



National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: January 21, 2003

In reply refer to: A-03-01

Dr. Myles Brand
President
National Collegiate Athletic Association
Indianapolis, Indiana 46206

On January 27, 2001, about 1737 mountain standard time,¹ a Raytheon (Beechcraft) King Air 200, N81PF, owned by North Bay Charter, LLC, and operated by Jet Express Services, crashed into rolling terrain near Strasburg, Colorado. N81PF was one of three airplanes² transporting members of the Oklahoma State University (OSU) basketball team and associated team personnel from Jefferson County Airport, Broomfield, Colorado, to Stillwater Regional Airport, Stillwater, Oklahoma, after a game at the University of Colorado at Boulder that afternoon. The two pilots and eight passengers aboard N81PF were killed, and the airplane was destroyed by impact forces and a postcrash fire.

The National Transportation Safety Board determined that the probable cause of this accident was the pilot's spatial disorientation resulting from his failure to maintain positive manual control of the airplane with the available flight instrumentation. Contributing to the cause of the accident was the loss of a.c. electrical power during instrument meteorological conditions.³

Background

According to ATC records, N81PF departed Jefferson County Airport about 1718. Information from the airplane's transponder⁴ indicated that the airplane reached an altitude of 23,200 feet (mean sea level) about 1735:44. No further information regarding the airplane's altitude was transmitted after that time, but the airplane's beacon (identification) code continued

¹ All times in this letter are mountain standard time, based on a 24-hour clock. The times are approximations based on air traffic control (ATC) radar data and transcript information.

² The other two airplanes were a Learjet 60 and a Cessna Citation 650.

³ For more information, see National Transportation Safety Board, *In-Flight Electrical System Failure and Loss of Control, Jet Express Services, Raytheon (Beechcraft) Super King Air 200, N81PF, Near Strasburg, Colorado, January 27, 2001*, Aircraft Accident Report NTSB/AAR-03-01 (Washington, DC: NTSB, 2003).

⁴ A transponder transmits an airplane's identification and altitude information in response to interrogation signals received from ground-based radar equipment. Identification information, known as mode A information, is displayed on ATC radar screens as a four-digit beacon code. Altitude information, known as mode C information, is shown on ATC radar screens in 100-foot increments. Mode A information is powered by d.c. electricity, and mode C information is powered by a.c. electricity.

transmitting. ATC radar data indicated that, about 1736:26, the airplane turned to the right. The last transponder return occurred about 1737:12. The airplane impacted rolling terrain sometime between 5 and 8 seconds after the final transponder return.

OSU's air transportation policy in effect at the time of the accident was detailed in OSU policy and procedures document 3-0155, "Transportation Services Flight Department," dated April 2000. According to the document, the OSU Flight Department Manager administered the university's air transportation policy. The manager was responsible for approving air transportation aboard the Flight Department's six-seat Cessna 421B and other multiengine aircraft to which OSU had access through the University of Oklahoma and the State of Oklahoma.⁵ Approval from the appropriate OSU vice president was also required before any out-of-state travel.

The policy and procedures document indicated that all charter flights—any trips for which money, goods, or services were exchanged for air service—were required to be contracted and scheduled through the Flight Department.⁶ The Flight Department Manager was responsible for ensuring that all charter companies providing services to OSU were properly certified under the applicable Federal Aviation Administration (FAA) regulations. The proper certification was to be updated annually and kept on file within the department.⁷

In addition, the policy and procedures document indicated that aircraft could be donated for OSU use and that these aircraft had to be certified and approved through the Flight Department. Information regarding the airplane's inspection records and insurance policy, the pilot's FAA certificate number and medical certificate, and the pilot's biannual flight review record were to be updated annually and kept on file within the department.⁸ The charges that the university incurred for donated flights were for the pilots' hotel rooms, meals, and telephone use. Donated flights did not require coordination with the Flight Department Manager.

