DEPARTMENT OF TECHNOLOGY
AVIATION PROGRAM
AVIA 335 & 336 – COMMERCIAL PILOT FLIGHT TRAINING
COMMERCIAL PILOT FLIGHT TRAINING COURSE OUTLINE

Instructor Qualifications:
Certified Flight Instructor (CFI)

Student Name:

_____

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Revision: I	Date: 09/01/2017	LOG OF REVISIONS

The Walla Walla University Aviation Faculty have prepared the following revisions. Each revision has a revision number and date.

LOG OF REVISIONS		
Revision #	**Date**	**Initials**
Original	09/01/2016	MG/MT
I	09/01/2017	PG/MT

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INTRODUCTION

This course fulfills the requirements of 14 CFR, Section 61, Subpart F for obtaining a Commercial pilot certificate with airplane category, single engine land class rating.

COURSE OBJECTIVE:

The student will obtain the knowledge, skill, and aeronautical experience necessary to meet the requirements for a Commercial pilot certificate with an airplane category rating and single-engine land class rating.

COURSE COMPLETION STANDARD:

The student will demonstrate/show through written exams, oral tests, flight tests, and appropriate records that they possess the knowledge, skill, and experience requirements necessary to obtain a Commercial pilot certificate. The specific requirements for each test and stage check are described in the appropriate syllabus lesson. At the completion of flight training the student will pass the Commercial Pilot practical test, based on the current Commercial Pilot Airman Certification Standards (ACS).

STAGE EXAMS/CHECKS/END-OF-COURSE CHECK

The syllabus incorporates stage exams, checks and an end-of-course check.

The student will complete stage exams as listed in this training course outline. The student will complete the stage exam with a grade of 70% or better. All subject areas shown to be deficient by the stage exams will be reviewed with an authorized instructor.

The student will complete stage checks as listed in this training course outline. The student will complete the stage check to the required completion standards in the flight lesson. Students unable to meet the completion standards will require additional instruction before re-qualifying to take the stage check.

The student will complete the end-of-course check as listed in this training course outline. The student will complete the end-of-course check with a director. It will be conducted in accordance with the current Commercial Pilot Airman Certification Standards and will be at least

equal in scope, depth, and difficulty to that practical test. Students unable to meet these standards will require additional instruction before re-qualifying to take the end of course check.

Training records will be updated to reflect all stage exams/checks and the end of course check.

STUDENT INFORMATION

REQUIREMENTS FOR SOLO FLIGHT:

Before you can fly solo you must meet the requirements as outlined in 14 CFR FAR 61.31(e) as well as WWU SOP 10.13.

REQUIREMENTS FOR COMPLETION:

To obtain a Commercial pilot certificate, you must be able to read, write, speak, and understand the English language and have, at the least, a valid FAA third-class medical certificate and be at least 17 years of age at the completion of the course. You must complete the lessons in the syllabus and satisfy the requirements described in the Course Completion Standard on the first page.

LESSON DESCRIPTION AND STAGES OF TRAINING:

Each lesson is fully described within the syllabus, including the objectives, standards, and measurable units of accomplishment and learning for each lesson.

VFR WEATHER MINIMUMS FOR STUDENT PILOTS

Due to the dynamic nature of weather, it is imperative that you obtain an adequate weather briefing and exercise conservative judgment by staying on the ground or landing as soon as practical whenever you encounter questionable or deteriorating weather conditions.

Wind Limitations:

Approval by a director is required to fly in any winds that exceed:

Pilot	KALW Winds	Other Airport Winds
Commercial Pilots	30 knots total	25 knots total
Dual Flights	At instructor's discretion	At instructor's discretion

VFR Flight Limitations:

Approval by an aviation program director is required to fly when the ceiling and/or the visibility are below those shown below. The ceiling and visibility must be able to be maintained throughout the entire flight. Conditions required for cross-country flight must be forecast to exist one hour before the departure time to one hour after the expected time of arrival.

Pilot	Local		Cross-Country	
	Ceiling	Visibility	Ceiling	Visibility
Commercial Pilots	1500’ AGL	3 SM	2000’ AGL	5 SM
Dual Flights	At instructor’s discretion		At instructor’s discretion	

SCHEDULE

AVIA 335										
STAGE	LESSON	DUAL GROUND	DUAL	SOLO	NGT	NGT LNDG	XC	SOLO XC	COMPLEX	EXAM
	Lesson Times are Shown in Hours									
I	1	2	1						1	
	2	1	1						1	
	3	0.5	1						1	
	4	0.5	2						2	
	5	0.5	2						2	
	6	1	2.5				2.5		2.5	
	7	1	2.5				2.5		2.5	
	8	1	2						2	
II	9	0.5	2				2		2	
	10	1	2		2		2		2	
	11	1	2						2	
	12			2.5	2.5	5	2.5		2.5	
	13			5			5	5	5	
	14	1	2				2		2	
	15			2.5	2.5	5	2.5		2.5	
	16									1
Class Totals:		**11**	**22**	**10**	**7**	**10**	**21**	**5**	**32**	**1**

AVIA 336										
STAGE	LESSON	DUAL GROUND	DUAL	SOLO	NGT	NGT LNDG	XC	SOLO XC	COMPLEX	EXAM
Lesson Times are Shown in Hours										
III	17	0.5	2						2	
	18	0.5	1						1	
	19	0.5	2						2	
	20	1	2						2	
	21			1					1	
	22			1					1	
	23			2					2	
	24	0.5	2						2	
	25	0.5	2						2	
	26			2					2	
	27			2					2	
	28			1					1	
	29	0.5	1						1	
	30	0.5	1						1	
	31	0.5	2						2	
	32	1	2						2	
	33									1
	34	1	2						2	
Class Totals:		**7**	**19**	**9**	**0**	**0**	**0**	**0**	**28**	**1**

Totals:	**18**	**41**	**19**	**7**	**10**	**21**	**5**	**60**	**2**

AVIA 265							
STAGE	LESSON	SOLO	DUAL	XC	INST DUAL	COMPLEX	EXAM
IV	Lesson Times are Shown in Hours						
	26	40		40		40	
Class Totals:		**40**	**0**	**40**	**0**	**0**	**0**

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STAGE I

STAGE OBJECTIVE

During this stage, the student obtains the foundation for all future aviation training. The student becomes familiar with the training airplane and learns how the airplane controls are used to establish and maintain specific flight attitudes. Through review and the introduction of new maneuvers, the student will gain the proficiency to solo the training airplane in the traffic pattern.

STAGE COMPLETION STANDARD

At the completion of this stage, the student will demonstrate an understanding of the basic flight maneuvers introduced in this stage. Additionally, the student will understand how to maintain specific flight attitudes and ground tracks. The student will have successfully soloed in the local area. In addition, the student will have the proficiency required for introduction of maximum performance takeoff and landing procedures in the following stage.

FLIGHT LESSON 1 – DUAL

LESSON OBJECTIVE:

The purpose of this ground lesson is to provide the student with the ground knowledge required to transition to a complex aircraft. Review basic flight procedures. Introduce and practice takeoffs, landings, and emergency procedures in the complex aircraft. Develop the necessary proficiency to safely act as pilot in command in the aircraft.

