I, _______________________________, have acquired and have in my possession a copy of the training course outline, training syllabus, and safety procedures and practices for AVIA 4552, Commercial Flying.

________________________________________
Student Signature

________________________________________
Flight Instructor Signature

________________________________________
Chief Flight Instructor Signature
COMM FLYING

UNIVERSITY OF OKLAHOMA
DEPARTMENT OF AVIATION
COMMERCIAL PILOT CERTIFICATION COURSE

This course fulfills the requirements of 14 CFR, Section 141, Appendix D 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 through written tests, oral tests, flight tests, and show through appropriate records that the knowledge, skill, and experience requirements necessary to obtain a commercial pilot certificate have been met. The specific requirements for each test and stage check are described in the appropriate syllabus lesson. At the completion of the ground school the student will pass the end of course test with a score of 70%. This test is the equivalent of the FAA commercial pilot knowledge test. At the completion of flight training the student will pass the Commercial Pilot practical test, based on the current Commercial Pilot Practical Test Standards (PTS).

**AIRPORT:** Max Westheimer Airport is the operations base for training in this course. Max Westheimer Airport has a hard surface runway and meets the requirements of 14 CFR, Section 141.38 for day and night operation. Fuel is available from 7:00 A.M. to 10:00 P.M. daily. Maintenance is available from 6:30 A.M. to 3:00 P.M. Monday through Friday and at other times on call. Training will originate at Max Westheimer Airport.

**AIRCRAFT:** The aircraft to be used in this course of training is the PA28-161, PA28R-200 and C-152. They meet the requirements of 14 CFR, Section 141.39. VFR airplanes are equipped for day and night VFR as specified in 14 CFR, Section 91.205. Airplanes used for instrument training are equipped for IFR as specified in 14 CFR, 91.205. Radio equipment will consist of at least one VHF transceiver and at least one VOR receiver.

**CHIEF FLIGHT INSTRUCTOR:** The Chief Flight Instructor will meet the requirements of 14 CFR, Section 141.35. (S)he must hold at least a commercial pilot certificate with an airplane category, single engine land rating and airplane instrument rating. In addition, (s)he must hold a flight instructor/instrument certificate with an airplane category rating and a single-engine class rating and have at least a second class medical certificate. See Appendix A of this Training Course Outline for Chief Flight Instructor designation.

**ASSISTANT CHIEF FLIGHT INSTRUCTOR:** The Assistant Chief Flight Instructor will meet the requirements of 14 CFR, Section 141.36. (S)he must hold at least a commercial pilot certificate with an airplane category, single engine land rating and airplane instrument rating. In addition, (s)he must hold a flight instructor/instrument certificate with an airplane category rating and a single-engine class rating and have at least a second class medical certificate. See Appendix A of this Training Course Outline for Assistant Chief Flight Instructor designation.

**CHECK INSTRUCTORS:** Check instructors will meet the requirements of 14 CFR, Section 141.37. S(he) must hold at least a commercial pilot certificate with an airplane category, single engine land rating and airplane instrument rating. In addition, (s)he must hold a flight instructor/instrument certificate with an airplane category rating and single-engine class rating and have at least a second class medical certificate.

**FLIGHT INSTRUCTORS:** Each flight instructor must hold at least a commercial pilot certificate with an airplane category, single engine land rating and airplane instrument rating. In addition, (s)he must hold a flight instructor certificate with an airplane category rating and a single-engine class rating and have at least a second class medical certificate. For Stages V and X, (s)he must also hold an instrument instructor rating.

**CHIEF GROUND INSTRUCTOR:** The Chief Ground Instructor will meet the requirements of 14 CFR, Section 141.35(e). See Appendix A of this Training Course Outline for Chief Ground Instructor designation.

**ASSISTANT CHIEF GROUND INSTRUCTOR:** The Assistant Chief Ground Instructor will meet the requirements of 14 CFR, Section 141.36(e). See Appendix A of this Training Course Outline for Assistant Chief Ground Instructor designation.

**GROUND INSTRUCTORS:** Each instructor used for ground training must hold a flight instructor or advanced or instrument ground instructor certificate for this course of training.
OFFICE AND CLASSROOM FACILITIES USED FOR AVIATION STUDENTS: The office and classroom facilities used for the training of aviation students of the University of Oklahoma are described in Appendix D of this Training Course Outline.

COURSE ENROLLMENT: You must hold a private pilot certificate with an aircraft category and single engine land rating and at least a third class medical certificate prior to enrolling in the flight portion of the commercial pilot certification course. You must also have an instrument airplane rating, or be concurrently enrolled in the University of Oklahoma Instrument Rating Course and pass the required instrument rating practical test prior to completing the commercial pilot certification course.

REQUIREMENTS FOR GRADUATION: To obtain a commercial pilot certificate, you must be able to read, speak, and understand the English language and have a valid FAA third-class medical certificate and be at least 18 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 page 1. You must also have an instrument airplane rating prior to the beginning of Stage X.

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. You are expected to complete at least one stage approximately every 90 days. The objectives and standards of each stage are described within the syllabus.

COURSE POLICY: The course policies for this course of training are outlined in Appendix B of this Training Course Outline.

TESTS AND CHECKS: The syllabus incorporates stage checks in accordance with 14 CFR, Section 141, Appendix D. These checks are given by the Chief, or designated Assistant Chief Flight Instructor, or Check Instructor at the end of each stage. The student will complete the appropriate stage exams, pilot briefings, and final examinations that are described within the syllabus. The final stage check will be conducted by the Chief or Assistant Chief Flight Instructor and will be conducted in accordance with the current Commercial Pilot Practical Test Standards and will be at least equal in scope, depth, and difficulty to that practical test.
**DISPATCH PROCEDURES** - The provisions of 14 CFR, Section 91.103 will be met prior to aircraft dispatch. For both dual and solo flights the instructor will provide a preflight briefing to the student. The instructor's signature on the syllabus sheet for that lesson constitutes permission to dispatch the aircraft. The student will check the scheduling clipboard to determine which aircraft is assigned for the flight and complete the information on the Aircraft Sign Out Sheet, the Plastic Flight Plan form and the Aircraft Information Sheet in the aircraft checklist binder. A flight plan will be filed with an Automated Flight Service Station for all cross country flights. For all solo cross country flights the student will also complete a Cross Country Sign Out form (available in the dispatch area). Aircraft keys are kept in a lock box in the dispatch area and will be issued upon completion of the above procedures. Notification of solo students returning after normal business hours (Monday through Friday after 5:00 PM, or any time on weekends and holidays): The instructor will tell the student to call the OU mobile phone number at 405-919-6319 upon return. If the solo departure is during normal business hours the instructor will place a note in the Chief Flight Instructor's box indicating the student name, aircraft tail number and itinerary of the flight. The Chief Flight Instructor or designated assistant checks this box prior to departure each day. If the solo departure is after normal business hours, the instructor will call the OU mobile phone number with this information.

