PERFORMANCE AUDIT
OF THE

AVIATION SERVICES DIVISION AND AIRPORTS DIVISION

MULTI-MODAL TRANSPORTATION SERVICES BUREAU
MICHIGAN DEPARTMENT OF TRANSPORTATION

November 2004

59-190-03

"...The auditor general shall conduct post audits of financial transactions and accounts of the state and of all branches, departments, offices, boards, commissions, agencies, authorities and institutions of the state established by this constitution or by law, and performance post audits thereof."

– Article IV, Section 53 of the Michigan Constitution

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REPORT SUMMARY

Performance Audit

Aviation Services Division and Airports Division
Multi-Modal Transportation Services Bureau
Michigan Department of Transportation

Report Number:
59-190-03

Released:
November 2004

The Multi-Modal Transportation Services Bureau administers the State airport development program, which provides project management for the programming, planning, safety evaluation, and construction of airports. Also, the Bureau's responsibilities include providing overall administration and direction for aviation programs; assisting communities and aviation interests in aeronautical matters; providing air transportation services to State personnel; coordinating accounting and administration functions; inspecting public use airports; and licensing and/or registering airports, flight schools, aircraft dealers, and aircraft.

Audit Objective:
To assess the effectiveness and efficiency of the Bureau in administrating aviation programs and airport and aviation development in the State.

Audit Conclusion:
The Bureau was generally effective and efficient in administering aviation programs and airport and aviation development in the State.

Reportable Conditions:
The Bureau needs to establish additional controls over the operation and monitoring of State-owned airports. Also, the Bureau should record accounting activities on the State's accounting system while operating State-owned airports. (Finding 1)

The Bureau did not ensure that airport consulting engineers submitted dated and timely reports of construction progress, materials tests, and certification results (Finding 2).

The Bureau did not assess the required financial penalty to aircraft owners or document the reason for the waiver of the penalty and did not assess the financial penalty to flight school operators who failed to pay the appropriate fees by the due date (Finding 3).

The Bureau did not always document its activities to help ensure that the airport manager and assistant manager tests were properly administered and that the airport license applications were complete (Finding 4).

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Audit Objective:
To assess the effectiveness of the Bureau in providing aviation services technical support to airports and communities.

Audit Conclusion:
The Bureau was generally effective in providing aviation services technical support to airports and communities.

Reportable Conditions:
The Bureau had not established written goals for the safety and education program and had not developed a formal process to evaluate the safety and education seminars (Finding 5).

The Bureau needs to develop and implement a policy for the frequency of flight school inspections (Finding 6).

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Audit Objective:
To assess the effectiveness and efficiency of the Bureau in maintaining and operating a fleet of State aircraft.

Audit Conclusion:
The Bureau was generally effective and efficient in maintaining and operating a fleet of State aircraft.

Reportable Condition:
The Bureau had not performed formal, periodic evaluations to determine its optimum fleet size (Finding 7).

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Agency Response:
Our audit report includes 7 findings and 8 corresponding recommendations. The Michigan Department of Transportation's preliminary response indicated that it agreed with all the recommendations but disagreed with part of one finding.

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A copy of the full report can be obtained by calling 517.334.8050 or by visiting our Web site at: http://audgen.michigan.gov

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AUDITOR GENERAL

November 5, 2004

Mr. Ted B. Wahby, Chairperson
State Transportation Commission
and
Mr. Sidney Adams Jr., Chairperson
Michigan Aeronautics Commission
and
Ms. Gloria J. Jeff, Director
Michigan Department of Transportation
Murray Van Wagoner Transportation Building
Lansing, Michigan

Dear Mr. Wahby, Mr. Adams, and Ms. Jeff:

This is our report on the performance audit of the Aviation Services Division and Airports Division, Multi-Modal Transportation Services Bureau, Michigan Department of Transportation.

This report contains our report summary; 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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MULTI-MODAL TRANSPORTATION SERVICES BUREAU
MICHIGAN DEPARTMENT OF TRANSPORTATION

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Description of Agency

The Multi-Modal Transportation Services Bureau, Michigan Department of Transportation, consists of four divisions: Aviation Services, Airports, Passenger Transportation, and Freight Services and Safety. This audit scope includes the Aviation Services Division and the Airports Division. The mission* of these two divisions is to develop and preserve a high quality Statewide air transportation system.

