

Multi-Engine Rating Course (AMEL) Flight Training Syllabus FAR Part 61

LIST OF EFFECTIVE PAGES

SECTION:	PAGE:	TITLE:	REV #:	DATE:
Introduction	1 of 1	List of Effective Pages	Orig	9/14/2006
Introduction	1 of 5	Introduction	Orig	9/14/2006
Introduction	2 of 5	Introduction	Orig	9/14/2006
Introduction	3 of 5	Introduction	Orig	9/14/2006
Introduction	4 of 5	Introduction	Orig	9/14/2006
Introduction	5 of 5	Introduction	Orig	9/14/2006
I	1 of 12	Stage I	Orig	9/14/2006
I	2 of 12	Lesson # 601	Orig	9/14/2006
I	3 of 12	Lesson # 602	Orig	9/14/2006
I	4 of 12	Lesson # 603	Orig	9/14/2006
I	5 of 12	Lesson # 604	Orig	9/14/2006
I	6 of 12	Lesson # 605	Orig	9/14/2006
I	7 of 12	Lesson # 606	Orig	9/14/2006
I	8 of 12	Lesson # 607	Orig	9/14/2006
I	9 of 12	Lesson # 608	Orig	9/14/2006
I	10 of 12	Lesson # 609	Orig	9/14/2006
I	11 of 12	Lesson # 610	Orig	9/14/2006
I	12 of 12	Lesson # 611 Stage Check	Orig	9/14/2006
II	1 of 6	Stage II	Orig	9/14/2006
II	2 of 6	Lesson # 612	Orig	9/14/2006
II	3 of 6	Lesson # 613	Orig	9/14/2006
II	4 of 6	Lesson # 614	Orig	9/14/2006
II	5 of 6	Lesson # 615	Orig	9/14/2006
II	6 of 6	Lesson # 616 End-Of-Course	Orig	9/14/2006

MULTI-ENGINE RATING COURSE AIRPLANE MULTI-ENGINE LAND (AMEL) FLIGHT TRAINING SYLLABUS

PRINT STUDENT NAME:

LAST NAME, FIRST NAME

____/___/
DATE (mm/dd/yyyy)

This publication was compiled and edited by the Tech Aviation Flight School, Inc. Its reproduction in whole or in part is expressly prohibited without the permission of Tech Aviation Flight School, Inc.

INTRODUCTION

The Multi-Engine Rating Course (Airplane) flight-training syllabus is designed to meet or exceeds the requirements of 14 CFR 61.65.

Its design will allow an enrolled appropriately rated Private or Commercial Pilot student to acquire the proficiency and experience needed to meet the certification requirements for adding a U.S. FAA Multi-Engine Rating (Airplane) to an existing Private or Commercial Pilot Certificate (ASEL). The performance criteria specified in the syllabus is based on the current FAA Multi-Engine Pilot (AMEL) Practical Test Standards (PTS). All enrolled students of this course must meet these standards before graduating from this course.

This flight-training syllabus contains two (2) stages and includes sixteen separate lessons. Each lesson includes an objective and a completion standard. Each completion standard must be met in its entirety before that lesson may be considered complete. The individual lesson and stage times indicated are not mandatory and are included for flight instructor and student guidance only. However, before graduation from the course, a student must meet the following minimum training hours:

Dual Flight Training Multi-Engine 15.0

Additional training requirements that must also be accomplished before graduation are included, as appropriate, in the Flight Training syllabus and the Multi-Engine Rating Ground Training Syllabus.

Within each stage, lesson sequences may be adjusted as necessary to accommodate training continuity problems. This is permitted as long as training objectives are not compromised.

The flight instructor will assign a grade "S"(Satisfactory), "U"(Unsatisfactory), or "I"(Incomplete) to each element within a lesson and an "S", "U", or "I" for the overall lesson grade. Dual lessons should be preceded and followed by pre-flight (pre) and post-flight (post) briefings. Although 14 CFR Part 61 does not specify a minimum number of hours for pre and post briefings, the amount of briefing time accomplished must be sufficient to ensure that the student understands the lesson objectives and completion standards for each lesson.

Every lesson contains an outline and detailed sequence of elements that the student must successfully complete. Normally, a lesson is expected to be satisfactory completed within the recommended time. However, if a student is unable to master the lesson in that time, it will be necessary to repeat those elements graded "I" or "U" until those lesson elements meet the lesson completion standards and are graded "S".

At the end of each stage of training a stage check has been included to check the student's progress. Each stage check must be accomplished satisfactorily before the student may continue training in the next stage. The final lesson of the flight-training syllabus is the stage check/end-of-course test. This lesson is designed to ensure that the student has acquired the aeronautical knowledge and flight skills required by the current FAA Commercial Pilot (ASEL) Practical Test Standards (PTS).

