

Minnesota State University, Mankato
Aviation Department
&
North Star Aviation

Aviation Student Handbook



November 1, 2006

PLEASE READ CAREFULLY

Minnesota State University, Mankato
Aviation Student Handbook

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Please note; this handbook is a guide but does not replace the necessity of meeting with your advisor on a regular basis.

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Welcome to the Department of Aviation at Minnesota State University, Mankato! We are pleased to have you in our program and look forward to working with you as you pursue your aviation education. Please know that you are always welcome to contact faculty members by phone, email or in person as necessary. We strive to make your time here at Minnesota State University, Mankato as successful and educational as possible!

Policies

This handbook sets forth policies procedures required by the aviation department. All aviation students must remain in compliance with this document. This statement should not be construed as authorization to violate any federal, state or local law nor the safety procedures outlined in North Star Aviation's Standardization Procedures Manuel where conflicts arise FAA and common safe practice take precedence.

General Information

The Department of Aviation allows students to pursue a Bachelor of Science degree in Aviation with a concentration in either Professional Flight or Aviation Management. In addition, we also offer a minor in Aviation Management. These options for undergraduate studies prepare students for successful careers in the aviation industry. Professional Flight Students obtain flight instruction through North Star Aviation located at the Mankato Regional Airport. Most flight instructors are students or recent graduates of the aviation program. In addition, it is our goal to provide all Professional Flight students with the opportunity to flight instruct upon completion of earning their Certified Flight Instructor certificates. The Department of Aviation is a member of the Council on Aviation Accreditation and the University Aviation Association and adheres to the principles established by these bodies.

Mission Statement

The mission of the Minnesota State Mankato Aviation Program is to prepare future aviation professionals for rewarding positions in the air transportation industry. Some examples include airline operations, aviation management, corporate aviation, airport management, and government operations. Our program aims to equip students to thrive in the rapidly changing and highly competitive field of aviation.

Department Information

The Department of Aviation administrative office is located at 328 Armstrong Hall and can be reached at (507) 389-6116. Each faculty member has an "inbox" located in this office and faculty offices are located nearby in Armstrong Hall. Karla Worden, Administrative Assistant, is available Monday through Friday from 8:00 AM – 4:00 PM to assist you.

Contact Information

Because the aviation department may need to contact you on short notice. All students must keep current the university & North Star Aviation files for both local and home, address and phone information. Failure to update contact information is a will be considered violation of aviation department policy.

Entering the Minnesota State Mankato Aviation Program with Prior Experience

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The Professional Flight Program at Minnesota State Mankato, like all such programs, involves substantial cost above the normal cost of a college education. In an effort to mitigate cost, the faculty has established this policy to reduce the need for redundant flight experiences.

Please note, students who have obtained flight certificates/ratings elsewhere may not have satisfied the University's academic and flight requirements for the professional flight concentration. Students must demonstrate that they have received the full breadth and depth of knowledge, skills, abilities, and attitudes consistent with an education received at Minnesota State Mankato. It is not possible to award credit for a course based on FAA certification alone. In addition, upon declaration of intent to enter the professional flight option of the aviation program, students are expected to complete all subsequent flight training within Minnesota State Mankato's aviation program.

Transfer credits:

To satisfy aviation curriculum requirements students with pilot certificates and ratings earned with college credit through a Council on Aviation Accreditation (CAA) accredited university may transfer those credits without demonstration of proficiency.

Transfer evaluation for aviation students:

All transfer evaluations start at the admissions office. There, transcripts sent directly to MSU from your transferring school(s) are evaluated and placed on a transfer evaluation (general education planning) sheet. All work that is accepted by MSU will be on the evaluation form. Courses accepted for general education requirements will be placed in the appropriate groupings and any general education requirements remaining to be completed will be indicated. Courses accepted, but not used for general education requirements, will be placed on the back. The aviation department will evaluate these, and assign credits to program areas as appropriate. The department does not accept credit which is not accepted by the university, such as that earned from non-regionally accredited schools, credit for life experience, etc.