The Bureau administers the State airport development program, which provides project management for the programming, planning, safety evaluation, and construction of airports. Also, the Bureau's responsibilities include providing overall administration and direction for aviation programs; assisting communities and aviation interests in aeronautical matters; providing air transportation services to State personnel; and coordinating accounting and administration functions with the Bureau of Finance and Administration. The Bureau is also responsible for the enforcement of the Aeronautics Code (Sections 259.1 - 259.823 of the *Michigan Compiled Laws*) by inspecting public use airports and licensing and/or registering airports, flight schools, aircraft dealers, and aircraft.

Aviation Services Division and Airports Division expenditures were as follows:

	Fiscal Year	
Expenditures	2001-02	2000-01
Administration and air service program	$ 6,740,974	$ 7,919,056
Capital outlay	152,867,609	123,979,966
Total	$ 159,608,584	$ 131,899,021

For fiscal years 2001-02 and 2000-01, the Bureau's sources of funding were 68% and 65% from the Federal Aviation Administration, 11% and 16% from local airport authorities, and 21% and 19% from the State aviation fuel taxes and other miscellaneous sources, respectively. As of August 31, 2003, the Aviation Services Division and Airports Division had 51 classified employees.

** See glossary at end of report for definition.*

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

Audit Objectives

Our performance audit* of the Aviation Services Division and Airports Division, Multi-Modal Transportation Services Bureau, Michigan Department of Transportation (MDOT), had the following objectives:

1. To assess the effectiveness* and efficiency* of the Bureau in administering aviation programs and airport and aviation development in the State.

2. To assess the effectiveness of the Bureau in providing aviation services technical support to airports and communities.

3. To assess the effectiveness and efficiency of the Bureau in maintaining and operating a fleet of State aircraft.

Audit Scope

Our audit scope was to examine the program and other records of the Multi-Modal Transportation Services Bureau. 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, performed during May through August 2003, included examination of the Bureau's records and activities for the period October 1, 2000 through August 31, 2003.

Our audit methodology included performing a preliminary review of the Bureau's operations to gain an understanding of its operations and to plan our audit. This included interviewing the Bureau's management personnel and reviewing applicable statutes, administrative rules, policies and procedures, and the Bureau's activities and program records.

** See glossary at end of report for definition.*

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

We selected and reviewed the Bureau's project files for airport capital improvements and grants to local airports. 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 the Bureau. 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 reviewed licensing and inspection records for selected airports and flight schools to ensure that inspections were completed on a timely basis and that required fees were collected. We also reviewed airport manager licensing procedures. We evaluated the Bureau's efforts to provide pilot safety and education programs by reviewing the credentials of the instructors and the cost and frequency of scheduled programs. We verified that the Federal Aviation Administration certified the electronic repair facilities and repair staff.

To accomplish our third audit objective, we examined the flight and inspection records of the seven State-owned aircraft. We reviewed applicable documentation to ensure that the Bureau was operating State-owned aircraft in compliance with safety and maintenance standards. We analyzed the aircraft rates used in recovering the cost of air transportation and the aircraft utilization.

Agency Responses and Prior Audit Follow-Up

Our audit report includes 7 findings and 8 corresponding recommendations. MDOT's preliminary response indicated that it agreed with all the recommendations but disagreed with part of one finding.

The agency preliminary response that 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 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.

We released our prior performance audit of the Bureau of Aeronautics, Michigan Department of Transportation (#5919098), in April 1999. Within the scope of this audit, we followed up all 13 prior audit recommendations. The Bureau complied with 11 of the 13 prior audit recommendations. One prior audit recommendation was repeated, and the other was rewritten for inclusion for in this report.

COMMENTS, FINDINGS, RECOMMENDATIONS, AND AGENCY PRELIMINARY RESPONSES

ADMINISTERING AVIATION PROGRAMS AND AIRPORT AND AVIATION DEVELOPMENT

COMMENT

Audit Objective: To assess the effectiveness and efficiency of the Multi-Modal Transportation Services Bureau in administering aviation programs and airport and aviation development in the State.

Conclusion: The Bureau was generally effective and efficient in administering aviation programs and airport and aviation development in the State. However, we noted reportable conditions* related to State-owned airports, construction monitoring, aircraft registration and flight school license fees, and documentation of Bureau activities (Findings 1 through 4).

