



RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF TRANSPORTATION
LANSING

KIRK T. STEUDLE
DIRECTOR

March 29, 2012

Dear Members of the Michigan Legislature:

Pursuant to Section 382 of Public Act 63 of 2011, enclosed is a study intended to fulfill the requirements of the following language:

Sec. 382. The department and the state budget office shall provide for an independent study of the state government needs for a state aircraft fleet. The department and the state budget office shall review the findings of that study and the costs associated with the current fleet or other arrangements for air travel. The department and the state budget office shall report the findings to the legislature no later than March 30, 2012, and shall consider those findings in any decision to sell airplanes.

Holstein Aviation, Inc. of Carmel, Indiana was retained through the standard Request for Proposals process to conduct the study, which was lead by Jeff Dunbar, Executive Director, Holstein Aviation.

If you have any questions, please contact us or Michael G. Trout, Executive Administrator, Michigan Department of Transportation's Office of Aeronautics, at 517-335-9568.

Sincerely,

Kirk T. Steudle, P.E.
Director

John E. Nixon, CPA
State Budget Director

Enclosure

**State of Michigan
State Aircraft Fleet Study**

From

Holstein Aviation, Inc.

March 29, 2012

Overview

As directed by contract with the State of Michigan, Holstein Aviation was retained to study the needs for a state aircraft fleet. Specifically, the task was to include meeting with representatives of the departments of Transportation, Natural Resources and State Police. The purpose of the meetings were to gather usage, cost and travel data, analyze the data, prepare a summary of findings with possible alternatives, present preliminary findings and prepare and submit a final report.

Onsite meetings in Lansing and Roscommon were conducted and overall, each department is well managed, the aircraft are in excellent condition mechanically and cosmetically and the crews are well trained. Each department has pilots that are trained for their specific and highly specialized missions. Mission fulfillment appears to be the highest priority to the extent they can be completed safely. Additionally, all parties in each department perform either other primary or additional duties in addition to flying requirements. The bulk of the aircraft maintenance is completed in-house with major inspections and overhauls done outside depending on the end user and the make and model of aircraft.

Following are the specific findings by department.

Michigan State Police

Missions

Since 1939 the mission of the MSP Aviation unit has been to enhance the service provided by the local, state and federal enforcement through day and night aerial surveillance. Missions include, but are not limited to;

- Search and Rescue
- Border Security Missions
- Domestic Cannabis Eradication and Suppression
- POTUS and VPOTUS Security Missions
- Fugitive Searches
- K-9 and SWAT Team Support
- Surveillances
- Disaster Support
- Investigative Support

Aircraft

Aircraft	Type	Special Equipment
2000 Bell 430	8-place twin turbine helicopter	Gen III FLIR, Day TV, video downlink, NiteSun, 800 MHz comm radio, night vision compatible
1990 Bell 206 L-3	5-place single turbine helicopter	Gen II FLIR, NiteSun, 800 MHz comm radio, night vision compatible
1992 Cessna 182R	Single piston engine fixed wing airplane	tracking system, 800 MHz comm radio, LoJack system

Aircraft Operating Cost

The State Police aviation unit does not charge for any law enforcement related missions with the exception of cost reimbursement for Domestic Cannabis Eradication and Suppression missions. The current rates are included below.

Aircraft	Cost Per Hour
Cessna 182	\$100
Bell 430	\$684
Long Ranger	\$329

Aircraft Values

Aircraft	Value	Current Hours
Bell 430 Helicopter, s/n 49071	\$2,409,400 Retail; \$2,080,050 Wholesale	2,896
Bell 206L-3 Helicopter, s/n 51325	\$864,700 Retail; \$738,030 Wholesale	7,600
Cessna 182R, s/n 68261	\$68,076 Retail; \$55,450 Wholesale	4,671

