VRB	VA	Manassas Tower	HEF
GA	Columbus Tower	CSG	VA	Patrick Henry Tower	PHF
GA	DeKalb - Peachtree Tower	PDK	VA	Richmond Tower	RIC
HI	Maui Tower	OGG	VI	St Thomas Tower	STT
ID	Twin Falls Tower	TWF	WA	Paine Tower	PAE

Source: This list was provided by FAA for comparison purposes only. Currently FAA has no plans to expand the Contract Tower Program to additional FAA-operated towers.

Exhibit D. List of 92 Comparable FAA Towers

EXHIBIT E. FY 2010 COST COMPARISON FOR FAA AND CONTRACT TOWERS

FAA Towers					Contract Towers				
Tower ID	Name	State	Avg. Density	FY 2010 Cost	Tower ID	Name	State	Avg. Density	FY 2010 Cost
TMB	Tamiami Tower	FL	37.3	$2,088,183.69	CHD	Chandler Tower	AZ	36.6	$770,060.00
PAO	Palo Alto Tower	CA	33.1	$1,910,114.51	OMN	Ormond Beach Tower	FL	33.4	$526,587.00
BED	Hanscom Tower	MA	32.4	$2,631,106.52	GYR	Goodyear Tower	AZ	32.2	$650,900.00
MMU	Morristown Tower	NJ	25.6	$2,254,948.21	TIX	Space Coast Tower	FL	25.6	$603,320.00
SJU	San Juan Tower	PR	22.1	$2,347,142.97	SDM	Brown Field Tower	CA	22.0	$540,668.00
GCN	Grand Canyon Tower	AZ	20.7	$1,201,893.82	CRG	Craig Tower	FL	20.5	$639,004.00
ADS	Addison Tower	TX	20.2	$2,265,801.54	GEU	Glendale Tower	AZ	20.5	$557,436.00
PHF	Patrick Henry Tower	VA	19.8	$2,622,386.80	HUM	Houma Tower	LA	19.8	$428,950.00
TEB	Teterboro Tower	NJ	17.5	$3,592,653.65	RNT	Renton Tower	WA	17.7	$497,428.00
SRQ	Sarasota Tower	FL	17.3	$2,004,577.80	APF	Naples Tower	FL	17.5	$730,984.00
CCR	Concord Tower	CA	16.1	$1,718.870.90	TKI	McKinney Tower	TX	16.4	$548,767.00
CDW	Caldwell Tower	NJ	16.0	$1,844,081.56	RBD	Executive Tower	TX	16.2	$591,452.00
SUS	Spirit Tower	MO	15.4	$2,213,505.89	FUL	Fullerton Tower	CA	15.0	$517,224.00
NEW	Lakefront Tower	LA	14.5	$1,319,099.44	FTY	Fulton County Tower	GA	14.5	$654,568.00
PNE	NE Philadelphia Tower	PA	13.4	$1,982,834.26	LEE	Leesburg Tower	FL	13.4	$433,445.00
ONT	Ontario Tower	CA	13.2	$3,283,849.59	MER	Castle Tower	CA	13.3	$504,864.00
OMA	Eppley Tower	NE	12.9	$2,497,667.50	HFD	Hartford Tower	CT	13.1	$641,336.00
MRY	Monterey Tower	CA	12.4	$1,693,640.43	TTD	Troutdale Tower	OR	12.5	$489,708.00
ILG	Wilmington Tower	DE	12.3	$2,087,122.71	EWB	New Bedford Tower	MA	12.2	$545,924.00
SCK	Stockton Tower	CA	11.6	$1,457.939.06	GMU	Greenville Tower	SC	11.5	$510,062.00
DPA	DuPage Tower	IL	10.8	$2,003,308.79	HHR	Hawthorne Tower	CA	10.8	$514,884.00
LNK	Lincoln Tower	NE	9.7	$2,237,513.66	MVY	Martha's Vineyard Tower	MA	9.8	$530,100.00
MKC	Downtown Tower	MO	9.6	$1,886,787.34	SWF	Stewart Tower	NY	8.8	$665,812.00
AGC	Allegheny Tower	PA	8.7	$1,870,950.34	ALN	Regional Tower	IL	8.7	$432,256.00
MHT	Manchester Tower	NH	8.5	$2,067,532.09	DEC	Decatur Tower	IL	8.2	$463,828.00
CSG	Columbus Tower	GA	8.1	$761,260.18	HRL	Harlingen Tower	TX	7.6	$546,735.00
YIP	Willow Run Tower	MI	8.0	$2,186,279.07	FLG	Flagstaff Tower	AZ	7.4	$466,112.00
HLN	Helena Tower	MT	7.6	$1,774,748.38	IFP	Laughlin Tower	AZ	5.9	$378,188.00
TWF	Twin Falls Tower	ID	6.5	$1,140,154.73	TXK	Texarkana Tower	AR	5.1	$397,385.00
BPT	Beaumont Tower	TX	5.1	$1,807,169.72	ADM	Ardmore Tower	OK	4.3	$329,346.00
Total FY 2010 Costs For 30 Selected FAA Towers				$60,753,125.15	Total FY 2010 Costs For 30 Selected Contract Towers				$16,107,333.00
Average FY 2010 Cost Per Selected FAA Tower				$2,025,104.17	Average FY 2010 Cost Per Selected Contract Tower				$536,911.00
Difference in FY 2010 Average Cost Per Tower = $1,488,193.07									