The flights that were used to transport members of the OSU basketball team and associated team personnel from Jefferson County Airport to Stillwater Regional Airport on January 27, 2001, were donated flights. The OSU basketball staff coordinated these flights directly with the donors,⁹ and the donors coordinated the flights with the pilots. OSU indicated that the accident pilot was "both a friend to and a pilot for a friend of the OSU athletic

⁵ The Manager of the Flight Department indicated, in a postaccident interview, that the University of Oklahoma operated a Turbo Commander 690 and that the State of Oklahoma operated a King Air 350.

⁶ Football team and commercial airline travel were exempt from this requirement.

⁷ According to the Flight Department Manager, four charter companies were on file with the Flight Department, but Jet Express Services was not one of them. The accident pilot was the sole proprietor of Jet Express Services.

⁸ OSU indicated that its Flight Department did not have any records on file regarding the accident pilots or airplane.

⁹ The chairman of an Oklahoma City oil company, who was an OSU alumnus and a friend of the accident pilot, donated the use of the accident airplane. An OSU alumnus from Houston, Texas, donated the use of the Learjet, and a friend of the coach from Little Rock, Arkansas, donated the use of the Citation. In a postaccident interview, a friend of the accident pilot said that the donor of the accident airplane paid for its rental fee, fuel, and associated expenses. This friend also said that the pilot did not bill OSU for his services because he enjoyed being with the basketball team players and coach.

department” and that the pilot flew for the university’s athletic department only. OSU records indicated that, between July 1, 2000, and January 27, 2001, the pilot flew for OSU eight times.

After the accident, OSU convened a task force to recommend ways to improve the transportation of its athletic teams. On April 22, 2002, OSU issued a revised team travel policy. The stated purpose of the policy is “to provide a framework for safe and efficient athletic team travel for the Oklahoma State University Department of Intercollegiate Athletics” and “to assign responsibility and accountability for enforcement.” The OSU Director of Intercollegiate Athletics is responsible for the overall administration of the policy, and a member of the athletic department staff is responsible for compliance, oversight, and recordkeeping. The director or a designee is to provide a copy of the policy to every coach, provide training to every coach, and maintain a signed statement from each coach indicating that he or she has read and understands the policy.

The revised team travel policy addresses five modes of transportation: automobiles/minivans, 12- and 15-passenger vans,¹⁰ buses, mini-buses (20- to 30-passenger transports), and aircraft. According to the policy, the OSU Director of Intercollegiate Athletics or a designee is responsible for verifying that the mode of transportation recommended for use for athletic travel complies with the policy. Coaches are responsible for developing their season travel plans, including the recommended transportation mode, and gaining written approval from the appropriate associate athletic director in advance of the season or a subsequent schedule change. In addition, the policy indicates that any coach or athletic department staff member who knowingly violates the policy will be suspended until the director or a designee investigates the violation and that violations may result in disciplinary action or termination. A copy of the revised team travel policy is attached to this letter.

Discussion

OSU’s former air transportation policy was not causal to the accident. In fact, the policy was not likely different from those in place at other universities of the same size as OSU. However, even though the university’s athletic department knew the accident pilot, the Flight Department had no records on file regarding him, the second pilot,¹¹ or the accident airplane, as required. Also, because the accident flight was a donated flight, it was not coordinated with the Flight Department Manager, as were charter flights and flights involving university airplanes. Thus, OSU did not provide any significant oversight for the accident flight.

The Safety Board investigated another accident involving a university athletic team in which no significant oversight occurred. On October 2, 1970, a Martin 404, N464M, was transporting members of the Wichita State University football team from Wichita, Kansas, to Logan, Utah. After a refueling stop in Denver, the flight crew deviated from the flight plan and proceeded via a “scenic” route with mountains on both sides of the flightpath. Subsequently, the

¹⁰ OSU’s revised team travel policy states that 12-passenger vans are to carry no more than 8 passengers and equipment and that 15-passenger vans are to carry no more than 10 passengers and equipment.