**STARTING PROCEDURES** - All aircraft will be started within the ramp area of the Department of Aviation unless otherwise designated by the Chief Flight Instructor or his designee. All starting procedures will comply with the procedures stated in the Pilots Operating Handbook for that aircraft.

**TAXIING PROCEDURES** - Taxi on yellow depicted taxi routes and at a slow and reasonable speed (use 10 miles per hour as a guide). Spacing between aircraft on taxi routes will be a minimum of two ship lengths. During the day, operate the anti-collision lights while taxiing. Use position lights and the landing light at night. To minimize the chance of runway incursion, read back taxi instructions, particularly hold short, position and hold, runway crossing and takeoff clearances. When obtaining complex taxi clearances at unfamiliar airports write down the clearance, have an airport diagram available and request progressive taxi if needed.

**FIRE PRECAUTIONS** – during fueling operations the aircraft involved will be unoccupied. Fire Extinguishers will be present when fueling is in progress. In the event of aircraft fire during engine start or taxiing, follow the emergency procedures in the aircraft POH. If there is any doubt about whether emergency procedures are working to extinguish the fire, evacuate the aircraft immediately.

**REDispatch PROCEDURES** - In the event a student landing is accomplished at an unscheduled destination for any reason, the student is to contact the Aviation Department at (405) 325-7231 (Long Distance instate toll free 1-800-522-0772 ext. 7231), or OU Aviation mobile phone at 405-919-6319 prior to determining any further course of action.

**AIRCRAFT DISCREPANCIES**: Upon noticing a discrepancy the pilot in command will take the following actions:
- Place the plastic "Maintenance Required" sign in the windshield of the aircraft (this sign is in a loose leaf binder in the aircraft).
- Complete Form OUAVMAIN #2 (copies of this form are in a loose leaf binder in the aircraft). When filling out the "Maintenance Problem" section, be as specific as possible. Provide the top copy to the mechanics in the hangar and place the yellow copy on the Aircraft Sign Out Sheet. If the mechanics are not available, place the top copy of the form in the maintenance in-box in the dispatch section. If the main office is closed, put both copies of the form in the envelope slot in the hangar door.
- Upon returning to the dispatch area, turn the plastic flight plan over so that the words "No Fly" are displayed. Note: If the main office is locked and this can't be done, the "Maintenance Required" sign in the aircraft serves as notification that the aircraft is not airworthy.
- Notify the director, the chief flight instructor or one of the assistant chief flight instructors as soon as possible.

**APPROVAL FOR RETURN OF AIRCRAFT TO SERVICE**: The mechanics will take whatever corrective actions are required to return the aircraft to service. Upon returning the aircraft to service the mechanics will place the "Maintenance Required" sign back in the lose leaf notebook and notify the main office. At that time the plastic flight plan will be turned back over and the yellow copy of OUAVMAIN #2 placed in the mechanics in-box. If the discrepancy can't be corrected immediately, but the mechanics determine the aircraft is still airworthy, this information will be noted in the "Maintenance Performed" section along with any required operating limitations due to the discrepancy. Inoperative equipment will be removed or deactivated and placarded IAW 14 CFR, Section 91.213. The aircraft may then be returned to service and flown within any operating limitations noted.
COMM FLYING

UNIVERSITY OF OKLAHOMA
DEPARTMENT OF AVIATION
COMMERCIAL PILOT CERTIFICATION COURSE
RULES OF OPERATION

SECURING AIRCRAFT - The pilot in command is responsible for securing aircraft on the ramp. Only aviation department personnel and contract personnel from the FBO may hangar aircraft. Students may assist in hangaring aircraft under the supervision of these personnel. All university aircraft will be secured with tie-down ropes or chocks while unattended on the Department of Aviation ramp. On cross country flights, the pilot in command will make tie-down arrangements with the local FBO for securing the aircraft. At no time will an aircraft be left unattended without it being secured by wheel chocks or tie-down ropes. When returning aircraft to the ramp in front of the terminal, solo students will not park the aircraft in the first row by the fence.

AIRCRAFT AVOIDANCE - No person may operate an aircraft so close to another aircraft as to create a collision hazard either on the ground or in the air. At all times, the Pilot-in-Command will be responsible for, and actively use "See and Avoid" procedures as described in the AIM, Chapter 7, Section 5 and comply with the right of way rules specified in 14 CFR, Section 91.113.

FUEL RESERVES - At no time will a department aircraft depart on a flight without the minimum fuel required by 14 CFR, Section 91.151 for VFR flights or 91.169 for IFR flights. Solo fuel reserves will be one hour remaining after the full stop landing on both local and cross-country flights.

MINIMUM ALTITUDES - Minimum altitude for solo maneuver practice with the exception of landing practice is 600' AGL or higher if the minimum altitude applicable in 14 CFR, Section 91.119 is higher than 600' AGL. All simulated emergency landings will be terminated at 500' AGL minimum. Minimum altitudes for IFR operations will be in accordance with 14 CFR, Sections 91.175 and 91.177.

PRACTICE AREAS - The University utilizes several practice areas for flight training. These areas are depicted in Appendix C of this Training Course Outline.

WEATHER MINIMUMS REQUIRED FOR SOLO FLIGHT:

Solo Traffic Pattern:
1,500’ ceiling 3 miles visibility

Solo Area Work:
2,500’ ceiling 5 miles visibility

Solo X-C:
2,500’ ceiling 10 miles visibility
This minimum applies for the entire route to be flown and the forecast must indicate an improvement or to remain the same.

