



INSTRUMENT RATING

SINGLE ENGINE AIRPLANE

Hursa Corp x Lucky Aviation 2022



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Stage One

Overview

There are three sections of stage one. First, the student will build aeronautical experience on long VFR cross-countries. Second, the student will build foundations for aircraft control in IMC conditions including upset recovery. The student will also be introduced to ATC clearances and departure procedures.

Objectives

The stage one objective is to teach the student aeronautical knowledge related to pre-flight procedures, aircraft systems related to IFR operations, upset recovery, ATC clearances and departure procedures.. Additionally, introduce the student to aeronautical experience and build a foundation for flight path management, CRM, SRM, ADM, and task management.

Completion Standards

The student should be able to control the aircraft to ACS standards while multitasking. The student will also pass the Systems Validation with a minimum of 80%.

Introduction to Instrument Flight

Introduction to Instrument Flight

Stage 1 Lesson 1

Ground Lesson

Lesson Time 4.0

Induction to Flight

Objectives

This lesson will serve as the student's initial ground briefing on Fundamentals of Flight, Pro Standards Flight Operations, Pro Standards checklists, and Pro Standards Procedures. Additionally, the instructor will introduce the aeronautical knowledge elements required prior to initial solo referencing applicable POH, the AFH, and the PHAK.

SBT

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Tasks

Introduction to Pro Standards Training Program

Course Overview

Required Course Materials

Course Policies

Professionalism

Human Factors

Threat and Error Management

Aeronautical Decision Making

Situational Awareness

Single-Pilot Recourse Management

Crew Recourse Management

Crew Communication

Workload Management

Controlled Flight into Terrain

Spatial Disorientation and Illusions

Fitness for Flight

Completion Standards

The student demonstrates an understanding of the knowledge of human factors, the elements required by 61.65, and the instructor has introduced all the of tasks to the student.

Introduction to Instrument Flight
Stage 1 Lesson 2
Maneuver Brief
Lesson Time 2.0

Objectives

Introduce the Pro Standards SOP, and FOM with an emphasis on IFR operations.

SBT

>> KSAN to KLAS San Diego weather is OVC200 1 1/2 SM -RN

Tasks

Pro Standards Checklist Philosophy (SOP)
Initial Aircraft Acceptance (SOP)
Standard Callouts (SOP)
Use of Checklists
Positive Exchange of Flight Controls
Before Start (SOP)
Engine Priming (SOP)
Engine Starting (SOP)
Before Taxi (SOP)
Before Takeoff (SOP)
Instrument Takeoff (SOP)
Climb (SOP)
Cruise (SOP)
Decent (SOP)
Approach (SOP)
Deviations and Call outs (SOP)
After Landing (SOP)
Shutdown/Secure (SOP)
Flight Deck Management
Taxiing

Completion Standards

The student should demonstrate proficiency in SOP procedures on the ground without missing more than one flow item per checklist.

Introduction to Instrument Flight

Stage 1 Lesson 3

Dual Flight

Lesson Time 2.0

Objectives

The Student should gain experience by conducting VFR cross-countries, focusing on SOP and standard call outs.

SBT

>> XC to KSBA

Tasks

Safety of Flight

Aeronautical Decision Making and Risk Management

Collision Hazards

Controlled Flight into Terrain Awareness

Weather Information

Performance and Limitations

Human Factors

Standard Operating Procedures

Preflight Assessment

Flight Deck Management

Engine Starting

Taxiing

Before Takeoff Check

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Airport, Taxiway, and Runway Signs and Markings

Normal Takeoff and Climb

Normal Approach and Landing

After Landing, Parking and Securing

Completion Standards

Safely complete a VFR cross-country. Correct any SOP deviations.

Introduction to Instrument Flight

Stage 1 Lesson 4

Dual Flight

Lesson Time 2.0

Objectives

The Student should gain experience by conducting VFR cross-countries, focusing on SOP and standard call outs.

SBT

>> XC to KAVX - L35

Tasks

Safety of Flight

Aeronautical Decision Making and Risk Management

Collision Hazards

Controlled Flight into Terrain Awareness

Weather Information

Performance and Limitations

Human Factors

Standard Operating Procedures

Preflight Assessment

Flight Deck Management

Engine Starting

Taxiing

Before Takeoff Check

Communications, Light Signals, and Runway Lighting Systems

Traffic Patterns

Airport, Taxiway, and Runway Signs and Markings

Normal Takeoff and Climb

Normal Approach and Landing

After Landing, Parking and Securing

Completion Standards

Safely complete a VFR cross-country. Correct any SOP deviations.

Basic Attitude Instrument

Basic Attitude Instrument
Stage 1 Lesson 5
Ground Lesson
Lesson Time 2.0

Flight Instruments Systems

Objectives

SBT

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Tasks

Pitot-Static Instruments
Airspeed Indicator
Altimeter
Vertical Speed Indicator
Systems Errors
Gyroscopic Flight Instruments
Attitude Indicator
Heading Indicator
Rate of Turn Indicators
Slip/skid Indicator
Magnetic Compass
Instrument Checks
Air Data Computer
Attitude Heading Reference
Electronic Flight Instruments
Electronic Instrument Checks
Electronic Instrument Failures and System Errors

Completion Standards

The student demonstrates an understanding of the knowledge of flight instrument systems, the elements required by 61.65, and the instructor has introduced all the of tasks to the student.

