

Commercial Pilot ASEL Initial Issue FAR 61.129

Total Time	Dual	Solo	PIC	Dual XC	Solo XC	PIC XC	Instrument	Night Dual	Night PIC	Night TO/Land PIC
250	20	Blank	100	0.1	Blank	50	10	3	5	10
100 hours in powered aircraft, 50 in airplanes	10 hours instrument, 5 hours in single engine airplane, 10 hours in complex, one Day XC 2 hours 100 miles away, one Night XC 100 miles away, 3 hours dual last 60 days		50 in airplanes	1 Daytime Dual ASEL XC 100 miles, One Dual ASEL XC Night 100 Miles		10 solo in single engine airplanes, one XC 300 nm, 3 points, one leg 250 nm	At least 5 in single engine airplane	One Dual XC Night 100 Miles, 10 T/O & Land Full stop	5 Night VFR, 10 single engine airplane T/O & Landings with tower	with a towered airport
Non 142 Training Device/Simulator Max Credit 50 ASEL										

PRETEST BRIEFING

- 1. Collect Fee __
- 2. Put the applicant at ease (small talk, etc.)
- 3. Advise applicant of available comfort facilities
- 4. Confirm type of practical test or retest
- 5. Provide casual overview of the test
- 6. Collect/Verify required documents:
 - FAA Form 8710-1, Airman Certificate and/or Rating Application __
 - Photo/signature I.D. (Note type on 8710-1 and return)
 - Pilot Certificate (Verify vs I.D. & FAA Form 8710-1 and return)
 - Medical (note limitations)
 - Knowledge test results__ **Check PLT items missed**
 - Logbook or GROUND training records (Part 61) 1 day, 1 night dual XC 100 miles, 1 solo XC 300 miles, 3 points 1 leg 250 miles
 - **Endorsements** – Logbook -Prepared for the test, Deficient written items, 3 hours in last 60 days.
 - (Verify that the applicant meets all requirements and appropriate endorsements)
- 7. Aircraft documents (Verify location & scheduled availability)
- 8. Verify that required equipment (hood, etc.) is available
- 9. Verify that applicant is aware of PTS requirements and tolerances
- 10. Advise the applicant that:
 - FAA Practical Test IAW the **COMMERCIAL PILOT ASEL PTS**
 - Will be using a Plan of Action (Used to organize the Practical Test)
 - Will be taking notes for the debrief
 - Perfection is not the standard
 - Oral questioning will continue throughout the test
 - Three possible outcomes are:
 - o Temporary airman certificate
 - o Notice of disapproval of application
 - o Letter of Discontinuance
- 11. Any Questions?
- 12. **Announce "THE TEST HAS BEGUN!"**

ORAL QUESTIONING

Oral questioning will continue throughout the test.

Special Emphasis Areas

NOTE: The following are "special emphasis" items from FAA-S-8081-12B PTS, Page 5.

1. What is Positive Aircraft Control? – Explain this (Pay attention to flying the plane)
2. What is Positive Exchange of Flight Controls? – Explain this
3. **Stalls/ Spin Awareness- Area of Operation VIII Task D**
 - a. What causes an airplane to stall?, AC 61-21A, p. 143
 - b. What is the minimum altitude you are allowed to practice stalls in this airplane? PTS, POH
 - c. How do you recover from a stall?, AC 61-21A, p. 144.
 - d. How do you recognize a spin? AC 61-21A, p. 154.
 - e. Explain spin recovery., AC 61-21A, p. 157.
 - f. Flight situations where unintentional spins may occur? Base to final overshoot, 360° on final....
4. Collision Avoidance – Describe methods of Scanning for other Aircraft. AIM 8-1-8
5. Wake Turbulance Avoidance AIM Section 3
 - a. What is Wake Turbulance?
 - b. Which way do the vortices travel after being generated?
 - c. You are Taking off behind a Large Jet that just departed. Explain.
 - d. You are landing behind a Large Jet that just touched down. Explain.
 - e. May you / should you request a waiver for wake turbulence separation if departing behind a HEAVY aircraft?
6. LAHSO – Explain AIM 4-3-11
 - a. How to tell if airport has LAHSO operations?
 - b. How to tell if LAHSO is in effect on arrival?
 - c. When should you notify the tower that you do not want to accept a LAHSO clearance?
7. Runway Incursion avoidance –
 - a. Describe the pavement markings and signs at the hold short point?
 - b. When may you cross this point?
8. Controlled Flight into Terrain -AC61-134
 - a. Examples of CFIT?
9. Aeronautical Decision Making (ADM) AC60-22
10. Checklist usage -
 - a. When do you use a preprinted checklist
 - b. Should you use a preprinted checklist if you have an engine failure at 100 feet AGL on takeoff?
 - c. Where would you look for the emergency glide speed for engine failure at high altitude? POH.
 - d. What would be your actions if you experienced a rough running engine right after takeoff?

NOTE: All questions pertain to operations as a COMMERCIAL PILOT.

I AREA OF OPERATION: Preflight Preparation

A. TASK: CERTIFICATES AND DOCUMENTS

REFERENCES: 14 CFR parts 43, 61, 91; FAA-H-8083-3; AC 61-23/FAA-H-8083-25; POH/AFM.

Scenario: Flight to planned destination, FAA ramp check of pilot and aircraft.

1. Pilot certificate, privileges, and limitations-
 - ___a. What personal documents must you have in your possession to act as Pilot-in-Command? 61.3 (a), (c), & (e).
 - ___b. How long is your medical certificate valid? 61.23.
 - ___c. What flight time must you log in your pilot log book, what are the required entries, and must you carry it with you on all flights? 61.51.
 - ___d. After you get your commercial certificate how often must you fly to remain current? For night operations? For instrument flight? 61.57
 - ___e. Examples of allowed commercial pilot operations. FAR 119.1(6)(d)
 - ___f. Examples of operations not allowed.
2. Aircraft Documents -- location and importance-
 - ___a. Airworthiness and registration -- What documents are required to be in the aircraft during flight? 91.303
 - ___b. Operating limitations, handbooks, or manuals -- Are you required to have an FAA approved Flight manual or POH in the aircraft during flight?
 - ___c. Weight & Balance -- When must you compute a weight and balance?

B. TASK: AIRWORTHINESS REQUIREMENTS REFERENCES: 14 CFR part 91; AC 61-23/FAA-H-8083-25.

Scenario: Something breaks on the A/C while at destination. Describe 91.213 process and disposition of passengers.

