
Office of Inspector General

Audit Report

FAA HAS NOT SUFFICIENTLY ADDRESSED KEY WEAKNESSES RELATED TO ITS ATCOTS CONTRACT

Federal Aviation Administration

Report Number: ZA-2016-010

Date Issued: December 10, 2015





Memorandum

U.S. Department of
Transportation

Office of the Secretary
of Transportation
Office of Inspector General

Subject: **INFORMATION**: FAA Has Not Sufficiently
Addressed Key Weaknesses Related to Its
ATCOTS Contract
Federal Aviation Administration
Report Number ZA-2016-010

Date: December 10, 2015

From: Mary Kay Langan-Feirson 
Assistant Inspector General
for Acquisition and Procurement Audits

Reply to
Attn. of: JA-60

To: Federal Aviation Administrator

The Federal Aviation Administration (FAA) plans to hire more than 11,000 air traffic controllers through fiscal year 2021 to replace the large number of controllers eligible to retire. To help train the influx of new controllers, in 2008, FAA awarded the \$859 million Air Traffic Control Optimum Training Solution (ATCOTS) contract to Raytheon, intended to provide up to 10 years of training support.

Since 2010, we have identified numerous problems regarding FAA's oversight of the ATCOTS contract, such as poor contract management practices, ineffective performance measures, and missed training goals. In December 2013, we made 10 recommendations for improving FAA's oversight of the ATCOTS contract.¹ The Explanatory Statement accompanying the Consolidated and Further Continuing Appropriations Act of 2015 directed our office to submit an update to that report.² Accordingly, our audit objective was to assess FAA's progress on addressing the recommendations from our December 2013 report.

We conducted this audit in accordance with generally accepted Government auditing standards. To complete our assessment, we met with officials from FAA and the National Air Traffic Controllers Association (NATCA) to discuss the status of FAA actions taken since we issued our ATCOTS report in December 2013. We collected and reviewed information from FAA on its implementation of

¹ *FAA Needs To Improve ATCOTS Contract Management To Achieve Its Air Traffic Controller Training Goals* (OIG Report Number ZA-2014-018), Dec. 18, 2013. OIG reports are available on our Web site: www.oig.dot.gov.

² Pub. L. No. 113-235, December 16, 2014.

key contract administration, management, and oversight controls. We also reviewed FAA's standard operating procedures and user guide for maintaining ATCOTS contract files.³ We visited FAA Headquarters to review ATCOTS contract documents to assess FAA's new processes for maintaining ATCOTS contract files. We also analyzed cost estimates for FAA's new Controller Training Contract (CTC), FAA's draft training requirements analysis methodology, and the amounts paid in ATCOTS contract award and incentive fees. Our review considered FAA actions taken to address recommendations through November 2015. Exhibit A further details our audit scope and methodology.

This report provides an update on FAA's actions in response to our prior report and does not contain any new recommendations that require agency comments.

RESULTS IN BRIEF

FAA did not fully implement our 2013 recommendations before awarding CTC—the successor contract to ATCOTS—with only 7 of the 10 recommendations now closed. FAA addressed weaknesses we identified with contract administration practices and oversight. For example, FAA implemented processes to hold its staff accountable for completing important contract management tasks on ATCOTS and decided to continue funding training innovations on CTC. However, FAA has not made sufficient progress to implement our recommendations related to defining training requirements and validating training costs. We recommended that FAA assess the adequacy of its own training resources in the form of FAA Certified Professional Controllers (CPC), define the complete requirements and cost associated with controller training, and identify the risks to meeting those requirements. These recommendations were designed to improve FAA's ability to develop a comprehensive understanding of its training needs that could have been used to create a more reliable estimate of the Agency's training costs before it awarded CTC. However, because FAA awarded CTC without fully addressing these recommendations, it may encounter many of the same issues that compromised the success of the ATCOTS contract.

BACKGROUND

FAA is responsible for and retains control of its overall controller training program as well as for recruiting and hiring controller candidates and conducting on-the-job training at air traffic facilities. To help train its influx of new controllers FAA relied on its ATCOTS contract, whereby the contractor provided classroom and simulator instruction, course and curriculum development, and administrative and program support services at the FAA Academy and air traffic facilities

³ FAA uses the Unified Contracting System Electronic Document Storage (eDocs)—an automated contracting system for all contract documents issued from fiscal year 2014 forward.

nationwide. The contractor also trained Certified Professional Controllers in Training (CPC-IT)—controllers who are already certified but require site-specific training when they transfer to different facilities or move to different areas within a facility. In addition, the contractor provided proficiency and specialized training to CPCs, such as the training required to become proficient on new systems.