FINDING

1. State-Owned Airports

The Bureau needs to establish additional controls over the operation and monitoring of State-owned airports. Also, the Bureau should record accounting activities on the State's accounting system while operating State-owned airports.

The Michigan Department of Transportation (MDOT) owns five airports. MDOT has entered into lease agreements and/or contracts with airport operators to operate and maintain these State-owned airports.

Our review of these lease agreements and contracts disclosed:

a. Without the State Treasurer's approval, the Bureau established savings and checking accounts outside the State's accounting system while temporarily operating one airport. MDOT used these accounts to record hangar rental and fuel sale revenue and airport-related expenditures. The savings and checking account balances were deposited to the State Aeronautics Fund when the Bureau entered into a contract. The Bureau informed us that it established these accounts because it did not have the operating funds in its budget to operate the airport. As a result, MDOT was supplementing its appropriations without legislative approval.

** See glossary at end of report for definition.*

Section 18.1441 of the *Michigan Compiled Laws* provides that all money received by a State agency shall be forwarded to the State Treasurer and credited to the State's proper fund.

b. Two of the 5 airports' operating lease agreements or contracts did not require the airport operators to maintain financial records. Also, 4 of the 5 lease agreements or contracts did not require the airports to obtain independent financial audits. Without a review of the airports' accounting records or independent audit reports, the Bureau cannot ensure that financial activities of the airports are appropriate.

c. Three of the 5 airports did not provide the Bureau with proof that they had obtained liability insurance as required by the lease agreements or contracts. As a result, the Bureau may not be insured against claims arising out of the airports' activities.

d. The Bureau had not approved the daily self-inspection program or verified that the airports maintained a daily log of all inspections. As a result, the Bureau cannot ensure that the airport operators are operating the airports safely. Two lease agreements or contracts require that the airport operators be responsible for daily self-inspection programs as approved by the Bureau and notify the Bureau of any significant discrepancies noted.

RECOMMENDATIONS

We recommend that the Bureau establish additional controls over the operation and monitoring of State-owned airports.

We also recommend that the Bureau record accounting activities on the State's accounting system while operating State-owned airports.

AGENCY PRELIMINARY RESPONSE

The Bureau agreed with parts a., c., and d. of the finding and informed us that it has taken corrective action. The Bureau disagreed with part b. of the finding. With regard to part b., the Bureau responded that each of the State-owned airports has differing management arrangements designed to maximize the utility of the airport to the users and managers. The Bureau informed us that it monitors the activities of the contractors to ensure that they meet their contract responsibilities.

FINDING

2. Construction Monitoring

The Bureau did not ensure that airport consulting engineers submitted dated and timely reports of construction progress, materials tests, and certification results. Without these reports, the Bureau cannot ensure that airport projects conform to contract plans and specifications.

The Bureau is responsible for ensuring that airport construction projects are completed in accordance with State and Federal Aviation Administration (FAA) regulations. Airport sponsors* hire an airport consulting engineer to monitor the construction contractor's performance to ensure that the work conforms to the requirements of the contract plans and specifications. The Bureau's Project Engineer's Manual requires that airport consulting engineers submit standard reports to the Bureau detailing construction progress, materials tests, and certification results. The Bureau relies on these reports to maintain project oversight and administration.

Our review of 12 airport construction projects disclosed:

a. Airport consulting engineers did not submit all of the progress and inspection reports to the Bureau for 6 of the 12 projects, including 3 projects for which engineers did not submit any reports. Also, the engineers submitted reports late for 4 of the 12 projects. Further, the progress and inspection reports for 3 of the 12 projects were not dated.

b. Airport consulting engineers did not submit materials test and certification results to the Bureau in a timely manner for 10 of the 12 projects. The other 2 projects did not require tests or certifications.

The Project Engineer's Manual requires that the airport consulting engineer submit weekly progress and inspection reports and materials test and certification results to the Bureau within 5 calendar days of the end of the contractor's workweek in which the inspection or test was performed.

The Bureau informed us that the Project Engineer's Manual is outdated and that the Bureau now requires airport consulting engineers to submit reports and test

** See glossary at end of report for definition.*

results at the end of the construction project. However, without weekly reports, the Bureau may not be aware of test deficiencies and construction problems until the project is complete.

The MDOT Construction and Technology Division requires its contractors to submit reports and test results weekly.