1. Determine applicant exhibits knowledge of certificates and documents.

- ___a. What are the required instruments and equipment for day/night VFR? FAR 91.205 equipment
- ___b. When would someone need to obtain a Special Flight Permit? (when 91.213 won't allow)
- ___c. How does one obtain the Permit? Contact FSDO nearest your location
- ___d. What is a minimum equipment list (MEL) and which aircraft require one? 91.213

Maintenance deferral on A/C without an MEL --

- ___e. How do you determine if you can operate the aircraft without an item of malfunctioning equipment on an aircraft without an approved MEL? 91-213 (d) (1) through (4).
- ___f. Deactivation procedure?

Scenario: A/C is away from home base on for hire trip when 100 hours have elapsed since Annual. Can aircraft be flown back to home base where another inspection can be conducted? What happens to excess hours?

2. Using the aircraft and equipment logs, determine:

- (1) When is the next annual inspection due? 91.409 & A/C log.
- (2) When must the transponder be tested? 91.413 & A/C log.
- (3) Determine if all Airworthiness Directives (ADs) have been complied with? 91.417(a)(2)(v).

C. TASK: WEATHER INFORMATION Reference: AC 00-6, AC 00-45, AC 61-21, AC 61-23, and AC 61-84.

1. Knowledge of aviation weather information -- obtaining, reading & analyzing-

- ___a. Weather reports & forecasts -- Where would you obtain a weather report for a destination airport 200 NM away? FSS, Terminal forecast.
 - ___b. Weather forecast -- Name two types of weather forecasts? Terminal (FT), Area (FA), Wind & Temperature Aloft (FD).
 - ___c. PIREPS -- Where could you obtain PIREPS and under what conditions would you initiate one? AIM, para. 7-19.
 - ___d. SIGMET & AIRMET -- What is a SIGMET? An AIRMET? AIM Glossary, p. S-2 & A-4
 - ___e. NOTAMS -- What is a NOTAM? AIM Glossary, p. N-2
 - ___f. Wind Shear Reports --
 - ___(1) Who can initiate Wind Shear Reports? AIM, para. 7-22
 - ___(2) To whom and how would you report a wind shear encounter? AIM, para. 7-22.
2. GO/NO-GO Decision -- Provide current forecast weather information.
- ___a. Applicant made competent go/no go decision based on forecast weather?
 - ___b. On simulated adverse weather?

NOTE: Use real time weather condition for area to be flown.

D. TASK: CROSS-COUNTRY FLIGHT PLANNING

Reference: AC 61-21A, AC 61-23, 61-84, Navigation Charts, & AIM.

Scenario: Trip includes photo mission to specified point prior to continuation to destination.

Photo location: S.E corner of New Baden, IL at Intersection of State route 160 and railroad tracks Road N/S, Tracks E/W
Coordinates 38° 31' 53" N, 89° 41' 12" W

___1. Flight Planning -- Plan a flight from _____ to _____ via _____.

Applicant must obtain weather, RE: Area of Operation I, Task C 1. Flight should be planned for a VFR cross-country flight to first fuel stop. Computations shall be based on maximum passenger, baggage and/or cargo loads.

- ___2. Selects and uses current and appropriate aeronautical charts?
- ___3. Properly identifies airspace, obstructions, and terrain features.
- ___4. Selects easily identifiable en route checkpoints.
- ___5. Selects most favorable altitudes considering WX and equipment capabilities.
- ___6. Computes headings, flight times, and fuel requirements.
- ___7. Selects appropriate navigation facilities and communication frequencies?
- ___8. Extracts and records pertinent information from NOTAMS, Airport/Facility Directory and other flight publications?
- ___9. Completes a navigation log and simulates filing a VFR flight plan.

E. TASK: NATIONAL AIRSPACE SYSTEM Reference: FAR Part 91 and AIM.

Scenario: Take-off and climb while remaining over airport, define airspaces and VFR WX minimums in each.

- ___1. Basic VFR Wx Minimums -- all classes of airspace.
 - ___a. What are the weather requirements to fly VFR into class B airspace? 3 SM & clear of clouds, 91.155.
 - ___b. What are the weather requirements to fly into class C airspace? 1,000 ft & 3 SM and cloud clearance of 500 below, 1,000 above, and 2,000 horizontal. 91.155 (a), (c), & (d).
 - ___c. What is Special VFR and when may you use it? 91.157 and Appendix D, section 3.
With ATC clearance and below 10,000 MSL, may land and depart airports in Class B, C, D, & E clear of clouds and 1 mile visibility.
- ___2. Airspace classes -- boundaries, pilot certification, & airplane equipment
 - ___a. Class A – AIM 3-2-2
 - ___(1) 18,000 to FL 600
 - ___(2) IFR flight plan
 - ___(3) Two Way Radio
 - ___(4) Transponder w/ mode C.
 - ___(5) ATC clearance.
 - ___b. Class B – AIM 3-2-3
 - ___(1) Surface to 10,000 feet MSL, nations busiest airports, lateral boundaries variable.
 - ___(2) Two-way radio
 - ___(3) Private pilot (FAR 91 appendix D, sec. 3) or student pilot w/ endorsement.
 - ___(4) Transponder w/ mode C, unless otherwise approved w/ ATC.
 - ___(5) IFR -- must have VOR.
 - ___(6) ATC clearance.
 - ___c. Class C -- AIM 3-2-4
 - ___(1) Surface to 4,000 feet above airport w/ 5 NM radius charted in MSL, 1,200 feet above surface to 4,000 feet above surface w/ 10 NM radius charted in MSL, and normally a 20 NM outer area.
 - ___(2) Two-way radio.
 - ___(3) Transponder w/ Mode C, unless otherwise authorized.
 - ___(4) ATC clearance.
 - ___d. Class D -- AIM 3-2-5.
 - ___(1) Surface to 2,500 feet above airport charted in MSL w/ individually tailored lateral boundaries.
 - ___(2) Two-way radio.
 - ___(3) ATC clearance
 - ___(4) Without tower airspace reverts to Class E with controlled airspace from surface or 700 feet AGL -- consult AFD.
 - ___e. Class E -- AIM 3-2-6.
 - ___(1) Begins at 14,500 MSL unless designated at surface, 700 feet, or 1,200 AGL up to but not including 18,000 feet. May be an airport surface area, extensions of Class B, C, and airspace, transition areas, enroute domestic area, federal airways, and off shore airspace areas out to 12 NM from shore.
 - ___f. Class G -- AIM 3-1-1.
 - ___(1) All other airspace (uncontrolled)
- ___3. Special use airspace--
 - ___a. Prohibited area – AIM 3-4-2
 - ___b. Restricted area – AIM 3-4-3
 - ___c. Warning area – AIM 3-4-4
 - ___d. Military Operations Area – AIM 3-4-5
 - ___e. Alert area – AIM 3-4-6.
 - ___f. Controlled firing areas – AIM 3-4-7

F. TASK: PERFORMANCE AND LIMITATIONS

Reference: AC 61-21A, AC 61-23, AC 61-84, AC 91-23, POH, & FAA-Approved Flight manual..