Source: OIG based on FAA Data

Exhibit E. FY 2010 Cost Comparison for FAA and Contract Towers

EXHIBIT F. END OF FY 2010 STAFFING LEVELS FOR SELECT FAA AND CONTRACT TOWERS*

FAA Towers					Contract Towers				
Tower ID	Name	State	Avg. Density	Number of ATC Personnel	Tower ID	Name	State	Avg. Density	Number of ATC Personnel
TMB	Tamiami Tower	FL	37.3	16	CHD	Chandler Tower	AZ	36.6	8
PAO	Palo Alto Tower	CA	33.1	14	OMN	Ormond Beach Tower	FL	33.4	6
BED	Hanscom Tower	MA	32.4	17	GYR	Goodyear Tower	AZ	32.2	6
MMU	Morristown Tower	NJ	25.6	15	TIX	Space Coast Tower	FL	25.6	8
SJU	San Juan Tower	PR	22.1	19	SDM	Brown Field Tower	CA	22.0	5
GCN	Grand Canyon Tower	AZ	20.7	11	CRG	Craig Tower	FL	20.5	7
ADS	Addison Tower	TX	20.2	18	GEU	Glendale Tower	AZ	20.5	6
PHF	Patrick Henry Tower	VA	19.8	20	HUM	Houma Tower	LA	19.8	5
TEB	Teterboro Tower	NJ	17.5	25	RNT	Renton Tower	WA	17.7	4
SRQ	Sarasota Tower	FL	17.3	17	APF	Naples Tower	FL	17.5	8
CCR	Concord Tower	CA	16.1	13	TKI	McKinney Tower	TX	16.4	6
CDW	Caldwell Tower	NJ	16.0	15	RBD	Executive Tower	TX	16.2	8
SUS	Spirit of St. Louis Tower	MO	15.4	18	FUL	Fullerton Tower	CA	15.0	5
NEW	Lakefront Tower	LA	14.5	13	FTY	Fulton County Tower	GA	14.5	10
PNE	NE Philadelphia Tower	PA	13.4	15	LEE	Leesburg Tower	FL	13.4	6
ONT	Ontario Tower	CA	13.2	27	MER	Castle Tower	CA	13.3	5
OMA	Eppley Tower	NE	12.9	19	HFD	Hartford Tower	CT	13.1	7
MRY	Monterey Tower	CA	12.4	12	TTD	Troutdale Tower	OR	12.5	5
ILG	Wilmington Tower	DE	12.3	16	EWB	New Bedford Tower	MA	12.2	6
SCK	Stockton Tower	CA	11.6	12	GMU	Greenville Tower	SC	11.5	6
DPA	DuPage Tower	IL	10.8	17	HHR	Hawthorne Tower	CA	10.8	5
LNK	Lincoln Tower	NE	9.7	18	MVY	Martha's Vineyard Tower	MA	9.8	6
MKC	Downtown Tower	MO	9.6	16	SWF	Stewart Tower	NY	8.8	9
AGC	Allegheny Tower	PA	8.7	17	ALN	Regional Tower	IL	8.7	5
MHT	Manchester Tower	NH	8.5	19	DEC	Decatur Tower	IL	8.2	5
CSG	Columbus Tower	GA	8.1	7	HRL	Harlingen Tower	TX	7.6	6
YIP	Willow Run Tower	MI	8.0	19	FLG	Flagstaff Tower	AZ	7.4	5
HLN	Helena Tower	MT	7.6	13	IFP	Laughlin Tower	AZ	5.9	3
TWF	Twin Falls Tower	ID	6.5	13	TXK	Texarkana Tower	AR	5.1	5
BPT	Beaumont Tower	TX	5.1	16	ADM	Ardmore Tower	OK	4.3	5
Average Number of ATC Personnel at 30 Selected FAA Towers				16.23	Average Number of ATC Personnel at 30 Selected Contract Towers				6.03

