PERFORMANCE AUDIT
OF THE

BUREAU OF AERONAUTICS

MICHIGAN DEPARTMENT OF TRANSPORTATION

April 1999

59-190-98

EXECUTIVE DIGEST

BUREAU OF AERONAUTICS

INTRODUCTION	This report, issued in April 1999, contains the results of our performance audit* of the Bureau of Aeronautics (BOA), Michigan Department of Transportation (MDOT).
AUDIT PURPOSE	This performance audit was conducted as part of the constitutional responsibility of the Office of the Auditor General. Performance audits are conducted on a priority basis related to the potential for improving effectiveness* and efficiency*.
BACKGROUND	The mission* of BOA is to execute the policies of the State Transportation Commission, the Michigan Aeronautics Commission, and MDOT in order to provide for the aeronautical needs of the State in the safest and most effective manner. The responsibilities of BOA are to provide overall administration and direction for aviation programs; assist communities and aviation interests in aeronautical matters; provide air transportation services to State personnel; and coordinate accounting and administrative functions with MDOT. BOA is also responsible for the enforcement of the Aeronautics Code (Sections 259.1 - 259.823 of the *Michigan Compiled Laws*).

* *See glossary on page 28 for definition.*

BOA is organized into three divisions: Executive, Airports, and Aviation Services. BOA's operating and capital outlay expenditures were $83.2 and $92.6 million for fiscal years 1996-97 and 1995-96, respectively. For fiscal years 1996-97 and 1995-96, BOA's sources of funding were 56% and 64% from the Federal Aviation Administration, 22% and 25% from local airport authorities, and 22% and 11% from the State aviation fuel taxes, respectively. As of August 31, 1998, BOA had 52 full-time classified employees.

AUDIT OBJECTIVES, CONCLUSIONS, AND NOTEWORTHY ACCOMPLISHMENTS

Audit Objective: To assess the effectiveness of BOA in administering aviation programs and airport and aviation development in the State.

Conclusion: BOA was generally effective in administering aviation programs and airport and aviation development in the State. However, our review disclosed reportable conditions* related to a continuous quality improvement process, airport preservation, construction monitoring, aircraft registration penalty fees, flight school and aircraft dealer licensing databases, use of State aircraft, and internal controls over cash receipts and State Aeronautics Fund revenue. (Findings 1 through 7).

Noteworthy Accomplishments: BOA was instrumental in overseeing and obtaining federal funding for a recent Airport Improvement Program project at Capital City Airport. The $3.7 million project to resurface the main airport runway was an around-the-clock operation completed in just 59 hours. Commonly, a project of this magnitude requires that airport operations be shut down

** See glossary on page 28 for definition.*

for several weeks, which can significantly interrupt airline service and inconvenience passengers.

Audit Objective: To assess the effectiveness of BOA's efforts to provide aviation services that ensure the safety of pilots, their passengers, and communities.

Conclusion: We determined that BOA was effective in providing aviation services that ensure the safety of pilots, their passengers, and communities. However, our review disclosed reportable conditions related to the submission of "as-constructed" plans and the Michigan Airport Directory (Findings 8 and 9).

Noteworthy Accomplishments: BOA was instrumental in developing the nation's first federally funded mobile rescue and fire training simulator to train airport rescue personnel. Completed in 1997, the Aircraft Rescue and Firefighting Unit is a fully mobile training simulator capable of duplicating expected responses associated with aircraft rescue and firefighting situations. The Unit is based at Kellogg Community College's Great Lakes Fire Training Institute. The unit is taken to outstate airports so that local rescue personnel can train using their own equipment. Nine airports received training in 1997, and 13 airports were scheduled to receive training in 1998.

AUDIT SCOPE AND METHODOLOGY

Our audit scope was to examine the program and other records of the Bureau of Aeronautics. Our audit was conducted in accordance with *Government Auditing Standards* issued by the Comptroller General of the United States and, accordingly, included such tests of the records and such other auditing procedures as we considered necessary in the circumstances.

Our audit procedures included examinations of BOA's records and activities for the period October 1, 1995 through August 31, 1998.