In September 2010, we reported on FAA’s weak acquisition practices and lack of effective contract oversight for the ATCOTS contract.⁴ In its first 2 years, the ATCOTS contract exceeded negotiated contract values by \$46 million, and the program did not achieve desired training goals.

In November 2011, the Chairman of the Subcommittee on Financial and Contracting Oversight, Senate Committee on Homeland Security and Governmental Affairs, requested that we conduct a follow-up review of FAA’s ATCOTS contract to determine the Agency’s progress in addressing our prior recommendations as well as report on any new issues. In December 2013, we reported that FAA had not (1) implemented sufficient changes to improve program and contract oversight, (2) achieved all of its key training goals under the ATCOTS contract, and (3) established effective performance measures and fee structures. Based on our review of FAA’s oversight of the ATCOTS contract, we made 10 recommendations to address weaknesses related to two broad categories: (1) contract administration and oversight and (2) training requirements and costs, summarized in table 1.

⁴ *FAA’s Air Traffic Controller Optimum Training Solution Program: Sound Contract Management Practices Are Needed To Achieve Program Outcomes* (OIG Report Number AV-2010-126), Sept. 30, 2010.

Table 1. Summary of Recommendations from December 2013 Report

Rec #	OIG's Recommendation	Contract Administration and Oversight	Training Requirements and Costs	Status
1	Create a training plan that clearly defines all air traffic controller training requirements, including proficiency training and training for new systems. The plan should also specify the training requirements to be performed by FAA certified professional controllers and those to be performed by the contractor.		X	Open
2	Implement a procedure to identify costs related to internal training performed by FAA controllers, such as a timekeeping code to record hours that controllers spend teaching classroom and simulator training, including any overtime hours accrued for training.		X	Closed
3	Develop a plan to assess internal resources and verify that controllers will be available to teach training at each facility.		X	Open
4	Update cost estimates, and determine whether: (a) training requirements can be met within the current contract value of \$859 million, (b) the acquisition should be rebaselined and/or re-competed, or (c) the remaining options should be exercised.		X	Closed
5	Implement procedures to hold FAA oversight staff accountable for overseeing contractor performance at the facilities, including completing required semi-annual performance evaluations.	X		Closed
6	Develop a process to ensure the contract files are maintained as required by FAA's Acquisition Management System.	X		Closed
7	Determine whether training innovations should be funded under the ATCOTS contract or competed under a separate contract, and modify the ATCOTS contract to reflect this determination.	X		Closed
8	Determine whether FAA should eliminate the cost incentive fee and modify the contract to a cost-plus-award-fee type.	X		Closed
9	Modify the award fees to (a) develop performance measures that motivate contractors to achieve program goals and (b) ensure that fees are paid only for performance that links to training goals and does not conflict with other contract objectives.	X		Closed
10	Perform an integrated baseline review to (a) identify the training requirements that should be included in the budget baseline, (b) identify the risks for maintaining the budget and plans for adequately mitigating those risks, and (c) determine whether resources are sufficient for completing the work.		X	Open

Source: *OIG analysis of FAA actions*

In January 2014, we testified at a congressional hearing on FAA’s management of ATCOTS and lack of progress on our prior recommendations.⁵ During the hearing, FAA testified that it had adequate resources and expertise to plan for its next competition to acquire controller training support services in accordance with our prior recommendations and that it would fully implement them. Later that year, FAA began the acquisition process for the successor contract to ATCOTS—the CTC, awarded on April 1, 2015, to Science Applications International Corporation. The total estimated value for the indefinite delivery/indefinite quantity (IDIQ)⁶ CTC award is \$425.6 million over 5 years (3 base years and 2 option years), and the contract ceiling is \$727.2 million.

