



MOUNT ALLISON UNIVERSITY & MONCTON FLIGHT COLLEGE

Bachelor of Science (Aviation) Handbook



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Preamble

This handbook is for the use and guidance of students in the Mount Allison University (MTA) / Moncton Flight College (MFC) Bachelor of Science (Aviation). This is a shared program, and the primary focus of this document, unless otherwise stipulated, is to bridge Moncton Flight College course requirements and procedures to those of Mount Allison University. Accordingly, for specific details on Mount Allison University policies, courses and procedures for its part of the program please refer to the current Mount Allison Academic Calendar.

All holders of this Handbook are responsible for knowledge of its contents and any future amendments issued. In case of any discrepancy between this Handbook and the Flight Training Operations Manual (FTOM), the FTOM shall be taken as correct. The regular Moncton Flight College Student Handbook adds details on flight training rules and requirements at MFC.

This is a new program and this document will be updated to accommodate a smooth transition, progress and Transport Canada requirements. Mount Allison University and the Moncton Flight College reserve the right to make these changes and will make every effort to notify students on a timely basis of any changes.

Program Coordinators for the B.Sc. (Aviation) are as follows:

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1 INTRODUCTION

1.1 Welcome

Welcome to the Moncton Flight College and Mount Allison University, Bachelor of Science (Aviation) program. This program represents the best that two premier Canadian schools offer respectively in aviation and undergraduate degree training.

The past two decades have seen many changes in aviation. The equipment pilots fly today and the environments in which they fly have changed dramatically. As a result, the philosophy of pilot training, skill and knowledge requirements is now changing to meet these new demands. In addition to the traditional “stick and rudder” skills every pilot must have, today’s pilots need to be professional technical managers with skills in communication, problem solving and the ability to operate effectively in a dynamic team environment. The *Bachelor of Science (Aviation)* program delivers an essential mix of broad undergraduate academics, professional flight training and applied technology to meet the current and future demands of the aviation industry. We look forward to having you join us in this exciting program and hope you find it to be a rewarding foundation for your future in aviation.

1.2 History of MFC

In one form or another, the Moncton Flight College (MFC) has existed since 1929. Since then, it is estimated that over 15,000 pilots have been trained under its guidance. Keeping pace with the dynamic nature of aviation, MFC has gone through many phases of expansion and contraction. One of the earliest and most dramatic expansions occurred during WWII, when MFC was actively engaged with the British Commonwealth Air Training Plan, supplying pilots and instructors for that turbulent time in history. It became incorporated as the Moncton Flying Club in July 1944.

Don McClure accepted the position of Chief Flying Instructor and manager of MFC in June of 1959. Under Don’s leadership the school experienced another significant growth spurt and the Club grew to the extent that it could claim to be the largest flying school in Canada. In fact, it pioneered the training of foreign students from many countries thus establishing a global reputation for excellence, achieved many awards, and reached a pinnacle of almost 24,000 flying hours in a single year. It brought much honor and recognition to our city. Mr. McClure retired in October 1989 but remained an active Club member right up until his death in April 2008.

Now almost 80 years later the Moncton Flight College (MFC) has withstood the test of time. MFC has stayed at the forefront of aviation training by integrating the latest methods, curriculum and technology into its programs while at the same time maintaining fundamental values of safety and client service. MFC’s rich history is full of success stories from students, instructors, managers and other dedicated members who navigated the school through good times and bad.

Today the Moncton Flight College has state of the art facilities, simulators, aircraft and a prestigious new partner, Mount Allison University. We look forward with great anticipation to the next 100 years of powered flight. Most importantly we hope your time with us will be rewarding and memorable—we know that it will definitely be exciting and that you also can become a part of this great history.

--Historical information courtesy of Donald S. McClure, MFC Honorary Chief Flight Instructor

1.3 Mission and Vision Statements

MFC Mission Statement

Building on over 75 years of experience as an industry leader, we educate and develop aviation professionals with state of the art curriculum, highly qualified instructors and modern facilities and equipment. These activities are carried out in a safety oriented training environment on a financially viable basis. We promote the field of aviation as well as the Greater Moncton area as an aviation centre of excellence.

MFC Vision Statement

We are an advanced aviation college internationally respected for producing aviation professionals and leaders, by exceeding industry training standards.

MTA Mission

Mount Allison University is committed to the creation and dissemination of knowledge in a community of higher learning, centered on undergraduate students, in an intimate and harmonious environment. Our teaching, research and creative enterprise are combined with extracurricular activities, in a liberal education tradition, that emphasizes development of the whole person. This integrated approach involves collaborative efforts among all members of the University community and leads to superior scholarship, cultural understanding and appreciation, personal and social maturation, leadership development and informed citizenship.