1. Performance Charts, Tables, and Graphs -- What will be the required forward distance to takeoff and clear a 50 foot obstacle under the following conditions: POH

- ___ a. Aircraft -- at gross weight.
- ___ b. Temperature -- ___ deg C
- ___ c. Runway -- ___
- ___ d. Wind -- ___/___
- ___ e. Field elevation -- ___

2. Weight & Balance -- Aircraft performance & limitations and effects of exceeding limits.

- ___ a. How does CG effect the aerodynamic reactions of an aircraft in flight? AC 61-21A, p. 300.
- ___ b. What will be some of the most significant disadvantages of operating the A/C with a CG beyond the aft limit? AC 61-21A, p. 302 - 304.
- ___ 3. How does temperature and altitude affect the airplane's performance? AC 61-21A, p. 324.
- ___ 4. Compute weight & balance -- determines if A/C is in CG.

G. TASK: OPERATION OF SYSTEMS Reference: AC 61-21A, AC 61-23, POH, & Airplane Flight Manual.

5 of the following:

- ___ 1. Primary Flight Controls and Trim--
 - ___ a. Explain the use and effect of the elevator? AC 61-21A, p. 39.
 - ___ b. Explain the use of a trim tab? AC 61-21A, p. 43.
- ___ 2. Flaps --What is the purpose of the wing flaps? AC 61-21A, p. 44.
- ___ 3. Engine --Describe the type of engine used in this aircraft?
 - ___ a. What is its horsepower? How many cylinders does it have? How many magnetos? POH
 - ___ b. If one mag fails what effect will it have on engine rpm? (Basic theory of operation)
- ___ 4 Propeller --What is the direction of rotation of the propeller on this aircraft and what type is it? POH
 - ___ a. Where would propeller rpm limitation (on placard) be relevant during the flight test?
- ___ 5 Landing Gear --What type of landing gear is installed on this aircraft? POH
- ___ 6. Fuel , Oil & Hydraulic system --
 - ___ a. Fuel system --
 - ___ (1) Explain the operation of the fuel system on this aircraft? POH
 - ___ (2) What is the purpose of the fuel pump and when is it used? POH
 - ___ (3) What type and grade of fuel is used in this aircraft? POH
 - ___ (4) What is the maximum capacity of the fuel system and the usable amount of fuel? POH
 - ___ (5) When is the fuel quantity indicator required to be accurate? Empty!
 - ___ (6) What are you checking for when you drain the fuel drains? color & water .
 - ___ b. Hydraulic System --
 - ___ (1) Are there any hydraulic systems on this aircraft? If so, explain their operation. POH
 - ___ (2) What type brake system does this aircraft have? POH
 - ___ c. Oil System --
 - ___ (1) What type of oil system does the engine have? POH
 - ___ (2) What is the oil capacity of the engine and what is the minimum for flight? POH
- ___ 7. Electrical System --
 - ___ a. What type of electrical system is installed on this aircraft? POH
 - ___ b. Where is the battery located? POH
 - ___ c. What drives the alternator? POH
- ___ 8. Pitot Static System, Vacuum System, & Flight Instruments.
 - ___ a. From where does the attitude indicator derive its power ? POH
 - ___ b. What powers the airspeed indicator?
 - ___ c. What powers the attitude gyro in this airplane? POH
 - ___ d. Where does the directional gyro receive its power? POH
- ___ 9. Environmental Systems --
 - ___ a. Explain heater system. POH
- ___ 10. De-ice and Anti-ice systems --
 - ___ a. Are there any anti-ice or de-ice systems installed on the aircraft? POH
 - ___ b. Explain when to use carburetor heat/ Alternate Air on this aircraft?
- ___ 11. Avionics --
 - ___ a. What type of avionics are installed on this aircraft?
 - ___ b. What avionics are required to enter Class B airspace?

J. TASK: AEROMEDICAL FACTORS Reference: AC 61-21A, AC 67-2, and AIM

4 of the following:

- ___1. Symptoms, Effects, and Corrective Action Of --
 - ___a. Hypoxia --
 - ___(1) What is hypoxia? AC 67-2, p. 11.
 - ___(2) How do you recognize the symptoms of hypoxia? AC 67-2, p. 11.
 - ___(3) How do you overcome the effects of hypoxia? AC 67-2, p. 12 & 13.
 - ___b. Hyperventilation --
 - ___(1) What is hyperventilation? AC 67-2, p. 15.
 - ___(2) How do you correct for the symptoms of hyperventilation? AC 67-2, p. 15
 - ___c. Middle Ear & Sinus Problems --
 - ___(1) When is ear block normally encountered and how do you remedy it? AC 67-2, p. 21 - 23.
 - ___(2) Can you experience a sinus block on a rapid descent? If so, what would be the corrective action?
 - ___d. Spatial Disorientation (Vertigo) --
 - ___(1) What is spatial disorientation? AC 67-2, p. 43.
 - ___(2) Have you ever had vertigo?
 - ___(3) How do you overcome vertigo? AC 67-2, p. 47.
 - ___e. Motion Sickness --
 - ___(1) What is the cause of motion sickness? AC 67-2, p. 51.
 - ___(2) How do you overcome the effects of motion sickness? AC 67-2, p. 51.
 - ___f. Carbon Monoxide Poisoning --
 - ___(1) What the likely source of carbon monoxide in the cockpit? Corrective action? AC 67-2, p. 33
 - ___(2) Explain the effect of stress and or fatigue on a pilot
- ___2. Alcohol and Drugs--
 - ___a. What is the maximum blood-alcohol content allowed to exercise the privileges of a pilot certificate? 91.17 (a) (4).
 - ___b. How soon after consuming alcohol may you perform crew member duties? 91.17 (a) (1).
 - ___d. It has been over 8 hours since your last drink and your blood alcohol content is less than .04 percent. May you fly your aircraft with a hangover? NO, 91.17 (a) (2).
 - ___e. May you operate the aircraft as a pilot if you know that narcotic drugs or marihuana is on board? 91.19 (a).
- ___3. Scuba Diving --
 - ___a. If you just finished a scuba dive, what effect will it have on an immediate flight? AIM, 8-1-2.
 - ___b. How long should you wait after scuba diving before performing crew member duties? AIM, 8-1-2.

