TRAINING COURSE OUTLINE

Bridgewater State University holds Pilot School Certificate No. **LY8S311Q.**

Bridgewater State University is an accredited four-year degree granting institution within the state of Massachusetts higher educational system. The base of operations/business address is 111 Harrington Hall, Bridgewater, MA 02325.

COMMERCIAL PILOT COURSE –141.55 (E)

The Facilities Manual is Part 1 of the Training Course Outline and meets the requirements of 14 CFR Part 141.55 (C), subsections 1-5.
Ground and Flight Course Manuals are contained in Part 2 and meet the requirements of the Training Course Outline specified in 14 CFR 141.55 (D) and (E).

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RECORD OF REVISIONS

REV. #	DATE	CONTENT
I	5/22/2015	Clarifies minimum x-country solo flight time requirements in the complex aircraft on lessons 18 and 19.
II	12/14/16	Updates personnel listing
III	6/12/17	Converts ground and flight training courses to Airman Certification Standards. Adds reference to BSU Hazardous Information Tracking (HIT) form and Emergency Response Plan (ERP) in various ground and flight lessons. Adds task "Impossible Turn" in various ground and flight lessons.
IV	1/12/18	Change of Chief Instructor/Assistant Chief Instructor(s), addition of Redbird AATD.
V	6/21/21	Change of Chief and Assistant Chief Instructors, addition of TAA capability, removal of PA-34 Seneca, updated airport diagram, removal of all references to multi-engine aircraft, addition of TAA tasks in stage II ground course and stage II flight lessons, corrected list of affected pages, minor grammar corrections.
VI	7/21/22	Change Assistant Chief Instructors

NOTE

Enter the revision number, date the revision is to be effective, and a brief summary of revision contents. The manual holder is responsible for maintaining current revisions.

LIST OF AFFECTED PAGES

PAGE #	REVISION	DATE	PAGE #	REVISION	DATE
1	REV III	6/12/17	2	REV III	6/12/17
3	REV VI	7/21/22	4	REV VI	7/21/22
5	REV III	6/12/17	6	REV III	6/12/17
7	REV V	6/21/21	8	REV V	6/21/21
9	REV III	6/12/17	10	REV V	6/21/21
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13	REV III	6/12/17	14	REV III	6/12/17
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45	REV III	6/12/17	46	REV III	6/12/17
47	REV III	6/12/17	48	REV III	6/12/17
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63	REV V	6/21/21	64	REV V	6/21/21
65	REV V	6/21/21	66	REV V	6/21/21
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COMMERCIAL PILOT - 141.55 (E)

PART I

FACILITIES MANUAL

The Facilities Manual is Part 1 of the Training Course Outline and meets the requirements of 14 CFR Part 141.55 (c), subsections 1-5.

PART I

FACILITIES MANUAL

Table of Contents

Bridgewater State University Facility

The Bridgewater State University campus located in Bridgewater, Massachusetts, serves as the primary business address and administrative office for this course.

Satellite Location

The Bridgewater State University campus located in Bridgewater, Massachusetts, serves as the satellite location for conduct of the ground training portion of this course.

Academics

The academics facilities are located on the campus of Bridgewater State University, Harrington Hall, 95 Grove Street, Bridgewater, Massachusetts. Bridgewater State University may elect to conduct the academic ground courses for students at its' flight training facility, located at New Bedford Regional Airport, New Bedford, Massachusetts.

Distance Learning

Bridgewater State University may deliver ground training in accordance with 14 CFR 141.53(d) utilizing internet-based tools described below.

- All courses are delivered using the Blackboard learning management system that requires a unique login to ensure identification/authorization, confidentiality, and access control. Blackboard allows out-of-class communications, attendance tracking, in-class discussion, participation, questions and answers, assignment feedback, and assessment feedback.
- Access to Blackboard is available through (4) different internet browsers.
- Blackboard monitors attendance for record-keeping compliance. Participants will be noted in their paper records to differentiate participants in the distance learning platform.
- A secure internet proctoring resource (Respondus Lockdown Browser) ensures integrity of stage exams, end-of-course and final exams.
- The Principle Operations Inspector (POI) receives a Blackboard account to allow for remote access to each course in accordance with 14 CFR 141.53(d)(2).

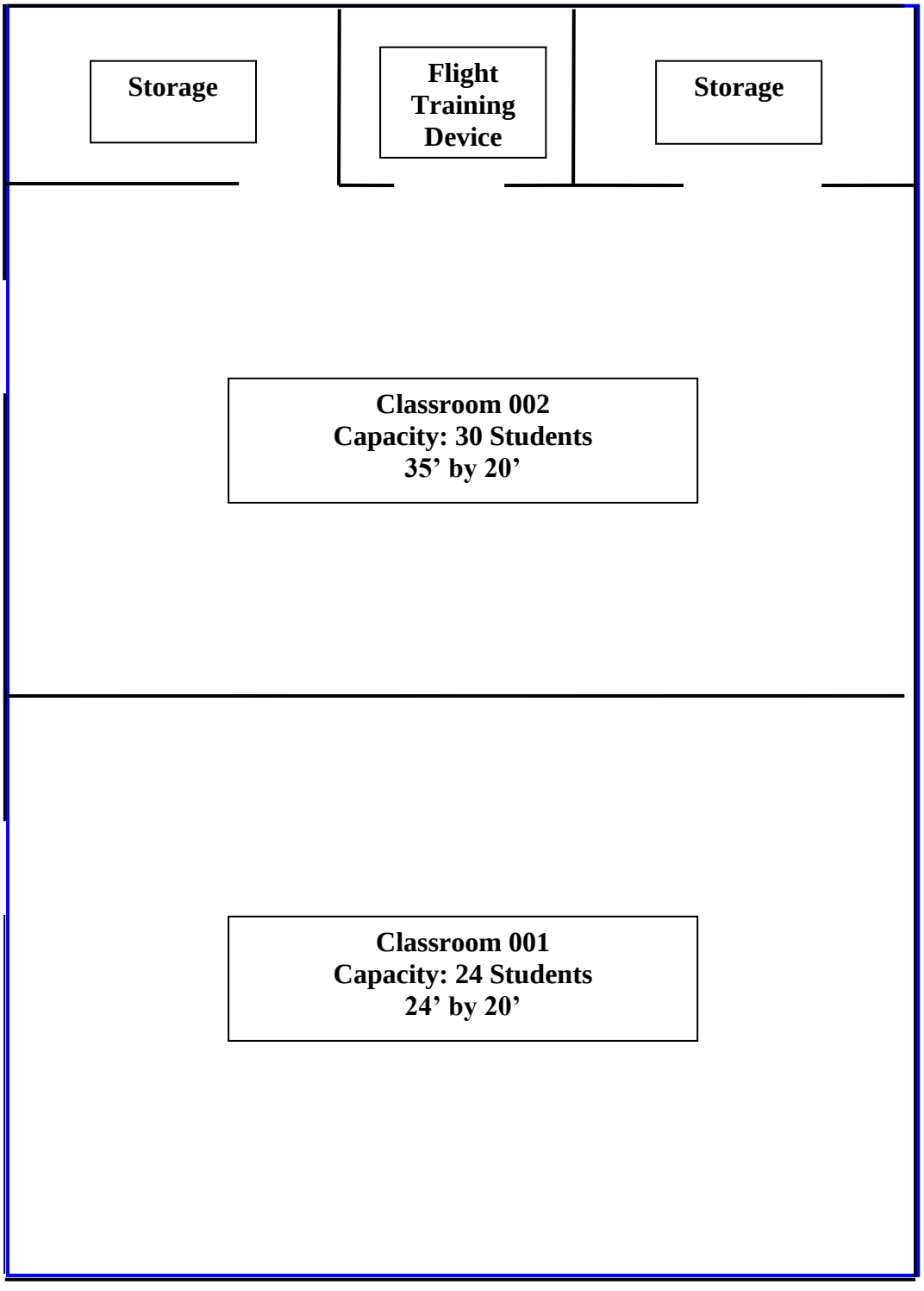
Classrooms

Academic classes will typically be conducted in Harrington Hall in two (2) classrooms located on the ground floor of the building. Classroom 001 measures 24' by 20' and accommodates 24 students. Classroom 002 measures 35' by 20' and accommodates 30 students. Both classrooms contain computerized projection equipment and dry erase boards. Other rooms may be available and assigned by the University as necessary. All classrooms and administrative areas comply with current local building, health and sanitation codes, are enclosed, easily accessible, and provide a clean instructional environment free from outside distractions.

Ground Training Aids

- Overhead projector with Audio/Visual capability
- Computer terminal including internet access
- Video projector with DVD capability
- Ceiling-mounted video projector unit
- Wall-mounted dry-erase board

Bridgewater State University Classroom Diagram



New Bedford (KEWB) Flight Training Center

Bridgewater State University's Flight Training Center, located at the New Bedford Regional Airport at 1852 Shawmut Avenue, North Dartmouth, MA 02747, is the central location for all flight training activity.

Aircraft

Bridgewater State University's flight training program may utilize two (2) aircraft for this course of training:

The Piper PA-28R Arrow is a four-place, single-engine, complex aircraft with dual flight controls. The aircraft is rated in the Normal category and certified for Day/Night VFR/IFR Operations. The aircraft meets the requirements of 14 CFR Part 141.39 and 141.75.

The Cessna 172 is a four-place, single-engine, non-complex aircraft with dual flight controls. The aircraft is rated in the Normal and Utility categories and is certified for Day/Night VFR/IFR Operations. The aircraft meets the requirements of 14 CFR Part 141.39 and 141.75. Multiple Cessna 172 aircraft qualify as Technically Advanced Airplanes per the requirements of 14 CFR Part 61.1 and 61.129(j).

Special equipment required for the course includes a VOR receiver, LOC and GS receivers, Transponder with Mode C, and GPS.

AATDs

Bridgewater State University's flight training program may utilize three (3) advanced aviation training devices for this course of training:

1) Redbird Model LD, SD, FMX.