TRAINING SYLLABUS

- **I.** ENROLLMENT PREREQUISITES: To enroll in the Multi-Engine Rating Course (Airplane), the applicant must hold a current private or commercial pilot certificate with a single-engine land aircraft category and class rating prior to beginning the flight portion of the course.
- **II.** <u>GROUND TRAINING REQUIREMENTS:</u> The applicant must successfully complete all required ground training lessons including the Final Stage Check.
- **III.** <u>FLIGHT TRAINING REQUIREMENTS:</u> The applicant must successfully complete all flight training lessons, stage checks, and end of course tests.
- **IV.** <u>REQUIREMENTS FOR GRADUATION:</u> To obtain a graduation certificate for the Multi-Engine Rating Course (AMEL), the applicant must:
 - **a.** Hold at least a current private pilot certificate with an airplane single-engine land category and class rating;
 - **b.** Be able to read, speak, write, and understand the English language;
 - **c.** Complete all ground training requirements;
 - d. Complete all flight training requirements; and
 - e. Hold a valid FAA medical certificate.

GRADING CRITERIA

FOR THE STUDENT AND INSTRUCTOR:

- I. The overall performance grade for each lesson completed is based on the knowledge, preparation, skill, attitude, and judgment of the student.
- II. The standards to be used in the end of course tests will be at least those listed in the appropriate FAA Private/Commercial Pilot (AMEL) Practical Test Standards.

The student should be evaluated on performance, both in academic ability as well as flying ability. A lesson is not complete until the instructor is satisfied that the student's performance meets the completion standards in all areas, and awards the student a grade of Satisfactory (S) on each element within the lesson, and a grade of 70% or higher or Satisfactory (S) on the entire lesson.

FLIGHT TRAINING WORKSHEETS

LESSON			ACT.			X-C				REC.	FLT
#	DATE	A/C	TTL	GRADE	DUAL	DUAL	IFR	FTD	GRD	TTL	STG
					М	ULTI-E	NGINE	STAG	ΕI		
601									2.0		
602									2.0		
603					1.0					1.0	
604									2.0		
605					1.5					1.5	
606									2.0		
607									1.0		
608					1.5					1.5	
609					2.0	2.0				2.0	
610					1.5					1.5	
611					1.5				1.0	1.5	
STAG	ETTOTA	L:			9.0	2.0	0.0	0.0	10.0	9.0	0.0
			=	-	M	JLTI-EI	NGINE	STAGE	II	_	-
612									2.0		
613					1.5		1.3			1.5	
614					1.5		0.5		1.0	1.5	
615					1.5		0.5		1.0	1.5	
616					1.5		0.5		1.0	1.5	
STAG	E II TOTA	۱L:			6.0	0.0	2.8	0.0	5.0	6.0	0.0
STAG	E I+II TO	ΓAL:			15.0	2.0	2.8	0.0	15.0	15.0	0.0

NOTE: All lessons indicating FTD (Flight Training Device) may also be completed in an appropriate aircraft.

[√] Stage Check

[♦] Course Completion Check

ADDITIONAL FLIGHT TRAINING WORKSHEET: INCOMPLETE, ADD-TIME, STUDENT REQUESTED, ETC...

LESSON#	DATE	AIRCRAFT #	TIME FLOWN	GROUND TIME	GRADE

STAGE I

STAGE OBJECTIVE

During this stage, the student will learn multiengine aerodynamics, operational procedures, systems, and performance considerations. The student will learn to compute weight and balance data accurately and to control the weight and balance conditions of the multiengine airplane. In addition, the student will learn to analyze multiengine performance factors and derive accurate values from multiengine charts. Also, the student will learn the principles, techniques, and procedures which apply to engine-out aerodynamics in the multiengine airplane.

STAGE COMPLETION STANDARDS

To complete this stage, the student must satisfactorily complete both a knowledge and a flight test. The knowledge test must be passed with a minimum score of 70%. The incorrect answers on the knowledge test must be reviewed in order to ensure complete understanding.

Multi-Engine Rating Course-AMEL				Flight Training Syllabus			
DATE:/_ AIRCRAFT MODEL:			TE:/	/	GRADE (0-99%	; 6, U, S, or I)	
FLIGHT TIME				GROUND I	LESSON	#601	
		X-C					
	Dual	Dual	IFR	FTD	GRD	Total	
Recommended					2.0		
This Lesson							
Previous Lesson							
New Total					0.0		
Recomm. Total					2.0		
Subject			Grade	Subject			Gra
Operation of System - Primary flight com - Flaps, leading edg - Powerplant and p - Landing gear syst - Fuel, oil, and hydr - Electrical system - Avionics system - Pitot-Static system and associated flight	trols and trimge devices a ropeller tem raulic system	nd spoilers is ressure systeints	m				
COMPLETION S At the completion of general systems of the system of the systems of the system	f this ground his multieng	lesson, the st ine airplane.				ing of the	
Student Signature			ructor Signature		// Print Na	umo.	
Student Signature		Inst	luctor Signature		Print Na	une	

