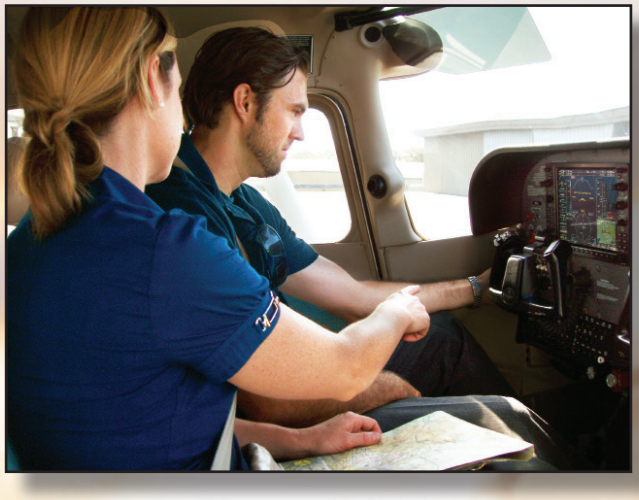
CESSNA FLIGHT TRAINING

INSTRUCTOR'S GUIDE

INSTRUMENT RATING



Cessna

TEXTRON AVIATION

Cessna Flight Training System

Cessna Instrument Rating Training Course

INSTRUCTOR'S GUIDE

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Version 1.10

Cessna Instrument Rating Instructor's Guide

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INSTRUCTOR'S GUIDE REVISION RECORD

Revision Number	*Revision Date*	*Online Date*	*Change Description*
Ver. 1.00	08-15-11	ORIGINAL	ORIGINAL
Ver. 1.01	06-15-16	07-01-16	Pages 3 & 4 Replaced Practical Test Standards with Airman Certificate Standards
Ver. 1.10	2-10-20	2-17-20	Removed redundant pages found in the Cessna Instrument Rating Syllabus Pages 1-13.
Ver. 1.10	2-10-20	3-23-20	Added Instrument Rating Syllabus Quick Guide Pages 1 - 22

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Overview

The **Cessna Flight Training System** is an integrated online ground and scenario-based flight training course, developed exclusively for Textron Aviation by the experts at King Schools. It has been designed to provide pilots-in-training with the knowledge, skills and confidence to embrace their future in aviation.

Online knowledge study and flight training are recorded in the Course Tracking Application (CTA). All pilot-in-training customers should be registered in the Course Tracking Application (CTA).

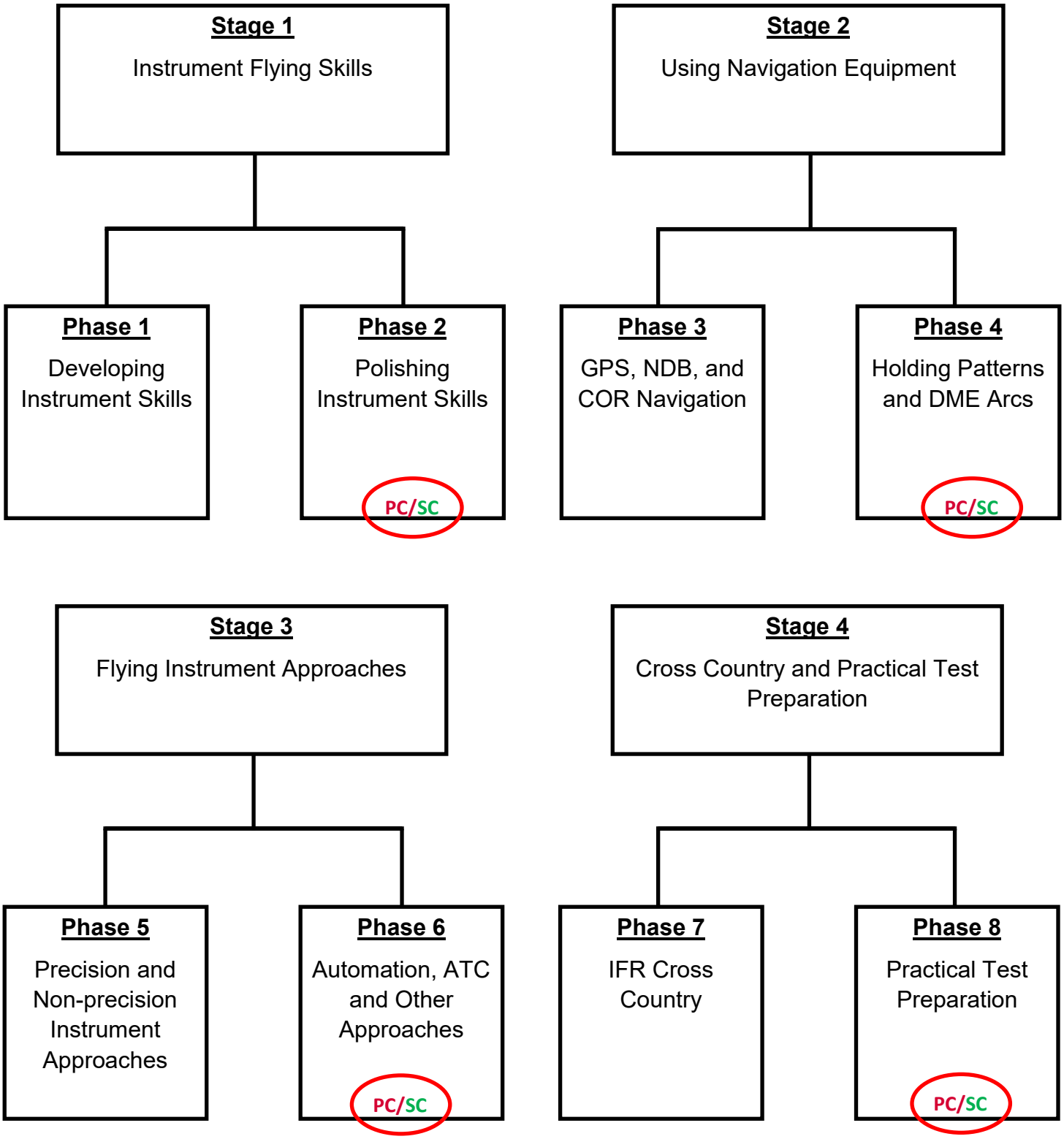
This quick reference guide is intended to provide flight instructors with a brief overview of the Cessna Flight Training Syllabus. The intended use of this guide is to familiarize the CFI with the overall course structure and training objectives. This guide does not replace the official course syllabus. The full course syllabus can be found in the Course Tracking Application (CTA) under the Documentation menu>Certification/Rating folder.