Basic Attitude Instrument
Stage 1 Lesson 6
Maneuvers Brief
Lesson Time 2.0

Objectives

SBT



Tasks

Fundamental IFR Skills
Control-Performance Method
Instrument Cockpit Check
Instrument Interpretation
Airplane Control
Primary Supporting Concept
Straight and Level Flight
Change of Airspeed and Configuration
Climbing and Descending Turns
Turns to Predetermined Headings
Instrument Takeoff
Vertical S
BAI Patterns
Steep Turns
Common Errors

Completion Standards

Basic Attitude Instrument
Stage 1 Lesson 7
Flight Lesson
Lesson Time 2.0

Objectives

SBT



Tasks

Fundamental IFR Skills
Control-Performance Method
Instrument Cockpit Check
Straight and Level Flight
Change of Airspeed and Configuration
Climbing and Descending Turns
Turns to Predetermined Headings
Instrument Takeoff
Vertical S
Compliance with Air Traffic Control Clearances
Checklist Usage
SOP Callouts

Completion Standards

This Lesson will be graded with Airman Certification Standards being satisfactory. The student demonstrates an understanding of the elements related to the tasks, ADM, CRM, SRM and the special emphasis areas. SOP deviation items must be corrected.

Basic Attitude Instrument
Stage 1 Lesson 8
Flight Lesson
Lesson Time 2.0

Objectives

SBT



Tasks

Fundamental IFR Skills
Control-Performance Method
Instrument Cockpit Check
Straight and Level Flight
Change of Airspeed and Configuration
Climbing and Descending Turns
Turns to Predetermined Headings
Instrument Takeoff
Vertical S
BAI Patterns
Steep Turns
Compliance with Air Traffic Control Clearances
Checklist Usage
SOP Callouts

Completion Standards

This Lesson will be graded with Airman Certification Standards being satisfactory. The student demonstrates an understanding of the elements related to the tasks, ADM, CRM, SRM and the special emphasis areas. SOP deviation items must be corrected.

Basic Attitude Instrument
Stage 1 Lesson 9
Ground Lesson
Lesson Time 2.0

Traditional Navigation Systems

Objectives

SBT

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Tasks

Basic Radio Principles
NDB/ADF
Operational Errors
VOR
Operational Errors
VOR Receiver Checks
Operational Errors
DME Arc
ILS/ILS Components
Operational Errors
SDF/LDA
Radar

Completion Standards

The student demonstrates an understanding of the knowledge of traditional navigation systems, the elements required by 61.65, and the instructor has introduced all the of tasks to the student.

Basic Attitude Instrument
Stage 1 Lesson 10
Flight Lesson
Lesson Time 2.0

Objectives

SBT



Tasks

Fundamental IFR Skills
Control-Performance Method
Instrument Cockpit Check
Straight and Level Flight
Change of Airspeed and Configuration
Climbing and Descending Turns
Turns to Predetermined Headings
Instrument Takeoff
Vertical S
BAI Patterns
Steep Turns
Compliance with Air Traffic Control Clearances

Completion Standards

This Lesson will be graded with Airman Certification Standards being satisfactory. The student demonstrates an understanding of the elements related to the tasks, ADM, CRM, SRM and the special emphasis areas. SOP deviation items must be corrected.

Basic Attitude Instrument
Stage 1 Lesson 11
Maneuver Briefing
Lesson Time 2.0

Objectives

SBT



Tasks

Airplane Systems
System and Equipment Malfunctions
Timed Turns
Magnetic Compass Turns
Loss of Primary Flight Instrument Indications
Coping With Instrument Failure
Partial Panel Flying
Timed Turns
Unusual Attitude Recovery
Electronic Flight Instrument Operational Considerations

Completion Standards

Basic Attitude Instrument
Stage 1 Lesson 12
Flight Lesson
Lesson Time 2.0

Objectives

SBT



Tasks

Instrument Cockpit Check
System and Equipment Malfunctions
Straight and Level Flight [Partial Panel]
Change of Airspeed and Configuration [Partial Panel]
Straight Climbs and Descending [Partial Panel]
Climbing and Descending Turns [Partial Panel]
Vertical S [Partial Panel]
Timed Turns
Magnetic Compass Turns
Loss of Primary Flight Instrument Indications
Checklist Usage
Standard Callouts

Completion Standards

This Lesson will be graded with Airman Certification Standards being satisfactory. The student demonstrates an understanding of the elements related to the tasks, ADM, CRM, SRM and the special emphasis areas. SOP deviation items must be corrected.

Basic Attitude Instrument
Stage 1 Lesson 13
Ground Lesson
Lesson Time 2.0

Next Generation Navigation Systems

Objectives

SBT

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Tasks

Area Navigation (RNAV)
Global Positioning System (GPS)
WAAS
Required Navigation Performance

Completion Standards

The student demonstrates an understanding of the knowledge of next generation navigation systems, the elements required by 61.65, and the instructor has introduced all the of tasks to the student.

Basic Attitude Instrument
Stage 1 Lesson 14
Flight Lesson
Lesson Time 2.0

Objectives

SBT

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Tasks

Instrument Cockpit Check
System and Equipment Malfunctions
Straight and Level Flight [Partial Panel]
Change of Airspeed and Configuration [Partial Panel]
Straight Climbs and Descending [Partial Panel]
Climbing and Descending Turns [Partial Panel]
Vertical S [Partial Panel]
Timed Turns
Magnetic Compass Turns
Loss of Primary Flight Instrument Indications
Checklist Usage
Standard Callouts

Completion Standards

This Lesson will be graded with Airman Certification Standards being satisfactory. The student demonstrates an understanding of the elements related to the tasks, ADM, CRM, SRM and the special emphasis areas. SOP deviation items must be corrected.