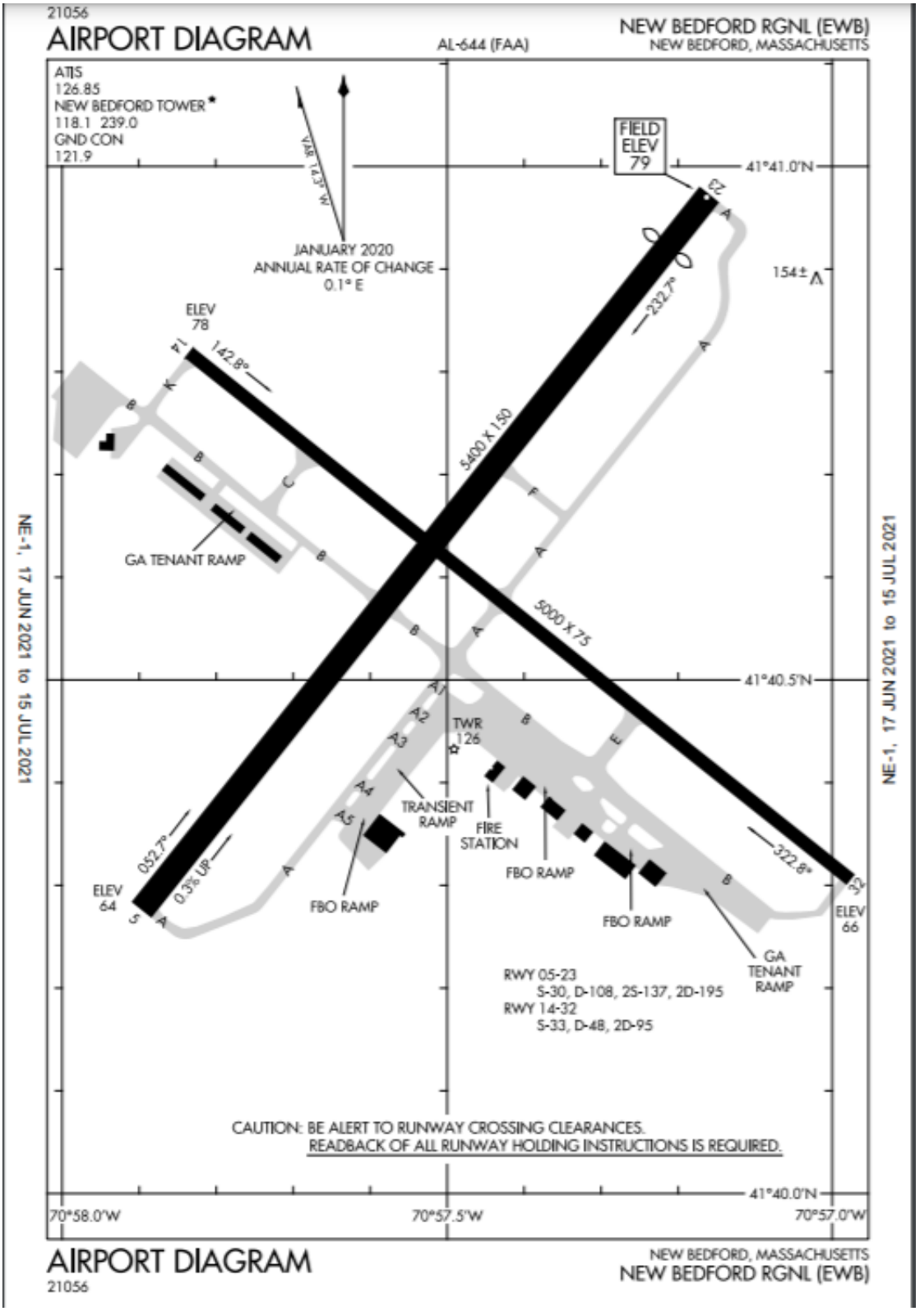
New Bedford Regional Airport

The New Bedford Regional Airport (KEWB) is the main flight training center for the Bridgewater State University aviation program. KEWB contains two (2) hard-surfaced runways and meets the requirements of 14 CFR Part 141.38 for both day and night flight operations. KEWB has an operational control tower that is staffed from 0700 – 2200 local time. The airport has operable ILS, LOC, LOC/BC, and GPS approaches. Maintenance service is available from 0700 – 1700 and on call during evening and night flight operations. Fuel service is available 0700 – 2000 daily, on call at other times.

Training Airports

All airports used for training operations meet the requirements of 14 CFR Part 141.38. Guidance for use of these airports is provided for flight instructors and students in the Bridgewater State University Aviation Operations Manual. The Chief Flight Instructor or his designee may approve the use of any public-use airport listed in the current Chart Supplement.

New Bedford Regional (KEWB) Airport Diagram



Flight Briefing Area

The main flight briefing area is centrally located within the operations building and measures 22' by 33'. It is equipped with briefing tables, chairs, cubicles (equipped with dry erase boards), a computer-based weather information station that provides textual and graphic weather reports and forecasts, and a landline phone connecting to a FSS Briefer. The room can accommodate up to 40 persons. There is a partition between the briefing area and the pilot lounge area (described below) that when removed allows for a 44' by 33' space that can be used for large meetings.

Classroom Area

The classroom area is located at the southeast corner of the facility, and is accessible from either the main facility entrance or from the rear of the classroom on the rearward side of the building. The classroom measures 23' by 34' and accommodates up to 50 persons. The room is equipped with tables, chairs, and dry erase boards.

AATD Room

One room measuring 32' by 22' houses three AATD units and a crosswind trainer.

Administrative Offices

The facility contains multiple administrative offices. Measuring 9' by 11', 9' by '14', 12' by 18', 14' by 24' or 18' by 24', each can accommodate (5) to (10) persons, respectively.

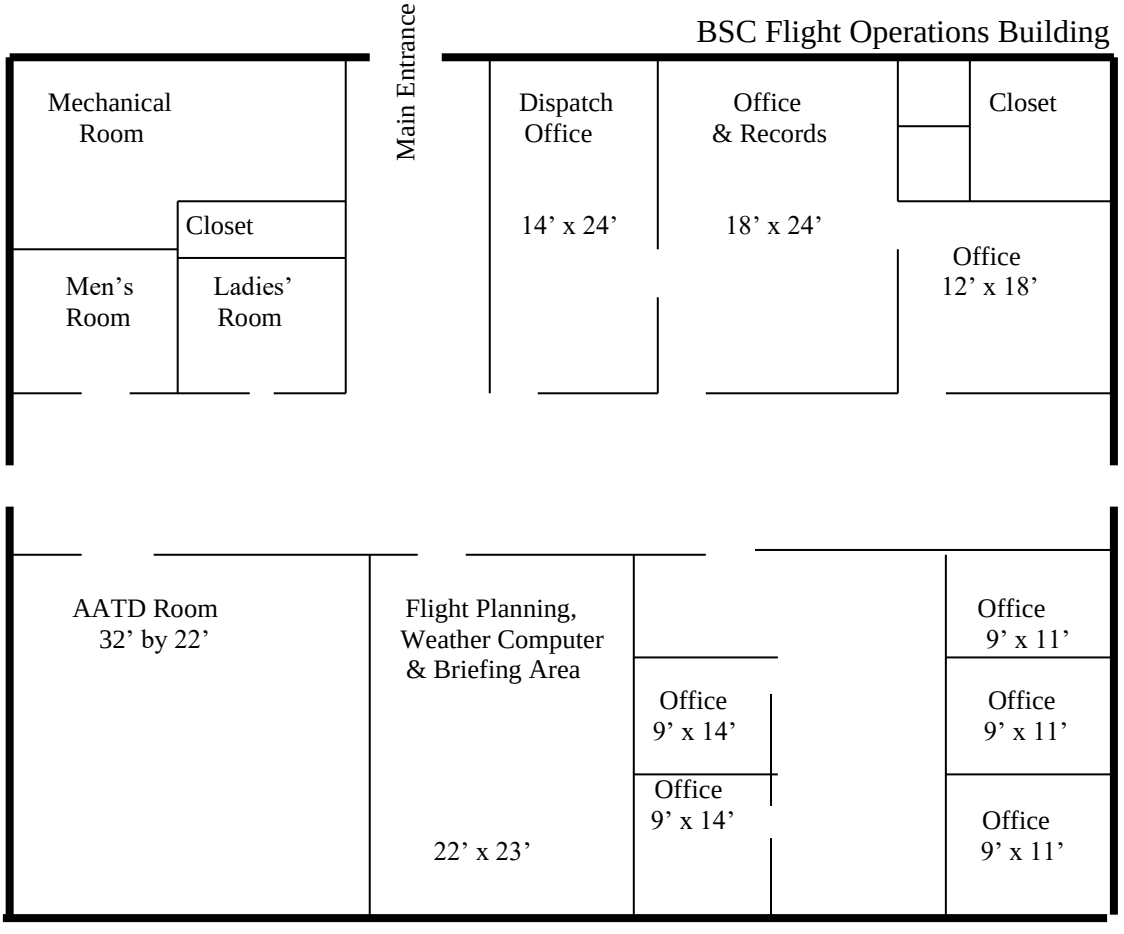
Ground Training Aids

1. Overhead projector with audio/visual capability
2. Computer terminal including internet access
3. Video projector with DVD capability
4. Ceiling-mounted video projector unit
5. Wall-mounted dry-erase board
6. Aeronautical charts, publications, and aircraft components for training purposes only
7. Resource library

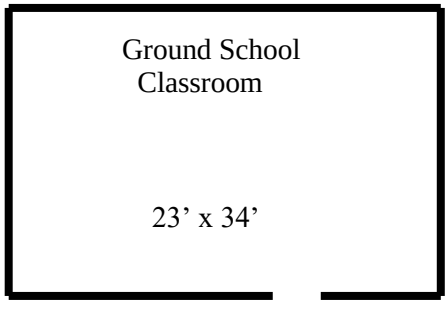
NOTE

All classrooms and administrative areas comply with current local building, health and sanitation codes. All rooms are enclosed and easily accessible, and provide a clean instructional and operational environment free from outside distractions

Flight Training Center Diagram



Not to Scale



PART II

COURSE MANUAL

COMMERCIAL PILOT CERTIFICATION COURSE 141.55(e)

COMMERCIAL TRAINING COURSE SYLLABUS

Table of Contents

PERSONNEL

CHIEF FLIGHT INSTRUCTOR

The Chief Flight Instructor for this course is Timothy Townsend. The Chief Flight Instructor meets the requirements of 14 CFR 141.35(e) and is designated by letter.

CHIEF GROUND INSTRUCTOR

The Chief Ground Instructor for this course is Timothy Townsend. The Chief Ground Instructor meets the requirements of 14 CFR 141.35(e) and is designated by letter.

ASSISTANT CHIEF FLIGHT INSTRUCTOR

The Assistant Chief Flight Instructor for this course is Loren Herren, Jared Rylant and Brandyn Johnson. The Assistant Chief Flight Instructor meets the requirements of 14 CFR 141.36 (d) and is designated by letter.

ASSISTANT CHIEF GROUND INSTRUCTOR

The Assistant Chief Ground Instructor for this course is Loren Herren. The Assistant Chief Ground Instructor meets the requirements of 14 CFR 141.35(e) and is designated by letter.

GROUND INSTRUCTORS

Each Ground Instructor assigned to this course must possess a valid Ground Instructor Certificate or a valid Flight Instructor Certificate with an Airplane rating. Other individuals may give instruction in this course if the Chief Flight Instructor (or if the Chief Flight Instructor is unavailable, the Assistant Chief Ground Instructors) finds that individual qualified to provide instruction. The instruction will be provided under the direct supervision of the Chief or Assistant Chief Instructor who is present at the facility when such instruction is given.

FLIGHT INSTRUCTORS

Each Flight Instructor assigned to this course must possess a valid Flight Instructor-Airplane certificate. Instructors who provide instrument training in the course must possess a Flight Instructor-Instrument certificate. Each CFI approved for training in this course will meet the requirements of 141.79 and be designated in the Part 141 Operations Specifications.

STUDENT INFORMATION

COURSE ENROLLMENT

Eligibility for enrollment in the ground portion of this course requires the student to be enrolled as a student at Bridgewater State University, be at least 18 years of age, and possess an FAA Private Pilot Certificate. Enrollment in the flight portion of this course requires the student to be enrolled as a student at Bridgewater State University, be at least 18 years of age, and possess an FAA Private Pilot Certificate with an Instrument Rating.

COMPLETION STANDARD FOR GRADUATION

To graduate from this course the student must be able to read, speak, write, and understand the English language, and satisfactorily complete the ground and flight training outlined in this syllabus. Through oral and written exams and flight tests, the student must demonstrate the required aeronautical knowledge, flight proficiency, and risk management capability at a level that meets or exceeds requirements specified in the current FAA Commercial Pilot Knowledge Test and Airman Certification Standards.

LESSON DESCRIPTION AND STAGES OF TRAINING

The BSU Commercial Pilot Course (ground) contains two (2) stages and a total of 16 lessons. The flight portion of the course contains two (2) stages and 22 total lessons. All lessons and tasks (including stage checks) are listed within the syllabus and include objectives, tasks, and completion standards.

TESTS AND STAGE CHECKS

The syllabus incorporates stage checks and end-of-course tests in accordance with 14 CFR Part 141.55 (D) and (E). The Chief Instructor is responsible for ensuring that each student accomplishes the required stage checks and end-of-course tests in accordance with Bridgewater State University's approved training course. The Chief Instructor may delegate authority for stage checks and end-of-course tests to the Assistant Chief or Check Instructor.