Course Structure

- **Stages** - The course is divided into four stages. Each stage has a required progress check.
  - ⇒ **Progress / Stage Checks (PC) (SC)** - Within each Stage, there is at least one Progress Check serving as a Stage Check that consists of oral quizzing and a flight given by the Chief CFI, Assistant Chief CFI, or a designated CFI. *Please see full syllabus for progress check details.*
- **Phases** - Each stage is divided into phases, there are eight phases. Each phase has required web-based knowledge instruction (required), flight scenarios (highly recommended), phase ground training checklists (required), and phase proficiency checklists (required).
  - ⇒ **Web-based Knowledge Instruction** - Builds the customer's knowledge foundation for flight scenarios, completed before the corresponding phase can be considered complete. Customers will complete this on the Cessna Companion App or Cessnaflighttraining.KingSchools.com
  - ⇒ **Flight Scenarios** - May be customized by the flight school for its operating environment and adapted as necessary by the instructor. Flight scenarios may be repeated as necessary for the pilot-in-training to achieve the required grade level for each specified tasks.
  - ⇒ **Ground Training Checklist** - The pilot-in-training must be able to explain the concept to show their understanding of underlying concepts, principles and procedures. The ground training checklist for each phase can be found in the full course syllabus in the Course Tracking Application (CTA) under the Documentation menu>Certification/Rating folder.
  - ⇒ **Phase Proficiency Checklists** - Tasks and completion standards for the phase. The phase proficiency checklist for each phase can be found in the full course syllabus in the Course Tracking Application (CTA) under the Documentation menu>Certification/Rating folder.

Syllabus Structure

PC/SC - Progress / Stage Check



Grading

Pilots-in-training must complete each task to the highest level of proficiency in order to graduate. Once a task has been marked to the highest standard, it is considered complete for the Phase regardless of future grading. It is the instructor's discretion whether they want the customer to repeat performing the task.

- **Maneuver (Task) Grades**
  - ⇒ **Describe** - At the completion of the ground training session, the pilot-in-training will be able to describe the physical characteristics of the task at a rote level.
  - ⇒ **Explain** - At the completion of the ground training session, the pilot-in-training will be able to describe the task and display an understanding of the underlying concepts, principles, and procedures.
  - ⇒ **Practice** - At the completion of the scenario the pilot-in-training will be able to plan and execute the scenario. Coaching, instruction, and/or assistance from the instructor will correct deviations and errors identified by the instructor.
  - ⇒ **Perform** - At the completion of the scenario, the pilot-in-training will be able to perform the activity without assistance from the instructor. Errors and deviations will be identified and corrected by the customer in an expeditious manner. At no time will the successful completion of the activity be in doubt. ('Perform' will be used to signify that the pilot is satisfactorily demonstrating proficiency in traditional piloting and systems operation skills.)

  *Example: Once the pilot-in-training can explain the effect of crosswind and speed reduction on rudder effectiveness, they have achieved a level of learning that will allow for meaningful "**Practice**." The "**Perform**" level is met when the completion standards for the particular scenario or phase are met*

- **Single-Pilot Resource Management (SRM) Grades**
  - ⇒ **Explain** - At the completion of the ground training session, the pilot-in-training can verbally identify the risks inherent in the flight scenario.
  - ⇒ **Practice** - The pilot-in-training can identify, describe, and understand the risks inherent in the scenario. The customer may need to be prompted to identify risks and make decisions.
  - ⇒ **Manage/Decide** - The pilot-in-training can correctly gather the most important data available both within and outside the cockpit, identify possible courses of action, evaluate the risk inherent in each course of action, and make the appropriate decision. Instructor intervention is not required for the safe completion of the flight.

  *Example: A pilot-in-training who is becoming proficient at aeronautical decision making (ADM) and risk management (RM) would be graded first at the "**Practice**" level. The "**Manage/ Decide**" level is met once a pilot makes decisions on their own, for instance, the decision to go-around without being prompted.*

Stage 1, Phase 1: Developing Instrument Skills

Objective: In this phase the pilot-in-training will learn preflight preparation for IFR flight, instrument scan techniques, basic instrument flight maneuvers, using the magnetic compass and postflight procedures following an IFR flight.