Operations & Geography

The Aviation Unit provides 24/7 support to law enforcement agencies for 83 counties across the state with two helicopters and one single engine airplane based in Lansing. In January of 2009, MSP entered into a cooperative effort with the Detroit Police Department to provide airborne patrols over southeast Michigan during peak crime hours. This highly successful venture has resulted in over 200 felons apprehended and countless assists to officers on the ground. To date, the capture rate of drivers involved in pursuits when the helicopter was involved is 100%. The only way to improve this program is to fly more hours. Currently, the flight hours in Detroit are restricted daily due to the lack of funding for fuel. The success of the efforts in Detroit could be repeated across the state. The Aviation Unit flew over 1,300 hours last year and supported more than 450 missions. In addition to the Detroit missions, the day to day aviation support continues out of Lansing.

Alternative Means to Accomplish Missions

Due to the highly specialized mission and mission specific equipped aircraft no third party or contract options are recommended. Availability and cost of alternatives therefore are not relevant.

Funding

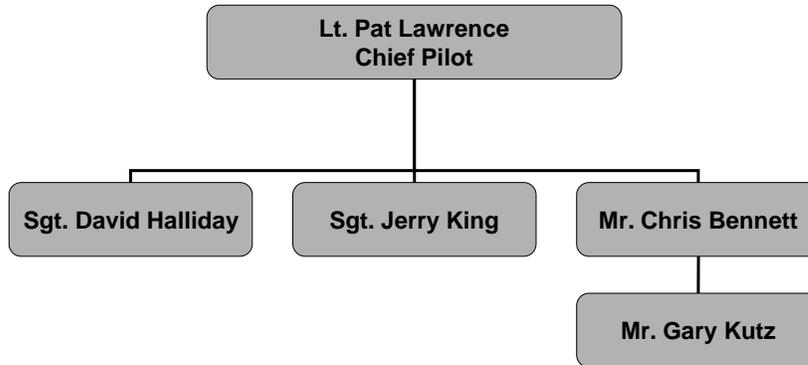
Funding is from the general operating budget and for fiscal year 2012 is \$1,529,000. Law enforcement missions are not charged but reimbursement is requested for the following: prisoner transport; support of other federal, state and local non-law enforcement missions; law enforcement missions with specific funding; events supported by the department with special funding; and others as required by the Director

Staffing

The Aviation Unit currently has three full-time pilots to cover missions 24/7 state wide. With two full-time mechanics the unit aircraft have minimal down time. This also allows the unit the ability to maintain aircraft in multiple work locations (Detroit and Lansing). Supporting missions at the current level, the unit uses one part-time tactical flight officer (TFO). The pilot needs a well qualified TFO in order to provide safe and effective support to ground officers while allowing the pilot to focus on flying the aircraft and maintaining situational awareness. The observer is the critical link in providing timely and accurate information to the officer on the ground as well as flight safety information to the pilot. The TFO is trained in the following areas:

- Night Vision Goggles
- Forward Looking Infrared (FLIR)
- Day television camera
- Live video downlink
- Street level moving map
- Aero-medical issues
- Aircraft and police radios
- Flight procedures
- Airborne tactical procedures
- Familiar with the local area

Aviation Section Personnel



Mission Statistics

FY 2011 Missions and Flight Hours			
Aircraft	Bell 430	Bell 206	Cessna 182
Missions	178	219	80
Hours	483.8	521.6	212

Utilization by Mission

FY 2011 Mission Breakdown			
Type Mission	Bell 430	Bell 206	Cessna 182
Admin	1	0	0
DCE/SP Indoor/Outdoor grows	42	27	2
Homeland Sec., Customs	1	0	29
Investigative-court surveillance, fugitive search, photo, video, interview, assist Specialist Teams	28	18	7
Maintenance	8	15	6
Region 2 Patrol – SE Michigan	55	122	3
Security – USSS, Governor	3	1	0
Training	11	12	24
SAR	23	14	0
Special	3	4	0

Missions Conducted for other Departments

Missions by Department			
Department	Bell 430	Bell 206	Cessna 182
MDOT	3	4	0
DNR	0	1	9
Other	0	1	0

Consolidation Task Force 2005 Findings and Recommendations

Following are highlights to the findings and recommendations from the State Aviation Services Consolidation Task Force of April 2005 relating to the MSP.