Our audit methodology included discussing the goals* and objectives* of several functions of BOA. In addition, we performed other tests of BOA's records and activities to accomplish the objectives of the audit.

To accomplish our first audit objective, we reviewed applicable laws and regulations and the corresponding policies and procedures established by BOA for State and federally funded capital improvement programs; grants to local airports; the registration of aircraft; and the implementation of the airport preservation policy. We selected and reviewed BOA records pertaining to these activities. We evaluated the activities for compliance with applicable laws and regulations and established policies and procedures.

To accomplish our second audit objective, we examined the flight and inspection records of the nine State-owned aircraft. We reviewed applicable documentation to ensure that BOA was operating State-owned aircraft in compliance with safety and maintenance standards. We also reviewed licensing and inspection records for selected airports, airport managers, and flight schools to ensure that inspections were completed on a timely basis and that required fees were collected.

In addition, we evaluated the procedures used by BOA to ensure that publications contain accurate and reliable information and are distributed in a timely manner.

* *See glossary on page 28 for definition*

AGENCY RESPONSES AND PRIOR AUDIT FOLLOW-UP	Our report includes 9 findings and 13 corresponding recommendations. BOA agreed with the 13 recommendations and informed us that it has implemented or will implement all of the them. BOA complied with 2 of our 3 prior audit recommendations and partially complied with the remaining recommendation. We repeated a portion of that prior audit recommendation in this report.

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Mr. Barton W. LaBelle, Chairman
State Transportation Commission
and
Mr. Lowell E. Kraft, Chairman
Michigan Aeronautics Commission
and
Mr. James DeSana, Director
Michigan Department of Transportation
Transportation Building
Lansing, Michigan

Dear Mr. LaBelle, Mr. Kraft, and Mr. DeSana:

This is our report on the performance audit of the Bureau of Aeronautics, Michigan Department of Transportation.

This report contains our executive digest; description of agency; audit objectives, scope, and methodology and agency responses and prior audit follow-up; comments, findings, recommendations, and agency preliminary responses; and a glossary of acronyms and terms.

Our comments, findings, and recommendations are organized by audit objective. The agency preliminary responses were taken from the agency's responses subsequent to our fieldwork. The *Michigan Compiled Laws* and administrative procedures require that the audited agency develop a formal response within 60 days after release of the audit report.

We appreciate the courtesy and cooperation extended to us during this audit.

Sincerely,

Thomas H. McTavish, C.P.A.
Auditor General

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MICHIGAN DEPARTMENT OF TRANSPORTATION

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Description of Agency

The mission of the Bureau of Aeronautics (BOA), Michigan Department of Transportation (MDOT), is to execute the policies of the State Transportation Commission, the Michigan Aeronautics Commission, and MDOT in order to provide for the aeronautical needs of the State in the safest and most effective manner.

The responsibilities of BOA are to provide overall administration and direction for aviation programs; assist communities and aviation interests in aeronautical matters; provide air transportation services to State personnel; and coordinate accounting and administration functions with MDOT. BOA is also responsible for the enforcement of the Aeronautics Code (Sections 259.1 - 259.823 of the *Michigan Compiled Laws*).

BOA is organized into three divisions: Executive, Airports, and Aviation Services. BOA's operating and capital outlay expenditures were $83.2 and $92.6 million for fiscal years 1996-97 and 1995-96, respectively. For fiscal years 1996-97 and 1995-96, BOA's sources of funding were 56% and 64% from the Federal Aviation Administration, 22% and 25% from local airport authorities, and 22% and 11% from the State aviation fuel taxes, respectively. As of August 31, 1998, BOA had 52 full-time classified employees.

Audit Objectives, Scope, and Methodology and Agency Responses and Prior Audit Follow-Up

Audit Objectives

Our performance audit of the Bureau of Aeronautics (BOA), Michigan Department of Transportation (MDOT), had the following objectives:

1. To assess the effectiveness of BOA in administering aviation programs and airport and aviation development in the State.

2. To assess the effectiveness of BOA's efforts to provide aviation services that ensure the safety of pilots, their passengers, and communities.