COURSE INTRODUCTION

The Bridgewater State University Commercial 141.55 (E) course coordinates academic study assignments and flight training designed for pilots learning to operate in a complex aviation environment. New subject matter is introduced and reviewed during ground lessons in multimedia formats, including but not limited to current editions of the following:

1. FAA Commercial Pilot Airman Certification Standards (ACS)
2. FAA Aviation Instructor's Handbook FAA-H-8083-9
3. FAR/AIM
4. FAA Pilot's Handbook of Aeronautical Knowledge FAA-H-8083-25
5. FAA Airplane Flying Handbook FAA-H-8083-3
6. FAA Instrument Flying Handbook FAA-H-8083-15
7. FAA Risk Management Handbook FAA-H-8083-2
8. FAA AC 00-45 Aviation Weather
9. FAA AC 00-6 Aviation Weather Services
10. NACO Instrument Approach Procedure Charts (IAPs)
11. NACO IFR Low En Route Charts
12. NACO Departure Procedures (DPs)
13. NACO Standard Terminal Arrivals (STARs)
14. FAA Chart Supplement (Former Airport/Facility Directory)
15. Bridgewater State University Aviation Emergency Response Plan (ERP)
16. Bridgewater State University Aviation Hazardous Information Tracking (HIT) form
17. Cessna 172R Skyhawk and Piper PA-28R Arrow Pilot's Information Manual (PIM)
18. Cessna 172R Skyhawk and Piper PA-28R Arrow BSU Flight Standards Manual (FSM)
19. Multi-media presentations
20. Instructor/student discussions
21. Stage and end-of-course exams

Whenever possible and practical, ground lessons are completed in ground school just prior to the respective flight lessons outlined in the syllabus. BSU may elect to present all of the ground lessons before the student is introduced to the airplane. Instructors are expected to ensure the student has retained and can apply previously learned material. Prior to each flight, students are expected to demonstrate the associated knowledge and rick management capability required in the lesson completion standards.

In accordance with established FAA educational best practices, this syllabus utilizes the building-block theory of learning, where each item taught must be presented on the basis of previously learned knowledge and skills.

COURSE ELEMENTS

The Bridgewater State University Commercial 141.55 (E) course is designed to be conducted as a combined ground and flight training program, but may be divided into separate components. This course includes the most current FAA pilot certification requirements.

GROUND TRAINING

In accordance with 14 CFR FAR Part 141, ground school training is an integral part of pilot certification courses. The Bridgewater State University ground training syllabus has been designed to meet this requirement in both letter and spirit. This course coordinates the sequence of ground and flight events to maximize effectiveness of the academic knowledge and its application during flight events.

Lessons shall be conducted in the numerical order as listed in the ground and flight training segments of the syllabus. Flexibility for adapting to individual student needs and training situations is occasionally required, but the syllabus lesson sequence may be altered only with the prior approval of the Chief or Assistant Chief Ground Instructor. Any deviation should not disturb the course continuity or objective. Each lesson may be presented in one session or divided into multiple sessions, as necessary.

USING THE GROUND LESSONS

The Bridgewater State University Commercial Pilot Course Ground lessons are best utilized by using all of the individual elements together in an organized approach as described in the syllabus. The syllabus contains cross-references which direct the user to the appropriate study materials for each lesson. Instructors are reminded to review the study assignment for the next lesson with their students.

STAGE CHECKS

Stage exams evaluate the student's understanding of the knowledge areas within a stage of training. Students must successfully complete each stage exam before progressing to the next stage. The Chief Instructor is responsible for the conduct of each stage check, and may designate authority for conducting the stage check to an Assistant Chief or Check Instructor, as necessary. This procedure provides close supervision of training, provides another opinion on the student's progress, and gives the Chief Instructor an opportunity to evaluate training effectiveness. Minimum passing score for any written stage or final exam for the purpose of earning Part 141 credit toward the Commercial Pilot certificate is 80%.

TEXTBOOKS/MULTI-MEDIA PRESENTATIONS

Prior to each ground lesson, students are expected to study the assigned textbook(s) sections or chapters. The texts are the primary source for initial study and review and contain concise explanations of the fundamental concepts and ideas and are organized in a logical building-block sequence. Study of the assigned materials prior to the scheduled lesson will improve student preparation and reduce overall training time.

COMMERCIAL PILOT GROUND COURSE

COURSE OVERVIEW

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 and single-engine land class rating.

COURSE COMPLETION STANDARDS

The student must demonstrate through knowledge tests, flight tests, and show through appropriate records that he/she meets the knowledge, risk management and skill requirements necessary to obtain a Commercial Pilot certificate with an airplane category and single-engine land class rating.

TRAINING SYLLABUS

The Bridgewater State University Commercial 141.55 (E) syllabus meets all curriculum requirements of 14 CFR 141, Appendix D.

TRAINING COURSE

The Ground Training course contains two (2) stages and a total of 15 lessons.

COMMERCIAL PILOT GROUND COURSE SYLLABUS

GROUND TRAINING COURSE OBJECTIVES

The student will obtain and demonstrate knowledge and aeronautical decision-making at a level that meets or exceeds FAA Commercial Pilot Airman Certification Standard and which is required to pass the FAA Commercial Pilot Airman Knowledge test.

LESSON GRADING AND COMPLETION STANDARD

Each ground lesson is graded across three (3) elements; Knowledge (defined by the applicant's ability to demonstrate understanding of the task elements), Risk Management (defined by the applicant's ability to identify, assess and mitigate risks associated with the task) and Skill (defined by the applicant's ability to apply the skill necessary to achieve the listed objective).

GROUND TRAINING COMPLETION STANDARDS

The student must demonstrate through written, oral and practical examination that s/he has obtained the knowledge (defined by the applicant's ability to demonstrate understanding of the task elements), risk management ability (defined by the applicant's ability to identify, assess and mitigate risks associated with the task) and skill (defined by the applicant's demonstrated ability to apply the skill necessary to achieve the listed objective) at a level that meets or exceeds FAA Commercial Pilot Airman Certification Standards and which is required to pass the FAA Commercial Pilot Airmen Knowledge test.

COMMERCIAL PILOT GROUND COURSE
TIME ALLOCATION TABLE

STAGE I

LESSON	SUBJECT	HOURS Training	Exam
I	Pilot Qualifications	2.0	
II	Airworthiness Requirements	1.0	
III	National Airspace System	1.0	
IV	Weather Information	3.0	
V	Cross-Country Flight Planning	2.0	
VI	Human Factors and Night Operations	2.0	
VII	Federal Aviation Regulations	2.0	
VIII	Stage I Exam		2.0
Stage I Totals		13.0	2.0

STAGE II

LESSON	SUBJECT	HOURS Training	Exam
IX	Aircraft Systems	6.0	
X	Advanced Aerodynamics	2.0	
XI	Performance	2.0	
XII	Weight and Balance	1.0	
XIII	Maneuvers and Procedures	2.0	
XIV	Instrument Procedures	1.0	
XV	Stage II Exam		2.0
XVI	Final Exam		2.0
Stage II Totals		14.0	4.0
Course Totals		27.0	6.0

STAGE I

STAGE I OBJECTIVES

During this stage the student will obtain and demonstrate knowledge and risk management ability associated with commercial pilot qualifications, human factors and decision-making, principles of flight including the use, capabilities and limitations of flight instruments and navigation systems, use of publications for flight planning and execution, and the air traffic control system and regulatory requirements related to commercial operations.

STAGE I COMPLETION STANDARDS

The stage is complete when the student completes the Stage I written exam with a minimum passing score of 80%.

STAGE I
GROUND LESSON 1
PILOT QUALIFICATIONS

LESSON REFERENCES
14 CFR Parts 61, 67, 91, Pilot's Handbook of Aeronautical Knowledge, Risk Management Handbook, Aviation Instructor's Handbook Chapters 1 – 3, BSU Aviation Hazardous Incident Tracking (HIT) form, BSU Aviation Emergency Response Plan (ERP)

LESSON SEQUENCE
1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE
Students will increase their knowledge, risk management and proficiency associated with operating as pilot in command (PIC) as a commercial pilot.

CONTENT
___ Pilot Qualifications
___ Aeronautical Decision Making
___ Risk Assessment and Management
___ Pilot Fitness for Flight
___ Single Pilot Resource Management
___ BSU Aviation Hazardous Incident Tracking (HIT) Form Applications
___ BSU Emergency Response Plan

COMPLETION STANDARDS
Through in-class oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with operating as pilot in command (PIC) as a commercial pilot.

STUDY ASSIGNMENT
14 CFR Part 23, 14 CFR 91.213, AC 91-67, Cessna 172 Information Manual, BSU C-172R FSM, Pilot's Handbook of Aeronautical Knowledge, Ch. 3

STAGE I
GROUND LESSON 2
AIRWORTHINESS REQUIREMENTS

LESSON REFERENCES

14 CFR Part 23, 14 CFR 91.213, AC 91-67, Cessna 172 Information Manual, BSU C-172R FSM, Pilot's Handbook of Aeronautical Knowledge, Ch. 3

LESSON SEQUENCE

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE

Students will increase their knowledge, risk management and proficiency associated with airworthiness requirements, including aircraft certificates and records.

CONTENT

___ 14 CFR Part 23, Normal, Utility, Aerobatic and Commuter Category Aircraft
___ Aircraft Preflight Inspection
___ Certificate Type, Location, Expiration Date
___ Airworthiness Directives
___ 14 CFR 91.409 Required Inspections and Documentation
___ 14 CFR 91.213 Inoperative Instrument and Equipment
___ 14 CFR Part 43 Maintenance, Preventive Maintenance, Rebuilding, and Alteration
___ Minimum Equipment List (MEL), Kinds of Operation Equipment List (KOEL)
___ Aircraft Maintenance Logbooks
___ Pilot-performed Preventive Maintenance
___ Special Flight Permit
___ Aircraft Security Concerns

COMPLETION STANDARDS

Through in-class oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with airworthiness requirements, including aircraft certificates and records.

STUDY ASSIGNMENT

Pilot's Handbook of Aeronautical Knowledge, 14 CFR Parts 71, 91, 93, Risk Management Handbook, Navigation Charts, AIM

STAGE I
GROUND LESSON 3
NATIONAL AIRSPACE SYSTEM

LESSON REFERENCES
Pilot's Handbook of Aeronautical Knowledge, 14 CFR Parts 71, 91, 93, Risk Management Handbook, Navigation Charts, AIM

LESSON SEQUENCE
1. Lesson Introduction
2. Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE
Students will increase their knowledge, risk management and proficiency associated with the National Airspace System (NAS), operating under VFR as a commercial pilot, airports and sources of flight planning information.

CONTENT
Airports
___ Rwy and Txwy Mrkgs and Lighting
___ Lighting Systems
___ Runway Incursion Avoidance
___ Collision Avoidance
___ Situational Awareness

National Airspace System
___ Airspace, Airspace Classes, Associated Requirements and Limitations
___ Charting Symbology
___ Special Use Airspace, (SUA), Special Flight Rules Areas, Temporary Flight Restrictions (TFR), and Other Airspace Areas
___ Emergency Air Traffic Rules

Sources of Flight Information
___ Chart Supplement
___ Federal Aviation Regulations
___ Aeronautical Information Manual
___ Notices to Airmen (NOTAMS)
___ Advisory Circulars

COMPLETION STANDARDS
Through in-class oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with airports, airspace and flight information.

STUDY ASSIGNMENT
14 CFR Part 91, PHAK, AC-00-6, AC-00-45, AC-00-54, AIM

STAGE I
GROUND LESSON 4
WEATHER INFORMATION

LESSON REFERENCES
14 CFR Part 91, PHAK, AC-00-6, AC-00-45, AC-00-54, AIM

LESSON SEQUENCE
1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE
Students will increase their knowledge, risk management and proficiency associated with obtaining, interpreting, and applying weather information for flight under VFR.

CONTENT
Weather and Weather Hazards
___ Atmospheric Composition and Stability
___ Temperature, Moisture, Precipitation
___ Clouds
___ Weather System Formation, Air Masses and Fronts
___ Thunderstorms and Microbursts
___ Wind Shear / Avoidance Procedures
___ Turbulence
___ Icing and Freezing Level Information
___ Hydroplaning

Weather Reports and Forecasts
___ METAR
___ AWOS, ASOS, ATIS
___ PIREPS
___ Terminal Aerodrome Forecast (TAF)
___ Graphic Forecast for Aviation (GFA)
___ Winds and Temps Aloft Forecast (FD)
___ Severe Weather Reports and Forecasts
___ WA/WS/WST
___ Surface Analysis Chart
___ Weather Depiction Chart
___ Satellite Weather
___ Low-Level Significant Weather Prog
___ Convective Outlook Chart
___ Volcanic Ash Forecast and Dispersion Chart

Weather Information
___ Preflight and In-Flight Weather Sources
___ Weather Radar Services
___ Automated Weather Reporting Systems
___ Personal Weather Minimums

COMPLETION STANDARDS
Through in-class oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with weather and sources of weather information.

