FAR Part 61

Instrument Rating Flight School Syllabus

Student:_____

Foreword

This syllabus is designed to provide a structured and organized series of stages and lessons to help you obtain the necessary flight experience and prepare for your instrument pilot check ride. Although not required, it is strongly recommended that you follow the syllabus in its presented order to help keep your learning structured and in logical order. There are three stages to this syllabus, each stage contains lessons designed to present new material, build flight proficiency and meet the objectives of each individual stage. Remember, a lot of it depends on individual study and review of previously learned material.

Study Tips

✓ Prior to the lesson, review the items that will be covered by reading the material related to the lesson, looking up "how to" videos, talk to other pilots etc.…

✓ Before the lesson sit down with your instructor and do pre-flight discussion on the items covered in the lesson
✓ Pay close attention to the items demonstrated during the flight. If you are feeling sick or unable to focus, don't go flying. Save your money for a good day.
✓ After the flight, do a post flight discussion on the items covered and get all your questions answered. Write down any pointers that the instructor provides to make your learning more efficient.
✓ If you are still unsure about anything, don't hesitate to bring this up with your instructor, get together with the instructor or give him/her a phone call. We love answering your questions and we want to see you succeed.
✓ Continue to mentally go over the maneuvers or practice them in the simulator. Remember, the better you understand a maneuver or a procedure the easier it is to do it in the aircraft.
✓ Try to fly as often as you can, keep those skills fresh.

CONTENTS

STAGE OBJECTIVES & COMPLETION STANDARDS

STAGE I. INSTRUMENT FOUNDATIONS

OBJECTIVES: Introduce the fundamentals of instrument flying, transition private pilot flying techniques to flight with no visual cues. To build a useful scan of the instruments to create better situational awareness. **Although it is not listed as required information in the ACS, all private pilot knowledge areas should be revisited for proficiency.**

COMPLETION STANDARDS: Demonstrate knowledge of all private pilot certification standards per ACS. Demonstrate basic knowledge of the components that make up instrument flying. Understand the who, what, where, when, why, and how to instrument flying.

STAGE II. DEPARTURE, ENROUTE, ARRIVAL, EMERGENCIES, ABNORMALITIES

OBJECTIVES: Introduce the pieces of creating an IFR flight plan.

COMPLETION STANDARDS: Demonstrate the proper planning and execution of IFR cross country flight. To evaluate all possible emergency scenarios and how to safely complete the flight with reference to the FAR/AIM and ACS standards.

STAGE III. PARTIAL PANEL LONG XC AND CHECKRIDE

OBJECTIVES: Students will build upon their instrument flight training to introduce partial panel flying while evaluating all other stages of the flight simultaneously. Students will perform the required checkride preparation per the FAR.

COMPLETION STANDARDS: Student successfully demonstrates proficiency in all requirements of the ACS. Students are able to assess and correct for partial panel execution. Students complete the required checkride preparation and are endorsed for the instrument checkride.

Instrument Rating- FAR PART 61 CERTIFICATION REQUIREMENT SUMMARY

INSTRUMENT RATING REQUIREMENTS

- ☐ Hold at least a current private pilot certificate, or be concurrently applying for a private pilot certificate, with an airplane, helicopter, or powered-lift rating appropriate to the instrument rating sought
- ☐ Be able to read, speak, write, and understand the English language
- ☐ Receive and log ground training from an authorized instructor or accomplish a home-study course of training on the aeronautical knowledge areas of paragraph (b) of this section that apply to the instrument rating sought
- ☐ Receive a logbook or training record endorsement from an authorized instructor certifying that the person is prepared to take the required knowledge test
- ☐ Receive and log training on the areas of operation of paragraph (c) of this section from an authorized instructor in an aircraft, full flight simulator, or flight training device that represents an airplane, helicopter, or powered-lift appropriate to the instrument rating sought;
- ☐ Receive a logbook or training record endorsement from an authorized instructor certifying that the person is prepared to take the required practical test;
- ☐ Pass the required knowledge test on the aeronautical knowledge areas of paragraph (b) of this section
- ☐ Pass the required practical test on the areas of operation in paragraph (c) of this section in -
- ☐ (i) An airplane, helicopter, or powered-lift appropriate to the rating sought; or
- ☐ (ii) A full flight simulator or a flight training device appropriate to the rating sought and for the specific maneuver or instrument approach procedure performed. If an approved flight training device is used for the practical test, the instrument approach procedures conducted in that flight training device are limited to one precision and one non precision approach, provided the flight training device is approved for the procedure performed.

AERONAUTICAL KNOWLEDGE

A person who applies for an instrument rating must have received and logged ground training from an authorized instructor or accomplished a home-study course on the following aeronautical knowledge areas that apply to the instrument rating sought

- ☐ Appropriate information that applies to flight operations under IFR in the "Aeronautical Information Manual;"
- ☐ Air traffic control system and procedures for instrument flight operations
- ☐ IFR navigation and approaches by use of navigation systems
- ☐ Use of IFR en route and instrument approach procedure charts
- ☐ Procurement and use of aviation weather reports and forecasts and the elements of forecasting weather trends based on that information and personal observation of weather conditions
- ☐ Safe and efficient operation of aircraft under instrument flight rules and conditions
- ☐ Recognition of critical weather situations and windshear avoidance
- ☐ Aeronautical decision making and judgment
- ☐ Crew resource management, including crew communication and coordination

FLIGHT PROFICIENCY

A person who applies for an instrument rating must have received and logged ground training from an authorized instructor or accomplished a home-study course on the following aeronautical knowledge areas that apply to the instrument rating sought

- ☐ Preflight procedures;
- ☐ Air traffic control clearances and procedures
- ☐ Flight by reference to instruments
- ☐ Navigation systems
- ☐ Instrument approach procedures
- ☐ Emergency operations
- ☐ Postflight procedure

AERONAUTICAL EXPERIENCE for the INSTRUMENT AIRPLANE RATING

APPLICANTS MUST LOG

- ☐ **50 hours of cross-country** flight time as pilot in command, of which **10 hours must have been in an airplane**; and
  - ☐ (g) 45 for a dual private pilot and instrument applicant
- ☐ **40 hours of actual or simulated instrument** time in the areas of operation of which **15 hours must have been received from an authorized instructor** who holds an instrument-airplane rating, and the instrument time includes:
- ☐ (i) **Three hours of instrument flight training** from an authorized instructor in an airplane that is appropriate to the instrument-airplane rating **within 2 calendar months before the date of the practical test**
- ☐ (ii) Instrument flight training on cross country flight procedures, including one cross country flight in an airplane with an authorized instructor, that is performed under instrument flight rules, when a flight plan has been filed with an air traffic control facility, and that involves -
- ☐ (A) A flight of **250 nautical miles** along airways or by directed routing from an air traffic control facility
- ☐ (B) An instrument approach at each airport
- ☐ (C) Three different kinds of approaches with the use of navigation systems.

USE OF A FULL FLIGHT SIMULATOR or FTD

- ☐ 30 hours can be used in a FTD

USE OF AN AVIATION TRAINING DEVICE

- ☐ 10 hours can be used in a Basic Aviation Training device as long as it is authorized by the FAA to do so
- ☐ 20 hours can be used in an Advanced Aviation Training device as long as it is authorized by the FAA to do so

Checklist before first meeting

- ☐ Have student and instructor reach out to each other
    - ☐ Introductions
    - ☐ Any prerequisite reading or documents
        - ☐ Reference Reading Appendix
- ☐ Have student look at NWFS website
    - ☐ SOP's
    - ☐ How to become a pilot document
    - ☐ Ground school schedule and syllabus
        - ☐ Emphasize having this completed before flight training begins
    - ☐ Rentals
    - ☐ How much does it cost
    - ☐ Rate sheet
- ☐ Have student bring in documentation
    - ☐ ID
    - ☐ Passport or birth certificate
    - ☐ *Medical*
    - ☐ *Pilot certificate*
- ☐ **HIGHLY RECOMMENDED Have the instrument ground course and written exam completed or be halfway through a ground course**

On day of first meeting

- ☐ Scan in documents
- ☐ Go over flight schedule pro
- ☐ Discuss course expectations
    - ☐ Have the written completed OR be at least halfway through a ground course OR complete together preliminary ground instruction before introduction the SIM tasks

Reading Appendix

ACS (Airman Certification Standards)

The ACS document provides information on aeronautical knowledge, risk management and flight proficiency standards for all students, instructors and DPEs.

PHAK (Pilot's Handbook of Aeronautical Knowledge)

Low Enroute Charts

Instrument flight charts, like the sectional, but for IFR operations

TPP (Terminal Procedure Publications)

The TPPs contain Instrument Approach Procedure charts (IAP), Departure Procedure charts (DP), Standard Terminal Arrival charts (STAR), CVFP and Airport Diagrams (AD). Also included are Takeoff, Radar, and Alternate Minima textual procedures

IFH (Instrument Flying Handbook)

In addition to knowing everything in the PHAK, this book expands on the knowledge required for instrument flying written in the same format

IPH (Instrument Procedures Handbook)

The detailed components of IFR flight planning and the procedures used to fly IMC

AFH (Airplane Flying Handbook)

The AFH provides detailed knowledge on airplane piloting skills. It lists how to perform all required maneuvers and includes procedures to transition to different aircraft.

