

## **Examiner's Plan of Action Student Pilot-Cross Country**

1. VERIFY APPLICANT ELIGIBILITY
☐ Verify § 61.83 - Applicant meets the eligibility requirements
☐ Verify § 61.87 - Applicant has received and logged the required pre-solo ground and flight training in the same
or a similar make and model of a/c for which cross country privileges are sought.
☐ Verify § 61.93(a);(b);(e) - Applicant has received and logged required ground and flight training and demonstrated
required flight proficiency.
PERSONAL EQUIPMENT
☐ View-Limiting Device
☐ Completed FAA 7233-1 Flight Plan Form or electronic equivalent
☐ Completed flight logs or electronic equivalent
☐ Computer and plotter or electronic equivalent
☐ Current Aeronautical Charts or electronic equivalent
☐ Current Chart Supplement or electronic equivalent
☐ Appropriate publications or electronic equivalent
☐ Backup charging source and backup charts if using EFB (recommended)
PERSONAL RECORDS
☐ Government issued ID (name matches IACRA)
☐ Pilot certificate (signed on back)
☐ Current Medical Certificate or BasicMed Qualification
☐ Pilot Logbook with Instructor Endorsements
2. VERIFY ACCEPTABLE AIRCRAFT
☐ Maintenance Records (AV1ATE)
☐ A/C Documents (AROW or ARROW)
☐ Approved FAA POH (or substitute if approved by Evaluator)

## The student has been instructed to plan the following cross-country flight scenario:

Scenario: Today is the day of your solo xctry, you've been trying to get this flight done for weeks but the weather (wx) hasn't been cooperative.

Please plan a solo, cross country flight from KAPA to KFNL keeping in mind the added pressures of trying to complete the flight. A strong understanding of ADM and personal minimums will help you adequately avoid the external pressures to fly when the safe outcome of the flight may be questionable.

Please prepare a flight plan and a weight and balance as if you're going solo on this flight. Also, please prepare all of the performance calculations and be prepared to tell the stage check pilot:

Using anticipated or actual atmospheric conditions, please calculate the following:

- 1. Takeoff distance.
- 2. Climb rate after takeoff
- 3. Time, fuel and distance to climb
- 4. Cruise speed and fuel burn
- 5. Landing distance

If you have any questions, contact your CFI and/or Stage Check Examiner to seek clarification.



## 3. CONDUCT PRACTICAL TEST

☐ This plan of action is a guide to conduct the test in accordance with the ACS in the time allotted.
☐ Its purpose is to:
1. Ensure the applicant possesses the Knowledge and Skill to solo an airplane outside of the local area and land
at airports other than KAPA.
2. Ensure the applicant possesses the ability to recognize, assess and take the appropriate action when facing a
risk management problem in order to act as PIC.
$\square$ Instruction during the FAA Practical Exam is not allowed; however, instruction is acceptable on the stage check.
☐ Perfection is not the standard. Students should strive to remain within standards and when a deviation occurs,
promptly correct to within standards.
☐ I will take notes throughout the test to provide you with a through debrief.
☐ Oral examining will continue throughout the test.
☐ Assume you have passed unless told otherwise.
☐ I will intervene to prevent a violation or unsafe condition.
☐ Please let me know if you do not understand a question, statement or instruction.

5 minute break if student would like one and we will begin the Oral Exam



## Oral Exam

### 1. Preflight Preparation (5 minutes)

### A. Pilot Qualifications

- 1. What documents must you have in your possession or readily accessible when acting as PIC?
- 2. What aircraft inspections are required? (AV1ATE)

### B. Airworthiness Requirements (5 minutes)

- 1. What a/c inspections are required to be documented for today's flight?
- 2. Who is responsible for maintaining an a/c in an airworthy condition?
- 3. Who responsible for determining that the a/c is airworthy?
- 4. Explain VFR equipment requirements for day and night.
- 5. Explain what you will do if you find inoperative equipment both on the ground and in flight
  - a. Required by 91.205
  - b. Not required by 91.205
  - c. Required by the manufacturer
  - d. Not required by the manufacturer

## C. Weather Information (20 minutes)

- 1. What is the purpose of the AFSS?
- 2. Demonstrates use of FAA wx briefing.
- 3. Demonstrates use of aviation textural wx reports and forecasts.
- 4. Demonstrates use of aviation graphical wx reports and forecasts.
- 5. Demonstrates understanding of characteristics of airmasses.
- 6. Demonstrates understanding of frontal wx systems.
- 7. Under what conditions would you expect icing to occur?
- 8. How can you receive an Inflight Weather Briefing?
- 9. Seasonal weather phenomena.
- 10. Makes an appropriate go/no-go decision based on real-world wx scenario.

