westflying

Syllabus

Instrument Rating

Part 61

Student: _____ Start Date: _____

Instructor: _____ Certificate # and Renewal Date: _____

Flight Training Plan – **Instrument Rating**

The table below consolidates the planned lessons for an Instrument Rating Airplane. Risk Management and ADM are included on each lesson. Additional flying might be needed to achieve the Aeronautical Experience required.

- Stage 1: Foundational Instrument Techniques
- Stage 2: Learning IFR and Instrument Procedures
- Stage 3: Develop Proficiency in Procedures and ATC Communications

	Lesson	Theme	Dual	Pre/ Post	Attempts *(enter the date on each cell)*				
					1	2	3	4	5
STAGE 1	**Lesson 01**	**Aircraft and Instrument/Avionics Familiarization** *(Includes VOR and Instrument Checks)*	*2.0*	*1.0*					
	Lesson 02	**Flying by Reference to Instruments** *(Straight and level, standard rate turns, climbs, descents)*	*1.5*	*0.6*					
	Lesson 03	**Navigational Systems: VOR and GPS** *(Intercept and follow VOR radials, GPS courses and Auto-Pilot usage)*	*1.5*	*0.6*					
	Lesson 04	**Partial Panel Flying and Loss of Communications** *(Handling emergencies in IMC)*	*1.5*	*0.8*					
	Lesson 05	**Recovery from Unusual Attitudes and Stalls** *(Handling emergencies in IMC)*	*1.5*	*0.6*					
	Lesson 06	**IFR Flight Plans and ATC Communications** *(Filling, Opening and Closing flight plans; IFR flight and radio comms)*	*2.0*	*1.0*					
STAGE 2	**Lesson 07**	**ATC Clearances & Departure Procedures** *(Requesting/Receiving clearances on the ground and in the air)*	*1.5*	*0.6*					
	Lesson 08	**Non-Precision Approach: LOCALIZER** *(Briefing, communicating, navigating to minimums and flying the missed)*	*2.0*	*0.6*					
	Lesson 09	**Non-Precision Approach: LNAV & LP** *(Briefing, communicating, navigating to minimums and flying the missed)*	*2.0*	*0.6*					
	Lesson 10	**Non-Precision Approach: VOR** *(Briefing, communicating, navigating to minimums and flying the missed)*	*2.0*	*0.6*					
	Lesson 11	**Precision Approach: ILS** *(Briefing, communicating, navigating to minimums and flying the missed)*	*2.0*	*0.6*					
	Lesson 12	**Approach with Vertical Guidance: LPV & LNAV/VNAV** *(Briefing, communicating, navigating to minimums and flying the missed)*	*2.0*	*0.6*					
	Lesson 13	**DME Arc: Techniques using VOR and GPS** *(Briefing, communicating, navigating to minimums and flying the missed)*	*1.5*	*0.8*					
	Lesson 14	**Circling Approach** *(Briefing, communicating, navigating to min, protected area, missed)*	*2.0*	*0.8*					
	Lesson 15	**Holds** *(Published and non-published, all entry types, standard and advanced)*	*1.5*	*1.0*					
	Lesson 16	**Course Reversal: Procedure Turns & Hold-in-lieu-PT** *(Includes recognizing NoPT and requesting "Straight In")*	*1.5*	*0.6*					
	Lesson 17	**Flying a STAR** *(Planning for a STAR, clearances, fly the STAR and Descending via STAR)*	*1.5*	*0.8*					
STAGE 3	**Lesson 18**	**Long IFR Cross-Country** *(250nm+ along airways with 3 different kinds of approaches in 3 airports)*	*5.0*	*1.0*					
	Lesson 19	**PRACTICE: Approaches** *(Sequence of approaches, circle-to-land, straight-in landing, ADM, SPR)*	As needed	As needed					
	Lesson 20	**PRACTICE: Holds** *(Sequence of published and non-published holds, different entries)*	As needed	As needed					
	Lesson 21	**Preparation for the FAA Practical Test** *(Polishing for consistent execution at ACS)*	*2.0*	*2.0*					

Syllabus based on, and modified from, the ASA Instrument Syllabus

FAA Requirements – **Instrument Rating**

Aeronautical Knowledge – 14 CFR 61.65(b)

Ground Training on these areas will be covered through the Pre/Post flight briefings, and standalone ground lessons.