STUDY ASSIGNMENT
14 CFR Part 91, Risk Management Handbook, Navigation Charts, Chart Supplement, AIM, NOTAMs, Pilot's Handbook of Aeronautical Knowledge, C172R FSM

STAGE I
GROUND LESSON 5
CROSS-COUNTRY FLIGHT PLANNING

LESSON REFERENCES
14 CFR Part 91, Risk Management Handbook, Navigation Charts, Chart Supplement, AIM, NOTAMs, Pilot's Handbook of Aeronautical Knowledge, C172R FSM

RECOMMENDED SEQUENCE
1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE
Students will increase their knowledge, risk management and proficiency associated with cross-country flights, flight planning and risk analysis.

CONTENT
___ Pilotage and Dead Reckoning
___ Route Planning, Including Airspace, Altitude, Navigation Aid Availability, Fuel,
___ Pilot, Aircraft, Environmental, External Pressures
___ Complete a Flight Planning Scenario Including Flight Log, and Risk Analysis

COMPLETION STANDARDS
Through in-class oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with cross-country flights, flight planning and risk analysis.

STUDY ASSIGNMENT
14 CFR Part 91, Risk Management Handbook, AIM, Pilot's Handbook of Aeronautical Knowledge, Airplane Flying Handbook, C172R FSM

STAGE I
GROUND LESSON 6
HUMAN FACTORS AND NIGHT OPERATIONS

LESSON REFERENCES
14 CFR Part 67, Part 91, Risk Management Handbook, AIM, Pilot's Handbook of Aeronautical Knowledge, Airplane Flying Handbook, C172R FSM

LESSON SEQUENCE
1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE
Students will increase their knowledge, risk management and proficiency associated with personal health, flight physiology, aeromedical and human factors related to flight.

CONTENT
Aviation Physiology
___ 14 CFR Part 67 Medical Standards and Certification
___ Hazardous Attitudes
___ Optical Illusions
___ Stress and Fatigue
___ Dehydration and Nutrition
___ Hypothermia
___ Spatial Disorientation and Motion Sickness
___ Carbon Monoxide Poisoning
___ Hypoxia and Hyperventilation
___ Nitrogen/Decompression Sickness
___ Alcohol & Drugs; FARs and Performance
___ High Altitude Operations

Night Operations
___ Night Equipment
___ Night Ground and Flight Operations

COMPLETION STANDARDS
Through in-class oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with personal health, flight physiology, aeromedical and human factors related to flight.

STUDY ASSIGNMENT
14 CFR Parts 1, 23, 61, 91, 119, 125, 121, 135, NTSB 830, AIM

STAGE I
GROUND LESSON 7
FEDERAL AVIATION REGULATIONS

LESSON REFERENCES
14 CFR Parts 23, 61, 91, 119, 125, 121, 135, NTSB 830, AIM

LESSON SEQUENCE
1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE:
Students will increase their knowledge, risk management and proficiency associated with Federal Aviation Regulations and NTSB 830 related to commercial pilot operations.

CONTENT
___ 14 CFR Part 1 Definitions and Abbreviations
___ 14 CFR Part 23 Related to Aircraft Performance Requirements
___ 14 CFR Part 61 Related to Additional Pilot Privileges and Ratings
___ 14 CFR Part 91
___ 14 CFR Part 119 Air Carriers and Commercial Operators
___ 14 CFR Part 121 Air Carrier Certification Process
___ 14 CFR Part 135 Commuter and On-Demand Operations
___ NTSB 830
___ AIM

COMPLETION STANDARDS
Through in-class oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with applicable parts of 14 CFR, NTSB 830, and AIM

STUDY ASSIGNMENT
As necessary in preparation for the Stage I Exam.

STAGE I
GROUND LESSON 8
STAGE I EXAM

LESSON REFERENCES
All texts and references utilized during lessons 1 – 7.

LESSON SEQUENCE
1. Testing
2. Critique

LESSON OBJECTIVE
Students will demonstrate the knowledge, risk management and proficiency associated with lesson content presented during lessons 1 – 7.

CONTENT
___ Pilot Qualifications
___ Airworthiness Requirements
___ National Airspace System
___ Weather Information
___ Cross-Country Flight Planning
___ Human Factors and Night Operations
___ Federal Aviation Regulations

COMPLETION STANDARDS
This lesson and stage are complete, and the student eligible to progress to the next stage of the course, when the student has completed the Stage I Exam with a minimum score of 80%.

STUDY ASSIGNMENT
Pilot's Handbook of Aeronautical Knowledge, Ch. 6, Airplane Flying Handbook, Ch. 11.

STAGE II

STAGE II OBJECTIVES

During this stage the student will increase knowledge of high performance and high altitude, aerodynamics, aircraft performance, weight and balance, complex aircraft systems, Commercial pilot-level maneuvers and procedures, and review instrument procedures.

STAGE II COMPLETION STANDARDS

This stage is complete and the student eligible to take the Course Final Exam when the student has completed the Stage II written exam with a minimum passing score of 80%.

STAGE II
GROUND LESSON 9
AIRCRAFT SYSTEMS

LESSON REFERENCES
Risk Management Handbook, Airplane Flying Handbook, PHAK, C172R Information Manual, Garmin G3X Touch, GFC 500 and G5 Operating Manuals

LESSON SEQUENCE
1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE
Students will increase their knowledge, risk management and proficiency associated with aircraft systems and high altitude operational effects related to commercial pilot operations.

CONTENT
___ Powerplant, Including Injected v. Carburated Systems, Turbo/Super-Charging, and High Altitude Performance
___ Propeller, Including Constant-Speed Propeller Design and Operation
___ Fuel System, Including Fuel Management
___ Oil and Hydraulic Systems
___ EGT and CHT Gauges and Use
___ Electrical
___ Avionics (Conventional and Glass
___ Cockpit PFD/MFD power-up & preflight check
___ Autopilot pre-flight check
___ Flight, comm. and nav mode selection
___ Flight plan entry and changes (departure & en route)
___ PFD/MFD failure, reversion modes, use of standby instruments
___ Autopilot failure
___ Turns, Climbs, Descents & Altitude Capture using AP
___ Course Intercepting & Trkg
___ Holding (manual & AP-coupled)
___ Instrument approach (manual)
___ Instrument approach (AP-coupled)
___ Missed approach (manual)
___ Missed approach (AP-coupled)
___ Piot-Static, Vacuum, and Associated Instruments
___ Landing Gear, Including Fixed and Retractable, Warning Systems
___ Environmental, Including Oxygen Systems, Storage and Servicing, Cabin Pressurization, Warning Systems and Emergencies
___ Anti-Ice and De-Ice Systems, Including Engine, Propeller, Windshield, Airfoils(s)

COMPLETION STANDARDS
Through in-class oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated
with single-engine aircraft systems.

STUDY ASSIGNMENT
Pilot's Handbook of Aeronautical Knowledge, Airplane Flying Handbook

STAGE II
GROUND LESSON 10
ADVANCED AERODYNAMICS

LESSON REFERENCES
Pilot's Handbook of Aeronautical Knowledge, Airplane Flying Handbook

LESSON SEQUENCE
1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE
Students will increase their knowledge, risk management and proficiency associated with advanced aerodynamics and their application in commercial flight operations.

CONTENT
___ High Altitude /High Speed Aerodynamics
___ Pilot Control of Lift
___ Leading & Trailing Edge Devices for Creating Lift and Drag
___ Weight and Load Factor
___ V_G Diagram

Stability
___ Static
___ Dynamic
___ Lateral
___ Longitudinal
___ Directional

Aerodynamics and Flight Maneuvers
___ Climbs
___ Glides
___ Stall and Spin Awareness
___ Spin Recovery

COMPLETION STANDARDS
Through in-class oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with aerodynamics, stability and applications in various flight maneuvers.

STUDY ASSIGNMENT
Pilot's Handbook of Aeronautical Knowledge, Airplane Flying Handbook, BSU FSM(s) Appropriate Pilot Information Manual(s)

STAGE II
GROUND LESSON 11
PERFORMANCE

LESSON REFERENCES
Pilot's Handbook of Aeronautical Knowledge, Airplane Flying Handbook, BSU FSM(s) Appropriate Pilot Information Manual(s)

LESSON SEQUENCE
1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE
Students will increase their knowledge, risk management and proficiency associated with airplane performance capability and limitations pertinent to commercial flight operations.

CONTENT
Factors Affecting Performance
___ Weight and Loading
___ Environmental Conditions
___ Runway Conditions

Calculating Performance
___ Performance Charts
___ Takeoff and Landing Distance
___ Accelerate – Stop Distance
___ Climb and Cruise Performance
___ Descent Planning Charts
___ Hydroplaning
___ Glide Distance

COMPLETION STANDARDS
Through in-class oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with single-engine aircraft performance.

STUDY ASSIGNMENT
Pilot's Handbook of Aeronautical Knowledge, Airplane Flying Handbook, BSU FSM(s) Appropriate Pilot Information Manual(s)

STAGE II
GROUND LESSON 12
WEIGHT AND BALANCE

LESSON REFERENCES
Pilot's Handbook of Aeronautical Knowledge, Airplane Flying Handbook, BSU FSM(s) Appropriate Pilot Information Manual(s)

LESSON SEQUENCE
1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE
Students will increase their knowledge, risk management and proficiency associated with weight and balance scenarios related to commercial flight operations.

CONTENT
___ Weight and Balance Limitations
___ CG Limitations
___ Effects of Exceeding Limitations
___ Weight and Balance Documents
___ Computations
___ Condition Checks
___ Computational Method
___ Graphical Method
___ Tabular Method
___ Weight Shift Calculations

COMPLETION STANDARDS
Through in-class oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with aircraft weight and balance.

STUDY ASSIGNMENT
Pilot's Handbook of Aeronautical Knowledge, Airplane Flying Handbook, BSU FSM(s) Appropriate Pilot Information Manual(s), Commercial Pilot ACS

STAGE II
GROUND LESSON 13
MANEUVERS AND PROCEDURES

LESSON REFERENCES
Pilot's Handbook of Aeronautical Knowledge, Airplane Flying Handbook, BSU FSM(s) Appropriate Pilot Information Manual(s), Commercial Pilot ACS

LESSON SEQUENCE
1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE
Students will increase their knowledge, risk management and proficiency associated with commercial-level aircraft maneuvers and procedures.

CONTENT
Airman Certification Standards
___ Mastery of the Aircraft
___ Importance of Visual Scanning
___ Demonstration of Sound Judgment and Aeronautical Decision Making

Normal Maneuvers and Procedures
___ Short-Field Takeoff
___ Soft-Field Takeoff
___ Short-Field Approach and Landing
___ Soft-Field Approach and Landing
___ Power-Off Accuracy Approach and Landing
___ Eights-On-Pylons
___ Chandelles
___ Lazy Eights
___ Steep Turns
___ Steep Spirals

Emergency Procedures
___ Emergency Equip. & Survival Gear
___ Emergency Approach and Landing
___ Impossible Turn
___ Emergency Descent
___ In-Flight Fire
___ Partial Power Loss
___ Comm/Nav Equipment Failure

COMPLETION STANDARDS
Through in-class oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with commercial maneuvers and procedures.

STUDY ASSIGNMENT
Instrument Flying Handbook, Instrument Approach Charts, appropriate BSU FSM(s)

STAGE II
GROUND LESSON 14
INSTRUMENT PROCEDURES

LESSON REFERENCES
Instrument Flying Handbook, Instrument Approach Charts, appropriate BSU FSM(s)

LESSON SEQUENCE
1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE
Students will increase their knowledge, risk management and proficiency associated with instrument approach procedures in complex aircraft and related to commercial flight operations.

CONTENT
___ Instrument Approach Charts
___ Instrument Approach Procedures
___ Executing Instrument Approaches in Complex SE Aircraft
___ Executing Instrument Approaches in TAA

COMPLETION STANDARDS
Through in-class oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with commercial instrument procedures in single-engine aircraft.

STUDY ASSIGNMENT
Texts as necessary in preparation for the Stage II Exam.

STAGE II
GROUND LESSON 15
STAGE II EXAM

LESSON REFERENCES
All texts referenced in presenting lessons 9 – 14.

RECOMMENDED SEQUENCE
1. Testing
2. Critique

LESSON OBJECTIVE
The student will demonstrate understanding of the concepts presented during lessons 9-14.