\*\*Ensure student correlates dynamic wx to the flight, identifies limitations of wx reports and forecasts, applies personal wx minimums

#### D. Cross Country Flight Planning (20 minutes)

Using student's flight planning materials and pre-assigned route of flight and scenario, test for understanding and completion of the following:

- 1. Is it legal to use an EFB? Why? (yes, AC-120-76D)
- 2. Applicant presents flight planned to first fuel stop using real-time weather and provides a risk analysis.
- 3. VFR Flight Plan
- 4. VFR Navigation Log
- 5. Route Planning Considerations



- 6. VFR Sectional Chart symbology
- 7. Appropriate selection of navigation systems/facilities and communication frequencies.

\*\*Ensure student correlates PAVE checklist, identifies hazards, alternates if flight cannot be performed as planned, tendency to continue despite adverse change in conditions, understands possible differences between published and actual performance data

## E. National Airspace System (10 minutes)

- 1. Types of airspace and associated requirements and limitations.
- 2. Charting symbology. General dimensions, equipment requirements.
- 3. VFR weather minimums and flying in particular classes of airspace.
- 4. Requirements for flying in special use airspace (SUA), and special flight rule areas (SFRA).
- 5. Properly identify airspace and operate accordingly with regards to communication and equipment requirements.

## F. Performance and Limitations (10 minutes)

Applicant demonstrates us of manufacturer's approved charts, table, and data to:

- 1. Compute Weight and Weight and balance for a scenario
- 2. Ensure a/c remains within W&B for duration of flight
- 3. Evaluate environmental conditions
- 4. Evaluate t/o and landing data
- 5. Calculates a/c performance: climb rates, TAS, groundspeed, fuel burn, decent planning
- 6. Calculates Heading, Time, Fuel, Distance under actual conditions
- 7. Recalculates fuel based on scenario provided by instructor

#### G. Operation of Systems (5 minutes)

- 1. Discuss leaning procedures
- 2. Discuss recognizing system malfunctions and failures
- 3. Discuss abnormal and emergency procedures

### H. Human Factors (5 minutes)

- 1. Perform a self-assessment including whether the pilot is fit for flight.
- 2. Show sound decision-making and judgment (based on reality of circumstances).
- 3. Explain the difference between proficiency and currency?
- 4. What are your personal weather minimums?



## PRACTICAL EVALUATION

## II. Preflight Procedures:

### A. Preflight Assessment (preflight inspection)

- 1. Risk Management
  - a. External Pressures
  - b. Environment
  - c. Aviation security
- 2. Skills and Knowledge
  - a. Checklist usage (internal and external inspection)
  - b. Verifies A/c in airworthy condition
  - c. Knowledge of a/c systems and detection of possible defects

#### B. Flight Deck Management

- 1. Risk Management
  - a. Improper SRM, ADM
- 2. Skills and Knowledge
  - a. Ensures security of all objects in the airplane.
  - b. Ensures all items are organized in a manner to support successful outcome of the flight.
  - c. Proper programming/use of navigation equipment and other electronics
  - d. Conducts passenger and crew briefings as required.

### c. Engine Starting

- 1. Risk Management
  - a. Propeller Safety
- 2. Skills and Knowledge
  - a. Proper positioning of A/C considering wind, obstructions, safety
  - b. Engine starting under a variety of atmospheric conditions
  - c. Checklist Usage

#### D. Taxi

- 1. Risk Management
  - a. Inappropriate activities
  - ь. Expectation bias
- 2. Skills and Knowledge
  - a. Brake Check
  - b. Positions flight controls correctly
  - c. Throttle and brake management
  - d. Situational awareness
  - e. ATC clearances and communications
  - f. a/c control during taxi



- g. use of navigation charts
- h. use of briefings to avoid runway incursions

#### E. Before Takeoff Check

- 1. Risk Management
  - a. Maintains Situational awareness
  - b. Identification/mitigation of threats
- 2. Skills and Knowledge
  - a. Division of attention
  - b. Positioning of a/c
  - c. Verify engine parameters and a/c airworthiness
  - d. Checklist usage
  - e. use of briefings to avoid runway incursions

## III. Airport operations

- A. Communication and light gun signals
- 1. Risk Management
  - a. Failure to declare an emergency
  - b. Confirmation bias or expectation bias
- 2. Skills and Knowledge
  - a. Appropriate use of radio equipment and tuning of frequencies
  - b. Radio communications in accordance with AIM
  - c. Receives, acknowledges, and complies with instructions