CONTENT:

Section A- Lesson Introduction

Controls

- ❑ Description and Limitations (1)
- ❑ Flaps (2)
- ❑ Trim Controls (2)
- ❑ Flight Controls (2)

Flight Instruments

- ❑ G500 System and Operations (3)
- ❑ Instrument Power Systems (4)
- ❑ Backup Instruments (4)
- ❑ MVP 50 System and Operations (5)
- ❑ Abnormal/Emergency Procedures (3)

Performance

- ❑ Description and Limitations (6)
- ❑ Take-Off and Landing Performance (7)
- ❑ Cruise Performance and Mixture Leaning Procedures (8)
- ❑ Abnormal/Emergency Procedures (9)

Powerplant/Propellers

- ❑ Description and Limitations (10)
- ❑ Constant Speed Propellers (10)
  - System Operations
  - Governor Operations
- ❑ Engine Fuel Control (10)
- ❑ Induction System (10)
- ❑ Engine Ignition System (10)
- ❑ Abnormal/Emergency Procedures (9)

Electrical

- ❑ Description and Limitations (11)
- ❑ Source of Electrical Power (11)
- ❑ Normal Engine Starts (12)
- ❑ Hot Engine Starts (12)
- ❑ Flooded Engine Starts (13)
- ❑ External Power Starts (13)
- ❑ Electrical Indicators (11)
    - Voltmeter
    - Ammeter
    - Loadmeter
- ❑ Over voltage v. Under voltage (11)
- ❑ Lighting Systems (11)
- ❑ Abnormal/Emergency Procedures (9)

Fuel System

- ❑ Description and Limitations (14)
- ❑ Fuel Injection System and Control System (14)
- ❑ Fuel Grades (16)
- ❑ Inflight Fuel Operations (15)
- ❑ MVP 50 Fuel Input Operation (5)
- ❑ Abnormal/Emergency Procedures (9)

Landing Gear

- ❑ Description and Limitations (17)
- ❑ Land Gear System (18)
- ❑ Normal Operation (15)
- ❑ Abnormal/Emergency Procedures (9)

Environmental

- ❑ Description and Limitations (19)
- ❑ Normal Operation of Heating, Ventilation, and Cooing (19)
- ❑ Abnormal/Emergency Procedures (9)

Oxygen

- ❑ Description and Limitations (20)
- ❑ Oxygen Requirements (21)
- ❑ Oxygen Mask v. Cannula (20)
- ❑ Normal Operation (20)
- ❑ High Altitude Physiology (20)

- ❑ Abnormal/Emergency Procedures (9)

Weight and Balance

- ❑ Description and Limitations (22)
- ❑ PA-28R Handling Characteristics (22)
- ❑ Center of Gravity and Stall Speed (22) (23)
- ❑ Forward v. Aft CG Flight Characteristics (22) (23)
- ❑ W&B Terms (22) (23)
- ❑ Abnormal/Emergency Procedures (9)

Section B- Flight Maneuvers

- ❑ Normal and Crosswind Takeoffs and Climbs (24)
- ❑ Normal and Crosswind Approaches and Landings (25)
- ❑ Go-Around/Rejected Landing (26)
- ❑ Steep Turns (27)
- ❑ Unusual Attitude Recovery (28)
- ❑ Maneuvering During Slow Flight (29)
- ❑ Power-On Stalls (30)
- ❑ Power-Off Stalls (31)
- ❑ Simulated Emergency Procedures (9)
- ❑ Power Settings and Mixture Leaning (32)
- ❑ Use of Constant-Speed Propeller (32)
- ❑ Use of Retractable Landing Gear and Flaps (32)
- ❑ Use of Checklists (33)

COMPLETION STANDARDS:

At the completion of the flight lesson the student should be thoroughly familiar with the flight characteristics, systems, and emergency procedures associated with the complex airplane. This lesson is complete when the instructor has covered the content knowledge required to transition to a complex aircraft.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 1 **LESSON# 1**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**	2	1					1	
Totals								

References:

(1) PA-28R-200 POH Page 1-1 to 1-4
(2) PA-28R-200 POH Page 2-1 & 2-8
(3) G500 Operators Manual
(4) PA-28R-200 POH Page 2-14 to 2-17
(5) MVP 50 Operators Manual
(6) PA-28R-200 POH Page 3-1 to 3-7
(7) PA-28R-200 POH Page 9-2 & 9-9
(8) PA-28R-200 POH Page 9-4 & 9-5
(9) PA-28R-200 POH Page 4-1 to 4-8
(10) PA-28R-200 POH Page 2-2
(11) PA-28R-200 POH Page 2-11 & 2-12
(12) PA-28R-200 POH Page 7-2
(13) PA-28R-200 POH Page 7-3
(14) PA-28R-200 POH Page 2-9 & 2-10
(15) PA-28R-200 POH Page 7-5 to 7-7
(16) PA-28R-200 POH Page 3-1
(17) PA-28R-200 POH Page 3-2
(18) PA-28R-200 POH Page 2-3 to 2-7
(19) PA-28R-200 POH Page 2-18 & 3-20
(20) FAA-H-8083-25B Page 7-37 to 7-40
(21) FAR 2017 §91.211
(22) PA-28R-200 POH Chapter 5
(23) FAA-H-8083-25B Page 5-40 to 5-51
(24) FAA-H-8083-3B Page 5-3 to 5-10
(25) FAA-H-8083-3B Page 8-14 to 8-17
(26) FAA-H-8083-3B Page 8-12 to 8-14
(27) FAA-H-8083-3B Page 9-2 to 9-4
(28) FAA-H-8083-3B Page 4-17 to 4-24
(29) FAA-H-8083-3B Page 4-3 to 4-5
(30) FAA-H-8083-3B Page 4-9 to 4-10
(31) FAA-H-8083-3B Page 4-8 to 4-9
(32) PA-28R-200 POH Page 7-1 to 7-11
(33) PA-28R-200 Current Checklist

FLIGHT LESSON 2 – DUAL

LESSON OBJECTIVE:

The student will perform the pilot-in-command responsibilities to increase familiarity with the complex airplane.

CONTENT:

Section A- Lesson Review

- ❑ Normal Takeoffs and Climbs
- ❑ Normal Approaches and Landings
- ❑ Go-Around/Rejected Landing
- ❑ Steep Turns
- ❑ Unusual Attitudes
- ❑ Maneuvering During Slow Flight
- ❑ Power-On Stalls
- ❑ Power-Off Stalls
- ❑ Simulated Emergency Procedures
- ❑ Power Settings and Mixture Leaning
- ❑ Use of Constant-Speed Propeller
- ❑ Use of Retractable Landing Gear and Flaps
- ❑ Use of Checklists

Section B- Lesson Introduction

- ❑ Short Take-off and Landing (1)
- ❑ Soft Take-off and Landing (2)
- ❑ Landing Gear Malfunction (3)

COMPLETION STANDARDS:

During each flight, the student should attempt to increase proficiency in the smooth and accurate performance of the listed flight maneuvers in the complex airplane.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 1 **LESSON# 2**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**	1	1					1	
Totals								

References:

(1) FAA-H-8083-3B Page 5-10 & 5-11
FAA-H-8083-3B Page 8-18 to 8-21

(2) FAA-H-8083-3B Page 5-11 & 5-12
FAA-H-8083-3B Page 8-21 & 8-22

(3) PA-28R-200 POH Page 4-5

FLIGHT LESSON 3 – DUAL

LESSON OBJECTIVE:

The student will perform the pilot-in-command responsibilities to increase familiarity with the complex airplane.

CONTENT:

Section A- Lesson Review

- ❑ Normal and Crosswind Takeoffs and Landings
- ❑ Use of Retractable Landing Gear and Flaps
- ❑ Climbs and descents
- ❑ Go-Around/Rejected Landing
- ❑ Power Settings and Mixture Leaning
- ❑ Use of Constant-Speed Propeller
- ❑ Slow Flight
- ❑ Power-Off Stalls
- ❑ Power-On Stalls
- ❑ Spin Awareness
- ❑ Short-Field Takeoff and Landing
- ❑ Soft-Field Takeoff and Landing
- ❑ Landing Gear Malfunction
- ❑ Systems and Equipment malfunction
- ❑ Emergency Approach and Landing
- ❑ Inflight Fire

COMPLETION STANDARDS:

During each flight, the student should attempt to increase proficiency in the smooth and accurate performance of the listed flight maneuvers in the complex airplane.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 1 **LESSON# 3**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**	0.5	1					1	
Totals								

FLIGHT LESSON 4 – DUAL

INSTRUMENT CHECKOUT

LESSON OBJECTIVE:

The student will perform the various instrument maneuvers, approaches, and missed approach procedures to safely fly in instrument conditions.