- It was determined that the specialized nature of the helicopter equipment and associated missions precluded those aircraft from inclusion in any reduction recommendations
- It was agreed that the Beechcraft King Air 200's currently operated by MDOT were best suited to satisfy this mission (transportation) obligation
- Recommended that two MSP cabin class aircraft, a Cessna 404 and a 421B, be sold
- MDOT negotiate Memorandum of Understanding allowing MSP to utilize 1982 Beechcraft King Air at an hourly rate and that MDOT would give MSP priority when scheduling aircraft
- MSP to retain Cessna 182 for slow flight surveillance and detection related to law enforcement activities

The two cabin class aircraft were sold and MSP coordinates with MDOT as necessary for transportation missions.

Potential Efficiencies

The MSP aircraft are specialized for their specific missions. Therefore, MDNR and MDOT aircraft are not easily transferable. When applicable, MDOT provides transportation for MSP special operations and while this service is not often utilized, when needed, it requires rapid response. If MDOT aircraft are otherwise engaged on a transportation mission, they would not be available to provide this priority service.

With the department operating at or near capacity, any expansion of mission requirements would require further study. An example is the type of cooperative effort with the city of Detroit being expanded to include more Michigan cities. Expansion of the mission requirements would require more rotary wing aircraft to be effective since current staff and aircraft are utilized at or near maximum capacity. Conversely, any reduction of aircraft would have a significant impact on the MSP to provide services as currently provided throughout the state.

Comparison Among State Police Aviation Programs

The Aviation Unit compared its current operation to three other surrounding states. Each state has a decentralized approach and places their aircraft on patrol in targeted areas. The Aviation Unit currently consists of three aircraft, three pilots, and two mechanics.

State	Pilots	TFO	Mechanic	Airplane	Helicopter	Total FTEs Pilots-TFOs	Total Aircraft
Michigan	3	0	2	1	2	3	3
*Indiana	9	0	2	6	8	9	14
*Ohio	15	8	8	14	2	23	16
*Pennsylvania	30	0	4	7	9	30	16

*Determined through the Airborne Law Enforcement Association Database.

Executive Summary

The review of the State Police Aviation Unit reveals that the department is operating at or very near maximum capacity. The staff is highly motivated, well trained and dedicated to the fulfillment of the mission. In order to increase availability and to reduce response time to request for support, the MSP Aviation Unit would need to increase their fleet with patrol specific aircraft stationed in strategic locations to meet the needs of law enforcement agencies across the state. Aircraft assigned to high crime areas should be placed on patrol there by providing a highly visible deterrent to crime, a rapid response to in-progress calls, safer vehicle pursuits and higher apprehension rates, making the officers, citizens, and visitors of the State of Michigan safer.

Michigan Department of Natural Resources

Missions

- Wildlife Survey: eagle, osprey, moose, wolf, elk & waterfowl
- Law Division Missions: deer feed & bait, night patrols (spotlighting), off road vehicle patrols
- Search and Rescue: lost hunters, children, stuck vehicles, mushroom hunters, escaped convicts
- Fire Detection
- Transportation

Aircraft

The MDNR operates seven aircraft specifically equipped for their missions to include special communications gear for coordination with ground operating teams.