### B. Traffic Patterns

- 1. Risk Management
  - a. Distractions
  - b. Operating near other aircraft
  - c. Failure to execute timely go around
  - d. Loss of situational awareness
- 2. Skills and Knowledge
  - a. Maintains TPA ±100' & 10 kts
  - b. Fly correct ground track and pattern procedures
  - c. Comply with traffic pattern procedures
  - a. Maintains awareness of other a/c and proper spacing when required

### IV. Takeoffs, Landings, and Go-Arounds

- A. Normal Takeoff and Climb
- 1. RM
  - a. Crosswind, windshear, wake TB



- b. Engine failure, other emergencies
- c. Distractions
- 2. Skills and Knowledge
  - a. Checklist usage
  - ь. Runway selection
  - c. Effects of atmospherics
  - d. Rotates and lifts off at the appropriate airspeeds
  - e. Climbs at Vy +10/-5 kts to a safe altitude
  - f. Directional control and wind drift correction

### B. Normal Apch and Landing

- 1. RM
  - a. Environmental hazards
  - b. Operational hazards
  - c. Distractions
- 2. Skills and Knowledge
  - a. Ensure a/c is on the correct/assigned runway
  - b. Checklist usage
  - c. S/A and comms
  - d. Stabilized approach including crosswind
  - e. A/s +10/-5 kts
  - f. Touches down smoothly at a speed providing little or no aerodynamic lift
  - g. Touches down within 400' of specified point with no drift, on centerline, and with a/c properly aligned with the runway
  - h. Maintains crosswind correction and directional control throughout the landing sequence
  - i. Executes timely go-around if apch cannot be executed within the tolerances above

#### C. Soft Field Takeoff and Climb

- 1. RM
  - a. Environmental factors
  - b. Emergency considerations
  - c. Collision avoidance
  - d. SRM and Task Management
- 2. Skills and Knowledge
  - a. Checklist usage
  - b. SA and Comms
  - c. Collision avoidance and division of attention
  - d. A/c control
    - i. Systems management and configuration
    - ii. Rotates correctly and accelerates in ground effect
    - iii. Vx or Vy + 10/-5 kts
    - iv. Maintains desired flight path



## D. Soft Field Approach and Landing

#### 1. RM

- a. Environmental factors
- b. Emergency considerations
- c. Collision avoidance
- d. SRM and Task Management

### 2. Skills and Knowledge

- a. Checklist usage
- b. SA and Comms
- c. Proper a/c configuration
- d. Proper a/s +10/-5 kts
- e. Proper landing technique keeping nose off until loss of elevator effectiveness
- f. Maintains proper positioning of flight controls and speed for soft surface
- g. Executes go around if maneuver cannot be made within the tolerances above

### E. Short Field and Max Performance Climb

#### 1. RM

- a. Environmental factors
- b. Emergency considerations
- c. Collision avoidance

#### 2. Skills and Knowledge

- a. Checklist usage
- b. SA and Comms
- c. Collision avoidance and division of attention
- d. Maneuver Parameters
  - i. Systems management and configuration
  - ii. Rotates correctly and accelerates in ground effect
  - iii. Establishes correct pitch attitude
  - iv. Maintains Vx +10/-5 kts until obstacle is cleared or 50'
  - v. Maintains desired flight path

#### F. Soft Field Approach and Landing

### 1. RM

- a. Environmental factors
- b. Emergency considerations
- c. Collision avoidance

#### 2. Skills and Knowledge

- a. Checklist usage
- b. SA and Comms
- c. Proper a/c configuration
- d. Proper a/s +10/-5 kts



- e. Touchdown ≤200' beyond specified point
- f. Proper braking technique
- g. Timely go around if landing within tolerances not anticipated

## G. Forward Slip to Landing

- 1. RM
  - a. Low altitude stall/spin awareness
  - b. Failure to apply correct controls for crosswind landings
  - c. Failure to go-around
- 2. Skills and Knowledge
  - a. Purpose of the maneuver
  - b. Determines if xwind component exceeds pilot's or aircraft's capability
  - c. Extablishes a sutable touchdown point
  - d. Maintains desired flight path
  - e. Touchdown ≤400' beyond specified point
  - f. Maintains crosswind correction and directional control throughout the landing sequence
  - g. Executes timely go-around if apch cannot be executed within the tolerances above