Web-based Knowledge Objectives

Exploring Instrument Flying

- ☐ How you'll become instrument rated
- ☐ Sensory systems
- ☐ Spatial disorientation
- ☐ Heading and altitude
- ☐ Leaving straight-and-level flight
- ☐ Primary instruments
- ☐ Supporting instruments
- ☐ Before you get into the airplane
- ☐ IFR preflight
- ☐ Checking the instruments

Flight Instruments

- ☐ Gyroscopic principles and AHRS
- ☐ How your attitude and heading gyros work
- ☐ How your electric turn coordinator works
- ☐ Pressure sensing flight instruments and ADC
- ☐ Pitot or static system blockage
- ☐ Altitude types and how read the altimeter
- ☐ Using the G1000 PFD
- ☐ Using the G1000 MFD
- ☐ Good habits for IFR flying
- ☐ Turning climbs and descents

Radio Navigation Aids and the Magnetic Compass

- ☐ VOR
- ☐ VOR indicator and how to use it
- ☐ HSI
- ☐ DME
- ☐ RNAV and GPS
- ☐ Turning forces and controlling load factor
- ☐ Limiting load factor in turbulence
- ☐ Controlling your rate and radius of turn
- ☐ Magnetic compass errors
- ☐ Timed turns

Single-Pilot Resource Management

- ☐ General aviation and instrument flying
- ☐ Risk awareness and recognizing hazards
- ☐ Single-plot resource management
- ☐ Risk management
- ☐ Task management
- ☐ Situational awareness
- ☐ Controlled flight into terrain awareness
- ☐ Automation management
- ☐ Aeronautical decision making

Flight Scenarios

- ☐ Developing your instrument scan - Understand instrument preflight procedures and the preparation necessary for an IFR flight. Experience flying by reference to instruments only while developing proper instrument cross-check and interpretation skills, and aircraft control skills.
- ☐ Improving your instrument scan - Continue learning the preparation necessary for an IFR flight and improve instrument flying skills including instrument cross-check and interpretation, and aircraft control. ATD may be used.
- ☐ Loss of heading indicator (G1000) - Improve basic control while flying by reference to instruments only, and learn how to use the compass in the event of an unreliable heading indicator. For airplanes equipped with G1000.
- ☐ Loss of heading indicator (Analog) - Improve basic control while flying by reference to instruments only, and learn how to use the compass in the event of an unreliable heading indicator. For airplanes equipped with analog flight instruments.

Stage 1, Phase 1 Continued On Next Page

Ground Training Tasks

- ☐ Aircraft systems related to IFR operations
- ☐ Attitude instrument flying - primary and supporting method vs. control and performance concept
- ☐ Instrument cockpit check
- ☐ Instrument Rating Airman Certification Standards (ACS)
- ☐ Preflight preparation for an IFR flight
- ☐ Safety practices and procedures
- ☐ Single-pilot resource management (SRM)
- ☐ Study material and habits

Flight Training Tasks

- ☐ Risk management
- ☐ Evaluating weather information
- ☐ Weather briefing and/or acceptable weather sources
- ☐ Takeoff and landing data
- ☐ Weight and balance
- ☐ Charts
- ☐ Preflight inspection
- ☐ Cockpit management
- ☐ Checklist usage
- ☐ Positive exchange of flight controls
- ☐ Correlating airport diagrams with taxiway and runway signs and markings
- ☐ Instrument cockpit check
- ☐ Collision avoidance (visually and in response to ATC traffic calls)
- ☐ Pitch and power settings required for basic instrument maneuvers
- ☐ Straight-and-level flight
- ☐ Airspeed changes in level flight
- ☐ Standard-rate level turns
- ☐ 180-degree standard-rate turns
- ☐ Constant airspeed climbs and descents
- ☐ Constant rate climbs and descents
- ☐ Constant rate climbs and descents with constant airspeed
- ☐ Turning climbs and descents
- ☐ Level-offs
- ☐ Loss of primary flight instrument—heading indicator
- ☐ Compass turns to magnetic headings
- ☐ Timed turns to magnetic headings
- ☐ After landing, parking and securing

Phase 1 Completion Standards

- ☐ Know and can complete all preflight preparation required for an instrument flight
- ☐ Can determine the airplane is safe for IFR flight
- ☐ Can safely control the airplane by reference to instruments only
- ☐ Can perform basic instrument flight maneuvers

Stage 1, Phase 2: Polishing Instrument Skills

Objective: Here the pilot-in-training will polish their skills controlling the airplane by reference only to the flight instruments and learn to receive, copy and fly an IFR clearance. The pilot-in-training will also learn to control the airplane simulating failure of the primary flight instruments and recover from an unusual flight attitude.

Web-based Knowledge Objectives

IFR Enroute Charts, Clearances, and Staying Organized

- ☐ Airspace
- ☐ Airports and navaids
- ☐ Airways
- ☐ Intersections and reporting points
- ☐ Altitudes
- ☐ More altitudes
- ☐ How to copy a clearance
- ☐ Cockpit organization

Understanding the Weather

- ☐ What makes weather
- ☐ Atmosphere
- ☐ Wind circulation
- ☐ Water vapor and cloud types
- ☐ Stable and unstable air
- ☐ Air masses and fronts
- ☐ Fog
- ☐ Ice
- ☐ Thunderstorms
- ☐ Wind shear
- ☐ Microbursts
- ☐ Practical tips for flying in rough weather

Instrument Failures and Unusual Attitudes

- ☐ G1000 failures including AHRS and ADC
- ☐ Figuring out which instruments have failed
- ☐ Partial panel
- ☐ Recovering from unusual attitudes

