



U.S. Department  
of Transportation

**Federal Aviation  
Administration**

**FAA-S-ACS-11  
(with Change 1)**

**Airline Transport Pilot and Type Rating for  
Airplane  
Airman Certification Standards**

**June 2019**

**Flight Standards Service  
Washington, DC 20591**

## I. Preflight Preparation

Task	A. Operation of Systems
References	14 CFR part 61; AC 90-117, AC 91.21-1, AC 91-78, AC 120-76; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-23, FAA-H-8083-25; POH/AFM; Flight Standardization Board (FSB) Report (type specific)
Objective	To determine that the applicant exhibits satisfactory knowledge, risk management, and skills associated with airplane systems and their components; and their normal, abnormal, and emergency procedures.  <b>Note:</b> See <a href="#">Appendix 7: Aircraft, Equipment, and Operational Requirements &amp; Limitations</a> for information related to this Task.
Knowledge	The applicant demonstrates an understanding of:
AA.I.A.K1	<b>Landing gear</b> —extension/retraction system(s), indicators, float devices, brakes, antiskid, tires, nose-wheel steering, and shock absorbers.
AA.I.A.K2	<b>Powerplant</b> —controls and indications, induction system, carburetor and fuel injection, turbocharging, cooling, mounting points, turbine wheels, compressors, deicing, anti-icing, and other related components.
AA.I.A.K3	<b>Propellers</b> —type, controls, feathering/unfeathering, auto-feather, negative torque sensing, synchronizing, synchrophasing, and thrust reverse including uncommanded reverse procedures.
AA.I.A.K4	<b>Fuel system</b> —capacity, drains, pumps, controls, indicators, cross-feeding, transferring, jettison, fuel grade, color and additives, fueling and defueling procedures, and fuel substitutions.
AA.I.A.K5	<b>Oil system</b> —capacity, allowable types of oil, quantities, and indicators.
AA.I.A.K6	<b>Hydraulic system</b> —capacity, pumps, pressure, reservoirs, allowable types of fluid, and regulators.
AA.I.A.K7	<b>Electrical system</b> —alternators, generators, batteries, circuit breakers and protection devices, controls, indicators, and external and auxiliary power sources and ratings.
AA.I.A.K8	<b>Pneumatic and environmental systems</b> —heating, cooling, ventilation, oxygen, pressurization, supply for ice protection systems, controls, indicators, and regulating devices.
AA.I.A.K9	<b>Avionics and communications</b> —autopilot, flight director, Electronic Flight Instrument Systems (EFIS), Flight Management System (FMS), Electronic Flight Bag (EFB), Radar, Inertial Navigation Systems (INS), Global Navigation Satellite System (GNSS), Space-Based Augmentation System (SBAS), Ground-Based Augmentation System (GBAS), ground-based navigation systems and components, transponder, Automatic Dependent Surveillance – Broadcast (ADS-B) In and Out, ADS – Contract (ADS-C), traffic awareness/warning/avoidance systems, terrain awareness/warning/alert systems, communication systems (e.g., data link, UHF/VHF/HF, satellite), Controller Pilot Data Link Communication (CPDLC), indicating devices, and emergency locator transmitter.
AA.I.A.K10	<b>Ice protection</b> —anti-ice, de-ice, pitot-static system protection, turbine inlet, propeller, windshield, airfoil surfaces, and other related components.
AA.I.A.K11	<b>Crewmember and passenger equipment</b> —oxygen system, survival gear, emergency exits, evacuation procedures and crew duties, quick donning oxygen mask for crewmembers, passenger oxygen system.
AA.I.A.K12	<b>Flight controls</b> —ailerons, elevator(s), rudder(s), control tabs, control boost/augmentation systems, flaps, spoilers, leading edge devices, speed brakes, stability augmentation system (e.g., yaw damper), and trim systems.
AA.I.A.K13	<b>Pitot-static system</b> with associated instruments and the power source for those flight instruments. Operation and power sources for other flight instruments.
AA.I.A.K14	<b>Fire &amp; smoke detection, protection, and suppression</b> —powerplant, cargo and passenger compartments, lavatory, pneumatic and environmental, electrical/avionics, and batteries (on-aircraft and personal electronic devices).
AA.I.A.K15	<b>Envelope protection</b> —angle of attack warning and protection and speed protection.