## H. Go Around/Rejected Landing

- 1. RM/PAVE/TEAM
  - a. Delayed recognition or performance of go around
  - b. Improper power application or a/c configuration
  - c. Collision avoidance, division of attention
  - d. Distractions, loss of SA, improper task management
- 2. Skills and Knowledge
  - a. Purpose of the maneuver
  - b. Knowledge elements related to maneuver
  - c. Checklist usage
  - d. Environmental considerations
  - e. SA and Comms
  - f. A/c configuration
  - g. Maneuver parameters
    - i. Timely decision and execution
    - ii. Correct pitch and power
    - iii. Vy +10/-5 kts
    - iv. Maintains desired flight path

#### V. Performance and Ground Reference Maneuvers

- A. Steep Turns
- 1. RM
  - a. Collision avoidance, division of attention



- b. Distractions, loss of SA, improper task management
- c. Stall/spin awareness, energy management
- 2. Skills and Knowledge
  - a. Purpose of the maneuver
  - b. Knowledge elements related to maneuver
  - c. Checklist usage
  - d. Environmental considerations
  - e. SA and Comms
  - f. A/c configuration
  - g. Maneuver parameters
    - i. ≅45° AoB
    - ii.  $360^{\circ}$  turns in both directions
    - iii.  $\pm 100$ ', AS  $\pm 10$  kts, Bank  $\pm 5^{\circ}$ . Hdg  $\pm 10$ '

#### B. Ground Reference Maneuvers

- 1. RM
  - a. Collision avoidance, division of attention
  - b. Distractions, loss of SA, improper task management
  - c. Stall/spin awareness, energy management
  - d. Emergency considerations
- 2. Skills and Knowledge
  - a. Knowledge elements related to maneuver
  - b. Identifies suitable emergency landing area
  - c. Selects suitable ground reference
  - d. Plans the maneuver as to enter with the appropriate perameters
  - e. Applies wind drift corrections
  - f. Maneuver parameters
    - i. Divides attention between a/c control, collision avoidance and ground track while maintaining coordinated flight
    - ii. 600'-1000' AGL  $\pm 100'$ , a/s  $\pm 10$  kts
    - iii. Exits as appropriate

#### VI. NAVIGATION

#### A. Pilotage and Dead Reckoning

- 1 RM
  - a. Selects most appropriate altitude considering obstacles and emergencies
  - b. Bracketing strategy
  - c. Task management
  - d. Cockpit organization
  - e. Failure to properly lean or select planned RPM setting
- 2. Skills and Knowledge



- a. Prepare and use paper or electronic flight log
- b. Navigate by pilotage, dead reckoning
- c. Note differences between pre-computed headings, groundspeeds and elapsed times
- d. Maintain ±3 nm of flight planned route
- e. Arrives within 5 minutes of flight planned or revised ATA
- f. ALT  $\pm 200$ ' and HDG  $15^{\circ}$

### B. Navigation Systems and Radar Services

- 1. RM
  - a. Failure to manage automation and navigation systems
- 2. Skills and Knowledge
  - a. Use an installed electronic navigation system
  - b. Intercepting and tracking radials or bearings as appropriate
  - c. Recognizing station passage
  - d. Recognizes signal loss and takes corrective action
  - e. Determine a/c position using navigation system
  - f. Proper comms when using radar services
  - g. Maintains ALT  $\pm 200$ ' and HDG  $\pm 15^{\circ}$

### c. Diversion

- 1. RM/ADM/SRM
  - a. Failure to make timely decision
  - b. Selects inappropriate airport
  - c. Failure to manage tasks and maintain situational awareness
- 2. Skills and Knowledge
  - a. Selects appropriate destination
  - b. Estimates HDG, Time, Fuel, Distance
  - c. Use of resources (SRM)

#### D. Lost Procedures

- 1. RM
  - a. Failure to record times over waypoints
  - b. Failure to declare an emergency or seek assistance
- 2. Skills and Knowledge
  - a. Determines position
  - b. Maintains appropriate hdg and climbs as necessary
  - c. Uses pilotage, electronic nav and ATC to determine position

## VII. Slow Flight and Stalls

- A. Maneuvering during slow flight
- 1. RM
  - a. Understanding hazards of inadvertent slow flight



#### 2. Skills and Knowledge

- a. Understands aerodynamics of slow flight
- b. Maintains coordinated flight
- c. Maneuver Parameters
  - i. ≥1500'
  - ii. Establish AS with no stall indications
  - iii. Config as specified
  - iv. ALT  $\pm 100$ ', HDG  $\pm 10$ °, +10/-0 KTS, specified AoB  $\pm 10$ °