III AREA OF OPERATION: Airport Operations

A. TASK: RADIO COMMUNICATIONS AND ATC LIGHT SIGNALS

Reference: AC 61-21A, 61-23, and AIM.

- ___1. Knowledge of Radio Communications --
 - ___a. Radio communications -- recommended procedures.
 - ___b. ATC light signals --
 - ___(1) What action will you take if we lose communications on this flight? AIM, para. 4-42.
 - ___(2) How would you notify the tower that you have lost your radio? AIM, para. 4-62.
 - ___(3) What would be your procedure for entering a traffic pattern in Class D airspace after a communications failure? AIM, para. 4-42

B. TASK: TRAFFIC PATTERN OPERATIONS

Reference: AC 61-21A, AC 61-23, and AIM.

___1. Draw a standard traffic pattern at a non-towered airport. Show the location, altitudes, and headings for entering the pattern. AIM, para. 4-52

C. TASK: AIRPORT AND RUNWAY MARKING AND LIGHTING Reference: AC 61-21A and AIM.

___1. Describe the various colors of VASI lights and their meanings.

___a. 2-bar VASI? AIM, para 2-2.

___b. 3-bar VASI? AIM, para. 2-2.

___c. Precision Approach path Indicator (PAPI)? AIM, para. 2-2.

___2. What do the numbers on a runway signify? AIM, para. 2-32 b.

___3. Describe runway hold short markings and signage.

___4. Describe pilot controlled lighting. Where do you look to find out what lighting is pilot controlled? AIM, para. 2-7.

VIII AREA OF OPERATION: Slow Flight and Stalls

___1. What is the minimum altitude for recovery during stall practice in this aircraft? 1,500 unless higher in the POH.

IX AREA OF OPERATION: Emergency Operations

B. TASK: EMERGENCY APPROACH AND LANDING Reference AC 61-21 A, POH, and FAA Approved AFM

___1. Explain your selection of an off airport emergency landing site. Describe your approach to the area and give the aircraft configuration during the approach.

B. TASK: SYSTEM AND EQUIPMENT MALFUNCTIONS

___1. What action would you take if you smelled something electrical burning and the cockpit filled with black smoke? POH

___2. Course of action if engine is overheating? Indications of overheating?

___3. Landing gear will not extend normally. Procedure?

___4. Loss of oil pressure, effect on propeller? Course of action?

___5. Loss of Vacuum or Loss of PFD/MFD?

C. TASK: EMERGENCY EQUIPMENT AND SURVIVAL GEAR

___1. Describe the proper use of a handheld fire extinguisher.

X. AREA OF OPERATION: High Altitude Operations

A. TASK: SUPPLEMENTAL OXYGEN

Reference: FAR Part 91, AC 61-107, POH, and FAA Approved AFM.

___1. Supplemental oxygen --

___a. What are the regulatory requirements requiring the use of oxygen for flight crews? 12,500 MSL up to 14,000 MSL 30 minutes or less; 14,000 MSL & above -- flight crews; 15,000 MSL and above -- all occupants. 91.211

___b. What is the difference between aviator's breathing oxygen and other types? moisture content.

___c. What are the operational characteristics of continuous flow, demand, and pressure-demand oxygen systems?

AC 61-107

___2. Pressurization—

___a. Fundamental concept of pressurization. How is it accomplished? Boosted engine, Bleed air, outflow valve, pressure controller.

___b. Supplemental Oxygen in a pressurized A/C. Same as unpressurized (cabin pressure altitude) plus 10 min supply to all when above 25K feet, one pilot wears mask sealed and secured above 35K when one pilot leaves deck. 91.211

___c. Physiological hazards of high altitude flight and decompression. Time of useful consciousness, Bends, Hypoxia, extreme cold, etc.

END OF ORAL -- SUMMARIZE. PROVIDE PASS/FAIL AND GIVE CONSTRUCTIVE REMARKS.

William R. Baumheuter Commercial PTS FAA-S-8081-12B

May 17, 2009

PREFLIGHT BRIEFING

1. Profile of flight test
2. Pilot in Command (14 CFR § 61.47)
3. Emergencies - actual and simulated
 - Engine failure • Other emergencies
4. Transfer of controls
5. Collision avoidance
 - Looking for reported traffic
 - Clearing the area before maneuvers
6. First preflight - weight and balance - VFR/IFR option

7. Advise that oral questioning will continue - Perfection is not the standard
8. Testing with Plan of Action will continue IAW PTS
9. Will continue taking notes
10. Continue/discontinue if task is unsatisfactory
11. Answer any questions
12. Advise applicant to return aircraft documents to the aircraft
13. Begin flight test

FLIGHT TEST

1. Be sure to take plan of action with you to the aircraft
 2. Conduct flight test according to the Practical Test Standards
 3. No Dual - No second chance when maneuver is unsatisfactory
 4. Continue testing if maneuver is incomplete or you need more information to make a decision
 5. Unsatisfactory performance:
 - Exceeding aircraft limitations
 - Examiner intervention
 - Inappropriate emergency procedures
 - Outcome of the maneuver being seriously in doubt
 - Poor judgment
 - Not within approved standards
 - Failure to apply aeronautical knowledge
 - Not being the master of the aircraft
 - Consistently exceeding tolerances stated in the objective
 - Failure to take prompt corrective action when tolerances are exceeded
 7. Use realistic distractions during the flight test
 8. Did the applicant meet the objective of the task?
 - P Did the applicant complete the procedure described?
 - T Did the applicant perform the maneuver within the tolerances?
 - S Did the applicant meet all safety considerations?
- If you can answer YES to each of these questions without reservation, the applicant has satisfactorily completed the task.

