At the request of Senator Richard Shelby, we conducted an audit of subcontracting issues of the Contract Tower Program. The objective of the audit was to evaluate the Federal Aviation Administration’s (FAA) and the primary contractor's oversight of subcontractors to ensure that subcontract tower operations are comparable in safety to FAA and contract towers. Details of the scope and methodology of our review are described in Exhibit A.

We found that subcontract towers are held to the same standards as other contract and FAA-operated towers, and receive the same level of oversight from FAA and the primary contractor. Specifically, we found that:

- Controllers’ training programs and requirements at subcontract towers are the same as other contract and FAA-operated towers,
- Subcontract towers are staffed according to contractual requirements,
- FAA provides the same level of oversight to subcontracted towers as for all other towers, and
- Operational safety at subcontract towers is comparable to other contract towers and similar FAA towers.

While FAA’s decision to allow subcontracted operations has not adversely impacted safety or service, it is important to note that this was a recent decision, and therefore, it is too early to tell the potential long term impacts of the program. At the time of our review, 17 of the 22 locations operated under subcontracts for less than 1 year. However, subcontracting operations in any
program, by nature, can pose additional risks by adding layers into the organizational structure, which require greater scrutiny. Accordingly, while we are not making any recommendations, we are encouraging FAA to continue closely monitoring subcontract tower operations.

BACKGROUND

FAA began contracting out air traffic services at low activity towers in 1982. Since then, the Contract Tower Program (the Program) has been successful in providing these services to low activity airports at lower costs than FAA could otherwise provide. The Program also provides service at towers FAA would otherwise not have staffed because they were too expensive to operate. As of October 1, 2001, there were 206 towers in the Program operated by 3 contractors: Robinson-Van Vuren Associates, Inc. (RVA); Midwest Air Traffic Control Services, Inc.; and Serco Management Services, Inc. The Contract Air Traffic Services Branch in FAA Headquarters manages the Program.

In 1999, with FAA’s approval, RVA began subcontracting with Computer Intelligence², Inc. to operate five of its contracted towers. On February 25, 2001, RVA hired a second subcontractor, Infinite Computer Technologies, to operate five additional towers. As of November 21, 2001, 22 towers were subcontracted out by RVA (a list of subcontract towers is provided as Exhibit B).

OBSERVATIONS

- **Controllers’ Training Programs and Requirements at Subcontract Towers Are the Same as Other Contract and FAA-Operated Towers.** We found that training programs and requirements for controllers at subcontract towers are the same as other towers. We compared the RVA Air Traffic Facility Training Order (3120.4B) with the FAA Air Traffic Technical Training Order (3120.4J), dated June 16, 1998, and found that these orders are similar in establishing training requirements for air traffic controllers at FAA-operated, contracted, and subcontracted towers.

  Our review of the training records at the six subcontract towers we visited determined that all of the controllers were properly certified and possessed the appropriate facility ratings. In fact, when the subcontractor took over operations at these six towers, the air traffic controllers remained in place,
becoming employees of the subcontractor. Training records also indicated that the controllers were receiving required refresher training.

- **Subcontract Towers Are Staffed According to Contractual Requirements.** Each contract for control tower operations has a staffing plan approved by FAA that establishes the required number of personnel and hours per pay period needed to properly operate each tower. We reviewed the number of personnel working at every subcontract tower and found all were staffed according to contractual requirements.

We also compared the number of work hours required for each subcontract tower to the time records of actual hours worked by controllers at the subcontracted towers for selected pay periods. We found that subcontract towers were providing the number of hours called for in the staffing plans.

- **FAA Provides the Same Level of Oversight to Subcontracted Towers as for All Other Towers.** FAA conducts full-facility quality assurance evaluations at FAA-operated, contracted, and subcontracted towers once every 2 years. FAA uses the same procedures in conducting these evaluations regardless of who operates the towers. Since, at the time of our review, 17 of the 22 subcontract towers have operated less than 1 year, only 8 full-facility evaluations have been conducted at these towers. FAA’s full-facility evaluations at the eight subcontract towers found that air traffic control personnel were adhering to the requirements mandated by FAA.

Evaluators from FAA’s Air Traffic Evaluations Branch stated there were no significant trends in the results that would separate operations at subcontract towers from other towers evaluated. The Contract Tower Program Manager at FAA Headquarters stated that he relies heavily on these quality assurance evaluations in determining the performance levels of the subcontract towers.

In addition to FAA’s oversight, RVA provides oversight to its contract towers and subcontract towers through quality assurance guidance and reviews, drug and alcohol testing, and operational direction. RVA uses the same quality assurance personnel and the same drug and alcohol testing personnel for both the subcontract and contract towers.
Operational Safety at Subcontract Towers Is Comparable to Other Contract Towers and Comparable FAA Towers. To evaluate the safety of operations at subcontract towers, we compared the number and rate\(^1\) of operational errors (OE) at subcontract towers to those of contract towers and a sample of comparable FAA visual flight rules (VFR) towers\(^2\). Since beginning subcontracting, there has only been one operational error at a subcontract tower. As shown in the chart below, for Fiscal Year (FY) 2001 the operational error rate is .07 errors per 100,000 operations, which is comparable to the rate of operational errors that occurred at contract towers and comparable FAA VFR towers during that period.

