# Update to Airline Transport Pilot Test

**September 2021**

Airline Transport Pilot Test Prep 2021

ASA-TP-ATP-21

With the following changes, ASA's *Airline Transport Pilot Test Prep 2021* provides complete preparation for the FAA ATP and Aircraft Dispatcher Knowledge Exams. This test continues to reference the *Airman Knowledge Testing Supplement for Airline Transport Pilot and Aircraft Dispatcher* (FAA-CT-8080-7D).

### About the Test Changes

The FAA exams are "closed tests" which means the exact database of questions is not available to the public. However, each test cycle the FAA provides a What's New document, which identifies subjects that have been removed or added to a test. This document also includes pertinent information to ensure training and testing remains correlated, which in turn promotes a reliable certification system.

The question and answer choices in this book provide a comprehensive representation of FAA questions, derived from history and experience with the airman testing process. You might see similar although not exactly the same questions on your official FAA exam. Answer stems may be rearranged from the A, B, C order you see in this book. Therefore, be careful to fully understand the intent of each question and corresponding answer while studying, rather than memorize the A, B, C answer. You may be asked a question that has unfamiliar wording; studying and understanding the information in this book and the associated reference documents will give you the tools to answer all types of questions with confidence. We invite your feedback. After you take your official FAA exam, let us know how you did. Were you prepared? Did the ASA products meet your needs and exceed your expectations? We want to continue to improve these products to ensure applicants are prepared, and become safe pilots. Send feedback to: cfi@asa2fly.com

| Page Number | Question Number | Correct Answer | Explanation |
|---|---|---|---|
| 1-4 | 9350-1 | [A] | **The correct answer is changed to A, and the question and answer stems are changed to read:**<br>**9350-1.** According to 14 CFR Part 121, what requirements must the second-in-command possess?<br>A—ATP certificate with appropriate type rating.<br>B—ATP certificate with appropriate second-in-command type rating.<br>C—ATP certificate and Third Class Medical Certificate. |
| 1-27 | 8706-1 | [A] | **A new question is added to read:**<br>ALL<br>**8706-1.** Which of the following is an effect of acute fatigue on performance?<br>A—Loss of accuracy and smoothness in control movements.<br>B—Heightened acuity in peripheral vision.<br>C—Mild euphoria, impaired judgment, and increased reaction time.<br>*Acute fatigue is characterized by inattention, distractibility, errors in timing, neglect of secondary tasks, loss of accuracy and control, lack of awareness of error accumulation, and irritability. (PLT409, AA.I.F.K1h) — AIM ¶8-1-1* |
| 1-30 | 8231-1 | [B] | **A new question is added to read:**<br>ATM, ADX<br>**8231-1.** For passenger-carrying operations under 14 CFR Part 121, which situation would be considered part of the required rest period?<br>A—Deadheading to home base after the last scheduled flight.<br>B—Electing to fly as a passenger from home base after the flight duty period ends.<br>C—Training conducted in a flight simulator.<br>*Duty means any task that a flight crewmember performs as required by the certificate holder, including but not limited to flight duty period, flight duty, pre- and post-flight duties, administrative work, training,* |