We noted similar conditions during our prior audit and the Bureau responded that it agreed with the corresponding recommendation and would comply.

RECOMMENDATION

WE AGAIN RECOMMEND THAT THE BUREAU ENSURE THAT AIRPORT CONSULTING ENGINEERS SUBMIT DATED AND TIMELY REPORTS OF CONSTRUCTION PROGRESS, MATERIALS TESTS, AND CERTIFICATION RESULTS.

AGENCY PRELIMINARY RESPONSE

The Bureau agreed with the recommendation with explanation. The Bureau informed us that, due to significant staff reductions within MDOT, airport consulting engineers have been given increased project management responsibilities for monitoring day-to-day construction activities, including verification that all materials used meet State and federal specifications and that all construction methods are performed in accordance with State and federal standards. The Bureau believes that the alternative methods of construction monitoring, although different from those specified in the Project Engineer's Manual, ensure that airport projects conform to contract plans and specifications. The Bureau also informed us that, according to the FAA Airport Improvement Program Handbook, the requirement to complete and submit weekly construction progress and inspection reports is optional; therefore, requiring consultants to submit progress and inspection reports is up to the discretion of MDOT project managers. In addition, the Bureau informed us that it will revise the Project Engineer's Manual to indicate when the airport consulting engineers will submit dated and timely reports of construction progress, materials tests, and certification results.

FINDING

3. Aircraft Registration and Flight School License Fees

The Bureau did not assess the required financial penalty to aircraft owners or document the reason for the waiver of the penalty and did not assess the financial penalty to flight school operators who failed to pay the appropriate fees by the due date. Enforcement of the penalties would help ensure compliance with the Aeronautics Code.

Our review of the aircraft registration and flight school licensing processes disclosed:

a. The Bureau waived the penalty for aircraft owners who failed to register their aircraft by the specified date. We noted that payments for 4 (7%) of 60 aircraft owner registrations reviewed were submitted from 47 to 152 days late. However, the Bureau did not assess the financial penalty required by the Aeronautics Code and did not document the reason for the waiver of the penalty. The Aeronautics Code requires registration of all Michigan-based aircraft worthy of travel. Section 259.77(6) of the *Michigan Compiled Laws* requires a $50 penalty for failure to pay the registration fee within one month of the specified date and an additional $5 penalty for each month that the registration fee and penalty are not paid. A waiver of the financial penalty may be granted if it is shown, to the satisfaction of the Michigan Aeronautics Commission, that the failure or refusal to pay was due to reasonable cause and not willful neglect.

   The Bureau annually registers approximately 7,000 Michigan-based aircraft.

b. The Bureau did not assess the initial application fee for the renewal of flight school licenses for which payment was not received until after the original licenses expired. Our review of applications from 5 flight schools for a three-year period disclosed that 3 (20%) of the 15 applications, which were received from 7 to 18 days late, were assessed the license renewal fee rather than the initial application fee. Section 259.85(4) of the *Michigan Compiled Laws* states that the annual flight school license renewal fee is $10 and is payable from the original date of issuance and that an applicant shall pay the initial application fee ($25) if a license is not renewed before its expiration.

The Bureau annually licenses approximately 70 flight schools.

RECOMMENDATION

We recommend that the Bureau assess the required financial penalty to aircraft owners or document the reason for the waiver of the penalty and assess the financial penalty to flight school operators who failed to pay the appropriate fees by the due date.

AGENCY PRELIMINARY RESPONSE

The Bureau agreed with the recommendation and informed us that it will continue its current practice regarding assessment of late fees and penalties for aircraft registration, but recognizes that such practices should be formally documented as policies. These policies are being developed with a target implementation date of January 1, 2005. With regard to flight school licensing fees, the Bureau informed us that it will enact revised program guidance by October 2004.

FINDING

4. Documentation of Bureau Activities

The Bureau did not always document its activities to help ensure that the airport manager and assistant manager tests were properly administered and that the airport license applications were complete.

Our review of the Bureau's activities disclosed:

a. The Bureau did not properly document administration of the airport manager and assistant airport manager test. As a result, the Bureau could not be assured that the appropriate person took the examination, an approved individual administered the examination, and the applicant completed the examination within one hour.