MTA Vision

Mount Allison will be the University of Choice for students seeking an undergraduate education of exceptional quality.

2 PROGRAM OVERVIEW

2.1 Overview

The Bachelor of Science (Aviation) is a new interdisciplinary degree program integrating professional flight training with a broad education in Science, Social Science and Arts

subjects. It is offered in partnership by Mount Allison University and the Moncton Flight College.

Along with practical and theoretical aviation subjects, students take Mount Allison courses in Computer Science, Geography and Environment, Mathematics, and Physics that are both relevant to professional flying and provide a substantial introduction to these disciplines. Students will gain experience in Arts and Humanities subjects, ensuring that graduates have an education combining breadth and depth.

Upon successful completion of the program graduates will have, in addition to a degree, a Commercial Pilot License for *aeroplane*, a Multi-engine class rating, and Group 1 Instrument Rating [CPL (A)/IR]. Students will also have completed the ground school and flight requirements enabling them to write the Transport Canada Airline Transport Pilot License exams (SARON, SAMRA). Upon passing these exams students will be able to operate as co-pilot on multi-crew, multi-engine aeroplanes in commercial air transportation. This is sometimes referred to as a “frozen” Airline Transport Pilot License. When the required 1500 hours of flight time are completed they are granted full privileges of an Airline Transport Pilot License.

The practical elements of the program require the student to spend time training outside the traditional September-April teaching period. Students begin by taking courses entirely at Mount Allison University for the first year, and then combined courses and training for the remaining three years at Mount Allison and the Moncton Flight College.

Flying is not scheduled in the curriculum for the first year. This is a demanding program and we strongly encourage students to focus on their first year studies to lay a good academic foundation for the remaining years of the program. If students wish to begin flying during the first year they may do so on an *ad hoc* basis (pay as you go), up to a maximum of 30 hours. If this is an option you wish to take, please be sure to remind MFC instructor staff that you are enrolled in the B.Sc. program. Any flying credits obtained in the first year will not be returned until the program is finished or one withdraws.

2.2 Admission Requirements

Bachelor of Science (Aviation) students make initial application to Mount Allison University according to the Mount Allison Academic Calendar, Section 3. In addition, they must also apply for admission to MFC by submitting the following documents.

1. Letter from Mount Allison University (photocopy acceptable) indicating their acceptance/enrollment for the B.Sc. program.
2. Completed Category 1 medical report.*
3. Students must be at least 17 years old to be accepted in this program.

*Medical Requirements

Students applying for the B.Sc. should make arrangements to have a Category 1 aviation medical as soon as possible in the application process. A list of approved medical examiners is included with your application package or is available on request from MFC Student Admissions. Transport Canada requires that have a documented medical

examination by an approved Canadian Aviation Medical Examiner (CAME) before engaging in flight training toward a Commercial Pilots License.

2.3 Application Contact Information

All correspondence regarding admission should be submitted to:

The Office of Student Services
Mount Allison University
65 York St., Sackville, NB
E4L 1E4

Tel. (506) 364-2269
E-mail admissions@mta.ca

<http://www.mta.ca/apply>

Mount Allison Academic Calendar Information

<http://www.mta.ca/calendar/Aviation.html>

3 FEES

3.1 Current fees are published as a separate document.

3.2 Schedule of Fees

The first year of the B.Sc. (Aviation) program is completed at the Mount Allison campus. First year fees are based entirely on the Mount Allison fee schedule in the Mount Allison Academic Calendar Section 4.

Fees for years 2, 3 and 4 are calculated based on MFC and MTA tuitions and collected by Mount Allison. Fees are calculated by combining the complete tuition costs for both institutions and prorating them over the remaining three years of the program. This allows students to budget accordingly for each year.

Flying credits that are unused will be returned to students upon completion or withdrawal from program.

Compulsory fees are collected by each institution. For the Moncton Flight College these fees include:

- Basic pilot equipment e.g. headset, logbooks etc.
- Transport Canada exam and licensing fees

- Membership to Moncton Flying Club
- Textbooks

Uniforms for students in the B.Sc. program are considered optional and will be paid for separately.

Tuition for international students is outlined in the Mount Allison Academic Calendar.

4 Financial Assistance

Financial assistance services/consultation will be done through the Mount Allison University Office of Student Services.