Dual* - All flights, except Instrument:
1,000’ ceiling 3 miles visibility
* Special VFR Closed Traffic Pattern Operations
may not be conducted unless normal traffic pattern altitude can be obtained. IFR operations will not be conducted unless weather minimums are at or above the specified approach minimums for the current instrument approach in use at Max Westheimer Airport.

WEATHER MINIMUMS FOR IFR TRAINING
Instrument training under VFR will be in accordance with the basic VFR weather minimums in 14 CFR, Section 91.155. For IFR operations, minimum weather for landings will be in accordance with 14 CFR, Section 91.175. For takeoffs, the ceiling and visibility will be equal to or greater than the lowest Category A aircraft instrument approach minimums at the departure airport. If prevailing winds dictate a circling procedure, the lowest Category A circling minimums will apply. Determination of the requirement for an alternate airport will be in accordance with 14 CFR, Section 91.169.
WIND LIMITS:
Solo: Maximum 25 knots - Maximum 10 knots gust spread
Dual: Maximum 35 knots - Maximum 15 knots gust spread
Crosswind: Crosswind limits will not exceed those specified by the POH for the aircraft to be flown.

AIRCRAFT CHECKLIST/KEY TURN IN: After completing the flight and securing the aircraft, the student will record the hobbs time on the Aircraft Information Sheet and return the aircraft checklists and keys to the dispatch area. Give the keys to a staff member for return to the lock box and complete the information on the Aircraft Sign Out Sheet. Return the syllabus sheet to the instructor for further processing. Solo students returning after hours when the main office is locked will leave the aircraft checklists and syllabus sheet in the aircraft. The aircraft keys will be placed in the envelope slot in the door to the large hangar. All solo students returning after normal business hours (5:00 PM, Monday through Friday or any time on weekends and holidays) will call the OU mobile phone at 919-6319 to report completion of the flight.

ATTENDANCE - TARDINESS:
Students are expected to attend all scheduled ground and flight training lessons. In the event of sickness or accident, call the Aviation Department at 325-7231. Do not make a determination of attendance due to weather. If in doubt, call the Aviation Department. Excessive absences or tardiness, are grounds for removal from the course.
COMMERCIAL PILOT STAGE X
LESSON TIME ALLOCATION

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*By the completion of Stage X the student will have completed 10 solo takeoffs and landings at night (with each landing involving a flight with a traffic pattern) at an airport with an operating control tower.

**These are the minimum times in each flight category for course completion

DL NGT = Dual Night
DL XC = Dual Cross Country
SO XC = Solo Cross Country
INST DL = Instrument
CA = Complex Airplane
UNIVERSITY OF OKLAHOMA
COMMERCIAL CERTIFICATION COURSE
STAGE X

STAGE OBJECTIVE

The objective of this stage is for the student to complete the course requirements and attain the proficiency level required of an instrument/commercial pilot.

STAGE COMPLETION STANDARDS

At the completion of this stage, the student must be able to demonstrate all flight maneuvers and procedures at the proficiency level of an instrument/commercial pilot. The student also will successfully complete the final stage tests and stage checks.
STAGE X FLIGHT LESSON 1 DUAL - LOCAL

LESSON OBJECTIVE: This lesson provides a review of basic ground reference maneuvers, steep power turns and chandelles. The student should begin developing precise airplane control when operating near the performance limits of the airplane.

CONTENT:
Lesson Review
Private Pilot Ground Reference Maneuvers Assigned by the Instructor
Maneuvering During Slow Flight
Simulated Emergency Procedures
- Emergency Descent
- Emergency Approach and Landing
- System and Equipment Malfunctions
Steep Turns
Chandelles

COMPLETION STANDARDS:
The lesson is complete when the student can perform basic ground reference maneuvers while maintaining a specified altitude and ground track. The student will display the correct understanding of the necessary control inputs during entry to, performance of, and recovery from, the steep power turn and chandelle.
STAGE X LESSON 2 DUAL - LOCAL, COMPLEX AIRCRAFT

LESSON OBJECTIVE: The objective of this lesson is to review the student's knowledge of complex airplanes. This review includes systems and basic flight operations.

CONTENT:
Lesson Introduction
Preflight Preparation and Procedures
- Certificates and Documents
- Operation of Airplane Systems
- Determining Performance and Limitations
- Use of Checklists
- Cockpit Management
- Visual Inspection
- Engine Starting
- Taxiing
- Pretakeoff Check
- Minimum Equipment List
- Airport Operations
Takeoffs and Landings
- Normal
- Crosswind
Climbs and Descents
Steep Turns
Cruise Procedures
Power Settings and Mixture Leaning
Use of Constant-Speed Propeller and Effects Upon Aircraft Performance
Use of Retractable Landing Gear and Flaps
Go-Around From Rejected (Balked) Landing
Post Flight Procedures

COMPLETION STANDARDS:
At the completion of the flight, the student should display a working knowledge of the airplane systems. Additionally, the student should display at least private pilot proficiency in the performance of basic flight operations.
STAGE X FLIGHT LESSON 3 SOLO - LOCAL

LESSON OBJECTIVE: This lesson provides the student with the opportunity to practice basic flight maneuvers to further develop coordination and airplane control.

CONTENT:
Lesson Review
- Power-Off
- Power-On
- Accelerated
Maneuvering During Slow Flight
Normal Takeoffs and Landings
Private Pilot Ground Reference Maneuvers Assigned by the Instructor

COMPLETION STANDARDS:
This lesson is complete when the student has conducted the assigned flight. The student should attempt to gain proficiency in the planning of each maneuver.

STUDENT NAME _______________________________ ID# _________________
INSTRUCTOR NAME ____________________________ CERT# ______________
AIRCRAFT # CRM FLIGHT STAGE # X LESSON # 3
SAT ____% UNSAT ____% INCOMPLETE ____% CANCELLATION______

HOMEWORK COMPLETE: Y / N (% grade is normally part of the lesson grade.)
Note:
1. Circle appropriate status/grade and put number (%) grade on line.
2. If cancellation state reason.