   We examined 84 airport manager and assistant manager tests. We noted 26 (31%) instances in which the Bureau did not document who administered the airport manager examination, 33 (39%) instances in which the start and/or stop time was not indicated, and 52 (62%) instances in which the administrator did not document that the applicant's photographic identification was checked.

The Bureau created a cover sheet providing directions to the examination administrator, including directions such as "Persons appearing to take the exam will be required to show a photo identification" and "Applicants have one hour to complete the examination." The cover sheets require examination administrators to document information such as who administered the test, start and stop times, and type of photographic identification checked.

b. The Bureau did not ensure that the airport license applications were complete. Completed applications help ensure that the airports are complying with the Aeronautics Code if an airport is not inspected.

Our review of 30 airport license applications disclosed that 7 (23%) applications were missing appropriate signatures to certify that all applicable standards continue to be met by the facility.

Michigan Administrative Code R 259.251(4) provides that before annual renewal of any public use airport license, the Michigan Aeronautics Commission shall determine that all applicable standards continue to be met by that facility, through either inspection or certification by the facility's owner or manager.

RECOMMENDATION

We recommend that the Bureau document its activities to help ensure that the airport manager and assistant manager tests are properly administered and that the airport license applications are complete.

AGENCY PRELIMINARY RESPONSE

The Bureau agreed with the recommendation and informed us that airport manager and assistant manager test cover sheets have been modified to require only that information which is needed to properly conduct the test. In addition, the Bureau will work to ensure that all airport applications are complete.

PROVIDING AVIATION SERVICES
TECHNICAL SUPPORT

COMMENT

Audit Objective: To assess the effectiveness of the Bureau in providing aviation services technical support to airports and communities.

Conclusion: The Bureau was generally effective in providing aviation services technical support to airports and communities. However, we noted reportable conditions related to safety program evaluations and measurable goals* and flight school inspections (Findings 5 and 6).

FINDING

5. Safety Program Evaluations and Measurable Goals

The Bureau had not established written goals for the safety and education program and had not developed a formal process to evaluate the safety and education seminars. Without written goals and an evaluation process, the Bureau cannot measure the effectiveness of the safety and education program.

The Bureau administers safety and education seminars to pilots and the general aviation public. The seminars provide access to continuing education, safety presentations, and current aeronautical information. However, the Bureau did not use evaluations to obtain feedback from participants to determine the adequacy of the program and to identify additional training needs.

Performance goals projecting the desired outcome*, such as the reduction of certain types of accidents or incidents, are an effective tool when measuring actual performance against desired outcomes.

Evaluations are widely recognized as an effective tool to make continuous improvements in program seminars. Without a formal evaluation process, the Bureau had no formal process to obtain feedback from seminar participants. Seminar evaluations could provide valuable insight as to the seminars' effectiveness as well as providing constructive suggestions for improvement. Also,

** See glossary at end of report for definition.*

evaluations could provide a method for participants to inform the Bureau of additional subjects in which they would be interested.

RECOMMENDATION

We recommend that the Bureau establish written goals for the safety and education program and develop a formal process to evaluate the safety and education seminars.

AGENCY PRELIMINARY RESPONSE

The Bureau agreed with the recommendation. The Bureau informed us that written goals have existed for pilot safety and education efforts for a number of years and that the goals have been reevaluated and revised to best reflect current efforts relative to aviation safety. The Bureau also informed us that seminar evaluations have been developed and are now used at safety presentations. Information collected to date has been very helpful, including quality of programs, quality of speakers, and suggestion for future programs. Furthermore, there is overwhelming agreement among pilots that participation in safety programs makes them safer pilots.

FINDING

6. Flight School Inspections

The Bureau needs to develop and implement a policy for the frequency of flight school inspections. Establishing a policy for periodic inspections would help ensure that the flight schools comply with the Aeronautics Code requirements.

The flight school inspections determine whether:

a. Each flight school maintains adequate aircraft maintenance records to demonstrate performance of the required maintenance to help ensure the safe operation of the aircraft.

b. Each flight school has a curriculum, including lesson plans, adequate to properly qualify the student to complete the course for the certificate or rating sought.

c. Each flight school maintains training records to show each student's progress and level of completion relative to the course instruction in which the student is enrolled.

Our test of 5 flight schools noted that the time period between inspections was 6 and 7 years for 2 of the schools. The Bureau issued a license to 1 flight school before it inspected the school. As a result of not having inspections, 1 flight school did not have a written agreement to operate commercially from the airport. Another flight school's agreement had expired.