4.1 Scholarships

This is a new program for the Moncton Flight College, we are working on new awards, scholarships and academic prizes that can be set up for eligible students taking the program. Please watch this section and our webpage for new developments. Students may be eligible for some scholarships or other awards through Mount Allison University. Information can be found in the Mount Allison Academic Calendar, Section 5.

4.2 Student Loans

The New Brunswick government has an excellent website devoted to student loans and the application process (see below). They have links to other websites, including other provincial websites that administer their own student and federal loan applications. Student services from either Moncton Flight College or Mount Allison can assist you with further information.

New Brunswick site: <http://www.studentaid.gnb.ca/>

Federal Government site: <http://www.canlearn.ca>

5 REGULATIONS

5.1 General Statement

As with other professional degrees, the Bachelor of Science (Aviation) takes responsibility for the professional outcomes desired. The character and discipline developed during this formative education will become the foundation of your future success and of safe performance. In flight training, the knowledge acquired is essential and there are numerous school and federal regulations that must be adhered to. Failure to do so can result in dismissal, suspension of licenses acquired and/or heavy fines.

5.2 Academic Regulations

The Bachelor of Science (Aviation) is a Mount Allison University degree, thus regulations pertaining to the Mount Allison portion of the academic program will be found in the Mount Allison Academic Calendar, Section 6. The Moncton Flight College will adhere to and uphold those regulations where applicable and in addition, the elements that pertain to Transport Canada licensing and safety requirements.

5.3 Requirements for a Bachelor of Science (Aviation) Degree

In order to qualify for a Bachelor of Science (Aviation) degree, a student must complete:

1. 84 credits in the aviation major earned as follows: *
 - a.)
 - 6 from CHEM 1001, 1021
 - 6 from MATH 1111, COMP 1631
 - 6 from PHYS 1051,1551
 - 6 from GENS 1401, 2421
 - 6 from COMP, GENS, MATH or PHYS at the 2000 level chosen in consultation with the Program Advisor**
 - 18 from COMP, GENS, MATH or PHYS at the 3000/4000 level chosen in consultation with the Program Advisor**
 - b.) The requirements in this document, the Moncton Flight College Handbook for the B.Sc. (Aviation). This includes credits earned at MFC and the requirements for the Transport Canada Integrated Airline Transport Pilot License (ATP/A). The ATP/A includes the requirements for Commercial Pilot's license Multi-Engine and IFR ratings.

This requirement is equated to 36 credits as follows: (See section 6.1 for course descriptions)

6	from Aviation AVST 1111, 1211, 2311
6	from Flight Operations AVST 1121, 1221 2321
3	from Air Law (Canadian Aviation Regulations) AVST 1131
3	from Flight AVST (1239, 2359, 3519)
12	from Applied Aviation Technology (AVST 1561, 1541, 2551, 3581)
3	from Advanced Aircraft Operations (AVST 3341, 3421, 4521)
3	Commercial Operations AVST 2331 Term 3 and Safety Management Systems AVST 2411

* Details regarding Mount Allison requirements can be found in the Mount Allison Academic Calendar under the B.Sc. (Aviation) program.

**Note that many 3000/4000 level courses have one or more prerequisite courses. Consultation must occur before the student's second year of study.

2. Thirty six additional credits beyond the aviation major are required. Of these, 24 credits may be used to complete a minor and 12 used to fulfill remaining distribution requirements. See the Mount Allison Academic Calendar Section 7.3 for the B.Sc. regulations.

5.4 Attendance

Canadian Aviation Regulations (CARS) Part 421.30 (3) (b) states that, "an applicant who is a graduate from an approved integrated course shall have completed the applicable course requirements in section 426.75 of the Canadian Aviation Regulations."

The application of this regulation requires that attendance be mandatory for all MFC ground school classes and briefings. Each student must maintain a good attendance record. To ensure that the progress of individual students is not impeded by poor attendance, the following regulations are adopted:

Absenteeism may only be authorized for instances of:

- Personal illness
- Serious illness or death of an immediate family member
- Causes over which the student is unable to exercise control

Due to progress delays during flying hours caused by poor weather, any student requesting a leave of absence, either one or several days, including statutory holidays, must have prior permission from the Program Manager.

While participating in Flight Training at MFC, cancellation (no show) of flight bookings will not be tolerated. If a student cancels a booking more than twice per semester, a meeting will be required with the Program Manager. If cancellation of bookings becomes a problem the student will be subject to a review committee where the items of concern are addressed and the student's continuation with the program.

If a flight booking needs to be changed or cancelled, 24 hours prior permission is required from the Program Manager or Flight Instructor.