¹¹ The pilot who occupied the right seat of the cockpit is referred to as the “second pilot” because he was not a required flight crewmember.

airplane crashed into the base of a mountain 8 miles west of Silver Plume, Colorado. The captain, flight attendant, and 28 passengers were killed; the first officer and 10 passengers were injured; and the airplane was destroyed by impact forces and a postcrash fire.

The Safety Board found that none of the parties involved with the flight (the owner of the airplane, the company that provided the pilots and other services, or the lessee) accepted responsibility concerning who was the operator of the flight and was thus responsible for its safe conduct.¹² The Board indicated that, if the parties denied after the accident that they were responsible for the safe conduct of the flight, it was likely that they would not have acknowledged such responsibility at the time of the flight. The Board also indicated that numerous deficiencies, unsafe practices, and deviations from regulations occurred during the flight and that the management required for a safe operation appears to have been absent, which was a “significant” factor in this accident.¹³

The Safety Board is concerned that colleges and universities may not be providing adequate oversight for athletic team travel. OSU’s revised team travel policy is a comprehensive travel management system that promotes safe university-sponsored team travel and provides the necessary oversight to ensure that transportation services are carried out in accordance with the provisions of the revised policy. For example, in addition to the oversight provided by the university’s athletic director, athletic department staff, and coaches, OSU will retain an aviation consultant with “expertise in operations, safety and certification.” Among other things, the aviation consultant will evaluate the certifications and safety records of charter air carriers, time-share aircraft, and other aircraft and will have the final authority for approving a firm or an aircraft for the purposes of the policy.

Also, OSU’s revised team travel policy provides a greater margin of safety for air transportation compared with the university’s former air transportation policy, as demonstrated by the following examples:

- OSU’s former air transportation policy indicated that, if the weather or the length of a trip were such that the pilot thought a copilot was necessary for the safe completion of the flight, the pilot would have the authority to dispatch a copilot for that purpose. As a result, some donated flights and possibly some charter flights were allowed to operate with one pilot (depending on whether the airplane was certified for single-pilot operation).¹⁴ In fact, a friend of the accident pilot stated, in a postaccident

¹² The Jack Richards Aircraft Company, Inc., which owned the airplane, and Golden Eagle Aviation, Inc., which provided the pilots and other services, contended that Wichita State University was the operator. Wichita State’s position was that it had merely chartered air service and was thus not the operator. The FAA’s position was that Golden Eagle Aviation was the operator. The Safety Board indicated that, for purposes of the report, it was not necessary to determine which party was the official operator of the flight but that this issue needed to be fully resolved separate from the report.

¹³ For more information, see National Transportation Safety Board, *Martin 404, N464M, 8 Statute Miles West of Silver Plume, Colorado, October 2, 1970*, Aircraft Accident Report NTSB/AAR-71-04 (Washington, DC: NTSB, 1971).

¹⁴ Although two pilots were aboard the accident flight, the pilot who occupied the left seat of the cockpit was solely responsible for the airplane.

interview, that the pilot often flew for OSU as a single pilot because the athletic department staff wanted to use all of the seats. The revised team travel policy, however, requires two pilots for all OSU air travel involving student athletes.

- The only mention in the former air transportation policy regarding pilot requirements are those for the OSU Flight Department's Cessna 421B and the other multiengine aircraft to which OSU had access. The former policy indicated that these airplanes were to be flown only by pilots from the OSU Flight Department or by qualified pilots hired by the Flight Department Manager. The pilots were required to have a commercial pilot's license; certification for single-engine, multiengine, and instrument flying; and a minimum of 2,500 hours as pilot-in-command, at least 500 of which were to have been in a multiengine airplane. The revised team travel policy requires captains and copilots to meet multiple requirements, some of which are more stringent than those required by the FAA.¹⁵
- The former air transportation policy indicated that university airplanes could be operated during day or night and in visual flight rules (VFR) or instrument flight rules (IFR) conditions.¹⁶ The former policy also indicated that the judgment of a pilot would always prevail regarding whether flight conditions were safe for takeoff or continuation of a flight. The revised team travel policy indicates that all flights are to be operated on an IFR flight plan and that aircraft may not depart into forecast hazardous weather conditions, including severe icing, thunderstorms, or severe turbulence or windshear. Also, the revised policy indicates that passengers cannot enter the cockpit or distract the pilots when an aircraft is below 10,000 feet on takeoff or landing operations and that aircraft used for team travel cannot be piloted by a team member.
- No specific restrictions on athletic team travel were provided in the former air transportation policy. The revised team travel policy indicates that other aircraft, including donated aircraft, are an acceptable means of travel for coaches and professional athletic department staff but that student athletes and teams are generally