## I. Preflight Preparation

<b>Task</b>	<b>A. Operation of Systems</b>
AA.I.A.K16	The contents of the POH or AFM with regard to the systems and components in the airplane.
AA.I.A.K17	How to use a Minimum Equipment List (MEL) and a Configuration Deviation List (CDL).
<b>Risk Management</b>	The applicant demonstrates the ability to identify, assess, and mitigate risks, encompassing:
AA.I.A.R1	Failure to detect system malfunctions or failures.
AA.I.A.R2	Improper management of a system failure.
AA.I.A.R3	Failure to monitor and manage automated systems.
AA.I.A.R4	Failure to follow appropriate checklists or procedures.
<b>Skills</b>	For the airplane provided for the practical test, the applicant demonstrates the ability to:
AA.I.A.S1	Explain and describe the operation of the airplane systems and components using correct terminology.
AA.I.A.S2	Recall immediate action items or memory items, if appropriate.
AA.I.A.S3	Identify system or component limitations listed in the POH/AFM.
AA.I.A.S4	Demonstrate or describe, as appropriate, the process for deferring inoperative equipment (e.g., MEL) and using a CDL.
AA.I.A.S5	Comply with operations specifications, management specifications, and letters of authorization, if applicable.
AA.I.A.S6	Through the use of the appropriate checklists and normal and abnormal procedures, demonstrate the proper use of the airplane systems, subsystems, and devices, as determined by the evaluator.

## I. Preflight Preparation

Task	<b>B. Performance and Limitations</b>
<b>References</b>	14 CFR parts 1, 61, and 91; AC 20-117, AC 61-138, AC 91-74, AC 91-79, AC 120-27, AC 120-58, AC 120-60, AC 135-17; FAA-H-8083-1, FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-23, FAA-H-8083-25; SAFO 19001; Chart Supplements; POH/AFM; AIM
<b>Objective</b>	To determine that the applicant exhibits satisfactory knowledge, risk management, and skills associated with operating an aircraft safely within its operating envelope. <b>Note:</b> See <a href="#">Appendix 7: Aircraft, Equipment, and Operational Requirements &amp; Limitations</a> for information related to this Task.
<b>Knowledge</b>	The applicant demonstrates understanding of:
AA.I.B.K1	Elements related to performance and limitations by explaining the use of charts, tables, and data to determine performance.
AA.I.B.K2	How to determine the following, as applicable to the class sought:
AA.I.B.K2a	a. Accelerate-stop / accelerate-go distance
AA.I.B.K2b	b. Takeoff performance (e.g., balance field length, $V_{MCG}$ )
AA.I.B.K2c	c. Climb performance
AA.I.B.K2d	d. Cruise performance (e.g., optimum and maximum operating altitudes)
AA.I.B.K2e	e. Descent performance
AA.I.B.K2f	f. Landing performance
AA.I.B.K2g	g. Performance with an inoperative powerplant for all phases of flight (AMEL, AMES)
AA.I.B.K2h	h. Weight and balance and how to shift weight
AA.I.B.K3	Factors affecting performance, to include:
AA.I.B.K3a	a. Atmospheric conditions
AA.I.B.K3b	b. Pilot technique
AA.I.B.K3c	c. Aircraft configuration (e.g., flap setting)
AA.I.B.K3d	d. Airport environment (e.g., runway condition, land and hold short operations (LAHSO))
AA.I.B.K3e	e. Loading (e.g., center of gravity)
AA.I.B.K3f	f. Weight and balance
AA.I.B.K4	Aerodynamics and how it relates to performance.
AA.I.B.K5	Adverse effects of exceeding an airplane limitation or the airplane operating envelope.
AA.I.B.K6	Effects of icing on performance.
AA.I.B.K7	Clean wing concept; deicing and anti-icing procedures to include use of appropriate de-ice fluid, hold-over tables, calculating hold-over times, and pre-takeoff contamination checks.
AA.I.B.K8	Air carrier weight and balance systems (e.g., average weight program). (ATP AMEL, AMES)
AA.I.B.K9	Runway assessment and condition reporting and use of the Runway Condition Assessment Matrix (RCAM). (ATP AMEL, AMES)
<b>Risk Management</b>	The applicant demonstrates the ability to identify, assess, and mitigate risks, encompassing:
AA.I.B.R1	Inaccurate use of performance charts, tables, and data.
AA.I.B.R2	Exceeding airplane limitations.
AA.I.B.R3	Possible differences between calculated performance and actual performance.
AA.I.B.R4	Airplane icing and its effect on performance and stall warning.
AA.I.B.R5	Runway excursions.
<b>Skills</b>	For the airplane provided for the practical test, the applicant demonstrates the ability to:
AA.I.B.S1	Describe the airspeeds used during specific phases of flight.
AA.I.B.S2	Describe the effects of meteorological conditions on performance for any phase of flight and correctly apply these factors to a specific chart, table, graph, or other performance data.
AA.I.B.S3	Describe the procedures for wing contamination recognition and any de-ice/anti-ice procedures prior to takeoff.