∗ ATC Personnel includes air traffic controllers, supervisors, and management.
Source: FAA

Exhibit F. End of FY 2010 Staffing Levels for Select FAA and Contract Towers

EXHIBIT G. MAJOR CONTRIBUTORS TO THIS REPORT

Name	Title
Robert Romich	Program Director
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Federal Aviation Administration

Memorandum

Date: October 10, 2012

To: Jeffrey B. Guzzetti, Director, Assistant Inspector General for Aviation and Special Program Audits

From: H. Clayton Foushee, Director, Office of Audit and Evaluation, AAE-1
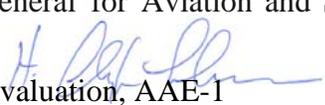
Subject: Contract Tower Program Audit

The Federal Aviation Administration (FAA) Contract Tower Program has provided safe, cost effective air traffic control services at low activity airports for over 30 years. The program has provided an increased level of safety at many airports that otherwise would not have received these services. The Department of Transportation (DOT), Office of Inspector General (OIG) has conducted several audits of various aspects of the program. Overall, they have found that contract towers provide services and outcomes comparable to those provided at FAA-staffed towers. This draft report continues to validate the previous OIG report findings of cost effectiveness, safety, and overall user satisfaction with the Federal Contract Tower (FCT) program. The FAA is pleased the Contract Tower Program is often referred to as one of the most efficient government programs and a model for government and industry partnerships and will continue to provide the programmatic oversight necessary to ensure the program's safety efficacy and cost effectiveness.

RECOMMENDATIONS AND RESPONSES

Recommendation 1: Develop a process to validate invoices and timecards submitted by FCT contractors annually to (a) ensure that hours billed are actually worked and met contract requirements, and (b) recover any overpayments made to the contractor.

FAA Response 1(a): Concur. The current contract language requires the vendor to include and submit invoices that reflect the hours worked and paid. The contract allows for a lapse of no more than 60 calendar days between serviced performed and the submission of an invoice.

The FCT Program Office utilizes a monthly tracking sheet, which consists of cost breakdown by each control tower. Upon receipt of the invoices, the FCT Program Office validates the air traffic controller costs and checks for discrepancies against the monthly tracking sheet. The FCT Program Office then compares the actual hours worked with the hours that were approved on the base-lined contract. The Contracting Officer (CO) will notify the vendor of any discrepancies, and identify adjustments needed in a resubmitted invoice.

The FCT Program Office will improve upon this process by coordinating with the CO to ensure that the vendors are in compliance with the contract requirements. Currently, the vendors submit invoices and actual hours worked in separate reports. The CO will notify the vendors that they must submit actual hours worked in conjunction with the invoices effective October 2012.

The FCT Program Office will further strengthen its internal controls by developing a timecard audit process to validate the FCT controller's timecards. The timecard audit process will entail conducting annual on-site inspections. The vendor will be required to provide a selected number of air traffic controllers' timecards. The FCT Program Office will validate the timecards against the actual hours billed on the vendors' invoices. The CO will notify the vendor of any discrepancies. The timecard audit process will be implemented by January 1, 2013.

FAA Response 1 (b): Concur. The contract currently has language for the FAA to recover overpayments made to contractors. The CO will notify the vendor if the performance levels are not within the performance range of 97 to 103 percent. If the performance level is below 97 percent, overpayment will be recovered.