EMPHASIS AREAS:

1. Preflight • Aircraft manuals and documentation
 - Pilot and medical certificates • Weather
 - Airport area and surroundings
2. Preflight inspections • Landing gear • Engine(s)
 - Adequacy of fuel supply & ATC communications and airspace considerations
3. Clearances • Instructions
 - Operations to/from/within/near Class A, B, C, D, and E airspace
4. Proper use of the flight controls/brakes on the ground
5. Landing flare
6. Avoidance of objects in the air and on the ground
7. Maintenance of adequate flying speed
8. Operations to/from/on suitable terrain for T/O, Apch, & Ldg Config. & Proc.
9. Observance of minimum safe altitudes—congested and non congested areas
10. Use of stabilized approach/flight path procedures
11. Forced landings

II. AREA OF OPERATION: PREFLIGHT PROCEDURES

A. TASK: **PREFLIGHT INSPECTION** REFERENCES: FAA-H-8083-3; POH/AFM.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to preflight inspection. This shall include which items must be inspected, the reasons for checking each item, and how to detect possible defects.
2. Inspects the airplane with reference to an appropriate checklist.
3. Verifies that the airplane is in condition for safe flight.

B. TASK: **COCKPIT MANAGEMENT** REFERENCES: FAA-H-8083-3; POH/AFM.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to cockpit management procedures.
2. Ensures all loose items in the cockpit and cabin are secured.
3. Organizes material and equipment in an efficient manner so they are readily available.
4. Briefs occupants on the use of safety belts, shoulder harnesses, doors, and emergency procedures.

C. TASK: **ENGINE STARTING** REFERENCES: FAA-H-8083-3, AC 61-23/FAA-H-8083-25, AC 91-13, AC 91-55; POH/AFM.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to recommended engine starting procedures. This shall include the use of an external power source, hand propping safety, and starting under various atmospheric conditions.
2. Positions the airplane properly considering structures, surface conditions other aircraft, and the safety of nearby persons and property.
3. Utilizes the appropriate checklist for starting procedure.

D. TASK: **TAXIING** REFERENCES: FAA-H-8083-3; POH/AFM.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to safe taxi procedures.
2. Performs a brake check immediately after the airplane begins moving.
3. Positions flight controls properly for the existing wind conditions.
4. Controls direction and speed without excessive use of brakes.
5. Complies with airport/taxiway markings, signals, ATC clearances and instructions.
6. Taxies so as to avoid other aircraft and hazards.

IV. AREA OF OPERATION: TAKEOFFS, LANDINGS, AND GO-AROUNDS REFERENCES: FAA-H-8083-3; POH/AFM.

A. TASK: **NORMAL AND CROSSWIND TAKEOFF AND CLIMB**

NOTE: If a crosswind condition does not exist, the applicant's knowledge of crosswind elements shall be evaluated through oral testing.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to normal and crosswind takeoff, climb operations and rejected takeoff procedures.
2. Positions the flight controls for the existing wind conditions.
3. Clears the area, taxies onto the takeoff surface and aligns the airplane on the runway center/takeoff path.
6. Lifts off at the recommended airspeed, and accelerates to VY.
7. Establishes a pitch attitude that will maintain VY, ± 5 knots.
8. Retracts the landing gear if appropriate, and flaps after a positive rate of climb is established.
9. Maintains takeoff power and VY ± 5 knots to a safe maneuvering altitude.
10. Maintains directional control, proper wind-drift correction throughout the takeoff and climb.
11. Complies with noise abatement procedures.
12. Completes appropriate checklists.

B. TASK: **NORMAL AND CROSSWIND APPROACH AND LANDING** REFERENCES: FAA-H-8083-3; POH/AFM.

NOTE: If a crosswind condition does not exist, the applicant's knowledge of the crosswind elements shall be evaluated through oral testing.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to normal and crosswind approach and landing.
3. Considers the wind conditions, landing surface, obstructions, and selects a suitable touchdown point.
4. Establishes the recommended approach and landing configuration and airspeed and adjusts pitch attitude and power as required.
5. Maintains a stabilized approach and recommended airspeed, or in its absence, not more than 1.3 VSO, ± 5 knots, with wind gust factor applied.
6. Makes smooth, timely, and correct control application during the roundout and touchdown.
8. Touches down smoothly at approximate stalling speed (ASEL).
9. Touches down at or within 200 feet (60 meters) beyond a specified point, with no drift, and with the airplane's longitudinal axis aligned with and over the runway center/landing path.
10. Maintains crosswind correction and directional control throughout the approach and landing sequence.
11. Completes appropriate checklist.

C. TASK: SOFT-FIELD TAKEOFF AND CLIMB REFERENCES: FAA-H-8083-3; POH/AFM.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to a soft-field takeoff and climb.
2. Positions the flight controls for existing conditions and to maximize lift as quickly as possible.
3. Clears the area; taxies onto t.o.surface at speed consistent w/safety without stopping while advancing the throttle smoothly to t.o. power.
4. Establishes and maintains a pitch attitude that will transfer the weight of the airplane from the wheels to the wings as rapidly as possible.
5. Lifts off at the lowest possible airspeed and remains in ground effect while accelerating to VX or VY, as appropriate.
6. Establishes a pitch attitude for VX or VY, as appropriate, and maintains selected airspeed ± 5 knots, during the climb.
7. Retracts the landing gear, if appropriate and flaps after clear of any obstacles or as recommended by the manufacturer.
8. Maintains takeoff power and VX or VY ± 5 knots to a safe maneuvering altitude.
9. Maintains directional control and proper wind-drift correction throughout the takeoff and climb.
10. Completes appropriate checklist.

D. TASK: SOFT-FIELD APPROACH AND LANDING REFERENCES: FAA-H-8083-3; POH/AFM.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to a soft-field approach and landing.
2. Considers the wind conditions, landing surface, and obstructions, and selects the most suitable touchdown area.
3. Establishes the recommended approach and landing configuration and airspeed; adjusts pitch attitude and power as required.
4. Maintains a stabilized approach and recommended airspeed, or in its absence, not more than 1.3 VSO, ± 5 knots, with wind gust factor applied.
5. Makes smooth, timely, and correct control application during the roundout and touchdown.
6. Touches down softly, with no drift, and with the airplane's longitudinal axis aligned with the runway/landing path.
7. Maintains crosswind correction and directional control throughout the approach and landing sequence.
8. Maintains proper position of the flight controls and sufficient speed to taxi on the soft surface.
9. Completes appropriate checklist.