Reading the Weather

- ☐ METAR
- ☐ ASOS/AWOS
- ☐ TAF
- ☐ GFA
- ☐ FD
- ☐ In-flight weather advisories
- ☐ Supplemental and in-flight weather services
- ☐ Surface analysis chart
- ☐ Weather depiction chart
- ☐ Weather radar information
- ☐ Low level significant weather prognostic chart
- ☐ High level significant weather prognostic chart
- ☐ Severe weather forecasts
- ☐ More upper air charts

Stage 1, Phase 2 Continued On Next Page

Flight Scenarios

- ☐ IFR flight preparation and clearance - Develop skills in preparing for an IFR flight including: weather briefings, filing the flight plan, and copying, understanding, and flying an IFR clearance.
- ☐ Unusual attitudes and failed instruments (G1000) - Recover the airplane from unusual flight attitudes, recognize primary flight instrument failures and control the aircraft using standby instruments. For airplanes equipped with G1000.
- ☐ Unusual attitudes and failed instruments (analog) - Recover the airplane from unusual flight attitudes, recognize primary flight instrument failures and control the aircraft using standby instruments. For airplanes equipped with analog flight instruments.
- ☐ Increasing proficiency (G1000) - Increase proficiency and accuracy with instrument cross-check and interpretation, and aircraft control. For airplanes equipped with G1000.
- ☐ Increasing proficiency (analog) - Increase proficiency and accuracy with instrument cross-check and interpretation, and aircraft control. For airplanes equipped with analog flight instruments.
- ☐ Increasing proficiency (G1000 ATD) - Increase proficiency and accuracy with instrument cross-check and interpretation, and aircraft control. G1000 ATD may be used.
- ☐ Increasing proficiency (analog ATD) - Increase proficiency and accuracy with instrument cross-check and interpretation, and aircraft control. Analog ATD may be used.
- ☐ Progress check (G1000) - See next page. For airplanes equipped with G1000.
- ☐ Progress check (analog) - See next page. For airplanes equipped with analog flight instruments.

Ground Training Tasks

- ☐ Recovery from unusual flight attitudes
- ☐ Shorthand to write down the clearance
- ☐ System and instrument failures affecting IFR flights

Flight Training Tasks

- ☐ Risk management
- ☐ Preflight preparation
- ☐ Preflight inspection
- ☐ Filing an IFR flight plan
- ☐ Alternate planning
- ☐ How to receive your clearance
- ☐ Copying your clearance
- ☐ Runway incursion avoidance procedures
- ☐ Checklist usage
- ☐ Cockpit management
- ☐ Collision avoidance
- ☐ Basic instrument flight maneuvers
- ☐ Timed turns to magnetic headings
- ☐ Compass turns to magnetic headings
- ☐ Compliance with ATC clearances
- ☐ Loss of primary flight instruments
- ☐ Recovery from unusual flight attitudes

Phase 2 Completion Standards

- ☐ Can accurately and safely prepare for an IFR flight
- ☐ Have improved your ability to more precisely fly basic instrument maneuvers
- ☐ Can use the magnetic compass and time to make turns to a desired heading
- ☐ Can copy, understand, and fly a clearance
- ☐ Have reviewed the Phase Progress Report with your instructor
- ☐ Pass the Progress Check (see next page)

Stage 1, Phase 2A: Progress/Stage Check

The Progress/Stage Check is to be completed after completing the Phase 2 Proficiency Checklist. An appropriate instructor will check the progress of your learning and the effective pairing of you and your primary instructor.

Objective: To check that your progress in the course is sufficient to move to the next phase of training.

Progress/Stage Check

- ☐ Risk management
- ☐ Preflight preparation
- ☐ Weather briefing and/or acceptable weather resources
- ☐ Takeoff and landing data
- ☐ Weight and balance
- ☐ Charts
- ☐ Preflight inspection
- ☐ Checklist usage
- ☐ Instrument cockpit check
- ☐ Runway incursion avoidance
- ☐ Cockpit management
- ☐ Collision avoidance
- ☐ Basic instrument flight maneuvers
- ☐ Loss of primary flight instruments
- ☐ Timed turns to magnetic headings
- ☐ Compass turns to magnetic headings
- ☐ Recovery from unusual flight attitudes
- ☐ After landing, parking and securing

Progress/Stage Check - Completion Standards

- ☐ Demonstrate knowledge of risk management
- ☐ Can perform the preparation necessary for an IFR flight
- ☐ Perform basic instrument flight maneuvers

Stage 2, Phase 3: GPS, NDB and VOR Navigation

Objective: This phase provides the pilot-in-training the opportunity to develop skills and gain confidence using RNAV, GPS, NDB and VOR avionics systems for IFR navigation. In addition the pilot-in-training will learn to apply these skills flying IFR departure procedures.

Web-based Knowledge Objectives

Understanding RNAV and GPS Navigation

- ☐ GPS requirements and using GPS for IFR
- ☐ RNP
- ☐ WAAS
- ☐ Creating and modifying a GPS flight plan
- ☐ Enroute GPS
- ☐ Loading instrument procedures

Understanding NDB Navigation

- ☐ ADF
- ☐ Homing and bearings to the station
- ☐ Moveable card indicator ADF
- ☐ Intercepting and tracking NDB bearings
- ☐ RMI orientation and navigation

Understanding VOR Navigation

- ☐ VOR Checks
- ☐ VOR Navigation
- ☐ Receiving localizers on the VOR radios
- ☐ Intercepting and tracking VOR radials
- ☐ Using an HSI for VOR navigation

Reading the Weather

- ☐ Safe IFR departures
- ☐ Departure procedure charts (ODPs and SIDs)
- ☐ Departing airports with control towers
- ☐ Departing airports without control towers
- ☐ Airspace system
- ☐ Class A - G airspace
- ☐ VFR weather minimums
- ☐ Special VFR

Flight Scenarios

- ☐ GPS for IFR use and ADF/NDB navigation - Familiarize with the GPS and its use for IFR navigation. If the airplane has a functioning ADF, navigate using a non-directional beacon (NDB). ATD may be used.
- ☐ VOR navigation - Enhance skill in using the VOR for situational awareness and intercepting and tracking radials . ATD may be used.
- ☐ Flying published departure procedures - Become familiar with and fly published departure procedures. ATD may be used.