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| | | | *deadhead transportation, aircraft positioning on the ground, aircraft loading, and aircraft servicing. Rest period means a continuous period determined prospectively during which the flightcrew member is free from all restraint by the certificate holder, including freedom from present responsibility for work should the occasion arise. (PLT409, AA.I.G.K3) — 14 CFR §117.3*<br>*Answer (A) is incorrect because deadhead transportation is considered duty time and does not count for part of the required rest period. Answer (C) is incorrect because no training counts for part of the required rest period.* |
| **1-38** | **8243-1** | **[C]** | **A new question is added to read:**<br>ATM, ADX<br>**8243-1.** You are the pilot-in-command of a 14 CFR Part 121 domestic operation flight. In addition to yourself, who is jointly responsible for preflight planning, delay, and dispatch release of the flight?<br>A—The director of operations.<br>B—The chief pilot or designed.<br>C—The aircraft dispatcher.<br>*The PIC and the aircraft dispatcher are jointly responsible for the preflight planning, delay, and dispatch release of a flight in compliance with this chapter and operations specifications. (PLT444, AA.I.E.K9) — 14 CFR §121.533* |
| **1-49** | **9763-1** | **[C]** | **A new question is added to read:**<br>ALL<br>**9763-1.** Under 14 CFR Part 121, when may nonessential communications take place below 10,000 feet?<br>A—In VMC conditions.<br>B—Before the final approach fix.<br>C—During cruise flight.<br>*Commonly known as the sterile cockpit rule, 14 CFR §121.542 requires flight crewmembers to refrain from nonessential activities during critical phases of flight. As defined in the regulation, critical phases of flight are all ground operations involving taxi, takeoff, and landing, and all other flight operations below 10,000 feet except cruise flight. Nonessential activities include such activities as eating, reading a newspaper, or chatting. (PLT498, AA.I.G.K4) — 14 CFR §121.542* |
| **1-58** | **9388-1** | **[A]** | **A new question is added to read:**<br>ATM, ATS, RTC<br>**9388-1.** If available, what action could a pilot of an air carrier take if they violate a federal regulation because of an air traffic control direction?<br>A—File a report through the Voluntary Disclosure Reporting Program (VDRP).<br>B—File a report through the Aviation Safety Action Program (ASAP).<br>C—File a report through the Flight Operational Quality Assurance Program (FOQA).<br>*The VDRP is used to collect information on 14 CFR regulation violations to improve the overall safety of the NAS. (PLT044, AA.I.E.K13) — AC 00-58*<br>*Answer (B) is incorrect because ASAP is used is to encourage employees of air carriers or repair stations to voluntarily report safety information that may be critical to identifying potential precursors to accidents. Answer (C) is incorrect because an FOQA program is used to reveal operational situations in which risk is increased in order to enable early corrective action before that risk results in an incident or accident.* |
| **1-58** | **9388-2** | **[B]** | **A new question is added to read:**<br>ALL<br>**9388-2.** What is the purpose of a Flight Operational Quality Assurance (FOQA) program?<br>A—To identify pilots who are having problems operationally.<br>B—To identify aggregate information for error trends.<br>C—To provide accountability within the air carrier system.<br>*FOQA is a voluntary safety program that is designed to make commercial aviation safer by allowing commercial airlines and pilots to share de-identified aggregate information with the FAA, so that the FAA can monitor national trends in aircraft operations and target its resources to address operational risk issues (e.g., flight operations, ATC, airports). (PLT044, AA.I.E.K13) — AC 120-82* |

| Page Number | Question Number | Correct Answer | Explanation |
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| 1-58 | 9388-3 | [C] | **A new question is added to read:**<br>ALL<br>**9388-3.** Your airline recently initiated a new safety partnership with the FAA utilizing the Aviation Safety Action Program (ASAP) for all pilots, flight attendants, dispatchers, and mechanics. What does ASAP encourage?<br>A—Encourages an employee to utilize an ASAP report after receiving a criminal substance abuse conviction so they do not face additional FAA enforcement.<br>B—Encourages operational situations in which risk is increased in order to enable early corrective action before that risk results in an incident or accident.<br>C—Encourages airline management to utilize ASAP reports and voluntarily report safety information to derive synergies and cost savings for the airline.<br>*ASAP is used is to encourage employees of air carriers or repair stations to voluntarily report safety information that may be critical to identifying potential precursors to accidents. (PLT044, AA.I.E.K13) — AC 120-66* |
| 1-72 | 9836-1 | [B] | **A new question is added to read:**<br>ALL<br>**9836-1.** What information is de-identified when a report is submitted through the Aviation Safety Reporting System (ASRS)?<br>A—Crew identity information when criminal offenses have occurred.<br>B—Crew identity information involving time-sensitive data.<br>C—Crew identity information when prompt NTSB reporting is required.<br>*The ASRS is a voluntary, confidential, and non-punitive incident reporting system. All identifying information is removed from the report before the data is entered into the ASRS database. The FAA will not use reports submitted to this program (or information derived therefrom) in any enforcement action except information concerning accidents or criminal offenses which are wholly excluded from the program. (PLT526, AA.I.E.K13) — AC 00-46* |
| 1-73 | 8165 | [C] | **The question category is changed to read: ATS, ADX** |
| 2-29 | 9352 | | **This question has been removed.** |
| 2-29 | 9353 | | **This question has been removed.** |
| 2-10 | 9769-3 | [B] | **A new question is added to read:**<br>ALL<br>**9769-3.** What manual should the crewmembers of an air carrier reference when determining if a portable electronic device is allowed to be operated on an aircraft?<br>A—The aircraft's approved flight manual.<br>B—The air carrier's policy and procedures manual.<br>C—The operating manual for the device.<br>*For operating certificate holders, the decision to allow PED usage must be made by the operator. Pilots can reference the air carrier's policy and procedures manual to determine if PEDs are allowed. (PLT524, AA.I.E.K11) — AC 91.21-1* |
| 2-11 | 9853-1 | [B] | **A new question is added to read:**<br>ALL<br>**9853-1.** In advanced avionics aircraft, proper automation management requires<br>A—relying on flight management systems to navigate in order for the pilot to perform other tasks.<br>B—a thorough understanding of how the autopilot interacts with other systems.<br>C—the pilot to refrain from monitoring the automation after initial programming. |