Multi-Engine Rating Course-AMEL DATE:/_ AIRCRAFT MODEL:			Flight Training Syllabus				
				GRADF (0-99)	∑: %, U, S, or I)		
AIRCRAFT MO	DEL:			N			
FLIGHT TIME				GROUND L	ESSON	#602	
		X-C					
	Dual	Dual	IFR	FTD	GRD	Total	
Recommended					2.0		
This Lesson							
Previous Lesson							
New Total							
Recomm. Total					4.0		
Subject				N CONTENT Subject			Gra
Preflight Procedure - Performance and - Weight and baland - Passenger Briefin - Preflight Inspectio - Cockpit Managem - Engine Starting Taxiing - Before Takeoff Ch Discussion of Norm - Airport Operations - Takeoff, Landing a Performance Mane - Steep Turns Slow Flight and Sta Post-Flight Procedu COMPLETION S At the completion of	Limitations (Note go note that it is lesson, Note that is lesson, Note t	ds DS: the student si				ting a basic	
understanding of the REMARKS:	e operation of	f a multiengir	ne airplane	under normal c	conditions.		

Instructor Signature

Student Signature

TECH AVIATION FLIGHT SCHOOL, INC. Multi-Engine Rating Course-AMEL **Flight Training Syllabus DATE:** / / GRADE: (0-99%, U, S, or I) AIRCRAFT MODEL: _____ FLIGHT TIME FLIGHT LESSON #603 X-C Dual Dual IFR FTD GRD Total Recommended 1.0 1.0 This Lesson Previous Lesson New Total Recomm. Total 1.0 4.0 1.0 **LESSON OBJECTIVE:** During this flight lesson, the student will become acquainted with the training airplane. Additionally, the student will learn the attitudes, power settings, and configurations required for the performance of the listed maneuvers and procedures. LESSON CONTENT Subject Grade Subject Grade Preflight Discussion Review Performance and Limitations (Multiengine) Postflight Procedures Normal Procedures Post Flight Discussion Introduce Preflight Procedures - Preflight Inspection - Cockpit Management - Engine Starting - Taxiing - Before Takeoff Check Normal and Crosswind Takeoffs and Climbs Cruise Flight and Four Fundamentals Slow Flight Normal and Crosswind Approaches and Landings Traffic Patterns **COMPLETION STANDARDS:** At the completion of this lesson, the student should be able to perform the listed ground and flight operations with minimal instructor assistance. The student should also demonstrate the knowledge of attitudes, power settings, and configurations necessary to perform the listed maneuvers and procedures **REMARKS:**

Instructor Signature

Student Signature

Multi-Engine Ra	ting Course	e-AMEL		Flig	ght Training	Syllabus
		DAT	ΓE:/	_/	GRADE: (0-99%)	II C or I)
AIRCRAFT MO	DEL:			N	(0-99%)	, U, S, 0f 1)
FLIGHT TIME				GROUND	LESSON	#604
LIGITI TIME		X-C		CINCOIND	LEGOON	#004
	Dual	Dual	IFR	FTD	GRD	Total
ecommended					2.0	
nis Lesson						
evious Lesson						
ew Total						
comm. Total	1.0				6.0	1.0
peration of Airpla Invironmental sy	ne Systems					
Subject				CONTEN ubject	l	
	Introduce					
•	•					
≘nvironmentai sy Deicing and anti-i						
urbocharger	icing systems					
diboenarger Iinimum Equipm	ent List					
plane Logbooks						
h Altitude Oper						
oplemental Öxy						
Post Gr	ound Discus	sion				
MPLETION			1 111	1	1 1	, .
the completion of						
erstanding of th			litiengine sys	tems and no	ow to use mini	mum
pment lists and	i airpiane iogi	OOOKS.				
MARKS:						
					/	
lent Signature		Inst	tructor Signature		Print Nan	ne

Multi-Engine Rating Course-AMEL Flight Training Syllabus **DATE:**___/____ **GRADE:**____ (0-99%, U, S, or I) AIRCRAFT MODEL: FLIGHT TIME FLIGHT LESSON #:605 X-C Dual Dual **IFR** FTD **GRD** Total Recommended 1.5 1.5 This Lesson Previous Lesson New Total Recomm. Total 2.5 6.0 2.5 **LESSON OBJECTIVE:** During this flight lesson, the student will review normal procedures and be introduced to stalls, spin awareness and short field takeoffs and landings. **LESSON CONTENT** Subject Grade Subject Grade Preflight Discussion Introduce Review Short-field takeoff and climb Preflight Procedures Short-field approach and landing - Preflight Inspection Spin Awareness - Cockpit Management Power off Stalls - Engine Starting Power on Stalls - Taxiing **Post Flight Discussion** - Before Takeoff Check Normal and Crosswind Takeoffs and Climbs Cruise Flight and Four Fundamentals Drag Changes for Various Configurations Normal and Crosswind Approaches and Landings Traffic Patterns Postflight Procedures **COMPLETION STANDARDS:** At the completion of this lesson, the student should be able to perform all listed maneuvers and

procedures with minimal instructor assistance.

