



South Dakota Legislative Research Council

Issue Memorandum 94-34

Review of the Usage of State-Owned Aircraft

Background

The state of South Dakota owns several aircraft, which are employed in a range of activities. Much of state employee travel is accomplished through the state automobile fleet and other means, but some state airplanes are used to provide transportation services. The Aeronautics Commission is authorized to oversee a variety of aspects of air travel in the state; their powers include oversight of the aircraft owned by the Department of Transportation. These aircraft are used to provide transportation to the Governor and state agencies.

State agencies who wish to use aircraft for travel have several options. First, they can be scheduled to use one of the airplanes operated by the Department of Transportation. Agencies must reimburse the Aeronautics Commission for this service according to the following statute:

§ 50-2-15. Operation of
commission aircraft for other
state departments -
Reimbursement of
commission.

The South Dakota aeronautics commission, when its state aircraft are not being used in the conduct of the necessary activities of the department of transportation, is authorized to

operate the aircraft for other departments of the state government of South Dakota. Such departments shall reimburse the aeronautics commission in a sum to be fixed by the state board of finance, to fully defray the cost and expenses of rendering said service; to be paid by such department upon presentation of an itemized claim by the said aeronautics commission.

This statute ensures that the agency will pay only the true cost of its use of the aircraft. The Aeronautics Commission also provides for the maintenance and repair of the Department of Transportation planes according to the following statute:

§ 50-2-16. Disposition of
payments received - Special
aviation internal service fund -
Use of moneys in fund.

The funds received from the several departments of state government by the department of transportation shall be deposited in the state treasury in an internal service fund to be designated as the "special aviation internal service fund." The funds deposited in said fund shall be used, and are

hereby assigned to the department to be used for the maintenance, cost of operation repair and other expenses in connection with the operation of its state aircraft.

If state aircraft are unavailable, state agencies can charter a flight according to the following administrative rule:

5:01:02:08. Charter airplane rates

Any department, agency, or institution may contract for airplane service from private flying stations when alternative methods of transportation are inadequate and when state aircraft are not available. The rates allowed for charter services shall not exceed charges made to private individuals and companies for like services.

Thus, state agencies have a couple of options to meet their air travel needs. They can use the state planes and pay the cost of the trip, or, if state planes are unavailable, they can charter flights for a price which does not exceed the private rate. In addition, state agencies which have adequate funds and receive legislative authorization to spend the necessary funds can develop their own fleet of transport aircraft. Only the Board of Regents and the Department of Game, Fish and Parks do so currently. The Department of Game, Fish and Parks, the Board of Regents, and the Highway Patrol also have non-transport aircraft, which are used largely for special functions of those agencies such as surveying, research, and law enforcement.

State agencies are not subject to any significant restrictions on the purchase of aircraft, with the obvious exception of the availability of funds. The Aeronautics Commission serves in an advisory capacity to all state agencies with aircraft. SDCL 50-2-1.1 states that "The commission shall provide advice and expertise to state agencies regarding the purchase, transfer and disposition of state owned and operated aircraft including those owned or operated by any state institution."

As that statute indicates, the use and acquisition of aircraft throughout state government is relatively unregulated. For example, the Aeronautics Commission has no policy restricting the use of the Department of Transportation's airplanes. Under existing practices, aircraft use is regulated by the pressure for agencies to stay within budgets. Thus, agencies are expected to weigh the cost of aircraft use as opposed to other budget priorities rather than complying with specific restrictions. The remainder of this memo provides an overview of the existing state aircraft fleet in all departments, and it includes data on the extent of use and cost of operation of these aircraft.

Department of Transportation

The Department of Transportation currently owns and operates a fleet of two aircraft. In addition, an aircraft owned by the Department of Game, Fish and Parks is also being scheduled and operated by the Department of Transportation. The older Department of Transportation plane is a 1980 Piper Seneca II. This plane was purchased in 1979 for \$152,546, and its current retail value is estimated at \$101,910. The Seneca can accommodate up to four passengers; it is

used primarily for in-state travel for state agencies. In fiscal year 1994, 21 state agencies scheduled at least one trip on this aircraft.

In 1989, the department purchased an MU2 at a cost of \$765,000. This plane provided transportation to the Governor and state agencies until April of 1993, when it was destroyed in a crash. To replace this aircraft, the department purchased a 1988 Beechcraft King Air B200 in February of 1994 for \$1,895,000. The estimated current retail value of this aircraft, according to the Aircraft Blue Book Price Digest, is \$2,112,031. This plane was chosen based on a study conducted by the Aeronautics Commission and a special Executive Aircraft Replacement Task Force; this report used safety and cost as the two primary considerations. The King Air has a carrying

capacity of nine passengers, and it is suitable for long-distance, out-of-state trips. This plane is designed to withstand adverse weather conditions, unlike smaller aircraft such as the Seneca. The King Air provides most of the travel needs of the Governor, and it is widely used by other state agencies. For example, in fiscal year 1994, the Governor's Office accounted for 18.5% of the passengers on flights by this aircraft. It is interesting to note that seven states, Arkansas, California, Connecticut, Hawaii, Maine, Oregon, and Vermont, do not own an executive aircraft. The governors of these states must use alternative forms of transportation, including chartered and commercial aircraft.