REMARKS: _________________________________________________________

FOR I OR U: SUBJECTS THAT ARE NOT COMPLETE/INSTRUCTOR COMMENTS
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DATE: ____________________________
TIME: IN _______________ ENTERED BY _____________
      OUT _______________ SYLL. LESSON ___________
      TOTAL ____________ PROCESSED ON ________

HOBBS / TAC: IN ________/_________ REMARKS: _______________
      OUT ________/_________ ___________________________________
      TOTAL TIME ___________________ _________________________

STUDENT SIGNATURE _____________________________________________
INSTRUCTOR SIGNATURE __________________________________________
STAGE X FLIGHT LESSON 4 DUAL - LOCAL, COMPLEX AIRCRAFT

LESSON OBJECTIVE: This lesson provides PIC experience to allow the student to increase familiarity with the complex airplane.

CONTENT:
Lesson Review
Visual Inspection
Cruise Procedures
Power Settings and Mixture Leaning
Climbs
Descents
Steep Turns
Maneuvering During Slow Flight
Stalls
- Power-Off
- Power-On
- Accelerated
Takeoffs and Landings
- Short-Field
- Soft-Field

COMPLETION STANDARDS:
This lesson is complete when the student has conducted the assigned flight. During the flight, the student should attempt to increase proficiency in the smooth and accurate performance of the listed flight maneuvers in the complex airplane.

STUDENT NAME _______________________________ ID# _________________
INSTRUCTOR NAME ____________________________ CERT# ______________
AIRCRAFT # CRM _____ FLIGHT _______ STAGE # X _____ LESSON # 4
SAT _____% UNSAT _____% INCOMPLETE _____% CANCELLATION_______

HOMEWORK COMPLETE: Y / N (% grade is normally part of the lesson grade.)
Note:
1. Circle appropriate status/grade and put number (%) grade on line.
2. If cancellation state reason.
REMARKS: _________________________________________________________
FOR I OR U: SUBJECTS THAT ARE NOT COMPLETE/INSTRUCTOR COMMENTS
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____________________________________________________________________
FOR XC FLIGHTS, LIST DESTINATIONS: _________________________________

DI | So | Dnt | Snt | Dxc | Sxc | Idl | Nldg | AATD | CA | PP | GI

DATE: ______________________
TIME: IN ____________ ENTERED BY ______________
OUT _______________ SYLL. LESSON __________
TOTAL ______________ PROCESSED ON __________

HOBBS / TAC: IN _______/__________ REMARKS: ______________
OUT _______/__________
TOTAL TIME ______________ ______________________

STUDENT SIGNATURE _____________________________________________
INSTRUCTOR SIGNATURE _________________________________________
STAGE X FLIGHT LESSON 5 DUAL - LOCAL

LESSON OBJECTIVE: This lesson presents additional instruction in chandelles and steep power turns. Maximum performance takeoffs and landings are practiced to increase the student's proficiency in the takeoff and landing phases of flight.

CONTENT:
Lesson Review
Steep Turns
Chandelles
Steep Spiral
Eights-On-Pylons
Traffic Patterns
Short-Field Takeoff and Landing
Soft-Field Takeoff and Landing
Power-Off 180 Degree Accuracy Approach and Landing

Lesson Review
Instrument Approaches
- Precision
- Non-Precision
Holding

COMPLETION STANDARDS:
Steep turns will be maintained within +/- 150 feet and bank angle and recovery heading within +/- 15 degrees. The student will demonstrate the correct procedures for performing the chandelle. During steep spirals the student will correctly adjust bank angle to stay at a constant radius from the selected point and adjust pitch to maintain a constant airspeed. During eights-on-pylons the student will anticipate altitude changes and make smooth pitch and bank changes to keep the wing on the pylon. During takeoffs and landings, the student will demonstrate correct airspeed control techniques. Instrument Approaches and holds will be performed to the Instrument Rating Practical Test Standards.
STAGE X FLIGHT LESSON 6 SOLO - LOCAL

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

CONTENT:
Lesson Review
Steep Turns
Chandelles
Maneuvering During Slow Flight
Short-Field Takeoffs and Landings
Soft-Field Takeoffs and Landings
Power-Off Stalls
Power-On Stalls
Accelerated Stalls
Lazy Eights
Steep Spiral
Eights On Pylons

COMPLETION STANDARDS:
This lesson is complete when the student has conducted the assigned maneuvers. During the lesson, the student should attempt to minimize the transition and setup time between each maneuver.

STUDENT NAME ____________________________ ID# __________________
INSTRUCTOR NAME ____________________________ CERT# __________________
AIRCRAFT # CRM FLIGHT STAGE # X LESSON # 6
SAT ____% UNSAT ____% INCOMPLETE ____% CANCELLATION_____

HOMEWORK COMPLETE: Y / N (% grade is normally part of the lesson grade.)
Note:
1. Circle appropriate status/grade and put number (%) grade on line.
2. If cancellation state reason.
REMARKS:
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HOBBS / TAC: IN _______ / _______ REMARKS: ___________
OUT _______ / _______ ____________________________
TOTAL TIME ___________

STUDENT SIGNATURE _____________________________________________
INSTRUCTOR SIGNATURE ___________________________________________
STAGE X FLIGHT LESSON 7 DUAL - LOCAL

LESSON OBJECTIVE: This lesson provides a review and evaluation of the student's progress during the previous solo lessons, including lazy eights, and eights-on-pylons.

CONTENT:
Lesson Review
Chandelles
Normal Takeoffs and Landings
Crosswind Takeoffs and Landings
Power-Off 180 Degree Accuracy Approach and Landing
Wake Turbulence Avoidance
Lazy Eights
Steep Spiral
Eights-On-Pylons

Lesson Review
Instrument Approaches
  - Precision
  - Non-Precision
Holding
Recovery From Unusual Attitudes

COMPLETION STANDARDS:
The student should 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, steep spirals, chandelles and eights-on-pylons. During the Power-Off 180 Degree Accuracy Approach and Landing and crosswind takeoffs and landings the student will correctly compensate for the wind. Instrument approaches, holds and recovery from unusual attitudes will be performed to the Instrument Rating Practical Test Standards.