CONTENT
___ Aircraft Systems
___ Advanced Aerodynamics
___ Performance
___ Weight and Balance
___ Maneuvers and Procedures
___ Instrument Procedures

COMPLETION STANDARDS
This lesson and stage are complete, and the student eligible to progress to the course final exam, when the student has completed the Stage II Exam with a minimum score of 80%.

STUDY ASSIGNMENT
As necessary in preparation for the Course Final Exam.

STAGE II
GROUND LESSON 16
COURSE FINAL EXAM

LESSON REFERENCES
All texts referenced in presenting lessons 1 – 14.

LESSON SEQUENCE
1. Testing
2. Critique

LESSON OBJECTIVE
The student will demonstrate his/her understanding of the concepts presented during lessons 1 – 14.

CONTENT
___ All material presented in lessons 1 - 14.

COMPLETION STANDARDS
The course is complete, and the student eligible to progress to the FAA Commercial Pilot Airman Knowledge Test, when the student has completed the Course Final Exam with a minimum score of 80%.

STUDY ASSIGNMENT
As necessary in preparation for the FAA Commercial Pilot Knowledge Test.

COMMERCIAL PILOT FLIGHT TRAINING SYLLABUS

COURSE OBJECTIVES
Students will obtain the necessary aeronautical skill and experience necessary to meet the requirements for an FAA Commercial Pilot certificate with an Airplane category single land class rating.

COMPLETION STANDARDS
Students must demonstrate through knowledge and flight tests the necessary aeronautical knowledge and skill required to obtain an FAA Commercial Pilot Certificate with an Airplane category single land class rating.

STAGE I OBJECTIVES
Students will increase their aeronautical knowledge, understanding and ability to safely and accurately demonstrate proficiency with VFR cross-country procedures during local and cross-country day and night operations.

STAGE I COMPLETION STANDARDS
The stage will be complete when students demonstrate safe, complete, and competent planning and execution of VFR day and night local and cross-country flight operations using pilotage, dead reckoning, navigation systems and radar services at a level that meets current FAA Commercial Pilot Airman Certification Standard.

STAGE II OBJECTIVES
During this stage, students will be introduced to complex/technically advanced aircraft operations and commercial maneuvers. Emphasis is placed on safe and accurate performance of required maneuvers and procedures.

STAGE II COMPLETION STANDARDS
The stage will be complete when students demonstrate safe and competent operation of the complex/technically advanced aircraft during all required flight maneuvers at a level that exceeds current FAA Commercial Pilot Airman Certification Standard.

COMMERCIAL PILOT FLIGHT COURSE
TIME ALLOCATION TABLE

STAGE	LESSON #	SCHEDULED TIME	DUAL A/C	SOLO	BRIEFING	INSTRUMENT	STAGE ORAL	STAGE FLIGHT	EQUIPMENT TYPE
				STAGE I					
I	1	2.0	2.0DXC		0.5	As Req.			ASEL
I	2	2.0	2.0N		0.5				ASEL
I	3	2.0		2.0N					ASEL
I	4	2.0		2.0N					ASEL
I	5	2.0	2.5NXC						ASEL
I	6	4.0		2.0NXC					ASEL
I	7	2.0	2.0		0.5	As Req.			ASEL
I	8	2.5		4.0DXC	0.5				ASEL
I	9	2.0	2.0		0.5	As Req.			ASEL
I	10	2.0	2.0		0.5	As Req.			ASEL
I	**11**	**2.0**	**2.0**		**.5**	**As Req.**	**2.0**	**2.0**	ASEL
	Totals	**24.5**	**14.5**	**10.0**	**3.5**		**2.0**	**2.0**	
				STAGE II					
II	12	2.0			0.5	As Req.			AATD/ASEL
II	13	2.0			0.5	As Req.			AATD/ASEL
II	14	2.0	2.0		0.5	As Req.			TAA or Complex
II	15	2.0	2.0		0.5	As Req.			TAA or Complex
II	16	2.0		2.0					TAA or Complex
II	17	2.0	2.0XC		0.5				TAA or Complex
II	18	2.0		2.0 XC					TAA or Complex
II	19	2.0		2.0 XC					TAA or Complex
II	20	2.0	2.0		0.5	As Req.			TAA or Complex
II	21	2.0	2.0		0.5	As Req.			TAA or Complex
II	**22**	**2.5**	**2.5**		**.5**	**As Req.**	**2.0**	**2.0**	TAA or Complex
Stage Total		**22.5**	**12.5**	**6.0**	**4.0**		**2.0**	**2.0**	
Course Total		**49.0**	**27.0**	**16.0**	**7.5**		**4.0**	**4.0**	

NOTE

Students must meet minimum course total flight and briefing time requirements.

NOTE

Students must obtain 5.0 hours of instrument training before completing the course.

STAGE I

STAGE I OBJECTIVES

Students will increase their knowledge, understanding and ability to safely and accurately demonstrate proficiency with VFR cross-country procedures during local and cross-country day and night flight operations in a non-complex/TAA aircraft.

STAGE I COMPLETION STANDARDS

The stage will be complete when students demonstrate safe, complete and competent planning and execution of VFR day and night local and cross country flight operations using pilotage, dead reckoning, navigation systems and radar services at a level that meets current FAA Commercial Pilot (ASEL) Airman Certification Standards.

STAGE I
FLIGHT LESSON 1
DUAL CROSS COUNTRY (ASE)

LESSON SEQUENCE
1. Preflight Briefing
2. Flight
3. Post-flight Briefing and Evaluation

LESSON OBJECTIVE
The student will review VFR cross country, instrument, and emergency procedures. The flight will be at least 2.0 hours, and travel a straight-line distance of at least 100 nautical miles from the original departure point.
NOTE: *Conduct required IR training only AFTER the final landing of the VFR cross-country portion of the lesson.*

CONTENT

INTRODUCTION

Preflight Briefing
___ Risk Assessment and Mitigation
___ Cross-Country Flight Planning
___ Performance and Limitations
___ National Airspace System
___ Weather Information
___ Aircraft Systems
___ Single Pilot Resource Management
___ Aeronautical Decision Making
___ Commercial Pilot Privileges and Limitations

Flight
___ Risk Assessment and Mitigation
___ Normal and/or Crswd Takeoff/Climb
___ Steep Turns
___ Maneuvering During Slow Flight
___ Radio Comms. & ATC Light Signals
___ Radio Navigation and Radar Services
___ Pilotage and Dead Reckoning
___ Diversion
___ Lost Procedures
___ Power Settings and Fuel Management
___ Systems and Equipment Malfunctions
___ Low Fuel Supply
___ Adverse Weather
___ Engine and Airframe Icing
___ Emergency Descent
___ Emergency Appch & Ldg (Sim)
___ Go-Around/Rejected Landing
___ Normal and/or X-wind Appch & Ldg.
___ Emergency Equip. and Survival Gear
___ Wake Turbulence Avoidance
___ Traffic Pattern Operations
___ Airport and Rwy Mrkgs and Lghtg

Instrument Procedures (IR)
___ Basic Instrument Maneuvers

Postflight
___ Postflight Procedures

COMPLETION STANDARDS
The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

DATE_____ **GRADE (C/INC)**_____

_____
STUDENT NAME / SIGNATURE

_____
CFI NAME / SIGNATURE / CFI # & EXP.

_____ _____
ROUTE OF FLIGHT **X-COUNTRY**

LANDINGS & LOCATION_____

DUAL ____ **HOOD/ACTUAL** ____ **BRIEF** ___

STAGE I
FLIGHT LESSON 2
DUAL LOCAL/NIGHT(ASE)

LESSON SEQUENCE

1. Preflight Briefing
2. Flight
3. Post-flight Briefing and Evaluation

LESSON OBJECTIVE

The student will review night VFR flight operations including emergency procedures. in preparation for the first night solo.

CONTENT

REVIEW

___ Risk Assessment and Mitigation
___ Normal and/or Crswd Takeoff / Climb
___ Normal and/or Crswd Approach/Lndg
___ Go-Around/Rejected Landing
___ Steep Turns
___ Maneuvering During Slow Flight
___ Systems and Equipment Malfunctions

INTRODUCTION

___ Aeromedical Factors
___ Personal Equipment
___ Risk Assessment and Mitigation
___ Night Preflight
___ Aircraft Lighting and Equipment
___ Engine Start/Taxi/Before Takeoff Check
___ Night Scanning/Collision Avoidance
___ CFIT Avoidance
___ Power-On Stall (Imminent)
___ Power-Off Stall (Imminent)
___ Lost Procedures
___ Engine Failure (Simulated)

Postflight

___ Postflight Procedures

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds current FAA Commercial Pilot Airman Certification Standards.

DATE_____ GRADE (C/INC)_____

_____
STUDENT NAME / SIGNATURE

_____
CFI NAME / SIGNATURE / CFI # & EXP.

_____
ROUTE OF FLIGHT

NIGHT LANDINGS & LOCATION_____

DUAL _____ NIGHT_____ BRIEF ____

STAGE I
FLIGHT LESSON 3
SOLO NIGHT (ASE)

LESSON SEQUENCE

1. Preflight Briefing
2. Flight
3. Post-flight Briefing and Evaluation

LESSON OBJECTIVE

The student will review VFR night flight procedures, *obtain 1.5 hours solo night experience and conduct no fewer than five (5) full-stop night landings at a controlled airport.*

CONTENT
REVIEW

___ Risk Assessment and Mitigation
___ Aeromedical Factors
___ Personal Equipment
___ Night Preflight
___ Start, Taxi, Before Takeoff Check
___ Nrml and/or Crswd Takeoff and Climb
___ Collision Avoidance
___ Steep Turns
___ Power-On Stall (Imminent Only)
___ Power-Off Stall (Imminent Only)
___ Lost Procedures
___ Adverse Weather
___ Low Fuel Supply
___ Go-Around/Rejected Landing
___ Normal and/or Crswd Appch & Ldng

Postflight

___ Postflight Procedures

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

DATE_____ **GRADE (C/INC)_____**

_____
STUDENT NAME / SIGNATURE

_____
CFI NAME / SIGNATURE / CFI # & EXP.

_____
ROUTE OF FLIGHT

NIGHT LANDINGS & LOCATION_____

NIGHT SOLO_____ **BRIEF _____**

STAGE I
FLIGHT LESSON 4
SOLO NIGHT(ASE)

LESSON SEQUENCE

1. Preflight Briefing
2. Flight
3. Post-flight Briefing and Evaluation

LESSON OBJECTIVE
The student will review VFR night flight procedures, obtain 1.5 hours solo night experience and conduct no fewer than five (5) full-stop night landings at a controlled airport. *At lesson completion the student will have obtained no less than 3.0 hours solo night flight experience.*

CONTENT

REVIEW
___ Risk Assessment and Mitigation
___ Aeromedical Factors
___ Personal Equipment
___ Night Preflight
___ Start, Taxi, Before Takeoff Check
___ Nrml and/or Crswd Takeoff and Climb
___ Collision Avoidance
___ Steep Turns
___ Power-On Stall (Imminent Only)
___ Power-Off Stall (Imminent Only)
___ Lost Procedures
___ Adverse Weather
___ Low Fuel Supply
___ Go-Around/Rejected Landing
___ Normal and/or Crswd Appch & Ldng

Postflight
___ Postflight Procedures

COMPLETION STANDARDS
The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.
At lesson completion the student will have obtained no less than 3.0 hours solo night flight experience.