## I. Preflight Preparation

Task	<b>B. Performance and Limitations</b>
AA.I.B.S4	Explain the adverse effects of airframe icing during all phases of flight. Describe any operating limitations for flight in icing conditions. If equipped, describe the procedures for de-icing and anti-icing system use and their effects on performance.
AA.I.B.S5	Compute weight and balance, including practical techniques to resolve out-of-limits calculations for a representative scenario, as specified by the evaluator.
AA.I.B.S6	Determine the computed center-of-gravity is within the acceptable limits and the lateral fuel balance is within limits for takeoff and landing.
AA.I.B.S7	Demonstrate proficient use of appropriate performance charts, tables, graphs, or other data to determine airplane performance and limitations for all phases of flight.

## I. Preflight Preparation

Task	<b>C. Weather Information (ATP)</b>
<b>References</b>	14 CFR parts 61 and 91; AC 00-6, AC 00-30, AC 00-45, AC 00-54, AC 61-107, AC 61-138, AC 91-74; FAA-H-8083-16, FAA-H-8083-25; AIM
<b>Objective</b>	To determine that the applicant exhibits satisfactory knowledge, risk management, and skills associated with obtaining, understanding, and applying weather information for a flight under IFR. <b>Note:</b> See <a href="#">Appendix 7: Aircraft, Equipment, and Operational Requirements &amp; Limitations</a> for information related to this Task.
<b>Knowledge</b>	The applicant demonstrates understanding of:
AA.I.C.K1	Sources of weather data (e.g., National Weather Service, Flight Service) for flight planning purposes.
AA.I.C.K2	Acceptable weather products and resources utilized for preflight planning, current and forecast weather for departure and en route operations and arrival phases of flight.
AA.I.C.K3	Meteorology applicable to the departure, en route, alternate, and destination for flights conducted under Instrument Flight Rules (IFR) to include expected climate and hazardous conditions such as: <b>Note:</b> If K3 is selected, the evaluator must assess the applicant's knowledge of at least three of the following sub-elements.
AA.I.C.K3a	a. Atmospheric composition and stability
AA.I.C.K3b	b. Wind (e.g., crosswind, tailwind, windshear, mountain wave, etc.)
AA.I.C.K3c	c. Temperature
AA.I.C.K3d	d. Moisture/precipitation
AA.I.C.K3e	e. Weather system formation, including air masses and fronts
AA.I.C.K3f	f. Clouds
AA.I.C.K3g	g. Turbulence
AA.I.C.K3h	h. Thunderstorms and microbursts
AA.I.C.K3i	i. Icing and freezing level information
AA.I.C.K3j	j. Fog/mist
AA.I.C.K3k	k. Frost
AA.I.C.K3l	l. Obstructions to visibility (e.g., smoke, haze, volcanic ash, etc.)
AA.I.C.K4	Flight deck displays of digital weather and aeronautical information, their use to navigate around weather, and equipment limitations.
AA.I.C.K5	Low-visibility operations (e.g., surface movement, category II and III approaches). (ATP AMEL, AMES)
AA.I.C.K6	Flight Risk Assessment Tools.
<b>Risk Management</b>	The applicant demonstrates the ability to identify, assess, and mitigate risks, encompassing:
AA.I.C.R1	Weather conditions involved in departure and in-flight decision making, to include:
AA.I.C.R1a	a. Circumstances requiring a change in course or destination
AA.I.C.R1b	b. Known or forecast icing, winds or turbulence aloft, volcanic ash, destination weather, etc.
AA.I.C.R1c	c. Personal minimums
AA.I.C.R1d	d. Operator specified or aircraft operational limitations, if applicable
AA.I.C.R2	Limitations of:
AA.I.C.R2a	a. Onboard weather equipment
AA.I.C.R2b	b. Aviation weather reports and forecasts
AA.I.C.R2c	c. Inflight weather resources
<b>Skills</b>	The applicant demonstrates the ability to:
AA.I.C.S1	Interpret weather information, apply principles of aeronautical decision-making, and use a Flight Risk Assessment Tool, if available.