Non CAA transfer credits:

College credits obtained through a non CAA accredited institution will be reviewed by the Minnesota State Mankato Department of Aviation to ensure the issuing institution follows policies and practices consistent with CAA accreditation standards. In the event credits do not transfer, students may be required to follow Credit for Prior Experience procedures.

Credit for Prior Experience:

Students entering Minnesota State Mankato without college credit as described above (including completed FAA certificates and ratings) must register for and complete the requirements for the applicable ground school and flight lab courses. Prior flight experience will be evaluated by the faculty and may result in advanced standing in flight labs. Students are responsible for aircraft rental during this evaluation, if one is required.

Procedure:

A student requesting advanced standing in one or more courses required by the Professional Flight program must:

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1. Schedule a record review with the Minnesota State Mankato Flight Education Faculty. Please bring to the review complete documentation of prior experience. Documentation must include but is not limited to, the pilot's personal logbook, FAA certificates, any record of formal ground instruction, and any other record of experience.
 - A. The reviewer will do a preliminary evaluation of the student's records and make a recommendation for advanced standing
 - B. The flight education faculty shall meet to approve the recommendation and issue an advanced standing award
 - C. This award will include:
 - Hybrid syllabus with new minimum flight, simulator, and ground instruction needed to meet the experiential requirement of each course with advanced standing
 - Notice a flight evaluation, if required. Students receiving advanced standing for a significant portion of any course should expect to have the experience evaluated for validation of skills required to earn course credit

2. If a flight evaluation is required:
 - A. The student should consult with their flight instructor to determine when the student will be prepared to complete the flight evaluation.
 - Please note; the flight evaluation may be conducted anytime after the advanced standing award but must be completed prior to course completion

 - B. Then schedule a flight evaluation with the Flight Education Faculty.

The flight evaluation will have one of three results.

1. No further evaluation required. Course is complete after student complies with advanced standing hybrid syllabus.
2. No further evaluation required. Course is complete after student completes a review of weak areas with flight instructor and student complies with advanced standing hybrid syllabus.
3. Review unsatisfactory areas with flight instructor, then re-evaluate with Faculty.

Please note: The Advanced Standing Award indicates the MINIMUM hours required for course completion.

Program Admittance

Students are encouraged to begin flight training their first semester at Minnesota State Mankato and therefore may enroll in 100/200 level courses and begin flight labs prior to admission to the major. In addition, we encourage Professional Flight students to advance through their flight labs in an efficient and timely manner, allowing them the opportunity to flight instruct while

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finishing their degree. This allows students to build flight experience which positions them for employment as a professional pilot soon after graduation.

Students should declare the aviation major with the registrar. Indicating your intent to pursue the major will result in assignment of an aviation advisor.

Admission to the major is necessary to enroll in 300/400 level courses and is normally accomplished at the end of the first academic year (attainment of 32 semester credits and 2.0 GPA). Students request admittance to the program by taking a copy of their unofficial transcript to the College of Education advising office in AH 117. To meet registration timetables, students can receive **provisional admittance** prior to completing their current term. Please note, those who receive provisional admittance must remember to return to AH 117 to process their admittance to the major upon completion of 32 credits. Provisional admittance is also granted for the express purpose of enrolling in the Multiengine Flight Lab (AVIA 371) that is normally taken during the freshman year.

Advising and Plan of Study

Just as we complete preflight planning before every flight, students should develop a plan of study that guides them to their goal of graduation. Freshmen are encouraged to meet with a faculty member from the Department of Aviation to assist in developing a plan of study by Thanksgiving or three months into their college career. In addition, we encourage you to meet with your advisor at least one time per year or as necessary to ensure that you reach your goals in a timely manner.

The plan of study should satisfy the 44 credit general education requirement along with all categories, writing intensive and cultural diversity requirements. The plan must also satisfy all aviation requirements from the undergraduate bulletin. Students that satisfy the minimum general education and aviation program requirements still require 7 elective credits to meet the 128 credit graduation requirement.

