

I. Preflight Preparation

Task	A. Pilot Qualifications
References	14 CFR parts 61, 68, 91; AC 68-1; FAA-H-8083-2, FAA-H-8083-25
Objective	To determine that the applicant exhibits satisfactory knowledge, risk management, and skills associated with operating as pilot-in-command (PIC) as a commercial pilot.
Knowledge	The applicant demonstrates understanding of:
CA.I.A.K1	Certification requirements, recent flight experience, and recordkeeping.
CA.I.A.K2	Privileges and limitations.
CA.I.A.K3	Medical certificates: class, expiration, privileges, temporary disqualifications.
CA.I.A.K4	Documents required to exercise commercial pilot privileges.
CA.I.A.K5	Part 68 BasicMed privileges and limitations.
Risk Management	The applicant demonstrates the ability to identify, assess and mitigate risks, encompassing:
CA.I.A.R1	Failure to distinguish proficiency versus currency.
CA.I.A.R2	Flying unfamiliar airplanes, or operating with unfamiliar flight display systems, and avionics.
Skills	The applicant demonstrates the ability to:
CA.I.A.S1	Apply requirements to act as PIC under Visual Flight Rules (VFR) in a scenario given by the evaluator.

Task	B. Airworthiness Requirements
References	14 CFR parts 39, 43, 91; FAA-H-8083-2, FAA-H-8083-25
Objective	To determine that the applicant exhibits satisfactory knowledge, risk management, and skills associated with airworthiness requirements, including airplane certificates.
Knowledge	The applicant demonstrates understanding of:
CA.I.B.K1	General airworthiness requirements and compliance for airplanes, including:
CA.I.B.K1a	a. Certificate location and expiration dates
CA.I.B.K1b	b. Required inspections and airplane logbook documentation
CA.I.B.K1c	c. Airworthiness Directives and Special Airworthiness Information Bulletins
CA.I.B.K1d	d. Purpose and procedure for obtaining a special flight permit
CA.I.B.K2	Pilot-performed preventive maintenance.
CA.I.B.K3	Equipment requirements for day and night VFR flight, to include:
CA.I.B.K3a	a. Flying with inoperative equipment
CA.I.B.K3b	b. Using an approved Minimum Equipment List (MEL)
CA.I.B.K3c	c. Kinds of Operation Equipment List (KOEL)
CA.I.B.K3d	d. Required discrepancy records or placards
Risk Management	The applicant demonstrates the ability to identify, assess and mitigate risks, encompassing:
CA.I.B.R1	Inoperative equipment discovered prior to flight.
Skills	The applicant demonstrates the ability to:
CA.I.B.S1	Locate and describe airplane airworthiness and registration information.
CA.I.B.S2	Determine the airplane is airworthy in a scenario given by the evaluator.
CA.I.B.S3	Apply appropriate procedures for operating with inoperative equipment in a scenario given by the evaluator.

Task	C. Weather Information
References	14 CFR part 91; FAA-H-8083-25; AC 00-6, AC 00-45, AC 00-54; AIM
Objective	To determine that the applicant exhibits satisfactory knowledge, risk management, and skills associated with weather information for a flight under VFR.
Knowledge	The applicant demonstrates understanding of:
CA.I.C.K1	Sources of weather data (e.g., National Weather Service, Flight Service) for flight planning purposes.
CA.I.C.K2	Acceptable weather products and resources required for preflight planning, current and forecast weather for departure, en route, and arrival phases of flight.
CA.I.C.K3	Meteorology applicable to the departure, en route, alternate, and destination under VFR in Visual Meteorological Conditions (VMC) to include expected climate and hazardous conditions such as:
CA.I.C.K3a	a. Atmospheric composition and stability
CA.I.C.K3b	b. Wind (e.g., crosswind, tailwind, windshear, mountain wave, etc.)
CA.I.C.K3c	c. Temperature
CA.I.C.K3d	d. Moisture/precipitation
CA.I.C.K3e	e. Weather system formation, including air masses and fronts
CA.I.C.K3f	f. Clouds
CA.I.C.K3g	g. Turbulence
CA.I.C.K3h	h. Thunderstorms and microbursts
CA.I.C.K3i	i. Icing and freezing level information
CA.I.C.K3j	j. Fog/mist
CA.I.C.K3k	k. Frost
CA.I.C.K3l	l. Obstructions to visibility (e.g., smoke, haze, volcanic ash, etc.)
Risk Management	The applicant demonstrates the ability to identify, assess and mitigate risks, encompassing:
CA.I.C.R1	Factors involved in making the go/no-go and continue/divert decisions, to include:
CA.I.C.R1a	a. Circumstances that would make diversion prudent
CA.I.C.R1b	b. Personal weather minimums
CA.I.C.R1c	c. Hazardous weather conditions to include known or forecast icing or turbulence aloft
CA.I.C.R2	Limitations of:
CA.I.C.R2a	a. Onboard weather equipment
CA.I.C.R2b	b. Aviation weather reports and forecasts
CA.I.C.R2c	c. Inflight weather resources
Skills	The applicant demonstrates the ability to:
CA.I.C.S1	Use available aviation weather resources to obtain an adequate weather briefing.
CA.I.C.S2	Analyze the implications of at least three of the conditions listed in K3a through K3l above, using actual weather or weather conditions in a scenario provided by the evaluator.
CA.I.C.S3	Correlate weather information to make a competent go/no-go decision.