## I. Preflight Preparation

<b>Task</b>	<b>D. High Altitude Aerodynamics (ATP) (AMEL, AMES)</b>
<b>References</b>	14 CFR part 61; AC 61-107, AC 61-138, AC 120-111; FAA-H-8083-3
<b>Objective</b>	To determine that the applicant exhibits satisfactory knowledge, risk management, and skills associated with high altitude airplane aerodynamics. <b>Note:</b> See <a href="#">Appendix 7: Aircraft, Equipment, and Operational Requirements &amp; Limitations</a> for information related to this Task.
<b>Knowledge</b>	The applicant demonstrates understanding of:
AA.I.D.K1	Aerodynamics of large transport category airplanes to include flight characteristics of swept wing airplanes (e.g., Mach buffet).
AA.I.D.K2	Energy management.
AA.I.D.K3	Relationship between Mach number, indicated airspeed, true airspeed, and change over altitudes.
AA.I.D.K4	Load factor at high altitude and its effect on high and low speed operating margins.
AA.I.D.K5	Relationship between altitude capability, weight, and temperature.
AA.I.D.K6	$V_{MO}/M_{MO}$ convergence and stall angle of attack.
AA.I.D.K7	Maximum Lift over Drag Ratio (L/D Max).
AA.I.D.K8	Best range and best endurance.
AA.I.D.K9	Factors which contribute to airplane upsets at high altitude and upset prevention and recovery techniques.
<b>Risk Management</b>	The applicant demonstrates the ability to identify, assess, and mitigate risks, encompassing:
AA.I.D.R1	Failure to manage the airplane's energy state.
AA.I.D.R2	High operating altitudes at high operational weights.
AA.I.D.R3	High altitude slow-downs and excursions behind the power curve.
AA.I.D.R4	Turbulence at high altitude.
<b>Skills</b>	The applicant demonstrates the ability to:
AA.I.D.S1	If a cruise altitude is reached, manage the airplane's systems and energy state.