The FCT Program Office will improve upon this process by conducting quarterly reviews of the vendors' monthly staffing reports for actual hours worked. The staffing reports are then compared to the hours that were approved on the base-lined contract. The reports are used to calculate the performance percentage. The quarterly review allows the FCT Program Office to proactively detect and notify the vendor of low performance levels that could result in the recovery of overpayment at the end of the year. The quarterly verification of hours will be implemented by January 1, 2013.

Recommendation 2: Modify FCT contracts to incorporate a voluntary reporting system, such as ATSAP, at contract towers to ensure more comprehensive reporting of safety incidents.

FAA Response: Concur. The FAA modified all seven FCT contracts in September of 2011. This requires each vendor to implement a voluntary reporting program. The requirements identified in the contract mod are currently being implemented by the vendors. The FCT Program Office and vendors expect the contractual requirements to be fully implemented by December 31, 2012.

Recommendation 3: Implement a policy that will ensure its risk-based facility oversight system allows for regular assessments of contract towers, as prescribed by Congress.

FAA Response: Concur. On January 30, 2012, the Air Traffic Organization (ATO) issued safety orders FAA JO 7210.632, Air Traffic Organization Occurrence Reporting, FAA JO 7210.633, Air Traffic Organization Quality Assurance Program, and FAA JO 7210.634, Air Traffic Organization (ATO) Quality Control. These orders provide enhanced processes for collecting safety-related data, analyzing/identifying suspected risk trends, and assessing the effectiveness of risk mitigations. All FAA facilities and FCTs are required to adhere to all requirements contained in these orders. In accordance with these orders and the requirement to conduct safety assessments, ATO Safety and Technical Training (AJI) will establish and implement an Audits and Assessments Program. The AJI Audits and Assessments Program will

Appendix. Agency Comments

consist of standardized processes and procedures that will be used to conduct ATO assessments. These standards, procedures, and checklists are scheduled for completion by December 1, 2012. AJI will determine when to conduct these audits or assessments based on data analyses of Mandatory Occurrence Reports, Electronic Occurrence Reports, and Voluntary Safety Reports that identify potential risk within specific Facility, District, Service Area, or National Airspace System wide. The AJI Audits and Assessments Program may be conducted through various methods that may include: a review of available data from the Comprehensive Electronic Data Analysis and Reporting tool, quality control and quality assurance data, Risk Analysis Event analyses, information from Air Traffic Safety Action Program, direct observations, interviews with personnel, developing a custom checklist, and other means as appropriate.

Within FAA JO 7210.634, there is a requirement that Field Assessments, referred to as Compliance Verifications (CV), be conducted. CVs are a means of assessing Air Traffic Facilities performance and identifying areas for improvement. There are two types of CVs that can be conducted, Internal Compliance Verification (ICV) and External Compliance Verification (ECV). ICVs are planned assessments accomplished through the use of a formal checklist and random sampling methods such as, but not limited to, direct operational observation, discussions with Service Delivery Point personnel, review of voice or radar data, equipment parameters, certification parameters, and examination of other documentation. ECVs are assessments of facilities that are conducted on an as needed basis as determined by the service unit, director of operations, and/or the Quality Control Group (with the concurrence of the director of operations). Determinations to conduct ECVs will be based upon data analyses of Mandatory Occurrence Reports, Electronic Occurrence Reports, and Voluntary Safety Reports which identifies potential risk within a specific facility. ECVs may be conducted through various methods that may include: a review of available data; direct observation; interviews with personnel; developing a custom checklist; and other means, as appropriate. All FAA and FCTs must conduct a regularly scheduled ICV each Fiscal Year and report their findings. Additionally, to support oversight efforts, all radar, voice, and other supporting data used to conduct these assessments must be retained for 12 months following the date of the review.

Information related to the CV process (checklists, reports, facility information, tracking information, mitigation plans, etc.) are stored in the Compliance Verification Tool (CVT), a national database developed by AJI. The data in the CVT database supports the analysis of system trends, the identification of suspected risk trends, and the development of requirements for safety assessments.

The Audits and Assessment Group will begin their assessments once the standards, procedures, and checklists are finalized in December 2012. The group will conduct a planned number of assessments each year that will be determined by data-driven needs and available resources. They will use the established assessment process and requirements checklists (developed based on suspected risk trends and other data stored in the CVT) to assess compliance, facility performance, and the effectiveness of operations in accordance with the ATO safety orders.

Appendix. Agency Comments