¹⁵ According to the policy, a captain is required to be employed as a full-time pilot and have an airline transport pilot rating with a current first-class medical certificate; a type rating in the airplane to be used for team travel; training in the airplane type within the past 12 months; at least 2,000 hours total flying time, including 200 hours in the airplane type to be used and 20 hours in the past 90 days in the airplane type to be used; and three instrument approaches and three night landings in the past 90 days. The policy also requires a copilot to have multiengine and instrument ratings and a current second-class medical certificate; training in the airplane type within the past 12 months; at least 1,500 hours total flying time, including 100 hours in the airplane type to be used and 10 hours in the past 90 days in the airplane type to be used; and three instrument approaches and three night landings in the past 90 days.

¹⁶ VFR applies to flights in which the pilot can navigate by maintaining visual contact with objects on the surface. IFR applies to flights in which the pilot references aircraft instrumentation because of reduced visibility; a pilot must have an instrument rating to fly in these conditions. The accident flight was operating on an IFR flight plan.

not permitted to travel on such aircraft.¹⁷ (Students are allowed to travel on commercial, charter, and time-share aircraft.) Coaches, professional athletic department staff, and student athletes traveling under special circumstances can decline travel on other aircraft, in which case accommodating transportation (within the framework of the policy) will be provided. Unlike the former policy, specific requirements must now be met for other aircraft, including that the aircraft are powered by two or more turbine engines and are certified for flight into known icing conditions.

- The former air transportation policy did not mention any provisions regarding airplane maintenance. The revised team travel policy indicates that inspection and maintenance must be performed by an appropriately rated FAA-certified repair station, the manufacturer, or a manufacturer-authorized service center. The revised policy further indicates that maintenance personnel must be appropriately rated and must have been trained within the previous 5 years to maintain the aircraft type to be used.

On June 18, 2002, OSU's Vice President of Business and External Relations, along with two colleagues, presented the university's revised team travel policy to the National Association of Collegiate Athletic Directors at a convention in Dallas, Texas. The Safety Board notes that this presentation was a positive initial step to inform college and university athletic directors and senior athletic administrators of OSU's comprehensive team travel policy. However, athletic directors and senior athletic administrators who are not members of the association, as well as senior administrators outside of athletic departments, also need to be made aware of OSU's revised policy. The adoption of a comprehensive team travel policy, such as the one developed by OSU, would ensure the necessary oversight for athletic team and other school-sponsored travel and would provide an extra margin of safety for students, faculty, and staff.

The Safety Board recognizes that not all colleges and universities have athletic programs the size of the OSU program and that some schools do not even have an athletic program. However, the guidance outlined in OSU's revised team travel policy can be adapted to smaller-scale athletic programs and to club and academic travel, especially because the policy addresses specific requirements for travel by automobiles and minivans, 12- and 15-passenger vans, buses, and mini-buses.¹⁸ (As stated earlier, OSU's policy indicates that 15-passenger vans

¹⁷ The revised team travel policy indicates that, "in special circumstances, if three or fewer athletes are needed for official business of the department, such student athletes may accompany a coach on other aircraft if written parental/guardian consent has been received for any athlete less than 21 years of age."