Ground Training Tasks

- ☐ ADF/NDB navigation for IFR
- ☐ GPS for IFR navigation
- ☐ How to receive an IFR clearance at a towered and non-towered airport
- ☐ Published Obstacle Departure Procedures
- ☐ VOR for IFR navigation

Stage 2, Phase 3 Continued On Next Page

Flight Training Tasks

- Aeronautical decision making
- Risk management
- Preflight preparation
- Checklist usage
- Determining suitability of GPS for IFR flight
- Familiarity with avionics
- Instrument cockpit check
- Navigating to a waypoint or an off-airway fix at a safe altitude
- Navigation system orientation (GPS and/or NDB)
- Navigation system course intercepting and tracking (GPS and/or NDB)
- VOR accuracy check
- Navigation system orientation (VOR)
- Navigation system course intercepting and tracking (VOR)
- Victor airway intercepting and tracking
- Recovery from unusual flight attitudes
- Compliance with published departure procedures
- Understanding required climb gradient
- Compliance with ATC clearances
- Basic instrument flight maneuvers

Phase 3 Completion Standards

- Can determine if the navigation aid is suitable for IFR use
- Maintain situational awareness when using navigation aids
- Can accurately intercept and track navigation systems
- Correct for wind drift as needed to maintain on course
- Have reviewed the Phase Progress Report with instructor

Stage 2, Phase 4: Holding Patterns and DME Arcs

Objective: This phase introduces holding patterns including their purpose and the requirements for entering, flying and making reports if the pilot has received a holding clearance. The pilot-in-training will also learn to fly DME arcs.

Web-based Knowledge Objectives

Holding Patterns and Arrivals

- ☐ The holding pattern
- ☐ How to fly a holding pattern
- ☐ Holding pattern entries
- ☐ Holding at intersections and waypoints
- ☐ Flying holding patterns with the G1000
- ☐ Format and symbols on STAR charts
- ☐ Loading and flying arrival procedures

DME Arcs

- ☐ DME arcs using VOR and DME
- ☐ DME arcs using the G1000

Approach Charts

- ☐ Approach segments
- ☐ Overview of approach charts
- ☐ Approach chart design
- ☐ Margin identification
- ☐ Pilot briefing
- ☐ Plan view
- ☐ Profile view
- ☐ Minimums section
- ☐ Airport sketch

Flight Scenarios

- ☐ Flying a holding pattern - Build the skills necessary to copy holding instructions, determine and fly the recommended entry into a proper holding pattern, and make required reports. ATD may be used.
- ☐ DME arcs and non-published holding patterns - How to fly a DME arc, and hold at a fix without a published holding pattern. ATD may be used.
- ☐ Progress/Stage Check - See next page.

Ground Training Tasks

- ☐ Approach charts
- ☐ Determining and flying the appropriate entry to a holding pattern
- ☐ Determining your approach category
- ☐ Flying a holding pattern
- ☐ How to fly a DME arc using GPS
- ☐ How to fly a DME arc using VOR/ DME
- ☐ Intersection holding
- ☐ Required ATC reports when holding

Flight Training Tasks

- ☐ Single-pilot resource management (SRM)
- ☐ Preflight preparation
- ☐ Instrument cockpit check
- ☐ Holding entries and procedures
- ☐ Basic instrument flight maneuvers
- ☐ Intercepting and tracking navigational systems
- ☐ Compliance with departure procedures
- ☐ Recovery from unusual flight attitudes
- ☐ Loss of primary flight instrument
- ☐ Intercepting and tracking DME arcs
- ☐ Non-published holding procedures

Stage 2, Phase 4 Continued On Next Page

Phase 4 Completion Standards

- Can perform all preparation required for an IFR flight
- Able to determine the proper entry to a holding pattern, make all required ATC reports, and appropriately fly the holding pattern
- Intercept and fly a DME arc
- Passed the Progress/Stage Check (see next page)
- Reviewed the Phase Progress Report with instructor

Stage 2, Phase 4A: Progress/Stage Check

Objective: Fly with a check instructor to ensure satisfactory course and skill level progress.

Progress/Stage Check - Ground (Oral)

- ☐ Required ATC reports when holding
- ☐ Single-pilot resource management
- ☐ Procedures for loss of communication in the hold

Progress/Stage Check - Flight

- ☐ Single-pilot resource management
- ☐ Preflight preparation
- ☐ Instrument cockpit check
- ☐ Basic instrument flight maneuvers
- ☐ Intercepting and tracking navigational systems
- ☐ Intercepting and tracking DME arcs
- ☐ Holding procedures
- ☐ Compliance with departure procedures
- ☐ Recovery from unusual flight attitudes
- ☐ Loss of primary flight instrument

Progress/Stage Check - Completion Standards

- ☐ Perform and understand all preparation necessary for IFR flight
- ☐ Perform to the specified standards
- ☐ Demonstrate to the check instructor that the safety of flight is never in doubt

Stage 3, Phase 5: Precision & Nonprecision Approaches

Objective: During this phase the pilot-in-training will fly both precision and nonprecision approach procedures while learning the visual references needed to make the decision to continue for landing. If the required references are not visible, they will follow the missed approach procedure.