| Page Number | Question Number | Correct Answer | Explanation |
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| | | | *Advanced avionics offer multiple levels of automation, from strictly manual flight to highly automated flight. No one level of automation is appropriate for all flight situations, but in order to avoid potentially dangerous distractions when flying with advanced avionics, the pilot must know how to manage the CDI, the navigation source, and the autopilot. It is important for a pilot to know the peculiarities of the particular automated system being used. (PLT104, AA.I.F.K3) — FAA-H-8083-25* |
| **2-19** | **9020-1** | **[C]** | **A new question is added to read:**<br>ALL<br>**9020-1.** Why does the FAA maintain a VOR Minimum Operational Network (MON)?<br>A—To provide VOR navigation service in the western mountainous United States below GPS signal coverage.<br>B—To maintain the enroute Victor airway structure on overwater routes in the Gulf of Mexico.<br>C—To support navigation of non-DME/DME equipped RNAV aircraft in the event of GPS outage.<br>*For those aircraft that do not carry DME, the FAA is retaining a limited network of VORs, called the VOR MON, to provide a basic conventional navigation service for operators to use if GNSS becomes unavailable. (PLT300, AA.II.A.K6) — AIM ¶1-1-3* |
| **2-36** | **8967** | **[B]** | **The question category is changed to read:**<br>ATM, ATS, RTC |
| **2-36** | **8965** | **[A]** | **The question category is changed to read:**<br>ATM, ATS, RTC |
| **2-43** | **9946-1** | **[A]** | **A new question is added to read:**<br>ALL<br>**9946-1.** Each person operating an aircraft equipped with ADS-B Out must operate it in the transmit mode<br>A—at all times unless otherwise authorized by the FAA or directed by ATC.<br>B—when operating in Class B and C airspace, excluding operations conducted under day VFR.<br>C—all classes of airspace when the flight is operated for compensation or hire but not otherwise.<br>*Regardless of airspace or whether the aircraft was originally certificated with an electrical system, it must operate any installed ADS-B Out equipment in transmit mode. (PLT354, AA.I.G.K2) — 14 CFR §91.225* |
| **2-49** | **8932** | **[A]** | **The question is changed to read:**<br>**8932.** (Refer to Figure 131.) What is the runway distance remaining at “C” for a takeoff on runway 9? |
| **3-6** | **9942-1** | **[B]** | **A new question is added to read:**<br>ALL<br>**9942-1.** As an airplane climbs to higher altitudes, what happens to the calibrated airspeed in relation to true airspeed?<br>A—It remains equal.<br>B—It decreases.<br>C—It increases.<br>*True airspeed is calibrated airspeed corrected for altitude and nonstandard temperature. Because air density decreases with an increase in altitude, an aircraft has to be flown faster at higher altitudes to cause the same pressure difference between pitot impact pressure and static pressure. Therefore, for a given calibrated airspeed, true airspeed increases as altitude increases; or for a given true airspeed, calibrated airspeed decreases as altitude increases. (PLT124, AA.I.B.K3a) — FAA-H-8083-25* |