Aircraft	Type
1977 Cessna 172N	Single piston engine fixed wing airplane
1975 Cessna 182P	Single piston engine fixed wing airplane
1976 Cessna 182P	Single piston engine fixed wing airplane
1979 Cessna 182Q	Single piston engine fixed wing airplane
2000 Cessna 182S	Single piston engine fixed wing airplane
2005 Cessna 182T	Single piston engine fixed wing airplane
1978 Beechcraft A36	Single piston engine fixed wing airplane

Current Operating Cost

Aircraft	Cost Per Hour
Cessna 172	\$115
Cessna 182	\$125
Beechcraft A36	\$145

Aircraft Values

Aircraft	Value	Current Hours
Cessna 172N, s/n 68632	\$49,131 Retail; \$38,847 Wholesale	7,000
Cessna 182P, s/n 63597	\$64,570 Retail; \$48,238 Wholesale	7,400
Cessna 182P, s/n 64615	\$82,530 Retail; \$66,066 Wholesale	7,800
Cessna 182Q, s/n 67181	\$91,221 Retail; \$73,441 Wholesale	8,000
Cessna 182S, s/n 80854	\$176,687 Retail; \$155,209 Wholesale	2,500
Cessna 182T, s/n 81735	\$218,015 Retail; \$180,827 Wholesale	1,040
Beechcraft A36, s/n E-1215	\$151,420 Retail; \$127,549 Wholesale	3,700

Operations & Geography

There are five full time pilots located throughout the Northern Lower and Upper Peninsula in Houghton Hancock, Newberry Escanaba and Roscommon. Wildlife surveys are conducted year-round and law division missions are generally conducted in the summer and fall. Search and Rescue are conducted as needed. Fire detection operations are ongoing throughout the fire season, which runs from March through November and this is the primary mission. Once detected the pilots are then responsible for the coordination and direction of firefighting efforts and protection of ground crews. A close bond exists between on-scene Conservation Officers while they perform evacuation out in front of the wildfire. Further a similar bond is critical to the Forest Officers performing the actual suppression work whose lives depend on accurate and timely information regarding the spreading of the fire. Highly trained and experienced aircrews are required in order to advise the ground crews of the status of the fire. The

aircraft are specifically equipped, high wing aircraft for an unobstructed view of ground operations. Equipment includes: Short Takeoff & Landing modification, which allows slower in-flight speeds to enhance ground observation; recognition lights to be seen better by other aircraft in smoke/haze; collision avoidance equipment to alert pilots of other aircraft in area; hi-band radio for ground crew communication; and intercom for in-aircraft crewmember interface when flying with observer.

MDNR aircraft are supplemented with standby contract service. The contractors own their own aircraft and the department has a package of equipment that can be temporarily mounted in contractors' aircraft to meet the mission requirements. The contractor pilots have been well trained and are familiar with the specific missions. Contract crews are utilized in the lower portion of the Lower Peninsula where fire hazards are lower leaving department personnel and aircraft to patrol and direct operations in the heavily wooded northern portions of the Lower and Upper Peninsulas. The Beechcraft A36 has wide rear double doors and equipment can be carried to nearby airports where and when needed, and with the doors removed can also be used for observation. The A36 is also utilized for transportation missions when cost effective.

All aircraft undergo 100-hour inspections via in-house maintenance personnel. Recurrent training is conducted by the instructor lead pilot.

Alternative Means to Accomplish Missions

Due to the highly specialized mission, contract options are limited and utilized in areas with a lower probability of fire. As noted above, they are not utilized in the heavily wooded area of the Lower and Upper Peninsulas. The cost of the contract service is well managed as the crews are not paid to be on standby. They are only paid when utilized and they have a minimum response time when on-call. The cost for the contract service is \$140 per hour while MDNR charge backs are \$125 for their own mission equipped and staffed C182's. While available and used successfully in some areas, the availability of contract services throughout the state is limited. MDNR was unable to obtain bids from contractors for most areas in the state.

Funding

Funding is via a revolving account with appropriations of \$250,000 per year, which is re-appropriated annually. MDNR charge-backs for the aircraft include reserves for the airframe, engine and avionics. Planned aircraft replacements take place at 10,000 hours airframe time and engine overhauls are per manufactures' recommendations. This revolving plan allows for replacement without additional appropriations.