## I. Preflight Preparation

<b>Task</b>	<b>E. Air Carrier Operations (ATP) (AMEL, AMES)</b>
<b>References</b>	14 CFR parts 25 and 121; AC 00-46, AC 61-138, AC 91.21-1, AC 91-78, AC 120-51, AC 120-66, AC 120-76, AC 120-82, AC 120-90, AC 120-101; AFM
<b>Objective</b>	To determine that the applicant exhibits satisfactory knowledge, risk management, and skills associated with air carrier operations. <b>Note:</b> See <a href="#">Appendix 7: Aircraft, Equipment, and Operational Requirements &amp; Limitations</a> for information related to this Task.
<b>Knowledge</b>	The applicant demonstrates understanding of:
AA.I.E.K1	Turbine engines, thrust reversing systems, and system malfunctions.
AA.I.E.K2	Airplane automation components (i.e., flight director, autopilot), their relationship to each other, and how to manage the automation for flight.
AA.I.E.K3	Advanced navigation equipment (e.g., FMS, RNP, ADS-B, EFB, etc.) and how it is used inflight.
AA.I.E.K4	Flightpath warning systems (e.g., TCAS, TAWS) and how to respond to a warning.
AA.I.E.K5	Altitudes and conditions that require the use of oxygen masks.
AA.I.E.K6	Causes and recognition of cabin pressure loss.
AA.I.E.K7	Appropriate rudder use in transport aircraft to avoid rudder reversal.
AA.I.E.K8	Crew communications (e.g., sterile flight deck rules, briefings).
AA.I.E.K9	Operational control.
AA.I.E.K10	Elements associated with operating at complex and high traffic airports with emphasis on runway incursion prevention techniques.
AA.I.E.K11	Professional responsibilities associated with being an ATP certificate holder and how to apply leadership skills as pilot in command.
AA.I.E.K12	Crew resource management (CRM) principles and application in a multi-crew environment.
AA.I.E.K13	Use of voluntary safety programs to manage risk across an organization (e.g., Threat and error management (TEM)).
AA.I.E.K14	Operations specifications.
<b>Risk Management</b>	The applicant demonstrates the ability to identify, assess, and mitigate risks, encompassing:
AA.I.E.R1	Turbine engine and thrust reversing system malfunctions.
AA.I.E.R2	Failure to manage automation and navigation equipment.
AA.I.E.R3	Failure to respond to a flightpath warning system alert.
AA.I.E.R4	Loss of cabin pressure.
AA.I.E.R5	Poor crew coordination.
<b>Skills</b>	The applicant demonstrates the ability to:
AA.I.E.S1	Apply CRM principles and use in a crew environment, as appropriate.



## I. Preflight Preparation

<b>Task</b>	<b>F. Human Factors (ATP)</b>
<b>References</b>	14 CFR part 61; AC 61-107, AC 61-138, AC 120-51, AC 120-100; FAA-H-8083-2, FAA-H-8083-25; AIM
<b>Objective</b>	To determine that the applicant exhibits satisfactory knowledge, risk management, and skills associated with personal health, flight physiology, and aeromedical and human factors. <b>Note:</b> See <a href="#">Appendix 7: Aircraft, Equipment, and Operational Requirements &amp; Limitations</a> for information related to this Task.
<b>Knowledge</b>	The applicant demonstrates understanding of:
<i>AA.I.F.K1</i>	Causes, effects, recognition, and corrective actions associated with aeromedical and physiological issues including: <b>Note:</b> If K1 is selected, the evaluator must assess the applicant's knowledge of at least three of the following sub-elements.
<i>AA.I.F.K1a</i>	a. Hypoxia
<i>AA.I.F.K1b</i>	b. Hyperventilation
<i>AA.I.F.K1c</i>	c. Middle ear and sinus problems
<i>AA.I.F.K1d</i>	d. Spatial disorientation
<i>AA.I.F.K1e</i>	e. Motion sickness
<i>AA.I.F.K1f</i>	f. Carbon monoxide poisoning
<i>AA.I.F.K1g</i>	g. Stress
<i>AA.I.F.K1h</i>	h. Fatigue
<i>AA.I.F.K1i</i>	i. Dehydration and nutrition
<i>AA.I.F.K1j</i>	j. Hypothermia
<i>AA.I.F.K1k</i>	k. Optical illusions
<i>AA.I.F.K1l</i>	l. Dissolved nitrogen in the bloodstream after scuba dives
<i>AA.I.F.K2</i>	Effects of alcohol, drugs, and over-the-counter medications.
<i>AA.I.F.K3</i>	Aeronautical Decision-Making (ADM) using Crew Resource Management (CRM) or Single Pilot Resource Management (SRM), as appropriate.
<i>AA.I.F.K4</i>	Components of self-assessment for determining fitness for flight.
<b>Risk Management</b>	The applicant demonstrates the ability to identify, assess, and mitigate risks, encompassing:
<i>AA.I.F.R1</i>	Aeromedical and physiological issues.
<i>AA.I.F.R2</i>	Hazardous attitudes.
<i>AA.I.F.R3</i>	Distractions, loss of situational awareness, or improper task management.
<b>Skills</b>	The applicant demonstrates the ability to:
<i>AA.I.F.S1</i>	Perform a self-assessment and determine fitness for flight.