POH (Pilot Operating Handbook)

The POH provides information on all aircraft operations, limitations, emergencies, weight and balance, performance, and airplane description about the aircraft

FAR/AIM (Federal Aviation Regulations/Aeronautical information manual)

The FAR/AIM provides information on all regulations of aircraft such as how to get a license, how to lose your license, commercial operations, etc. This book goes very in depth with all kinds of knowledge.

TERPS (United States Standard for Terminal Instrument Procedures and Order 8260.3D)

This order prescribes standardized methods for designing and evaluating instrument flight procedures

AVIATION WEATHER

Aviation Weather is a comprehensive resource for everything that pilots, students, and instructors need to know about navigating all types of weather safely

AVIATION WEATHER SERVICES

This book provides interpretation and usage of U.S weather products and services to plan safe and efficient flights

Stage 1 Ground Topic Overview

Instrument Foundations

Prerequisite study: Review all knowledge areas from Private Pilot ACS. Read the Instrument Rating ACS. If student has completed the written test or is at least halfway through a ground course, you can proceed to SIM lesson 1. If student has not completed those tasks, consider doing multiple ground lessons first and tab out the FAR/AIM and go over the entire IFH emphasis on highlighting the glossary terms as well as completing Ground Overview Lesson Stage 1 first.
Objective: To introduce knowledge on the basic foundations of instrument flying. To include private pilot knowledge review, These should be discussed throughout stage 1 where practical.

Pilots Handbook of Aeronautical Knowledge

- ☐ Everything
- ☐ Types of altitude
- ☐ Types of airspeed
- ☐ Instruments
    - ☐ Scanning techniques
        - ☐ T scan
        - ☐ Hub and spoke
        - ☐ Rectangle
    - ☐ Errors
        - ☐ Fixation
        - ☐ Omission
        - ☐ Emphasis

TPP

- ☐ Airport diagrams
- ☐ Departure Procedures
- ☐ IAP plates
- ☐ STARs
- ☐ Legend

Airplane Flying Handbook

- ☐ Review necessary procedures
- ☐ Chapter 4: Energy Management: Mastering Altitude and Airspeed Control

Instrument Flying Handbook

- ☐ All Chapters

Instrument Procedures Handbook

- ☐ Glossary

Pilot Operating Handbook

- ☐ Limitations
    - ☐ Airspeeds
    - ☐ Weights
- ☐ Take off, Landing, Climb, Cruise Operations
- ☐ Emergency in flight engine failure
- ☐ Go Around Procedures
- ☐ Weight and balance
- ☐ Performance charts
- ☐ Airplane description

FAR/AIM

- ☐ Go over the Instrument study guide and tab out the sections for discussion
    - ☐ PAVE
    - ☐ IFR requirements
    - ☐ VORs/DME/TACAN
    - ☐ GPS/RAIM/WAAS
    - ☐ ILS
    - ☐ Weather
    - ☐ (§91.177, Pilot/Controller Glossary)
    - ☐ Etc.

TERPS

- ☐ Introduction and how to use

Stage 1 Lesson 1: Sim and Ground

Intro SIM, PAVE, Flight Instruments, Scan Techniques, Timed Turns **BATD/AATD**

Prerequisite study: Reference assigned reading from stage 1 ground topic overview. Watch ERAU timed compass turns and scanning techniques videos.
Objective: To introduce and demonstrate the basic fundamentals of instrument flying. To get comfortable referencing instruments for the four fundamentals including timed turns.

Knowledge Areas

- ☐ Scanning Techniques
- ☐ PAVE
- ☐ Flight Instruments Operation
- ☐ Timed turns math

Sim Tasks

- ☐ How to turn on SIM and set it up
  - ☐ Plane model
  - ☐ Instrument stack
  - ☐ Location and time
- ☐ Introduction to flight controls
- ☐ Introduction to instruments
- ☐ Checklist
  - ☐ Engine start
  - ☐ Setting up and understanding comms
  - ☐ Setting up and understanding GPS
- ☐ Run up checklist
- ☐ Take off
  - ☐ Take off clearance with a heading and altitude
  - ☐ After take off checklist
  - ☐ CAPS available
- ☐ Four fundamentals
  - ☐ Introduction to cruise checklist
  - ☐ Introduction to Autopilot
- ☐ Timed Turns
  - ☐ Starting the timer and noting standard rate turns to 45/90/180/225/270/315/360 degrees from different headings
- ☐ Going back to the airport
  - ☐ Descent checklist
  - ☐ Vectors to airport
  - ☐ Make weather vfr coming into land
- ☐ Landing
  - ☐ Before landing checklist
  - ☐ VASI/PAPI
  - ☐ Flare

Completion standards: Student was able to become familiar with the simulator and was able to use the sim to learn basic maneuvers. Student understands the foundational blocks to the transition of VMC flying scanning techniques to IMC. Student understands timed turns.

Date Completed_____

Overall Grade: Excellent Good Fair Needs Improvement

Name/Signature_____

Notes:

Stage 1 Lesson 2: Sim and Ground

Sim: Patterns, Preflight Inspection **BATD/AATD**

Prerequisite study: Reference assigned reading from stage 1 ground topic overview VORs and GPS construction. Review the power profiles worksheet. Review the Jeppesen patterns in the IFR handouts

Objective: To practice preflight and run up procedures including VOR checks. To demonstrate and create a power profile sheet for descent rates to achieve specific airspeeds and fpm.

Knowledge Areas

- ☐ VOR FARs
- ☐ Discussion on Instrument Checks
- ☐ Briefing the Patterns Paper
- ☐ Power Settings List for Descents

Sim Tasks

- ☐ Checklist
  - ☐ Start up
  - ☐ Run Up
- ☐ Taxiing
  - ☐ **VOR Check**
  - ☐ **Instrument Check While Taxiing**
- ☐ Take Off
  - ☐ Take off clearance with a heading and altitude
- ☐ CAPS available
- ☐ **Jeppesen Patterns A-E**
  - ☐ **Vectors to headings**
  - ☐ **Cruise checklist**
  - ☐ **Completion of all patterns**
- ☐ Landings
  - ☐ **Descent checklist**
  - ☐ **Aiming for airspeeds and noting the power settings to achieve the proper approach speeds**

Completion standards: Student was able to become familiar with proper checklist usage. Student is able to understand VOR construction, beginning VOR check procedures, and vectors to headings. Student combined previous knowledge of timed turns to begin completing the patterns in the appendix. Student is beginning to correlate power settings to achieve desired descent rates and airspeeds.

Date Completed_____

Overall Grade: Excellent Good Fair Needs Improvement

Name/Signature_____

Notes:

Stage 1 Lesson 3: Sim and Ground

SIM: Patterns, Systems **BATD/AATD**

Prerequisite study: Reference assigned reading from stage 1 ground topic overview for systems and instrument knowledge. Watch ERAU or Cirrus Approach system and instrument videos.
Objective: To demonstrate knowledge on the systems for the aircraft to be flown. To continue to finish the patterns and become familiar with the checklists for the aircraft. Do an aircraft walk around if the student is unfamiliar with the plane.

Knowledge Areas

- ☐ System and Instrument construction and usage
- ☐ Discussion on Instrument Checks
- ☐ Briefing the Patterns Paper
- ☐ Power Settings List for Descents

Sim Tasks

- ☐ Checklist
  - ☐ Start up
  - ☐ Run Up
- ☐ Take Off
  - ☐ Take off clearance with a heading and altitude
- ☐ VOR Check
- ☐ Instrument Check While Taxiing
- ☐ CAPS available
- ☐ Jeppesen Patterns F-J
  - ☐ Vectors to headings
  - ☐ Cruise checklist
  - ☐ Completion of all patterns
- ☐ Landings
  - ☐ Descent checklist
  - ☐ Aiming for airspeeds and noting the power settings to achieve the proper approach speeds

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Completion standards: Student was able to demonstrate knowledge on system and instrument construction. Student used proper checklist usage. Student was able to complete the patterns. Student completes an aircraft walk around if needed.

Date Completed_____

Overall Grade: Excellent Good Fair Needs Improvement

Name/Signature_____

Notes:

Stage 1 Lesson 4: Sim and Ground

SIM: Pilotedge; building blocks of IFR flight **BATD/AATD**

Prerequisite study: Reference assigned reading from stage 1 ground topic overview VORs, GNSS, IFR clearances, Departure Procedures, and Approaches. King Schools youtube videos OR complete the Cirrus Instrument Flight Procedures Course. **Read each Pilotedge page and watch attached video before each lesson.**

Objective: To create a foundational understanding of IFR flight composition. To be able to feel confident in flying VORs, GPS waypoints and beginner Instrument approaches before getting into the plane. To learn the IFR radio verbiage.

Knowledge Areas

- ☐ VOR construction
- ☐ GNSS operation
- ☐ IFR clearances
- ☐ Departure Procedure Construction and Plates
  - ☐ ODP vs SID
- ☐ Approach Construction and Plates
  - ☐ Precision
  - ☐ Non- Precision
  - ☐ STARs

Sim Tasks

- ☐ How to log onto PilotEdge
- ☐ Complete each 1-Rating (1-8) with and without logging onto Pilotedge
- ☐ Brief plan before logging on
- ☐ Use of proper checklists
- ☐ Checking VOR availability
- ☐ Using **bearing pointers**
- ☐ Loading in frequencies
- ☐ Loading in flight plan
- ☐ Hand flying and Autopilot usage

Completion standards: Student was able to satisfactorily complete pilotedge ratings 1-8 to instructors discretion.