CONTENT:

Section A- Lesson Introduction

- ❑ Straight-and-Level Flight (1)
- ❑ Constant Airspeed Climbs (1)
- ❑ Constant Airspeed Descents (1)
- ❑ Constant Rate Climbs (1)
- ❑ Constant Rate Descents (1)
- ❑ Standard-Rate Turns (1)
- ❑ VOR Navigation (2)
- ❑ GPS Navigation (3)
- ❑ VOR Approach (4)
- ❑ GPS Approach (5)
- ❑ Localizer Approach (6)
- ❑ ILS Approach (6)
- ❑ Missed Approach Procedures (7)
- ❑ Glass Panel Emergencies (8)
- ❑ Use of Checklists (9)

COMPLETION STANDARDS:

At the completion of the flight lesson the student should be able to better control a complex airplane in instrument conditions as well as perform various instrument approach and missed approach procedures.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 1 **LESSON# 4**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**	0.5	2					2	
Totals								

References:

(1) FAA-H-8083-15B Chapter 7, Section I
(2) FAA-H-8083-15B Page 9-8 to 9-24
(3) FAA-H-8083-15B Page 9-24 to 9-34
(4) FAA-H-8083-16A Page 4-69
FAA-H-8083-16A Page 4-39
FAA-H-8083-16A Chapter 4
Refer to VOR navigation reference
(5) FAA-H-8083-16A Page 4-58
FAA-H-8083-16A Chapter 4
(6) FAA-H-8083-16A Page 4-64
FAA-H-8083-16A Chapter 4
(7) FAA-H-8083-16A Page 4-39
(8) G500 Operators Manual
(9) PA-28R-200 Current Checklist

FLIGHT LESSON 5 – DUAL

INSTRUMENT CHECKOUT

LESSON OBJECTIVE:

The student will perform the various instrument maneuvers, approaches, and missed approach procedures to safely fly in instrument conditions.

CONTENT:

Section A- Lesson Review

- ❑ Straight-and-Level Flight
- ❑ Constant Airspeed Climbs
- ❑ Constant Airspeed Descents
- ❑ Constant Rate Climbs
- ❑ Constant Rate Descents
- ❑ Standard-Rate Turns
- ❑ VOR Navigation
- ❑ GPS Navigation
- ❑ VOR Approach
- ❑ GPS Approach
- ❑ Localizer Approach
- ❑ ILS Approach
- ❑ Missed Approach Procedures
- ❑ Glass Panel Emergencies
- ❑ Use of Checklists

COMPLETION STANDARDS:

At the completion of the flight lesson the student should be able to better control a complex airplane in instrument conditions as well as perform various instrument approach and missed approach procedures.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 1 **LESSON# 5**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**	0.5	2					2	
Totals								

FLIGHT LESSON 6 – DUAL XC

LESSON OBJECTIVE:

During this lesson, the student will continue to practice cross-country planning, pilotage and dead reckoning, and VOR/GPS navigation. The flight will give the student experience with flying cross-country in a complex airplane. The flight will include a landing at a point more than 50 nautical miles from the original departure point.

CONTENT:

Section A- Lesson Review

Preflight Preparation

- ❑ Cross-Country Flight Planning
- ❑ Airworthiness Requirements
- ❑ Certificates and Documents
- ❑ Performance and Limitations
- ❑ Weather Information
- ❑ Density Altitude Considerations

Inflight Operations

- ❑ Radio Communications
- ❑ Navigation Systems
- ❑ Pilotage and Dead Reckoning
- ❑ VOR and GPS Navigation
- ❑ Diversion and Lost Procedures
- ❑ Power Settings and Mixture Leaning
- ❑ Cockpit Management
- ❑ Crew Resource Management
- ❑ Wake Turbulence Avoidance
- ❑ Runway Incursion Avoidance
- ❑ Use of Checklists

Simulated Emergency Procedures

- ❑ Systems and Equipment Malfunction
- ❑ Adverse Weather
- ❑ Low Fuel Supply

Unfamiliar Airports

- ❑ Traffic Pattern
- ❑ Non-Controlled Airport
- ❑ Controlled Airport
- ❑ CTAF Procedures
- ❑ Airport, Runway, and Taxiway signs/markings
- ❑ Wake Turbulence Avoidance
- ❑ Runway Incursion Avoidance

Postflight Procedures

- ❑ After Landing
- ❑ Parking
- ❑ Securing

COMPLETION STANDARDS:

This lesson is complete when the student has conducted a cross-country to include a landing at a point more than 50 nautical miles from the original departure point demonstrating increased proficiency by accurately adhering to the preplanned navigation log.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 1 **LESSON# 6**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**	1	2.5				2.5	2.5	
Totals								

FLIGHT LESSON 7 – DUAL XC

LESSON OBJECTIVE:

During this lesson, the student will continue to practice cross-country planning, pilotage and dead reckoning, and VOR/GPS navigation. The flight will give the student experience with flying cross-country in a complex airplane. The flight will include a landing at a point more than 50 nautical miles from the original departure point.

CONTENT:

Section A- Lesson Review

Preflight Preparation

- ❑ Cross-Country Flight Planning
- ❑ Airworthiness Requirements
- ❑ Certificates and Documents
- ❑ Performance and Limitations
- ❑ Weather Information
- ❑ Density Altitude Considerations

Inflight Operations

- ❑ Radio Communications
- ❑ Navigation Systems
- ❑ Pilotage and Dead Reckoning
- ❑ VOR and GPS Navigation
- ❑ Diversion and Lost Procedures
- ❑ Power Settings and Mixture Leaning
- ❑ Cockpit Management
- ❑ Crew Resource Management
- ❑ Wake Turbulence Avoidance
- ❑ Runway Incursion Avoidance
- ❑ Use of Checklists

Simulated Emergency Procedures

- ❑ Systems and Equipment Malfunction
- ❑ Adverse Weather
- ❑ Low Fuel Supply

Unfamiliar Airports

- ❑ Traffic Pattern
- ❑ Non-Controlled Airport
- ❑ Controlled Airport
- ❑ CTAF Procedures
- ❑ Airport, Runway, and Taxiway signs/markings
- ❑ Wake Turbulence Avoidance
- ❑ Runway Incursion Avoidance

Postflight Procedures

- ❑ After Landing
- ❑ Parking
- ❑ Securing

COMPLETION STANDARDS:

This lesson is complete when the student has conducted a cross-country to include a landing at a point more than 50 nautical miles from the original departure point demonstrating increased proficiency by accurately adhering to the preplanned navigation log.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 1 **LESSON# 7**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**	1	2.5				2.5	2.5	
Totals								

FLIGHT LESSON 8 – DUAL
STAGE I CHECK

LESSON OBJECTIVE:

The objective of this stage check, conducted by the chief instructor, the assistant chief, or a designate check instructor, is to evaluate the students understanding of VFR cross country procedures, instrument procedures, maneuvers, and simulated emergencies to the satisfaction of a complex airplane checkout.