| Page Number | Question Number | Correct Answer | Explanation |
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| 3-6 | 8397-1 | [A] | **A new question is added to read:**<br>ALL<br>**8397-1.** How does an increase in an aircraft's weight affect its climb performance?<br>A—The aircraft will climb at a lower angle of attack, which allows for a higher TAS and higher rate of climb.<br>B—Both parasite and induced drag are increased, which will lower the reserve thrust available to climb.<br>C—A higher aircraft weight requires that the aircraft is configured for climb earlier in the departure which allows a greater climb gradient.<br>*Climb performance is most critical at high weight, high altitude, or during a malfunction of a powerplant. A change in aircraft weight affects both climb angle and climb rate and will alter the drag and power required. Generally, an increase in weight will reduce the maximum rate of climb, but the airplane must be operated at an increased speed to achieve the reduced maximum rate of climb. (PLT015, AA.I.B.K2c) — ANA* |
| 3-7 | 8379-1 | [C] | **A new question is added to read:**<br>ATM, ATS, ADX<br>**8379-1.** What is the absolute ceiling of an airplane?<br>A—The point where the minimum rate of climb becomes lower than the optimum $L/D_{MAX}$ speed.<br>B—The altitude at which the aircraft is unable to climb at more than 100 feet per minute.<br>C—When the maximum rate of climb and the maximum angle of climb speeds converge.<br>*At the absolute ceiling, there is no excess of power and only one speed will allow steady level flight. Consequently, the absolute ceiling of the airplane produces zero rate of climb. This occurs when the maximum rate of climb and the maximum angle of climb speeds converge. (PLT131, AA.I.B.K2c) — FAA-H-8083-25* |
| 3-8 | 9813-1 | [B] | **A new question is added to read:**<br>ATM, ATS<br>**9813-1.** High density altitude can reduce turbojet aircraft performance in which of the following ways?<br>A—It reduces the likelihood of maintaining laminar flow over the airfoils as airspeed and altitude increase.<br>B—It reduces thrust because there is a reduced mass of gases to force out of the exhaust.<br>C—It reduces thrust because there is an increased mass of gases that inhibits the outflow of exhaust.<br>*The engine's compressor section has to work harder when air density is decreased. Power capability is reduced at high density altitudes, and power use may have to be modulated to keep engine temperature within limits. (PLT005, AA.I.B.K3a) — FAA-H-8083-3* |
| 3-13 | 8367-1 | [A] | **A new question is added to read:**<br>ALL<br>**8367-1.** When does a typical aircraft exhibit reduced longitudinal stability?<br>A—With the center of gravity (CG) near the aft limit.<br>B—With the center of gravity (CG) near the forward limit.<br>C—With the center of gravity (CG) at a mid-range location.<br>*A tail-heavy condition has a serious effect on longitudinal stability and reduces the capability to recover from stalls and spins. (PLT236, AA.I.B.K5) — FAA-H-8083-25* |
| 3-15 | 8389-1 | [B] | **A new question is added to read:**<br>ATM, ATS, ADX<br>**8389-1.** When piloting a turbojet transport airplane, what is a possible result when operating at speeds 5 to 10 percent above the critical Mach number?<br>A—Increased aerodynamic efficiency.<br>B—Decreased control surface effectiveness.<br>C—Occasional low speed Mach buffet warnings. |