The following chart illustrates the number of trips, miles flown and cost of operation for each of the Department of Transportation aircraft over the past three fiscal years.

Fiscal Year	Department of Transportation Airplanes								
	King Air			Seneca			MU2		
	Trips	Miles	Cost per Mile	Trips	Miles	Cost per Mile	Trips	Miles	Cost per Mile
1992	-----	-----	-----	187	74,492	\$0.80	121	62,812	\$1.75
1993	-----	-----	-----	177	68,899	\$1.03	93	48,338	\$2.07
1994	46	24,418	\$2.40	158	58,484	\$1.07	-----	-----	-----

As the chart indicates, the Seneca is the only one of the department's planes to be in continuous operation over the past three years. Interestingly, it has received less use with each successive year, even though the department was without one aircraft for almost a full year. This divergence from expectations can be explained by a couple of factors. First, the Seneca is not a capable

substitute for the MU2 because it is not safe in all weather conditions and it carries fewer passengers. Thus, many trips had to be taken on charter aircraft during the time period that the department was short one plane. In addition, the department started scheduling trips on a Department of Game, Fish and Parks plane after the loss of the MU2; this probably led to some substitution of flights

which would have been handled by the Seneca. The Seneca can be operated comparatively inexpensively; however, as the number of trips it takes each year declines, the average cost of operation has increased.

The King Air is relatively new to the department's fleet, but it appears that it will serve as an adequate replacement for the MU2. The number of trips it handled in fiscal year 1994 equates to slightly more than 100 over a full year, which is in range of the use of the MU2 in previous years. Based on the limited data available, the King Air appears to be a slightly more expensive aircraft to operate. However, if it offers increased safety, the increase in cost can be considered a worthy investment. Because of its relatively high cost of operation, it would be logical to restrict use of the King Air to only flights which need to go a long distance, carry more than four passengers, or go through difficult weather conditions. For other trips, another plane, such as the Seneca, would be an adequate and more economical choice.

Department of Game, Fish and Parks

The Department of Game, Fish and Parks owns three aircraft and operates a total of five. Since the crash of the Department of Transportation's MU2, a Piper Aztec, which is owned by the Department of Game, Fish and Parks, has been scheduled by the Department of Transportation. Since this arrangement began, this plane has provided transportation services to twenty-six state agencies and less than 10% of the passengers have been from the Department of Game, Fish and Parks. This aircraft is also still used by the department to transport fish eggs from hatcheries to lakes throughout the state. The Department of Game, Fish and Parks also

owns a Cessna Skyhawk which is used for surveying work done by the department; this plane is not suited for transportation. The following table illustrates the amount of flight time and distance and cost of operation for these two planes in fiscal year 1994.

Department of Game, Fish and Parks Aircraft		
Piper Aztec		
Hours Flown	Miles Flown	Cost per Mile
344.2	55,355	\$1.02
Cessna Skyhawk		
Hours Flown	Miles Flown	Cost per Mile
323.1	37,157	\$0.54

The Aztec is a more expensive plane to operate, which is generally true for planes which are designed to provide transportation. The costs of both of these planes are in line with the operating costs of similar planes in other departments of state government.

The Department of Game, Fish and Parks also operates three airplanes as part of its predator and animal damage control efforts. The department only owns one of these aircraft, which is based in Huron. Airplanes based at Faith and Sturgis, which are owned by the Perkins County Predator Control Association and the South Dakota Sheep Growers Association, respectively, are also operated by the Department of Game, Fish and Parks. The department employs a total of thirty-three pilots who use these planes for predator control activities on an as-needed basis. These planes were flown for a total of 1,397 hours during fiscal year 1994, and the cost of operating these planes averaged \$117 per hour.

Highway Patrol

The South Dakota Highway Patrol owns one aircraft, which is a Cessna that was purchased in 1981. This plane is utilized for a variety of activities, including patrol of highways, surveillance, search and rescue missions, and training. It is also used on a very limited basis as a mode of transportation. The

primary activity of this aircraft is the patrol of highways to assist ground officers in the arrest of traffic law violators. The following table indicates the extent of use and cost of operation of the South Dakota Highway Patrol's aircraft; the data in this table includes actual figures for 1993 and projected figures for 1994.