Audit Scope

Our audit scope was to examine the program and other records of the Bureau of Aeronautics. Our audit was conducted in accordance with *Government Auditing Standards* issued by the Comptroller General of the United States and, accordingly, included such tests of the records and such other auditing procedures as we considered necessary in the circumstances.

Audit Methodology

Our audit procedures were performed during July through September 1998 and included examinations of BOA's records and activities for the period October 1, 1995 through August 31, 1998.

Our audit methodology included discussing the goals and objectives of several functions of BOA. In addition, we performed other tests of BOA's records and activities to accomplish the objectives of the audit.

To accomplish our first audit objective, we reviewed applicable laws and regulations and the corresponding policies and procedures established by BOA for State and federally funded capital improvement programs; grants to local airports; the registration of aircraft; and the implementation of the airport preservation policy.

We selected and reviewed BOA project files pertaining to airport capital improvements, grants to local airports, and airport preservation activities. We evaluated selected

projects for compliance with applicable laws and regulations and established policies and procedures. We also evaluated the aircraft registration process administered by BOA. We reviewed selected registrations to ensure that required aircraft were annually registered and that fees were collected as prescribed by the Aeronautics Code.

To accomplish our second audit objective, we examined the flight and inspection records of the nine State-owned aircraft. We reviewed applicable documentation to ensure that BOA was operating State-owned aircraft in compliance with safety and maintenance standards. We also reviewed licensing and inspection records for selected airports, airport managers, and flight schools to ensure that inspections were completed on a timely basis and that required fees were collected.

We evaluated BOA's efforts to provide pilot safety and education programs by reviewing the credentials of the instructors and the cost and frequency of scheduled programs and by comparing the efforts of BOA to other state aeronautics agencies. We also evaluated the procedures used by BOA to ensure that publications contain accurate and reliable information and are distributed in a timely manner.

Agency Responses and Prior Audit Follow-Up

The agency preliminary response which follows each recommendation in our report was taken from the agency's written comments and oral discussion subsequent to our audit fieldwork. Section 18.1462 of the *Michigan Compiled Laws* and the Department of Management and Budget Administrative Guide procedure 1280.02 require MDOT to develop a formal response to our audit findings and recommendations within 60 days after release of the audit report.

Our report includes 9 findings and 13 corresponding recommendations. BOA agreed with the 13 recommendations and informed us that it has implemented or will implement all of them.

BOA complied with 2 of our 3 prior audit recommendations and partially complied with the remaining recommendation. We repeated a portion of that prior audit recommendation in this report.

COMMENTS, FINDINGS, RECOMMENDATIONS, AND AGENCY PRELIMINARY RESPONSES

ADMINISTRATION OF AVIATION PROGRAMS AND AIRPORT AND AVIATION DEVELOPMENT

COMMENT

Audit Objective: To assess the effectiveness of the Bureau of Aeronautics (BOA) in administering aviation programs and airport and aviation development in the State.

Conclusion: BOA was generally effective in administering aviation programs and airport and aviation development in the State. However, our review disclosed reportable conditions related to a continuous quality improvement process, airport preservation, construction monitoring, aircraft registration penalty fees, flight school and aircraft dealer licensing databases, use of State aircraft, and internal controls over cash receipts and State Aeronautics Fund revenue.

Noteworthy Accomplishments: BOA was instrumental in overseeing and obtaining federal funding for a recent Airport Improvement Program project at Capital City Airport. The $3.7 million project to resurface the main airport runway was an around-the-clock operation completed in just 59 hours. Commonly, a project of this magnitude requires that airport operations be shut down for several weeks, which can significantly interrupt airline service and inconvenience passengers.

FINDING

1. Continuous Quality Improvement Process

BOA had not developed a continuous quality improvement (CQI) process for monitoring and improving its effectiveness and efficiency.

Effectiveness and efficiency can best be evaluated by establishing a CQI process. Such a process should include: performance standards* that describe the desired

* *See glossary on page 28 for definition.*

level of outcomes*; performance measures* for measuring outcomes; a management information system to gather accurate performance data; a comparison of performance data to desired outcomes; a reporting of the comparison results to management; and proposals of program changes to improve effectiveness.