Date Completed_____

Overall Grade: Excellent Good Fair Needs Improvement

Name/Signature_____

Notes:

Stage 1 Lesson 5: Flight

First Flight: Standard Rate Turns, Stalls, Steep Turns, Slow FLight

Prerequisite study: Reference assigned reading from stage 1 ground topic overview for assigned reading. Review private pilot maneuvers.
Objective: To introduce private pilot maneuvers under the hood. Correlating previous sims muscle memory for checklist usage, autopilot usage and power profiles to flight with view limiting device.

Knowledge Areas

- ☐ Review Private Pilot Maneuvers in AFH
  - ☐ POH for airspeeds

Flight Tasks

- ☐ Checklists
  - ☐ Engine start
  - ☐ VOR check practice
  - ☐ Instrument check
  - ☐ Run up
  - ☐ Climb
  - ☐ Cruise
- ☐ Take off
  - ☐ Optional practice departure
  - ☐ CAPS available
  - ☐ Climb checklist
  - ☐ **Hood**
  - ☐ Optional Autopilot
- ☐ Cruise
  - ☐ Checklist
- ☐ Maneuvers: to be done under the hood
  - ☐ Timed turns/patterns-optional
  - ☐ Slow flight
  - ☐ Stalls
  - ☐ Steep turns
  - ☐ Descent rate and power profiles
  - ☐ Vertical patterns
- ☐ Vectors back to airport
  - ☐ Descent checklist
  - ☐ Remove hood on final or at missed

Completion standards: Student was able to complete all phases of flight including private pilot maneuvers to ACS standards with the use of a view limiting device. Student applies proper checklist usage.

Date Completed_____

Overall Grade: Excellent Good Fair Needs Improvement

Name/Signature_____

Notes:

Stage 1 Lesson 6:Flight

Private Maneuvers, Unusual Attitudes, Emergency Procedures

Prerequisite study: Reference assigned reading from stage 1 ground topic overview for Private Pilot Maneuvers and Maintaining Aircraft Control: Upset Prevention and Recovery Training in AFH. Review the emergency procedures and abnormal operations in the POH.
Objective: To introduce and demonstrate recovery from unusual attitudes with view limiting device. To introduce the differences and challenges to handling emergencies in simulated IMC conditions.

Knowledge Areas

- ☐ Review Private Pilot Maneuvers and **Maintaining Aircraft Control: Upset Prevention and Recovery Training** in AFH
  - ☐ POH for airspeeds

Flight Tasks

- ☐ Checklists
  - ☐ Engine start
  - ☐ VOR check practice
  - ☐ Instrument check
  - ☐ Run up
  - ☐ Climb
  - ☐ Cruise
- ☐ Take off
  - ☐ Optional practice departure
  - ☐ CAPS available
  - ☐ Optional Autopilot
- ☐ Maneuvers: to be done under the hood
  - ☐ Slow flight
  - ☐ Stalls
  - ☐ Steep turns
  - ☐ Descent rate and power profiles
- ☐ **Unusual Attitudes**
- ☐ **Emergency Procedures:IFR considerations**
  - ☐ **Fires**
  - ☐ **Engine Failures**
  - ☐ **Gauges**
  - ☐ **Electrical**
  - ☐ **Abnormal Annunciations**
- ☐ Vectors back to airport
  - ☐ Descent checklist
  - ☐ Remove hood on final or at missed approach point

Completion standards: Student was able to complete all phases of flight including remaining private pilot maneuvers to ACS standards with the use of a view limiting device. Student was able to recover from unusual attitudes with view limiting device. Student was able to practice assessing proper ADM skills to correct for emergencies while in IMC conditions. Student applies proper checklist usage.

Date Completed_____

Overall Grade: Excellent Good Fair Needs Improvement

Name/Signature_____

Notes:

Stage 1 Lesson 7: Flight

VOR: Intercepting and Tracking Courses, GPS Waypoints, DME ARC intro

Prerequisite study: Reference assigned reading from stage 1 ground topic overview VOR, GPS and **DME** construction. Read and watch material for DME ARCs

Objective: To introduce and demonstrate the building blocks of IFR flight plan construction. To load and follow GPS waypoints simultaneously with GPS waypoints. To understand the use and reason for DME ARCs. To practice tracking a navigation aide and maintaining a specified distance around the point.

Knowledge Areas

- ☐ Low IFR Enroute Chart
- ☐ VORs
- ☐ GNSS
- ☐ DME Arcs
  - ☐ Bearing pointer
  - ☐ Turn 10 twist 10

Flight Tasks

- ☐ Checklists
  - ☐ Engine start
  - ☐ VOR check practice
  - ☐ Instrument check
  - ☐ Run up
  - ☐ Climb
  - ☐ Cruise
- ☐ Take off
  - ☐ Practice departure
  - ☐ CAPS available
  - ☐ Optional autopilot

EXAMPLE

- ☐ Intercept Victor airway via vectors
  - ☐ V120-448 to COE
- ☐ Practice a full 360 and 90 degree DME Arc around COE VOR
  - ☐ Optional touch and go landing
- ☐ GPS waypoints to KDEW
  - ☐ Reference low enroute chart waypoints
- ☐ Practice a full 360 and 90 degree DME Arc around KDEW

Completion standards: Student was able to track and intercept a Victor airway or radial off of specified VOR to a destination. Student was able to perform a VOR DME ARC. Student was able to track GPS waypoints in reference to low en route chart and DME ARC around a specified GPS location. Optional, student was able to track inbound to final for a landing at an airport via VOR radial or GPS waypoints.

Date Completed_____

Overall Grade: Excellent Good Fair Needs Improvement

Name/Signature_____

Notes:

Stage 1 Lesson 8: Flight

Departure, Vectors to Final, Precision Approach, Full Stop or Missed Approach

Prerequisite study: Reference assigned reading from stage 1 ground topic overview Departure Procedures, Precision Approaches, Missed Approaches. **Watch the Cirrus Instrument Flight Procedures Course or Sporty's Instrument Proficiency Check Course**
Objective: To introduce and demonstrate the application of precision approach IFR flight from start to finish in a practice environment. Applying skills learned from the pilot edge course to the airplane. ***Can be combined with a missed approach to complete lesson 9 simultaneously. To be repeated as necessary***

Knowledge Areas

- ☐ Departure Procedures
- ☐ Approaches: Precision
- ☐ Missed Approach Procedures

Flight Tasks

- ☐ Checklists
  - ☐ Engine start
  - ☐ VOR check practice
  - ☐ Instrument check
  - ☐ Run up
  - ☐ Climb
  - ☐ Cruise
- ☐ Pre Taxi
  - ☐ Set up comms
  - ☐ Set up navigation equipment
  - ☐ Receive a practice CRAFT
- ☐ Take off
  - ☐ Departure procedure
- ☐ Climb
  - ☐ CAPS available
  - ☐ Request full practice ILS
  - ☐ Request vectors or simulate vectors
  - ☐ Optional autopilot
- ☐ Cruise
  - ☐ Locate destination
  - ☐ Listen to weather
  - ☐ Brief approach
  - ☐ Request practice approach
- ☐ Descent
  - ☐ Follow GS
  - ☐ Proper power settings
  - ☐ Call out locations, altitudes, distances
  - ☐ Go visual at missed and full stop land, touch and go, or perform missed approach procedure

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Completion standards: Student was able to become familiar and execute a practice IFR flight with a departure procedure, request and follow vectors either from CFI or ATC, and complete a precision approach. Student was able to load the approach, locate, listen, and brief the approach. **Optional combination with lesson 9 with a missed approach procedure to complete both a precision and non precision approach on the same flight.**

Date Completed_____

Overall Grade: Excellent Good Fair Needs Improvement

Name/Signature_____

Notes:

Stage 1 Lesson 9: Flight

Departure, Full Non-Precision Approach, Full Stop or Missed Approach

Prerequisite study: Reference assigned reading from stage 1 ground topic overview Departure Procedures, Precision Approaches, Missed Approaches. **Watch the Cirrus Instrument Flight Procedures Course or Sporty's Instrument Proficiency Check Course**
Objective: To introduce and demonstrate the application of non-precision approach IFR flight from start to finish in a practice environment. Applying skills learned from the pilot edge course to the airplane. ***Can be combined with Lesson 8. To be repeated as necessary***

Knowledge Areas

- ☐ Departure Procedures
- ☐ **Approaches: Non-Precision**
- ☐ Missed Approach Procedures

Flight Tasks

- ☐ Checklists
  - ☐ Engine start
  - ☐ VOR check practice
  - ☐ Instrument check
  - ☐ Run up
  - ☐ Climb
  - ☐ Cruise
- ☐ Pre Taxi
  - ☐ Set up comms
  - ☐ Set up navigation equipment
  - ☐ Receive a practice CRAFT
- ☐ Take off
  - ☐ Departure procedure
  - ☐ CAPS available
- ☐ Climb
  - ☐ Request full practice Precision, Non Precision or APV approach
  - ☐ Vectors or own navigation
  - ☐ Optional autopilot
- ☐ Cruise
  - ☐ Locate destination
  - ☐ Listen to weather
  - ☐ Brief approach
  - ☐ Request practice approach
- ☐ Descent
  - ☐ Follow step down altitudes
  - ☐ Proper power settings
  - ☐ Call out locations, altitudes, distances
  - ☐ Go visual at missed and full stop land, touch and go, or perform missed approach procedure

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Completion standards: Student was able to become familiar and execute a practice IFR flight with a departure procedure, request and follow vectors either from CFI or ATC, and complete a precision approach. Student was able to load the approach, locate, listen, and brief the approach. **Optional combination with lesson 8 with a missed approach procedure to complete both a precision and non precision approach on the same flight.**

Date Completed_____

Overall Grade: Excellent Good Fair Needs Improvement

Name/Signature_____

Notes:

Stage 1 Stage Check

To Be Completed With Another Instructor

Prerequisite study: Reference assigned reading from stage 1 ground topic overview. Watch the Cirrus Instrument Flight Procedures Course or Sporty's Instrument Proficiency Check Course
Objective: To demonstrate knowledge on the basic foundations of IFR flight construction to include IFR FARs relating to PAVE, terms and definitions pertaining to Instrument Departure and Approach diagrams, systems and instruments and aircraft performance.