(1) Federal Aviation Regulations of this chapter that apply to flight operations under IFR;
(2) Appropriate information that applies to flight operations under IFR in the "Aeronautical Information Manual;"
(3) Air traffic control system and procedures for instrument flight operations;
(4) IFR navigation and approaches by use of navigation systems;
(5) Use of IFR enroute and instrument approach procedure charts;
(6) 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;
(7) Safe and efficient operation of aircraft under instrument flight rules and conditions;
(8) Recognition of critical weather situations and windshear avoidance;
(9) Aeronautical decision making and judgment; and
(10) Crew resource management, including crew communication and coordination.

Flight Proficiency – 14 CFR 61.65(c)

(1) Preflight preparation;
(2) Preflight procedures;
(3) Air traffic control clearances and procedures;
(4) Flight by reference to instruments;
(5) Navigation systems;
(6) Instrument approach procedures;
(7) Emergency operations; and
(8) Postflight procedures.

Aeronautical Experience – 14 CFR 61.65(d)

(1) Except as provided in paragraph (g) of this section, 50 hours of cross-country time as pilot in command, of which 10 hours must have been in an airplane; and
(2) Forty hours of actual or simulated instrument time in the areas of operation listed in paragraph (c) of this section, 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; and
    (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; and
        (C) Three different kinds of approaches with the use of navigation systems.

Additional Resources

Slides, Books and Notes

- Ground lessons available at our website ➔ Resources - WestFlying
- FAA Practical Test Preparation Book ➔ Commercial Instrument Pilot (available on Amazon)
- Pilot-Cafe Summary ➔ The IFR Quick-Review Study Guide
- Instrument ACS ➔ Instrument Rating – Airplane ACS
- FAA Books ➔ FAA-H-8083-15B, Instrument Flying Handbook and FAA-H-8083-16B, Instrument Procedures

Video Lessons (YouTube) – FlightInsight channel

Basics

- Requirements to Fly IFR | Instrument Proficiency Check | IFR Inspections | VOR Inspections
- IFR Enroute Charts Explained | Airways on IFR Charts | IFR Training
- IFR Altitudes Explained | MEA MOCA & OROCA on Low Enroute Chart | Minimum Altitudes for Enroute IFR
- Enroute Chart Airspace Explained | Compulsory Reporting Points

IFR Clearances

- CRAFT Clearance | Receiving IFR Clearance from ATC | IFR Clearance Practice
- How to Get an IFR Clearance Enroute | Picking up IFR Clearance | Pop Up IFR Clearance

Departure Procedures

- Standard Instrument Departures (SID) Obstacle Departure Procedure (ODP) Explained | IFR Departures

Instrument Procedures

- Easily Read Instrument Approach Plates | Instrument Approach Plate Tutorial | IFR Training
- How to Brief an Approach Plate | Our Best IFR Briefing Tips | IFR Approaches Made Easy
- Approach Plate Minimums Explained | Decision Height | Minimum Descent Altitude
- How ILS Works | Instrument Landing System Explained | IFR Training
- How to Fly a Non Precision Approach | Continuous Descent FInal Approach | LNAV + V
- Circle to Land Explained | How to Go Missed on a Circling Approach
- Procedure Turns Explained | Barbs and Hold-In-Lieu of
- Get Holding Entries Right Every Time | How a CFI Visualizes Holding Entries | Holding Pattern Entry
- DME Arc Approach | Most Challenging IFR Approaches | VOR 15 Martin State
- Where's the Missed Approach Point? | Visual Descent Point Explained
- Visual Descent Point | Descending from the MDA | FAR 91.175
- How to Fly a VOR Approach & VOR Hold | Hold in Lieu of Procedure Turn
- Approach Clearance from ATC | Radar Vectors to Final | Cleared for the ILS
- The 5 C's of Going Missed | IFR Missed Approach
- Can you fly a STAR? | Standard Terminal Arrival Route | Video Quiz