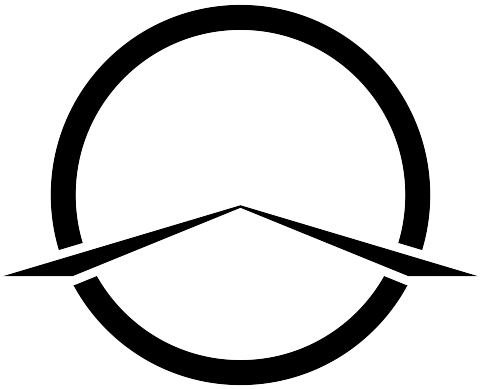

INSTRUMENT RATING

SINGLE ENGINE AIRPLANE

Hursa Corp x Lucky Aviation 2022

Table of Contents

Ground Lessons

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
>>

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 Resource Management
Crew Resource 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 Callouts (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-county. Correct any SOP devotions.

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-county. Correct any SOP devotions.

Basic Attitude Instrument

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

Flight Instruments Systems

Objectives

SBT
>>

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
>>

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 Decents [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
>>

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
>>

Tasks
Instrument Cockpit Check
System and Equipment Malfunctions
Straight and Level Flight [Partial Panel]
Change of Airspeed and Configuration [Partial Panel]
Straight Climbs and Descents [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
>>

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
>>

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
>>

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 En Route 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
>>

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
>>

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
>>

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
>>

Tasks
En Route Charts
Front Panel
Navigation Aids
Victor Airways
Communication
Airports
Airspace
Area Charts
En Route 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
>>

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
>>

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
>>

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
>>

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
>>

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 preforms 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)
En route 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 KMRY
>> 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.