Web-based Knowledge Objectives

IFR Rules and Approach Types

- ☐ Pilot and airplane IFR requirements
- ☐ Maintaining your IFR skill
- ☐ Beyond the missed approach point
- ☐ Precision approaches and APVs
- ☐ Nonprecision approaches
- ☐ Getting turned around to make an approach
- ☐ How to fly a localizer course

ILS Approaches

- ☐ Guidance
- ☐ Range
- ☐ Visual components
- ☐ Runway visual range (RVR)
- ☐ Inoperative ILS components
- ☐ Choosing which approach to fly
- ☐ Self-briefing the approach
- ☐ Setting up for the approach
- ☐ Flying the ILS
- ☐ Flying the missed approach

Localizer Approaches

- ☐ Flying a localizer front course
- ☐ Flying a localizer back course
- ☐ Flying SDF and LDA approaches
- ☐ Flying DME arcs to a localizer

RNAV Approaches

- ☐ RNAV approaches
- ☐ LPV and LP approaches
- ☐ LNAV/VNAV approach
- ☐ LNAV approach
- ☐ GPS and missed approaches

Flight Scenarios

- ☐ ILS approaches - How to fly a precision approach, using vertical and lateral guidance to descend to the decision altitude / decision height and decide whether to make a missed approach or continue below the approach minimums visually. ATD may be used.
- ☐ RNAV (GPS) approaches with vertical guidance (WAAS) - How to fly an RNAV (GPS) approach with vertical guidance to the decision altitude and decide whether to make a missed approach or continue below the approach minimums visually. ATD may be used.
- ☐ RNAV (GPS) approaches without vertical guidance - How to fly an RNAV (GPS) nonprecision approach to the minimum descent altitude (MDA) and missed approach point, and decide whether to make a missed approach or continue below the approach minimums visually. ATD may be used.
- ☐ Localizer (LOC) approaches - How to fly a localizer nonprecision approach to the minimum descent altitude and missed approach point and decide whether to make a missed approach or continue below the approach minimums visually. ATD may be used.

Ground Training Tasks

- ☐ Approach briefing
- ☐ Flying the approaches
- ☐ Nonprecision approach procedures
- ☐ Precision approach procedures
- ☐ When a missed approach is required

Stage 3, Phase 5 Continued On Next Page

Flight Training Tasks

- ☐ Single-pilot resource management (SRM)
- ☐ Checklist usage
- ☐ Intercepting and tracking navigational systems
- ☐ Communication with ATC
- ☐ Compliance with ATC clearance
- ☐ Approach briefing
- ☐ Vectors to final approach course
- ☐ Intercept and track localizer course
- ☐ Intercept and track the glideslope
- ☐ Precision approach
- ☐ Load and verify RNAV approach into navigation system
- ☐ RNAV approach with vertical guidance
- ☐ Intercept and track RNAV approach course
- ☐ Intercept and track electronic vertical guidance
- ☐ Terminal Arrival Area (TAA) procedure or course reversal
- ☐ RNAV approach without vertical guidance
- ☐ Descent to the minimum descent altitude (MDA)
- ☐ Identify the missed approach point
- ☐ Localizer approach
- ☐ Identify missed approach point using time from final approach fix (FAF)
- ☐ Descend from MDA at visual descent point (VDP)
- ☐ Execute missed approach procedure
- ☐ Transition to landing from an approach

Phase 5 Completion Standards

- ☐ Consistently and safely control the airplane in all phases of an instrument approach
- ☐ Recognize when a missed approach is required and safely initiate missed approach procedures
- ☐ Have reviewed the Phase Progress Report with your instructor

Stage 3, Phase 6: Automation, ATC and Other Approaches

Objective: In this phase, the pilot-in-training will polish their skill with precision and nonprecision approaches. The pilot-in-training will also discover the value of using the autopilot for instrument approaches. In addition you'll learn about using a circling maneuver to align with the landing runway.

Web-based Knowledge Objectives

Incorporating Automation

- ☐ How an automatic flight control system (AFCS) works
- ☐ Using an automatic flight control system (AFCS)

VOR and NDB Approaches

- ☐ VOR approach
- ☐ NDB approach

ATC Clearances, Services, and More Approaches

- ☐ Clearances
- ☐ Radar services in the terminal area
- ☐ Circling approaches
- ☐ IFR clearances that include VFR conditions
- ☐ Aeronautical information manual (AIM)
- ☐ Contact and visual approaches

ATC Procedures

- ☐ Increasing traffic flow
- ☐ Communications failure
- ☐ Complete radio failure

Flight Scenarios

- ☐ VOR/NDB approaches - How to fly a VOR nonprecision approach to the minimum descent altitude and missed approach point and decide whether to make a missed approach or continue below the approach minimums. If your airplane has a functioning ADF and there is a NDB approach available, you will also fly a nonprecision NDB approach. ATD may be used.
- ☐ Circling approaches - Fly a circling approach to the minimum descent altitude, initiate a circle-to-land maneuver as appropriate for the category of aircraft, and land on the appropriate runway.
- ☐ More ILS and nonprecision approaches - Polish the ability to fly a precision instrument approach while incorporating departure and holding procedures. ATD may be used.
- ☐ Progress/Stage Check - See next page.