## I. Preflight Preparation

<b>Task</b>	<b>G. The Code of Federal Regulations (ATP)</b>
<b>References</b>	14 CFR parts 61, 91, 117, 121, and 135; 49 CFR part 830
<b>Objective</b>	To determine that the applicant exhibits satisfactory knowledge of regulations applicable to the privileges and limitations of the ATP certificate and to flight operations that require an ATP certificate.  <b>Note:</b> See <a href="#">Appendix 7: Aircraft, Equipment, and Operational Requirements &amp; Limitations</a> for information related to this Task.
<b>Knowledge</b>	The applicant demonstrates understanding of:
<i>AA.I.G.K1</i>	14 CFR part 61, subparts A, B, and G.
<i>AA.I.G.K2</i>	14 CFR part 91, subparts A, B, C, F, G, and H.
<i>AA.I.G.K3</i>	14 CFR part 117 (AMEL, AMES).
<i>AA.I.G.K4</i>	14 CFR part 121, subparts A, G, K, M, O, T, U, and V (AMEL, AMES).
<i>AA.I.G.K5</i>	14 CFR part 135, subparts A, B, C, D, E, F, and G (ASEL, ASES).
<i>AA.I.G.K6</i>	49 CFR part 830.
<b>Risk Management</b>	The applicant demonstrates the ability to identify, assess, and mitigate risks, encompassing:
<i>AA.I.G.R1</i>	Failure to comply with the applicable CFRs.
<b>Skills</b>	The applicant demonstrates the ability to:
<i>AA.I.G.S1</i>	Apply the CFRs to the flight/operation.

## I. Preflight Preparation

<b>Task</b>	<b>H. Water and Seaplane Characteristics, Seaplane Bases, Maritime Rules, and Aids to Marine Navigation (ASES, AMES)</b>
<b>References</b>	14 CFR part 61; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-23; USCG Navigation Rules, International-Inland; POH/AFM; Chart Supplements; AIM
<b>Objective</b>	To determine that the applicant exhibits satisfactory knowledge, risk management, and skills associated with water and seaplane characteristics, seaplane bases, maritime rules, and aids to marine navigation.
<b>Knowledge</b>	The applicant demonstrates understanding of:
AA.I.H.K1	The characteristics of a water surface as affected by features, such as:
AA.I.H.K1a	a. Size and location
AA.I.H.K1b	b. Protected and unprotected areas
AA.I.H.K1c	c. Surface wind
AA.I.H.K1d	d. Direction and strength of water current
AA.I.H.K1e	e. Floating and partially submerged debris
AA.I.H.K1f	f. Sandbars, islands, and shoals
AA.I.H.K1g	g. Vessel traffic and wakes
AA.I.H.K1h	h. Other characteristics specific to the area
AA.I.H.K2	Float and hull construction and its effect on seaplane performance.
AA.I.H.K3	Causes of porpoising and skipping, and the pilot action needed to prevent or correct these occurrences.
AA.I.H.K4	How to locate and identify seaplane bases on charts or in directories.
AA.I.H.K5	Operating restrictions at various bases.
AA.I.H.K6	Right-of-way, steering, and sailing rules pertinent to seaplane operation.
AA.I.H.K7	Marine navigation aids, such as buoys, beacons, lights, sound signals, and range markers.
AA.I.H.K8	Naval vessel protection zones.
AA.I.H.K9	No wake zones.
<b>Risk Management</b>	The applicant demonstrates the ability to identify, assess, and mitigate risks, encompassing:
AA.I.H.R1	Local conditions.
AA.I.H.R2	Impact of marine traffic.
AA.I.H.R3	Failure to follow right-of-way and sailing rules pertinent to seaplane operations.
AA.I.H.R4	Limited services and assistance available at seaplane bases.
<b>Skills</b>	The applicant demonstrates the ability to:
AA.I.H.S1	Explain how float and hull construction can affect seaplane performance.
AA.I.H.S2	Describe how to correct for porpoising and skipping.
AA.I.H.S3	Locate seaplane bases on charts or in directories and identify any restrictions.
AA.I.H.S4	Identify marine navigation aids.
AA.I.H.S5	Describe what naval vessel protection zones and no wake zones are.
AA.I.H.S6	Assess the water surface characteristics for the proposed flight.
AA.I.H.S7	Perform correct right-of-way, steering, and sailing operations.

