# SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY SAULT STE. MARIE, ONTARIO

## COURSE OUTLINE

Code No.:	AVT 270-3	_
Program:	AVIATION TECHNOLOGY (FLIGHT) PROGRAM	_
Semester:	IV	
Date:	JUNE, 1983	
Author:	B. GOVETT	_
	New Partition V	
	New: Revision: X	_
	New: Revision: X	-
APPROVED:	New: Revision: X  Chairperson Date	

AIRCRAFT SYSTEMS
Course Name

AVT 270-3 Course Number

#### PHILOSOPHY/GOALS:

Upon successful completion of this course the student will know, in general terms, the systems peculiar to multi-engined aircraft and specifically know the systems of the Twin Comanche and Twin Otter Aircraft.

METHOD OF ASSESSMENT (GRADING METHOD):

The student will be assessed by test on block subject matter with a mid-term final specifically on the Twin Comanche Aircraft and an end of semester final specifically on the Twin Otter Aircraft. Grades will be assessed as indicated with College Calendar as A, B, C, X, or R with the Grade Point Average used to indicate total points gained.

Results of AVT 270-3 are submitted to the aviation co-ordinator, totalled and averaged.

A - 90-100%

B - 80- 89%

C - 70- 79%

X - below 70% at mid-term

R - below 70% at final grading

A grade of less than 70% will be considered a failure as will incompleted assignments.

#### TEXTBOOK(S):

Twin Comanche Owners Handbook - by Piper

PA 30/39 Service Manual - by Piper

Twin Otter DHC-6 Pilot Training Manual - by DeHavilland

#### AIRCRAFT SYSTEMS

#### AVT 270-3

#### GENERAL OBJECTIVES:

The primary objective of this course is to give students a thorough knowledge of all systems in the multi-engine aircraft on which they receive their advanced training. In addition, students will be required to know systems of the Twin Comanche and Twin Otter aircraft.

### AIRCRAFT SYSTEMS

## AVT 270-3

TOPIC NO.	PERIODS	TOPIC DESCRIPTION	REFERENCE
1.	1	Introduction to the PA 30 Aircraft	Aircraft Piper Twin Comanche Manual
2.	1	Operating speeds and limitations	Piper-Twin Comanche Manual
3.	1	Emergency Procedures	
4.	1	Pre-flight examination and flying controls	Pipe Twin Comanche Manual, Piper PA 30/39 Service Manual
5.	1	Hydraulic system and Landing gear and brake system	
6.	1	Power plant and review	
7.	1	Fuel system and Instruments	
8.	1	Electrical systems, Heating Ventilating system and Accessories	&
9.	1	Automatic Pilot	
10.	1	Final PA 30 Aircraft operato Exam Mid-Semester	rs
11.	1	Introduction to the Twin Otter Aircraft & General	DHC-6 Twin Otter Pilot Training Manual
12.	1	Flight Controls Review Questions	
13.	1	Fuel System	
14.	1	Cockpit Layout Review Questions	
15.	1	Operating Speeds	
16.	1	Hydraulic System Review Questions	

## AIRCRAFT SYSTEMS

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TOPIC NO.	PERIODS	TOPIC DESCRIPTION	REFERENCE	_
17.	1	Ice & Rain Protection Lighting System Landing Gear		
18.	1	Flight Instruments Review Questions		
19.	1	Pneumatic System Review Questions		
20.	2	Power Plant Review Questions		
21.	1	Final DHC-6 Aircraft Systems Exam		