CONTENT:

Section A- Lesson Review

Preflight Preparation

- ❑ Cross-Country Flight Planning
- ❑ Airworthiness Requirements
- ❑ Certificates and Documents
- ❑ Performance and Limitations
- ❑ Weather Information
- ❑ Density Altitude Considerations

Inflight Operations

- ❑ Radio Communications
- ❑ Navigation Systems
- ❑ Pilotage and Dead Reckoning
- ❑ VOR and GPS Navigation
- ❑ Diversion and Lost Procedures
- ❑ Power Settings and Mixture Leaning
- ❑ Cockpit Management
- ❑ Crew Resource Management
- ❑ Wake Turbulence Avoidance
- ❑ Runway Incursion Avoidance
- ❑ Use of Checklists

Simulated Emergency Procedures

- ❑ Systems and Equipment Malfunction
- ❑ Adverse Weather

Instrument Procedures

- ❑ Nonprecision Approach
- ❑ Precision Approach
- ❑ Missed Approach Procedures
- ❑ Unusual Attitude Recovery

Maneuvers

- ❑ Normal Crosswind Take-off and Landing
- ❑ Short Take-off and Landing
- ❑ Soft Take-off and Landing
- ❑ Maneuvering During Slow Flight
- ❑ Power-On Stall
- ❑ Power-Off Stall
- ❑ Steep Turns
- ❑ Go-Around/Rejected Landing

Postflight Procedures

- ❑ After Landing
- ❑ Parking
- ❑ Securing

COMPLETION STANDARDS:

At the completion of this lesson, the student will display a complete understanding of VFR cross-country planning and in fight procedures. The student will show the ability to operate safely in the National Airspace System and use good judgment consistently.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 1 **LESSON# 8**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**	1	2					2	
Totals								

STAGE II

STAGE OBJECTIVE

During this stage, the student obtains the foundation for all future aviation training. The student becomes familiar with the training airplane and learns how the airplane controls are used to establish and maintain specific flight attitudes. Through review of cross country procedures and the introduction of certain commercial scenario flights, the student will gain the proficiency to make cross country flights to a commercial standard.

STAGE COMPLETION STANDARD

At the completion of this stage, the student will demonstrate an understanding of commercial cross country operations and scenario commercial flights in this stage. Additionally, the student will understand how to maintain specific flight attitudes and ground tracks. The student will have successfully completed the required cross countries outlined in 14 CFR FAR 61. In addition, the student will have the proficiency required for review of the commercial maneuvers in the following stage.

FLIGHT LESSON 9 – DUAL XC

LESSON OBJECTIVE:

The student will review VFR cross-country skills including the demonstration of simulated emergency procedures in preparation for solo cross-country flights. The flight will be at least two hours in duration during the day and include a straight-line distance of more than 100 nautical miles from the original departure point.

CONTENT:

Section A- Lesson Review

Preflight Preparation

- ❑ Cross-Country Flight Planning
- ❑ Airworthiness Requirements
- ❑ Certificates and Documents
- ❑ Performance and Limitations
- ❑ National Airspace System
- ❑ Weather Information
- ❑ Density Altitude Considerations

Inflight Operations

- ❑ Radio Communications
- ❑ Navigation Systems and Radar Services
- ❑ Pilotage and Dead Reckoning
- ❑ VOR and GPS Navigation
- ❑ Diversion and Lost Procedures
- ❑ Power Settings and Mixture Leaning
- ❑ Cockpit Management
- ❑ Crew Resource Management
- ❑ Wake Turbulence Avoidance
- ❑ Runway Incursion Avoidance
- ❑ Use of Checklists

Simulated Emergency Procedures

- ❑ Systems and Equipment Malfunction
- ❑ Low Fuel Supply
- ❑ Adverse Weather

- ❑ Airframe and Powerplant Icing
- ❑ Emergency Approach and Landing
- ❑ Emergency Equipment

Full Panel Instrument

- ❑ Straight-and-Level Flight
- ❑ Climbs
- ❑ Descents
- ❑ Standard-Rate Turns
- ❑ VOR Navigation
- ❑ GPS Navigation
- ❑ Use of Radar Vectors

COMPLETION STANDARDS:

The student will demonstrate the ability to act as pilot in command on a cross-country flight of at least two hours to include a straight-line distance of more than 100 nautical miles from the original departure point.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 2 **LESSON# 9**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**	0.5	2				2	2	
Totals								

FLIGHT LESSON 10 – DUAL XC

LESSON OBJECTIVE:

The student will review VFR cross-country skills including the demonstration of simulated emergency procedures in preparation for solo cross-country flights. The flight will be at least two hours in duration during the night and include a straight-line distance of more than 100 nautical miles from the original departure point.

CONTENT:

Section A- Lesson Review

- ❑ Night Preflight Preparation
- ❑ Aircraft Lighting and Equipment
- ❑ Aeromedical Factors of Night Flight
- ❑ Engine starting, Taxiing, Before Takeoff Check
- ❑ Night VFR References
- ❑ Lost Procedures
- ❑ Night Scanning/Collision Avoidance
- ❑ Wake Turbulence Avoidance

Simulated Emergency Procedures

- ❑ Systems and Equipment Malfunction
- ❑ Adverse Weather
- ❑ Low Fuel Supply
- ❑ Airframe and Powerplant Icing

Full Panel Instrument

- ❑ Straight-and-Level Flight
- ❑ Climbs and Descents
- ❑ Standard-Rate Turns

Section B- Lesson Introduction

- ❑ Cross-Country Flight Planning
- ❑ Weather Information
- ❑ Preflight Inspection
- ❑ Cockpit Management
- ❑ Crew Resource Management
- ❑ Airport and Taxiway Lighting

- ❑ Runway Incursion Avoidance
- ❑ Land and Hold Short Operations

Night Navigation

- ❑ Night Cross-Country Procedures
- ❑ Navigation Systems and Radar Services
- ❑ Pilotage and Dead Reckoning
- ❑ Diversion and Lost Procedures
- ❑ Use of Unfamiliar Airports

COMPLETION STANDARDS:

Successful completion of this lesson is indicated by the student's demonstration of the correct operation procedures for night cross-country flights. The flight will be at least two hours in duration and include a straight-line distance of more than 100 nautical miles from the original departure.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 2 **LESSON# 10**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**	1	2		2		2	2	
Totals								

FLIGHT LESSON 11 – DUAL
PHOTO MISSION SCENARIO FLIGHT

SCENARIO:

You are a Commercial Pilot. The FBO where you work receives a request from a nearby construction company. The construction company is building at a site near your airport and needs some aerial photos taken of the progress at the construction site. The construction company wants to hire you to fly a photographer over the construction site to take photos. The owner of your company, who is also your boss, is a good friend of the construction company owner. The construction company needs the photos as soon as possible. Your boss wants to make sure that his friend is satisfied with his aerial photography service. Failure to get this job done safely, quickly and with excellent customer service will reflect badly on your status in the company- in fact, the owner has fired pilots before for not getting these types of jobs done efficiently. The consequence of your decision-making will be your job security. As a commercial pilot, is the aerial photography mission legal? Most new Commercial Pilots mistakenly believe that, once they pass the Commercial Pilot check ride, they can conduct any commercial operation- but nothing is farther from the truth. To haul passengers and cargo, for instance, a commercial pilot must also meet the regulations of Part 135 or 121 in certain situations. 14 CFR Part 119 is a regulation that outlines the additional requirements that commercial pilots must meet in order to conduct certain types of commercial operations. Aerial photography, however, is listed as one of the operations that does not apply to part 119. That means that no additional requirements, beyond the commercial pilot certificate, are required to conduct an aerial photography mission.

- 14 CFR 119.1(e) "…This part does not apply to-
- (4) Aerial; work operations, including-
- (iii) Aerial photography or survey;"

LESSON OBJECTIVE:

This scenario is planned as a daytime Aerial Photography mission. Federal Aviation Regulation 119.1, Applicability of air carriers and commercial operators, allows commercial pilots to conduct aerial photography and survey missions. The PT will review local area VFR flight operations, including weather analysis and performance calculations. In addition, the PT will gain an understanding of the pressures that can be

present on an aerial photography mission: the photographer may ask the pilot to fly too low or to unusually yaw the airplane for best camera angles. The PT will understand that they are in charge of the flights ultimate safety despite what requests might come from the passenger.