| Page Number | Question Number | Correct Answer | Explanation |
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| | | | *Critical Mach number is the boundary between subsonic and transonic flight. When shock waves form on the aircraft, airflow separation followed by buffet and aircraft control difficulties can occur. Shock waves, buffet, and airflow separation take place above critical Mach number. (PLT214, AA.I.B.K4) — FAA-H-8083-25* |
| **3-16** | **8391-3** | **[B]** | **A new question is added to read:**<br>ATM, ATS, ADX<br>**8391-3.** What is an advantage of a sweptback wing?<br>A—It allows shock wave induced flow separation.<br>B—The design delays the onset of compressibility.<br>C—The wings tend to stall at the wing root first.<br>*The sweptback wing design delays the onset of compressibility. (PLT094, AA.I.B.K4) — ANA*<br>*Answer (A) is incorrect because sweptback wings are designed to avoid the formation of shock waves. Answer (C) is incorrect because sweptback wings stall at the tip first.* |
| **3-17** | **8394-3** | **[C]** | **A new question is added to read:**<br>ATM, ATS, ADX.<br>**8394-3.** While operating a turbojet transport airplane at high altitude, which of the following is most likely to cause a low speed Mach buffet?<br>A—Reducing the angle of attack after a high speed Mach buffet.<br>B—The airplane is flown too fast for its weight and altitude.<br>C—The airplane is flown too slow for its weight and altitude.<br>*Mach buffet is a function of the speed of the airflow over the wing—not necessarily the speed of the aircraft. An aircraft flown at a speed too slow for its weight and altitude necessitating a high angle of attack is the most likely situation to cause a low speed Mach buffet. (PLT094, AA.I.D.K9) — FAA-H-8083-25* |
| **3-24** | **8334** | **[B]** | **The correct answer is changed to B, and the question and answer stems are changed to read:**<br>**8334.** What effect does extending leading edge slats have on an airplane's wing?<br>A—Increases the pitch up moment of an airfoil.<br>B—Increases the camber and $CL_{MAX}$.<br>C—Allows for earlier airflow separation. |
| **4-5** | **8394-1** | **[A]** | **A new question is added to read:**<br>ALL<br>**8394-1.** What could cause a turbine engine hot start?<br>A—Lack of airflow due to insufficient turbine RPM.<br>B—Inlet and compressor airflow imbalance.<br>C—Insufficient fuel in the combustion chamber.<br>*A hot start occurs when the exhaust gas temperature exceeds the safe limit of an aircraft. Caused by either too much fuel entering the combustion chamber or insufficient turbine RPM, this condition is also known as a hung start. (PLT499, AA.I.A.K2) — FAA-H-8083-25* |
| **4-7** | **9067-1** | **[C]** | **A new question is added to read:**<br>ALL<br>**9067-1.** While on an ILS approach, what is the proper way to recover from an impending stall?<br>A—Engaging the autopilot.<br>B—Changing flap settings.<br>C—Reducing the angle of attack.<br>*The most important action to take to recover from an impending stall or a full stall is to reduce the angle of attack. (PLT343, AA.V.C.K5) — FAA-H-8083-3* |

| Page Number | Question Number | Correct Answer | Explanation |
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| 4-32 | 9084-1 | [C] | **A new question is added to read:**<br>ATM, ATS<br>**9084-1.** When is braking performance optimized during landing?<br>A—Before the nose wheel touches down.<br>B—Wheel spin-up at touchdown.<br>C—Maximum weight on main wheels.<br>*Braking effectiveness is greatest when the aircraft weight is transferred to the wheels. (PLT170, AA.I.A.k1) — FAA-H-8083-25* |
| 4-39 | 8727-1 | | **This question now references Figure 21.** |
| 5-3 | 8697-1 | [B] | **A new question is added to read:**<br>ALL<br>**8697-1.** Given the following, what would be the maximum payload?<br>Basic operating weight (BOW): 100,500 lbs.<br>Maximum zero fuel weight: 138,000 lbs.<br>Maximum landing weight: 142,000 lbs.<br>Maximum takeoff weight: 184,200 lbs.<br>Fuel load: 40,000 lbs.<br>Fuel tank capacity: 54,000 lbs.<br>A—43,700 lbs.<br>B—37,500 lbs.<br>C—29,700 lbs.<br>*The payload is the maximum combination of passengers, baggage, and cargo that the airplane is capable of carrying. A zero fuel weight, if published, is the limiting weight: 138,000 – 100,500 = 37,500. (PLT003, AA.I.B.K3e) — FAA-H-8083-3* |
| 5-3 | 8697-2 | [A] | **A new question is added to read:**<br>ALL<br>**8697-2.** What is the purpose of a zero fuel weight limitation?<br>A—To limit load forces on the wing spars with heavy fuselage loads.<br>B—To limit load forces on the fuselage with a heavy wing fuel load.<br>C—To prevent overstressing the landing gear during a hard landing.<br>*The zero fuel weight of an aircraft includes all useful load except fuel. The purpose of a zero fuel weight is to limit load forces on the wing spars with heavy fuselage loads. (PLT003, AA.I.B.K3e) — FAA-H-8083-3* |
| 5-3 | 8697-3 | [B] | **A new question is added to read:**<br>ALL<br>**8697-3.** What adverse flight characteristics could result from operating an aircraft with the center of gravity (CG) beyond the published forward limitations?<br>A—The flight control forces may become very light.<br>B—It could be difficult or impossible to flare for landing.<br>C—It could be difficult or impossible to recover from a stall.<br>*In extreme cases, a CG location that is beyond the forward limit may result in nose heaviness, making it difficult or impossible to flare for landing. (PLT003, AA.I.B.K5) — FAA-H-8083-25* |