Systems Validation

SV
Stage 1 Lesson 15
Validation
Lesson Time 2.0

Objectives

SBT

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Tasks

Aircraft Systems
Aircraft Flight Instruments
Aircraft Limitations
Memory Items

Completion Standards

Upset Recovery

Upset Recovery
Stage 1 Lesson 16
Ground Lesson
Lesson Time 2.0

Upset and IFR Emergencies

Objectives

To have the student demonstrate the proper upset recovery skills and correlate the aeronautical knowledge related to upset recovery and IFR emergencies.

SBT

>> *Colgan Air 3407*

Tasks

Extended Envelope Training
Upsets
Upset Recovery
Declaring an Emergency
Minimum Fuel
Instrument Failure
Loss of Reliable Airspeed
Communications Failure
Malfunction Reports

Completion Standards

The student demonstrates an understanding of the knowledge of upset recovery and IFR emergencies, the elements required by 61.65, and the instructor has introduced all the of tasks to the student.

Upset Recovery
Stage 1 Lesson 17
Maneuver Brief
Lesson Time 0.5

Objectives

Review the SOP procedures for the maneuvers to be performed on the next flight.

SBT**Tasks**

Slow Flight [Instrument Reference]
Loss of Reliable Airspeed [Instrument Reference]
Upset Recovery
Upset Recovery [Partial Panel]
Recovery from full stall [Instrument Reference]
Recovery From Bounced landing

Completion Standards

Upset Recovery
Stage 1 Lesson 18
Flight Lesson
Lesson Time 2.0

Objectives

SBT



Tasks

Slow Flight [Instrument Reference]
Loss of Reliable Airspeed [Instrument Reference]
Upset Recovery
Upset Recovery [Partial Panel]
Recovery from full stall [Instrument Reference]
Recovery From Bounced landing

Completion Standards

This lesson will be graded with Airman Certification Standards being satisfactory. The student demonstrates an understanding of the elements related to the tasks, ADM, CRM, SRM and the special emphasis areas. SOP deviation items must be corrected. Upset recovery must be performed without error.

Upset Recovery
Stage 1 Lesson 19
Flight Lesson
Lesson Time 2.0

Objectives

SBT



Tasks

Upset Recovery
Upset Recovery [Partial Panel]

Completion Standards

This lesson will be graded with Airman Certification Standards being satisfactory. The student demonstrates an understanding of the elements related to the tasks, ADM, CRM, SRM and the special emphasis areas. SOP deviation items must be corrected.

Upset Recovery
Stage 1 Lesson 20
Ground Lesson
Lesson Time 2.0

Airports, Airspace, and IFR Environment

Objectives

SBT

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Tasks

Airport/Facility Directory (A/FD)
Aeronautical Information Manual (AIM)
Notices to Airmen (NOTAMs)
Advisory Circulars
The Airport Environment
Runway and taxiway signs, markings and lighting
Runway Incursion Avoidance
Land and Hold Short Operations (LAHSO)
Approach Light Systems
Visual Glide Slope Indicators
IFR Operations in the National Airspace System

Completion Standards

The student demonstrates an understanding of the knowledge of the IFR environment, the elements required by 61.65, and the instructor has introduced all the of tasks to the student.

Upset Recovery
Stage 1 Lesson 21
Ground Lesson
Lesson Time 2.0

Air Traffic Control Systems and Procedures

Objectives

SBT

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Tasks

Air Traffic Control System
Procedures for Instrument Flight Operations
IFR Flight Plan and ATC Clearance
Elements of an IFR Clearance
Abbreviated IFR Departure Clearance
Cruise Clearance
VFR on Top Clearance
Composite Flight Plan
Tower Enroute Control Clearance (TEC)
Departure Restrictions
Clearance Void Time
Clearance Read back
Clearance Shorthand

Completion Standards

Stage Two

Overview

In stage two the student will learn en route procedures including holding procedures and DME arcs.

Objectives

The objective is to teach the student the aeronautical knowledge related to airports and the airport environments, en route procedures, holding procedures and IFR regulations. The student should also be introduced to en route and holding procedures.

Completion Standards

The student can complete all the maneuvers to ACS Standards

Departures

Departures
Stage 2 Lesson 22
Ground Lesson
Lesson Time 2.0

Airports, Airspace, and IFR Environment

Objectives

SBT

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Tasks

Airport/Facility Directory (A/FD)
Aeronautical Information Manual (AIM)
Notices to Airmen (NOTAMs)
Advisory Circulars
The Airport Environment
Runway and taxiway signs, markings and lighting
Runway Incursion Avoidance
Land and Hold Short Operations (LAHSO)
Approach Light Systems
Visual Glide Slope Indicators
IFR Operations in the National Airspace System

Completion Standards

The student demonstrates an understanding of the knowledge of the IFR environment, the elements required by 61.65, and the instructor has introduced all the of tasks to the student.

Departures
Stage 2 Lesson 23
Ground Lesson
Lesson Time 2.0

Departure Charts and Procedures

Objectives

SBT

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Tasks

Departure Charts
Departure Standards
U.S. Standards for Terminal Instrument Procedures (TERPS)
Takeoff Minimums
Departure Options
IFR Departure Procedures

Completion Standards

The student demonstrates an understanding of the knowledge of departure procedures, the elements required by 61.65, and the instructor has introduced all the of tasks to the student.