Highway Patrol Aircraft Use							
Year	Hours Flown	% of Hours Flown on Patrol	Cost per Hour	Miles	Cost per Mile	Arrests	Cost per Arrest
1993	537	67	\$74.17	69,758	\$0.57	731	\$54.45
1994	609	75	\$68.18	79,186	\$0.52	755	\$54.99

As the table indicates, the hours and miles flown by the Highway Patrol's aircraft are on pace to increase significantly in 1994. With the increase in flight time, the average cost of using the aircraft is declining slightly. It is apparent from this data that most of the expanded time is being used to provide additional patrol activities. Interestingly, the expanded patrol flights are projected to produce only a modest increase in arrests, and the cost per arrest will increase slightly. However, the Highway Patrol's use of the aircraft would appear to be a very effective method of arresting traffic law violators. The cost per arrest is just over \$50, and much of this cost can be recovered through fines. This method of patrol appears especially effective when one considers that a quarter or more of the aircraft's time is devoted to other activities.

Board of Regents

The Board of Regents institutions own several aircraft, which are used for training, research, and transportation. Both South Dakota State University (SDSU) and the University of South Dakota (USD) operate an aircraft which provides transportation services to individuals who are working on university business. In addition, both of these aircraft are made available for use by other agencies, which are charged for the actual cost of their use. The SDSU aircraft is number 695SU, which they purchased for \$54,450; the current estimated value of that plane is \$91,847. The USD aircraft is a 1970 Piper Navajo, which they purchased in 1988 at a cost of \$59,990; its current value is estimated at \$70,000. The following chart illustrates the number of flights and miles flown by these planes in the past three fiscal years.

Fiscal Year	Campus Aircraft					
	SDSU			USD		
	Flights	Miles	Miles per Flight	Flights	Miles	Miles per Flight
1992	270	69,514	257.5	164	85,790	523.1
1993	239	49,561	207.4	158	79,431	502.7
1994	225	54,352	241.6	116	55,826	481.3

The table illustrates that the USD aircraft takes fewer trips, but travels more than twice as many miles on an average trip. In addition to these planes, the two universities also occasionally use educational aircraft or charter aircraft to meet transportation needs when the campus airplanes are busy. Campus administrators have indicated that use of the campus planes is a more economical choice than chartering. The universities have taken steps to ensure that their planes are used as efficiently as possible; for example, 73% of the trips on the SDSU plane include more than one passenger, and the USD plane is used extensively by other state agencies in Vermillion, including South Dakota Public Broadcasting. In fiscal year 1994, 45% of the trips on the USD plane were for other state agencies.

SDSU also owns two planes which are used in an aviation education program. In addition to training flights, these aircraft are occasionally used for travel needs; such flights offer advanced training to student pilots. One plane in this program is number 8589, which was purchased at a cost of \$4,000 and is estimated to currently be worth approximately \$45,000. The other plane used by this program is number 97R, which was purchased for \$23,500. This plane was damaged in an accident that

occurred during fiscal year 1992, but it is being repaired and its estimated value is \$38,000. Between fiscal years 1991 and 1993, these planes were flown an average of 83,798 miles each year. This figure can be expected to increase in the future because the second plane is returning to service later this year.

The Board of Regents final aircraft is a T-28 which the South Dakota School of Mines and Technology (SDSMT) uses exclusively for atmospheric research. This plane holds only the pilot and is thus never used for transportation. SDSMT purchased this aircraft for \$1 from military surplus, and its current value is estimated at \$100,000. In fiscal year 1992, this plane was flown for 84.9 hours. The corresponding totals for fiscal year 1993 and fiscal year 1994 are 17.3 hours and 42.4 hours. The amount of flight time for this aircraft fluctuates because it is used to study atmospheric phenomena, which do not occur on a regular basis.

Conclusion

Several departments of state government own and operate aircraft for a variety of uses, from transportation, to law enforcement, to surveying. Overall, it would appear that state government has some excess aircraft capacity, since a Department of Game, Fish and Parks airplane was able to take some of the load off the Department of Transportation's airplanes after the 1993 crash. A full review of state government aircraft, however, indicates that most of them are being used extensively for the purposes for which they were purchased.

The state's fleet of transportation aircraft, particularly those operated by the Department of Transportation, appears to be providing efficient service to state agencies. One alternative would be to reduce the state fleet and depend on chartered aircraft to a greater extent. However, this approach may be more costly. For example, a charter service in Pierre will provide a one-day flight to Sioux Falls for four people at a cost of approximately \$3 per mile. The planes in the state fleet all provide services at a lower cost per mile, so it makes sense economically to attempt to maximize the use of state airplanes for the purpose of necessary air transportation.

This issue memorandum was written by Jeff Bostic, Fiscal Analyst for the Legislative Research Council. It is designed to supply background information on the subject and is not a policy statement made by the Legislative Research Council.