Task	D. Cross-Country Flight Planning
References	14 CFR part 91; FAA-H-8083-2, FAA-H-8083-25; Navigation Charts; Chart Supplements; AIM; NOTAMs
Objective	To determine that the applicant exhibits satisfactory knowledge, risk management, and skills associated with cross-country flights and VFR flight planning.
Knowledge	The applicant demonstrates understanding of:
CA.I.D.K1	Route planning, including consideration of different classes and special use airspace (SUA) and selection of appropriate and available navigation/communication systems and facilities.
CA.I.D.K2	Altitude selection accounting for terrain and obstacles, glide distance of the airplane, VFR cruising altitudes, and the effect of wind.
CA.I.D.K3	Calculating:
CA.I.D.K3a	a. Time, climb and descent rates, course, distance, heading, true airspeed, and groundspeed
CA.I.D.K3b	b. Estimated time of arrival to include conversion to universal coordinated time (UTC)
CA.I.D.K3c	c. Fuel requirements, to include reserve
CA.I.D.K4	Elements of a VFR flight plan.
CA.I.D.K5	Procedures for activating and closing a VFR flight plan.
Risk Management	The applicant demonstrates the ability to identify, assess and mitigate risks, encompassing:
CA.I.D.R1	Pilot.
CA.I.D.R2	Aircraft.
CA.I.D.R3	Environment (e.g., weather, airports, airspace, terrain, obstacles).
CA.I.D.R4	External pressures.
CA.I.D.R5	Limitations of air traffic control (ATC) services.
CA.I.D.R6	Improper fuel planning.
Skills	The applicant demonstrates the ability to:
CA.I.D.S1	Prepare, present, and explain a cross-country flight plan assigned by the evaluator including a risk analysis based on real-time weather, to the first fuel stop.
CA.I.D.S2	Apply pertinent information from appropriate and current aeronautical charts, Chart Supplements; NOTAMs relative to airport, runway and taxiway closures; and other flight publications.
CA.I.D.S3	Create a navigation plan and simulate filing a VFR flight plan.
CA.I.D.S4	Recalculate fuel reserves based on a scenario provided by the evaluator.

Task	E. National Airspace System
References	14 CFR parts 71, 91, 93; FAA-H-8083-2; Navigation Charts; AIM
Objective	To determine that the applicant exhibits satisfactory knowledge, risk management, and skills associated with the National Airspace System (NAS) operating under VFR as a commercial pilot.
Knowledge	The applicant demonstrates understanding of:
CA.I.E.K1	Types of airspace/airspace classes and associated requirements and limitations.
CA.I.E.K2	Charting symbology.
CA.I.E.K3	Special use airspace (SUA), special flight rules areas (SFRA), temporary flight restrictions (TFR), and other airspace areas.
Risk Management	The applicant demonstrates the ability to identify, assess and mitigate risks, encompassing:
CA.I.E.R1	Various classes and types of airspace.
Skills	The applicant demonstrates the ability to:
CA.I.E.S1	Identify and comply with the requirements for basic VFR weather minimums and flying in particular classes of airspace.
CA.I.E.S2	Correctly identify airspace and operate in accordance with associated communication and equipment requirements.
CA.I.E.S3	Identify the requirements for operating in SUA or within a TFR. Identify and comply with SATR and SFRA operations, if applicable.

Task	F. Performance and Limitations
References	FAA-H-8083-1, FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-25; POH/AFM
Objective	To determine that the applicant exhibits satisfactory knowledge, risk management, and skills associated with operating an airplane safely within the parameters of its performance capabilities and limitations.
Knowledge	The applicant demonstrates understanding of:
CA.I.F.K1	Elements related to performance and limitations by explaining the use of charts, tables, and data to determine performance.
CA.I.F.K2	Factors affecting performance, to include:
CA.I.F.K2a	a. Atmospheric conditions
CA.I.F.K2b	b. Pilot technique
CA.I.F.K2c	c. Airplane configuration
CA.I.F.K2d	d. Airport environment
CA.I.F.K2e	e. Loading (e.g., center of gravity)
CA.I.F.K2f	f. Weight and balance
CA.I.F.K3	Aerodynamics.
Risk Management	The applicant demonstrates the ability to identify, assess and mitigate risks, encompassing:
CA.I.F.R1	Inaccurate use of manufacturer's performance charts, tables, and data.
CA.I.F.R2	Exceeding airplane limitations.
CA.I.F.R3	Possible differences between calculated performance and actual performance.
Skills	The applicant demonstrates the ability to:
CA.I.F.S1	Compute the weight and balance, correct out-of-center of gravity (CG) loading errors and determine if the weight and balance remains within limits during all phases of flight.
CA.I.F.S2	Utilize the appropriate airplane manufacturer's approved performance charts, tables, and data.