The State Legislature and the Governor have required, in department appropriations acts and Executive Directive 1996-1, that State programs use CQI processes to manage the use of limited State resources.

Our review of the various aviation programs and services of BOA disclosed that formal written goals and objectives either were not established or were not measurable for many programs and functions of BOA:

a. The Airports Division had not established measurable goals and objectives for State and federally funded capital improvement programs, the inspection and licensing of aviation facilities, the registration of aircraft, the publication of various aviation data, and the development and planning of aviation safety programs.

b. The Aviation Services Division had established goals and objectives for the Michigan Air Service Grant Program; however, these goals and objectives were broad and not specifically defined. As a result, no system had been developed to determine if the goals and objectives were achieved.

c. BOA had not established measurable goals and objectives for the airport preservation policy.

During our fieldwork, BOA began to work with the Office of Quality and Re-engineering, Michigan Department of Transportation (MDOT), to develop a CQI process.

* *See glossary on page 28 for definition.*

RECOMMENDATION

We recommend that BOA develop a CQI process for monitoring and improving its effectiveness and efficiency.

AGENCY PRELIMINARY RESPONSE

BOA agrees with this recommendation and will comply by October 1, 1999. BOA informed us that MDOT has developed a business plan that included the development of a scorecard approach to clearly define measurable goals. In May 1998, BOA identified measures of nine strategic objectives from MDOT's business plan.

Measurement development will continue through MDOT's scorecard to improve effectiveness and efficiency. As a part of this process, BOA will establish measurable goals and objectives for its programs and functions.

FINDING

2. Airport Preservation

BOA did not develop, implement, and document procedures and guidelines for the airport preservation policy.

Michigan has approximately 240 licensed general aviation airports. They range from small, one-runway, grass strips that may operate seasonally to large, multiple runway facilities that provide a full range of services and operate year-round. Airports serve a necessary function as part of Michigan's aviation infrastructure both for general and business aviation.

In 1992, BOA established the airport preservation policy in response to the closure of over 40 airports Statewide from 1970 through 1990. At the onset of this policy, the Michigan Aeronautics Commission approved a document entitled "A Plan for Preservation of Michigan's General Aviation Infrastructure." This document described the need for preservation activities and presented a series of recommendations designed to assist and preserve Michigan's airports. In 1997, the document was amended to include a proposal that would permit the participation of the Michigan Aeronautics Commission as a partner in a public

airport authority. At that time, the Michigan Aeronautics Commission adopted the preservation of general aviation airports as one of its highest priorities.

BOA informed us that 19 airports received preservation efforts during our audit period. Our review disclosed that BOA did not document its preservation efforts for 9 (47%) of these airports. BOA verbally informed us of the preservation efforts taken by BOA personnel.

Preservation efforts involve the assistance of personnel throughout the three divisions of BOA. These efforts can range from communications with airport owners regarding compliance with federal regulations or grant obligations to the ultimate purchase of an airport by the State.

Because this process involves all of BOA, it is important that BOA develop, implement, and document procedures to ensure consistent and necessary preservation efforts.

RECOMMENDATION

We recommend that BOA develop, implement, and document procedures and guidelines for the airport preservation policy.

AGENCY PRELIMINARY RESPONSE

BOA agrees with the recommendation and will comply by November 1, 1999. The State Aviation System Plan is currently being updated with a planned completion date of October 1, 1999. BOA informed us that, when the Plan is complete, the preservation policy will be updated. BOA's update will develop, implement, and document procedures and guidelines for the preservation policy. In addition, BOA will implement an annual review of airports to determine which are in need of preservation efforts.

FINDING

3. Construction Monitoring

BOA did not effectively monitor airport development projects by ensuring that airport project engineers (PEs) submitted complete and timely reports. Also, BOA

did not obtain airport sponsors' concurrence that the project was completed to their satisfaction.

Airport sponsors hire a PE to monitor the contractor's performance to ensure that the work conforms to the requirements of the contract plans and specifications. PEs are required to submit standard reports detailing the construction progress and materials tests and certification results. BOA relies on these reports to provide project oversight and administration.