## II. Preflight Procedures

<b>Task</b>	<b>A. Preflight Assessment</b>
<b>References</b>	14 CFR parts 43, 61, 63, 71, 91, 97, 117, 119, 121, and 135; AC 00-6, AC 120-27, AC 120-60, AC 135-17; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-23, FAA-H-8083-25; POH/AFM; AIM
<b>Objective</b>	To determine that the applicant exhibits satisfactory knowledge, risk management, and skills associated with preparing for safe flight.  <b>Note:</b> See <a href="#">Appendix 7: Aircraft, Equipment, and Operational Requirements &amp; Limitations</a> for information related to this Task.
<b>Knowledge</b>	The applicant demonstrates understanding of:
AA.II.A.K1	Pilot self-assessment.
AA.II.A.K2	Determining that the aircraft to be used is appropriate, airworthy, and in a condition for safe flight by locating and explaining related documents such as:
AA.II.A.K2a	a. Airworthiness and registration certificates
AA.II.A.K2b	b. Operating limitations, handbooks, and manuals
AA.II.A.K2c	c. Minimum Equipment List (MEL) and Configuration Deviation List (CDL)
AA.II.A.K2d	d. Weight and balance data
AA.II.A.K2e	e. Required inspections or tests and appropriate records and documentation (e.g., dispatch release) as applicable to the proposed flight or operation.
AA.II.A.K3	Preventive maintenance that can be performed by the pilot or other designated crewmember.
AA.II.A.K4	Aircraft preflight inspection including:
AA.II.A.K4a	a. Which items must be inspected
AA.II.A.K4b	b. The reasons for checking each item
AA.II.A.K4c	c. How to detect possible defects
AA.II.A.K4d	d. The associated regulations
AA.II.A.K5	Environmental factors including weather, terrain, route selection, and obstructions.
AA.II.A.K6	Requirements for current and appropriate navigation data.
AA.II.A.K7	Operations specifications, management specifications, or letters of authorization applying to a particular airplane and operation, if applicable.
<b>Risk Management</b>	The applicant demonstrates the ability to identify, assess, and mitigate risks, encompassing:
AA.II.A.R1	Human performance factors.
AA.II.A.R2	Inoperative equipment discovered prior to flight.
AA.II.A.R3	Environment (e.g., weather, airports, airspace, terrain, obstacles).
AA.II.A.R4	External pressures.
AA.II.A.R5	Aviation security concerns.
<b>Skills</b>	The applicant demonstrates the ability to:
AA.II.A.S1	Inspect the airplane in accordance with an appropriate checklist demonstrating proper operation of applicable airplane systems. Coordinate checklist with crew, if appropriate.
AA.II.A.S2	Coordinate with ground crew and ensure adequate clearance prior to moving doors, hatches, flight control surfaces, etc.
AA.II.A.S3	Document any discrepancies found; take corrective action and acknowledge limitations imposed by MEL/CDL items, if applicable.
AA.II.A.S4	Determine if the airplane is airworthy and in condition for safe flight.
AA.II.A.S5	Identify and comply with operations specifications as required.
AA.II.A.S6	Assess factors related to the environment (weather, airports, terrain, airspace).
AA.II.A.S7	Ensure the airplane and surfaces are free of ice, snow, and frost. If icing conditions are present, demonstrate satisfactory knowledge of deicing procedures.