Knowledge Areas

- ☐ Terms and Definitions from IFH Glossary
- ☐ How to read a Departure Plate
- ☐ How to read an Approach Plate
  - ☐ Precision
  - ☐ Non precision
- ☐ Systems
- ☐ Instruments
- ☐ PAVE
- ☐ Aircraft Performance
  - ☐ W+B
  - ☐ Profiles

Flight Tasks

- ☐ Checklists
  - ☐ Engine start
  - ☐ VOR check practice
  - ☐ Instrument check
  - ☐ Run up
  - ☐ Climb
  - ☐ Cruise
- ☐ Pre Taxi
  - ☐ Set up comms
  - ☐ Set up navigation equipment
  - ☐ Receive a practice CRAFT
- ☐ Take off
  - ☐ Departure procedure
  - ☐ CAPS available
- ☐ Climb
  - ☐ Request vectors to final
  - ☐ Optional autopilot
- ☐ Cruise
  - ☐ Locate, Listen, Brief, Communicate
  - ☐ Brief approach
- ☐ Descent
  - ☐ Follow step down altitudes
  - ☐ Proper power settings
  - ☐ Call out locations, altitudes, distances
  - ☐ Go visual at missed
  - ☐ Touch and go
- ☐ Maneuvers- all or some
  - ☐ Power On Stall
  - ☐ Power Off Stall
  - ☐ Steep Turns
  - ☐ Slow Flight
- ☐ Unusual Attitudes
- ☐ Emergency Procedures
  - ☐
  - ☐
  - ☐

Completion standards: Student completes all chosen maneuvers within ACS standards. Student was able to properly execute assigned practice IFR flight procedures. Student demonstrated their ADM skills to assess emergency situations in IMC flight. Student demonstrated their knowledge to the evaluator and was deemed proficient in all areas.

Date Completed_____

Overall Grade: Excellent Good Fair Needs Improvement

Name/Signature_____

Notes:

Stage 2 Ground Topic Overview
DEPARTURE, ENROUTE, ARRIVAL, EMERGENCIES, ABNORMALITIES

Prerequisite study: Have completed the Cirrus Approach instrument flight procedures course. Sporty's Instrument Proficiency Check course could be a substitute as well. Have completed stage 1 ground overview.

Objective: To take our instrument foundations and build an instrument flight plan from the ground up. Ground study is aimed at building a working and applicable knowledge to the charts and procedures found in the TERPS, TPP, IFH, and IPH. This section will also go deeper into the already tabbed out FAR/AIM from stage 1.

TPP

- ☐ Airport diagrams
- ☐ Departure Procedures
- ☐ IAP plates
- ☐ STARs
- ☐ Legend

Instrument Flying Handbook

- ☐ Weather
- ☐ Aeromedical Factors
  - ☐ Spacial disorientation (PHAK)
- ☐ Airspace
- ☐ Oxygen
- ☐ Air traffic control
- ☐ IFR flight
- ☐ **Emergency Operations**

Instrument Procedures Handbook

- ☐ Glossary

FAR/AIM/IPH/IFH

- ☐ Review in depth your tabs
  - ☐ Definitions review (§91.177, Pilot/Controller Glossary)
  - ☐ Logging time
  - ☐ Recency
    - ☐ 66HIT
  - ☐ Aeronautical knowledge and experience
  - ☐ PAVE
    - ☐ GRABCARD
    - ☐ VOR checks
    - ☐ Alternates
    - ☐ Fuel
  - ☐ IFR altitudes
    - ☐ Cruising
    - ☐ DA/H
    - ☐ MAA
    - ☐ MCA
    - ☐ MDA/H
    - ☐ MEA
    - ☐ MOCA
    - ☐ MORA
    - ☐ MRA
    - ☐ MSA
    - ☐ MTA
    - ☐ MVA
    - ☐ OROCA
  - ☐ VOR service volumes
  - ☐ DME
  - ☐ NDB
  - ☐ GPS
    - ☐ RAIM
    - ☐ WAAS
  - ☐ RNAV
  - ☐ PBN
  - ☐ RNP
  - ☐ Clearances
  - ☐ ATC procedures
  - ☐ ILS construction
    - ☐ Localizer
    - ☐ Glide slope
    - ☐ Marker beacons

- ☐ ALS
- ☐ Mandatory Reports
- ☐ Position Reports in non-radar
- ☐ Holding procedures 5-3-8
- ☐ Lost Comms
    - ☐ Altitude
    - ☐ Route
    - ☐ Leaving a clearance limit

TERPS

- ☐ Departure procedures
- ☐ Enroute
- ☐ Holding
- ☐ Approaches
- ☐ STARs
- ☐ **Circling**

Stage 2 Lesson 1: Sim and Ground

Sim: Holds, DME ARCs **BATD/AATD**

Prerequisite study: Reference assigned reading from ground overview stage 2. **Complete holds worksheet located in the appendix.** Review DME construction and watch Sporty's or Cirrus Instrument course on holds and DME ARCs

Objective: To introduce and demonstrate holding procedures both unpublished and published. To review DME ARC construction. To introduce hold building in Cirrus

---

Knowledge Areas

- ☐ Holds worksheet
  - ☐ Published vs unpublished holds
  - ☐ Plates
  - ☐ Low Enroute Charts
- ☐ DME ARC review
  - ☐ DME construction
  - ☐ VOR construction
  - ☐ GPS construction
  - ☐ Plates

Sim Tasks

- ☐ Proper checklist usage
- ☐ Flying a DME Arc from various approaches
  - ☐ Also around VORs and waypoints
- ☐ Receiving, copying, understanding holding instructions
- ☐ Executing various holds with different entries
  - ☐ Published
  - ☐ Unpublished
  - ☐ **Cirrus: build a hold**
  - ☐ **Optional autopilot**

Completion standards: Student was able to complete the holds worksheet. Student was able to effectively have a discussion on different kinds of holds, how to fly them and their purpose. Student was able to discuss DME ARCs and their related topics. Student was able to practice and demonstrate holds and ARCs in the sim.

Date Completed_____

Overall Grade: Excellent Good Fair Needs Improvement

Name/Signature_____

Notes:

Stage 2 Lesson 2: Sim and Ground

Pilot Edge **BATD/AATD**

Prerequisite study: Reference I-Ratings 10 and 11 information pages. Completion of holds worksheet

Objective: To complete the I-ratings for better knowledge comprehension of all parts of an Instrument flight plan

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Knowledge Areas

- ☐ Stage 1 stage check
- ☐ Stage 2 Sim lesson 1
- ☐ PilotEdge lesson 10 and 11 information pages

Sim Tasks

- ☐ Set up for flight
  - ☐ Comms
  - ☐ Navigation
  - ☐ Brief the plan
- ☐ Log onto Pilotedge
- ☐ Execute I-ratings 10 and 11

Completion standards: Student was able to complete I-ratings 10 and 11 to instructor completion discretion.

Date Completed_____

Overall Grade: Excellent Good Fair Needs Improvement

Name/Signature_____

Notes:

Stage 2 Lesson 3: Flight
Holds

Prerequisite study: Reference assigned reading from stage 2 ground review. Completion of Stage 2 lesson 1.
Objective: To demonstrate holds in the airplane. This lesson is encouraged to have an emphasis on unpublished holds first. The use of holding on waypoints and VOR radials both hand flying and with autopilot. To practice hold building in Cirrus

---

Knowledge Areas

- ☐ Holding handout
- ☐ Discussion on local published holds to be performed
- ☐ Unpublished holds discussion

Flight Tasks

- ☐ Checklists
  - ☐ Engine start
  - ☐ VOR check practice
  - ☐ Instrument check
  - ☐ Run up
  - ☐ Climb
  - ☐ Cruise
- ☐ Pre Taxi
  - ☐ Set up comms
  - ☐ Set up navigation equipment
  - ☐ Engine start
  - ☐ VOR check practice
  - ☐ Taxiing- instrument check
  - ☐ Run up
  - ☐ Take off
- ☐ Take off
  - ☐ Practice departure procedure
  - ☐ CAPS available
- ☐ Climb
  - ☐ Checklist
  - ☐ Go to practice area
- ☐ Cruise
  - ☐ Lean
  - ☐ Perform various holds
    - ☐ Unpublished
    - ☐ **Cirrus: build a hold**
    - ☐ **Optional autopilot**
- ☐ Descent
  - ☐ Descent and before landing checklist
  - ☐ Request practice ILS to return
    - ☐ Time permitting
    - ☐ Follow GS
    - ☐ Proper power settings
    - ☐ Call out locations, altitudes, distances
  - ☐ Vectors to intercept Localizer
  - ☐ Go visual at missed approach
  - ☐ Land

Completion standards: Student was able to demonstrate unpublished holds to ACS standards.