CONTENT:

Section A- Scenario Evaluation

- ❑ Preflight Preparation
  - Weather information
  - Navigation Planning
  - SRM
- ❑ Preflight Procedures
  - Aircraft Systems, Instruments, Navigation
  - Flight Deck checks & Run-up
  - SRM
- ❑ Ground Procedures
  - Ground taxi and sequencing
  - Controlled/Uncontrolled airport procedures
  - SRM
- ❑ Takeoff and Departure procedures
  - Runway Entry & Clearance
  - Traffic Pattern Operation
  - SRM
- ❑ Enroute Operations- Aerial Photography
  - Safe Aircraft Control and Operation
  - Navigation Systems and Automation Proficiency
  - SRM
- ❑ Enroute Operations- Navigation and Automation
  - Safe Aircraft Control and Operation
  - Navigation Systems and Automation Proficiency
  - SRM
- ❑ Enroute Operations- Ground Reference
  - MFD Nav. To Ground Landmarks
  - Flight control with Ref. to Target, wind Drift, Altitude

- SRM

❑ Arrival and Landing- Navigation and Automation
  - Navigation Systems Proficiency
  - Automation Systems Proficiency
  - SRM

❑ Arrival and Landing- Procedures
  - Transition to airport/traffic pattern
  - Collison Avoidance
  - Normal/Crosswind Landing
  - SRM

COMPLETION STANDARDS:

The PT will have successfully completed this lesson after demonstrating the desired performance for each task listed and exhibiting the required level of SRM to safely and efficiently complete the training scenario. Additionally, the PT should be able to identify any errors or unsafe practices made during the flight, including SRM considerations, and understanding why those actions were not optimal and what corrective actions should have been taken.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 2 **LESSON# 11**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**	1	2					2	
Totals								

FLIGHT LESSON 12 – SOLO XC

LESSON OBJECTIVE:

The student's proficiency in night operations is reviewed and practiced in this lesson. The student should acquire increased knowledge of radio navigation during cross-country flights. The flight will include a landing at a point more than 50 nautical miles from the original departure point.

CONTENT:

Section A- Lesson Review

- ❑ Cross-Country Flight Planning
- ❑ Weather Information
- ❑ Night Operation Considerations
- ❑ Preflight Preparation
- ❑ Cockpit Management

Night Navigation

- ❑ Night Cross-Country Procedures
- ❑ Navigation Systems and Radar Services
- ❑ Pilotage and Dead Reckoning
- ❑ Crew Resource Management
- ❑ Airport, Runway, and Taxiway Signs, Markings, and Lighting
- ❑ Runway Incursion Avoidance

COMPLETION Standards:

The student will show added skill in cross-country planning by selecting optimum cruising altitudes and appropriate check-points for a flight with a landing at a point more than 50 nautical miles from the original departure point. Demonstrate ability to accomplish the assigned night cross-country flight. During the postflight evaluation, the student will thoroughly explain the operational and safety considerations associated with night cross-country flying.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 2 **LESSON# 12**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**			2.5	2.5	5	2.5	2.5	
Totals								

FLIGHT LESSON 13 – SOLO XC

LESSON OBJECTIVE:

The purpose of this cross country is to build the student's experience and meet the long cross-country requirements. Therefore, the flight must include landings at a minimum of three points, one of which is at least a straight-line distance of 250 nautical miles from the original departure point and 300 nautical miles total.

CONTENT:

Section A- Lesson Review

- ❑ Preflight Preparation
- ❑ Cross-Country Flight Planning
- ❑ Navigation Systems and Radar Services
- ❑ Pilotage and Dead Reckoning
- ❑ VOR and GPS Navigation
- ❑ Crew Resource Management
- ❑ Airport, Runway, and Taxiway Signs, Markings, and Lighting
- ❑ Runway Incursion Avoidance

COMPLETION STANDARDS:

This lesson is complete when the student has conducted a cross-country with landings at a minimum of three points, one of which is at least a straight-line distance of 250 nautical miles from the original departure point. The student should be able to flight plan accurately making use of the applicable FAA publications and weather information.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 2 **LESSON# 13**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**			5			5	5	
Totals								

FLIGHT LESSON 14 – DUAL

FERRY FLIGHT SCENARIO FLIGHT

SCENARIO:

You are a Commercial Pilot and you work for an airplane sales and refurbishing company. The company has just completed the installation and upholstery of new seats in an airplane that is owned by a customer. Your job today is to deliver the airplane back to the customer. You will fly, in VFR daytime conditions, from your home airport to the customer's home airport to make the delivery. Also at the customer's home airport is another airplane that has had avionics work done. You will pick up that airplane and fly it home. Can a commercial pilot conduct this type of ferry flight? Federal Aviation Regulation 119.1(e)(3) allows commercial pilots who do not have any additional qualifications (such as required for air taxi or scheduled air carrier) to conduct these types of delivery or ferry flights.

LESSON OBJECTIVE:

The objective of this lesson is to deliver the customer's airplane to his home airport and to bring home a second airplane from the avionics shop. The PT must display good judgement and decision making to complete these flights in VFR daytime conditions. It is important to the owners of both airplanes that they be repositioned as soon as the weather will allow. When a VFR day is selected to conduct the ferry flights, they must be delivered on time and on schedule. The PT must also insure that the airplane is legal to fly and has been properly returned to service after the work has been completed. The PT will determine if the airplane's logbooks have been properly prepared considering: upholstery sign-off, avionics sign-off, pitot-static check, ELT check, and VOR check. The PT must safely navigate between the two airports and adhere to all airspace rules that are applicable to their airports involved. This mission will be compete and the objectives of this lesson met when both airplanes have been safely repositioned.

CONTENT:

Section A- Scenario Evaluation

- ❑ Preflight Preparation
  - Weather information
  - VFR Cross Country Flight Planning
  - SRM
- ❑ Preflight Procedures
  - Systems, Instruments, Navigation, Engine Run-up
  - Weight and Balance Computations
  - SRM
- ❑ Ground Procedures
  - Ground Operations/Taxi Clearance
  - Controlled/Uncontrolled airport procedures
  - SRM
- ❑ Takeoff and Departure procedures
  - Runway Entry & Clearance
  - Traffic Pattern Operation
  - SRM
- ❑ Ferry Flight Operations
  - Safe Aircraft Control and Operation
  - VFR Navigation- Pilotage, Dead Rec, Radio Nav
  - SRM
- ❑ Enroute Operations- Navigation and Automation
  - Safe Aircraft Control and Operation
  - Navigation Systems and Automation Proficiency
  - SRM
- ❑ Enroute Operations- Ground Reference
  - MFD Nav. To Ground Landmarks
  - Calculation of Wind Drift, Fuel Consumption in Flight
  - SRM

- ❑ Arrival and Landing- Navigation and Automation
  - ATC Clearance/Approach to Airport Area
  - ATC Clearance/Traffic Pattern Entry
  - SRM

- ❑ Arrival and Landing- Procedures
  - Transition to airport/traffic pattern
  - Collison Avoidance
  - Normal/Crosswind Landing
  - SRM

COMPLETION STANDARDS:

The PT will have successfully completed this lesson after demonstrating the desired performance for each task listed and exhibiting the required level of SRM to safely and efficiently complete the training scenario. Additionally, the PT should be able to identify any errors or unsafe practices made during the flight, including SRM considerations, and understanding why those actions were not optimal and what corrective actions should have been taken.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 2 **LESSON# 14**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**	1	2				2	2	
Totals								

FLIGHT LESSON 15 – SOLO XC

LESSON OBJECTIVE:

The student's proficiency in night operations is reviewed and practiced in this lesson. The student should acquire increased knowledge of radio navigation during cross-country flights. The flight will include a landing at a point more than 50 nautical miles from the original departure point.

CONTENT:

Section A- Lesson Review

- ❑ Cross-Country Flight Planning
- ❑ Weather Information
- ❑ Night Operation Considerations
- ❑ Preflight Preparation
- ❑ Cockpit Management

Night Navigation

- ❑ Night Cross-Country Procedures
- ❑ Navigation Systems and Radar Services
- ❑ Pilotage and Dead Reckoning
- ❑ Crew Resource Management
- ❑ Airport, Runway, and Taxiway Signs, Markings, and Lighting
- ❑ Runway Incursion Avoidance

COMPLETION STANDARDS:

The student will show added skill in cross-country planning by selecting optimum cruising altitudes and appropriate check-points for a flight with a landing at a point more than 50 nautical miles from the original departure point. Demonstrate ability to accomplish the assigned night cross-country flight. During the postflight evaluation, the student will thoroughly explain the operational and safety considerations associated with night cross-country flying.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 2 **LESSON# 15**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**			2.5	2.5	5	2.5	2.5	
Totals								

FLIGHT LESSON 16 – EXAM

LESSON OBJECTIVE:

The objective of this lesson is to evaluate the student's knowledge through a written stage exam.