During our review of 14 airport construction projects, we noted:

a. Progress and inspection reports were either late (5) or missing (2) for 7 (50%) of the projects.

   The PE's manual requires that the PE submit weekly progress and inspection reports to BOA within 5 calendar days of the end of the contractor's workweek. These reports provide BOA with information about the job (including work that has been completed in the past week, percentage of work completed, weather conditions, and any laboratory or field testing completed during that period).

b. Materials test and certification results were not submitted to BOA in a timely manner for 4 (29%) of the projects. In one instance, BOA overpaid the contractor because the materials test and certification results were not submitted in a timely manner. A review of these documents disclosed that the materials were not in accordance with the specifications.

   The PE's manual requires that the PE submit a copy of all test reports and materials certifications to BOA within 5 calendar days of the end of the contractor's workweek in which the test was performed. The PE should show his or her approval or disapproval of all materials test and certification results.

c. There was no documentation of BOA's attendance at the final inspection for 1 (13%) of the 8 completed projects. Also, an acceptance certificate was not obtained from the airport sponsor for 4 (50%) of the 8 completed projects.

If all of the work was satisfactorily completed, the PE and airport sponsor are required to sign an acceptance certificate attesting to this fact and to submit the certificate to BOA.

BOA has the ultimate responsibility for ensuring that airport development projects are completed in accordance with construction standards and specifications. Without adequate oversight, airports may not meet State and Federal Aviation Administration regulations and projects may not meet the needs of the airport sponsor.

RECOMMENDATIONS

We recommend that BOA monitor airport development projects by ensuring that airport PEs submit complete and timely reports.

We also recommend that BOA obtain airport sponsors' concurrence that the project was completed to their satisfaction.

AGENCY PRELIMINARY RESPONSE

BOA agrees with these recommendations and will comply by May 1, 1999. BOA will review its current process to determine an improved, effective monitoring and enforcement procedure to ensure complete and timely submittals. A sponsor agreement as to the satisfactory completion will also be obtained for the permanent file. BOA management will also recommend that appropriate staff members attend MDOT courses on project management.

FINDING

4. Aircraft Registration Penalty Fees

BOA did not assess the required penalty to aircraft owners who failed to pay the aircraft registration fee by the date specified.

The Aeronautics Code requires registration of all Michigan-based aircraft worthy of travel. Section 259.77(6) of the *Michigan Compiled Laws* (Section 77 of the Aeronautics Code) requires a $50 penalty fee for failure to pay the registration fee within one month of the specified date, and an additional $5 penalty fee for each

month thereafter that the registration and penalty fees are not paid. A waiver of the penalty may be granted if it is shown to the satisfaction of the Michigan Aeronautics Commission that the failure or refusal was due to reasonable cause and not willful neglect.

To help obtain aircraft registrations from late registrants, BOA sends a letter to prior registrants who have not registered their aircraft by the specified time period. However, these letters do not contain information about the penalty for failure to register the aircraft in a timely manner and the potential waiver if reasonable cause exists.

Although required by the Aeronautics Code, BOA staff informed us that they have elected not to enforce this provision of the Code.

BOA registered approximately 6,500 and 6,100 Michigan-based aircraft for registration years 1998 and 1997, respectively. Our review of 20 aircraft registrations for these years disclosed that 7 (35%) aircraft registrations were not received by the date specified. These registrants, who submitted payments from 13 to 86 days late, were not assessed the penalty fee required by the Aeronautics Code, even though they had not provided BOA staff with a reasonable cause for the delay.

BOA's decision to not enforce this provision of the Code has resulted in lost licensing revenue for the State Aeronautics Fund.

RECOMMENDATION

We recommend that BOA assess the required penalty to aircraft owners who fail to pay the aircraft registration fee by the date specified.

AGENCY PRELIMINARY RESPONSE

BOA agrees with this recommendation and will comply by March 1, 1999. BOA plans to change the fee collection process to ensure that, unless extenuating circumstances arise, aircraft will be registered on or before December 31 of each year. BOA plans to assess the appropriate statutory penalty if an aircraft is not registered on or before that date.