¹⁸ OSU is not the only university to develop a written driving policy after an accident. On February 10, 2000, a 1999 Ford E-350 XLT 15-passenger van was transporting a track coach, an athletic trainer, and eight student athletes from Prairie View A&M University, near Hempstead, Texas, to a men's indoor track meet at the University of Arkansas at Pine Bluff. When the van was on Texas State Highway 43 near Karnack, Texas (a two-lane highway), the van driver (a student athlete) tried to pass a Jeep Cherokee but then decided to reverse this passing action. The van subsequently went out of control and rolled over. Four of the van occupants were killed, and six were seriously injured. The Safety Board determined that a contributing factor to this accident was Prairie View's lack of oversight regarding the transportation of student athletes.

can transport no more than 10 passengers and equipment. According to the Board's October 2002 safety report, research from the National Highway Traffic Safety Administration indicated that, in 2001, 15-passenger vans with 10 or more occupants were three times more likely to be involved in a rollover accident than those vans with fewer than 10 occupants.¹⁹ The Board is concerned that 15-passenger vans carrying 10 occupants and athletic equipment may not have the same margin of safety from rollovers as vans carrying fewer than 10 occupants and no equipment because the weight and position of the equipment would cause the van's center of gravity to move rearward and upward.)

The Safety Board also recognizes that not all colleges and universities have budgets to support the specific requirements described in the revised OSU team travel policy. However, the Safety Board concludes that colleges and universities would benefit from reviewing a model policy based on OSU's postaccident team travel policy and then implementing a travel policy that is commensurate with the institution's travel needs.

Therefore, the National Transportation Safety Board recommends that the National Collegiate Athletic Association:

Review Oklahoma State University's postaccident team travel policy and develop, either independently or jointly with the National Association of Intercollegiate Athletics and/or the American Council on Education, a model policy for member institutions to use in creating a travel policy or strengthening an existing travel policy. (A-03-01)

Acting Chairman CARMODY and Members HAMMERSCHMIDT, GOGLIA, and BLACK concurred in this recommendation.²⁰

At the time of the accident, Prairie View's only written driving policy was a provision in its Athletic Policies & Procedures manual requiring that designated speed laws be obeyed when official vehicles were used for team functions. In June 2001, the Texas legislature passed a bill requiring that, by August 2002, all public institutions of higher education have a travel policy addressing fatigue, use of seatbelts, passenger capacity, and qualifications and training of drivers who operate a particular mode of transportation. In December 2001, Prairie View adopted a vehicle safety policy that conforms to the State requirements.

¹⁹ For more information, see National Transportation Safety Board, *Evaluating the Rollover Propensity of 15-Passenger Vans*, Safety Report NTSB/SR-02-03 (Washington, DC: NTSB, 2002).

²⁰ At the time this recommendation was adopted (January 15, 2003), Carol J. Carmody was Acting Chairman.

The National Transportation Safety Board is an independent Federal agency with the statutory responsibility "...to promote transportation safety by conducting independent accident investigations and by formulating safety improvement recommendations" (Public Law 93-633). The Safety Board is vitally interested in any actions taken as a result of its safety recommendations and would appreciate a response from you regarding action taken or contemplated with respect to the recommendation in this letter. Please refer to Safety Recommendation A-03-01 in your reply.

Original Signed

By: John A. Hammerschmidt
Acting Chairman

Attachment

Other recipients:

Mr. Steven B. Baker
President and Chief Executive Officer
National Association of Intercollegiate Athletics
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Dr. David Ward
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TASK FORCE REPORT OSU TEAM TRAVEL POLICY

1.01 Purpose

- A. To provide a framework for safe and efficient athletic team travel for the Oklahoma State University Department of Intercollegiate Athletics.
- B. To assign responsibility and accountability for enforcement.