*(continued)*

| Page Number | Question Number | Correct Answer | Explanation |
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| 5-3 | 8697-4 | [C] | **A new question is added to read:**<br>ALL<br>**8697-4.** What adverse flight characteristics could result from operating an aircraft with the center of gravity (CG) beyond the published aft limitations?<br>A—The flight control forces may become very heavy.<br>B—It could be difficult to flare for landing.<br>C—It could be impossible to recover from a stall.<br>*As the CG moves aft, a less stable condition occurs, which decreases the ability of the aircraft to right itself after maneuvering or turbulence, including recovery from a stall or spin. (PLT003, AA.I.B.K5) — FAA-H-8083-25* |
| 5-5 | 8699-1 | [A] | **A new question is added to read:**<br>ATM, ATS, ADX<br>**8699-1.** (Refer to Figure 419.) With the following conditions, would the airplane be in the approved weight and CG envelope for landing?<br>CG location: 25% MAC<br>Aircraft Weight: 74,000 lbs.<br>A—No, the airplane is over the maximum approved landing weight.<br>B—Yes, the airplane is within the approved weight and CG envelope.<br>C—No, the airplane is below the maximum landing weight, but the CG is aft of limits.<br>*The airplane is over the maximum approved landing weight of 73,500 lbs. (PLT121, AA.I.B.K3e) — FAA-H-8083-25* |
| 5-5 | 8699-2 | [B] | **A new question is added to read:**<br>ATM, ATS, ADX<br>**8699-2.** (Refer to Figure 419.) You are preparing for a flight, with the following planned loading at takeoff. Would the aircraft be within the approved weight limitations?<br>Basic operating weight (including crew): 49,500 lbs.<br>Passengers, baggage, and cargo: 20,850 lbs.<br>Fuel weight: 9,500 lbs.<br>A—Yes, the weight would be within limits.<br>B—No, max zero fuel weight would be exceeded.<br>C—No, the max takeoff weight would be exceeded.<br>*The total weight for this flight is 49,500 + 20,850 + 9,500 = 79,850 lbs. This is below the maximum takeoff weight but above the zero fuel weight limit of 70,000 at 70,350 lbs. (PLT121, AA.I.B.K3e) — FAA-H-8083-25* |
| 5-30 | 8769 | [C] | **The ACS code is changed to read:**<br>*AA.I.B.K3e* |
| 5-30 | 8770 | [B] | **The ACS code is changed to read:**<br>*AA.I.B.K3e* |
| 5-30 | 8771 | [B] | **The ACS code is changed to read:**<br>*AA.I.B.K3e* |
| 5-31 | 8772 | [A] | **The ACS code is changed to read:**<br>*AA.I.B.K3e* |
| 5-31 | 8773 | [A] | **The ACS code is changed to read:**<br>*AA.I.B.K3e* |

| Page Number | Question Number | Correct Answer | Explanation |
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| 5-31 | 8776 | [B] | **The ACS code is changed to read:** *AA.I.B.K3e* |
| 5-31 | 8777 | [C] | **The ACS code is changed to read:** *AA.I.B.K3e* |
| 5-32 | 8778 | [A] | **The ACS code is changed to read:** *AA.I.B.K3e* |
| 5-32 | 8779 | [B] | **The ACS code is changed to read:** *AA.I.B.K3e* |
| 5-32 | 9920 | [C] | **The ACS code is changed to read:** *AA.I.B.K3e* |
| 5-32 | 9938 | [A] | **The ACS code is changed to read:** *AA.I.B.K3e* |
| 5-33 | 8789 | [A] | **The ACS code is changed to read:** *AA.I.B.K3e* |
| 5-33 | 8781 | [C] | **The ACS code is changed to read:** *AA.I.B.K3e* |
| 5-33 | 8787 | [B] | **The ACS code is changed to read:** *AA.I.B.K3e* |
| 5-33 | 8788 | [A] | **The ACS code is changed to read:** *AA.I.B.K3e* |
| 5-33 | 8790 | [C] | **The ACS code is changed to read:** *AA.I.B.K3e* |
| 5-34 | 8791 | [C] | **The ACS code is changed to read:** *AA.I.B.K3e* |
| 5-34 | 8844 | [A] | **The ACS code is changed to read:** *AA.I.B.K3e* |
| 5-34 | 8845 | [C] | **The ACS code is changed to read:** *AA.I.B.K3e* |
| 5-35 | 8846 | [B] | **The ACS code is changed to read:** *AA.I.B.K3e* |
| 5-35 | 8847 | [B] | **The ACS code is changed to read:** *AA.I.B.K3e* |
| 5-35 | 8848 | [C] | **The ACS code is changed to read:** *AA.I.B.K3e* |