Ground Training Tasks

- ☐ Circling approach
- ☐ Loss of communications
- ☐ Using an automatic flight control system
- ☐ Determining circling approach minima
- ☐ Required ATC communications

Flight Training Tasks

- ☐ Single-pilot resource management
- ☐ Preflight preparation
- ☐ Checklist usage
- ☐ Communication with ATC
- ☐ Compliance with ATC clearance
- ☐ Departure procedures
- ☐ Approach briefing
- ☐ Terminal Arrival Area (TAA) procedure or course reversal
- ☐ VOR/NDB approach
- ☐ Descend to minimum descent altitude (MDA)
- ☐ Identify the missed approach point (MAP)
- ☐ Circling approach
- ☐ Determine circling minima
- ☐ Select and fly circling maneuver
- ☐ Execute missed approach during circling approach
- ☐ Transition to landing from a circling approach
- ☐ Holding procedures
- ☐ Loss of communications
- ☐ Precision approach
- ☐ Nonprecision approach
- ☐ Execute missed approach procedure
- ☐ Transition to landing from a straight-in approach

Phase 6 Completion Standards

- ☐ Fully understand instrument approach procedures
- ☐ Fly precision and nonprecision instrument approaches to meet the airman certification standards
- ☐ Make required communications with ATC
- ☐ Understand procedures for loss of communications
- ☐ Maintain situational awareness during actual or simulated IMC flights
- ☐ Use the checklist throughout the flight and on the ground as necessary
- ☐ Make safety-conscious approach briefings
- ☐ Have reviewed the Phase Progress Report with the instructor

Stage 3, Phase 6A: Progress/Stage Check

Objective: Fly with a check instructor to ensure you're able to safely fly instrument approaches to meet the airman certification standards.

Progress/Stage Check - Ground (Oral)

- ☐ Circling approach
- ☐ Determining circling approach minima
- ☐ Loss of communications
- ☐ Required ATC communications
- ☐ Using an automatic flight control system

Progress/Stage Check - Flight

- ☐ Single-pilot resource management
- ☐ Preflight preparation
- ☐ Checklist usage
- ☐ Communication with ATC
- ☐ Compliance with ATC clearance
- ☐ Departure procedures
- ☐ Approach briefing
- ☐ Terminal Arrival Area (TAA) procedure or course reversal
- ☐ VOR/NDB approach
- ☐ Descend to minimum descent altitude (MDA)
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- ☐ Execute missed approach during circling approach
- ☐ Transition to landing from a circling approach
- ☐ Holding procedures
- ☐ Loss of communications
- ☐ Precision approach
- ☐ Nonprecision approach
- ☐ Execute missed approach procedure
- ☐ Transition to landing from a straight-in approach

Progress/Stage Check - Completion Standards

- ☐ Perform and understand all preparation necessary for IFR flight
- ☐ Can safely perform instrument approach procedures to meet the airman certification standards
- ☐ Apply single-pilot resource management
- ☐ Demonstrate to the check instructor that the safety of flight is never in doubt

Stage 4, Phase 7: IFR Cross Country

Objective: Here the pilot-in-training will learn the steps involved in planning for and flying safe cross countries under Instrument Flight Rules. During a long cross country the pilot-in-training will use three different types of IFR approach procedures.

Web-based Knowledge Objectives

Procedure For Flying Cross Country IFR

- ☐ Radar procedures and services enroute
- ☐ IFR procedures and reports

Planning Your Cross-Country Flight

- ☐ Chart supplement
- ☐ Preflight planning
- ☐ Gathering weather information
- ☐ IFR flight plan

Safety Tips and Tools

- ☐ Visual illusions
- ☐ Aeromedical factors and oxygen rules
- ☐ Avoiding other aircraft
- ☐ Arriving IFR at a non-towered airport
- ☐ Flying across pressure and temperature changes
- ☐ Avoiding special hazards at airports
- ☐ Visual glideslope indicators
- ☐ Airport signs and markings
- ☐ Flying in icing conditions
- ☐ Operating the autopilot during IFR flight
- ☐ Personal minimums
- ☐ PAVE checklist
- ☐ CARE checklist
- ☐ Two rules for safe IFR flying

Flight Scenarios

- ☐ Flying an IFR cross country - Plan and fly an instrument cross-country flight to your destination airport.
- ☐ Approach with loss of primary flight instruments (ATD) - Fly an instrument approach with failed primary flight instruments. ATD may be used.
- ☐ Long IFR cross country - Fly a 250 nm distance along airways or ATC-directed routing, with one segment of the flight consisting of at least a straight-line distance of 100 nm between airports.

Ground Training Tasks

- ☐ Cross-country flight planning
- ☐ Filing an IFR flight plan and alternate planning
- ☐ IFR procedures and reports

Flight Training Tasks

- ☐ Single-pilot resource management (SRM)
- ☐ Task management
- ☐ Automation management
- ☐ Situational awareness
- ☐ Cross-country planning procedures
- ☐ Communication with ATC
- ☐ Compliance with ATC clearances
- ☐ Required ATC reports
- ☐ Intercepting and tracking navigational systems
- ☐ Precision approach
- ☐ Nonprecision approach
- ☐ Precision approach with the loss of primary flight instruments
- ☐ Nonprecision approach with the loss of primary flight instruments
- ☐ Landing from a straight-in or circling approach
- ☐ Autopilot use
- ☐ Compliance with departure, en route, and arrival procedures
- ☐ Alternator failure in IMC
- ☐ No-flap approach and landing

Stage 4, Phase 7 Continued On Next Page

Phase 7 Completion Standards

- Complete FAA IFR cross-country requirements
- Maintain situational awareness during actual or simulated IMC flights
- Use the checklist throughout the flight and on the ground as necessary
- Make safety-conscious approach briefings
- Have reviewed the Phase Progress Report with your instructor

Stage 4, Phase 8: Practical Test Preparation

Objective: In this phase the pilot-in-training will polish all the instrument flying skills and knowledge they have learned to meet or exceed the Instrument Rating Airman Certification Standards.