Staffing

- The MDNR currently has five full-time pilots to cover missions state wide
- The pilots are also mechanics resulting in lower cost and minimal down time
- Due to ongoing in-house maintenance and the need for immediate response the aircraft availability is seen to be appropriate for the nature of the mission.

Mission Statistics

FY 2011 Flight Hours			
Aircraft Type	N-number	Airframe Total Time	Flight (Tach) Time FY2011
C172	N733XN	6975	354
C182	N97745	7812	340
C182	N5981J	7319	365
C182	N2463B	971	281
C182	N357ME	6875	404
C182	N8470M	7679	479
A36	N23752	3683	50

Five Year Mission Statistics

Since MDNR fire detection missions can vary yearly depending on the fire risk, following is a five-year summary.

Aircraft	FY2007	FY2008	FY2009	FY2010	FY2011	TOTAL	5-YR AVERAGE
C172N, N733XN	234	311	293	235	400	1,473	295
C182P, N97745	452	304	337	397	341	1,721	344
C182P, N5981J	384	304	346	353	388	1,775	355
C182, 872 – 63B	606	373	405	658	384	2,426	485
C182S, N357ME	371	415	532	555	402	2,275	455
C182T, N8470M	522	426	508	554	504	2,514	503
C182, 44U	27	0	0	0	0	27	5
Be A36, N23752	125	42	41	45	50	303	61
TOTAL	2,721	2,175	2,352	2,797	2,469	12,514	2,503

Utilization by mission

Aircraft	Hours
FMD	850
Wildlife	1472
Law Enforcement	144
Other	2

Consolidation Task Force 2005 Findings and Recommendations

Following are highlights to the findings and recommendations from the State Aviation Services Consolidation Task Force of April 2005 relating to the MDNR.

- For public safety reasons, it was determined that all MDNR single engine aircraft should be retained
- It was agreed that one twin piston engine Cessna 310R based in Marquette be sold
- It was agreed that the passenger transportation needs of the MDNR could be satisfied by MDOT
- MDOT agreed to position one of the twin engine aircraft in the Upper Peninsula for that purpose
- MDOT to coordinate all passenger traffic associated with the Upper Peninsula

MDOT has established a base of operations with a pilot for the Upper Peninsula in Marquette, provides transportation for MDNR, to include 76 missions in FY2011, and coordinates all passenger traffic.

Potential Efficiencies

MDNR aircraft are specifically equipped for the stated missions. Therefore, transferability between departments is very limited. MDOT provides passenger transportation when required. There are several efficiencies that are currently realized such as discounted bulk fuel purchased at Roscommon, in-house maintenance and in-house training. The budget and charge-backs include reserves for scheduled overhauls and replacements. When and where appropriate, low cost and well trained contract services provide seasonal and backup services.

Executive Summary

As the consolidation report concluded in 2005, the department appears to be well staffed and equipped for the stated purpose. The pilots and maintenance personnel are highly motivated, well trained and mission oriented.

Michigan Department of Transportation – Transport and Safety Section

Missions

- Promote and Foster Aviation
- Airport Inspections – ensure licensing standards to code; required to license all airports; involved with airport approvals and layouts
- Electrical Facilities Unit – 41 automatic weather observation systems; inspect and maintain
- Maintain state owned very high frequency omni-range radio stations (VOR)
- First responders for federal control of strategic stockpile for Dept. of Community health
- Provide cost effective transportation for state personnel
- Provide rapid response in support of MSP special operations
- Provide rapid response in support of the key state administrative personnel

Aircraft

Aircraft	Type
1982 Beechcraft King Air B200	Twin turbine engine 9-passenger airplane
1999 Beechcraft King Air B200	Twin turbine engine 9-passenger airplane
1985 Beechcraft Baron B58	Twin piston engine 5-passenger airplane
1994 Beechcraft Baron B58	Twin piston engine 5-passenger airplane
1982 Cessna 206G	Single piston engine fixed wing airplane