| Page Number | Question Number | Correct Answer | Explanation |
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| 5-35 | 8431 | [A] | **The ACS code is changed to read:**<br>*AA.I.B.K3e* |
| 5-36 | 8432 | [A] | **The ACS code is changed to read:**<br>*AA.I.B.K3e* |
| 5-36 | 8433 | [C] | **The ACS code is changed to read:**<br>*AA.I.B.K3e* |
| 6-19 | 8255 | [A] | **The explanation for the incorrect answers is deleted, the correct answer is changed to A, and the question and answer stems are changed to read:**<br>**8255.** As required by Part 121, an airport may be listed as an alternate in the flight release only if the weather forecast indicates that conditions will be at or above the<br>A—alternate weather minima specified in the operation specifications at the time of arrival.<br>B—lowest available IAP minima at the time of arrival.<br>C—lowest available IAP minima for 1 hour before to 1 hour after the time of arrival. |
| 6-22 | 9402-1 | [C] | **A new question is added to read:**<br>ALL<br>**9402-1.** While airborne and below the MEA, the pilot accepts an IFR clearance. Sole responsibility for terrain and obstruction clearance remains with the pilot unless<br>A—the flight continues in clouds or above a ceiling and ATC transmits “RADAR CONTACT.”<br>B—an appropriate minimum IFR altitude providing obstruction clearance is attained.<br>C—the pilot advises ATC that he or she is unable to maintain terrain/obstruction clearance.<br>*It is the pilot’s responsibility to maintain terrain/obstruction clearance when flying below the minimum IFR altitude, unless the pilot advises ATC that they are unable to do so. (PLT444, AA.VI.B.K3) — FAA-H-8083-15*<br>*Answer (A) is incorrect because simply hearing “radar contact” does not relieve the pilot of responsibility. Answer (B) is incorrect because a controller cannot issue an IFR clearance until an aircraft is above the minimum IFR altitude, unless it is able to climb in VFR conditions.* |
| 6-30 | 9438 | [B] | **The question category is changed to read:**<br>ATM, ATS, RTC |
| 6-41 | 8298-1 | [B] | **A new question is added to read:**<br>ALL<br>**8298-1.** When is the pilot responsible to see and avoid other traffic, terrain, or obstacles?<br>A—ATC maintains responsibility if the pilot is operating under IFR.<br>B—When meteorological conditions permit, regardless of flight rules.<br>C—When they have accepted an instruction to “maintain visual separation.”<br>*When weather conditions permit, regardless of whether an operation is conducted under IFR or VFR, vigilance shall be maintained by each person operating an aircraft so as to see and avoid other aircraft. (PLT029, AA.VI.C.K3) — 14 CFR §91.113* |
| 6-42 | 9094-1 | [A] | **A new question is added to read:**<br>ALL<br>**9094-1.** When ATC assigns a speed adjustment to an aircraft operating at FL270, it will be at a speed not less than<br>A—250 knots.<br>B—210 knots.<br>C—200 knots. |