Periods of illness extending for three days or more are to be supported by satisfactory medical evidence. However, medical certification may be required for lesser periods, at the discretion of the college.

Student absenteeism should not exceed 5% of the total hours in any individual subject. Students who have their training cancelled in a subject will receive a final mark of zero in that subject. Total absenteeism will include sick days of a casual nature, but may not include extended periods of illness. This is not to be considered as permission to be absent five percent of the time, but rather as an identification of limits. Each student is to be informed that absenteeism or sub-standard progress will result in a re-examination of the student's training status and can lead to cancellation of the student's training.

5.5 Cessation of Training

The Moncton Flight College may cease training for students in their program. Only the principal or designate may authorize the cancellation of training for students. Once a recommendation for cancellation of a student's training has been made by a training review committee, a final appeal may be made directly to the principal. Based on past history, a reversal of the review committee's decision by the principal only happens in most exceptional circumstances. Depending on the circumstances, cessation of training with MFC may result in change of status at Mount Allison University.

5.6 Course Exemptions and Transfers

Canadian Aviation Regulations part 426.75 regarding integrated flight training programs, states that,

(6) An applicant may be admitted to training either directly without previous experience or as the holder of a Private Pilot License — Aeroplane. (Amended 2006/12/14; no previous version)

(7) An applicant admitted to training under (2) may be credited towards the course flight time requirement up to a credit of a maximum of 30 hours flying experience, of which 20 hours may be dual instruction flight time. (Amended 2006/12/14; no previous version)

The Moncton Flight College offers an integrated program students cannot apply for credit for any previous ground school completed at any other flight school/college other than a maximum of 30 hours flight time.

6 MFC & NBCC COURSES OF INSTRUCTION*

6.1 MFC Course Descriptions

CODE	COURSE TITLE	Credit Hrs.
AVST1111	Aviation I: Introduction to Aviation	2.0
	Aviation I introduces the student to three major topics of aircraft and flight: Airframes, Engines and Systems; Aerodynamics & Theory of Flight and Navigation. This course gives students a solid foundation in major aircraft components. Subjects include: internal combustion engines, airframe construction, electrical and fuel systems. Topics relating to various control systems: electrical, mechanical and hydraulic. Significant time will be given to aircraft instruments and their operation. The course also introduces the student to principles of flight. Topics here include: lift, drag, effects of flight control surfaces and other forces that act on an aircraft. Aircraft design and its effect on aerodynamics is looked at, along with load factors and stability. The air navigation component starts with definitions, maps/charts, time, longitude, and radio theory. Specific navigation aids such as VOR, ADF, LORAN C, and GNSS/GPS will be covered. Students will become skilled at using navigation computers, maps and charts as well as being able to complete pre-flight preparation. This course is prerequisite to Aviation II.	
AVST1211	Aviation II	2.0
	Aviation II represents a continuation of study areas introduced in Aviation I (MFC1111) as well as new course topics. Airframes, Engines and Systems are looked at further with an in-depth look at systems and more advanced aircraft typically used in commercial operations, e.g. pressurization, de-icing/anti-icing, and environmental systems. The aircraft instruments component integrates instrument function to instrument flying. Navigation and Radio Aids is followed up with emphasis now focused on night navigation procedures and more coverage of VOR, ADF and GPS navigation aids.	
	Human Factors was looked at previously now this area of study examines the human in the aircraft and their relationship to the environment in which they work. Topics include: human physiology; aviation psychology; pilot equipment, materials/ergonomics and interpersonal relations. Significant emphasis is also placed on Decision Making and what affects the how and why decisions are made.	
	Previously its own separate course, Canadian Aviation Regulations is integrated with Aviation II to transition from private operator to commercial operations. Emphasis is placed on those sections dealing with commercial air services, air-taxi operations, aircraft requirements and procedures for various commercial operations. Approximately one half of the course is directed at those sections dealing with air traffic services and procedures. Upon completion of this course, the student will have acquired the knowledge and skills needed to interpret and apply the regulations and standards needed to complete both the Transport Canada Commercial Pilot written exam and CPL flight test.	
AVST2311	Aviation III	2.0
	Aviation III now goes more in depth to various aircraft subjects. The Aerodynamics and Theory of Flight component now addresses theory of flight and aerodynamics in respect to larger, faster aircraft. Substantial review is given later in the course, based on work done in terms 1 and 2, to prepare the student for successful completion of the Transport Canada commercial written exam and flight test. Topics include: stability and control, high-speed flight, mach, shock waves, as well	