REMARKS:			
		/	
Student Signature	Instructor Signature	Print Name	

DELLABIA

Multi-Engine Rating Course-AMEL Flight Training Syllabus DATE:___/____ GRADE:_____ (0-99%, U, S, or I) AIRCRAFT MODEL: GROUND LESSON FLIGHT TIME #606 X-C IFR FTD Dual Dual GRD Total Recommended 2.0 This Lesson Previous Lesson New Total Recomm. Total 2.5 8.0 2.5 **LESSON OBJECTIVE:** During this ground lesson, the student will learn emergency operations and multiengine aerodynamics. LESSON CONTENT Subject Grade Subject Grade Introduce Emergerncy Operations - Emergency descent - Manuevering with one engine inoperative - Engine inoperative loss of directional control - Engine failure during takeoff before Vmc - Engine failure after lift-off (simulated) - Approach and landing with an inoperative engine (simulated) - Systems and equipment malfunctions Emergency equipment and survival gear Multiengine aerodynamics - Vmc - Principles of flight - engine inoperative - Critical Engine **Post Ground Discussion COMPLETION STANDARDS:** At the completion of this lesson, the student should demonstrate through oral quizzing a basic understanding of multiengine emergency operations and aerodynamics. REMARKS:

Instructor Signature

Original 3/09/2006

Student Signature

Multiengine Stage I. Page 7

TECH AVIATION FLIGHT SCHOOL, INC. Multi-Engine Rating Course-AMEL

Multi-Engine Rating Course-AMEL DATE:/_ AIRCRAFT MODEL:		Flight Training Syllabus					
		ΓΕ:/	// 	GRADE (0-99%	: %, U, S, or I)		
FLIGHT TIME				GROUND I	FSSON	#607	
I EIGITI TIIVIE		X-C		I			
	Dual	Dual	IFR	FTD	GRD	Total	
Recommended					1.0		
This Lesson							
Previous Lesson							
New Total	0.5				0.0	0.5	
Recomm. Total	2.5				9.0	2.5	
Subject	Review			I CONTENT Subject			Grade
COMPLETION S The student shall co score of 70%. The sunderstanding of all score on the knowle	STANDAR implete the Minstructor shat subject areas dge test.	DS: Iultiengine Pi	th incorrect refor this lesso	esponse to en on shall reflec	sure comple	ete	
Student Signature		 Inst	ructor Signature		/_ Print Na	ame	

Multi-Engine Rating Course-AMEL			,	Flight Training Syllabus			
DATE:			TE:/_	/	GRADE:	, U, S, or I)	
AIRCRAFT MO	DEL:			N	(0-99%)	, 0, 8, 01 1)	
FLIGHT TIME				FLIGHT LE	SSON #6	808	
	Dual	X-C Dual	IFR	FTD	GRD	Total	
Recommended This Lesson Previous Lesson	1.5					1.5	
New Total							
Recomm. Total LESSON OBJECT During this flight lead and maneuver the atthe engine inoperation.	esson, the stud arn to identify irplane with o	the inoperatione engine in	tive engine, in noperative. T	nitiate approp The student wi	riate correctiv ll also be intr	ve procedures roduced to	
maneuver.				N CONTENT		•	
Subject				Subject			Grade
	ght Discussi	on			Introduc	ce	
Multiengine Operations Performance and Limitations Operation of Systems - Manuevering with one engine inoperative (in cruise flight) - Engine inoperative-loss of directional control (below 50% Vmc) - Engine failure after lift-off (simulated above 500 feet) - Approach and landing with an inoperative engine (simulated) - Flight principles engine inoperative (in flight One engine shut down - Emergency descent Post Flight Discussion					f directional control off before Vmc (simulated above h an inoperative operative (in flight)		
COMPLETION At the completion of use the correct input knowledge of the carecognize the immit NOTE: all engine completed no low REMARKS:	of this lesson, its to maintain ause, effect, a nent loss of c e inoperativ ver than 4,0	the student so a straight flig and significar ontrol. The loss of di	ght. The stud nce of engine rectional co	ent shall have -out minimun	a complete an control spec	and accurate ed and	
Student Signature		Ins	structor Signature		Print Nan	ne	

TECH AVIATION FLIGHT SCHOOL, INC. Multi-Engine Rating Course-AMEL **Flight Training Syllabus DATE:** / / GRADE: (0-99%, U, S, or I) AIRCRAFT MODEL: _____ FLIGHT TIME FLIGHT LESSON #609 X-C Dual Dual IFR FTD GRD Total Recommended 2.0 2.0 2.0 This Lesson Previous Lesson New Total Recomm. Total 6.0 2.0 6.0 LESSON OBJECTIVE: During this day VFR dual cross-country flight lesson, the student develops cross-country proficiency and confidence in a multiengine airplane. The flight will include a landing at a point more than 100NM from the original point of departure. The student will also practice normal maneuvers. **LESSON CONTENT** Grade Subject Grade Subject Preflight Discussion Practice Use of apprpriate checklists Preflight Planning VFR cross-country, >100NM - Obtaining and assessing current weather info. Route: - Completing performance calculations - Determining route and altitude Landings at: - Filing flight plan Dead reckoning Pilotage Secondary route: Diversion Performance of groundspeed and ETA calc. Landings at: VOR and ADF navigation Completing cross-country log Short field takeoff and landing **Post Flight Discussion COMPLETION STANDARDS:** The student shall demonstrate skill in cross-country planning by selecting optimum cruising altitudes and appropriate checkpoints for a flight with a landing at a point more than 100NM from the original point of departure. Additionally, the student shall verify position, altitude, heading and arrival times at the en-route checkpoints within the parameters as specified in the current FAA Private or Commercial Pilot (AMEL) Practical Test Standards as appropriate. This lesson satisfies the requirements of 14 CFR Part 141 Appendix D (4) (b) (2) (iii).