FAA ADDRESSED OUR RECOMMENDATIONS ON CONTRACT ADMINISTRATION AND OVERSIGHT BUT DID NOT IMPLEMENT RECOMMENDATIONS TO DEFINE REQUIREMENTS AND VALIDATE COSTS

FAA addressed our recommendations related to contract administration and oversight weaknesses that we identified in 2013. However, FAA planned and awarded CTC without implementing our recommendations to define its training requirements and support its estimates of training costs. FAA addressed, and we closed, all five recommendations related to contract administration and oversight. However, three of the five recommendations related to FAA’s assessment of training resources and cost validation remain open.⁷

FAA Addressed Contract Administration and Oversight Recommendations

FAA addressed our recommendations related to contract administration and oversight weaknesses and made improvements that could help it better assess whether it is achieving its controller training goals. Based on FAA’s actions we were able to close recommendations 5, 6, 7, 8, and 9 as shown in table 2.

⁵ *Management of Air Traffic Controller Training Contracts: Hearing Before the Subcommittee on Financial and Contracting Oversight of the Committee of Homeland Security and Governmental Affairs United States Senate* (S. Hrg. 113–323), Jan. 14, 2014.

⁶ This is a type of contract that provides for an indefinite quantity of supplies or services during a fixed period of time.

⁷ We close recommendations when the agency provides sufficient evidence to show that it has taken the actions planned in response to our report.

Table 2. Summary of Contract Administration and Oversight Recommendations

Rec #	OIG Recommendation	Progress	Status
5	Implement procedures to hold FAA oversight staff accountable for overseeing contractor performance at the facilities, including completing required semi-annual performance evaluations.		Closed. FAA assigned Quality Reliability Officers to the ATCOTS contract to implement the Quality Assurance Surveillance Plan.
6	Develop a process to ensure contract files are maintained per FAA's Acquisition Management System.		Closed. FAA implemented eDocs to improve its contract file management.
7	Determine whether training innovations should be funded under the ATCOTS contract or competed under a separate contract, and modify the ATCOTS contract to reflect this determination.		Closed. FAA included training innovation as part of the CTC statement of work.
8	Determine whether FAA should eliminate the cost incentive fee and modify the contract to a cost-plus-award-fee type.		Closed. FAA did not include incentive fees in CTC.
9	Modify the award fees to (a) develop performance measures that motivate contractors to achieve program goals and (b) ensure fees are paid only for performance that links to training goals and does not conflict with other contract objectives.		Closed. FAA did not include award fees in the CTC, so this recommendation is not relevant to the new contract. While ATCOTS performance measures did not address reducing time to train or increasing training innovation, the contract is now complete.

LEGEND:  = sufficient progress;  = some progress;  = no progress

Source: *OIG analysis of FAA actions.*

Implement procedures to hold FAA oversight staff accountable for overseeing contractor performance at the facilities, including completing required semi-annual performance evaluations (Recommendation #5). In September 2010, we reported that FAA had weak acquisition practices and did not have effective oversight controls in place to monitor contractor services for its ATCOTS contract. In December 2013, we reported that FAA did not hold oversight staff accountable for conducting required semiannual evaluations of the quality of contractor-provided services, which prevented program offices from identifying problems and taking appropriate corrective actions.

We closed this recommendation in December 2014 after FAA provided documentation that it had assigned Quality Reliability Officers (QRO) to the ATCOTS contract to implement the Quality Assurance Surveillance Plan FAA developed in 2012. As part of our follow-up review, FAA provided us documentation that QRO Audits Reports were issued and that initial corrective

actions were taken in response. Also, FAA provided documentation of semiannual performance evaluations its Contracting Officer's Representative had conducted in 2014 and 2015 at a controller training facility. Finally, during our review of CTC, we found that FAA plans to continue to conduct evaluations of contractor performance in classroom training and controller simulation tasks.

Develop a process to ensure the contract files are maintained as required by FAA's Acquisition Management System (AMS) (Recommendation #6). In 2013, we reported that FAA's ATCOTS contract files had not been consistently maintained, updated, and organized. ATCOTS contracting staff experienced frequent turnover; yet, FAA did not maintain a complete contract file. A complete file is important to effective contract administration and can also help newer staff to readily access and understand the contract's history.