FINDING

5. Flight School and Aircraft Dealer Licensing Databases

BOA did not have internal control procedures in place to help ensure the completeness of flight school and aircraft dealer licensing databases.

Our review disclosed:

a. The 1998 flight school database contained 77 flight schools. However, the number of flight school applications maintained by BOA was 72, resulting in a 7% error rate.

b. The 1998 aircraft dealer database contained 241 dealers. However, the number of aircraft dealer applications maintained by BOA was 205, resulting in an 18% error rate.

c. The 1997 aircraft dealer database contained 88 dealers. However, the number of aircraft dealer applications maintained by BOA was 213, resulting in a 59% error rate.

d. The 1996 aircraft dealer database contained 250 dealers. However, the number of aircraft dealer applications maintained by BOA was 223, resulting in a 12% error rate.

To initiate the annual licensing process, BOA uses these databases to send required forms to flight schools and aircraft dealers. Also, these databases are used to send various aeronautical publications to flight schools.

Sound internal controls require that procedures be in place to help ensure the completeness of databases.

RECOMMENDATION

We recommend that BOA implement internal control procedures to help ensure the completeness of flight school and aircraft dealer licensing databases.

AGENCY PRELIMINARY RESPONSE

BOA agrees with this recommendation and will comply by October 1, 1999. BOA will review and implement internal controls to ensure that information is properly entered into the appropriate databases. BOA management will sponsor staff in attending Transportation Improvement Process training to analyze how and where improvements can be gained.

FINDING

6. Use of State Aircraft

BOA did not ensure that flight approval forms, containing a cost analysis and management approval, were completed prior to the use of State aircraft by BOA personnel.

The MDOT Standardized Travel Regulations provide for the use of MDOT-owned airplanes when air travel is to the advantage of the State, measured by both comparative travel costs and compensated employee work hours. In response to a prior MDOT Office of Commission Audit recommendation regarding the control over and use of State aircraft by BOA personnel, BOA developed a flight approval form. In addition, BOA identified job responsibilities that require the use of State aircraft and documented a pre-justified list of these responsibilities for which a flight approval form would not be required. The requester of the flight is responsible for completing the flight approval form and obtaining the proper approval.

Our review of 54 fiscal year 1997-98 flights that were not pre-justified disclosed that a cost analysis was not prepared and management approval was not obtained for 15 (28%) of these flights.

A cost analysis is a necessary tool for determining the most cost-effective means of transportation. Failure to prepare a cost analysis between alternative means of transportation could result in higher transportation costs.

RECOMMENDATION

We recommend that BOA ensure that flight approval forms, containing a cost analysis and management approval, are completed prior to the use of State aircraft by BOA personnel.

AGENCY PRELIMINARY RESPONSE

BOA agrees with this recommendation and will comply by March 1, 1999. BOA informed us that it will require the aircraft scheduler to obtain a signed cost analysis form before the aircraft is dispatched. BOA will also issue guidelines to clarify when the cost analysis forms are necessary.

FINDING

7. Internal Controls Over Cash Receipts and State Aeronautics Fund Revenue

BOA did not maintain sufficient internal controls over cash receipts and deposits. Also, BOA did not maintain sufficient internal controls over the accounting of State Aeronautics Fund revenue.

The Fiscal Coordination Section within the Aviation Services Division is responsible for the overall coordination of BOA's financial activities as it relates to the administration of certain aviation programs and airport and aviation development in the State.

Our review disclosed:

a. BOA's internal control structure did not provide for cash deposits to be verified to the deposit tickets and individual receipts by someone independent of cash handling.

   Sound internal controls require the independent verification of cash deposits to both the deposit ticket and the individual receipts.

b. BOA's internal control structure did not ensure that deposits were made on a timely basis.

Department of Management and Budget Administrative Guide procedure 1210.04 requires cash receipts to be deposited the day received or no later than the close of business the following day. BOA receives cash daily throughout the year. Our review disclosed that BOA made 6 deposits in 1998 for a total of $8,324.14. Deposits were made approximately every 60 days.

c. BOA did not have procedures in place to ensure the proper accounting of all State Aeronautics Fund revenue.