Web-based Knowledge Objectives

Achieving Your Instrument Rating

- ☐ Passing the test
- ☐ Your new rating

Flight Scenarios

- ☐ Polishing all IFR skills - This is a review flight before the final Progress/Stage Check in order to polish all skills to the current Instrument Rating Airman Certification Standards.
- ☐ Final Progress/Stage Check - See next page.

Ground Training Tasks

- ☐ Aeronautical decision making
- ☐ Aircraft systems related to IFR operations
- ☐ Airplane flight instruments and navigation equipment
- ☐ Attitude instrument flying
- ☐ Automation management
- ☐ Controlled flight into terrain awareness
- ☐ Crew resource management
- ☐ Cross-country flight planning
- ☐ Emergency instrument procedures
- ☐ Instrument cockpit check
- ☐ Pilot qualifications
- ☐ Positive exchange of flight controls
- ☐ Risk management
- ☐ Single-pilot resource management (SRM)
- ☐ Situational awareness
- ☐ Special emphasis areas
- ☐ Task management
- ☐ Terminal Publication Procedures (TPP)
- ☐ Use of checklists
- ☐ Use of distractions during practical test
- ☐ Weather information

Flight Training Tasks

- ☐ Single-pilot resource management (SRM)
- ☐ Preflight preparation
- ☐ Instrument cockpit check
- ☐ Checklist usage
- ☐ Communication with air traffic control and clearances
- ☐ Compliance with departure, en route, and arrival procedures and clearances
- ☐ Holding procedures
- ☐ Basic instrument flight maneuvers
- ☐ Recovery from unusual flight attitudes
- ☐ Intercepting and tracking navigational systems and DME arcs
- ☐ Nonprecision approach (NPA)
- ☐ Precision approach (PA)
- ☐ Missed approach
- ☐ Circling approach
- ☐ Landing from a straight-in or circling approach
- ☐ Emergency operations - Loss of communications
- ☐ Emergency operations - Approach with loss of primary flight instrument indicators
- ☐ Checking instrument and equipment

Phase 8 Completion Standards

- ☐ Meet the standards outlined in the Instrument Rating Airman Certification Standards

Stage 4, Phase 8A: Progress/Stage Check

Objective: Complete the final Progress/Stage Check for the course.

Progress/Stage Check - Ground (Oral)

- ☐ Aircraft systems related to IFR operations
- ☐ Airplane flight instruments and navigation equipment
- ☐ Cross-country flight planning
- ☐ Instrument cockpit check
- ☐ Pilot qualifications
- ☐ Single-pilot resource management (SRM)
- ☐ Special emphasis areas
- ☐ Terminal Publication Procedures (TPP)
- ☐ Weather information

Progress/Stage Check - Flight

- ☐ Single-pilot resource management (SRM)
- ☐ Preflight preparation
- ☐ Instrument cockpit check
- ☐ Checklist usage
- ☐ Communication with ATC and clearances
- ☐ Compliance with departure, en-route, and arrival procedures and clearances
- ☐ Holding procedures
- ☐ Basic instrument flight maneuvers
- ☐ Recovery from unusual flight attitudes
- ☐ Intercepting and tracking navigation systems and DME arcs
- ☐ Nonprecision approach (NPA)
- ☐ Precision approach (PA)
- ☐ Missed approach
- ☐ Circling approach
- ☐ Landing from a straight-in or circling approach
- ☐ Emergency operations - Loss of communications
- ☐ Emergency operations - Approach with loss of primary flight instrument indicators
- ☐ Checking instruments and equipment

Progress/Stage Check - Completion Standards

- ☐ Demonstrate the aeronautical knowledge and skill to safely perform at or above the airman certification standards and demonstrate sound decision-making
- ☐ Have demonstrated your ability as an instrument rated pilot

U.S. Department
of Transportation
**Federal Aviation
Administration**

800 Independence Ave., SW.
Washington, DC 20591

FEB 01 2012

Mac McWhinney
King Schools
3840 Calle Fortunada
San Diego, CA 92123

Dear Mr. McWhinney:

The Federal Aviation Administration (FAA) has reviewed the King Schools, Inc. on-line *Web Based Instructional Programs, Cessna Instrument Rating Training Course* package (Revision 1.0) and finds that its instrument rating content appears to meet acceptable training standards for use under Title 14 of the Code of Federal Regulations (14 CFR) part 141. The curriculum contains sufficient ground and flight training hours needed for the instrument-airplane rating and is adequate in scope and content for use under part 141 provided all part 141 requirements are adhered to.

It is not the function of this office to certificate 14 CFR part 141 flight schools and this letter is not to be construed as an authorization to conduct part 141 operations. We are only acknowledging that the materials presented to the FAA's General Aviation and Commercial Division, AFS-800, would be appropriate for use in a certificated part 141 training environment. The authorization to operate a part 141 flight school using these or any other materials is and remains a function of the jurisdictional flight standards district office.

Thank you for allowing us the opportunity to review a well thought-out and carefully crafted flight and ground training product. If you have any further questions please don't hesitate to contact the General Aviation and Commercial Division at (202) 385-9600.

Sincerely,

Original Signed By
Melvin O. Cintron

Melvin O. Cintron
Manager, General Aviation and Commercial Division

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