Operating Cost

Aircraft	Cost Per Hour
King Air B200	\$1,231
Baron B58	\$395
Cessna 206	\$304

Aircraft Values

Aircraft	Value	Current Hours
1999 King Air B200, s/n BB-1655	\$1,905,310 Retail; \$1,664,810 Wholesale	2,050
1982 King Air B200, s/n BB-1010	\$1,483,864 Retail; \$1,320,989 Wholesale	6,260
1994 Baron B58, s/n 1726	\$289,348 Retail; \$251,928 Wholesale	4,581
1985 Baron B58, s/n 1502	\$232,208 Retail; \$202,498 Wholesale	5,749
1982 Cessna 206, s/n 6505	\$128,416 retail; \$106,716 Wholesale	3,528

Operations & Geography

There are a two dedicated full time pilots, one with an Airline Transport rating (ATP), located in Lansing to act as Pilot in Command (PIC) on all three makes and models of airplanes. The Manager of the department also serves additional duty as PIC. Other department personnel have primary or additional duties and fly when called upon. There is one Baron and an ATP rated pilot based in Marquette. There are two additional Commercial rated pilots for the Cessna 206 whom also perform Second-in-Command (SIC) functions for the King Air and Baron. And there is one commercial pilot to perform duties as SIC when needed. The King Airs are flown with a crew of two.

In order to meet the rapid response nature in support of the MSP and key state administrative personnel, two King Airs allow for scheduling flexibility to respond 24/7. There is additional capacity available on the King Airs as well as on the Cessna 206 and it does not appear that the department has been utilized to maximum capacity. However, data for the first two quarters of 2012 indicate a significant increase in

utilization. Overall flight hours are up in over 30% FY2012 over FY2011. Individually, the King Air B200 hours are up by 20% (93.0 hours to 111.6 hours), the Baron B58 hours are up 31% (209.8 to 274.8) and the C206 hours are up 81% (14.8 hours to 26.8).

While the above increases are significant, as noted there is additional capacity on the King Air B200's and Cessna 206. Per State of Michigan Travel Regulations, "...the use of commercial airlines or state aircraft is permitted when it is to the advantage of the State." Further, "...All travelers should purchase the least expensive flight that meets the business need and is in the best interest of the state." The Department of Aeronautics provides costs based on specific formulas including FTE time and total expenses comparing flying, commercial aircraft and driving options. Previous studies and ongoing trip cost comparisons illustrate the cost benefit of air travel on state aircraft when travelers' salaries, time, expenses and alternative travel costs are considered. An internal department study was conducted in FY2010. There were 2,371 passenger hours. If those trips had been taken by car the employees would have spent 11,979 hours on the road. At an average compensation rate of \$45.00/hour, this resulted in a savings of \$432,360 in FY2010. For FY2011, a similar analysis was completed with similar results. There were 2,034 passenger hours on MDOT aircraft which would have been 10,643 hours if traveling by car. At the same \$45.00/hour average salary, the result was a savings of \$387,405. This includes time only and does not include any overnight expenses due to the inability to go out and back in one day.

Similar savings can be realized by utilizing MDOT aircraft versus commercial airlines. The costs comparisons that the department can provide can determine actual costs of flying on commercial airlines and MDOT aircraft. Anecdotally, testimonial by users illustrate the inefficiencies of commercial transportation. In one case, a group of FTE's had to go to Duluth. Airline schedules would have required either an overnight stay or a long layover in Duluth instead of the entire group being able to return to Michigan in the same business day.

Michigan has a unique geography and coverage area. As an illustration, the drive time for the 541 miles from Lansing to Ironwood is 9:41. The drive time from Lansing to Washington D.C. is only 19 minutes longer. With the mix of two 9-passenger turboprops, two 5-passenger piston twins and one 5 passenger single engine aircraft, the right aircraft can be assigned to the right mission. Anecdotal statements from users describe trips to/from the UP that resulted in 1-day trips versus at least 1-overnight stay and more productive use of the employee's time. The aircraft utilized for each trip is "right-sized" for the number of passengers on the trips.