BOA and MDOT's Bureau of Finance and Administration internal control procedures did not detect an error recorded by the Bureau of Finance and Administration for $16,710 of lease payments for use of an airport hangar. The Bureau of Finance and Administration recorded the proceeds of the lease payments in the State Trunkline Fund instead of the State Aeronautics Fund. A similar error regarding the proceeds from the sale of an aircraft was reported in our prior audit. BOA agreed with our prior audit recommendation and corrected the accounting records; however, it did not improve reviews of State Aeronautics Fund transactions.

Sound internal control procedures require BOA to periodically verify revenue to ensure that the Bureau of Finance and Administration is appropriately accounting for State Aeronautics Fund revenue.

RECOMMENDATIONS

We recommend that BOA improve its internal control structure over cash receipts and deposits.

WE AGAIN RECOMMEND THAT BOA IMPROVE ITS INTERNAL CONTROL STRUCTURE OVER THE ACCOUNTING OF STATE AERONAUTICS FUND REVENUE.

We also recommend that BOA correct the accounting records to record the rental proceeds of the airport hangar to the State Aeronautics Fund.

AGENCY PRELIMINARY RESPONSE

BOA agrees with the first recommendation and informed us that it complied as of September 24, 1998. BOA informed us that it implemented a procedure that includes an independent reconciliation of receipts against deposit tickets with a signed verification by a BOA staff member independent of those handling the money and preparing the deposit tickets.

BOA agrees with the second recommendation and informed us that it complied as of September 24, 1998. BOA implemented procedures to require more timely deposits of cash receipts.

BOA agrees with the intent of the third recommendation. However, adjustment of this misclassification of revenue would require a supplemental appropriation by the State Legislature. Given the amount involved and the age of the misclassification, BOA does not feel that adjustment of the accounting records is warranted. BOA has, however, taken action to safeguard against misclassifications in the future. BOA staff met in September 1998 to discuss procedures to ensure that State Aeronautics Fund revenue is properly recorded and deposited into the State Aeronautics Fund. BOA is compiling a comprehensive list of revenue sources, and project managers will provide a quarterly accounting of incoming funds resulting from BOA operations to the Fiscal Coordination Section. On a quarterly basis, these receipts will be verified against financial statements showing revenue deposited into the State Aeronautics Fund. Discrepancies will be brought to the attention of the Bureau of Finance and Administration for correction. This process is being implemented for the first quarter of fiscal year 1999-2000.

ADMINISTRATION OF AVIATION SAFETY SERVICES

COMMENT

Audit Objective: To assess the effectiveness of BOA's efforts to provide aviation services that ensure the safety of pilots, their passengers, and communities.

Conclusion: We determined that BOA was effective in providing aviation services that ensure the safety of pilots, their passengers, and communities. However, our review disclosed reportable conditions related to the submission of "as-constructed" plans and the Michigan Airport Directory.

Noteworthy Accomplishments: BOA was instrumental in developing the nation's first federally funded mobile rescue and fire training simulator to train airport rescue personnel. Completed in 1997, the Aircraft Rescue and Firefighting Unit is a fully mobile training simulator capable of duplicating expected responses associated with aircraft rescue and firefighting situations. The Unit is based at Kellogg Community College's Great Lakes Fire Training Institute. The Unit is taken to outstate airports so that local rescue personnel can train using their own equipment. Nine airports received training in 1997, and 13 airports were scheduled to receive training in 1998.

FINDING

8. Submission of "As-Constructed" Plans

BOA did not ensure that PEs submitted "as-constructed" plans after airport construction projects were completed. Also, BOA had not specified how much time the PE was allowed, after construction was complete, to submit "as-constructed" plans.

The PE is required to complete "as-constructed" plans showing all plan changes. These plans show location details of all construction work, including buried cables, fuel tanks, and sewage systems. After BOA reviews and approves the "as-constructed" plans, BOA provides a copy to the airport sponsor.

BOA uses the "as-constructed" plans as the basis for all future design work for that particular airport, as well as to update the Michigan Airport Directory. If "as-constructed" plans are not received in a timely manner, future design work may be hindered and the Michigan Airport Directory may not include accurate, reliable information.