DATE_____ **GRADE (C/INC)**_____

_____
STUDENT NAME / SIGNATURE

_____
CFI NAME / SIGNATURE / CFI # & EXP.

_____
ROUTE OF FLIGHT

NIGHT LANDINGS & LOCATION_____

NIGHT SOLO____ **BRIEF** ___

STAGE I
FLIGHT LESSON 5
DUAL NIGHT CROSS-COUNTRY (ASE)

LESSON SEQUENCE
1. Preflight Briefing
2. Flight
3. Post-flight Briefing and Evaluation

LESSON OBJECTIVE
The student will conduct a night VFR cross country flight of at least 2.0 hours including a straight-line distance of at least 100 nautical miles from the original departure point.
NOTE: *Conduct required IR training only after the final landing of the VR portion of the lesson.*

CONTENT

INTRODUCTION
Preflight Discussion
___ Risk Assessment and Mitigation
___ Cross-Country Flight Planning
___ Performance and Limitations
___ National Airspace System
___ Weather Information
___ Aircraft Systems
___ Single Pilot Resource Management
___ Aeronautical Decision Making

Flight
___ Risk Assessment and Mitigation
___ Normal and/or Crswd Takeoff/Climb
___ Steep Turns
___ Maneuvering During Slow Flight
___ Radio Comms. & ATC Light Signals
___ Radio Navigation and Radar Services
___ Pilotage and Dead Reckoning
___ Diversion
___ Lost Procedures
___ Power Settings and Fuel Management
___ Systems and Equipment Malfunctions
___ Low Fuel Supply
___ Adverse Weather
___ Power plant and Airframe Icing
___ Emergency Descent
___ Emergency Appch & Ldg (Sim)
___ Go-Around/Rejected Landing
___ Normal and/or X-wind Appch & Ldg.
___ Emergency Equip. and Survival Gear
___ Wake Turbulence Avoidance
___ Traffic Pattern Operations

Instrument Procedures
___ Non-precision IAP

Postflight
___ Postflight Procedures

COMPLETION STANDARDS:
The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

DATE_____ **GRADE (C/INC)**_____

_____
STUDENT NAME / SIGNATURE

_____
CFI NAME / SIGNATURE / CFI # & EXP.

_____ _____
ROUTE OF FLIGHT **X-COUNTRY**

NIGHT LANDINGS & LOCATION_____

HOOD/ACTUAL_____ **DUAL**_____ **BRIEF** ____

STAGE I
FLIGHT LESSON 6
SOLO NIGHT CROSS-COUNTRY
(ASE)

LESSON SEQUENCE

1. Preflight Briefing
2. Flight
3. Post-flight Briefing and Evaluation

LESSON OBJECTIVE
The student will conduct a night VFR cross country flight to/from an airport further than 50 NM from the departure point.

CONTENT

Preflight Planning
___ Risk Assessment and Mitigation
___ Night Cross-Country Flight Planning
___ Performance and Limitations
___ National Airspace System
___ Weather
___ Emergency Equip. and Survival Gear
___ Cockpit Management
___ Single Pilot Resource Management

Flight
___ Risk Assessment and Mitigation
___ Normal and/or Crswd Takeoff/Climb
___ Steep Turns
___ Maneuvering During Slow Flight
___ Radio Comms. & ATC Light Signals
___ Radio Navigation and Radar Services
___ Pilotage and Dead Reckoning
___ Lost Procedures
___ Power Settings and Fuel Management
___ Go-Around/Rejected Landing
___ Normal and/or X-wind Appch & Ldg.
___ Traffic Pattern Operations
___ Aprt and Rwy Mrkngs & Lighting

Postflight
___ Postflight Procedures

COMPLETION STANDARDS
The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.
At lesson completion the student will have obtained at least 6.0 hours solo night flight experience, and (10) night take-offs and landings.

DATE_____ **GRADE (C/INC)**_____

_____
STUDENT NAME / SIGNATURE

_____
CFI NAME / SIGNATURE / CFI # & EXP.

_____ _____
ROUTE OF FLIGHT **X-COUNTRY**

LANDINGS & LOCATION_____

NIGHT SOLO____ **BRIEF** ___

STAGE I
FLIGHT LESSON 7
DUAL LOCAL (ASE)

LESSON SEQUENCE

1. Preflight Briefing
2. Flight
3. Post-flight Briefing and Evaluation

LESSON OBJECTIVE

The student is introduced to commercial flight maneuvers, takeoffs and landings, and Instrument approach procedures.
NOTE: *Conduct required IR training only AFTER the final landing of the VFR portion of the lesson.*

CONTENT

INTRODUCTION

___ Short Field Takeoff and Climb
___ Soft Field Takeoff and Climb
___ The Impossible Turn (Demonstration)
___ Chandelles
___ Lazy Eights
___ Steep Spiral
___ Emergency Descent
___ Eights On Pylons
___ Accelerated Stall (Imminent Only)
___ GPS Instrument Approach (IR)
___ Short Field Appch and Ldg
___ Soft Field Appch and Ldg
___ Power-Off Accuracy Appch and Ldg

REVIEW

___ Risk Assessment and Mitigation

Postflight

___ Postflight Procedures

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

DATE_____ GRADE (C/INC)_____

_____
STUDENT NAME / SIGNATURE

_____
CFI NAME / SIGNATURE / CFI # & EXP.

_____
RTE OF FLIGHT

LANDINGS AND LOCATION_____

HOOD/ACTUAL_____ DUAL _____ BRIEF ____

STAGE I
FLIGHT LESSON 8
SOLO 250NM CROSS-COUNTRY
(ASE)

LESSON SEQUENCE

1. Preflight Briefing
2. Flight
3. Post-flight Briefing and Evaluation

LESSON OBJECTIVE

The student will increase aeronautical knowledge and flight proficiency by conducting a VFR cross-country flight to a minimum of three airports with one leg of the route being not less than 250 NM straight-line distance from the original departure point. The student shall file, open, execute and close an FAA flight plan.

CONTENT

Flight

___ Risk Assessment and Mitigation
___ Departure Procedures
___ Radio Navigation and Radar Services
___ Pilotage and Dead Reckoning
___ Single Pilot Resource Management
___ Aprt and Rwy Mrkngs & Lighting
___ Collision Avoidance
___ Runway Incursion Avoidance
___ Normal and/or X-wind Appch & Ldg.
___ Airport and Runway Markings and Lighting

Postflight

___ Postflight Procedures

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards on a solo VFR cross country flight with landings at three different airports and one leg of the route being not less than 250 NM straight-line distance from the original departure point. *At the completion of this lesson the student shall have obtained not less than 10 hours solo flight experience in the airplane.*

DATE_____ **GRADE (C/INC)** _____

_____
STUDENT NAME / SIGNATURE

_____
CFI NAME / SIGNATURE / CFI # & EXP.

_____ _____
ROUTE OF FLIGHT **X-COUNTRY**

LANDINGS & LOCATION_____

SOLO _____ **BRIEF** ____

STAGE I
FLIGHT LESSON 9
DUAL LOCAL (ASE)

LESSON SEQUENCE

1. Preflight Briefing
2. Flight
3. Post-flight Briefing and Evaluation

LESSON OBJECTIVE

The student will review commercial flight maneuvers, including takeoffs and landings, and instrument approach procedures.
NOTE: *Conduct required IR training only after the final landing of the VR portion of the lesson.*

CONTENT

REVIEW

___ Risk Assessment and Mitigation
___ Short Field Takeoff and Climb
___ Soft Field Takeoff and Climb
___ Chandelles
___ Lazy Eights
___ Steep Spiral
___ The Impossible Turn (Demonstration)
___ Emergency Descent
___ Eights On Pylons
___ Power-On Stall (Imminent)
___ Power-Off Stall (Imminent)
___ Short Field Appch and Ldg
___ Soft Field Appch and Ldg
___ Power-Off Accuracy Appch and Ldg
___ Accelerated Stall (Imminent)

Instrument Procedures (IR)

___ Non-precision Instrument Approach

Postflight

___ Postflight Procedures

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

DATE_____ **GRADE (C/INC) _____**

_____
STUDENT NAME / SIGNATURE

_____
CFI NAME / SIGNATURE / CFI # & EXP.

_____
ROUTE OF FLIGHT

LANDINGS & LOCATION_____

HOOD/ACT_____ DUAL _____ BRIEF ____

STAGE I
FLIGHT LESSON 10
DUAL LOCAL (ASE)

LESSON SEQUENCE

1. Preflight Briefing
2. Flight
3. Post-flight Briefing and Evaluation

LESSON OBJECTIVE

The student will review the listed tasks in preparation for the stage check.

CONTENT

REVIEW

___ Cross-Country Flight Planning
___ Performance and Limitations
___ National Airspace System
___ Weather Information
___ Aircraft Systems
___ Aeronautical Decision Making
___ Commercial Pilot Privileges and Limitations
___ Risk Assessment and Mitigation
___ Short Field Takeoff and Climb
___ Soft Field Takeoff and Climb
___ Chandelles
___ Lazy Eights
___ Steep Spiral
___ The Impossible Turn (Demonstration)
___ Emergency Descent
___ Eights On Pylons
___ Power-On Stall
___ Power-Off Stall
___ Accelerated Stall
___ Short Field Appch and Ldg
___ Soft Field Appch and Ldg
___ Power-Off Accuracy Appch and Ldg
___ Non-precision Approach (IR)

Postflight

___ Postflight Procedures

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

DATE_____ **GRADE (C/INC)** _____

_____
STUDENT NAME / SIGNATURE

_____
CFI NAME / SIGNATURE / CFI # & EXP.

_____
ROUTE OF FLIGHT

LANDINGS & LOCATION_____

HOOD/ACT_____ **DUAL** _____ **BRIEF** ____

STAGE I
FLIGHT LESSON 11
DUAL LOCAL STAGE CHECK (ASE)

LESSON SEQUENCE

1. Preflight Briefing
2. Flight
3. Post-flight Briefing and Evaluation

LESSON OBJECTIVE

This lesson is a stage check conducted by the Chief Instructor, Assistant Chief Instructor, or Check Instructor. The student will be evaluated on his/her knowledge and proficiency of/with the listed tasks according to current FAA Commercial Pilot Airman Certification Standard.

CONTENT

ORAL

___ Cross-Country Flight Planning
___ Performance and Limitations
___ National Airspace System
___ Weather Information
___ Aircraft Systems
___ Aeronautical Decision Making
___ Commercial Pilot Privileges and Limitations
___ Risk Assessment and Mitigation

FLIGHT

___ Risk Assessment and Mitigation
___ Short Field Takeoff and Climb
___ Soft Field Takeoff and Climb
___ X-Country Departure
___ Pilotage and Dead Reckoning
___ Radio Navigation and Radar Svcs
___ Chandelles
___ Lazy Eights
___ Steep Spiral
___ The Impossible Turn (Demonstration)
___ Emergency Descent
___ Eights On Pylons
___ Departure/Power-On Stall (Imm)
___ Appch to Lndg/Power-Off Stall (Imm)
___ Accelerated Stall (Imm)
___ System and Equipment Malfunctions
___ Engine Failure In Flight (Sim)
___ Emergency Appch & Ldg (Sim)
___ Short Field Appch and Ldg
___ Soft Field Appch and Ldg
___ Power-Off Accuracy Appch and Ldg
___ Postflight Procedures

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

DATE_____ **GRADE (C/INC)** _____

_____
STUDENT NAME / SIGNATURE

_____
CFI NAME / SIGNATURE / CFI # & EXP.

_____
ROUTE OF FLIGHT

LANDINGS & LOCATION_____

HOOD/ACT____ **DUAL** _____ **BRIEF** ____

STAGE II

STAGE II OBJECTIVE

The student is introduced to dual and solo flight operations in the complex and/or technically advanced aircraft and learns to conduct all previously learned normal and emergency maneuvers and procedures in a complex and/or technically advanced aircraft. Procedures and maneuvers will be conducted in the single-engine airplane, as appropriate.

STAGE II COMPLETION STANDARD

The stage and course is complete when the student demonstrates knowledge of and performs all required maneuvers and procedures at a level that exceeds current FAA Commercial Pilot Airman Certification Standards.

STAGE II
FLIGHT LESSON 12
AATD or DUAL LOCAL TAA or COMPLEX

LESSON SEQUENCE

1. Preflight Briefing
2. Flight
3. Post-flight Briefing and Evaluation

LESSON OBJECTIVE

The student is introduced to complex aircraft systems, maneuvers, and procedures in the AATD. Special emphasis is placed on developing proficiency in the execution of checklist procedures and configuration changes throughout flight operations.