2.01 Applicability

For purposes of this policy, athletic teams are defined as:

- Baseball
- Basketball, Women's and Men's
- Equestrian
- Football
- Golf, Women's and Men's
- Soccer
- Softball
- Tennis, Women's and Men's
- Track (Indoor, Outdoor, Cross Country), Women's and Men's
- Wrestling
- Mascots, Spirit Squad, Student Trainers, and/or Student Mangers traveling as a part of a team listed above
- or any other such team as may be subsequently added to the OSU Intercollegiate Athletics Program

3.01 Responsibility for administration

- A. The OSU Director of Intercollegiate Athletics shall be responsible for overall administration of this policy and shall assign a member of the athletics staff to be responsible for compliance, oversight and necessary recordkeeping. The OSU Director of Intercollegiate Athletics or his/her designee shall provide a copy of this policy to every coach; provide training to every coach; and maintain on file in the Athletic Department a signed certificate by each coach stating the coach has read and understands this policy.
- B. The OSU Director of Intercollegiate Athletics or his/her designee shall have the responsibility to verify the type of vehicle recommended for use for athletic travel is in compliance with this policy. Coaches are responsible for developing their season travel plans, to include recommended vehicle types, and gaining written approval from the appropriate associate athletic director in advance of the season or subsequent schedule change. Coaches will consider the type of travel necessary to comply with the institutional policy on missed classes. Post-season travel shall be handled according to NCAA guidelines and approved by the OSU Director of Intercollegiate Athletics or his/her designee.

C. When aircraft are used under this policy, the captain (pilot in command) shall make the final decision whether to fly. However, in no case will the pilot fly if weather conditions do not meet the standards of his/her certification. The respective head coach may always overrule the pilot if he/she concludes that it is inappropriate to fly.

D. The OSU Director of Intercollegiate Athletics or his/her designee shall review and recommend revision, as deemed appropriate to this policy annually, in accordance with institutional guidelines on policy revisions.

4.01 Accountability

Any coach or athletic staff member knowingly violating this policy will be suspended with or without pay until the OSU Director of Intercollegiate Athletics or his/her designee investigates the violation. Violations may result in disciplinary action or termination.

5.01 Supplemental Insurance

OSU will procure and maintain in effect accidental death benefits that will guarantee an amount up to \$1 million, but not less than \$250,000 for travel connected to athletic competition and practice [in accordance with NCAA Bylaw 16.4.1-(b) or as amended]. Coverage per person will be in addition to any other coverages for student athletes, coaches, mascots, spirit squad, student trainers, student managers, and Athletic Department members while on authorized Athletic Department business.

6.01 Types of Vehicles Used for Team Travel and Requirements for Operation

General Requirement: Coaches, assistant coaches, student trainers, student managers, mascots and members of the spirit squad may drive vehicles used for team travel, if the specific requirements for the vehicle are met. Student athletes may not drive other athletes as a part of team travel.

The following types of vehicles shall be approved for athletic team travel under the conditions noted:

A. Automobiles/Minivans (Specific Requirements)

1. Drivers must be at least 21 years of age, have a valid and approved driver's license and be rested.
2. A qualified, paid driver must be used if traveling farther than 350 miles one way, or if the trip is expected to extend later than 2:00 a.m., or overnight.

B. Twelve and Fifteen Passenger Vans (Specific Requirements)

1. Drivers are required to obtain a certification from an Emergency Vehicle Operator's Course in the type of vehicle they will be driving.
2. Drivers must be at least 21 years of age, have a valid and approved driver's license and be rested.

3. For safety reasons, drivers must have a Class C(P) Commercial Driver's License whether or not required by law.
4. Drivers must submit to a health check as required by the license or, upon hiring, must pass a medical exam and pass an annual exam thereafter.
5. A qualified, paid driver must be used if traveling farther than 350 miles one way or if the trip is expected to extend later than 2:00 a.m., or overnight.
6. Only vans with a 155 inch wheelbase equipped with "E" rated radial tires, or equivalent, properly inflated will be allowed to transport teams greater than 100 miles from a point of departure. In cases when it is necessary to lease vans from a commercial vendor or when vans are provided as a courtesy, team travel is authorized even if the van does not meet the 155 inch/"E" criteria, but travel will be limited to 100 miles one way.
7. Twelve passenger vans shall be loaded with no more than eight passengers and equipment. Fifteen passenger vans shall be loaded with no more than ten passengers and equipment.