We closed this recommendation in July 2014, after FAA provided a standard operating procedure for maintaining contract files in its Knowledge Sharing Network (KSN) and a user's guide for its eDocs contract document management system. FAA has since fully instituted changes to its contract file management, by implementing both eDocs and a new internal email system, which, according to the contracting officer, improves how FAA maintains the ATCOTS contract files. In April 2015, we conducted a site visit to FAA to determine if staff was following these processes. Generally, we found FAA's process for maintaining the files had improved since our previous audit. Going forward, according to the ATCOTS contracting officer, FAA expects to maintain CTC entirely in eDocs as part of the FAA-wide Unified Contracting System. Based on our review, it appears that FAA is following the developed standard operating procedure in order to maintain a complete contract file for ATCOTS and CTC.

Determine whether training innovations should be funded under the ATCOTS contract or competed under a separate contract, and modify the ATCOTS contract to reflect this determination (Recommendation #7). In both of our prior reviews, we determined that FAA's administration and use of the ATCOTS contract had not resulted in significant training innovations for FAA, although a key goal of the contract was to develop training technologies and procedures to meet the changing environment in which controllers operate while reducing training time and costs. We also found that FAA had not provided sufficient funding for proposed innovations under ATCOTS, budgeting less than 2 percent of the ATCOTS contract value for training innovations.

We closed this recommendation in December 2014 after FAA included training innovation as part of the CTC statement of work. FAA structured the statement of work so that it can award specific innovation task orders under CTC to make it easier to monitor and track contract costs. However, FAA's use of the IDIQ

contract type for CTC makes it difficult to determine if innovation will be sufficiently funded since innovation task orders have not yet been awarded.

Determine whether FAA should eliminate the cost incentive fee and modify the contract to a cost-plus-award-fee type (Recommendation #8). FAA’s ATCOTS contract’s performance measures—comprised of award and incentive fees—were not effective in motivating the contractor to achieve desired outcomes or manage costs. Specifically we found that ATCOTS had award fee and incentive fee measures that both attempted to incentivize the contractor to control cost twice. The practice of allowing a contractor to earn both incentive fees and award fees based on the same metric is not consistent with FAA’s AMS guidance.⁸

We closed this recommendation in December 2014 when FAA issued a solicitation that did not include any incentive fees in its planned replacement contract, CTC. FAA awarded CTC as a hybrid time-and-materials (T&M) and firm-fixed price (FFP) contract, eliminating incentive and award fees.

However, during the course of our current review, we found that FAA used the same ineffective fee structure identified in our 2010 and 2013 ATCOTS reports and paid the ATCOTS contractor \$22 million in incentive fees over the entire life of the ATCOTS contract. Specifically, the FAA paid duplicative incentive and award fees after we made our most recent 2013 recommendation to not use both to incentivize the contractor to control cost (see tables 3 and 4).

Table 3. Incentive Fees Paid by FAA During ATCOTS Contract (September 2008-March 2015)

Contract Year (CY)	Incentive Fees
CY1 : Sept. 2008 – Sept. 2009	\$1,432,500
CY2 : Sept. 2009 – Sept 2010	\$4,611,744
September 2010: OIG issued first ATCOTS report	
CY3 : Sept. 2010 – Sept. 2011	\$4,014,562
CY4 : Sept. 2011 – Sept. 2012	\$3,864,932
CY6 :Sept. 2012 – Sept. 2013 ^a	\$3,051,379
CY7 :Sept. 2013 – Sept, 2014	\$3,284,458
December 2013: OIG issued second ATCOTS report	
CY8 :Sept. 2014 – Mar. 2015	\$2,160,636
Total	\$22,420,211

^a CY5, the last year of the base contract, was not completed due to lack of funding. FAA instead exercised and began CY6, the first option year, a year early.

Source: OIG analysis of FAA data.

⁸ According to AMS T3.2.4, care needs to be exercised on multiple-incentive arrangements—such as the ATCOTS cost-plus-award-fee/cost-plus-incentive fee (CPIF/CPAF) type—to ensure that combinations of cost control incentive fees and award fees do not result in contractors making trade-off decisions inconsistent with FAA objectives and performance priorities. In addition, FAA’s Award Fee Contracting Guidance states that no performance element should be incentivized more than once.

Modify the award fees to (a) develop performance measures that motivate contractors to achieve program goals and (b) ensure that fees are paid only for performance that links to key training goals and does not conflict with other contract objectives (Recommendation #9). In 2013, we reported that FAA had paid ATCOTS award fees based on performance metrics that did not motivate the contractor to achieve FAA's key training goals such as reducing time to train and increasing innovation. FAA concurred with our recommendation and stated that in September 2012 it had introduced a new award fee structure that addressed FAA's key training goals. However, while the new performance measures linked to containing contract costs, we did not find that they motivated the contractor to reduce training time or develop training innovations. FAA could not demonstrate how these new performance measures were directly related to these key contract goals.