CONTENT

INTRODUCTION

___ Use of Checklists and Flows
___ Before Takeoff Check
___ Normal Takeoff and Climb
___ Short-Field Takeoff and Climb
___ Use of Constant Speed Propeller
___ Use of Retractable Lndg Gear / Flaps
___ Power Settings & Fuel Management
___ Maneuvering During Slow Flight
___ Power-Off Stall
___ Accelerated Stall
___ Power-On Stall
___ Landing Gear System Malfunctions
___ Propeller System Malfunction
___ Go-Around/Rejected Landing
___ Rcvry From Unusual Flight Att. (IR)
___ The Impossible Turn (Demo)
___ Emergency Descent
___ Emer. Appch & Ldg (Sim)
___ Normal Approach and Landing

TAA Procedures (If Applicable)

___ PFD/MFD power-up & preflight check
___ Autopilot pre-flight check
___ Flight, comm. and nav mode selection
___ Flight plan entry and changes (departure & enroute) (VR/IR)
___ PFD/MFD failure, reversion modes, use of standby instruments (VR/IR)
___ Autopilot failure (VR/IR)
___ Turns, Climbs, Descents & Altitude Capture using AP
___ Course Intercepting & Trkg (VR/IR)

COMPLETION STANDARDS

The student will demonstrate proficiency in the knowledge and use of complex/technically advanced aircraft systems.

DATE_____ **GRADE (C/INC)** _____

_____
STUDENT NAME / SIGNATURE

_____
CFI NAME / SIGNATURE / CFI # & EXP.

_____
ROUTE OF FLIGHT

LANDINGS & LOCATION_____

AATD ____ **HOOD**____ **BRIEF** ____

STAGE II
FLIGHT LESSON 13
AATD or DUAL LOCAL TAA or COMPLEX

LESSON SEQUENCE

1. Preflight Briefing
2. Flight
3. Post-flight Briefing and Evaluation

LESSON OBJECTIVE

The student reviews complex aircraft systems, maneuvers and procedures in the AATD or ASEL. Special emphasis is placed on increasing knowledge and procedural proficiency prior to flight in a complex/technically advanced aircraft.

CONTENT (REVIEW)

___ Cockpit Management
___ Use of Checklists
___ Preflight Inspection
___ Before Takeoff Check
___ Normal Takeoff and Climb
___ Short-Field Takeoff and Climb
___ Use of Constant Speed Propeller
___ Use of Retractable Lndg Gear / Flaps
___ Power Settings & Fuel Management
___ Maneuvering During Slow Flight
___ Power-Off Stall
___ Accelerated Stall
___ Power-On Stall
___ Landing Gear System Malfunctions
___ Propeller System Malfunction
___ Rcvry From Unusual Flight Att. (IR)
___ The Impossible Turn (Demo)
___ Emergency Descent
___ Emer. Appch & Ldg (Sim)
___ Normal Approach and Landing

TAA Procedures (If Applicable)

___ PFD/MFD power-up & preflight check
___ Autopilot pre-flight check
___ Flight, comm. and nav mode selection
___ Flight plan entry and changes (departure & enroute) (VR/IR)
___ PFD/MFD failure, reversion modes, use of standby instruments (VR/IR)
___ Autopilot failure (VR/IR)
___ Turns, Climbs, Descents & Altitude Capture using AP
___ Course Intercepting & Trkg (VR/IR)

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

DATE_____ **GRADE (C/INC)** _____

_____
STUDENT NAME / SIGNATURE

_____
CFI NAME / SIGNATURE / CFI # & EXP.

_____
ROUTE OF FLIGHT

LANDINGS & LOCATION_____

AATD ____ **HOOD**____ **BRIEF** ___

STAGE II
FLIGHT LESSON 14
DUAL LOCAL – TAA or COMPLEX

LESSON SEQUENCE

1. Preflight Briefing
2. Flight
3. Post-flight Briefing and Evaluation

LESSON OBJECTIVE

The student is introduced to flight operations in the complex or technically advanced airplane. Special emphasis will be placed on the proper execution of collision avoidance, checklist procedures and configuration changes.

CONTENT

INTRODUCTION

___ Risk Assessment and Mitigation
___ Operation of Systems
___ Performance and Limitations
___ Use of Checklists
___ Preflight Inspection
___ Engine Start, Taxi, Before T.O. Check
___ Normal and/or X-wnd T.O. and Climb
___ Short-Field Takeoff and Climb
___ Soft-Field T.O. & Climb
___ Use of Constant Speed Propeller
___ Use of Retractable Ldg Gear/Flaps
___ Power Setting &Fuel Management
___ Maneuvering During Slow Flight
___ Turning Stall
___ Accelerated Stall
___ Power-Off Stall
___ Go-Around/Rejected Landing
___ Power-On Stall
___ Steep Turns
___ Chandelles
___ Lazy-Eights
___ Steep Spiral
___ Eights-On-Pylons
___ Basic Attitude IR Maneuvers (IR)
___ Recovery from Unusual Attitudes (IR)
___ Systems and Equipment Malfunctions
___ Emer. Appch & Ldg (Sim)
___ Short-Field Approach and Landing
___ Soft-Field Approach and Landing
___ Normal and/or X-wnd Appch/Lndg
___ Power-Off 180^0 Accuracy Appch & Ldg.

TAA Procedures (If Applicable)

___ PFD/MFD power-up & preflight check
___ Autopilot pre-flight check
___ Flight, comm. and nav mode selection
___ Flight plan entry and changes (departure & enroute) (VR/IR)
___ PFD/MFD failure, reversion modes, use of standby instruments (VR/IR)
___ Autopilot failure (VR/IR)
___ Turns, Climbs, Descents & Altitude Capture using AP
___ Course Intercepting & Trkg (VR/IR)

Postflight Procedures

___ Postflight Procedures

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards and warrants issuance of an endorsement to operate complex aircraft per 14 CFR Part 61.31(e), if applicable.

DATE_____ GRADE (C/INC) _____

_____
STUDENT NAME / SIGNATURE

_____
CFI NAME / SIGNATURE / CFI # & EXP.

_____
ROUTE OF FLIGHT

LANDINGS & LOCATION_____

HOOD_____ DUAL____ BRIEF ____

STAGE II
FLIGHT LESSON 15
DUAL LOCAL – TAA or COMPLEX

LESSON SEQUENCE

1. Preflight Briefing
2. Flight
3. Post-flight Briefing and Evaluation

LESSON OBJECTIVE

The student reviews flight operations to gain proficiency in the complex or technically advanced airplane, with emphasis placed on proper execution of checklist procedures and configuration changes. This lesson prepares the student for cross-country flight operations in the complex or technically advanced aircraft.

CONTENT

REVIEW

___ Risk Assessment and Mitigation
___ Use of Checklists
___ Preflight Inspection
___ Engine Start, Taxi, Before T.O. Check
___ Normal and/or X-wnd T.O. and Climb
___ Short-Field Takeoff and Climb
___ Soft-Field T.O. & Climb
___ Power Setting &Fuel Management
___ Maneuvering During Slow Flight
___ Turning Stall
___ Accelerated Stall
___ Power-Off Stall
___ Go-Around/Rejected Landing
___ Power-On Stall
___ Steep Turns
___ Chandelles
___ Lazy-Eights
___ Steep Spiral
___ Eights-On-Pylons
___ Recovery from Unusual Attitudes (IR)
___ Systems and Equipment Malfunctions
___ Emerg Appch & Ldg (Sim)
___ Short-Field Approach and Landing
___ Soft-Field Approach and Landing
___ Normal and/or X-wnd Appch/Lndg
___ Power-Off 180^0 Accuracy Appch & Ldg.

TAA Procedures (If Applicable)

___ PFD/MFD power-up & preflight check
___ Autopilot pre-flight check
___ Flight, comm. and nav mode selection
___ Flight plan entry and changes (departure & enroute) (VR/IR)
___ PFD/MFD failure, reversion modes, use of standby instruments (VR/IR)
___ Autopilot failure (VR/IR)
___ Turns, Climbs, Descents & Altitude Capture using AP
___ Course Intercepting & Trkg (VR/IR)

Postflight Procedures

___ Postflight Procedures

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

DATE_____ GRADE (C/INC) _____

_____
STUDENT NAME / SIGNATURE

_____
CFI NAME / SIGNATURE / CFI # & EXP.

_____
ROUTE OF FLIGHT

LANDINGS & LOCATION_____

HOOD____ DUAL____ BRIEF ____

STAGE II
FLIGHT LESSON 16
SOLO TAA or COMPLEX LOCAL

LESSON SEQUENCE
1. Preflight Briefing
2. Flight
3. Post-flight Briefing and Evaluation

LESSON OBJECTIVE
The student reviews flight operations to gain proficiency in the complex or technically advanced airplane, with emphasis placed on proper execution of checklist procedures and configuration changes. Requires complex endorsement.

CONTENT
REVIEW
___ Risk Assessment and Mitigation
___ Use of Checklists
___ Preflight Inspection
___ Normal and/or X-wnd T.O. and Climb
___ Short-Field Takeoff and Climb
___ Soft-Field T.O. & Climb
___ Power Setting &Fuel Management
___ Maneuvering During Slow Flight
___ Turning Stall
___ Accelerated Stall
___ Power-Off Stall
___ Go-Around/Rejected Landing
___ Power-On Stall
___ Steep Turns
___ Chandelles
___ Lazy-Eights
___ Steep Spiral
___ Eights-On-Pylons
___ Short-Field Approach and Landing
___ Soft-Field Approach and Landing
___ Normal and/or X-wnd Appch/Lndg
___ Power-Off 180^0 Accuracy Appch & Ldg.

TAA Procedures (If Applicable)
___ PFD/MFD power-up & preflight check
___ Autopilot pre-flight check
___ Flight, comm. and nav mode selection
___ Flight plan entry and changes (departure & enroute) (VR/IR)
___ PFD/MFD failure, reversion modes, use of standby instruments (VR/IR)
___ Autopilot failure (VR/IR)
___ Turns, Climbs, Descents & Altitude Capture using AP
___ Course Intercepting & Trkg (VR/IR)

Postflight Procedures
___ Postflight Procedures

COMPLETION STANDARDS
The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

DATE_____ GRADE (C/INC) _____

_____
STUDENT NAME / SIGNATURE

_____
CFI NAME / SIGNATURE / CFI # & EXP.

_____
ROUTE OF FLIGHT

LANDINGS & LOCATION_____

SOLO____ BRIEF ___

STAGE II
FLIGHT LESSON 17
DUAL TAA or COMPLEX CROSS-COUNTRY

LESSON SEQUENCE

1. Preflight Briefing
2. Flight
3. Post-flight Briefing and Evaluation

LESSON OBJECTIVE

The student increases proficiency with VFR cross-country flight operations in the complex or technically advanced aircraft during a flight of not less than 50 NM distance from the departure airport. Special emphasis is placed on proper planning and execution of VFR navigation, collision avoidance, checklist usage and configuration changes. Minimum flight time for this lesson is 2.0 hours.

CONTENT

INTRODUCTION

Flight

___ Risk Assessment and Mitigation
___ Cross-Country Flight Planning
___ Performance and Limitations
___ National Airspace System
___ Weather Information
___ SRM and ADM
___ Cross-Country Departure
___ Normal and/or X-wnd Takeoff/Climb
___ Radio Comms. & ATC Light Signals
___ Radio Navigation and Radar Services
___ Pilotage and Dead Reckoning
___ Diversion
___ Lost Procedures
___ Power Settings and Fuel Management
___ Systems and Equipment Malfunctions
___ Low Fuel Supply
___ Adverse Weather
___ Recovery From Unusual Atts. (IR)
___ Power plant and Airframe Icing
___ Emergency Descent
___ Emer. Appch & Ldg (Sim)
___ Go-Around/Rejected Landing
___ Normal and/or X-wind Appch & Ldg.
___ Emergency Equip. and Survival Gear
___ Wake Turbulence Avoidance
___ Traffic Pattern Operations

TAA Procedures (If Applicable)

___ PFD/MFD power-up & preflight check
___ Autopilot pre-flight check
___ Flight, comm. and nav mode selection
___ Flight plan entry and changes (departure & enroute) (VR/IR)
___ PFD/MFD failure, reversion modes, use of standby instruments (VR/IR)
___ Autopilot failure (VR/IR)
___ Turns, Climbs, Descents & Altitude Capture using AP
___ Course Intercepting & Trkg (VR/IR)

Postflight Procedures

___ Postflight Procedures

COMPLETION STANDARDS

The student will complete a VFR cross-country flight in the complex or technically advanced aircraft during a flight of not less than 50 NM distance from the departure airport. The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

DATE_____ **GRADE (C/INC)** _____
_____
STUDENT NAME / SIGNATURE
_____
CFI NAME / SIGNATURE / CFI # & EXP.