Our review of 7 projects that were completed at least 6 months ago disclosed that BOA had not received "as-constructed" plans for 5 (71%) of those projects. These projects had been complete for 10 to 14 months.

RECOMMENDATIONS

We recommend that BOA require PEs to submit "as-constructed" plans in a timely manner after airport construction projects are completed.

We also recommend that BOA specify how much time the PE is allowed, after construction is complete, to submit "as-constructed" plans.

AGENCY PRELIMINARY RESPONSE

BOA agrees with these recommendations and will comply for all new contracts after May 1, 1999. BOA will develop contracts that provide a better incentive to submit the "as-constructed" plans. BOA management will also recommend that appropriate staff members attend MDOT courses on project management.

FINDING

9. Michigan Airport Directory

BOA's internal control procedures did not help ensure that required changes noted during the completion of annual airport inspections were made to the Michigan Airport Directory.

BOA publishes the Michigan Airport Directory annually in March. This Directory provides aeronautical information, pictorial information, and safety information pertinent to the conduct of flights. In 1998, BOA also began to maintain the Michigan Airport Directory on its web page. The annual airport inspections completed by BOA staff are the primary source of information for this publication.

We reviewed documentation for 15 annual airport inspections conducted in 1997 and compared selected information to the published 1998 Michigan Airport Directory. Also, we reviewed documentation for 10 annual airport inspections conducted in 1998 and compared selected information to the Michigan Airport Directory maintained on the BOA web page. We noted:

a. The runway length available for landing did not agree with the annual airport inspection documentation for 5 airports. The differences noted ranged from 10 feet to 475 feet.

b. The scheduled times that the airport was attended by airport personnel did not agree with the annual airport inspection documentation for 2 airports.

c. Information regarding the type of repairs available at the airport did not agree with the annual airport inspection documentation for 2 airports.

d. Pictorial information presented on the web page did not agree with the annual airport inspection documentation for 3 airports.

To help ensure that pilots are aware of pertinent information for the conduct of safe flights, internal control procedures should ensure the completeness and accuracy of airport information presented in the Michigan Airport Directory.

During our fieldwork, BOA reviewed the noted differences and informed us that the required changes to the Michigan Airport Directory had been initiated.

RECOMMENDATION

We recommend that BOA enhance its internal control procedures to help ensure that required changes noted during the completion of annual airport inspections are made to the Michigan Airport Directory.

AGENCY PRELIMINARY RESPONSE

BOA agrees with this recommendation and informed us that it complied as of February 1, 1999. BOA implemented new procedures to ensure accuracy in the Michigan Airport Directory.

Glossary of Acronyms and Terms

BOA	Bureau of Aeronautics.
CQI	continuous quality improvement.
effectiveness	Program success in achieving mission and goals.
efficiency	Achieving the most outputs and outcomes practical for the amount of resources applied or minimizing the amount of resources required to attain a certain level of outputs or outcomes.
goals	The agency's intended outcomes or impacts for a program to accomplish its mission.
MDOT	Michigan Department of Transportation.
mission	The agency's main purpose or the reason the agency was established.
objectives	Specific outputs a program seeks to perform and/or inputs a program seeks to apply in its efforts to achieve its goals.
outcomes	The actual impacts of the program. Outcomes should positively impact the purpose for which the program was established.
PE	project engineer.
performance audit	An economy and efficiency audit or a program audit that is designed to provide an independent assessment of the performance of a governmental entity, program, activity, or function to improve public accountability and to facilitate decision making by parties responsible for overseeing or initiating corrective action.

performance measures Information of a quantitative or qualitative nature indicating program outcomes, outputs, or inputs. Performance measures are typically used to assess achievement of goals and/or objectives.

performance standards A desired level of output or outcome as identified in statutes, regulations, contracts, management goals, industry practices, peer groups, or historical performance.

reportable condition A matter coming to the auditor's attention that, in his/her judgment, should be communicated because it represents either an opportunity for improvement or a significant deficiency in management's ability to operate a program in an effective and efficient manner.