FAA modified ATCOTS performance measures again in 2013, but we found that FAA did not sufficiently address this recommendation during the remaining performance period on the ATCOTS contract. In fact, the Agency paid the ATCOTS contractor nearly \$8.3 million more in award fees from September 2012 to September 2015 with performance measures that were not tied to motivating the contractor to reduce time to train or provide training innovation—two key ATCOTS contract goals. FAA paid a total of over \$25.6 million in award fees during the life of the ATCOTS contract using performance measures that did not align with contract goals or effectively incentivize the contractor to perform in key areas (see table 4).

Table 4. Award Fees Paid by FAA During ATCOTS Contract (September 2008-March 2015)

Contract Year (CY)	Award Fees
CY1 :Sept. 2008 – Sept. 2009	\$4,388,225
CY2 :Sept. 2009 – Sept 2010	\$4,783,511
September 2010: OIG issued first ATCOTS report	
CY3 :Sept. 2010 – Sept. 2011	\$4,352,740
CY4 :Sept. 2011 – Sept. 2012	\$3,810,719
July 2012: FAA provided OIG with new draft performance measures^a	
CY6 :Sept. 2012 – Sept. 2013 ^b	\$2,706,952
CY7 :Sept. 2013 – Sept, 2014	\$3,721,551
December 2013: OIG issued second ATCOTS report	
CY8 :Sept. 2014 – Sept. 2015	\$1,862,407
Total	\$25,626,105

^aWe reviewed the performance measures in 2012 and determined that they did not link to all contract goals and failed to motivate the contractor to reduce time to train or provide training innovation.

^b CY5, the last year of the base contract, was not completed due to lack of funding. FAA instead exercised and began CY6, the first option year, a year early.

Source: OIG analysis of FAA data.

Since CTC does not contain award fees, the recommendation is not relevant to the current contract. Therefore, we closed this recommendation after FAA completed and paid award fees for the final award fee period for ATCOTS in November 2015.

FAA Did Not Implement Our Recommendations To Define Requirements and Validate Costs of Its Controller Training Efforts Before Awarding a New Controller Training Contract

While FAA addressed two recommendations regarding validating costs related to training air traffic controllers, FAA planned and awarded CTC without addressing our other three recommendations focused on foundational aspects of its controller training acquisition. Specifically, FAA has not assessed the adequacy of its own training resources, defined the complete requirements and cost associated with controller training, and identified the risks to meeting those training needs (see table 5).

Table 5. Summary of Requirements and Cost Recommendations

Rec #	OIG Recommendation	Progress	Status
1	Create a training plan that clearly defines all air traffic controller training requirements, including proficiency training and training for new systems. The plan should also specify the training requirements to be performed by FAA certified controllers and those to be performed by the contractor.		Open. FAA is developing a tool that will identify gaps in training requirements, and expects to have a controller training plan based on this data by January 2016.
2	Implement a procedure to identify costs related to internal training performed by FAA controllers, such as a timekeeping code to record hours including any overtime hours accrued for training.		Closed. FAA reached an agreement with NATCA to expand labor codes and distributed the new codes to the regional directors of Air Traffic Services for implementation.
3	Develop a plan to assess internal resources and verify that controllers will be available to teach training at each facility.		Open. FAA has not provided a deadline by which it intends to identify and address potential shortfalls in training resources.
4	Update cost estimates, and determine whether: (a) training requirements can be met within the current contract value of \$859 million, (b) the acquisition should be rebaselined and/or re-competed, or (c) the remaining options should be exercised.		Closed. FAA developed and approved a new cost estimate for the re-competed acquisition known as CTC
10	Perform an integrated baseline review to (a) identify the training requirements that should be included in the budget baseline; (b) identify the risks for maintaining the budget and plans for adequately mitigating those risks; and (c) determine whether resources are sufficient for completing the work.		Open. FAA decided not to perform an integrated baseline review on ATCOTS or CTC, and instead identified alternative steps that we do not agree meet the same intent.
LEGEND:  = sufficient progress;  = some progress;  = no progress			