Date Completed_____

Overall Grade: Excellent Good Fair Needs Improvement

Name/Signature_____

Notes:

Stage 2 Lesson 4: Flight

Holds, DME ARCs, Procedure Turns

Prerequisite study: Reference assigned reading from stage 2 ground review. Completion of Stage 2 lesson 1.

Objective: To demonstrate holds, DME ARCs, and procedure turns in the airplane. This lesson is encouraged to have an emphasis on published holds, practicing procedure turns from VOR radials and waypoints, and DME ARCs from VOR radials and GPS waypoints. Usage of both hand flying and autopilot.

Knowledge Areas

- ☐ Holding handout
- ☐ Discussion on local published holds to be performed
- ☐ Unpublished holds discussion

Flight Tasks

- ☐ Checklists
  - ☐ Engine start
  - ☐ VOR check practice
  - ☐ Instrument check
  - ☐ Run up
  - ☐ Climb
  - ☐ Cruise
- ☐ Pre Taxi
  - ☐ Set up comms
  - ☐ Set up navigation equipment
  - ☐ Engine start
  - ☐ VOR check practice
  - ☐ Taxiing- instrument check
  - ☐ Run up
  - ☐ Take off
- ☐ Take off
  - ☐ Practice departure procedure
  - ☐ CAPS available
- ☐ Climb
  - ☐ Checklist
  - ☐ Go to practice area
  - ☐ Autopilot optional
- ☐ Cruise
  - ☐ Lean
  - ☐ Perform various holds
    - ☐ **Published**
    - ☐ Unpublished
    - ☐ **Cirrus: build a hold**
    - ☐ DME ARC practice from VORs
    - ☐ Procedure Turn Practice from GPS waypoints and VORs
- ☐ Descent
  - ☐ Descent and before landing checklist
  - ☐ Request practice ILS to return
    - ☐ Time permitting
    - ☐ Follow GS
    - ☐ Proper power settings
    - ☐ Call out locations, altitudes, distances
  - ☐ Vectors to intercept Localizer
  - ☐ Go visual at missed approach
  - ☐ Land

Completion standards: Student was able to demonstrate holds, DME ARCs and procedure turns to ACS standards.

Date Completed_____

Overall Grade: Excellent Good Fair Needs Improvement

Name/Signature_____

Notes:

Stage 2 Lesson 5: Flight
XC Practice

Prerequisite study: Reference assigned reading from stage 2 ground topic overview. Watch the Cirrus and/or Sporty's Instrument Procedures courses.
Objective: To put the building blocks together by flying local cross countries. These are intended to include multiple approaches and missed approach procedures with enough time for briefing and discussion along the route.
REPEAT AS NECESSARY

Knowledge Areas

- ☐ Departure Procedures
- ☐ Approach Procedures
- ☐ Holds, DME ARCs
- ☐ ATC clearances
- ☐ IFR flight plan filing

Flight Tasks

- ☐ Checklists
  - ☐ Engine start
  - ☐ VOR check practice
  - ☐ Instrument check
  - ☐ Run up
  - ☐ Climb
  - ☐ Cruise
- ☐ Pre Taxi
  - ☐ Set up comms
  - ☐ Set up navigation equipment
  - ☐ Engine start
  - ☐ VOR check practice
  - ☐ Open flight plan or practice CRAFT
  - ☐ Taxiing- instrument check
  - ☐ Run up
  - ☐ Take off
- ☐ Take off
  - ☐ Departure procedure
  - ☐ CAPS available
- ☐ Climb
  - ☐ Checklist
  - ☐ Autopilot optional
- ☐ Cruise
  - ☐ Lean
  - ☐ Locate, Listen, Brief, Communicate
  - ☐ Circling-optional
  - ☐ Perform a Precision approach
    - ☐ Vectors to final
    - ☐ Missed Approach
  - ☐ Perform a non precision approach
    - ☐ Full approach
    - ☐ Missed approach
  - ☐ Perform an approach into Felts
  - ☐ Land
- ☐ Descent
  - ☐ Descent checklist
  - ☐ Follow GS or Step downs
  - ☐ Proper power settings
  - ☐ Call out locations, altitudes, distances
  - ☐ Go visual at missed and full stop land, touch and go, or perform missed approach procedure

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Completion standards: Student was able to discuss departure and approach procedures pertaining to this flight. Student was able to fly local IFR approaches to ACS standards.

Date Completed_____

Overall Grade: Excellent Good Fair Needs Improvement

Name/Signature_____

Notes:

Stage 2 Lesson 6: Flight
IFR XC Practice with Emergencies

Prerequisite study: Reference assigned reading from stage 2 ground topic overview. Watch the Cirrus and Sporty's Instrument Procedures courses. **Review how to create and file an IFR flight plan. Review aircraft emergencies in the POH.**
Objective: To practice creating and filing an IFR flight plan to be executed. To review how to assess lost comms, emergency and abnormal operations during an IFR flight and the different risks involved.
REPEAT AS NECESSARY

Knowledge Areas

- ☐ Departure Procedures
- ☐ Approach Procedures
- ☐ Holds, DME ARCs
- ☐ Circling Approach
- ☐ Lost Comms
- ☐ Emergencies
- ☐ File IFR Flight Plan

Flight Tasks

- ☐ Checklists
  - ☐ Engine start
  - ☐ VOR check practice
  - ☐ Instrument check
  - ☐ Run up
  - ☐ Climb
  - ☐ Cruise
- ☐ Pre Taxi
  - ☐ Set up comms
  - ☐ Set up navigation equipment
  - ☐ Engine start
  - ☐ VOR check practice
  - ☐ **CRAFT Clearance**
  - ☐ Taxiing- instrument check
  - ☐ Run up
  - ☐ Take off
- ☐ Take off
  - ☐ Departure procedure
  - ☐ CAPS available
- ☐ Climb
  - ☐ Checklist
  - ☐ Autopilot optional
- ☐ Cruise
  - ☐ Lean
  - ☐ Locate, Listen, Brief, Communicate
  - ☐ **Emergencies**
    - ☐ **Lost comms**
    - ☐ Engine failure
    - ☐ Engine fire
    - ☐ Electrical fire
    - ☐ Low oil psi/ high oil temp
    - ☐ Low voltage light
    - ☐ Alternator 1 and/or 2 failure
    - ☐ Loss of pitot heat in icing conditions
    - ☐ PFD, MFD, HSI failure
  - ☐ Precision and Non Precision Approaches
  - ☐ Missed Approach
  - ☐ Circling-optional
- ☐ Descent
  - ☐ Descent checklist
  - ☐ Follow GS or step downs
  - ☐ Proper power settings
  - ☐ Call out locations, altitudes, distances
  - ☐ Go visual at missed and full stop land, touch and go, or

perform missed approach procedure

Completion standards: Student was able to plan, file and execute an IFR flight to ACS standards. Student was able to perform ADM skills for IMC emergency procedures including lost comms and abnormal procedures.

Date Completed_____

Overall Grade: Excellent Good Fair Needs Improvement

Name/Signature_____

Notes:

Stage 2 Stage Check

To Be Done with Another Instructor

Prerequisite study: Reference stage 2 ground overview topics. Complete Cirrus or Sporty's videos for review.
Objective: To evaluate the student's ability and comprehension on building, filing, and effectively executing an IFR flight plan. To demonstrate ADM skills in regards to IMC flight emergencies.

Knowledge Areas

- ☐ Departure Procedures
- ☐ Approach Procedures
- ☐ Holds, DME ARCs
- ☐ Lost Comms
- ☐ Emergency Engine Failure discussion
- ☐ Abnormal and emergency discussion
- ☐ File IFR Flight Plan

Flight Tasks

- ☐ Checklists
  - ☐ Engine start
  - ☐ VOR check practice
  - ☐ Instrument check
  - ☐ Run up
  - ☐ Climb
  - ☐ Cruise
- ☐ Pre Taxi
  - ☐ Set up comms
  - ☐ Set up navigation equipment
  - ☐ Engine start
  - ☐ VOR check practice
  - ☐ **CRAFT Clearance**
  - ☐ Taxiing- instrument check
  - ☐ Run up
  - ☐ Take off
- ☐ Take off
  - ☐ Departure procedure
  - ☐ CAPS available
- ☐ Climb
  - ☐ Checklist
  - ☐ Autopilot optional
- ☐ Cruise
  - ☐ Lean
  - ☐ Locate, Listen, Brief, Communicate
  - ☐ Emergencies
    - ☐
    - ☐
    - ☐
  - ☐ Precision Approach
  - ☐ Non Precision Approach
  - ☐ APV Approach
  - ☐ Circling
  - ☐ Straight in Approach
  - ☐ Descent checklist
    - ☐ Follow GS or step downs
    - ☐ Proper power settings
    - ☐ Call out locations, altitudes, distances
    - ☐ Go visual at missed and full stop land, touch and go, or perform missed approach procedure

---

Completion standards: Student was able to plan, file and execute an IFR flight to ACS standards. Student was able to perform ADM skills for IMC emergency procedures including lost comms

and abnormal procedures. Student performed a circling approach and recovery from unusual attitudes. Autopilot and hand flown should be demonstrated

Date Completed_____

Overall Grade: Excellent Good Fair Needs Improvement

Name/Signature_____

Notes:

Stage 3 Lesson 1: Flight
Intro to Partial Panel Approaches

Prerequisite study: Reference assigned reading. Review avionics failure Cirrus Approach videos, iFOM, and applicable POH.
Objective: To become familiar with flying instrument approaches relying on reduced instrument access.