STUDENT NAME ___________________________ ID# _______________
INSTRUCTOR NAME ___________________________ CERT# _______________
AIRCRAFT # CRM FLIGHT STAGE # X LESSON # 7
SAT _____% UNSAT _____% INCOMPLETE _____% CANCELLATION_______

HOMEWORK COMPLETE: Y / N (% grade is normally part of the lesson grade.)
Note:
  1. Circle appropriate status/grade and put number (%) grade on line.
  2. If cancellation state reason.
REMKS:
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      TOTAL _______ PROCESSED ON _______

HOBBS / TAC: IN _______/_______ REMARKS: __________________
      OUT _______/_______
      TOTAL TIME __________________

STUDENT SIGNATURE ___________________________
INSTRUCTOR SIGNATURE ___________________________
STAGE X FLIGHT LESSON 8 DUAL - LOCAL, COMPLEX AIRCRAFT

LESSON OBJECTIVE: During this lesson, the student is provided with a review of basic complex aircraft and emergency procedures. In addition, this lesson will provide a review of commercial pilot maneuvers.

CONTENT:
Lesson Review
Visual Inspection
Determining Performance and Limitations
Takeoffs and Landings
  - Normal
  - Go-Around from Rejected (Balked) Landing
Power Settings and Mixture Leaning
Use of Constant-Speed Propeller and Effects upon Aircraft Performance
Use of Landing Gear and Flaps
Climbs
Descents
Steep Turns
Stalls
  - Power-On
  - Power-Off
  - Accelerated
Takeoffs and Landings
  - Short-Field
  - Soft-Field
Simulated Emergency Procedures
  - Emergency Descent
  - Emergency Approach and Landing (Simulated)
  - System and Equipment Malfunctions
Chandelles
Lazy Eights
Steep Spiral
Eights-On-Pylons

COMPLETION STANDARDS:
During the performance of this lesson, the student should demonstrate commercial pilot proficiency. Any maneuvers, which do not meet this standard, will be assigned for additional practice.

STUDENT NAME _______________________________ ID# _______________
INSTRUCTOR NAME ____________________________ CERT# ______________
AIRCRAFT #  CRM  FLIGHT  STAGE #  X  LESSON #  8
SAT ____%  UNSAT ____%  INCOMPLETE ____%  CANCELLATION_____

HOMEWORK COMPLETE: Y / N (% grade is normally part of the lesson grade.)
Note:
1. Circle appropriate status/grade and put number (%) grade on line.
2. If cancellation state reason.

REMARKS:
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OUT _______________ SYLL. LESSON ___________
TOTAL _______________ PROCESSED ON __________

HOBBS / TAC: IN _______/__________ REMARKS: _______________
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TOTAL TIME _______________

STUDENT SIGNATURE _____________________________________________
INSTRUCTOR SIGNATURE _________________________________________
STAGE X FLIGHT LESSON 9 DUAL - LOCAL, COMPLEX AIRCRAFT

LESSON OBJECTIVE: This lesson provides PIC experience to allow the student to increase familiarity with the complex airplane.

CONTENT:
Lesson Review
Visual Inspection
Power Settings and Mixture Leaning
Climbs
Descents
Steep Turns
Takeoffs and Landings
- Short-Field
- Soft-Field
Power-Off 180 Degree Accuracy Approach and Landing
Completion of 10 Takeoffs and 10 Landings to a Full Stop

COMPLETION STANDARDS:
This lesson is complete when the student has conducted the assigned flight. During the flight, the student should attempt to increase proficiency in the smooth and accurate performance of the listed flight maneuvers in the complex airplane.

STUDENT NAME ____________________________ ID# _______________
INSTRUCTOR NAME ____________________________ CERT# _____________
AIRCRAFT # CRM FLIGHT STAGE # X LESSON # 9
SAT ____% UNSAT ____% INCOMPLETE ____% CANCELLATION_______

HOMEWORK COMPLETE: Y / N (% grade is normally part of the lesson grade.)
Note:
1. Circle appropriate status/grade and put number (%) grade on line.
2. If cancellation state reason.
REMARKS:
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FOR XC FLIGHTS, LIST DESTINATIONS: _______________________________

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DATE: __________________
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OUT ____________ SYLL. LESSON ____________
TOTAL ____________ PROCESSED ON ____________

HOBBS / TAC: IN _____ / ________ REMARKS: ________________
OUT _____ / ________
TOTAL TIME ____________

STUDENT SIGNATURE ____________________________________________
INSTRUCTOR SIGNATURE ____________________________________________
STAGE X FLIGHT LESSON 10 SOLO - LOCAL

LESSON OBJECTIVE:

This lesson maintains student proficiency in cross-country flights. The flight will include a landing at a point more than 50 nautical miles from the original departure point.

CONTENT:

Lesson Review

Cross-Country Flight Planning
- Dead Reckoning
- Pilotage
- VOR Navigation
- GPS Navigations
- Controlled Airport Operations
- Uncontrolled Airport Operations

COMPLETION STANDARDS:

This lesson is complete when the student has conducted a solo cross-country flight to include a landing at a point more than 50 nautical miles from the original departure point. The student will demonstrate continued proficiency in cross-country operations.

STUDENT NAME _______________________________ ID# ______________
INSTRUCTOR NAME ____________________________ CERT# ______________
AIRCRAFT # CRM FLIGHT STAGE # X LESSON # 10
SAT _____% UNSAT _____% INCOMPLETE ____% CANCELLATION_______
HOMWORK COMPLETE: Y / N (% grade is normally part of the lesson grade.)
Note:
1. Circle appropriate status/grade and put number (%) grade on line.
2. If cancellation state reason.
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HOBBS / TAC: IN ________/__________ REMARKS: _______________________
             OUT ________/__________
             TOTAL TIME __________________
STUDENT SIGNATURE ________________________________________________
INSTRUCTOR SIGNATURE _____________________________________________
STAGE X FLIGHT LESSON 11 DUAL - LOCAL, NIGHT

LESSON OBJECTIVE: This lesson reviews the student's night flight operations and the differences encountered between day and night flight.

CONTENT:
Lesson Introduction
Night Ground Operations
  - Aeromedical Factors
  - Personal Equipment Recommended
  - Night Flight Preparation
  - Night Preflight Inspections
Airport and Runway Markings and Lighting
Takeoffs and Landings
  - Normal
  - Crosswind
  - Controlled and Uncontrolled Airports
Stalls
  - Power-Off
  - Power-On
Maneuvering During Slow Flight
Steep Turns
Simulated Emergency Procedures
  - Emergency Descent
  - Emergency Approach and Landing
  - Systems and Equipment Malfunctions
Go-Around From Rejected (Balked) Landing

COMPLETION STANDARDS:
This lesson is complete when the student displays an understanding of night flight and the associated normal and emergency procedures.
STAGE X FLIGHT LESSON 12 SOLO - LOCAL, NIGHT

LESSON OBJECTIVE: This lesson provides night solo practice so the student may gain proficiency and confidence in the night environment.