Transportation of department personnel in support of the mission to inspect airports, licensing, electronic equipment maintenance is provided by department aircraft and two airport inspectors are qualified for PIC in the Cessna 206

Alternative Means to Accomplish Missions

Users can use alternative modes of transportation to include driving and commercial airline, however, as previous studies indicate, state aircraft can provide the most cost effective method. The department has a standardized form that determines total trip costs and includes factors for number of passengers, salaries, total trip time and expenses. The State's Standard Travel Regulations advise that travelers should utilize the mode that meets the business need and is in the best interest of the State.

There are similar turboprop aircraft in Michigan available for charter, but cost more per hour and additional cost would be incurred to include the deadhead legs to and from the airport of departure from the charter operator's home base. For example, per a published charter guide there are five B200 aircraft available for charter in the state with an average rate of \$1,380 per hour. This compares to the MDOT charge back rate of \$1,231 per hour. On a typical trip the deadhead legs would add approximately 30 – 45 minutes of billable time. A two hour roundtrip flight would cost \$2,462 in the MDOT aircraft versus approximately \$3,725. There are some other intangible considerations for charter aircraft in that they may or may not be as professionally operated as department aircraft. As noted, several of the department pilots are ATP rated and attend regularly scheduled third party flight training.

As the department aircraft are specifically designed for passenger transportation, the utilization of MSP or MDNR aircraft for general transportation is not feasible due to the number of engines, seats and/or equipment mounted in the cabins. Additionally, the other department aircraft are operating at or near maximum capacity.

Funding

Air Transport operations are from restricted funds with a FY2012 budget of \$1,369,824. Users of the system reimburse the Bureau at a predefined rate for utilization from their sources of funds. These sources of "revenue" are deposited into the restricted State Aeronautics Fund (SAF).

Staffing

- There are two dedicated pilots, one with an Air Transport rating (ATP), located in Lansing to act as Pilot in Command (PIC) on all three makes and models of airplanes
- The Manager of the department, ATP rated, serves the additional duty as PIC
- There is an additional pilot with an ATP rating to fly as PIC in the Baron based in Marquette
- There are two additional Commercial rated pilots for the Cessna 206 as well that also perform Second-in-Command (SIC) functions for the King Air and Baron when required and an additional pilot available as needed to act as SIC in the King Air and Baron.
- The King Airs are operated with a crew of two, one PIC and one SIC
- There are two maintenance airport inspectors that are qualified to fly the Cessna 206 in support of their functions

Mission Statistics

FY 2011 Flight Hours		
Aircraft Type	N-number	Flight Time FY2011
B200	N1655M	117
B200	N702MA	100
Baron B58	N2844D	280
Baron B58	N72521	233
C206	N9461Z	35
TOTAL		765

Note: Transportation aircraft typically are required to remain on site while awaiting passengers for continuing flights. The ratio of duty time to flight time is approximately 4.6:1. Therefore while the flight time was 765 hours, the duty time for FY2011 was 3,535 hours.

Utilization by mission

Aircraft	Hours
Aeronautics	183
Attorney General	5
Community Health	17
Civil Rights	3
Environmental Quality	36
Human Services	4
Labor & Economic Growth	4
DNR	76
MDOT	196
Tech., Management & Budget	2
Lic. & Regulatory Affairs	3
Education	5
MI Economic Develop Corp.	17
MSP	73
Michigan State University	109
Treasury	32
TOTAL	765

Consolidation Task Force 2005

Following are highlights to the findings and recommendations from the State Aviation Services Consolidation Task Force of April 2005 relating to the MDOT.