Departures
Stage 2 Lesson 24
Maneuvers Brief
Lesson Time 2.0

Objectives

SBT

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Tasks

Aircraft Navigation Equipment
Intercepting and Tracking Navigational Systems
Intercepting and Tracking Arcs
Radar Vectors
Departure Procedures

Completion Standards

The student demonstrates an understanding of the elements related to airplane navigation equipment and intercepting and tracking navigational systems, arcs, and departure en route, and arrival operations. The lesson will be complete once the instructor has introduced all the required Tasks and subsequent elements to the student.

Departures
Stage 2 Lesson 25
Flight Lesson
Lesson Time 2.0

Objectives

This lesson will serve as practice in the aircraft, of the procedures associated with intercepting and tracking navigational systems, arcs, and departure, en route, and arrival operations. All Skills will be performed solely by reference to instruments.

SBT

>> *ODP - KRNM ODP*

Tasks

Instrument Cockpit Check
Compliance with Air Traffic Control Clearances
Instrument Takeoff
Intercepting and Tracking Navigation Systems
Intercepting and Tracking Arcs
Departure Procedures
Radar Vectors
Checklist Usage
Standard Callouts

Completion Standards

This lesson will be graded with Airman Certification Standards being satisfactory. The student demonstrates an understanding of the elements related to the tasks, ADM, CRM, SRM and the special emphasis areas. SOP deviation items must be corrected.

Departures
Stage 2 Lesson 26
Flight Lesson
Lesson Time 2.0

Objectives

This lesson will serve as practice in the aircraft, of the procedures associated with intercepting and tracking navigational systems, arcs, and departure, en route, and arrival operations. All Skills will be performed solely by reference to instruments.

SBT

>> *ODP - KPSP for Cathedral(x) Departure*

Tasks

Instrument Cockpit Check
Compliance with Air Traffic Control Clearances
Instrument Takeoff
Intercepting and Tracking Navigation Systems
Intercepting and Tracking Arcs
Departure Procedures
Radar Vectors
Checklist Usage
Standard Callouts

Completion Standards

This Lesson will be graded at +50% ACS. The student demonstrates an understanding of the elements related to airplane navigation equipment and intercepting and tracking navigational systems, arcs, and departure, en route, and arrival operations by performing the tasks solely by reference to instruments in accordance with the ERAU Standardization Manual and Instrument Rating Airplane Airman Certification Standards.

Departures
Stage 2 Lesson 27
Flight Lesson
Lesson Time 2.0

Objectives

This lesson will serve as practice in the aircraft, of the procedures associated with intercepting and tracking navigational systems, arcs, and departure, en route, and arrival operations. All Skills will be performed solely by reference to instruments.

SBT

>> *ODP - KPSP for Cathedral(x) Departure*

Tasks

Instrument Cockpit Check
Compliance with Air Traffic Control Clearances
Systems and Equipment Malfunctions
Instrument Takeoff
Intercepting and Tracking Navigation Systems [Partial Panel]
Intercepting and Tracking Arcs [Partial Panel]
Departure Procedures [Partial Panel]
Radar Vectors [Partial Panel]
Checklist Usage
Standard Callouts

Completion Standards

This lesson will be graded with Airman Certification Standards being satisfactory. The student demonstrates an understanding of the elements related to the tasks, ADM, CRM, SRM and the special emphasis areas. SOP deviation items must be corrected.

En Route

En Route
Stage 2 Lesson 28
Ground Lesson
Lesson Time 2.0

En Route Charts and Planning

Objectives

SBT

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Tasks

Enroute Charts
Front Panel
Navigation Aids
Victor Airways
Communication
Airports
Airspace
Area Charts
Enroute Procedures
Communication
Radar and Non-Radar Reports
Reporting Procedures
IFR Cruising Altitudes
Descending From the En Route Segment

Completion Standards

The student demonstrates an understanding of the knowledge of en route planning, the elements required by 61.65, and the instructor has introduced all the of tasks to the student.

En Route
Stage 2 Lesson 29
Ground Lesson
Lesson Time 2.0

Holding Procedures

Objectives

SBT

>>

Tasks

ATC Holding Instructions
Holding Pattern Terminology
Holding Pattern Entry Procedures
Crosswind Correction
Maximum Holding Speeds

Completion Standards

The student demonstrates an understanding of the knowledge of holding procedures, the elements required by 61.65, and the instructor has introduced all the of tasks to the student.

En Route
Stage 2 Lesson 30
Maneuvers Brief
Lesson Time 2.0

Objectives

To teach the student the aeronautical knowledge and skills related to the elements of holding procedures and airplane systems related to IFR operations. All Skills will be performed solely by reference to instruments.

SBT

>> *Holding Delays in SOCAL CARIF, OCN, VISTA, and ROBNN*

Tasks

Holding Procedures

Completion Standards

The student demonstrates an understanding of the knowledge and skills required to conduct holding procedures. The lesson will be complete once the instructor has introduced all the required Tasks and subsequent elements to the student.

En Route
Stage 2 Lesson 31
Flight Lesson
Lesson Time 2.0

Objectives

To teach the student the aeronautical knowledge and skills related to the elements of holding procedures and airplane systems related to IFR operations. All Skills will be performed solely by reference to instruments.