CONTENT:

- ❑ Stage II Exam

COMPLETION STANDARDS:

The student should score at least 70% on the exam. In addition, the instructor is responsible for reviewing those questions missed.

Record Keeping

SCORE: _____

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 2 **LESSON# 16**

DATE	DUAL GRND	DUAL	XC	EXAM
				1
Totals				

STAGE III

STAGE OBJECTIVE

During this stage, the student obtains the foundation for all future aviation training. The student reviews and becomes proficient while performing the maneuvers required for the commercial certificate. Through review of the commercial maneuvers the student will develop the skill required to become a commercial pilot. The student will gain the proficiency and skill to be able to take the commercial practical test.

STAGE COMPLETION STANDARD

At the completion of this stage, the student will be able to perform commercial maneuvers to commercial PTS and demonstrate a more detailed understanding required for the commercial certificate. Additionally, the student will understand how to maintain specific flight attitudes and ground tracks. At the completion of this stage the student will be prepared for the commercial practical test.

FLIGHT LESSON 17 – DUAL

LESSON OBJECTIVE:

Review slow flight and stalls to further develop student skills in flying the airplane. Continue to practice short and soft field takeoffs and landings. Gain understanding and knowledge in recovery procedures that apply to demonstrated stalls.

CONTENT:

Section A- Lesson Review

- ❑ Power-On Stalls
- ❑ Power-Off Stalls
- ❑ Maneuvering During Slow Flight
- ❑ Normal Cross-Wind Take-Offs and Landings
- ❑ Short-Field Takeoffs and Landings
- ❑ Soft-Field Takeoffs and Landings
- ❑ Go-Around/Rejected Landing

Section B- Lesson Introduction

- ❑ Secondary Stall (1)
- ❑ Accelerated Stall (1)

COMPLETION STANDARDS:

The student will display increased proficiency performing slow flight and stall recovery procedures. The student will demonstrate the correct procedures for short and soft field landings by picking a suitable point on the runway and landing not more than 100 feet beyond the selected point.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 3 **LESSON# 17**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**	0.5	2					2	
Totals								

References:
(1) FAA-H-8083-3B Page 4-10 & 4-11
(2) FAA-H-8083-3B Page

FLIGHT LESSON 18 – DUAL

LESSON OBJECTIVE:

Provide the student with the opportunity to practice basic flight maneuvers to further develop coordination and airplane control in preparation for the commercial practical test.

Content:

Section A- Lesson Review

- ❑ Power-On Stalls
- ❑ Power-Off Stalls
- ❑ Maneuvering During Slow Flight
- ❑ Normal Cross-Wind Take-Offs and Landings
- ❑ Short-Field Takeoffs and Landings
- ❑ Soft-Field Takeoffs and Landings
- ❑ Go-Around/Rejected Landing
- ❑ Accelerated Stall

COMPLETION STANDARDS:

This lesson is complete when the student has conducted the assigned flight. The student should gain proficiency in the planning and performance of each maneuver.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 3 **LESSON# 18**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**	0.5	1					1	
Totals								

FLIGHT LESSON 19 – DUAL

LESSON OBJECTIVE:

Steep turns and chandelles are introduced to begin developing precise airplane control when operating near the performance limits of the airplane. Additional practice in stall and spin recognition and recovery procedures will be provided.

CONTENT:

Section A- Lesson Review

- ❑ Steep Turns
- ❑ Power-On Stalls
- ❑ Power-Off Stalls
- ❑ Maneuvering During Slow Flight
- ❑ Normal Cross-Wind Take-Offs and Landings
- ❑ Short-Field Takeoffs and Landings
- ❑ Soft-Field Takeoffs and Landings
- ❑ Go-Around/Rejected Landing
- ❑ Accelerated Stall

Simulated Emergency Procedures

- ❑ Emergency Approach and Landing
- ❑ Systems and Equipment Malfunctions

Section B- Lesson Introduction

- ❑ Chandelles (1)
- ❑ Steep Turns (2)

COMPLETION Standards:

The student will display increased knowledge of stall and spin recognition and recovery. The student will display an understanding of the entry, performance, and recovery techniques that apply to steep turns and chandelles.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 3 **LESSON# 19**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**	0.5	2					2	
Totals								

References:

(1) FAA-H-8083-3B Page 9-5 & 9-6

(2) FAA-H-8083-3B Page 9-2 to 9-4

FLIGHT LESSON 20 – DUAL

LESSON OBJECTIVE:

The student will increase proficiency in performing steep turns and chandelles. Lazy eights, eights-on-pylons, steep spirals, and power-off 180° accuracy approaches and landings are introduced to present the student with an added challenge in precision flight maneuvers.

CONTENT:

Section A- Lesson Review

- ❑ Chandelles
- ❑ Steep Turns

Section B- Lesson Introduction

- ❑ Lazy Eights (1)
- ❑ Eights-On-Pylons (2)
- ❑ Steep Spirals (3)
- ❑ Power-Off 180° Accuracy Approach and Landing (4)

COMPLETION STANDARDS:

The student will show increased proficiency in the review maneuvers by demonstrating correct entry and recovery procedures and increased coordination during the performance of each maneuver. The student also will demonstrate an understanding of the important performance elements of lazy eights, eights-on-pylons, steep spiral, and power-off 180° accuracy approaches and landings.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 3 **LESSON# 20**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**	1	2					2	
Totals								

References:
(1) FAA-H-8083-3B Page 9-6 to 9-8
(2) FAA-H-8083-3B Page 6-14 to 6-18
(3) FAA-H-8083-3B Page 9-4 & 9-5
(4) FAA-H-8083-3B Page 8-22 to 8-26

FLIGHT LESSON 21 – SOLO

LESSON OBJECTIVE:
The student will work to gain proficiency through review of the listed maneuvers.

CONTENT:

Section A- Lesson Review

- ❑ Short-Field Takeoffs and Landings
- ❑ Soft-Field Takeoffs and Landings
- ❑ Maneuvering During Slow Flight
- ❑ Power-Off 180° Accuracy approach and Landing
- ❑ Power-On Stalls
- ❑ Power-Off Stalls
- ❑ Steep Turns
- ❑ Chandelles
- ❑ Lazy Eights
- ❑ Eights-On-Pylons
- ❑ Steep Spirals

COMPLETION STANDARDS:
The lesson is completed when the student has conducted the assigned flight. During the lesson, the student should increase proficiency in the entry, performance, and recovery techniques for each maneuver.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 3 **LESSON# 21**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**			1				1	
Totals								

FLIGHT LESSON 22 – SOLO

LESSON OBJECTIVE:

The student will work to gain proficiency through review of the listed maneuvers.

CONTENT:

Section A- Lesson Review

- ❑ Short-Field Takeoffs and Landings
- ❑ Soft-Field Takeoffs and Landings
- ❑ Maneuvering During Slow Flight
- ❑ Power-Off 180° Accuracy approach and Landing
- ❑ Power-On Stalls
- ❑ Power-Off Stalls
- ❑ Steep Turns
- ❑ Chandelles
- ❑ Lazy Eights
- ❑ Eights-On-Pylons
- ❑ Steep Spirals

COMPLETION STANDARDS:

The lesson is completed when the student has conducted the assigned flight. During the lesson, the student should increase proficiency in the entry, performance, and recovery techniques for each maneuver.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 3 **LESSON# 22**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**			1				1	
Totals								

FLIGHT LESSON 23 – SOLO

LESSON OBJECTIVE:

The student will work to gain proficiency through review of the listed maneuvers.