as present and future design concepts. The Airframes, Engines and Systems component is designed to give the student a stronger foundation to further understand aircraft design, function and structures. Included are areas relating to engines such as turbo charging and turbines, also fuel topics such as fuel management and fuel handling will require a greater depth of understanding for the commercial level. Also students will be introduced to advanced aircraft systems typically used in commercial operations such as pressurization, de-icing/anti-icing and environmental systems. In conjunction with this topic Aircraft Flight Instruments are examined more thoroughly. This topic is designed to give the student a stronger foundation to further use and interpret Aircraft Flight Instruments. Those areas relating to radio & radar altimeter and instrument flying such as partial panel and unusual attitude recoveries will require a greater depth of understanding for the commercial level. The topic is augmented with more attention to Navigation and Radio Aids. Additional advanced topics include: navigational computers and Radio Magnetic Indicator (RMI). Students are expected to show proficiency in using advanced navigational aids and procedures.

AVST1121 Flight Operations I 2.0

This ground school course represents 80% of what a pilot will be doing every day - flight operations. The course covers a variety of topics from general airmanship i.e. flying aircraft under various conditions in various locations to aircraft performance. Use of performance charts, weight and balance calculations and the effects of wake turbulence are also included. Practical topics such as use of a Flight Operations Manual will be explored. A significant element of this course is human factors: physiology and psychology, and the role they play in day-to-day operation of aircraft. Aviation meteorology is introduced. Pilots fly in various weather conditions and it is essential that you understand meteorology, both practically and theoretically. Topics in this course range from general aspects of the earth's atmosphere, such as composition and temperature, to more complex subjects such as density altitude, relative humidity and lapse rates. Significant time will be spent on the language of meteorology: terms, acronyms, METARS and TAFS. Students will become skilled in interpreting weather symbols, charts, and forecasts. Significant emphasis will be placed on meteorology and its implications for flight operations and safety. This course is prerequisite to Flight Operations II.

AVST1221 Flight Operations II 2.0

Flight Operations II is designed to give the student a stronger foundation to Flight Operations for the Commercial level. Areas include performance charts, weight & balance, critical surface contamination and complex performance topics. Theory of flight is integrated here as a review of previous elements including forces acting on an aircraft, airfoils, load factors, wing design stability and flight controls. As before in Flight Operations I, the meteorology component takes a more in-depth study of the significance of meteorology within the commercial flying environment. Topics include: meteorological aspects of altimetry, fronts and frontal weather, weather maps and prognostic charts. Students are expected to be fluent in transmitting and receiving weather information from the various meteorological services available to pilots. About two hours of additional lab/exercise time is expected with this section. The final section of this course deals with wilderness survival. This section is designed to provide basic wilderness survival skills to pilots, preparing them for a forced or precautionary landing in remote and or uninhabited terrain. Topics include: psychology of survival, geography, signaling, shelter building, food/water sources, and land navigation. A 24-hour field lab is conducted during term 3 based on the content of this course.

AVST2321 Flight Operations III 2.0

Flight Operations gives in-depth analysis of flight operations with strong focus on commercial operations. Significant time devoted to Human Factors, especially pilot decision making. Also covered are interpersonal relations, pilot equipment/materials relationship and more human physiology, as it pertains to the commercial operating environment. The objectives of the Air Traffic Services section will focus on regulations that pertain to flight planning, radar services and

night flying. Topics and activities include the Canada Flight Supplement (CFS); Air Traffic Control Specialties; Area Control Center Tour, Airspace Review; Aircraft Recognition and U.S. Flight Operations.

AVST1131 Canadian Aviation Regulations (MFC) 3.0
As with most professions, law (in this case air law) and procedures make up a significant portion of a pilot's training. This introductory course looks at the structure of Canadian Aviation Regulations, their importance and application to various aspects of flying, including airspace classification, various licenses and permits, operating and flight rules, equipment requirements, and very importantly the responsibilities of the pilot. Included with this course is a 10 hour tutorial on Air Traffic Control regulations and procedures. During this course the student must pass a Transport Canada PSTAR exam on Canadian Aviation regulations. Upon completion of this course, the student will have acquired the knowledge and skills needed to interpret and apply the regulations and standards needed to complete both the Transport Canada Private Pilot written exam and flight test.

AVST1239 Flight I 1.0
Although the student has already been flying an aircraft significantly during Term I, it is not formally recognized by transcript until Term II. By this time the student will have completed and documented approximately 76.4 hours of flight time. This will have included about 20-25 hours of classroom Preparatory Ground Instruction (PGI) toward completion of their Transport Canada Private Pilot License (PPL) and Night Rating Endorsement. Marks for this component will be based on both the Transport Canada (TC) written exam and the TC PPL flight test. A separate and very detailed syllabus is used for Flight I, II and III.