CONTENT:
Lesson Review
Takeoffs and Landings
- Normal
- Crosswind

COMPLETION STANDARDS:
This lesson is complete when the student has conducted the solo night flight. During the flight, the student should attempt to gain proficiency in takeoffs and landings in the night environment.

NOTE: Through a combination of Stage IV Lessons 12, 17, & 21 and Stage X Lesson 12, the student will have completed a combined 10 takeoffs and landings (with each landing involving a flight with a traffic pattern) at an airport with an operating control tower.
STAGE X FLIGHT LESSON 13 SOLO - LOCAL, NIGHT

LESSON OBJECTIVE: The object of this lesson is to increase the student's proficiency in night operations. Night flight procedures, therefore, are reviewed and practiced in this session.

CONTENT:
Lesson Review
- Steep Turns
- Maneuvering During Slow Flight
- Takeoffs and Landings

COMPLETION STANDARDS:
The student's increase in night proficiency to that of a commercial pilot will be evident during the postflight evaluation. The student will thoroughly explain the additional operational aspects and safety considerations which are associated with night flight.
STAGE X FLIGHT LESSON 14 SOLO - LOCAL

LESSON OBJECTIVE: This lesson will provide solo practice of the flight maneuvers so that the student can acquire added proficiency.

CONTENT:
Lesson Review
Steep Turns
Chandelles
Lazy Eights
Steep Spiral
Eights-On-Pylons
Takeoffs and Landings
  - Short-Field
  - Soft-Field
  - Crosswind
Power-Off 180 Degree Accuracy Approach and Landing

COMPLETION STANDARDS:
This solo lesson is complete when the student has conducted the assigned flight. During the flight, the student should attempt to attain or maintain commercial pilot proficiency.
STAGE X FLIGHT LESSON 15 DUAL - LOCAL

LESSON OBJECTIVE: This lesson provides a review for the student and an opportunity to correct any areas of faulty performance.

CONTENT:
Lesson Review
Chandelles
Lazy Eights
Eights-On-Pylons
Steep Turns
Steep Spiral

Lesson Review
Instrument Approaches
  - Precision
  - Non-Precision
Intercepting and Tracking DME arcs.

COMPLETION STANDARDS:
During the performance of each of the listed maneuvers, the student should demonstrate commercial pilot proficiency. Any maneuvers which do not meet this standard will be assigned for additional practice. Instrument procedures will be performed to the Instrument Rating Practical Test Standards.
STAGE X FLIGHT LESSON 16 DUAL - LOCAL, INSTRUMENT

LESSON OBJECTIVE: This review of holding patterns, voice communications, radar vectoring procedures, and approaches will maintain the student's proficiency in preparation for the stage check.

CONTENT:
Lesson Review
VOR Holding
ADF Holding
Localizer Holding
Intersection Holding
Voice Communications
Use of Radar Vectors
ILS, VOR, and NDB Approaches (As Necessary)

COMPLETION STANDARDS:
The student will correctly perform holding pattern entries, wind correction, and leg timing for both standard and nonstandard holding patterns. All voice communications will be both appropriate and timely, compliance with radar vector instructions will be accurate, and instrument approaches will meet instrument pilot standards.

STUDENT NAME __________________________ ID# __________________
INSTRUCTOR NAME _________________________ CERT# ________________
AIRCRAFT # CRM _____ FLIGHT _____ STAGE # X _____ LESSON # 16
SAT _____% UNSAT _____% INCOMPLETE _____% CANCELLATION_______

HOMEWORK COMPLETE: Y / N (% grade is normally part of the lesson grade.)
Note: 1. Circle appropriate status/grade and put number (%) grade on line.
2. If cancellation state reason.
REMARKS:
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FOR XC FLIGHTS, LIST DESTINATIONS: _________________________________

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TOTAL ___________ PROCESSED ON __________
HOBB / TAC: IN _____ / ____ REMARKS: _______________
OUT _____ / ________________
TOTAL TIME ________________

STUDENT SIGNATURE _____________________________________________
INSTRUCTOR SIGNATURE _________________________________________
STAGE X FLIGHT LESSON 17 SOLO - LOCAL

LESSON OBJECTIVE: This lesson is a solo review lesson designed to increase the student’s proficiency.

CONTENT:
Lesson Review
Lazy Eights
Eights-On-Pylons
Chandelles
Steep Turns
Steep Spiral
Power-Off 180 Degree Accuracy Approach and Landing

COMPLETION STANDARDS:
This lesson will be complete when the student has conducted the assigned solo flights. During each flight, the student should attempt to perform lazy eights with symmetrical loops and eights-on-pylons, chandelles, and steep power turns with smoothness and coordination. During steep spirals the student will adjust bank angle to maintain a constant radius from the selected point and pitch to maintain a constant airspeed. During the power-off 180 degree accuracy approach and landing the student will factor in the wind to correctly adjust the approach course to touch down on or 200 feet beyond the selected point.

STUDENT NAME _______________________________ ID# __________________
INSTRUCTOR NAME ____________________________ CERT# ________________
AIRCRAFT # CRM FLIGHT STAGE # X LESSON # 17
SAT ____% UNSAT ____% INCOMPLETE ____% CANCELLATION_______

HOMEWORK COMPLETE: Y / N (% grade is normally part of the lesson grade.)
Note:
1. Circle appropriate status/grade and put number (%) grade on line.
2. If cancellation state reason.
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HOBBS / TAC: IN _______________/______________ REMARKS: _______________
             OUT _______________/______________
             TOTAL TIME __________________________

STUDENT SIGNATURE ________________________________________________
INSTRUCTOR SIGNATURE _____________________________________________
STAGE X FLIGHT LESSON 18 DUAL - LOCAL, COMPLEX AIRCRAFT

LESSON OBJECTIVE: This lesson provides PIC experience to allow the student to increase familiarity with the complex airplane.