<table>
<thead>
<tr>
<th></th>
<th>FY 1999</th>
<th>FY 2000</th>
<th>FY 2001</th>
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<tbody>
<tr>
<td><strong>Subcontract Towers</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Number of OE</td>
<td>0</td>
<td>0</td>
<td>1</td>
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<tr>
<td>Rate</td>
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<td>0</td>
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<tr>
<td>Number of OE</td>
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<td>9</td>
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<tr>
<td>Rate</td>
<td>0.05</td>
<td>0.05</td>
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<tr>
<td><strong>FAA VFR Towers</strong></td>
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<td></td>
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<tr>
<td>Number of OE</td>
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</tr>
<tr>
<td>Rate</td>
<td>0.05</td>
<td>0.08</td>
<td>0.07</td>
</tr>
</tbody>
</table>

We also interviewed airport managers and other users at the facilities we visited to determine their level of satisfaction with the subcontract towers’ services. According to the managers, these towers continue to provide service comparable to towers operated by the contractor. Since the controllers for the subcontractor were the same controllers that worked for the contractor, the users we interviewed said the conversion was invisible to them.

**CONCLUSION**

The Contract Tower Program has a proven record of providing cost-effective services that are comparable to the quality and safety of FAA-operated towers. While FAA’s decision to allow subcontracted operations at several contract tower locations has not adversely impacted safety or service, it is important to note that this was a recent decision, and it is too early to tell the potential long term impacts of the program. At the time of our review, 17 of the 22 locations operated under subcontracts for less than 1 year. While we are not making any recommendations, given the inherent risks of subcontracting operations in any

\(^1\) OE rate is the number of operational errors at a given facility per 100,000 operations.

\(^2\) Our sample included only FAA towers in Air Traffic Control Grades 5 and 6, which are most similar to the operations at towers in the existing Contract Tower Program.
program, we encourage FAA to continue closely monitoring subcontract tower operations.
We appreciate the cooperation and assistance provided by you and your staff during our review. If you have any questions or need further information, please contact me at (202) 366-1992 or David A. Dobbs, Deputy Assistant Inspector General for Aviation, at (202) 366-0500.
Audit Scope and Methodology

The field work for our audit was conducted between May and August 2001 at six randomly selected subcontract towers. We also met with representatives from Robinson-Van Vuren Associates, Inc., Computer Intelligence², Inc., Infinite Computer Technologies, and FAA, and contacted other organizations, including Midwest Air Traffic Control Services, Inc., and Serco Management Services, Inc.

We conducted the audit in accordance with Government Auditing Standards prescribed by the Comptroller General of the United States. Our methodology was designed to answer the following question: Are FAA and the primary contractor providing appropriate oversight over subcontractors to ensure that subcontract tower operations are comparable in safety to contract towers and similar FAA towers?

To answer this question, we interviewed officials of FAA’s Office of Air Traffic Planning and Procedures, Contract Air Traffic Services, the primary contractor, and the two subcontractors to determine their oversight roles over the subcontract towers. We interviewed officials in FAA’s Air Traffic Evaluations Division and reviewed facility safety evaluations for subcontracted towers to determine if any safety concerns exist at these towers. We also compared operational safety rates at subcontract towers, contract towers, and similar FAA towers for the past 3 years.

In addition, we interviewed airport managers and users at select subcontract towers to determine whether any safety or operational problems exist at these towers. Finally, we reviewed the certification and training records of select subcontract controllers and reviewed staffing levels at all subcontract towers.
Subcontracted Towers (Date Subcontracted)

COMPUTER INTELLIGENCE², INC.

Fulton County, Georgia (Sept. 1999)  
Albany, Georgia (Sept. 1999)  
Cobb County (McCollum), Georgia (Sept. 1999)  
Gwinnett County, Georgia (Sept. 1999)  
Macon, Georgia (Oct. 1999)  
Owensboro, Kentucky (Oct. 2000)  
Greenville, Mississippi (Oct. 2000)  
Jackson, Tennessee (Oct. 2000)  
Smyrna, Tennessee (Dec. 2000)  
Dothan, Alabama (Dec. 2000)  
Tuscaloosa, Alabama (Dec. 2000)  
Isla Grande, Puerto Rico (Feb. 2001)  
St. Croix, Virgin Islands (Apr. 2001)

INFINITE COMPUTER TECHNOLOGIES

Lynchburg, Virginia (Feb. 2001)  
Morgantown, West Virginia (Feb. 2001)  
Parkersburg, West Virginia (Feb. 2001)  
Wheeling, West Virginia (Feb. 2001)  
Lancaster, Pennsylvania (Feb. 2001)  
Hagerstown, Maryland (Apr. 2001)  
Capitol City, Pennsylvania (Apr. 2001)  
Williamsport, Pennsylvania (Apr. 2001)
Activities Visited or Contacted

FAA HEADQUARTERS
Office of Air Traffic Planning and Procedures, Contract Air Traffic Services
Office of Air Traffic Services, Evaluations Division
Office of Acquisitions, Contracts Division

SUBCONTRACT TOWERS
Atlanta Terminal Radar Approach Control, Georgia
Cobb County Airport Subcontract Tower, Georgia
Gwinnett County Airport Subcontract Tower, Georgia
Fulton County Airport Subcontract Tower, Georgia
Hagerstown Airport Subcontract Tower, Maryland
Capitol City Airport Subcontract Tower, Pennsylvania
Lancaster Airport Subcontract Tower, Pennsylvania

CONTRACTORS AND ASSOCIATIONS
Robinson-Van Vuren Associates, Inc.
Computer Intelligence², Inc.
Infinite Computer Technologies
Midwest Air Traffic Control Services, Inc.
Serco Management Services, Inc.
American Association of Airport Executives
### Major Contributors to This Report

The following staff members contributed to this report.

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