AVST2359 Flight II 1.0
By this time an additional 83.4 hours of flight time will have been added to the students Pilot Training Record (PTR) and Logbook. Marks will be given based on their Transport Canada commercial written test, commercial flight test and Multi-Eng Flight tests.

AVST3519 Flight III 1.0
An additional 40.2 hours of flight time has been logged. The Transport Canada IFR written test (INRAT) and flight test will be the main elements for the final mark.

AVST1561 Aircraft Maintenance Familiarization (NBCC) 3.0
Following successful completion of this course, the student will have acquired the basic skills and knowledge required to perform walk around inspections, performance checks of systems during ground running of an aircraft. Subject areas include: turbine engines (theory, components, starting and operation); fuel system servicing and fire protection (contaminates, hazards, protection); piston engine oil systems (oil dilution, pressure relief); retractable landing gear (fluids, hydraulic systems, pneumatic systems) and constant speed propellers and composite propellers.

AVST1541 Electronics for Commercial Pilots (NBCC) 3.0
By the end of this course the student will be able to describe avionics and electrical systems utilized on multiple types of aircraft. This course will enable the student to apply the basic theory from course AIRC 1566 to actual aircraft electrical, communication, navigation and indicating systems.

AVST2551 Avionics for Commercial Pilots I (NBCC) 3.0
The Student will be able to describe various avionics/electrical systems utilized on multiple types of aircraft. This course will enable the student to apply the basic theory from course AIRC 1566 to actual aircraft electrical, communication, navigation and indicating systems.

AVST3581 Avionics for Commercial Pilots II (**NBCC**) 3.0
Utilizing professionals from the Avionics field, 80 hours of the Commercial Pilot program will be dedicated to enhancing the students' knowledge of onboard electrical and electronic systems. The aim of sharing this information is to broaden the aviation scope of the graduate. This will lead to a higher degree of comfort on the flight deck as well as improved communications between the professional pilot and maintenance crews regarding operational problems.

AVST3341 Advanced Aircraft Operations 1.0
Multi-Engine Ground School is the first major component of this course. Upon completion, the student will be prepared for the Multi-Engine class rating which is added to their current pilot license. Topics are all directed toward the Multi-Engine aircraft and include: systems, handling/performance issues and limitations. With more complex aircraft Crew Resource Management or CRM becomes critical. CRM will teach the student the effective use of all resources, including the aircraft and its systems, printed materials, computer software, and people, to achieve the highest level of safety possible. Emphasis is placed on attitude, interpersonal skills, workload management, communication, and skills for dealing with emergency situations. The student's ability to make good flying decisions is a major goal. Students will have already been introduced to this area of study under their Human Factors components.

AVST3421 Instrument Procedures 1.0
Completion of this course will prepare the student for their Instrument Flight Rating on their current license. A rigorous course that takes the student from flying under visual flight rules to flying an aircraft under instrument conditions. Where precision is a must with IFR flying, significant emphasis is placed on proficiency with both instruments and procedures. Topics include: IFR charts/approach plates, pitot and gyro systems, holds and approaches, instrument navigation and operational/serviceability checks of avionics.

AVST4521 King Air 200 Ground School 1.0
All Students completing the MFC Diploma program must successfully complete the B200 ground school and Flight Training Device (simulator) sessions. The students will gain a good appreciation of CRM concepts, experience multi-crew cooperation in a Multi-Engine turboprop aircraft environment and gain valuable technical knowledge about advanced aircraft operation. Students will gain familiarity with turbo prop aircraft operations, avionics and automatic flight control systems. Significant emphasis will be placed on CRM skill development. The course is divided between 35 hours of ground school and 34 hours of simulator (FTD) time.

AVST2331 Commercial Operations 2.0
With Commercial Operations emphasis again focuses on Canadian Aviation Regulations. This subject is designed to give the student a stronger foundation to further interpret and understand Canadian Aviation Regulations. As well students will be introduced to part VII, Commercial Air Services, which will be required knowledge for the commercial level.

Meteorology continues to be a significant element. The second half of this course is designed to give the student a stronger foundation on the principles of weather. Most areas relating to weather will require a greater depth of understanding for the commercial level. Subject areas include: Meteorological Aspects of Altimetry; Stability and Instability; Air Masses; Fronts and Frontal Weather; Aircraft Icing; Meteorological Services Available to Pilots; Aviation Weather Reports, Met Charts and Pilot Reports.