E. TASK: SHORT-FIELD TAKEOFF AND MAXIMUM PERFORMANCE CLIMB REFERENCES: FAA-H-8083-3; POH/AFM.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to a short-field (confined area ASES) takeoff and maximum performance climb.
2. Positions the flight controls for the existing wind conditions, sets flaps as recommended.
3. Clears the area; taxies into takeoff position utilizing maximum available takeoff area and aligns the airplane on the runway center/takeoff path.
5. Applies brakes (if appropriate) while advancing the throttle smoothly to takeoff power.
7. Lifts off at the recommended airspeed, and accelerates to recommended obstacle clearance airspeed, or VX.
8. Establishes a pitch attitude that will maintain the recommended obstacle clearance airspeed, or VX, ± 5 knots, until the obstacle is cleared, or until the airplane is 50 feet above the surface.
9. After clearing the obstacle, establishes the pitch attitude for VY, accelerates to VY, and maintains VY, ± 5 knots, during the climb.
10. Retracts the landing gear, if appropriate and flaps after clear of any obstacles or as recommended by manufacturer.
11. Maintains takeoff power and VY ± 5 knots to a safe maneuvering altitude.
12. Maintains directional control and proper wind-drift correction throughout the takeoff and climb.
13. Completes appropriate checklist.

F. TASK: SHORT-FIELD APPROACH AND LANDING REFERENCES: FAA-H-8083-3; POH/AFM.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to a short-field(confined area ASES) approach and landing.
3. Considers the wind conditions, landing surface, obstructions, and selects the most suitable touchdown point.
4. Establishes the recommended approach and landing configuration and airspeed; adjusts pitch attitude and power.
5. Maintains a stabilized approach and recommended approach airspeed, or in its absence, not more than 1.3 VSO, ± 5 knots, with wind gust factor applied.
6. Makes smooth, timely, and correct control application during the roundout and touchdown.
8. Touches down smoothly at minimum control airspeed (ASEL).
9. Touches down at or within 100 feet (30 meters) beyond a specified point, with no side drift, minimum float and with the airplane's longitudinal axis aligned with and over the runway center/landing path.
10. Maintains crosswind correction and directional control throughout the approach and landing sequence.
11. Applies brakes as necessary to stop in the shortest distance consistent with safety.
12. Completes appropriate checklist.

K. TASK: POWER-OFF 180° ACCURACY APPROACH AND LANDING REFERENCE: FAA-H-8083-3.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to a power-off 180° accuracy approach and landing.
2. Considers the wind conditions, landing surface, obstructions, and selects an appropriate touchdown point.
3. Positions airplane on downwind leg, parallel to landing runway, and not more than 1000 feet AGL.
4. Abeam the specified touchdown point, closes throttle and establishes appropriate glide speed.
5. Completes final airplane configuration.
6. Touches down in a normal landing attitude, at or within 200 feet beyond the specified touchdown point.
7. Completes the appropriate checklist.

L. TASK: **GO-AROUND/REJECTED LANDING** REFERENCES: FAA-H-8083-3; POH/AFM.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to a goaround/rejected landing.
2. Makes a timely decision to discontinue the approach to landing.
3. Applies takeoff power immediately and transitions to climb pitch attitude for VY, and maintains VY ± 5 knots.
4. Retracts flaps as appropriate.
5. Retracts the landing gear if appropriate after a positive rate of climb is established.
6. Maneuvers to the side of runway/landing area to clear and avoid conflicting traffic.
7. Maintains takeoff power and VY ± 5 knots to a safe maneuvering altitude.
8. Maintains directional control and proper wind-drift correction throughout the climb.
9. Completes the appropriate checklist.

V. AREA OF OPERATION: PERFORMANCE MANEUVERS

NOTE: The examiner shall at least select either TASK A or B, and either C or D.

A. TASK: **STEEP TURNS** REFERENCES: FAA-H-8083-3; POH/AFM.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to steep turns.
2. Establishes the manufacturer's recommended airspeed or if one is not stated, a safe airspeed not to exceed VA.
3. Rolls into a coordinated 360° steep turn with at least a 50° bank, followed by a 360° steep turn in the opposite direction.
4. Divides attention between airplane control and orientation.
5. Maintains the entry altitude, ± 100 feet (30 meters), airspeed, ± 10 knots, bank, $\pm 5^\circ$; and rolls out on the entry heading, $\pm 10^\circ$.

B. TASK: **STEEP SPIRAL** REFERENCE: FAA-H-8083-3.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to a steep spiral.
2. Selects an altitude sufficient to continue through a series of at least three 360° turns.
3. Selects a suitable ground reference point.
4. Applies wind-drift correction to track a constant radius circle around selected reference point with bank not to exceed 60° at steepest point in turn.
5. Divides attention between airplane control and ground track, while maintaining coordinated flight.
6. Maintains the specified airspeed, ± 10 knots, rolls out toward object or specified heading, $\pm 10^\circ$.

C. TASK: **CHANDELLES** REFERENCE: FAA-H-8083-3.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to chandelles.
2. Selects an altitude that will allow the maneuver to be performed no lower than 1,500 feet AGL (460 meters).
3. Establishes the recommended entry configuration, power, and airspeed.
4. Establishes the angle of bank at approximately 30°.
5. Simultaneously applies power and pitch to maintain a smooth, coordinated climbing turn to the 90° point, with a constant bank.
6. Begins a coordinated constant rate rollout from the 90° point to the 180° point maintaining power and a constant pitch attitude.
7. Completes rollout at the 180° point, $\pm 10^\circ$ just above a stall airspeed, and maintaining that airspeed momentarily avoiding a stall.
8. Resumes straight and level flight with minimum loss of altitude.

D. TASK: **LAZY EIGHTS** REFERENCE: FAA-H-8083-3.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to lazy eights.
2. Selects an altitude that will allow the task to be performed no lower than 1,500 feet AGL (460 meters).
3. Establishes the recommended entry configuration, power, and airspeed.
4. Maintains coordinated flight throughout the maneuver.
5. Achieves the following throughout the maneuver—
 - a. approximately 30° bank at the steepest point.
 - b. constant change of pitch and roll rate.
 - c. altitude tolerance at 180° points, ± 100 feet (30 meters) from entry altitude.
 - d. airspeed tolerance at the 180° point plus $\pm 10^\circ$ knots from entry airspeed.
 - e. heading tolerance at the 180° point $\pm 10^\circ$.
6. Continues the maneuver through the number of symmetrical loops specified and resumes straight and level flight.