CONTENT:

Section A- Lesson Review

- ❑ Short-Field Takeoffs and Landings
- ❑ Soft-Field Takeoffs and Landings
- ❑ Maneuvering During Slow Flight
- ❑ Power-Off 180° Accuracy approach and Landing
- ❑ Power-On Stalls
- ❑ Power-Off Stalls
- ❑ Steep Turns
- ❑ Chandelles
- ❑ Lazy Eights
- ❑ Eights-On-Pylons
- ❑ Steep Spirals

COMPLETION STANDARDS:

The lesson is completed when the student has conducted the assigned flight. During the lesson, the student should increase proficiency in the entry, performance, and recovery techniques for each maneuver.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 3 **LESSON# 23**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**			2				2	
Totals								

FLIGHT LESSON 24 – DUAL

LESSON OBJECTIVE:

During this lesson the student is provided with a review of commercial maneuvers and attitude instrument flying.

CONTENT:

Section A- Lesson Review

Takeoffs and Landings

- ❑ Power-Off 180° Accuracy approach and Landing
- ❑ Power-On Stalls
- ❑ Power-Off Stalls
- ❑ Steep Turns
- ❑ Chandelles
- ❑ Lazy Eights
- ❑ Eights-On-Pylons
- ❑ Steep Spirals

Full and Partial Panel Instrument

- ❑ Straight-and-Level Flight
- ❑ Standard-Rate Turns
- ❑ Maneuvering During Slow Flight
- ❑ Power-On Stalls
- ❑ Power-Off Stalls
- ❑ Recovery from Unusual Flight Attitudes

COMPLETION STANDARDS:

The student demonstrates increased proficiency in the listed commercial maneuvers and displays competency in the instrument maneuvers according to the standards outlined in the current FAA Instrument Pilot Airman Certification Standards.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 3 **LESSON# 24**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**	0.5	2					2	
Totals								

FLIGHT LESSON 25 – DUAL

LESSON OBJECTIVE:

The student is provided with a review of takeoffs and landings, attitude instrument flying, and emergency procedures.

CONTENT:

Section A- Lesson Review

Flight Maneuvers

- ❑ Short-Field Takeoffs and Landings
- ❑ Soft-Field Takeoffs and Landings
- ❑ Maneuvering During Slow Flight
- ❑ Power-On Stall
- ❑ Power-Off Stall
- ❑ Power-Off 180° Accuracy Approach and Landing

Full and Partial Panel Instrument

- ❑ Straight-and-Level Flight
- ❑ Standard-Rate Turns
- ❑ Maneuvering During Slow Flight
- ❑ Power-On Stalls
- ❑ Power-Off Stalls
- ❑ Recovery from Unusual Flight Attitudes

Simulated Emergency Procedures

- ❑ Systems and Equipment Malfunctions
- ❑ Low Fuel Supply
- ❑ Adverse Weather
- ❑ Airframe and Powerplant Icing
- ❑ Emergency Approach and Landing

COMPLETION STANDARDS:

The student demonstrates increased proficiency in the listed commercial maneuvers and displays competency in the instrument maneuvers and emergency procedures according to the standards outlined in the current FAA Instrument Pilot Airman Certification Standards.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 3 **LESSON# 25**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**	0.5	2					2	
Totals								

FLIGHT LESSON 26 – SOLO

LESSON OBJECTIVE:

The Lesson Provides the student with the opportunity to review the listed flight maneuvers to increase proficiency.

CONTENT:

Section A- Lesson Review

- ❑ Steep Turns
- ❑ Chandelles
- ❑ Eights-on-Pylons
- ❑ Steep Spirals
- ❑ Lazy Eights
- ❑ Power-Off 180° Accuracy Approach and Landing
- ❑ Short-Field Takeoffs and Landings
- ❑ Soft-Field Takeoffs and Landings
- ❑ Aeronautical Decision Making
- ❑ Cockpit Management

COMPLETION STANDARDS:

The student must complete the assigned solo flight developing additional proficiency in the listed maneuvers.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 3 **LESSON# 26**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**			2				2	
Totals								

FLIGHT LESSON 27 – SOLO

LESSON OBJECTIVE:

The Lesson Provides the student with the opportunity to review the listed flight maneuvers to increase proficiency.

CONTENT:

Section A- Lesson Review

- ❑ Steep Turns
- ❑ Chandelles
- ❑ Eights-on-Pylons
- ❑ Steep Spirals
- ❑ Lazy Eights
- ❑ Power-Off 180° Accuracy Approach and Landing
- ❑ Short-Field Takeoffs and Landings
- ❑ Soft-Field Takeoffs and Landings
- ❑ Aeronautical Decision Making
- ❑ Cockpit Management

COMPLETION STANDARDS:

The student must complete the assigned solo flight developing additional proficiency in the listed maneuvers.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 3 **LESSON# 27**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**			2				2	
Totals								

FLIGHT LESSON 28 – SOLO

LESSON OBJECTIVE:

The Lesson Provides the student with the opportunity to review the listed flight maneuvers to increase proficiency.

CONTENT:

Section A- Lesson Review

- ❑ Steep Turns
- ❑ Chandelles
- ❑ Eights-on-Pylons
- ❑ Steep Spirals
- ❑ Lazy Eights
- ❑ Power-Off 180° Accuracy Approach and Landing
- ❑ Short-Field Takeoffs and Landings
- ❑ Soft-Field Takeoffs and Landings
- ❑ Aeronautical Decision Making
- ❑ Cockpit Management

COMPLETION STANDARDS:

The student must complete the assigned solo flight developing additional proficiency in the listed maneuvers.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 3 **LESSON# 28**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**			1				1	
Totals								

FLIGHT LESSON 29 – DUAL

LESSON OBJECTIVE:

The Lesson is designed to review and evaluate the students' knowledge and proficiency in the operation of the tasks within the lesson. The flight provides an opportunity to practice the listed maneuvers and procedures in preparation for the stage check.

CONTENT:

Section A- Lesson Review

- ❑ Steep Turns
- ❑ Chandelles
- ❑ Eights-on-Pylons
- ❑ Steep Spirals
- ❑ Lazy Eights
- ❑ Power-Off 180° Accuracy Landing
- ❑ Power-On Stalls
- ❑ Power-Off Stalls
- ❑ Maneuvering During Slow Flight
- ❑ Short-Field Takeoffs and Landings
- ❑ Soft-Field Takeoffs and Landings

COMPLETION STANDARDS:

The lesson is complete when the student demonstrates the ability to safely and accurately perform each of the assigned maneuvers and/or procedures. The student will demonstrate sufficient knowledge and proficiency to progress to the next lesson.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 3 **LESSON# 29**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**	0.5	1					1	
Totals								

FLIGHT LESSON 30 – DUAL

LESSON OBJECTIVE:

The Lesson is designed to review and evaluate the students' knowledge and proficiency in the operation of the tasks within the lesson. The flight provides an opportunity to practice the listed maneuvers and procedures in preparation for the stage check.

CONTENT:

Section A- Lesson Review

- ❑ Steep Turns
- ❑ Chandelles
- ❑ Eights-on-Pylons
- ❑ Steep Spirals
- ❑ Lazy Eights
- ❑ Power-Off 180° Accuracy Landing
- ❑ Power-On Stalls
- ❑ Power-Off Stalls
- ❑ Maneuvering During Slow Flight
- ❑ Short-Field Takeoffs and Landings
- ❑ Soft-Field Takeoffs and Landings

COMPLETION STANDARDS:

The lesson is complete when the student demonstrates the ability to safely and accurately perform each of the assigned maneuvers and/or procedures. The student will demonstrate sufficient knowledge and proficiency to progress to the next lesson.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 3 **LESSON# 30**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**	0.5	1					1	
Totals								

FLIGHT LESSON 31 – DUAL

LESSON OBJECTIVE:

This lesson provides the student with an opportunity to practice commercial maneuvers and procedures identified in previous lessons as areas needing review. Review maneuvers and procedures in the complex aircraft.