AVST2411 Safety Management Systems 1.0
Introduction to Safety Management Systems. This is a Transport Canada approved course which includes a separate certificate enabling them to be an aviation safety officer under Transport Canada regulations. Complementary to this is a valid First Aid Training course designed to give

the student first aid training and skills in coping with various emergency situations particularly those involving physical injury.

Important Notes:

1. In the ongoing process to maintain high standards in content and currency with Civil Aviation Authority (Transport Canada) regulations, the Moncton Flight College reserves the right to make course changes during the school year. This includes but is not limited to course additions, schedule and content changes. MFC will endeavor to notify students of these changes as soon as possible.

6.2 Sample Course Selection/Schedule

The following is a possible schedule for four years in the program. During the first year, students study in Sackville on the Mount Allison campus. In years two to four students take courses in Sackville and at the MFC campus in Dieppe. Students **must** meet with the Mount Allison B.Sc. (Aviation) Program Coordinator **before Year 2** to plan their course selection. The example courses listed will complete the degree with a Mathematics emphasis and a Geography and Environment minor.

Year 1

Term 1: Fall

- 1 CHEM 1001
- 2 GENS 1401
- 3 MATH 1111
- 4 PHYS 1051
- 5 Arts and Humanities - 3 credits (e.g. ENGL 1111)

Term 2: Winter

- 1 COMP 1631
- 2 CHEM 1021
- 3 GENS 2421
- 4 PHYS 1551
- 5 Arts and Humanities - 3 credits (e.g. ENGL 1121)

Year 2:

Term 3: Fall

- 1 AVST(MFC) 1111 Aviation 1: Introduction to Aviation
- 2 AVST(MFC) 1121 Flight Operations I
- 3 AVST(MFC) 1131 Canadian Aviation Regulations
- 4 COMP, GENS, MATH or PHYS 2000 level - 6 credits (e.g. MATH 2211, MATH 2221)
- 5 Arts and Humanities - 3 credits (e.g. HIST 1601)
- 6 Approx 30 hours flying time plus PGI (preparatory ground instruction, required with all flying components).

Term 4 Winter

- 1 AVST(MFC) 1211 Aviation II
- 2 AVST(MFC) 1221 Flight Operations II
- 3 Minor subject - 6 credits (e.g. GENV 1201, GENS 2431)
- 4 Arts and Humanities - 3 credits (e.g. HIST 1611)
- 5 AVST(MFC) 1239 Flight I (started in Term 1): Approx 30 hours flying time, complete Phase 1-3 of the MFC flight curriculum plus Transport Canada ground exam and flight test: Private Pilot License(PPL)

At the end of Year 2 students have 48 credits offered at MTA plus 12 credits transferred from MFC and the Private Pilot License (PPL).

Year3

Term 5 Fall

- 1 AVST(MFC) 2311 Aviation III
- 2 AVST(MFC) 2321 Flight Operations III
- 3 AVST(MFC) 2331 Commercial Operations
- 4 3/4000 level COMP, GENS, MATH or PHYS - 6 credits (e.g. MATH 3011, MATH3031)
- 5 Minor subject or optional – 3 credits (e.g. GENS 2441)
- 6 Approx 40 hours flying time including Night Rating - Phase 4a of the MFC flight curriculum

Term 6 Winter

- 1 AVST(NBCC) 1561 Aircraft Maintenance Familiarization
- 2 AVST(NBCC) 1541 Electronics for Commercial Pilots
- 3 3/4000 level COMP, GENS, MATH or PHYS - 6 credits (e.g. MATH 3151, MATH3211)
- 4 Minor subject or optional – 3 credits (e.g. GENS 3401)
- 5 AVST(MFC) 2359 Flight II (started in Term 1): Approx 40 hours flying: Commercial time building: Phase 4b and Phase 5 of the MFC flight curriculum. Transport Canada ground exam and flight test for the Commercial Pilot Licence (CPL)

At the end of Year 3, students have 66 credits offered at MTA, plus 25 credits transferred from MFC, Night Rating and CPL.