Professional Flight requirements include the aviation core (25 Cr), aviation electives (12 Cr), professional flight electives (flight labs and AVIA 380 CFI ground, 10 Cr) and business foundation classes (30 Cr). The Minnesota State Mankato program is intended to develop a pilot/manager, although the bulletin permits students to pursue a minor course of study in lieu of the business foundation courses. We recommend that students stay with the business foundation as this foundation provides valuable backup career options to a piloting career. The combination of piloting with management/business skills is very valuable in the aviation workplace. Nevertheless, professional flight students that have different alternative career plans and aspirations can pursue a minor of their choice.

Most minors require less than 30 credits. In this case, additional aviation credits must be accomplished to equal 30 credits. For instance, if a student opts for a minor that requires 18 credits, he/she must take 12 additional aviation credits (above and beyond normal

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aviation requirements). This can often be accomplished through internship or additional aviation elective classes.

Aviation Management requirements include the aviation core (25 Cr), aviation electives (12 Cr), internship, individual study or additional aviation electives (10 Cr) and business foundation classes (30 Cr). Business foundation classes are mandatory for the Aviation Management concentration without alternative options as in the Professional Flight Concentration.

Aviation Minor

Students completing a major in aviation, either Professional Flight or Aviation Management, are not eligible for the aviation minor. The minor is available for Minnesota State Mankato students majoring in other subject areas.

A **worksheet and a suggested generic plan** of study are provided in this handbook for your convenience.

Flight Labs

Students must enroll in the respective flight lab prior to start of flight training. Lab enrollment ensures student rates for aircraft instruction without sales tax. In addition, it is a necessary step in the financial aid process (See Financial Aid Procedure below). To enroll in a flight lab, students should request permission from a faculty member and demonstrate their readiness for the particular lab. Electronic permission will be issued at that time. *It is the student's responsibility to enroll in the flight lab course after permission has been granted.*

At the time that you request and receive permission to enroll in the appropriate flight lab, you and the faculty member will establish several meetings to occur throughout the semester. This will ensure adequate student progress as well as course completion, when appropriate and are a mandatory component of the flight lab course. Students are responsible to contact faculty in a timely manner to reschedule if there is a schedule conflict.

In addition, students are required to meet with the Chief Flight Instructor **within the first week** of the semester to establish their personal flight training schedule. Students are required to flight train at a **minimum of three times per week**. Two sessions will be the same time every week, the third or more sessions for the week will be determined by the student. This will allow for some flexibility for the students.

Flight training syllabi can be purchased from North Star Aviation at the beginning of each flight lab.

MSU follows a non-traditional flight lab sequence with emphasis on multiengine flight operations that the program is most noted for. Students are cautioned that this sequence does not follow the numerical course sequence and that some labs require both single engine and multiengine training. The proper sequence for MSU flight labs is:

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AVIA 151	Private Pilot
AVIA 371	Multiengine Pilot
AVIA 261*	Instrument Pilot
AVIA 251*	Commercial Pilot
AVIA 381	Certificated Flight Instructor Flight Lab
AVIA 382	Multiengine Instructor Flight Lab
AVIA 391	Instrument Flight Instructor Flight Lab

* Requires Single and Multiengine

Flight Lab Progress

In addition to the meetings scheduled with your advisor, they will also have access to your flight training records through the online scheduling program. If necessary, your advisor may contact you to determine the cause of slow progress.

Flight Training Policies and Procedures

North Star Aviation will provide each student with a copy of the Policies and Procedures manual specifically created to inform students of the rules, dispatch and rental requirements, and other policies that apply to flight training.

Late Cancellation/No-Show Policy

Students who fail to cancel a lesson within 2 hours of that lesson OR who no-show **will** be charged for that two hour time period.

Flight Student Discipline Policy

Any student who fails to comply with this Student Handbook or the Policies and Procedures manual are subject to discipline from both Minnesota State Mankato and North Star Aviation. This may include suspension of flight privileges for a given amount of time. All discipline issues will be handled by the Flight Review Board.