Knowledge Areas

- ☐ Departure Procedures
- ☐ Approach Procedures
- ☐ Holds, DME ARCs

Flight Tasks

- ☐ Checklists
  - ☐ Engine start
  - ☐ VOR check practice
  - ☐ Instrument check
  - ☐ Run up
  - ☐ Climb
  - ☐ Cruise
- ☐ Pre Taxi
  - ☐ Set up comms
  - ☐ Set up navigation equipment
  - ☐ Engine start
  - ☐ VOR check practice
  - ☐ CRAFT practice
  - ☐ Taxiing- instrument check
  - ☐ Run up
  - ☐ Take off
- ☐ Take off
  - ☐ Practice departure procedure
  - ☐ CAPS available
- ☐ Climb
  - ☐ Checklist
- ☐ Cruise
  - ☐ Lean
  - ☐ **Practice receiving vectors with partial panel**
  - ☐ Locate, Listen, Brief, Communicate
  - ☐ **Perform a precision, non precision or APV approach with partial panel**
    - ☐ Full approach
    - ☐ Missed approach
  - ☐ Perform an approach into Felts
  - ☐ Land
- ☐ Descent
  - ☐ Descent checklist
  - ☐

Completion standards: Student was able to assess the risk and management of partial panel instrument flying. Student was able to complete various approaches with a partial panel and reference to back up instruments. Autopilot optional

Date Completed_____

Overall Grade: Excellent Good Fair Needs Improvement

Name/Signature_____

Notes:

Stage 3 Lesson 2: Flight
Partial Panel, Local Approaches

Prerequisite study: Reference assigned reading from stage 1 and 2 ground topic overview. Watch Sporty's or Cirrus Instrument videos
Objective: To practice local approaches in quick succession with **partial panel** use of instruments to learn how to quickly divert attention to back up instruments and multi-task with limited systems.

Knowledge Areas

- ☐ Departure Procedures
- ☐ Approach Procedures
- ☐ Holds, DME ARCs

Flight Tasks

- ☐ Checklists
  - ☐ Engine start
  - ☐ VOR check practice
  - ☐ Instrument check
  - ☐ Run up
  - ☐ Climb
  - ☐ Cruise
- ☐ Pre Taxi
  - ☐ Set up comms
  - ☐ Set up navigation equipment
  - ☐ Engine start
  - ☐ VOR check practice
  - ☐ **Local IFR request**
  - ☐ Taxiing- instrument check
  - ☐ Run up
  - ☐ Take off
- ☐ Take off
  - ☐ Practice departure procedure
  - ☐ CAPS available
- ☐ Climb
  - ☐ Checklist
  - ☐ Autopilot optional
- ☐ Cruise
  - ☐ Lean
  - ☐ **Navigating with partial panel**
  - ☐ Locate, Listen, Brief, Communicate
  - ☐ **Perform a Precision, non precision or APV approach circuit with partial panel**
    - ☐ Vectors to final
    - ☐ Missed Approach
  - ☐ Perform a non precision approach partial panel
    - ☐ Full approach
    - ☐ Missed approach
  - ☐ Perform an approach into Felts
  - ☐ Land
- ☐ Descent
  - ☐ Descent checklist

Completion standards: Student was able to assess the risk and management of partial panel instrument flying. Student was able to complete various approaches with a partial panel and reference to back up instruments to ACS standards. To be completed with and without autopilot

Date Completed_____

Overall Grade: Excellent Good Fair Needs Improvement

Name/Signature_____

Notes:

Stage 3 Lesson 3: Flight
250 NM IFR XC

Prerequisite study: Reference assigned reading from stage 1 and 2 ground topic overview and watch the Cirrus or Sporty's Instrument courses.
Objective: To plan, file, and execute the long IFR cross country. To include as many different iterations of IFR flight possibilities, to incorporate scenario based problem solving along the route.

Knowledge Areas

- ☐ Departure Procedures
- ☐ Approach Procedures
- ☐ Holds, DME ARCs
- ☐ Emergencies
- ☐ Unusual attitudes
- ☐ Circling approaches
- ☐ Filing a flight plan

Flight Tasks

- ☐ File a flight plan-optional
- ☐ Checklists
  - ☐ Engine start
  - ☐ VOR check practice
  - ☐ Instrument check
  - ☐ Run up
  - ☐ Climb
  - ☐ Cruise
- ☐ Pre Taxi
  - ☐ Set up comms
  - ☐ Set up navigation equipment
  - ☐ Engine start
  - ☐ VOR check practice
  - ☐ Taxiing- instrument check
  - ☐ Run up
  - ☐ Take off
- ☐ Take off
  - ☐ Departure procedure
  - ☐ CAPS available
- ☐ Climb
  - ☐ Checklist
  - ☐ Hood
- ☐ Cruise
  - ☐ Lean
  - ☐ Locate, Listen, Brief, Communicate
  - ☐ Perform a Precision,Non Precision, and APV Approach
  - ☐ Holds, DME ARCs
  - ☐ Circling
  - ☐ Missed Approach
  - ☐ Partial Panel
  - ☐ Emergency Practice
  - ☐ Unusual Attitudes
- ☐ Descent
  - ☐ Descent checklist

Completion standards: Student was able to execute a proper IFR flight plan with various procedures, emergencies, and abnormal flight operations both with and without autopilot to ACS standards.

Date Completed_____

Overall Grade: Excellent Good Fair Needs Improvement

Name/Signature_____

Notes:

Stage 3 Lesson 4: Ground
Checkride Preparation

Prerequisite study: Reference previous ground topic overviews, the acs, and online Sporty's or Cirrus Approach Instrument course
Objective: To demonstrate proficient knowledge on all ACS topics. Have the instructor assign a flight plan guideline for discussion and flight.

Knowledge Areas

- ☐ Flight instruments
  - ☐ Steam
  - ☐ Glass
  - ☐ Magnetic
- ☐ Navigation equipment function and their errors
  - ☐ VOR
  - ☐ DME
  - ☐ GPS
- ☐ Aeromedical factors
- ☐ Regulations
  - ☐ Pilot qualifications
  - ☐ Currency
  - ☐ Airworthiness
    - ☐ AV1ATES
    - ☐ ARROW
    - ☐ ATOMATOFLAMES FLAPS
    - ☐ GRABCARD
  - ☐ Preflight action
  - ☐ IFR weather minimums
    - ☐ Alternates
    - ☐ Landing requirements 91.175
  - ☐ IFR altitudes
    - ☐ Cruising
    - ☐ DA/H
    - ☐ MAA
    - ☐ MCA
    - ☐ MDA/H
    - ☐ MEA
    - ☐ MOCA
    - ☐ MORA
    - ☐ MRA
    - ☐ MSA
    - ☐ MTA
    - ☐ MVA
    - ☐ OROCA
  - ☐ Definitions of night
    - ☐ Logging
    - ☐ Landing
    - ☐ Lights
  - ☐ Oxygen
- ☐ Publications
  - ☐ TERPS
  - ☐ TPP
  - ☐ IFH
  - ☐ AFH
  - ☐ PHAK
  - ☐ FAR/AIM
  - ☐ POH
  - ☐ ACS
  - ☐ Low Enroute Charts
- ☐ Weather theory
- ☐ Weather services
- ☐ Cross country flight planning
  - ☐ Filing
  - ☐ VFR airspace and weather minimums
- ☐ Lost Comms
  - ☐ Altitude
  - ☐ Route
- ☐ Lost Procedures and Emergency Codes
- ☐ Clearances
  - ☐ CRAFT

- ☐ Clearance void time
- ☐ Departure Procedures
  - ☐ ODP
  - ☐ SID
  - ☐ Climb gradient vs rate
  - ☐ Minimums
  - ☐ DP plate
- ☐ Approach and STAR Procedures
  - ☐ Contact vs Visual
  - ☐ Segments of an approach
    - ☐ IAF/IF/FAF
    - ☐ DA/DH/MDA
    - ☐ VDP
    - ☐ MAP
    - ☐ Approach Categories
  - ☐ Precision
    - ☐ ILS
      - ☐ Localizer
      - ☐ Glide slope
      - ☐ Marker beacons
      - ☐ ALS
    - ☐ PAR
  - ☐ Non Precision and APV
    - ☐ VOR
    - ☐ RNAV
    - ☐ GPS
      - ☐ WAAS
      - ☐ RAIM
    - ☐ LPV
    - ☐ LNAV/VNAV
    - ☐ LNAV
    - ☐ +V
    - ☐ RNP
- ☐ Missed Approach Procedures
- ☐ Circling Procedures
- ☐ Reporting Points- radar and non radar
- ☐ **Holds**
  - ☐ Published
  - ☐ Unpublished
  - ☐ Entries
  - ☐ Speed limits
  - ☐ Timing vs DME
  - ☐ Correcting for wind
- ☐ **DME ARCs**
- ☐ Procedure Turns

Completion standards: Student was able to demonstrate proficient knowledge on all ACS instrument ground topics to standards.