Year 4

Term 7 Fall

- 1 AVST(MFC) 3341 Advanced Aircraft Operations
- 2 AVST(MFC) 2411 Safety Management Systems
- 3 AVST(MFC) 3421 Instrument Procedures (IFR ground school)
- 4 AVST(NBCC) 2551 Avionics for Commercial Pilots I
- 5 3/4000 level COMP, GENS, MATH or PHYS - 3 credits (e.g. MATH 3221)
- 6 Minor subject or optional – 6 credits (e.g. GENS 3451, GENV2201)
- 7 Approx 18 hours simulator(ATC 810) and 25 hours flying time, Multi-Engine Rating, Phase 6b and 6c of the MFC flight curriculum plus Transport Canada ground exam and flight test for the Instrument Flight Rules (IFR) Rating

Term 8 Winter

- 1 AVST(MFC) 4521 King Air 200 Ground School
- 2 AVST(NBCC) 3581 Avionics for Commercial Pilots II
- 3 3/4000 level COMP, GENS, MATH or PHYS - 3 credits (e.g. MATH3251)
- 4 Minor subject or optional – 6 credits (e.g. GENV 3211, Option – minor complete)
- 5 AVST(MFC) 3519. 35 hr King Air simulator time; up to 25 hours flying: Time building to 205 hr: Phase 7 of the MFC flight curriculum

At the end of Year 4, students have completed all BSc(Aviation) requirements: 84 credits offered at MTA, plus 36 credits transferred from MFC, Phase 1-7 of the MFC flight curriculum, CPL, Night, Multi-engine and IFR ratings (a minimum of 205 hours flown).

7 GENERAL INFORMATION

7.1 Staff Contact Numbers

ADMINISTRATIVE (MFC)			
NAME	TITLE	PHONE	EMAIL
College Main	506-857-3080 Toll Free	1-800-760-4632	lyoung@mfc.nb.ca
Mike Doiron	Principal & CEO	(506) 857-3080 x102	mdoiron@mfc.nb.ca
Bob Henderson	Dir Flight Ops (CFI)	(506) 857-3080 x217	bhenderson@mfc.nb.ca
Chris Walsh	Manager IFR Ops	(506) 857-3080 x228	cwalsh@mfc.nb.ca
Craig Prosser	Dir. Finance & Operations	(506) 857-3080 x112	cprosser@mfc.nb.ca
Francisco Andrade	Manager Can. Ops	(506) 857-3080 x123	Frank@mfc.nb.ca
Gerry Benoit	Student Services & Licensing	(506) 857-3080 x213	gbenoit@mfc.nb.ca
Graham Sheppard	Manager Standards	(506) 857-3080 x225	gsheppard@mfc.nb.ca
Kelly Melvin	Ground school Coordinator	(506) 857-3080 x211	kellym@mfc.nb.ca
Lori Young	Dir Student Recruitment	(506) 857-3080 x212	lyoung@mfc.nb.ca
Gerald Riddett	Manager European Ops	(506) 857-3080 x116	griddett@mfc.nb.ca
Nathalie Gallant	Receptionist	(506) 857-3080 x101	ngallant@mfc.nb.ca
Will Sutherland	Manager Safety	(506) 857-3080 x225	wsutherland@mfc.nb.ca
Darla Clynick	Bookkeeping	(506) 857-3080 x103	dclynick@mfc.nb.ca
Maurice LeBlanc	Building Maintenance	(506) 857-3080 x232	mleblanc@mfc.nb.ca
Ian Luff	Operational Support	(506) 857-3080 x110	iluff@mfc.nb.ca
Mel Benson	Dir Advanced Education MTA coordinator	(506) 857-3080 x107	mbenson@mfc.nb.ca
ADMINISTRATIVE (MTA)			
Bob Rosebrugh	MTA Program Advisor	(506) 364-2538	rosebrugh@mta.ca
Chris Parker	Registrar	(506) 364-2269	cparker@mta.ca

8 STUDENT COMMUNICATIONS

8.1 Communication

The Moncton Flight College encourages students to discuss any issues they may have with a staff member with that person. If a resolution is not reached, students should arrange a meeting with their program manager. If the concern, problem, or issue is not properly addressed, employees should contact the MFC Principal. Any information discussed in an Open Communication meeting is considered confidential, to the extent possible while still allowing management to respond to the problem. Retaliation against any student for appropriate usage of Open Communication channels is unacceptable.

8.2 Closing Statement

Successful study conditions and relationships depend upon successful communication. It is important that students stay aware of changes in procedures, policies, and general information. It is also important to communicate ideas, suggestions, personal goals, or problems as they affect your training at the Moncton Flight College.

Control Page

Moncton Flight College Student Handbook

Prepared By

Document Owner(s)	Project/Organization Role

B.Sc. (Aviation) Handbook Manual Version Control

Version	Date	Author	Change Description

Note: Moncton Flight College and or Mount Allison University at their option, may change, delete, suspend or discontinue parts of this handbook in its entirety, at any time. In the event of a change, students will be notified.