CONTENT:
Lesson Review
Visual Inspection
Cruise Procedures
Power Settings and Mixture Leaning
Climbs
Descents
Steep Turns
Chandelles
Lazy-Eights
Steep Spiral
Eights-On-Pylons
Maneuvering During Slow Flight
Stalls
  - Power-Off
  - Power-On
  - Accelerated
Takeoffs and Landings
  - Short-Field
  - Soft-Field
Power-Off 180 Degree Accuracy Approach and Landing

COMPLETION STANDARDS:
This lesson is complete when the student has conducted the assigned flight. During the flight, the student should attempt to increase proficiency in the smooth and accurate performance of the listed flight maneuvers in the complex airplane.
STAGE X FLIGHT LESSON 19 DUAL - LOCAL, COMPLEX AIRCRAFT

LESSON OBJECTIVE: During this lesson, the student is provided with a review of basic flight procedures along with the practice of emergency procedures, attitude instrument flying, and takeoffs and landings in the complex aircraft. The student will be introduced to high altitude operations.

CONTENT:
Lesson Review
Visual Inspection
Determining Performance and Limitations
Takeoffs and Landings
- Normal
- Go-Around From Rejected (Balked) Landing
Power Settings and Mixture Leaning
Use of Constant-Speed Propeller and Effects Upon Aircraft Performance
Use of Landing Gear and Flaps
Climbs
Descents
Steep Turns
Maneuvering During Slow Flight
Stalls
- Power-Off
- Power-On
- Accelerated
Takeoffs and Landings
- Short-Field
- Soft-Field
Simulated Emergency Procedures
- Emergency Descent
- Emergency Approach and Landing
- System and Equipment Malfunctions
- Fire in Flight
Full Panel Instrument
- Straight and Level
- Climbs
- Climbing Turns
- Descents
- Descending Turns
- Standard-Rate Turns
- Recovery From Unusual Flight Attitudes
- Maneuvering During Slow Flight
- Flight at Slow Airspeeds with Realistic Distractions, and the Recognition of and Recovery from Stalls
- Entered from Straight Flight and from Turns

COMPLETION STANDARDS:
At the completion of this lesson, the student should be thoroughly familiar with the flight characteristics, systems, and emergency procedures associated with the complex airplane. The student will demonstrate pilot-in-command proficiency.
STAGE X FLIGHT LESSON 20 SOLO - LOCAL

LESSON OBJECTIVE: The objective of this lesson is the same as previous solo lessons. The student is provided with the opportunity to review and practice flight maneuvers to gain added proficiency.

CONTENT:
Lesson Review
Power-Off Stalls
Power-On Stalls
Accelerated Stalls
Maneuvering During Slow Flight
Steep Turns
Chandelles
Steep Spiral
Lazy Eights
Eights-On-Pylons
Short-Field Takeoffs and Landings
Soft-Field Takeoffs and Landings
Power-Off 180 Degree Accuracy Approach and Landing

COMPLETION STANDARDS:
This lesson will be completed when the student has conducted the assigned solo flight. During the flight, the student should attempt to increase accuracy and coordination on the listed maneuvers.
STAGE X FLIGHT LESSON 21 DUAL - LOCAL

LESSON OBJECTIVE: The objective is to determine the student's VFR proficiency. The instructor is to choose the maneuvers to be performed.

CONTENT:
Lesson Review
Chandelles
Power-Off 180 Degree Accuracy Approach and Landing
Eights-On-Pylons
Steep Turns
Stalls
Maneuvering During Slow Flight
Lazy Eights
Steep Spirals
Takeoffs and Climbs
  - Normal
  - Crosswind
  - Short-Field
  - Soft-Field
Approaches and Landings
  - Normal
  - Crosswind
  - Short-Field
  - Soft-Field
  - Go-Around From Rejected (Balked) Landing
- Power-Off 180 Degree Accuracy Approach and Landing
Cockpit Management
After Landing Procedures

COMPLETION STANDARDS:
All maneuvers will be performed according to FAA practical test standards.
STAGE X FLIGHT LESSON 22 DUAL - LOCAL-COMPLEX AIRCRAFT

LESSON OBJECTIVE: This lesson is the final dual review of the precision flight maneuvers. The objective is to determine the student's preparedness for the last stage check.

CONTENT:
Lesson Review
Chandelles
Lazy Eights
Steep Spiral
Eights-On-Pylons
Steep Turns
Takeoffs and Landings
  - Short-Field
  - Soft-Field
  - Crosswind
  - Power-Off 180 Degree Accuracy Approach and Landing
Go-Around From Rejected (Balked) Landing
Simulated Emergency Procedures
  - Landing Gear Malfunction
  - Systems and Equipment Malfunction
  - Emergency Descent
  - Emergency Approach and Landing

COMPLETION STANDARDS:
The lesson is complete when the student can perform each of the listed maneuvers to the minimum performance standards outlined in the current FAA commercial pilot practical test standards.
STAGE X LESSON 23 QUIZ

LESSON OBJECTIVE: The objective of this lesson is to test the student’s knowledge of this stage through a quiz.

COMPLETION STANDARDS:
This lesson is complete when the student scores a 70% or better. In addition, the instructor is responsible for reviewing those questions missed.
STAGE X FLIGHT LESSON 24 DUAL - COMPLEX
FINAL STAGE CHECK

LESSON OBJECTIVE: This lesson is the final stage check conducted by the Chief or Assistant Chief Flight Instructor. During this lesson, the student must demonstrate knowledge and proficiency in all tasks to a level required by the current FAA Commercial Pilot Practical Test Standards. The order of material examined under lesson content is based on how this material may be covered during the oral and flight portions of the practical test. Note: The person conducting this stage check is not required to cover the material in the order indicated as long as all required material is covered.