_____ _____
ROUTE OF FLIGHT **X-COUNTRY**

LANDINGS & LOCATION_____

HOOD_____ **DUAL**____ **BRIEF** ____

STAGE II
FLIGHT LESSON 18
SOLO TAA or COMPLEX CROSS-COUNTRY

LESSON SEQUENCE

1. Preflight Briefing
2. Flight
3. Post-flight Briefing and Evaluation

LESSON OBJECTIVE

The student will increase proficiency with VFR solo cross-country flight operations in a complex or technically advanced aircraft and will demonstrate knowledge, risk management and skill on all tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standard. Special emphasis is placed on proper planning and execution of VFR navigation, collision avoidance, checklist usage and configuration changes. The student will log a minimum 2.0 hours of solo cross country flight time, and travel a straight-line distance of at least 100 nautical miles from the original departure point.

CONTENT

REVIEW

Flight

___ Risk Assessment and Mitigation
___ Cross-Country Flight Planning
___ Performance and Limitations
___ National Airspace System
___ Weather Information
___ SRM and ADM
___ Cross-Country Departure
___ Normal and/or X-wnd Takeoff/Climb
___ Radio Comms. & ATC Light Signals
___ Radio Navigation and Radar Services
___ Pilotage and Dead Reckoning
___ Lost Procedures
___ Power Settings and Fuel Management
___ Systems and Equipment Malfunctions
___ Go-Around/Rejected Landing
___ Normal and/or X-wind Appch & Ldg.
___ Emergency Equip. and Survival Gear
___ Wake Turbulence Avoidance
___ Traffic Pattern Operations

TAA Procedures (If Applicable)

___ PFD/MFD power-up & preflight check
___ Autopilot pre-flight check
___ Flight, comm. and nav mode selection
___ Flight plan entry and changes (departure & enroute) (VR)
___ PFD/MFD failure, reversion modes, use of standby instruments (VR)
___ Autopilot failure (VR)
___ Turns, Climbs, Descents & Altitude Capture using AP
___ Course Intercepting & Trkg (VR)

Postflight Procedures

___ Postflight Procedures

COMPLETION STANDARDS

The student will complete a VFR cross-country flight in the complex or TAA during a flight of not less than 100 NM distance from the departure airport, and demonstrate knowledge, risk management and skill at a level that meets or exceeds Commercial Pilot ACS. The student must log a minimum 2.0 hours of solo cross country flight time, and travel a straight-line distance of at least 100 nm from the original departure point.

DATE_____ **GRADE (C/INC)** _____
_____
STUDENT NAME / SIGNATURE
_____
CFI NAME / SIGNATURE / CFI # & EXP.
_____ _____
ROUTE OF FLIGHT **X-COUNTRY**
LANDINGS & LOCATION_____
SOLO___ **BRIEF** ___

STAGE II
FLIGHT LESSON 19
SOLO TAA or COMPLEX CROSS-COUNTRY

LESSON SEQUENCE

1. Preflight Briefing
2. Flight
3. Post-flight Briefing and Evaluation

LESSON OBJECTIVE

The student will increase proficiency with VFR solo cross-country flight operations in a complex or technically advanced aircraft and will demonstrate knowledge, risk management and skill on all tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standard. Special emphasis is placed on proper planning and execution of VFR navigation, collision avoidance, checklist usage and configuration changes. The student will log a minimum 2.0 hours of solo cross country flight time, and travel a straight-line distance of at least 100 nautical miles from the original departure point.

CONTENT

REVIEW

Flight

___ Risk Assessment and Mitigation
___ Cross-Country Flight Planning
___ Performance and Limitations
___ National Airspace System
___ Weather Information
___ SRM and ADM
___ Cross-Country Departure
___ Normal and/or X-wnd Takeoff/Climb
___ Radio Comms. & ATC Light Signals
___ Radio Navigation and Radar Services
___ Pilotage and Dead Reckoning
___ Lost Procedures
___ Power Settings and Fuel Management
___ Systems and Equipment Malfunctions
___ Low Fuel Supply
___ Adverse Weather
___ Power plant and Airframe Icing
___ Go-Around/Rejected Landing
___ Normal and/or X-wind Appch & Ldg.
___ Emergency Equip. and Survival Gear
___ Wake Turbulence Avoidance
___ Traffic Pattern Operations

TAA Procedures (If Applicable)

___ PFD/MFD power-up & preflight check
___ Autopilot pre-flight check
___ Flight, comm. and nav mode selection
___ Flight plan entry and changes (departure & enroute) (VR)
___ PFD/MFD failure, reversion modes, use of standby instruments (VR)
___ Autopilot failure (VR)
___ Turns, Climbs, Descents & Altitude Capture using AP
___ Course Intercepting & Trkg (VR)

Postflight Procedures

___ Postflight Procedures

COMPLETION STANDARDS

The student will complete a VFR cross-country flight in the complex or technically advanced aircraft during a flight of not less than 100 NM distance from the departure airport, and demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards. The student must log a minimum 2.0 hours of solo cross country flight time, and travel a straight-line distance of at least 100 nautical miles from the original departure point.

DATE_____ **GRADE (C/INC)** _____
_____
STUDENT NAME / SIGNATURE
_____
CFI NAME / SIGNATURE / CFI # & EXP.
_____ _____
ROUTE OF FLIGHT **X-COUNTRY**

LANDINGS & LOCATION_____

SOLO____ **BRIEF** ____

_____

STAGE II
FLIGHT LESSON 20
DUAL TAA or COMPLEX

LESSON SEQUENCE

1. Preflight Briefing
2. Flight
3. Post-flight Briefing and Evaluation

LESSON OBJECTIVE

The student will review flight operations in the complex or technically advanced aircraft in preparation for the end-of-course exam and demonstrate knowledge, risk management and skill on all tasks at a level that exceeds current FAA Commercial Pilot Airman Certification Standard.

CONTENT (REVIEW)

___ Risk Assessment and Mitigation
___ Use of Checklists
___ Preflight Inspection
___ Engine Start, Taxi, Before T.O. Check
___ Normal and/or X-wnd T.O. and Climb
___ Short-Field Takeoff and Climb
___ Soft-Field T.O. and Climb
___ Power Setting &Fuel Management
___ Maneuvering During Slow Flight
___ Turning Stall
___ Accelerated Stall
___ Power-Off Stall
___ Go-Around/Rejected Landing
___ Power-On Stall
___ Steep Turns
___ Chandelles
___ Lazy-Eights
___ Steep Spiral
___ Eights-On-Pylons
___ Recovery from Unusual Attitudes (IR)
___ The Impossible Turn (Demo)
___ Systems and Equipment Malfunctions
___ Emer. Appch & Ldg (Sim)
___ Short-Field Approach and Landing
___ Soft-Field Approach and Landing
___ Normal and/or X-wnd Appch/Lndg
___ Power-Off 180^0 Accuracy Appch & Ldg.

Postflight Procedures

___ Postflight Procedures

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

DATE_____ **GRADE (C/INC) _____**

_____
STUDENT NAME / SIGNATURE

_____
CFI NAME / SIGNATURE / CFI # & EXP.

_____
ROUTE OF FLIGHT

LANDINGS & LOCATION_____

HOOD/ACT_____ DUAL_____ BRIEF ____

STAGE II
FLIGHT LESSON 21
DUAL TAA or COMPLEX

LESSON SEQUENCE

1. Preflight Briefing
2. Flight
3. Post-flight Briefing and Evaluation

LESSON OBJECTIVE

The student reviews flight operations in the complex or technically advanced airplane in preparation for the end-of-course exam.

CONTENT

REVIEW

___ Certificates and Documents
___ Comm. Pilot Prvlgs and Lmtns.
___ Airworthiness Requirements
___ Performance and Limitations
___ Aircraft Systems
___ Cross-Country Flight Planning
___ Navigation Log
___ Risk Assessment and Mitigation
___ Use of Checklists
___ Preflight Inspection
___ Engine Start, Taxi, Before T.O. Check
___ Normal and/or Crswd T.O. and Climb
___ Short-Field Takeoff and Climb
___ Soft-Field T.O. and Climb
___ Power Setting &Fuel Management
___ Maneuvering During Slow Flight
___ Turning Stall
___ Accelerated Stall
___ Power-Off Stall
___ Go-Around/Rejected Landing
___ Power-On Stall
___ Steep Turns
___ Chandelles
___ Lazy-Eights
___ Steep Spiral
___ Eights-On-Pylons
___ Recovery from Unusual Attitudes (IR)
___ Systems and Equipment Malfunctions
___ Emer. Appch & Ldg (Sim)
___ Short-Field Approach and Landing
___ Soft-Field Approach and Landing
___ Normal and/or X-wnd Appch/Lndg
___ Power-Off 180^0 Accuracy Appch & Ldg.

TAA Procedures (If Applicable)

___ PFD/MFD power-up & preflight check
___ Autopilot pre-flight check
___ Flight, comm. and nav mode selection
___ Flight plan entry and changes (departure & en route) (VR/IR)
___ PFD/MFD failure, reversion modes, use of standby instruments (VR/IR)
___ Autopilot failure (VR/IR)
___ Turns, Climbs, Descents & Altitude Capture using AP
___ Course Intercepting & Trkg (VR/IR)

Postflight Procedures

___ Postflight Procedures

COMPLETION STANDARDS

All tasks will be performed at a level that exceeds current FAA Commercial Pilot ACS.

DATE_____ GRADE (C/INC) _____

_____
STUDENT NAME / SIGNATURE

_____
CFI NAME / SIGNATURE / CFI # & EXP.

_____
ROUTE OF FLIGHT

LANDINGS & LOCATION_____

HOOD/ACT_____ DUAL____ BRIEF ____

STAGE II
FLIGHT LESSON 22
END-OF-COURSE STAGE CHECK
DUAL TAA or COMPLEX

LESSON SEQUENCE

1. Preflight Briefing
2. Flight
3. Post-flight Briefing and Evaluation

LESSON OBJECTIVE

During the end-of-course stage check conducted by the Chief Flight Instructor or his/her designee, the student will be evaluated on his/her aeronautical knowledge, flight proficiency and risk management skills on all subject areas and tasks in accordance with current FAA Commercial Pilot Airman Certification Standards.

CONTENT

ORAL

___ Certificates and Documents
___ Comm. Pilot Prvlgs and Lmtns.
___ Airworthiness Requirements
___ Performance and Limitations
___ Aircraft Systems
___ Cross-Country Flight Planning
___ Navigation Log

FLIGHT

___ Risk Assessment and Mitigation
___ Use of Checklists
___ Preflight Inspection
___ Engine Start, Taxi, Before T.O. Check
___ Normal and/or X-wnd T.O. and Climb
___ Short-Field Takeoff and Climb
___ Soft-Field T.O. and Climb
___ Maneuvering During Slow Flight
___ Turning Stall
___ Accelerated Stall
___ Power-Off Stall
___ Go-Around/Rejected Landing
___ Power-On Stall
___ Steep Turns
___ Chandelles
___ Lazy-Eights
___ Steep Spiral
___ Eights-On-Pylons
___ Recovery from Unusual Attitudes (IR)
___ Systems and Equipment Malfunctions
___ The Impossible Turn (Demo)
___ Emer. Appch & Ldg (Sim)
___ Short-Field Approach and Landing
___ Soft-Field Approach and Landing
___ Normal and/or CX-wnd Appch/Lndg
___ Power-Off 180^0 Acc. Appch & Ldg.

Postflight Procedures

___ Postflight Procedures

COMPLETION STANDARDS

At the completion of this lesson the student will demonstrate knowledge and proficiency that exceeds current FAA Commercial Pilot Airman Certification Standards.

DATE_____ GRADE (C/INC) _____

_____

STUDENT NAME / SIGNATURE

_____

CFI NAME / SIGNATURE / CFI # & EXP.

_____

ROUTE OF FLIGHT

LANDINGS & LOCATION_____

HOOD/ACT____ DUAL____ BRIEF __