Flight Review Board

The Flight Review Board consists of members from the Department of Aviation and North Star Aviation. In addition, the Dean of the College of Education may be involved.

North Star Aviation

North Star Aviation is the official and exclusive provider of flight training for Minnesota State Mankato flight labs. Within the first week of the semester, students enrolled in flight labs are required to meet with the Chief Flight Instructor (as mentioned above). Flight instructors are normally assigned by the chief pilot, but students may request a particular instructor if they choose.

North Star Aviation is based at the Mankato Airport is located northeast of Mankato on US Highway 12. A map and directions to the airport are included in this handbook. Personal transportation is a practical necessity for the 20 minute drive to the airport to participate in the flight training program as there is no public transportation or shuttle service currently available.

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All flight instruction for the purposes of Minnesota State Mankato flight labs must be accomplished with North Star Aviation. Flight instruction accomplished through another vendor or in other aircraft will not count towards course completion. North Star Aviation maintains a superb fleet of new aircraft, including Piper Seminoles, Piper Warriors and Diamond DA-20s.

Equipment and Supplies

Piloting requires considerable equipment and supplies including, but not limited to: headset, flight bag, flight computer (E-6B or electronic equivalent), plotter, and current aviation charts. There are many choices available that involve a personal decision. In particular, headset models vary widely. Headset options range from a high-quality basic model at nearly \$150 to state of the art noise canceling headsets over \$1,000. Students should be prepared for these expected costs as prices for equipment and supplies are not included in flight lab cost estimates. Students may also want to talk to a number of pilots and search available information on piloting supplies to make an informed choice. One of the best sources of information will be your personal flight instructor. All necessary equipment and supplies are available at the Mankato Airport from North Star Aviation.

FAA Medical Exam

Students are required to receive a 3rd class FAA medical certificate near the beginning of their flight training, but are encouraged to receive a 1st class medical exam for their initial evaluation. The 1st class medical is required of professional pilots at airlines and similar commercial aviation positions. It is advisable to take a 1st class physical before beginning a flight program to uncover any potential health issues that may limit your pursuit of a piloting career. The extra money spent in advance provides peace of mind and may save money in the long-run. To locate a medical examiner near you, visit: <http://ame.cami.jccbi.gov/>

Health is as important to a pilot as flight training. Ensure that you remain healthy by following good health practices – especially in relation to alcohol consumption and smoking. Begin now to establish a lifestyle that protects your medical certificate and your pilot certificate.

Instructor Program

The aviation program intends to prepare every student to become a flight instructor with North Star Aviation. Students should strive toward instructor level of knowledge and understanding throughout their tenure and recognize that their attitude toward training will be considered during the interview process.

In addition to teaching toward instructor level of knowledge and proficiency, we employ a unique ground instructor program. Every aviator recalls achieving the greatest advancement in their knowledge and skills upon becoming an instructor. We take advantage of that principle by providing students the opportunity to teach in the simulator **first as an Instrument Ground Instructor (IGI) and next adding multiengine procedure training as an Advanced Ground Instructor (AGI)**. To make this program work, a portion of a student's simulator training is provided by an IGI/AGI vs. the student's personal Certificated Flight Instructor (CFI). The simulator program with its ground instructor requirements can be viewed **at *LINK***.

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Each student has the opportunity to become a ground instructor as they begin working toward their commercial certificate. We place such emphasis on the ground instructor program that we require 50 hours of ground instruction given to before the IGI/AGI can start as a flight instructor with North Star Aviation. The first 10 hours of ground instruction given are supervised by a CFI. In this manner, the new ground instructor is introduced to the art of simulator instruction.

To be eligible for employment in our program, flight instructor candidates must also successfully complete our Flight Instructor Ground School. In addition, all flight instructors must possess the multiengine (MEI) and instrument (CFII) instructor privileges. Despite these high credentials, we still require new instructors to give 100 hours of instruction in single engine aircraft before instructing in multiengine aircraft. A summary of the Instructor Qualification Program is [provided at LINK](#).