SBT

>> *Holding Delays in SOCAL CARIF, OCN, VISTA, and ROBNN*

Tasks

Instrument Cockpit Check
Compliance with Air Traffic Control Clearances
Instrument Takeoff
Departure Procedures
En Route Procedures
Intercepting and Tracking Navigational Systems
VOR Holds
DME Holds
Intersection Holds
GPS Holds
Checklist Usage
Standard Callouts

Completion Standards

This lesson will be graded with Airman Certification Standards being satisfactory. The student demonstrates an understanding of the elements related to the tasks, ADM, CRM, SRM and the special emphasis areas. SOP deviation items must be corrected.

En Route
Stage 2 Lesson 32
Flight Lesson
Lesson Time 2.0

Objectives

To teach the student the aeronautical knowledge and skills related to the elements of holding procedures and airplane systems related to IFR operations. All Skills will be performed solely by reference to instruments.

SBT

>> *Holding Delays in SOCAL CARIF, OCN, VISTA, and ROBNN*

Tasks

Instrument Cockpit Check
Compliance with Air Traffic Control Clearances
Instrument Takeoff
Departure Procedures
En Route Procedures
Intercepting and Tracking Navigational Systems
VOR Holds
DME Holds
Intersection Holds
GPS Holds
Checklist Usage
Standard Callouts

Completion Standards

This lesson will be graded with Airman Certification Standards being satisfactory. The student demonstrates an understanding of the elements related to the tasks, ADM, CRM, SRM and the special emphasis areas. SOP deviation items must be corrected.

En Route
Stage 2 Lesson 33
Ground Lesson
Lesson Time 2.0

IFR Regulations

Objectives

To teach the student the aeronautical knowledge and skills related to the elements of holding procedures and airplane systems related to IFR operations. All Skills will be performed solely by reference to instruments.

SBT

>> *Fly with Chris to Vegas today*

Tasks

Part 1.1 – Definitions and Abbreviations
Part 1.2 – Abbreviations and Symbols
Part 1.3 – Rules of Construction
Part 61.51 – Pilot Logbooks
Part 61.57 – Recent Flight Experience: Pilot in Command
Part 61.133 – Commercial Pilot Privileges and Limitations
Part 91.21 – Portable Electronic Devices
Part 91.103 – Preflight Action
Part 91.109 – Flight Instruction; Simulated Instrument Flight
Part 91.113 – Right-of-Way Rules: Except Water Operations
Part 91.121 – Altimeter Settings
Part 91.123 – Compliance with ATC Clearances and Instructions
Part 91.131 – Operations in Class B Airspace
Part 91.135 – Operations in Class A Airspace
Part 91.167 – Fuel Requirements for Flight in IFR Conditions
Part 91.169 – IFR Flight Plan: Information Required
Part 91.171 – VOR Equipment Check for IFR Operations
Part 91.173 – ATC Clearance and Flight Plan Required
Part 91.175 – Takeoff and Landing under IFR
Part 91.177 – Minimum Altitudes for IFR Operations
Part 91.179 – IFR Cruising Altitude or Flight Level
Part 91.181 – Course to be flown
Part 91.183 – IFR Radio Communications
Part 91.185 – Two-Way Radio Communications Failure
Part 91.187 – IFR in Controlled Airspace: Malfunction Reports
Part 91.205 – Instrument & Equipment Requirements
NTSB 830 – Notification and Reporting of Accidents or Incidents

Completion Standards

The student demonstrates an understanding of the knowledge of IFR regulations, the elements required by 61.65, and the instructor has introduced all the of tasks to the student.

En Route
Stage 2 Lesson 34
Flight Lesson
Lesson Time 2.0

Objectives

To teach the student the aeronautical knowledge and skills related to the elements of holding procedures and airplane systems related to IFR operations. All Skills will be performed solely by reference to instruments.

SBT

>> *Holding Delays in SOCAL CARIF, OCN, VISTA, and ROBNN*

Tasks

Instrument Cockpit Check
Compliance with Air Traffic Control Clearances
Instrument Takeoff
Departure Procedures [Partial Panel]
En Route Procedures [Partial Panel]
Intercepting and Tracking Navigational Systems [Partial Panel]
VOR Holds [Partial Panel]
DME Holds [Partial Panel]
Intersection Holds [Partial Panel]
GPS Holds [Partial Panel]
Checklist Usage
Standard Callouts

Completion Standards

This lesson will be graded with Airman Certification Standards being satisfactory. The student demonstrates an understanding of the elements related to the tasks, ADM, CRM, SRM and the special emphasis areas. SOP deviation items must be corrected.

En Route
Stage 2 Lesson 35
Maneuvers Brief
Lesson Time 2.0

Objectives

To teach the student the aeronautical knowledge and skills related to the elements of holding procedures and airplane systems related to IFR operations. All Skills will be performed solely by reference to instruments.

SBT

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Tasks

DME Arcs

Completion Standards

The student demonstrates an understanding of the knowledge and skills required to conduct holding procedures. The lesson will be complete once the instructor has introduced all the required Tasks and subsequent elements to the student.

En Route
Stage 2 Lesson 36
Flight Lesson
Lesson Time 2.0

Objectives

To teach the student the aeronautical knowledge and skills related to the elements of holding procedures and airplane systems related to IFR operations. All Skills will be performed solely by reference to instruments.

SBT

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Tasks

Instrument Cockpit Check
Compliance with Air Traffic Control Clearances
Instrument Takeoff
Departure Procedures
En Route Procedures
Intercepting and Tracking Navigational Systems
GPS Holds
DME Arcs
Checklist Usage
Standard Callouts

Completion Standards

This lesson will be graded with Airman Certification Standards being satisfactory. The student demonstrates an understanding of the elements related to the tasks, ADM, CRM, SRM and the special emphasis areas. SOP deviation items must be corrected.