Date Completed_____

Overall Grade: Excellent Good Fair Needs Improvement

Name/Signature_____

Notes:

Stage 3 Lesson 5: Flight
Checkride Preparation

Prerequisite study: Reference previous ground topic overviews and online Sporty's or Cirrus Approach Instrument course.
Objective: To demonstrate proficient flight skills to be endorsed for the Instrument Practical Test. This flight should simulate the checkride to include multiple approaches in quick succession to utilize time to task ratio efficiently

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Knowledge Tasks
- ☐ Completion of ground portion of End of Course

Preflight Tasks
- ☐ Proper flight plan filing
- ☐ Proper demonstration of PAVE

Flight Tasks
- ☐ Checklists
  - ☐ Engine start
  - ☐ Instrument check
  - ☐ Run up
  - ☐ Climb
  - ☐ Cruise
- ☐ Pre Taxi
  - ☐ Set up comms
  - ☐ Set up navigation equipment
  - ☐ Engine start
  - ☐ VOR check
  - ☐ KRAFT Clearance
  - ☐ Taxiing- instrument check
  - ☐ Run up
  - ☐ Take off
- ☐ Take off
  - ☐ Departure Procedure
  - ☐ CAPS available
- ☐ Climb
  - ☐ Checklist
- ☐ Cruise
  - ☐ Checklist
  - ☐ Intercepting and Tracking VOR/GPS
  - ☐ Holds
    - ☐ Published
    - ☐ Unpublished
      - ☐ **Build a hold**
  - ☐ DME ARC
  - ☐ Lost Comms
  - ☐ Engine failure
  - ☐ Recovery from unusual attitudes
- ☐ Descent
  - ☐ Checklist
  - ☐ Non Precision Approach
  - ☐ Precision Approach
  - ☐ Missed Approach
  - ☐ Circling Approach
  - ☐ Straight in Approach
  - ☐ Partial Panel

Completion standards: Student was able to demonstrate proficient skills on all ACS instrument flight tasks to standards.

Date Completed_____

Overall Grade: Excellent Good Fair Needs Improvement

Name/Signature_____

Notes:

Stage 3 Lesson 6: Ground
Mock Checkride

Prerequisite study: Reference previous ground topic overviews, the acs, and online Sporty's or Cirrus Approach Instrument course
Objective: To demonstrate proficient knowledge on all ACS topics. Have the instructor assign a flight plan guideline for discussion and flight.

Knowledge Areas

- ☐ Flight instruments
  - ☐ Steam
  - ☐ Glass
  - ☐ Magnetic
- ☐ Navigation equipment function and their errors
  - ☐ VOR
  - ☐ DME
  - ☐ GPS
- ☐ Aeromedical factors
- ☐ Regulations
  - ☐ Pilot qualifications
  - ☐ Currency
  - ☐ Airworthiness
    - ☐ AV1ATES
    - ☐ ARROW
    - ☐ ATOMATOFLAMES FLAPS
    - ☐ GRABCARD
  - ☐ Preflight action
  - ☐ IFR weather minimums
    - ☐ Alternates
    - ☐ Landing requirements 91.175
  - ☐ IFR altitudes
    - ☐ Cruising
    - ☐ DA/H
    - ☐ MAA
    - ☐ MCA
    - ☐ MDA/H
    - ☐ MEA
    - ☐ MOCA
    - ☐ MORA
    - ☐ MRA
    - ☐ MSA
    - ☐ MTA
    - ☐ MVA
    - ☐ OROCA
  - ☐ Definitions of night
    - ☐ Logging
    - ☐ Landing
    - ☐ Lights
  - ☐ Oxygen
- ☐ Publications
  - ☐ TERPS
  - ☐ TPP
  - ☐ IFH
  - ☐ AFH
  - ☐ PHAK
  - ☐ FAR/AIM
  - ☐ POH
  - ☐ ACS
  - ☐ Low Enroute Charts
- ☐ Weather theory
- ☐ Weather services
- ☐ Cross country flight planning
  - ☐ Filing
  - ☐ VFR airspace and weather minimums
- ☐ Lost Comms
  - ☐ Altitude
  - ☐ Route
- ☐ Lost Procedures and Emergency Codes
- ☐ Clearances
  - ☐ CRAFT
  - ☐ Clearance void time
- ☐ Departure Procedures

- ☐ ODP
- ☐ SID
- ☐ Climb gradient vs rate
- ☐ Minimums
- ☐ DP plate

☐ Approach and STAR Procedures

- ☐ Contact vs Visual
- ☐ Segments of an approach
  - ☐ IAF/IF/FAF
  - ☐ DA/DH/MDA
  - ☐ VDP
  - ☐ MAP
  - ☐ Approach Categories
- ☐ Precision
  - ☐ ILS
    - ☐ Localizer
    - ☐ Glide slope
    - ☐ Marker beacons
    - ☐ ALS
  - ☐ PAR
- ☐ Non Precision and APV
  - ☐ VOR
  - ☐ RNAV
  - ☐ GPS
    - ☐ WAAS
    - ☐ RAIM
  - ☐ LPV
  - ☐ LNAV/VNAV
  - ☐ LNAV
  - ☐ +V
  - ☐ RNP
- ☐ Missed Approach Procedures
- ☐ Circling Procedures
- ☐ Reporting Points- radar and non radar
- ☐ **Holds**
  - ☐ Published
  - ☐ Unpublished
  - ☐ Entries
  - ☐ Speed limits
  - ☐ Timing vs DME
  - ☐ Correcting for wind
- ☐ **DME ARCs**
- ☐ Procedure Turns

Completion standards: Student was able to demonstrate proficient knowledge on all ACS instrument ground topics to standards.

Date Completed_____

Overall Grade: Excellent Good Fair Needs Improvement

Name/Signature_____

Notes:

Stage 3 Lesson 7: Flight
Mock Checkride

Prerequisite study: Reference previous ground topic overviews and online Sporty's or Cirrus Approach Instrument course.
Objective: To demonstrate proficient flight skills to be endorsed for the Instrument Practical Test.

Knowledge Tasks
- ☐ Completion of ground portion of End of Course

Preflight Tasks
- ☐ Proper flight plan filing
- ☐ Proper demonstration of PAVE

Flight Tasks
- ☐ Checklists
  - ☐ Engine start
  - ☐ Instrument check
  - ☐ Run up
  - ☐ Climb
  - ☐ Cruise
- ☐ Pre Taxi
  - ☐ Set up comms
  - ☐ Set up navigation equipment
  - ☐ Engine start
  - ☐ VOR check
  - ☐ KRAFT Clearance
  - ☐ Taxiing- instrument check
  - ☐ Run up
  - ☐ Take off
- ☐ Take off
  - ☐ Departure Procedure
  - ☐ CAPS available
- ☐ Climb
  - ☐ Checklist
- ☐ Cruise
  - ☐ Checklist
  - ☐ Intercepting and Tracking VOR/GPS
  - ☐ Holds
    - ☐ Published
    - ☐ Unpublished
      - ☐ **Build a hold**
  - ☐ DME ARC
  - ☐ Lost Comms
  - ☐ Engine failure
  - ☐ Recovery from unusual attitudes
- ☐ Descent
  - ☐ Checklist
  - ☐ Non Precision Approach
  - ☐ Precision Approach
  - ☐ Missed Approach
  - ☐ Circling Approach
  - ☐ Straight in Approach
  - ☐ Partial Panel

Completion standards: Student was able to demonstrate proficient skills on all ACS instrument flight tasks to standards.

Date Completed_____

Overall Grade: Excellent Good Fair Needs Improvement

Name/Signature_____

Notes:

Instrument Rating Checkride Endorsements

Aeronautical knowledge test: §§ 61.35(a)(1), 61.103(d), and 61.105. I certify that _____has received the required training in accordance with § 61.105. I have determined [he or she] is prepared for the _____knowledge test Date_____ CFI_____	**Flight proficiency/practical test: § 61.65(a)(6).** I certify that_____ has received the required training of § 61.65(c) and (d). I have determined [he or she] is prepared for the Instrument–[airplane, helicopter, or powered-lift] practical test. Date_____ CFI_____
Review of deficiencies identified on airman knowledge test: § 61.39(a)(6)(iii), as required. I certify that _____has demonstrated satisfactory knowledge of the subject areas in which [he or she] was deficient on the _____airman knowledge test. Date_____ CFI_____	**Retesting after failure of a knowledge or practical test: § 61.49** I certify that _____ has received the additional [flight and/or ground, as appropriate] training as required by § 61.49. I have determined that [he or she] is proficient to pass the _____knowledge/practical test. Date_____ CFI_____
Prerequisites for instrument practical tests: § 61.39(a). I certify that_____ has received and logged the required flight time/training of § 61.39(a) in preparation for the practical test within 2 calendar-months preceding the date of the test and has satisfactory knowledge of the subject areas in which [he or she] was shown to be deficient by the FAA Airman Knowledge Test Report. I have determined [he or she] is prepared for the Instrument–[airplane, helicopter, or powered lift] practical test. Date_____ CFI_____	**Completion of an instrument proficiency check: § 61.57(d).** **No logbook entry reflecting unsatisfactory performance on an instrument proficiency check is required.** I certify that [First name, MI, Last name], [grade of pilot certificate], [certificate number], has satisfactorily completed the instrument proficiency check of § 61.57(d) in a [make and model] aircraft on [date]. Date_____ CFI_____

Pilot: Tail #: Dispatched by:

Risk Assessment

		Low		Medium		High		Score
P	**Pilot**							
	General	◆	0	■	5	●	10	
	IFR Proficiency	◆	0	■	5	●	10	
OR	NOT IFR Rated						10	
	Night Currency (30 Days)	> 3 Landings	0	1-3 Landings	3	0 Landings	5	
	IMSAFE (see reverse)	0 Elements	0	1 Element	5	2 or greater elements	10	
A	**Aircraft**							
	Maintenance Status	Fully Functional	0	Non Critical Squawks	10	Not Airworthy	NG	
	On Board Weather	Yes	0			No	5	
	Autopilot	Yes	0			No	10	
V	**Enviornment**							
	Planned Flight Altitude	< 8000	0	8000-12,000	5	> 12,000	10	
	Planned Flight Time	< 2 hrs	0	2-4 hrs	5	> 4 hrs	10	
	Enroute Terrain	Flat	0	Rolling / Low	5	Mntns or Large Bodies of H2O	10	
	Enroute Weather	CAVU	0	Isolated TS / Poss Icing	10	Scattered TS / Probable Icing	40	
	Ceilings/Vis at Destination	> 3000 / 5	0	2000-3000 / 3 Miles	8	< 2000 2 Miles	15	
	Landing RW distance	2.5 x Short Field + Roll	0	> 1.5 X <2.5 X	5	< 1.5 X	10	
	Crosswind at Destination	<10 Knots	0	10-20 Knots	5	> 20 Knots	10	
	Day vs Night	Day	0			Night	30	
	Landing Airfield	Familiar	0			New	10	
E	**External Pressures**							
	New Passenger(s)	No	0			Yes	10	
	Co-Pilot	Yes w/CRM training	-10			No, or w/o CRM training	10	
	Urgency of Flight	Can be late	1	Should Get There	5	Must Get There	20	
	Family &/or Business Issues	Nothing Pressing	1	Occupied with Issues	10	Stressed by Situations	30	
	Total Score							

</= 90	Low Risk, Stay Vigilent
> 90 < 170	Moderate Risk, Apply Risk Management, especially OUTS
> 170	Reschedule and/or make changes to reduce Risk

General Flight Guidance	1	2	3	4	5	You
Years Actively Flying (Currency Maintained)	> 10	6-10	2-5		<2	
Last Recurring Training Event	<6 Mo		6-12 Mo		12-24 Mo	
Certificate Held	ATP or CFI	Comm w/ IFR	Pvt w/IFR	PVT	Stud	
Total Time	>2000	1000-2000	750-1000	500-750	<500	
Hours Logged Last 12 Months	>200	150-200	100-150	50-150	<50	
Hours in Type Last 90 Days	>50	35-50	25-35	10-25	<10	
Mishap in Last 24 Months				Incident	Accident	
Landing (in Type) Last 30 Days	>10	6-9	3-5	1-2	0	
					Total	
Pilot Categories	>/= 23 ●		14-22 ■		</+13 ◆	

Instrument Flight Guidance	1	2	3	4	5	You
Years Actively Flying IFR (Currency Maintained)	>5		1-5		<1	
Hours Flown IFR in Last 90 Days	>35	25-35	10-25	5-10	<5	
Simulated / Actual Instrument in Type (avionics) last 90 Days	>3		1-3		<1	
Autpilot Coupled IAPs in Type (avionics) last 90 Days	>4		1-4		0	
Hand Flown IAPs in Last 90 Days	>2		1		0	
Received Avionics Specific Training from Instructor	Yes				No	
Subtract 2 points for completeing IPC in last 12 Months; Subtract 1 point when flying with IFR licensed pilot					Total	
Pilot Categories	>/= 19 ●		8-18 ■		</+7 ◆	

IMSAFE: Illness; Medication; Stress; Alcohol; Fatigue; Eating

WEIGHT AND BALANCE

SKYHAWK N_____

STATION	WEIGHT	ARM	MOMENT
Empty Weight			
Usable Fuel ____gal		48	
Pilot & Front passenger		37	
Rear Passengers		73	
Baggage Area 1 (120 lbs Max)		95	
Baggage Area 2 (50 lbs Max)		123	
RAMP WEIGHT			
Start/Taxi/ Run-up	-7	48	-336
TAKEOFF WEIGHT			
Fuel Burn ____gal		48	
LANDING WEIGHT			

MINIMUM FUEL REQUIRED _____ GAL.

PREFLIGHT CHECKLIST	
Current Departure WX	
Current Enroute WX	
Forecast Enroute WX	
Forecast Destination WX	
Forecast Alternate Airport WX	
Winds & Temps Aloft Forecast	
Area Forecast	
Temp/Dew Point Spread	
Freezing Level	
PIREPs	
NOTAMs	
ADM/PAVE	
Flight Plan	

LIGHT GUN SIGNALS		
SIGNAL	ON GROUND	IN FLIGHT
Steady Green	Cleared for Takeoff	Cleared to Land
Flashing Green	Cleared to Taxi	Return for Landing
Steady Red	Stop	Give Way
Flashing Red	Taxi Clear of Runway	DO NOT LAND
Flashing White	Return to Ramp	-
Alternating Red/Green	Use Extreme Caution	Use Extreme Caution

I'M SAFE	
Illness	
Medication	
Stress	
Alcohol	
Fatigue	
Eating	

N#	Empty Weight	Arm	Moment	Max T/O Weight
3021E	1436.69	36.1	51,869,78	2400
738BS	1513.51	36.84	55,750.38	2400

aa

December 3, 2019

WEIGHT AND BALANCE

CIRRUS N_____

STATION	WEIGHT	ARM	MOMENT
Empty Weight			
Usable Fuel _____gal			
Pilot & Front passenger			
Rear Passengers			
Baggage Area 1 (120 lbs Max)			
Baggage Area 2 (50 lbs Max)			
RAMP WEIGHT			
Start/Taxi/ Run-up			
TAKEOFF WEIGHT			
Fuel Burn _____gal			
LANDING WEIGHT			

MINIMUM FUEL REQUIRED _____ GAL.

N#	Empty Weight	Arm	Moment	Max T/O Weight
881PF	2187	140.67	307.693	3050

PREFLIGHT CHECKLIST	
Current Departure WX	
Current Enroute WX	
Forecast Enroute WX	
Forecast Destination WX	
Forecast Alternate Airport WX	
Winds & Temps Aloft Forecast	
Area Forecast	
Temp/Dew Point Spread	
Freezing Level	
PIREPs	
NOTAMs	
ADM/PAVE	
Flight Plan	

LIGHT GUN SIGNALS		
SIGNAL	ON GROUND	IN FLIGHT
Steady Green	Cleared for Takeoff	Cleared to Land
Flashing Green	Cleared to Taxi	Return for Landing
Steady Red	Stop	Give Way
Flashing Red	Taxi Clear of Runway	DO NOT LAND
Flashing White	Return to Ramp	-
Alternating Red/Green	Use Extreme Caution	Use Extreme Caution

I'M SAFE	
Illness	
Medication	
Stress	
Alcohol	
Fatigue	
Eating	

December 3, 2019

WEATHER RESTRICTIONS

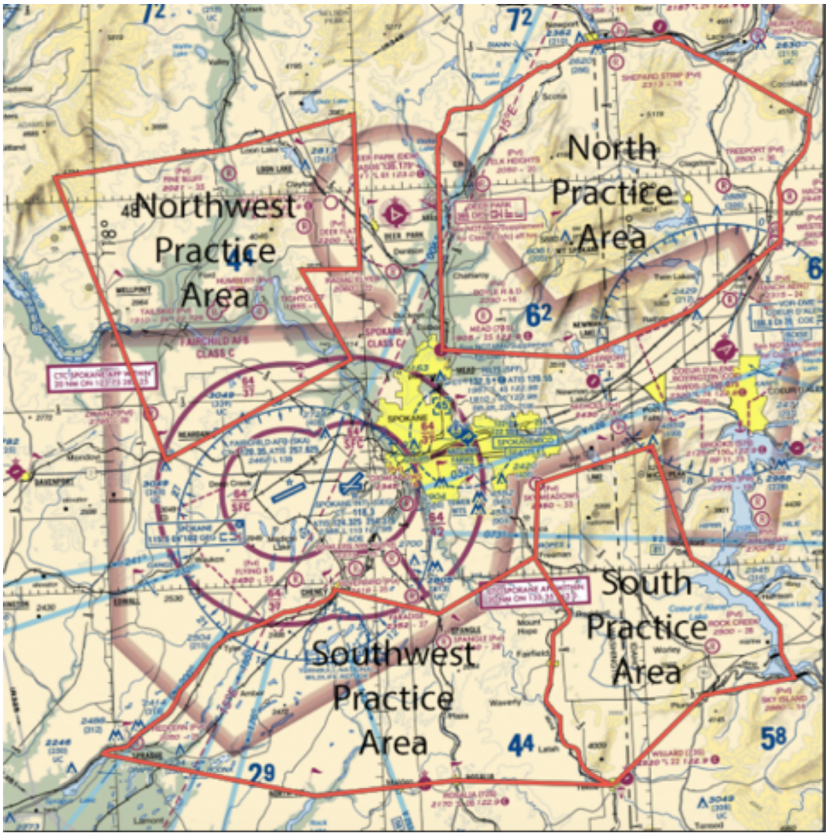
The following weather restrictions apply to NWFS operations:

	Ceiling	Visibility	Crosswind Component
Traffic Pattern	3000 AGL	5 NM	8 Kts

Practice Area	5000 AGL	8 NM	8 Kts
VFR Cross Country	5000 AGL	10 NM	8 Kts
IFR	200' above lowest published minimums	Published mins plus ½ NM for precision. Published mins plus 1 NM for non-precision	8 Kts

*Individual student/renter endorsements may be more or less restrictive than that presented in this table.

**Dual flight instruction may be conducted at the flight instructor's personal minimums which may not match this table.



IFR Clearance & Flight Log

C			
R			
A	climb/maintain	expect	minutes after departure
F			
T			

Release time: _____ Void time: _____ Time now:_____

Altitude	Heading	Frequency