Student Signature

REMARKS:

Instructor Signature

7.5

Multi-Engine Rating Course-AMEL

Flight Training Syllabus

9.0

7.5

		DAT	TE:/_		GRADE: (0-99%,	U, S, or I)
AIRCRAFT MO	DEL:			N		
FLIGHT TIME				FLIGHT LE	SSON #6	10
		X-C				
	Dual	Dual	IFR	NIGHT	GRD	Total
Recommended	1.5					1.5
This Lesson						
Previous Lesson						
New Total						

LESSON OBJECTIVE:

Recomm. Total

During this flight lesson, the student will review all areas of operation and procedures in preparation for the Stage one Check.

2.0

	LESSO	ON CONTENT	
Subject	Grade	Subject	Grade
Preflight Discussion (Oral)		SLOW FLIGHT AND STALLS	
PREFLIGHT PREPARATION		- Manuevering During Slow Flight	
- Certificates and Documents		- Power-On Stalls	
Performance and Limitations		- Power-Off Stalls	
- Principles of Flight - Engine Inoperative		- Spin Awareness	
- Operation of Systems		EMERGENCY OPERATIONS	
Flight Evaluation		- Emergency Descent	
PREFLIGHT PROCEDURES		- Manuevering with One Engine Inoperative	
- Preflight Inspection		- Engine Inoperative Loss of DiR. Control	
- Cockpit Management		Demonstration	
- Engine Starting		- Engine Failure on Takeoff Befroe Vmc	
- Taxiing		(Below 50% Vmc)	
- Before Takeoff Checks		- Engine Failure After Lift-Off (simulated)	
AIRPORT OPERATIONS		- Approach and Landing with an Inoperative	
- Traffic Patterns		Engine (Simulated)	
TAKEOFFS, LANDINGS AND GO-			
AROUNDS		- Systems and Equipment Malfunctions	
- Normal and Crosswind Takeoffs and			
Climb		- Emergency Equipment and Survival Gear	
- Normal and Crosswind App and Landing		MULTIENGINE OPERATIONS	
- Short-Field Takeoff and Climb		- Engine Failure During Flight	
- Short-Field Approach and Landing		POSTFLIGHT PROCEDURES	
- Go-Around		- After Landing	
PERFORMANCE MANUEVER		- Parking and Securing	
- Steep Turns			

COMPLETION STANDARDS:

At the completion of this lesson, the student should be able to perform all the listed maneuvers and procedures with minimal instructor assistance.

Multi-Engine Rating Cou	Flight Training Syllabus		
REMARKS:			
		/	
Student Signature	Instructor Signature	Print Name	

TECH AVIATION FLIGHT SCHOOL, INC. <u>Multi-Engine Rating Course-AMEL</u>

Flight Training Syllabus

AIRCRAFT MO	DEL.	DAT	TE:/	_/	GRADE: (0-99%,	U, S, or I)
	DEL:					
FLIGHT TIME		STAGE 1 CHECK		FLIGHT LESSON #611		
	Dual	X-C Dual	IFR	NIGHT	GRD	Total
Recommended	1.5				1.0	1.5

	Dual	Dual	IFR	NIGHT	GRD	Total
Recommended	1.5				1.0	1.5
This Lesson						
Previous Lesson						
New Total						
Recomm. Total	9.0	2.0			10.0	9.0

LESSON OBJECTIVE:

This stage check conducted by the chief or assistant chief flight instructor, will determine that the student meets the proficiency requirements for a multiengine land class rating limited to VFR only.