En Route
Stage 2 Lesson 36
Flight Lesson
Lesson Time 2.0

Objectives

To teach the student the aeronautical knowledge and skills related to the elements of holding procedures and airplane systems related to IFR operations. All Skills will be performed solely by reference to instruments.

SBT

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Tasks

Instrument Cockpit Check
Compliance with Air Traffic Control Clearances
Instrument Takeoff
Departure Procedures [Partial Panel]
En Route Procedures [Partial Panel]
Intercepting and Tracking Navigational Systems [Partial Panel]
GPS Holds [Partial Panel]
DME Arcs [Partial Panel]
Checklist Usage
Standard Callouts

Completion Standards

This lesson will be graded with Airman Certification Standards being satisfactory. The student demonstrates an understanding of the elements related to the tasks, ADM, CRM, SRM and the special emphasis areas. SOP deviation items must be corrected.

Maneuvers Validation

MV

Stage 2 Lesson 37

Validation

Lesson Time 2.0

Objectives

To teach the student the aeronautical knowledge and skills related to the elements of holding procedures and airplane systems related to IFR operations. All Skills will be performed solely by reference to instruments.

SBT

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Tasks

Instrument Cockpit Check

Compliance with Air Traffic Control Clearances

Instrument Takeoff

Departure Procedures

En Route Procedures

Intercepting and Tracking Navigational Systems

GPS Holds

DME Arcs

Instrument Flight [Partial Panel]

Holds [Partial Panel]

Checklist Usage

Standard Callouts

Completion Standards

The student demonstrates an understanding of the knowledge and skills required to conduct holding procedures. The lesson will be complete once the instructor has introduced all the required Tasks and subsequent elements to the student.

Stage Three

Overview

In stage three the student will be introduced to instrument approaches.

Objectives

The objective of stage three is to teach the student the aeronautical knowledge related to instrument approaches and weather. Additionally, introduce the student to precision and non precision instrument approaches.

Completion Standards

The student should be able to perform the maneuvers to ACS standards.

Arrivals

Arrivals
Stage 3 Lesson 38
Ground Lesson
Lesson Time 2.0

Arrival Charts and Procedures

Objectives

SBT

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Tasks

Arrival Charts
Standard Terminal Arrival Route (STAR)
Interpreting the STAR
Vertical Navigation Planning
Arrival Procedures

Completion Standards

The student demonstrates an understanding of the knowledge of arrival procedures, the elements required by 61.65, and the instructor has introduced all the of tasks to the student.

Arrivals
Stage 3 Lesson 39
Maneuver Brief
Lesson Time 2.0

Objectives

SBT

>>

Tasks

Aircraft Navigation Equipment
Intercepting and Tracking Navigational Systems
Arrival Procedures
Standard Operating Procedures
Checklist Usage

Completion Standards

Arrivals
Stage 3 Lesson 40
Flight Lesson
Lesson Time 2.0

Objectives

SBT

>>

Tasks

Aircraft Navigation Equipment
Intercepting and Tracking Navigational Systems
Arrival Procedures
Standard Operating Procedures
Checklist Usage

Completion Standards

This lesson will be graded with Airman Certification Standards being satisfactory. The student demonstrates an understanding of the elements related to the tasks, ADM, CRM, SRM and the special emphasis areas. SOP deviation items must be corrected.

Arrivals
Stage 3 Lesson 41
Flight Lesson
Lesson Time 2.0

Objectives

SBT

>>

Tasks

Aircraft Navigation Equipment
Intercepting and Tracking Navigational Systems
Arrival Procedures
Standard Operating Procedures
Checklist Usage

Completion Standards

This lesson will be graded with Airman Certification Standards being satisfactory. The student demonstrates an understanding of the elements related to the tasks, ADM, CRM, SRM and the special emphasis areas. SOP deviation items must be corrected.

Approaches

Approaches
Stage 3 Lesson 42
Ground Lesson
Lesson Time 2.0

Approach Charts and Procedures

Objectives

SBT

>>

Tasks

Overview/Purpose
Non-Precision vs. Precision
Visual/Contact
Approach Segments
Feeder Routes
Initial Approach Segment
Intermediate Approach Segment
Final Approach Segment
Missed Approach Segment
Chart Layout
Heading Section
Plan View
Profile View
Landing Minimums
Airport Diagram
Preparing for the Approach
Approach Clearance
Executing the Approach
Straight-In Approach
Straight-in Landing
Radar Vectors
Approaches Which Require Course Reversal
Timed Approaches from a Holding Fix
Final Approach
Circling Approaches
Sidestep Maneuver
Missed Approach Procedures
GPS Operational Considerations

Completion Standards

The student demonstrates an understanding of the knowledge of approach procedures, the elements required by 61.65, and the instructor has introduced all the of tasks to the student.

Approaches
Stage 3 Lesson 43
Maneuver Brief
Lesson Time 2.0

Objectives

SBT



Tasks

Precision Approach
Missed Approach
Landing From a Straight in or Circling Approach
ILS Categories and Minimums
Flying the ILS
Localizer Approach
Localizer Back Course Approach
LDA, SDF, and MLS Approaches

Completion Standards

Approaches
Stage 3 Lesson 44
Flight Lesson
Lesson Time 2.0

Objectives

SBT



Tasks

Instrument Cockpit Check
Compliance with ATC Clearances
Instrument Takeoff
Departure, En route and Arrival Procedures
Holding
Precision Approach
Missed Approach
Landing From a Straight in or Circling Approach
Checklist Usage
Standard Operating Procedures

Completion Standards

This lesson will be graded with Airman Certification Standards being satisfactory. The student demonstrates an understanding of the elements related to the tasks, ADM, CRM, SRM and the special emphasis areas. SOP deviation items must be corrected.