VI. AREA OF OPERATION: GROUND REFERENCE MANEUVER

TASK: **EIGHTS ON PYLONS** REFERENCE: FAA-H-8083-3.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to eights on pylons.
2. Determines the approximate pivotal altitude.
3. Selects suitable pylons that will permit straight and level flight, between the pylons.
4. Enters the maneuver at the appropriate altitude and airspeed and at a bank angle of approximately 30° to 40° at the steepest point.
5. Applies the necessary corrections so that the line-of-sight reference line remains on the pylon.
6. Divides attention between accurate coordinated airplane control and outside visual references.
7. Holds pylon using appropriate pivotal altitude avoiding slips and skids.

VII. AREA OF OPERATION: NAVIGATION

A. TASK: **PILOTAGE AND DEAD RECKONING** REFERENCE: AC 61-23/FAA-H-8083-25.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to pilotage and dead reckoning.
2. Follows the preplanned course by reference to landmarks.
3. Identifies landmarks by relating surface features to chart symbols.
4. Navigates by means of precomputed headings, groundspeed, and elapsed time.
5. Corrects for and records differences between preflight groundspeed and heading calculations and those determined enroute.
6. Verifies the airplane's position within two (2) nautical miles of flight planned route.
7. Arrives at the en route checkpoints within three (3) minutes of the initial or revised ETA and provides a destination estimate.
8. Maintains appropriate altitude, ± 100 feet (30 meters), and headings, $\pm 10^\circ$.

B. TASK: **NAVIGATION SYSTEMS AND RADAR SERVICES** REFERENCES: FAA-H-8083-3, AC 61-23/FAA-H-8083-25; Navigation Equipment Operation Manuals, AIM.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to navigation systems and radar services.
2. Demonstrates the ability to use an airborne electronic navigation system.
3. Locates the airplane's position using the navigation system.
4. Intercepts and tracks a given course, radial, or bearing as appropriate.
5. Recognizes and describes the indication of station passage if appropriate.
6. Recognizes signal loss and takes appropriate action.
7. Uses proper communication procedures when utilizing radar services.
8. Maintains the appropriate altitude, ± 100 feet and heading, $\pm 10^\circ$.

C. TASK: **DIVERSION** REFERENCES: FAA-H-8083-25; AIM

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to diversion.
2. Selects an appropriate alternate airport and route.
3. Makes an accurate estimate of heading, groundspeed, arrival time, and fuel consumption to the alternate airport.
4. Maintains the appropriate altitude, ± 100 feet (30 meters), and heading, $\pm 10^\circ$.

D. TASK: **LOST PROCEDURES** REFERENCES: FAA-H-8083-25; AIM.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to lost procedures.
2. Selects an appropriate course of action.
3. Maintains an appropriate heading and climbs, if necessary.
4. Identifies prominent landmarks.
5. Uses navigation systems/facilities and/or contacts an ATC facility for assistance as appropriate.

VIII. AREA OF OPERATION: SLOW FLIGHT AND STALLS

A. TASK: **MANEUVERING DURING SLOW FLIGHT** REFERENCES: FAA-H-8083-3; POH/AFM.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to maneuvering during slow flight.
2. Selects an entry altitude that will allow the task to be completed no lower than 1,500 feet (460 meters) AGL.
3. Establishes and maintains an airspeed at which any further increase in angle of attack, increase in load factor, or reduction in power, would result in an immediate stall.
4. Accomplishes coordinated straight-and-level flight, turns, climbs, and descents with landing gear and flap configurations specified by the examiner.
5. Divides attention between airplane control and orientation.
6. Maintains the specified altitude, ± 50 feet (15 meters); specified heading, $\pm 10^\circ$; airspeed $+5/-0$ knots, and specified angle of bank, $\pm 5^\circ$.

B. TASK: POWER-OFF STALLS REFERENCES: FAA-H-8083-3, AC 61-67; POH/AFM.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to power-off stalls.
2. Selects an entry altitude that allows the task to be completed no lower than 1,500 feet (460 meters) AGL.
3. Establishes a stabilized descent in the approach or landing configuration, as specified by the examiner.
4. Transitions smoothly from the approach or landing attitude to a pitch attitude that will induce a stall.
5. Maintains a specified heading, $\pm 10^\circ$ in straight flight; maintains a specified angle of bank, not to exceed 20° , $\pm 5^\circ$, in turning flight while inducing the stall.
6. Recognizes and recovers promptly as the stall occurs by simultaneously reducing the angle of attack, increasing power to maximum allowable and leveling the wings to return to a straight and- level flight attitude with a minimum loss of altitude appropriate for the airplane.
7. Retracts the flaps to the recommended setting, retracts the landing gear if retractable after a positive rate of climb is established.
8. Accelerates to VX or VY speed before the final flap retraction; returns to the altitude, heading, and airspeed specified by the examiner.

C. TASK: POWER-ON STALLS REFERENCES: FAA-H-8083-3, AC 61-67; POH/AFM.

NOTE: In some high performance airplanes, the power setting may have to be reduced below the practical test standards guideline power setting to prevent excessively high pitch attitudes (greater than 30° nose up).

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to power-on stalls.
2. Selects an entry altitude that allows the task to be completed no lower than 1,500 feet (460 meters) AGL.
3. Establishes the takeoff or departure configuration. Sets power to no less than 65 percent available power.
4. Transitions smoothly from the takeoff or departure attitude to a pitch attitude that will induce a stall.
5. Maintains a specified heading $\pm 5^\circ$, in straight flight; maintains a specified angle of bank, not to exceed a 20° , $\pm 10^\circ$, in turning flight, while inducing the stall.
6. Recognizes and recovers promptly as the stall occurs by simultaneously reducing the angle of attack, increasing power to maximum allowable, and leveling the wings to return to a straight and- level flight attitude, with a minimum loss of altitude appropriate for the airplane.
7. Retracts flaps to the recommended setting, retracts the landing gear if retractable, after a positive rate of climb is established.
8. Accelerates to VX or VY speed before the final flap retraction; returns to the altitude, heading, and airspeed specified by the examiner.

D. TASK: SPIN AWARENESS REFERENCES: FAA-H-8083-3, AC 61-67; POH/AFM.

Objective. To determine that the applicant exhibits knowledge of the elements related to spin awareness by explaining:

1. Aerodynamic factors related to spins.
2. Flight situations where unintentional spins may occur.
3. Procedures for recovery from unintentional spins.