Simulator Program

The simulator program is [outlined in LINK](#). Simulator requirements for each flight lab are firm requirements and must be accomplished with a CFI or IGI as indicated in the syllabus. Some have the notion that aircraft time is more valuable than simulator training and want to trade excess aircraft hours to meet simulator requirements. We find, however, that professional pilots will be faced with simulator training and requirements throughout their career, including airline interviews. The common complaint that the simulator doesn't quite emulate the aircraft and that artificialities exist in simulator scenarios actually provide justification for simulator training. The artificial aspects of simulator experience are receiving recognition from the aviation industry and the FAA as important elements in pilot development. In addition, our turbine transition program provides experience in operating turbine aircraft systems and operating in a crew environment.

Estimated Costs

Estimated Flight Lab costs are [provided at LINK](#). The estimated costs are based upon currently established rates. We strive to keep training costs to a minimum, but annual rate increases and adjustments for fuel/insurance costs should be anticipated. The estimated lab costs are for aircraft/simulator rental and flight instruction. These estimates do not include typical expenses such as aviation headset, charts, books, flight calculator, etc. Estimated costs are also based upon maintaining good training continuity and preparing effectively for each flight/lesson. We suggest that students budget to expend flight-training funds in approximately a two-year period. Stretching training into the four-year program will lead to poor continuity and resulting increased costs. In addition, drawing out the training will delay opportunities to build valuable flight time and reach your career objective.

Financial Aid

Financial Aid may be available for expenses such as tuition, books and living expenses. For professional flight students, additional aid for flight training may be obtained depending on eligibility. Students that receive financial aid should carefully manage expenditure of their aid award. Additional money is not available once authorized funds are expended. In addition,

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failure to complete the course of study may result in action to recover money from the student. Student progress is monitored and those students not using additional cost aid to progress toward the respective flight lab within the program may be notified to return the financial aid to the lending institution.

Financial Aid Procedure

This procedure has been established to assist student in obtaining financial aid funds in a timely manner. If followed in order with each step completed as soon as possible, students should receive their flight training money within the first 10 days of the semester.

1. Complete the Free Application for Federal Students Aid (FAFSA) after Jan 1 each year and BEFORE March 15.
 - √ www.fafsa.ed.gov
2. Student will receive award packet in the mail
 - √ Follow all instructions in this packet
 - √ Complete any forms as requested and return to Student Financial Services **ASAP**
3. Receive instructor permission and enroll in appropriate flight lab
4. Meet with Chief Flight Instructor to set up flight training schedule
5. Complete a Budget Adjustment Request Form to request additional funds for the flight lab you are registered in.
 - √ www.mnsu.edu/forms
 - √ You may only receive funds for the semester you are registered in the flight lab, for example you may ask for funds for the private pilot flight lab fall semester as long as you are registered for and start training for the private pilot certificate that semester
 - √ You must fill out another Budget Adjustment Form during the semester if you complete a flight lab and require funds to start another flight lab
 - √ You must actively pursue completion of your flight lab by meeting with your instructor 2-3 times per week
 - √ In addition, you must complete your flight training with North Star Aviation
6. Turn in Budget Adjustment Form to Student Financial Services *as soon as possible* in this process.
7. You will receive a Budget Adjustment Request Results Notification form in the mail to the address you put on the Budget Adjustment Form.

If you fail to meet the above requirements, you will need to repay your financial aid immediately

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A detailed description of this information can be found at
www.mnsu.edu/campusub/programs/special/aviation

Please feel free to contact Karen Taylor in the Student Financial Services office or Craig Ruedy, Department of Aviation Chairperson, if you have any additional questions.

Scholarships

The aviation program sponsors scholarships each spring for award at the Aviation Banquet for deserving students with at least one more semester remaining in the program. Announcements regarding application procedures and deadlines will be made during the spring term.

A listing of additional aviation scholarships compiled by the University Aviation Association can be viewed at the Aviation Department Office. These scholarships have a variety of application procedures and deadlines. Students that wish to pursue scholarships are encouraged to contact their advisor and make an annual plan to apply for scholarships. Women should give special attention to scholarships available through the Women in Aviation organization.