C. Buses (Specific Requirements)

1. When more than 20 passengers are part of the land travel party, a bus or mini-bus shall be used.
2. Buses may be used to transport to away venues, transport to hotels from airports, and transport from hotels to playing venues.
3. Approved buses for team transport are motor coach common carriers or institution leased, owned or operated over-the-road bus transports.
4. Drivers of buses must have a valid and approved Class B(P) Commercial Driver's License.
5. Drivers must submit to a health check as required by the license or, upon hiring, must pass a medical exam and pass an annual exam thereafter.

D. Mini-buses (defined as 20 – 30 passenger transports) (Specific Requirements)

1. When more than 20 passengers are part of the land travel party, a bus or mini-bus shall be used.
2. Acceptable mini-buses shall be institution owned or commercially owned.
3. Driver must have a valid and approved Class B(P) Commercial Drivers License to operate a mini-bus for purposes of this policy.

4. Drivers must submit to a health check as required by the license or, upon hiring, must pass a medical exam and pass an annual exam thereafter.

E. Air Transportation

Commercial air carriers, charter, time-share and other aircraft may be used for the purposes stated and are subject to the provisions below:

1. Commercial Airlines

Commercial airlines are an acceptable means of travel for athletic teams. Tickets must be procured under the travel guidelines established by the State of Oklahoma.

2. Use of Aviation Consultant

All air travel, except the use of commercial air carriers, shall be subject to the review of the institution's aviation consultant.

The University will, through competitive proposals, retain an aviation consultant. Such individual or firm must have expertise in operations, safety and certification for the purpose of evaluating the certifications and safety records, of charter air carriers, time-share and other aircraft and assure pilot certifications are in keeping with this policy. The aviation consultant will evaluate and assure insurance coverage consistent with this policy.

Prior to flying, the institutional aviation consultant must assure that charter companies, time-share companies, other aircraft and all pilots flying other aircraft meet the requirements of this policy. The aviation consultant shall maintain a qualified list of time-share and other aircraft for possible use.

The institutional aviation consultant shall have final approving authority for approving a firm/aircraft for purposes of this policy.

3. General Requirements for Charter, Time-Share, and Other Aircraft

a) Insurance

Aircraft owners/operators shall furnish proof of insurance in advance. Liability insurance should be at least \$25 million for light turboprop aircraft, \$50 million for light jet aircraft, and a minimum of \$3 million per seat for Commercial airlines. Given the volatility in the insurance market, it may not always be possible to achieve these minimum coverages in the marketplace. If it becomes necessary to establish limits in keeping with current industry standards, it shall be the responsibility of the University's aviation consultant to recommend acceptable limits.

b) Pilots

Two pilots will be required for all OSU travel involving student athletes. Pilots for small aircraft (maximum gross weight of 12,500 lbs or less), whether charter, time-share or other shall have, as a minimum:

b(1) Captain

- Airline Transport Pilot (ATP) rating with current first class medical.
- Type rating in aircraft to be used for team travel.
- Training in the aircraft type to be used at Flight Safety International, Simuflite Training International, or equivalent aircraft manufacturer's training within the past 12 months.
- Be employed as a full-time pilot.
- 2000 hours total flying time.
- 200 hours total flying time in the aircraft type to be used.
- 20 hours flying time in the past 90 days in the aircraft type to be used.
- Three instrument approaches and three night landings in the previous 90 days.

b(2) Copilot

- Commercial Pilot Certificate with current second class medical with multi-engine and instrument ratings.
- Training in the aircraft type to be used at Flight Safety International, Simuflite Training International, or equivalent aircraft manufacturer's training within the past 12 months.
- 1500 hours total flying time.
- 100 hours total flying time in the aircraft type to be used.
- 10 hours flying time in the past 90 days in the aircraft type to be used.
- Three instrument approaches and three night landings in the previous 90 days.