Approaches
Stage 3 Lesson 45
Flight Lesson
Lesson Time 2.0

Objectives

SBT

>>

Tasks

Instrument Cockpit Check
Compliance with ATC Clearances
Instrument Takeoff
Departure, En route and Arrival Procedures
Holding
Precision Approach
Missed Approach
Landing From a Straight-In Approach
Checklist Usage
Standard Operating Procedures

Completion Standards

Approaches
Stage 3 Lesson 46
Ground Lesson
Lesson Time 2.0

Non-Precision Approach Charts and Procedures

Objectives

SBT

>>

Tasks

VOR Approaches
GPS and RNAV Approaches
VOR/DME RNAV Approaches
NDB Approaches

Completion Standards

The student demonstrates an understanding of the knowledge of non-precision approaches, the elements required by 61.65, and the instructor has introduced all the of tasks to the student.

Approaches
Stage 3 Lesson 47
Maneuver Brief
Lesson Time 1.0

Objectives

SBT

>>

Tasks

Non-Precision Approach
Missed Approach
Circling Approach
Landing from a Straight-In Approach
Circling Approaches
MDA

Completion Standards

Approaches
Stage 3 Lesson 48
Flight Lesson
Lesson Time 2.0

Objectives

SBT

>>

Tasks

Instrument Cockpit Check
Compliance with ATC Clearances
Instrument Takeoff
Departure, En route and Arrival Procedures
Holding
Non-Precision Approach (GPS)
Approach with Loss of Primary Flight Instrument Indications
Missed Approach
Landing From a Straight-In Approach
Checklist Usage
Standard Operating Procedures

Completion Standards

This lesson will be graded with Airman Certification Standards being satisfactory. The student demonstrates an understanding of the elements related to the tasks, ADM, CRM, SRM and the special emphasis areas. SOP deviation items must be corrected.

Approaches
Stage 3 Lesson 49
Flight Lesson
Lesson Time 2.0

Objectives

SBT

>>

Tasks

Instrument Cockpit Check
Compliance with ATC Clearances
Instrument Takeoff
Departure, En route and Arrival Procedures
Holding
Non-Precision Approach (VOR)
Approach with Loss of Primary Flight Instrument Indications
Missed Approach
Landing From a Straight-In Approach
Checklist Usage
Standard Operating Procedures

Completion Standards

Approaches

Stage 3 Lesson 50

Ground Lesson

Lesson Time 2.0

*Aviation Weather Products***Objectives****SBT****Tasks**

Aviation Routine Weather Reports (METARs)

Pilot Weather Reports (PIREP)

Terminal Aerodrome Forecasts (TAF)

Aviation Area Forecast (FA)

Winds and Temperatures Aloft Forecast (FD)

Surface Analysis Chart

Weather Depiction Chart

Radar Summary Chart

Constant Pressure Analysis Chart

Freezing Level Chart/Stability Chart

Observed Winds and Temperatures Aloft Chart

U.S. Low-Level Significant Weather Prognostic Chart

U.S. High-Level Significant Weather Prognostic

Approaches
Stage 3 Lesson 51
Flight Lesson
Lesson Time 2.0

Objectives

SBT



Tasks

Instrument Cockpit Check
Compliance with ATC Clearances
Instrument Takeoff
Departure, En route and Arrival Procedures
Holding
Non-Precision Approach (LOC)
Approach with Loss of Primary Flight Instrument Indications
Missed Approach
Landing From a Straight-In Approach
Checklist Usage
Standard Operating Procedures

Completion Standards

This lesson will be graded with Airman Certification Standards being satisfactory. The student demonstrates an understanding of the elements related to the tasks, ADM, CRM, SRM and the special emphasis areas. SOP deviation items must be corrected.

Approaches
Stage 3 Lesson 52
Flight Lesson
Lesson Time 2.0

Objectives

SBT

>>

Tasks

Instrument Cockpit Check
Compliance with ATC Clearances
Instrument Takeoff
Departure, En route and Arrival Procedures
Holding
Non-Precision Approach (Other)
Approach with Loss of Primary Flight Instrument Indications
Missed Approach
Landing From a Straight-In Approach
Checklist Usage
Standard Operating Procedures

Completion Standards

This lesson will be graded with Airman Certification Standards being satisfactory. The student demonstrates an understanding of the elements related to the tasks, ADM, CRM, SRM and the special emphasis areas. SOP deviation items must be corrected.

Procedures Validation

PV

Stage 3 Lesson 53

Validation

Lesson Time 2.0

Objectives

SBT

>>

Tasks

Instrument Cockpit Check

Compliance with ATC Clearances

Instrument Takeoff

Departure, En route and Arrival Procedures

Holding

Non-Precision Approach (Other)

Approach with Loss of Primary Flight Instrument Indications

Missed Approach

Landing From a Straight-In Approach

Checklist Usage

Standard Operating Procedures

Completion Standards

Stage Four

Overview

In stage four the student will focus on instrument cross-countries, culminating in a multi-day 1,000 NM cross-country.