LESSON CONTENT					
Subject	Grade	Subject	Grade		
Preflight Discussion (Oral)		SLOW FLIGHT AND STALLS			
PREFLIGHT PREPARATION		- Manuevering During Slow Flight			
 Certificates and Documents 		- Power-On Stalls			
Performance and Limitations		- Power-Off Stalls			
- Principles of Flight - Engine Inoperative		- Spin Awareness			
- Operation of Systems		EMERGENCY OPERATIONS			
Flight Evaluation		- Emergency Descent			
PREFLIGHT PROCEDURES		- Manuevering with One Engine Inoperative			
- Preflight Inspection		- Engine Inoperative Loss of DiR. Control			
- Cockpit Management		Demonstration			
- Engine Starting		- Engine Failure on Takeoff Befroe Vmc			
- Taxiing		(Below 50% Vmc)			
- Before Takeoff Checks		- Engine Failure After Lift-Off (simulated)			
AIRPORT OPERATIONS		- Approach and Landing with an Inoperative			
- Traffic Patterns		Engine (Simulated)			
TAKEOFFS, LANDINGS AND GO-AROUNDS		- Systems and Equipment Malfunctions			
 Normal and Crosswind Takeoffs and Climb 		- Emergency Equipment and Survival Gear			
- Normal and Crosswind App and Landing		MULTIENGINE OPERATIONS			
- Short-Field Takeoff and Climb		- Engine Failure During Flight			
- Short-Field Approach and Landing		POSTFLIGHT PROCEDURES			
- Go-Around		- After Landing			
PERFORMANCE MANUEVER		- Parking and Securing			
- Steep Turns		7			

Continued on next page

Multi-Engine Rating Course-AMEL

Flight Training Syllabus

COMPLETION STANDARDS:

At the completion of this lesson, the student shall perform each of the listed areas of operation and tasks at a proficiency level that meets or exceeds those criteria outlined in the current FAA Private or Commercial Pilot (AMEL) Practical Test Standards.

NOTE: These requirements complete the course (except for the final course completion check) for a student that does not hold an instrument rating (airplane), or holds an instrument rating (airplane) but elects to be limited to VFR only in the multiengine airplane.

The student who is instrument rated and elects to have instrument privileges in the multiengine airplane will proceed to Stage II upon completion of this stage check.

REMARKS:		
		/
Student Signature	Instructor Signature	Print Name

Multi-Engine Rating Course-AMEL

Flight Training Syllabus

STAGE II

Stage Objective

During this stage, the student will review IFR procedures and will be introduced to multiengine instrument procedures. The student will also learn how to handle engine-out emergencies while only using reference to instruments.

Stage Completion Standards

At the completion of this stage, the student shall perform each of the listed areas of operation and tasks at a proficiency level that meets or exceeds those criteria outlined in the current FAA Private or Commercial Pilot (AMEL) Practical Test Standards, as applicable.

TECH AVIATION FLIGHT SCHOOL, INC. Multi-Engine Rating Course-AMEL

<u> Multi-Engine Ra</u>	E-AVIEL	ANIEL FIIG			Syllabus	
AIRCRAFT MO	DEL:			/	GRADE: (0-99%,	
FLIGHT TIME				FLIGHT LE		
TEIGHT HIVE		X-C		T EIGITI EE	30011 110	12
	Dual	Dual	IFR	NIGHT	GRD	Total
Recommended					2.0	
This Lesson						
Previous Lesson						
New Total						
Recomm. Total	9.0	2.0			12.0	9.0
	0.0		l			0.0
Subject	Review			ON CONTENT Subject		
Instrument Approac		c		+		
Instrument Navigat		3		†		
IFR Communication				7		
Use of Checklists]		
	ce/Oral Brie]		
Multiengine Operat			_	4		
 Instrument Approx Engine Failure Du 		nes Operatin	9	┪		
- Instrument Approx		aine inop		†		
	_			<u> </u>		
Post Gro	ound Discus	sion				
COMPLETION				.1.4.1	l - 4 - 1 4	. 4: CIED
At the completion o procedures for the n			uaent snou	nave a comp	iete understai	naing of IFK
procedures for the h	namengine a	n prane.				
REMARKS:						
					1	
Student Signature		Inst	tructor Signatu	re	/ Print Nan	<u> </u>
~ ~		11130	Digitata			

			1 1191	<u>it Training</u>	Syllabus	
L:	DATE		/ N	GRADE: (0-99%,		
			FLIGHT LES	SSON #6	13	
	X-C			30011 #0		
Dual	Dual	IFR	NIGHT	GRD	Total	
1.5		1.3			1.5	
10.5	2.0	1.3		12.0	10.5	
Procedur	95					Grad
Procedur	es	Grade	oubject			Orac
view			Pos	st Flight Dis	cussion	
ent Flight						
ovol						
evei						
All Engine	es Operating					
One Engi	ine Inoperative					
	10.5 VE: n, the studies al condition Procedur view ent Flight evel d Featheri All Engine	Dual 1.5 10.5 2.0 VE: n, the student will practice all conditions and during Procedures view ent Flight evel d Feathering All Engines Operating	Dual Dual IFR 1.5 1.3 10.5 2.0 1.3 VE: In, the student will practice basic attent all conditions and during single engine of the student will practice basic attent all conditions and during single engine of the student will practice basic attent all conditions and during single engine of the student will practice basic attent all conditions and during single engine of the student will practice basic attent all conditions and during single engine of the student will practice basic attent all conditions and during single engine of the student will practice basic attent all conditions and during single engine of the student will practice basic attent all conditions and during single engine of the student will practice basic attent all conditions and during single engine of the student will practice basic attent all conditions and during single engine of the student will practice basic attent all conditions and during single engine of the student will practice basic attent all conditions and during single engine of the student will practice basic attent all conditions and during single engine of the student will practice basic attent all conditions and during single engine of the student will practice basic attent all conditions and during single engine of the student will practice basic attent all conditions and during single engine of the student will practice basic attent all conditions are student will be student wil	Dual Dual IFR NIGHT 1.5 1.3 10.5 2.0 1.3 VE: In, the student will practice basic attitude instrume all conditions and during single engine operations LESSON CONTENT Grade Subject	Dual Dual IFR NIGHT GRD 1.5 1.3 12.0 VE: n, the student will practice basic attitude instrument flight and hal conditions and during single engine operations. LESSON CONTENT Grade Subject Procedures view Post Flight Disters evel	NE: n, the student will practice basic attitude instrument flight and instrument all conditions and during single engine operations. LESSON CONTENT Grade Subject Procedures view Post Flight Discussion ent Flight evel d Feathering All Engines Operating All Engines Operating