CONTENT:

Section A- Lesson Review

Preflight Preparations

- ❑ Certificates and Documents
- ❑ Airworthiness Requirements
- ❑ Operation of Systems
- ❑ Performance and Limitations
- ❑ Use of Checklists
- ❑ Cockpit Management
- ❑ Preflight Inspection
- ❑ Engine Starting and Taxiing
- ❑ Before Takeoff Check

Flight Maneuvers

- ❑ Steep Turns
- ❑ Chandelles
- ❑ Eights-on-Pylons
- ❑ Steep Spirals
- ❑ Lazy Eights
- ❑ Power-Off 180° Accuracy Landing
- ❑ Power-On Stalls
- ❑ Power-Off Stalls
- ❑ Maneuvering During Slow Flight

Takeoffs and Landings

- ❑ Normal Crosswind Take-Off and Landing
- ❑ Power-Off 180° Accuracy Landing
- ❑ Short-Field Takeoffs and Landings
- ❑ Soft-Field Takeoffs and Landings

Simulated Emergency Procedures

- ❑ Systems and Equipment Malfunction
- ❑ Landing Gear Malfunctions
- ❑ Emergency Approach and Landing

COMPLETION STANDARDS:

The student should demonstrate familiarity with the complex aircraft flight characteristics, systems, and emergency procedures assigned in the lesson. Performance of the commercial maneuvers should indicate thorough understanding of the correct procedures. Maneuvers or procedures which do not meet commercial standards will be assigned for additional practice.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 3 **LESSON# 31**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**	0.5	2					2	
Totals								

FLIGHT LESSON 32 – DUAL

EOC PREPARATION

LESSON OBJECTIVE:

The lesson is a review and evaluation of the students' knowledge and proficiency in the operation of the complex aircraft. The flight provides an opportunity to practice the listed maneuvers and procedures in preparation for the EOC. The student also will perform VOR, GPS, ILS, and missed approach procedures according to FAA Instrument Rating Airman Certification Standards.

CONTENT:

Section A- Lesson Review

Flight Maneuvers

- ❑ Maneuvering During Slow Flight
- ❑ Power-Off Stalls
- ❑ Power-On Stalls
- ❑ Spin Awareness
- ❑ Steep Turns
- ❑ Chandelles
- ❑ Lazy Eights
- ❑ Eights-On-Pylons
- ❑ Steep Spirals

Takeoffs and Landings

- ❑ Power-Off 180° Accuracy Approach and Landing
- ❑ Normal Crosswind Takeoff and Landing
- ❑ Short-Field Takeoff and Landing
- ❑ Soft-Field Takeoff and Landing
- ❑ Go-Around/Rejected Landing

Postflight Procedures

- ❑ After Landing
- ❑ Parking
- ❑ Securing

COMPLETION STANDARDS:

During each approach, the student will follow the step-by-step procedure published on the approach chart. Descents to the MDA or DH will be at the proper rate, so as to arrive at a position from which a normal circling or straight-in landing can be made. Missed approach procedures will follow the published procedure or the controller's instructions. All VFR maneuvers will be performed according to FAA Commercial Pilot Airman Certification Standards.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 3 **LESSON# 32**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**	1	2					2	
Totals								

FLIGHT LESSON 33 – EXAM

LESSON OBJECTIVE:

The objective of this lesson is to evaluate the student's knowledge through a written stage exam.

CONTENT:

- ❑ Stage III Exam

COMPLETION STANDARDS:

The student should score at least 70% on the exam. In addition, the instructor is responsible for reviewing those questions missed.

Record Keeping

SCORE: _____

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 3 **LESSON# 33**

DATE	DUAL GRND	DUAL	XC	EXAM
				1
Totals				

FLIGHT LESSON 34 – DUAL
END-OF-COURSE CHECK

LESSON OBJECTIVE:

This flight check, conducted by the chief instructor, assistant chief instructor, or a designated check instructor, will evaluate the student's instrument and commercial flight proficiency, as well as the ability to act safely and competently as pilot in command. The student will be evaluated on their ability to control the aircraft accurately and smoothly while exercising sound judgment in decision making.

CONTENT:

Section A- Lesson Review

VFR Cross-Country Flight Planning

- ❑ Weather Information related to VFR Flight
- ❑ Aircraft Performance and Limitations
- ❑ Operation of Systems
- ❑ Enroute Chart Interpretation

ATC Clearance

- ❑ Clearance Copying and Read back
- ❑ Departure Procedures and Clearances

VFR Cross-Country Flight

- ❑ VOR and GPS Navigation
- ❑ Enroute Procedures and Clearances
- ❑ Arrival Procedures and Clearances
- ❑ Single-Pilot Resource Management
- ❑ Aeronautical Decision Making

Flight Maneuvers

- ❑ Maneuvering During Slow Flight
- ❑ Power-Off Stalls
- ❑ Power-On Stalls
- ❑ Spin Awareness
- ❑ Steep Turns
- ❑ Chandelles
- ❑ Lazy Eights
- ❑ Eights-On-Pylons

- ❑ Steep Spirals

Takeoffs and Landings

- ❑ Power-Off 180° Accuracy Approach and Landing
- ❑ Normal Crosswind Takeoff and Landing
- ❑ Short-Field Takeoff and Landing
- ❑ Soft-Field Takeoff and Landing
- ❑ Go-Around/Rejected Landing

Simulated Emergency Procedures

- ❑ Systems and Equipment Malfunctions
- ❑ Loss of Communications
- ❑ Low Fuel Supply
- ❑ Fire in Flight
- ❑ Adverse Weather
- ❑ Airframe and Powerplant Icing
- ❑ Emergency Approach and Landing

Postflight Procedures

- ❑ After Landing
- ❑ Parking
- ❑ Securing

COMPLETION STANDARDS:

At the completion of this end-of-course check, the student will display a complete understanding of VFR and IFR procedures. The student also will demonstrate the necessary knowledge, skill, and judgment to operate safely as pilot in command. The students' performance during each maneuver and procedure will exceed the minimum performance requirements outlined in the current FAA Instrument Airman Certification Standards and Commercial Pilot Airman Certification Standards.

Record Keeping

STUDENT: _____

INSTRUCTOR: _____ **CERT#** _____

STAGE# 3 **LESSON# 34**

DATE	DUAL GROUND	DUAL	SOLO	NIGHT	NIGHT LANDINGS	XC	COMPLEX	EXAM
**	1	2					2	
Totals								

STAGE IV

STAGE OBJECTIVE

During this stage, the student complete 40 hours of cross-country flight time to meet the total time requirements of the Commercial Pilot Certificate. Repeat flights cannot be counted. For example, ALW-GEG-ALW could only be counted once. However ALW-GEG-PSC-ALW could be counted separately. Students must conduct one flight to a Class C airport, one flight in Class B airspace, and one flight in excess of 300 NM from Walla Walla Regional Airport (KALW).

STAGE COMPLETION STANDARD

This stage is completed without the aid of a flight instructor. The student must complete the 40 hours of cross-country time and submit a flight report as indicated on the Walla Walla University Course Syllabus.

FLIGHT LESSON 35 – CROSS-COUNTRY

LESSON OBJECTIVE:

The objective of this lesson is to complete the required total time necessary for the Commercial Pilot – Airplane certificate.

CONTENT:

- ❑ Cross-Country Flight Operations
- ❑ Class C Airport Operations
- ❑ Class B Airspace Operations
- ❑ Long Distance (300NM+) Flights

COMPLETION STANDARDS:

The student should complete 40 hours of cross-country flight, including a flight to a Class C airport, flight in Class B airspace, and a flight in excess of 300 NM from Walla Walla. All flights should be recorded here as well as on any applicable flight logs for the academic course.

DATE	ROUTE OF FLIGHT	FLIGHT TIME
		40

Totals		