CONTENT:

Special Emphasis Areas: In addition to the specific Areas of Operation (AO’s) and the Tasks identified in the oral and flight portions of the test, the following special emphasis areas will be evaluated throughout the test:

- Positive Aircraft Control
- Positive Exchange of the Flight Controls Procedure
- Stall/Spin Awareness
- Collision Avoidance
- Land and Hold Short Operations
- Runway Incursion Avoidance
- Controlled Flight Into Terrain
- Aeronautical Decision Making and Risk Management
- Wire Strike Avoidance
- Checklist Usage
- Temporary Flight Restrictions (TFRs)
- Special Use Airspace (SUA)
- Aviation Security
- Single Pilot Resource Management (SRM)
- Other Areas Deemed Appropriate to any Phase of the Test

(CONTINUED ON NEXT PAGE)
STAGE X FLIGHT LESSON 24 (CONT'D)
FINAL STAGE CHECK

**Oral Portion of Practical Test**

Certificates and Documents (AOI, Task A)

Airworthiness Requirements (AOI, Task B)

Cross-Country Flight Scenario (based on maximum allowable passengers, baggage, and/or cargo loads using real-time weather)

Weather Information (AOI, Task C)

Cross-Country Flight Planning (AOI, Task D)

National Airspace System (AOI, Task E)

Radio Communication and ATC Light Signals (AOIII, Task A)

Runway Incursion Avoidance (AOII, Task F)

Airport Runway and Taxiway Signs, Markings and Lighting (AOIII, Task C)

Performance and Limitations (AOI, Task F)

Operation of Systems (AOI, Task G)

Systems and Equipment Malfunctions (AOIX, Task C)

Aeromedical Factors (AOI, Task J)

High Altitude Operations (AOX, Tasks A and B)

Emergency Equipment and Survival Gear (AOIX, Task D)

Spin Awareness (AOVIII, Task E)

**Flight Portion of Practical Test**

Ground Operations

Preflight Inspection (AOII, Task A)

Engine Starting (AOII, Task C)

Taxiing (AOII, Task D)

Before Takeoff Check (AOII, Task G)

(CONTINUED ON NEXT PAGE)
STAGE X FLIGHT LESSON 24 (CONT'D)
FINAL STAGE CHECK

Evaluated Throughout Flight

Cockpit Management (AOII, Task B)

Radio Communications and ATC Light Signals (AOIII, Task A)

Runway Incursion Avoidance (AOII, Task F)

Cross Country Segment

Pilotage and Dead Reckoning (AOVII, Task A)

Navigation Systems and Radar Services (AOVII, Task B)

Diversion (AOVII, Task C)

Lost Procedures (AOVII, Task D0)

Systems and Equipment Malfunctions (AOIX, Task C)
Note: At some point during flight Evaluate Landing Gear Failure

Emergency Descent

Emergency Approach and Landing (AOIX, Task B)

Performance Maneuvers

Steep Turns (AOV, Task A) or Steep Spirals (AOV, Task B)

Chandelles (AOV, Task C) or Lazy Eights (AOV, Task D)

Slow Flight and Stalls

Maneuvering During Slow Flight (AOVIII, Task A)

Power-Off Stalls (AOVIII, Task B)

Power-On Stalls (AOVIII, Task C)

Accelerated Stalls (AOVIII, Task D)

Ground Reference Maneuver

Eights on Pylons (AOVI, Task A)

CONTINUED ON NEXT PAGE)
STAGE X FLIGHT LESSON 24 (CONT’D)
FINAL STAGE CHECK

Airport Operations/Takeoffs and Landings

Traffic Patterns (AOIII, Task B)

Airport Runway/Taxiway Signs Markings and Lighting (AOIII, Task C)

Norman/X-Wind Takeoff/Climb (AOIV, Task A)

Normal/X-Wind Approach/Landing (AOIV, Task B)

Soft-Field Takeoff and Climb (AOIV, Task C)

Soft-Field Approach and Landing (AOIV, Task D)

Short-Field Takeoff and Max Performance Climb (AOIV, Task E)

Short-Field Approach and Landing (AOIV, Task F)

Power-Off 180 Degree Approach and Landing (AOIV, Task K)

Go-Around/Rejected Landing (AOIV, Task L)

Postflight Procedures

After Landing, Parking and Securing (AOXI, Task A)

COMPLETION STANDARDS:
The student will demonstrate proficiency in strict accordance with the Commercial Pilot Practical Test Standards and will be at least equal in scope, depth and difficulty to that flight test.
APPENDIX B
UNIVERSITY OF OKLAHOMA
COURSE POLICIES

1. At the discretion of the instructor, students who progress rapidly within a specific stage, may within reasonable variances, continue to the next lesson with less time than is specified in the specific lesson curriculum, provided all content and completion standards are satisfactorily completed. The time stated in the lesson is the approximate minimum time that a student would need to meet the lesson objectives and completion standards; not absolute required times. The lesson time could be slightly more or slightly less. These reduced hours must be included in other lessons to complete the total ground or flight time specified by category in the training course outline in order to satisfactorily complete the course.

2. At no time will a student be allowed to continue to the next stage without having successfully completed all of the lessons and the required tests or stage checks related to the completion of the previous stage.

3. Any lesson stated as a FTD lesson may be flown in an aircraft, ATC-710 or PCATD. The lesson will include the required pre- and post-flight procedures.

4. Flight training for this course will be done in accordance with the F.A.A approved syllabus. Deviations from the syllabus due to student training requirements, weather related factors, or other items as necessary will be allowed as long as the following requirements are met:
   1.) A notation will be made in the student training record as to the lesson covered and the reason for the deviation.
   2.) The student will complete all syllabus requirements before a graduation certificate is issued.

5. To satisfactorily complete the course of training, the student must meet all course objectives and completion standards. The student must have satisfactorily completed all required ground school courses and have completed the minimum flight time stated at the end of the course for each category as well as total flight time.
The University of Oklahoma Department of Aviation has three (3) practice areas used for normal flight training operations on a daily basis. They are designated practice area 'A', 'B', and 'C'.

Practice area 'A' is described as an area southwest of Max Westheimer Airport bounded on the north by State Highway 9, on the south by the 35° line of latitude, on the west by the line extending north and south along a similar direction road extending south from the town of Blanchard, and on the east by the line formed by the railroad tracks running southeast from Norman, OK along and near Interstate Highway 35.

Practice area 'B' is described as an area southeast of Max Westheimer Airport bounded on the north by State Highway 9, on the south by State Highway 33, on the west by the railroad tracks extending southeast from Norman, OK, and on the east by an imaginary line extending south from the east side of Lake Thunderbird and ending at State Highway 33.

Practice area 'C' is described as an area west of Max Westheimer Airport bounded on the north by an imaginary line extending west from State Highway 9 southwest of Norman, Ok. to the town of Pocasset, OK., on the south by the 35° line of latitude, on the west by the line extending north and south along a similar direction road extending north from the town of Chickasha, OK. and on the east by the line extending north and south along a similar direction road extending south from the town of Blanchard, OK.