c) Maintenance

c(1) Inspection and maintenance must be performed by an appropriately rated FAA certified repair station, the manufacturer or a manufacturer authorized service center (no Aircraft and Powerplant Mechanic signoffs).

c(2) Maintenance personnel (or at least the person signing the log books) must be appropriately rated and be trained to maintain the aircraft type to be used by either Flight Safety International or Simuflite Training International within the previous five years.

c(3) Charter aircraft used according to this policy must be maintained under the appropriate FAA operations specifications.

d) Operation

d(1) On all light turboprop and light jet aircraft, weight and balance computations using average passenger weights are prohibited. A weight and balance form must be completed for each flight using actual weight figures for passengers (no quick weight and balance using normal passenger weights).

d(2) No over-weight or out of center of gravity operation shall be allowed.

d(3) No aircraft may depart into forecast hazardous weather conditions, such as severe icing, thunderstorms or severe turbulence or wind shear.

d(4) No circling instrument approaches shall be authorized with ceilings less than 1,000 feet and at least three miles visibility.

d(5) All flights shall be conducted on an instrument flight plan.

d(6) No passengers may enter the cockpit or distract pilots when the aircraft is below 10,000 feet on takeoff or landing operations.

d(7) Aircraft should be hangered whenever possible during inclement weather.

d(8) No aircraft used for team transportation may be piloted by a team member.

d(9) All flight operations must be conducted in accordance with all relevant FAA regulations or insurance requirements, whichever is more strict.

4. Charter Services (Specific Requirements)

a) All charter services procured shall be subject to the involvement of the OSU Purchasing Department.

b) Every charter company used must have and demonstrate evidence of a current air carrier certificate under FAA Part 135 or 121.

c) The OSU institutional aviation consultant shall assure the OSU Director of Intercollegiate Athletics or his/her designee that written verification has been received for all charter flights from the FAA Flight Standards District Office (FSDO) that an Air Carrier Operating Certificate has been filed and is being maintained in good standing.

5. Time-share aircraft is authorized if an individual sport budget is sufficient to pay any applicable and operational costs and if any of the conditions below apply:

a) Time is available to the Athletic Department in the time-share pool, either owned by the University, corporate or an individual ownership.

b) Such use will facilitate travel and keep student athletes from missing excessive class time.

c) It will facilitate the recruiting image or funding efforts of the department.

d) Commercial or charter services cannot otherwise accommodate the necessary schedule.

6. Other Aircraft (Specific Requirements)

Other aircraft are an acceptable means of travel for coaches and professional athletic department staff, based on personal election, provided all requirements in Section 6.01 E 3 "General Requirements for Charter, Time-Share and Other Aircraft" have been met and the following specific requirements are met. Student athletes and teams shall not be permitted to travel on such other aircraft, except that in special circumstances if three or fewer athletes are needed for official business of the department, such student athletes may accompany a coach on other aircraft if written parental/guardian consent has been received for any athlete less than 21 years of age. Coaches, professional athletic department staff or student athletes may decline to travel on such other aircraft, in which case accommodating transportation (within the framework of this policy) will be provided.

a) Other Aircraft

a(1) The aircraft are powered by two or more turbine engines.

a(2) The aircraft are certified for flight into known icing conditions.

a(3) The aircraft otherwise meets all FAA and insurance requirements of OSU's travel policy (whichever are most strict).

b) Other Aircraft Approval

The institutional aviation consultant must approve in writing the use of aircraft prior to travel (See Section 6.01 E 2).

c) Other Aircraft Documentation

Before any aircraft is approved for use, the owner/operator shall provide and the institutional aviation consultant shall evaluate and approve in writing the compliance of the following:

c(1) Proof of insurance with required minimums.

c(2) Documentation showing the maintenance plan under which the aircraft operates complies with the requirements of this policy.

c(3) Pilot experience and training documents showing qualifications meeting or exceeding the requirements of this policy.

c(4) Documents showing the aircraft payload capabilities for use in trip planning.