IX. AREA OF OPERATION: EMERGENCY OPERATIONS

A. TASK: EMERGENCY APPROACH AND LANDING (SIMULATED) REFERENCES: FAA-H-8083-3; POH/AFM.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to emergency approach and landing procedures.
2. Analyzes the situation and selects an appropriate course of action.
3. Establishes and maintains the recommended best glide airspeed, ± 10 knots.
4. Selects a suitable landing area.
5. Plans and follows a flight pattern to the selected landing area considering altitude, wind, terrain, and obstructions.
6. Prepares for landing, or go-around, as specified by the examiner.
7. Follows the appropriate checklist.

B. TASK: SYSTEMS AND EQUIPMENT MALFUNCTIONS REFERENCES: FAA-H-8083-3; POH/AFM.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to systems and equipment malfunctions appropriate to the airplane provided for the practical test.
2. Analyzes the situation and takes appropriate action for simulated emergencies appropriate to the airplane provided for the practical test for **at least five (5) of the following**:
 - a. partial or complete power loss.
 - b. engine roughness or overheat.
 - c. carburetor or induction icing.
 - d. loss of oil pressure.
 - e. fuel starvation.
 - f. electrical malfunction.
 - g. vacuum/pressure, and associated flight instruments malfunction.
 - h. pitot/static.
 - i. landing gear or flap malfunction.
 - j. inoperative trim.
 - k. inadvertent door or window opening.
 - l. structural icing.
 - m. smoke/fire/engine compartment fire.
 - n. any other emergency appropriate to the airplane.
3. Follows the appropriate checklist or procedure.

C. TASK: EMERGENCY EQUIPMENT AND SURVIVAL GEAR REFERENCES: FAA-H-8083-3; POH/AFM.

Objective. To determine that the applicant:

Exhibits knowledge of the elements related to emergency equipment and survival gear appropriate to the airplane and environment encountered during flight. Identifies appropriate equipment that should be aboard the airplane.

XI. AREA OF OPERATION: POSTFLIGHT PROCEDURES

NOTE: The examiner shall select TASK A

A. TASK: **AFTER LANDING, PARKING, AND SECURING** REFERENCES: FAA-H-8083-3; POH/AFM.

Objective. To determine that the applicant:

1. Exhibits knowledge of the elements related to after landing, parking and securing procedures.
2. Maintains directional control after touchdown while decelerating to an appropriate speed.
3. Observes runway hold lines and other surface control markings and lighting.
4. Parks in an appropriate area, considering the safety of nearby persons and property.
5. Follows the appropriate procedure for engine shutdown.
6. Completes the appropriate checklist.
7. Conducts an appropriate postflight inspection and secures the aircraft.

Sequence of Tasks

- Preflight Inspection
- Cockpit Management
- Engine Starting
- Taxiing
- Normal T.O
- Depart on XC; Photo Mission, G/S, ETA
- Slow Flight
- Power off Stall
- Power on Stall
- Steep turns **or**
- Steep Spiral

- Lazy 8's **or**
- Chandelle
- 8's on Pylons
- Engine Failure (not below 500')
- Lost
- Diversion to home– Radio Nav
- Short Field Landing, T.O
- Soft Field Landing, T.O.
- Power Off 180° Landing
- Go-Around
- Normal Landing

POST – FLIGHT

1. General

- Reaffirm outcome
 - Allow applicant some time to self
 - Prepare temporary cert./disapproval notice/letter of discontinuance
 - Offer to sign applicant's logbook
- #### 2. Temporary Airman Certificate
- Establish a positive atmosphere
 - Highlight above average performance
 - Debrief using the plan of action
 - Have applicant review and sign temporary airman certificate
 - Examiner signs and issues temporary airman certificate
 - Advise of duration - 120 days
 - Ensure applicant has proper documents
 - Verify that you have the proper documents

- Brief flight instructor of applicant's performance
- #### 3. Disapproval Notice
- Establish a positive atmosphere
 - Highlight above average performance as well as deficient tasks
 - Debrief using the plan of action
 - Use PTS to explain reasons for disapproval
 - Do not criticize the flight instructor
 - Be alert for Denial, Anger, Bargaining, or Depression
 - Issue disapproval notice
 - Advise re-test credit for satisfactorily completed items is 60 days
 - Ensure applicant has proper documents
 - Verify that you have the proper documents
 - Brief flight instructor of applicant's performance

I. PREFLIGHT PREPARATION

- A. Certificates and Documents
- B. Airworthiness Requirements
- C. Weather Information
- D. Cross-Country Flight Planning
- E. National Airspace System
- F. Performance and Limitations
- G. Operation of Systems
- J. Aeromedical Factors

II. PREFLIGHT PROCEDURES

- A. Preflight Inspection
- B. Cockpit Management
- C. Engine Starting
- D. Taxiing
- F. Before Takeoff Check

III. AIRPORT AND SEAPLANE BASE OPERATIONS

- A. Radio Communications and ATC Light Signals
- B. Traffic Patterns
- C. Airport/Seaplane Base, Runway, and Taxiway Signs, Markings, and Lighting

IV. TAKEOFFS, LANDINGS, AND GO-AROUNDS

- A. Normal and Crosswind Takeoff and Climb
- B. Normal and Crosswind Approach and Landing
- C. Soft-Field Takeoff and Climb
- D. Soft-Field Approach and Landing
- E. Short-Field Takeoff and Maximum Performance Climb
- F. Short-Field Approach and Landing

- K. Power-Off 180° Accuracy Approach and Landing

- L. Go-Around/Rejected Landing

V. PERFORMANCE MANEUVERS

- A. Steep Turns
- B. Steep Spiral
- C. Chandelles
- D. Lazy Eights

VI. GROUND REFERENCE MANEUVER

- Eights on Pylons

VII. NAVIGATION

- A. Pilotage and Dead Reckoning
- B. Navigation Systems and Radar Services
- C. Diversion
- D. Lost Procedures

VIII. SLOW FLIGHT AND STALLS

- A. Maneuvering During Slow Flight
- B. Power-Off Stalls
- C. Power-On Stalls
- D. Spin Awareness

IX. EMERGENCY OPERATIONS

- A. Emergency Approach and Landing (Simulated)
- B. Systems and Equipment Malfunctions
- C. Emergency Equipment and Survival Gear

X. HIGH ALTITUDE OPERATIONS

- A. Supplemental Oxygen
- B. Pressurization

XI. POSTFLIGHT PROCEDURES

- A. After Landing, Parking, and Securing