Internship and Individual Study

The Department of Aviation has many contacts in the aviation industry that provide internship opportunities for our students including, but not limited to Northwest Airlines, the Metropolitan Airport Commission, the Federal Aviation Administration, the Minnesota Aviation Career Education Camp, North Star Aviation, and the Minnesota Business Aviation Association. In addition, students may arrange their own intern experiences through obtaining aviation related employment. Students should notify their advisor if they are interested in an internship.

Whether registering for a formal departmental internship or an internship of their own creation, students must first draft an internship proposal. The proposal must include the student Tech ID, expected work effort including work-hour expectations and duration of the assignment, requested credits (up to 12 for full-time work), internship workplace supervisor, and anticipated learning outcomes. The proposal must also include a description of how they will document their internship progress. Normally, students will compile a weekly journal of their experiences and an overall summary of the experience.

Individual study projects are normally proposed by the student, but faculty may suggest areas of study. One of the most important aspects of individual study is defining the scope of study in the proposal. Individual study can include scholarly research or experiential learning such as advanced aviation certificates and ratings not offered in our normal course of study. The proposal is presented to the faculty in a manner similar to an internship proposal. Thus, the proposal must include the topic of study, scope, method of study, student Tech ID, requested credits and anticipated learning outcomes. The proposal must also include a description of reports that will be delivered at the end of the individual study.

Career Information & Resume Development

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The Career and Development Center at Minnesota State Mankato is a terrific source for information on aviation resumes and career information. In addition, Department of Aviation Faculty have extensive experience in the aviation industry and are more than willing to advise students on resume, cover letter and interview preparation.

- Checklist for Success written by Cheryl Cage is a book specifically designed to prepare pilots for airline interview.
- Additional career information from the Federal Aviation Administration may be found at <http://www.faa.gov/education/documents/salary.htm>.
- The Department of Aviation maintains employment information that may be reviewed in the department administrative office, AH 328.
- The Career and Development Center's links to various aviation employment sources available on the web can be found at <http://www.mnsu.edu/cdc/education.shtml>

As students look ahead to their career, they should remain aware of the potential impact of current actions on their ability to obtain the job of their dreams. In addition to the obvious need to gain flight experience while avoiding violations of Federal Aviation Regulations, students should also be aware of the adverse impact of any police record including speeding violations. We have seen students experience rejection from employment due to having three or more violations on their driving record. A single DUI can have similar disastrous effect.

Student Organizations

Active involvement in student organizations is a very important aspect of your time at Minnesota State Mankato. Not only is a way to have fun, meet people, and give back to your community, it will help you through the job search/interview process. When hiring a pilot, it is important to verify their aviation knowledge and abilities, but it is also important to hire a well rounded individual.

There are three Aviation Recognized Student Organizations (RSOs) and are as follows;

Aviation Club and Women in Aviation

These organizations work together and are open to all aviation students. Membership dues are expected to be paid during the first month of the fall semester and are minimal. This group organizes activities, such as;

- Tours to aviation facilities. In the past they have toured Minneapolis Tower, 3M Corporate Flight Department, Decompression Chamber, Metropolitan Airport Commission, Northwest Flight Training Simulators
- Homecoming Fly-by
- Homecoming Parade Float
- Aviation T-Shirts and Sweatshirts
- Mini-golf
- Holiday Dinner
- Adopt-a-Highway

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- Boy Scout/Girl Scout Aviation Merit Badge Day at Airport
- Annual Aviation Banquet
- Flight Trips to Aviation Conferences like Women in Aviation, NBAA
- Annual Oshkosh Booth and Camping Trip

Flight Team

The flight team competes annually at the Regional Flight Meet held in October. The first two placed teams at that meet move on to the national competition. Some events include;

- Preflight
- Aircraft Recognition
- E6B
- Message Drop
- Precision Landings
- Flight Plan

Contact Information

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