Instructor Signature

Student Signature

TECH AVIATION FLIGHT SCHOOL, INC. <u>Multi-Engine Rating Course-AMEL</u>

Flight Training Syllabus

AIRCRAFT MO	DEI .	DAT	TE:/	_/ N	(0-99%,	U, S, or I)
AIRCRAFT WIO	DEL.			11		
FLIGHT TIME		FLIGHT LE	SSON #61	14		
		X-C	IED	NIOLIT	0.00	T ()

FLIGHT TIME		FLIGHT LESSON #614				
	Dual	X-C Dual	IFR	NIGHT	GRD	Total
Recommended	1.5		0.5		1.0	1.5
This Lesson						
Previous Lesson						
New Total						
Recomm. Total	12.0	2.0	1.8		13.0	12.0

LESSON OBJECTIVE:

During this lesson, the student will review all maneuvers for the final stage check.

LESSON CONTENT						
Subject	Grade	Subject	Grade			
Oral		EMERGENCY OPERATIONS				
PREFLIGHT PREPARATION		- Emergency Descent				
- Performance And Limitations		- Manuevering with One Engine Inoperatie				
- Principles of Flight - Engine Inoperative		- Engine Inoperative - Loss of Directional				
- Operation Of Systems		Control Demonstration				
Flight Evaluation		- Engine Failure on Takeoff Before Vmc				
PREFLIGHT PROCEDURES		(below 50% Vmc)				
- Preflight Inspection		- Engine Failure After Lift-Off (Simulated)				
- Cockpit Management		- Approach and Landing with an Inoperative				
- Engine Starting		Engine (Simulated)				
- Taxiing		- Systems and Equipment Malfunctions				
- Before Takeoff Check		- Emergency Equipment and Survival Gear				
AIRPORT OPERATIONS		MULTIENGINE OPERATIONS				
- Traffic Patterns		- Engine Failure During Flight				
TAKEOFFS, LANDINGS, AND GO-AROUNDS		(By Reference to Instruments)				
- Normal and Crosswind Takeoffs and Climb		- Instrument Approach - All Engines Operating				
- Normal and Crosswind Approach and Landing		- Instrument Approach - One Engine Inoperative				
- Short-Field Takeoff and Climb		POSTFLIGHT PROCEDURES				
- Short-Field Approach and Landing		- After Landing				
-Go-Around		- Parking and Securing				
PERFORMANCE MANUEVER						
- Steep Turns						
SLOW FLIGHT AND STALLS						
- Manuevering During Slow Flight						
- Power-On Stalls		1				
- Power-Off Stalls						
- Spin Awareness						

Continued on next page

TECH AVIATION FLIGHT SCHOOL, INC. Multi-Engine Rating Course-AMEL

Flight Training Syllabus

COMPLETION STANDARDS:

At the completion of this lesson, the student shall be able to perform all listed maneuvers and
procedures without instructor assistance. The student shall also meet or exceed the current FAA
Private or Commercial Pilot (AMEL) Practical Test Standards, as applicable.

REMARKS:		
		1
Student Signature	Instructor Signature	Print Name

TECH AVIATION FLIGHT SCHOOL, INC. Multi-Engine Rating Course-AMEL

Flight Training Syllabus

		DAT	E:/	_/	GRADE: (0-99%	U, S, or I)
AIRCRAFT MO	DEL:			N	(0))/0,	
FLIGHT TIME				FLIGHT LE	SSON #6	15
	Dual	X-C Dual	IFR	NIGHT	GRD	Total
Recommended	1.5		0.5		1.0	1.5
This Lesson						
Previous Lesson						
New Total						
Recomm. Total	13.5	2.0	2.3		14.0	13.5

LESSON OBJECTIVE:

During this lesson, the flight instructor will determine that the student meets the proficiency requirements for a private or commercial multiengine land class rating for VFR and IFR.