#### B. Power-Off Stalls

#### 1. RM

- a. Failure to recognize stall indications
- b. Improper recovery procedure
- c. Factors affecting stalling speed
- d. Secondary stalls, accelerated stalls, and cross-control stalls

#### 2. Skills and knowledge

- a. Maneuver parameters
  - i. Clear the area
  - ii. ≥1500',
  - iii. Configure as specified by evaluator
  - iv. Establish a stabilized decent
  - v. Transitions from apch decent to an attitude that will induce a stall
  - vi. 10° HDG if straight, ≤20° AoB if turning
  - vii. Recognizes and recover promptly after a full stall has occured
  - viii. Executes proper recovery procedure iaw POH/AFM
  - ix. Accelerates to Vx or Vy prior to flap retraction
  - x. Returns to ALT, HDG and IAS specified by evaluator

#### c. Power-On Stalls

#### 1. RM

- a. Failure to recognize stall indications
- b. Improper recovery procedure
- c. Factors affecting stalling speed
- a. Secondary stalls, accelerated stalls, elevator trim stalls, and cross-control stalls
- 2. Skills and knowledge
  - a. Stall indications
  - b. Circumstances that can lead to inadvertent stalls
  - c. Maneuver parameters
    - i. Clear the area
    - ii. ≥1500',
    - iii. Establish takeoff, departure or cruise configuration as assigned by the examiner
    - iv. Power as specified by examiner, not less than 65%



- v. 10° HDG if straight, ≤20° AoB ±10if turning
- vi. Acknowledges and recovers at the first indication of an impending stall
- vii. Executes proper recovery procedure iaw POH/AFM
- viii. Accelerates to Vx or Vy prior to flap retraction
- ix. Returns to ALT, HDG and IAS specified by evaluator

### D. Spin Awareness

- 1. RM
  - a. Factors leading to or contributing to spins
  - b. Recovery procedure
- 2. Skills and Knowledge
  - a. Spin recovery procedures
  - b. Assess and avoid situations where unintentional spins may occur

#### VIII. Basic Instrument Maneuvers

- A. Emergency Decent (eg. smoke/fire)
- 1. RM
  - a. Poor cockpit/task management
  - b. Continued flight into IMC
  - c. Hazards of rapid head movement
- 2. Skills and Knowledge
  - a. Controls a/c solely by reference to instruments
  - b. Performs straight and level flight
  - c. Airspeed climbs
  - d. Airspeed descents
  - e. Turns to headings
  - f. Recovery from unusual attitudes
  - g. Use of a navigation facility to intercept and track a desired course
  - h. Interact with ATC in order to obtain and comply with radar sevices
  - i. Maneuver parameters:
    - i. ALT ±200', HDG ±20°, IAS ±10 KTS

## B. Emergency approach and landing (simulated)

- 1. RM:
  - a. Collision hazards
  - b. Low altitude stall/spin awareness
  - c. Failure to select suitable landing area
  - d. Improper task management
- 2. Skills and Knowledge
  - a. Analyze situation and take most appropriate course of action



- b. Exhibit orientation, division of attention, and proper planning
- c. Effects of atmospherics
- d. ATC services
- e. Maneuver parameters:
  - i.  $a/s \pm 10kts$
  - ii. proper configuration
  - plans and follows flight path to the selected landing area
  - iv. prepares for landing
  - v. completes checklist
  - vi. makes appropriate radio calls when conditions allow

## C. Systems and equipment malfunctions (relocated from the flight portion)

- 1. RM:
  - a. Failure to use proper checklist
- 2. Skills and Knowledge
  - a. Demonstrates understanding of:
    - i. Partial or complete loss of engine power
    - ii. Electrical malfunction
    - iii. Flight control failures
    - iv. Flight instrument failures
    - v. System failures
    - vi. Smoke/fire
    - vii. Inadvertent door/window open
  - b. Describes action items for 3 of the above.
  - c. Analyze situation and take most appropriate course of action
  - d. Completes checklist or procedure

#### XI. Postflight Procedures

- C. After landing, Parking and securing
- 1. RM:
  - a. Distractions
  - b. Airport security
  - c. Inappropriate cockpit/task management
- 2. Skills and Knowledge
  - a. Utilize runway incursion avoidance procedures
  - b. Complete checklists after a/c has stopped
  - c. Proper shutdown procedure
  - d. Documentation
  - e. Disembarkation of passengers
  - f. Safety awareness



- g. Securing of aircraft
- h. Postflight inspection
- i. Checklist usage