Section 259.85 of the *Michigan Compiled Laws* states that a person shall not operate a flight school in this State unless the person holds an annual license issued by the Michigan Aeronautics Commission. This Section also requires the schools to possess minimum requirements to operate as flight schools.

RECOMMENDATION

We recommend that the Bureau develop and implement a policy for the frequency of flight school inspections.

AGENCY PRELIMINARY RESPONSE

The Bureau agreed with the recommendation and informed us that new program guidance concerning flight school inspections has been developed and will be instituted in October 2004. The Bureau also informed us that new personnel have been assigned to conduct flight school inspections.

MAINTAINING AND OPERATING STATE AIRCRAFT

COMMENT

Background: The Air Transport Section within the Aviation Services Division operates a fleet of seven aircraft to provide on-demand safe and efficient air travel for State business to destinations within and outside Michigan when cost effective. Also, the aircraft are used by the Bureau to manage the State's ground-based air navigation and weather data collection and distribution systems. Further, the aircraft are used to facilitate airport safety inspections and electronic navigational device inspections and to regulate the construction of tall structures. Not only are these systems important to air safety, they improve access to the communities served by Michigan's 235 public use

airports and support the State's economic vitality. All State aircraft are operated on a cost recovery basis. Rates are per hour and based on fuel, maintenance, pilot time, and other related costs. MDOT recovers the cost of the flight by billing the appropriate State agency. The rate is the same regardless of the number of passengers on board.

Audit Objective: To assess the effectiveness and efficiency of the Bureau in maintaining and operating a fleet of State aircraft.

Conclusion: The Bureau was generally effective and efficient in maintaining and operating a fleet of State aircraft. However, we noted a reportable condition related to aircraft utilization (Finding 7).

FINDING

7. Aircraft Utilization

The Bureau had not performed formal, periodic evaluations to determine its optimum fleet size. Formal periodic evaluations may help to ensure efficient utilization of aircraft.

The Bureau had seven aircraft that it used to manage the State's ground-based air navigation and weather systems, to facilitate airport safety inspections, and to provide transportation to State employees for work-related functions. We compared the Bureau's use of its aircraft to standards for the flight industry. As the following table illustrates, the Bureau's aircraft utilization was, in some cases, well below industry standards:

Aircraft Type	Fiscal Year 2001-02 Direct Operating Cost	Fiscal Year 2001-02 Flight Hours	2002 Industry Standard*	Percentage of Industry Standard
King Air 1	$136,677	253.5	328	77%
King Air 2	$110,423	144.8	328	44%
Baron 1	$ 55,168	281.7	292	96%
Baron 2	$ 53,886	255.1	292	87%
Bonanza	$ 19,736	141.3	292	48%
Cessna 1	$ 28,070	99.3	292	34%
Cessna 2	$ 9,932	117.0	292	40%

* 2002 Industry Standard Source: National Business Aviation Association 2002 Compensation and Benchmark Survey of Business Aviation Owners.

During calendar year 1999, the Bureau sold two aircraft and purchased one aircraft. However, the Bureau did not perform a formal evaluation of its optimum fleet size prior to the acquisition and sale of its aircraft to determine the cost-effectiveness of maintaining seven aircraft.

RECOMMENDATION

We recommend that the Bureau perform formal, periodic evaluations to determine its optimum fleet size.

AGENCY PRELIMINARY RESPONSE

The Bureau agreed with the recommendation and informed us that it conducts periodic evaluations, although not in a formalized process. The Bureau also informed us that it consulted with other State agencies with flight services and developed a plan for improving utilization of MDOT aircraft. MDOT believes that aircraft utilization has decreased as a result of increased aircraft rates and the September 11, 2001 terrorist attacks.

GLOSSARY

Glossary of Acronyms and Terms

airport sponsor	A public or private agency that is eligible to receive federal funds for a public use airport.
effectiveness	Program success in achieving mission and goals.
efficiency	Achieving the most outputs and outcomes practical with the minimum amount of resources.
FAA	Federal Aviation Administration.
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 that the agency was established.
outcomes	The actual impacts of the program.
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.
reportable condition	A matter that, in the auditor's judgment, represents either an opportunity for improvement or a significant deficiency in management's ability to operate a program in an effective and efficient manner.