Task	G. Operation of Systems
References	FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-23, FAA-H-8083-25; POH/AFM
Objective	To determine that the applicant exhibits satisfactory knowledge, risk management, and skills associated with the safe operation of systems on the airplane provided for the flight test.
Knowledge	The applicant demonstrates understanding of:
<i>CA.I.G.K1</i>	Airplane systems, to include: Note: <i>If K1 is selected, the evaluator must assess the applicant's knowledge of at least three of the following sub-elements.</i>
<i>CA.I.G.K1a</i>	a. Primary flight controls
<i>CA.I.G.K1b</i>	b. Secondary flight controls
<i>CA.I.G.K1c</i>	c. Powerplant and propeller
<i>CA.I.G.K1d</i>	d. Landing gear
<i>CA.I.G.K1e</i>	e. Fuel, oil, and hydraulic
<i>CA.I.G.K1f</i>	f. Electrical
<i>CA.I.G.K1g</i>	g. Avionics
<i>CA.I.G.K1h</i>	h. Pitot-static, vacuum/pressure, and associated flight instruments
<i>CA.I.G.K1i</i>	i. Environmental
<i>CA.I.G.K1j</i>	j. Deicing and anti-icing
<i>CA.I.G.K1k</i>	k. Water rudders (ASES, AMES)
<i>CA.I.G.K1l</i>	l. Oxygen system
<i>CA.I.G.K2</i>	Indications of and procedures for managing system abnormalities or failures.
Risk Management	The applicant demonstrates the ability to identify, assess and mitigate risks, encompassing:
<i>CA.I.G.R1</i>	Failure to detect system malfunctions or failures.
<i>CA.I.G.R2</i>	Improper management of a system failure.
<i>CA.I.G.R3</i>	Failure to monitor and manage automated systems.
Skills	The applicant demonstrates the ability to:
<i>CA.I.G.S1</i>	Operate at least three of the systems listed in K1a through K1l above, appropriately.
<i>CA.I.G.S2</i>	Use appropriate checklists properly.

Task	H. Human Factors
References	FAA-H-8083-2, FAA-H-8083-25; AIM
Objective	To determine that the applicant exhibits satisfactory knowledge, risk management, and skills associated with personal health, flight physiology, aeromedical, and human factors, as it relates to safety of flight. Note: See Appendix 6: Safety of Flight .
Knowledge	The applicant demonstrates understanding of:
CA.I.H.K1	The symptoms (as applicable), recognition, causes, effects, and corrective actions associated with aeromedical and physiological issues including:
CA.I.H.K1a	a. Hypoxia
CA.I.H.K1b	b. Hyperventilation
CA.I.H.K1c	c. Middle ear and sinus problems
CA.I.H.K1d	d. Spatial disorientation
CA.I.H.K1e	e. Motion sickness
CA.I.H.K1f	f. Carbon monoxide poisoning
CA.I.H.K1g	g. Stress
CA.I.H.K1h	h. Fatigue
CA.I.H.K1i	i. Dehydration and nutrition
CA.I.H.K1j	j. Hypothermia
CA.I.H.K1k	k. Optical illusions
CA.I.H.K1l	l. Dissolved nitrogen in the bloodstream after scuba dives
CA.I.H.K2	Regulations regarding use of alcohol and drugs.
CA.I.H.K3	Effects of alcohol, drugs, and over-the-counter medications.
CA.I.H.K4	Aeronautical Decision-Making (ADM).
Risk Management	The applicant demonstrates the ability to identify, assess and mitigate risks, encompassing:
CA.I.H.R1	Aeromedical and physiological issues.
CA.I.H.R2	Hazardous attitudes.
CA.I.H.R3	Distractions, loss of situational awareness, or improper task management.
Skills	The applicant demonstrates the ability to:
CA.I.H.S1	Associate the symptoms and effects for at least three of the conditions listed in K1a through K1l above with the cause and corrective action.
CA.I.H.S2	Perform self-assessment, including fitness for flight and personal minimums, for actual flight or a scenario given by the evaluator.