LESSON CONTENT				
Subject	Grade	Subject	Grade	
Oral		EMERGENCY OPERATIONS		
PREFLIGHT PREPARATION		- Emergency Descent		
 Performance And Limitations 		- Manuevering with One Engine Inoperatie		
- Principles of Flight - Engine Inoperative		- Engine Inoperative - Loss of Directional		
- Operation Of Systems		Control Demonstration		
Flight Evaluation		- Engine Failure on Takeoff Before Vmc		
PREFLIGHT PROCEDURES		(below 50% Vmc)		
- Preflight Inspection		- Engine Failure After Lift-Off (Simulated)		
- Cockpit Management		- Approach and Landing with an Inoperative		
- Engine Starting		Engine (Simulated)		
- Taxiing		- Systems and Equipment Malfunctions		
- Before Takeoff Check		- Emergency Equipment and Survival Gear		
AIRPORT OPERATIONS		MULTIENGINE OPERATIONS		
- Traffic Patterns		- Engine Failure During Flight		
T/O'S, LANDINGS, AND GO-AROUNDS		(By Reference to Instruments)		
 Normal and Crosswind Takeoffs and Climb 		- Inst Approach - All Engines Operating		
 Normal and Crosswind App and Landing 		- Inst Approach - One Engine Inoperative		
- Short-Field Takeoff and Climb		POSTFLIGHT PROCEDURES		
- Short-Field Approach and Landing		After Landing		
-Go-Around		- Parking and Securing		
PERFORMANCE MANUEVER				
- Steep Turns				
SLOW FLIGHT AND STALLS				
- Manuevering During Slow Flight				
- Power-On Stalls				
- Power-Off Stalls				
- Spin Awareness				

Multi-Engine Rating Course-AMEL

Flight Training Syllabus

COMPLETION STANDARDS:

The student shall perform each of the listed areas of operation and tasks at a proficiency level that meets or exceeds those criteria outlines in the current FAA Private or Commercial Pilot (AMEL) Practical Test Standards, as applicable.

REMARKS:		
		/
Student Signature	Instructor Signature	Print Name

TECH AVIATION FLIGHT SCHOOL, INC. Multi-Engine Rating Course-AMEL

Flight Training Syllabus

	DATE:_	/	/	GRADE:
				(0-99%, U, S, or I)
AIRCRAFT MODEL:			N	

	End-Of-Course-Check			FLIGHT LESSON #616		
	Dual	X-C Dual	IFR	NIGHT	GRD	Total
Recommended	1.5		0.5		1.0	1.5
This Lesson						
Previous Lesson						
New Total						
Recomm. Total	15.0	2.0	2.8		15.0	15.0

LESSON OBJECTIVE:

During this End-of-Course Check, the chief or assistant chief flight instructor wil determine that the student meets the requirements of the current FAA Private or Commercial Pilot (AMEL) Practical Test Standards (PTS), as applicable.

	LESS	ON CONTENT	
Subject	Grade	Subject	Grade
Oral		EMERGENCY OPERATIONS	
PREFLIGHT PREPARATION		- Emergency Descent	
- Performance And Limitations		- Manuevering with One Engine Inoperatie	
- Principles of Flight - Engine Inoperative		- Engine Inoperative - Loss of Directional	
- Operation Of Systems		Control Demonstration	
Flight Evaluation		- Engine Failure on Takeoff Before Vmc	
PREFLIGHT PROCEDURES		(below 50% Vmc)	
- Preflight Inspection		- Engine Failure After Lift-Off (Simulated)	
- Cockpit Management		- Approach and Landing with an Inoperative	
- Engine Starting		Engine (Simulated)	
- Taxiing		- Systems and Equipment Malfunctions	
- Before Takeoff Check		- Emergency Equipment and Survival Gear	
AIRPORT OPERATIONS		MULTIENGINE OPERATIONS	
- Traffic Patterns		Engine Failure During Flight	
T/O'S, LANDINGS, AND GO-AROUNDS		(By Reference to Instruments)	
- Normal and Crosswind Takeoffs and Climb		- Inst Approach - All Engines Operating	
 Normal and Crosswind App and Landing 		Inst Approach - One Engine Inoperative	
- Short-Field Takeoff and Climb		POSTFLIGHT PROCEDURES	
- Short-Field Approach and Landing		- After Landing	
-Go-Around		Parking and Securing	
PERFORMANCE MANUEVER			
- Steep Turns			
SLOW FLIGHT AND STALLS			
 Manuevering During Slow Flight 			
- Power-On Stalls			
- Power-Off Stalls			
- Spin Awareness			

Multi-Engine Rating Course-AMEL

Flight Training Syllabus

COMPLETION STANDARDS:

The student shall perform each of the listed areas of operation and tasks at a proficiency level that meets or exceeds those criteria outlined in the current FAA Private or Commercial Pilot (AMEL) Practical Test Standards, as applicable.

NOTE: Those applicants not requesting instrument privileges in the multiengine airplane need not complete the instrument maneuvers.

REMARKS:		
-		
		/
Student Signature	Instructor Signature	Print Name