Objectives

The stage four objective is to teach the student the aeronautical knowledge related to hazardous weather and IFR flight planning. Additionally, the student should develop aeronautical experience acting as PIC during IFR operations.

Completion Standards

The student completes all the requirements to take the check ride and performs all the maneuvers to ACS standards.

LOFT

LOFT

Stage 4 Lesson 54

Ground Lesson

Lesson Time 2.0

Recognition of Critical Weather

Objectives

SBT

>>

Tasks

Weather Hazards

Thunderstorm Avoidance

Turbulence

Wind Shear Avoidance

Microburst

Clouds and Fog

Structural Icing

Preflight Weather Briefing

Airmet (WA), Sigmet (WS), Convective Sigmet (WST)

Enroute Flight Advisory Service (EFAS)

Hazardous In-Flight Weather Advisory Service (HIWAS)

Transcribed Weather Broadcasts (TWEB)

Automated Surface Observation System (ASOS)

Automated Weather Observing Systems (AWOS)

Weather Radar Services

Completion Standards

The student demonstrates an understanding of the knowledge of critical weather recognition, the elements required by 61.65, and the instructor has introduced all the of tasks to the student.

LOFT

Stage 4 Lesson 55

Ground Lesson

Lesson Time 4.0

*Instrument Flight Planning***Objectives****SBT**

>>

Tasks

Weather Information

Cross-Country Flight Planning

Loss of Communications

Pilot Qualifications

Pre-planning Preparation

IFR Route Selection

Departure Segment

Arrival Segment

En route Segment

Applicable Federal Aviation Regulations

IFR Flight Planning Process

Navigation Log

Filing an IFR Flight Plan

Closing an IFR Flight Plan

GPS Operational Considerations

Completion Standards

The student demonstrates an understanding of the knowledge of IFR flight planning, the elements required by 61.65, and the instructor has introduced all the of tasks to the student.

LOFT

Stage 4 Lesson 56

Flight Lesson

Lesson Time 2.0

Objectives**SBT**

>>

Tasks

Weather Information

Cross-Country Flight Planning

Compliance with ATC Clearances

Instrument Takeoff

Departure Procedures

Precision Approach

Non-Precision Approach

Landing from a Straight-In or Circling Approach

Loss of Communications

Checklist Usage

Standard Operating Procedures

Completion Standards

This lesson will be graded with Airman Certification Standards being satisfactory. The student demonstrates an understanding of the elements related to the tasks, ADM, CRM, SRM and the special emphasis areas. SOP deviation items must be corrected.

LOFT

Stage 4 Lesson 57

Flight Lesson

Lesson Time 20.0

Objectives**SBT**

>> Day 1 SAN // KPHX // KLAS

>> Day 2 KMRV

>> Day 2 KPRB // KCMA // SAN

Tasks

Weather Information

Cross-Country Flight Planning

Compliance with ATC Clearances

Instrument Takeoff

Departure Procedures

Precision Approach

Non-Precision Approach

Missed Approach

Landing from a Straight-In or Circling Approach

Loss of Communications

Checklist Usage

Standard Operating Procedures

Completion Standards

This lesson will be graded with Airman Certification Standards being satisfactory. The student demonstrates an understanding of the elements related to the tasks, ADM, CRM, SRM and the special emphasis areas. SOP deviation items must be corrected.

LOFT

Stage 4 Lesson 58

Flight Lesson

Lesson Time 4.0

Objectives**SBT**

>>

Tasks

Weather Information

Cross-Country Flight Planning

Airplane systems related to IFR Operations

Airplane Flight Instruments and Navigation Equipment

Compliance with ATC Clearances

Departure, En Route and Arrival Procedures

Holding Procedures

Loss of Communications

Pilot Qualifications

Course Deficient Items

Completion Standards

This lesson will be graded with Airman Certification Standards being satisfactory. The student demonstrates an understanding of the elements related to the tasks, ADM, CRM, SRM and the special emphasis areas. SOP deviation items must be corrected.

Knowledge Validation

KV

Stage 4 Lesson 59

Validation

Lesson Time 2.0

Objectives

SBT

>>

Tasks

Weather Information

Cross-Country Flight Planning

Airplane systems related to IFR Operations

Airplane Flight Instruments and Navigation Equipment

Compliance with ATC Clearances

Departure, En Route and Arrival Procedures

Holding Procedures

Loss of Communications

Pilot Qualifications

Completion Standards

Instrument Rating Evaluation

IRE

Stage 4 Lesson 60

Evaluation

Lesson Time 2.0

Objectives

To determine through flight evaluation that the student possesses the required aeronautical skills to safely conduct flight operations as an FAA rated Instrument Pilot. All Skills will be performed in accordance with the Instrument Rating Airplane Airman Certification Standards.

SBT

>> *Plan an IFR flight to KRNM*

Tasks

Instrument Flight Deck Check
Compliance with ATC Clearances
Departure, En Route, and Arrival Operations
Instrument Flight
Holding Procedures
Intercepting and Tracking Navigation Systems
DME ARCS
Precision Approaches
Non-Precision Approaches
Circling Approach
Missed Approach
Landing From a Straight-In or Circling Approach
Recovery From Unusual Attitudes
Approach with Loss of Primary Flight Instrument Indications
Checking Instruments and Equipment

Completion Standards

The student demonstrates the required aeronautical skills to safely conduct flight operations as an FAA rated Instrument Pilot by meeting the standards prescribed in the Instrument Rating Airplane Airman Certification Standards.