- It was determined that the Beechcraft King Air B200's currently operated by MDOT were the best suited to satisfy the mission.
- MSP sold two cabin class aircraft with transportation missions to be transferred to MDOT
- DNR sold one twin piston engine aircraft with transportation missions to be transferred to MDOT
- It was agreed that the passenger transportation needs of the MSP and MDNR could be satisfied by MDOT
- MDOT sold two single piston engine aircraft, a Beechcraft Bonanza and a Cessna 182
- MDOT agreed to position one of its twin engine aircraft in the Upper Peninsula for MDNR purposes
- MDOT to coordinate all passenger traffic associated with the Upper Peninsula
- MDOT should be responsible for all passenger transport
- MDOT uses "FlightPak" software to schedule and maintain a data base of air transport flights

MDOT established a base of operations with a pilot for the Upper Peninsula, provides transportation when requested for MSP and MDNR and coordinates all passenger traffic.

The Task Force included comments on the King Air 200 stating that it "...represents the industry standard for entry level business transportation and maintains the best long term utility and efficiency for a variety of transportation needs. The turbine-powered King Air 200 features a large, pressurized cabin and is capable of carrying up to eight passengers, long distances, above weather, and at speeds of over 300 miles per hour. Turbine-powered aircraft flown by professional crews have a safety record on par with that of commercial airlines.

It was agreed by task force members that from a "State" perspective, it is desirable to retain both King Air aircraft."

Potential Efficiencies

There is additional capacity on the King Airs. As previously indicated, when compared to alternative travel options, department aircraft can provide a lower cost option. Additionally, the two King Air B200 aircraft allow for rapid response for top government officials and the MSP when required. The State should look at additional ways to utilize the service that the department provides. The department can provide a cost analysis to determine the most cost effective mode and match aircraft to the mission. The cost analysis form that the department utilizes should be made available for ease of use for all travelers.

Another consideration for increased utility, cost effectiveness and traveler's convenience would be a regularly scheduled shuttle service from Lansing to Marquette. The King Air would be ideally suited for such a mission if more passengers share trip costs. The capacity exists for additional flying and if comparable modes of transportation are considered, state aircraft can be the most cost effective.

The Cessna 206 also has additional capacity and is used primarily by maintenance personnel in the department for airport inspections. MSP is aware of the availability of the aircraft but due to their specific mission and equipment requirements as well as a limited number of pilots, they do not utilize the aircraft.

Executive Summary

The Department of Aeronautics Transportation and Safety Division is highly motivated, well trained and dedicated to the fulfillment of the missions. The theme for the department is to foster and promote aviation, which is exemplified in the day-to-day functions. Additional capacity exists for the King Air B200's and for the Cessna 206. However, the ability to provide rapid response for MSP or key personnel missions assumes availability of aircraft when needed and if the aircraft are on another mission then they simply are not available for the rapid response. The department should continue to explore when and how to utilize MDOT aircraft when it is the most cost effective solution.

A scheduled shuttle service for common destinations such as Lansing to the Upper Peninsula should be investigated. By doing so, not only could utilization increase but additional savings may be realized as trips are combined with costs shared among more travelers. All state departments that have travel requirements should consider budgeting for travel utilizing MDOT aircraft when it is the most cost effective. The form currently used by the department to establish comparative costs should be made more easily available to traveling personnel for the purpose of evaluating which mode of transportation is in the state's best interest.

In the current used aircraft marketplace retail values are significantly depressed. With the potential to realize additional efficiencies with higher utilization of the King Air B200's, it would be advisable to pursue these savings as opposed to selling an aircraft at this time.

As previously noted, the Cessna 206 is underutilized notwithstanding the increase in operations so far this year. Options include transferring the airplane to MDNR or MSP. In either case, their missions would need to be expanded and additional staffing added for either department to take advantage of the additional aircraft. The 206 has higher operating costs than the 182's operated by MDNR and MSP and exceed the cost of MDNR contract services. Ultimately one option is the sale of this airplane. However, in the current market, values are depressed. It is difficult to forecast when and if the market for a 1982 model will improve, but holding the aircraft while continuing to utilize it for airport inspections and backup transportation may result in a higher sale price in the future.

SUBMITTED BY:



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March 29, 2012

Date