Source: *OIG analysis of FAA actions*

Create a training plan that clearly defines all air traffic controller training requirements, including proficiency training and training for new systems. The plan should also specify the training requirements to be performed by FAA certified professional controllers and those to be performed by the contractor (Recommendation #1). We made this recommendation because FAA's Annual Work Plan (AWP)⁹ did not address all of FAA's training needs, including training for certified controllers and proficiency training on new ATC automation systems, making it difficult for FAA to anticipate its overall training

⁹ The AWP is the tool that FAA uses to identify and report training needs to the contractor.

costs. FAA and Raytheon jointly developed a tool to capture training needs that would be provided via the ATCOTS contract but did not include training provided by FAA's controllers. However, according to FAA, the tool is proprietary to Raytheon, meaning that FAA will not be able to use it when ATCOTS expires in September 2015.

FAA stated it was developing a tool to address gaps in the identification of training requirements and allow the Agency to decide whether to use contract or government labor for various training activities. However, according to FAA, the tool was not ready until September 2015—5 months after the CTC award.¹⁰ Moreover, FAA will still need time to gather and analyze data using the tool in order to provide useful information for a training plan. FAA expects to have a controller training plan based on data it will gather from the tool by January 2016—9 months after the CTC award.

Implement a procedure to identify costs related to internal training performed by FAA controllers, such as a timekeeping code to record hours that controllers spend teaching classroom and simulator training, including any overtime hours accrued for training (Recommendation #2). We made this recommendation because FAA was not tracking the costs of controller-provided training other than on-the-job (OJT) training, even though it was using controllers to provide simulator and classroom training that was also covered under the ATCOTS contract. As the ATCOTS contract began to experience cost overruns, FAA reduced the number of contractor instructors and began to rely more heavily on FAA CPCs to provide training. FAA took steps to address this recommendation by capturing these cost data using revised CPC timekeeping codes, which, according to FAA, required an agreement with NATCA on the number and nature of the codes.

In June 2015, FAA requested that we close this recommendation and stated that it had reached an agreement with NATCA to expand the labor codes. FAA subsequently provided a memorandum that it distributed to its regional directors of Air Traffic Services showing how to add the labor codes to the timekeeping software in use at facilities in the regions. In September 2015, FAA provided additional information demonstrating that its controllers are using the new codes. Therefore, we closed this recommendation. Going forward, FAA will need to ensure that CPCs are properly recording time spent on training-related activities to have visibility on the cost and use of CPC-provided training as it begins a new training contract.

¹⁰ Due to the timing of our audit we did not review the tool.

Develop a plan to assess internal resources and verify that controllers will be available to teach training at each facility (Recommendation #3). We made this recommendation because we found that FAA had not collected data on whether facilities have the capacity to provide internal training, especially at high-traffic facilities. The ATCOTS program office stated during our 2013 review that CPCs would be able to perform the needed internal training but could not provide data to support this assertion at that time. While initially stating that its existing policy was sufficient to close this recommendation, FAA later reconsidered and proposed to conduct an analysis to identify the sufficiency of internal training resources and facilities lacking these resources.

In October 2014, FAA provided an analysis that only considered resources pertaining to OJT, which FAA guidance requires to be performed by CPCs.¹¹ FAA's analysis was not sufficient to close the recommendation, as it did not discuss classroom and simulator training, which may be performed by either contract instructors or CPCs. We have since learned from NATCA representatives that FAA and NATCA have been collaborating on a review and update of FAA's staffing models used to develop facility staffing targets that includes internal resources needed for training. However, FAA has not provided a deadline by which it intends to identify and address potential shortfalls in training resources. As a result, FAA is still missing important information that could help it determine how much training it can expect to order from the new training contractor and where those contract resources are most needed.

Update cost estimate and determine whether (a) training requirements can be met within the current contract value of \$859 million, (b) the acquisition should be rebaselined and/or re-competed, or (c) the remaining options should be exercised (Recommendation #4). In 2013, we reported that FAA had not addressed our 2010 recommendation to assess whether the ATCOTS contract would meet its long-term needs before the end of the contract base period in 2013. The ATCOTS program experienced 4 consecutive years of cost overruns, totaling about \$89 million and resulting in FAA prematurely exhausting the contract's 5-year base funding in only 4 years. To continue training support when the base period funding ran out, FAA chose to exercise and begin the contract's first 3-year option period a year early without updating cost estimates and training requirements or developing adequate criteria for determining whether the Agency should exercise the contract options as recommended in 2010.

We closed this recommendation based on FAA's issuance of a solicitation for CTC. As part of the acquisition planning process for CTC, FAA's Program Management Office and Office of Safety and Technical Training jointly developed a new cost estimate and received approval from FAA's Support Contracts Review

¹¹ FAA JO 3120.4N, Chapter 6 §3.a(1) is an FAA policy requiring that OJT be conducted by CPCs.

Board and Chief Financial Officer to compete a new controller training contract. However, this was the only recommendation related to defining training requirements and validating costs of its controller training efforts that FAA completed prior to issuing the solicitation for CTC.

Perform an integrated baseline review to prioritize training requirements, identify and mitigate cost risks, and determine whether resources are sufficient for completing the work (Recommendation #10). FAA experienced cost overruns under ATCOTS in large part because it failed to define its controller training requirements, which led it to underestimate its training needs. Seeking to control costs, FAA directed the contractor to sharply reduce contractor training staff, which in turn led to longer average time to train controllers, an outcome at odds with one of the primary goals of the ATCOTS program. To prevent these problems from recurring, we recommended that FAA conduct an integrated baseline review (IBR) of the ATCOTS program. An IBR is a joint assessment by the Government and the contractor of a contract or program typically done prior to, or soon after, contract award. While IBRs are typically performed on contracts for major capital investments, we nonetheless recommended that FAA perform an IBR for ATCOTS because the process would have helped FAA to pinpoint problems and make decisions on the amount of services required and the associated funds needed to obtain them.

Despite our recommendation, FAA decided not to perform an IBR on ATCOTS, or later, CTC. Instead, FAA identified steps that it stated performed the same role as an IBR, such as conducting regular, informal reviews of the ATCOTS contractor's performance, and plans to track and analyze facility managers' training task orders placed against CTC. An IBR is designed to be a forward-looking assessment examining whether (1) all program requirements have been addressed, (2) all risks have been identified and appropriate mitigation plans are in place, and (3) planned resources are sufficient to complete the work. Therefore, we do not agree that FAA's approach would identify cost, schedule, and performance risks as early on as an IBR, and we have not closed this recommendation.

CONCLUSION

Our previous audits of the ATCOTS contract found that FAA's lack of attention to critical pre-award acquisition planning activities and failure to conduct effective contract management contributed to cost overruns, weak oversight, performance shortfalls, and payment of award fees that did not result in better contractor performance. In the nearly two years since our most recent ATCOTS audit, FAA has taken some important actions to address lapses in its capability to manage a major support services acquisition such as CTC for air traffic controller training.

However, FAA has not made sufficient progress on our recommendations designed to improve its ability to define its needs and identify risks prior to awarding CTC. Consequently, FAA has awarded a new multimillion-dollar air traffic controller training contract without fully addressing foundational aspects of its controller training acquisition. As a result, FAA lacks the knowledge necessary to effectively and transparently manage training costs, validate cost estimates, and detect and address cost or performance risks on CTC, many of the same issues that compromised the success of the previous ATCOTS contract.

AGENCY COMMENTS AND OIG RESPONSE

We provided FAA with our draft report on October 29, 2015. While the report did not contain any recommendations requiring formal agency comments, we gave FAA the opportunity to respond and received its comments on November 25, 2015, which are included as an appendix to this report. In general, FAA acknowledged the difficulties with the ATCOTS program as identified in our 2013 audit. FAA stated that in response to those findings, it made improvements to the oversight and management of contract controller training, successfully closing 7 of the 10 recommendations. Of the remaining three open recommendations, (1, 3 and 10), FAA stated that it continues to work towards providing our office with the necessary information needed for closure. Accordingly, we still consider these three recommendations as resolved but open pending completion of the planned actions.

We appreciate the courtesies and cooperation of FAA representatives during this audit. If you have any questions concerning this report, please call me at (202) 366-5225 or Tony Wysocki, Program Director, at (202) 493-0223.

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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 March 2015 through November 2015 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 reasonable basis for our findings and conclusions based on our audit objective.

To complete our work, we met with the FAA and National Air Traffic Controllers Association (NATCA) officials to discuss the status of actions taken since we issued our ATCOTS report in December 2013. We reviewed documentation provided by FAA to verify whether it fully implemented its updated timekeeping codes and procedure to record hours and identify costs related to internal training performed by FAA controllers; therefore, identifying time spent by controllers teaching classroom and simulator training and any overtime hours accrued for training.

We assessed FAA's implementation of key contract administration, management, and oversight controls. We also reviewed FAA's standard operating procedures and user guide for maintaining ATCOTS contract files as required by FAA's Acquisition Management System. We visited FAA Headquarters to review ATCOTS contract documents to determine if FAA's new processes for maintaining ATCOTS contract files are effective.

We also assessed whether FAA implemented procedures to hold oversight staff accountable for overseeing contractor performance at the training facilities, including completing semi-annual performance evaluations and implementing corrective actions identified from QRO audit reports.

We analyzed the FAA's cost estimates for its new CTC, FAA's draft training requirements analysis methodology, and the amounts that FAA paid in ATCOTS contract award and incentive fees from the start of the ATCOTS contract in September 2008 through September 2015. Further, we interviewed FAA officials to determine whether it performed an IBR to identify training requirements and contract costs, and mitigate risks, both during the ATCOTS contract and prior to the award of the new CTC. Finally, we assessed FAA's efforts to improve its ability to define its training needs and identify risks prior to awarding the new CTC.

EXHIBIT B. MAJOR CONTRIBUTORS TO THIS REPORT

Name	Title
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APPENDIX. AGENCY COMMENTS



Federal Aviation Administration

Memorandum

Date: November 25, 2015

To: Mary Kay Langan-Feirson, Assistant Inspector General for Acquisition and Procurement Audits

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

Subject: Federal Aviation Administration's (FAA) Response to Office of Inspector General (OIG) Draft Report: FAA's Air Traffic Control Optimum Training Solution Contract

The FAA acknowledges the difficulties with the Air Traffic Control Optimum Training Solution (ATCOTS) program as identified in the 2013 OIG audit. In response to those findings, the FAA has implemented multiple corrective actions intended to improve the FAA's ability to manage contract selection and award processes for controller training. To correct the deficiencies noted in the 2013 report, the FAA has:

- Implemented procedures to identify costs related to internal training performed by FAA controllers and to hold FAA oversight staff accountable for overseeing contractor performance at the facilities.
- Updated cost estimates on an annual basis, which improved the training process by defining the number of students, types of training and the students requiring training.
- Deployed an Electronic Document Storage (eDocS) system to ensure the contract files are maintained in a centralized and secured manner as required by FAA's Acquisition Management System.
- Streamlined the acquisition process and confirmed that the strategy was geared toward adopting the best commercial practices while gaining greater access to technological innovations and maximizing competition

to achieve greater savings and efficiencies to the overall training program.

- Modified the award fees process by developing performance measures to incentivize contractors to meet program goals and to ensure that fees are paid only for performance that links to key training goals.

With the award of the new Controller Training Contract (CTC) in March 2015, the CTC is designed to improve contract resource planning and management through a change in contract type, better mechanisms for requirements planning, and improved oversight of contractor-provided services. By changing the contract type from the ATCOTS performance-based cost reimbursable type contract to an indefinite delivery/indefinite quantity task order type of contract, the CTC should improve contract resource planning and management. CTC file management will be 100 percent maintained on the eDocS contracts filing system. Additionally, the CTC has multiple discrete task orders and firm fixed-price contract line item numbers, which places all cost risk upon the contractor. This will enable the FAA to have total control on how much work is ordered, exactly how and when it will be performed, and a known fixed-cost for the work. The FAA is also utilizing quality reliability officers to validate each course provided by the vendor to ensure improved oversight of contractor-provided services.

With the implementation of the above solutions, the FAA has made significant improvements to the oversight and management of contract controller training, and as noted in the draft report, the FAA has successfully closed seven of the 10 recommendations. Of the remaining three open recommendations, (1, 3 and 10), the FAA continues to work towards providing the OIG with the necessary information needed for closure. The Agency will complete the required actions for recommendation 1 by January 31, 2016 and by December 31, 2015 for recommendations 3 and 10.

We appreciate this opportunity to offer additional perspective on the OIG draft report. Please contact H. Clayton Foushee at (202) 267-9000 if you have any questions or require additional information about these comments.