| Page Number | Question Number | Correct Answer | Explanation |
|---|---|---|---|
| | | | *When ATC assigns speed adjustments to aircraft operating between FL280 and 10,000 feet, it will be to a speed not less than 250 knots or the equivalent Mach number. (PLT161, AA.VI.C.K3) — AIM ¶4-4-12* |
| **6-50** | **9554** | **[B]** | **The question category is changed to read:**<br>ATM, ATS, RTC |
| **6-52** | **9617** | **[B]** | **The question category is changed to read:**<br>ATM, ATS, RTC |
| **6-54** | **9691** | **[C]** | **This question has been removed.** |
| **6-55** | **9693** | **[B]** | **This question has been removed.** |
| **6-57** | **8852-1** | **[A]** | **Answer stem A and the explanation are changed to read:**<br>A—963 FPM.<br>*Using Figure 361, standard takeoff minimums for Runway 3 is 400 ft/NM. Using Legend 72 and the 140 knots provided in the question, interpolate the rate of climb by finding 400 ft/NM on the left-hand column and 140 knots on the top of the chart for the groundspeed. The minimum rate of climb is 963 FPM.* |
| **6-59** | **8704** | **[C]** | **The question and explanation are changed to read:**<br>**8704.** (Refer to Figures 262 and 263.) In a turbojet airplane, when assigned the RIICE THREE ARRIVAL, at what speed would ATC expect you to cross RIICE intersection when landing EAST at IAH?<br>*The chart notes "Turbojets: Landing east at IAH cross RIICE at 250 KIAS, expect clearance to cross RIICE at 10000."* |
| **6-59** | **8704-1** | **[C]** | **A new question is added to read:**<br>ATM, ATS<br>**8704-1.** (Refer to Figure 163A) Arriving at Ryan Field at 1600Z under visual meteorological conditions (VMC) in a turbine-powered airplane, at what altitude should you enter the traffic pattern and remain at that altitude until further descent is required for a safe landing?<br>A—1,000 feet AGL.<br>B—2,500 feet AGL.<br>C—1,500 feet AGL.<br>*The chart supplement does not specify any changes from regular procedures. Large and turbine-powered aircraft enter the traffic pattern at an altitude of not less than 1,500 feet AGL or 500 feet above the established pattern altitude. (PLT083, AA.I.G.K2) — AIM ¶4-3-3* |
| **7-8** | **9050** | **[B]** | **The question and answer stems are changed to read:**<br>**9050.** What conditions would cause an air traffic controller to issue you a safety alert?<br>A—When your approach has become unstable, and you are required to execute a go-around.<br>B—When the aircraft altitude places it in unsafe proximity to terrain, obstructions, or other aircraft.<br>C—When they have implemented a temporary reduction in approach control separation minimums. |
| **7-12** | **9354** | **[A]** | **The question and answer stems are changed to read:**<br>**9354.** Under 14 CFR Part 91, what are the minimum number of hours that must pass after a person consumes alcohol before they may act as a crewmember?<br>A—8.<br>B—10.<br>C—12. |

| Page Number | Question Number | Correct Answer | Explanation |
|---|---|---|---|
| 7-14 | 9114-1 | [A] | **A new question is added to read:**<br>ALL<br>**9114-1.** When is ear blockage most likely to occur?<br>A—Upon descent and is aggravated by upper respiratory infection.<br>B—During initial climb-out as expanding air in the middle ear pushes the eustachian tube open.<br>C—During cruise flight as the pressure between the middle ear and aircraft cabin equalizes.<br>*As the aircraft cabin pressure decreases during ascent, the expanding air in the middle ear pushes the eustachian tube open, and by escaping down into the nasal passages, equalizes in pressure with the cabin pressure. But during descent, a pilot must periodically open the eustachian tube to equalize pressure. This can be accomplished by swallowing, yawning, or tensing muscles in the throat. Either an upper respiratory infection or a nasal allergic condition can produce enough congestion around the eustachian tube to make equalization difficult. Consequently, the difference in pressure between the middle ear and aircraft cabin can build up to a level that will hold the eustachian tube closed, making equalization difficult if not impossible to open. The problem is commonly referred to as ear block. (PLT099, AA.I.F.K1c) — AIM ¶8-1-2* |
| 7-16 | 9103 | [B] | **The correct answer is changed to B, and the question and answer stems are changed to read:**<br>**9103.** Altitude-induced hypoxia is caused by what atmospheric condition?<br>A—Significantly less oxygen molecules at high altitude.<br>B—Insufficient partial pressure of the inhaled oxygen.<br>C—Incorrect balance of oxygen and carbon dioxide. |
| 7-17 | 9805-8 | [C] | **A new question is added to read:**<br>ALL<br>**9805-8.** In a multicrew environment, who is responsible for the tone, pace, and outcome of decisions made, and will be held accountable for all outcomes in air carrier flights?<br>A—First officer.<br>B—Air carrier.<br>C—Captain.<br>*The captain is responsible for the tone, pace, and outcome of decisions, and will be held accountable for all outcomes of the flight. (PLT104, AA.I.E.K11) — AC 120-51* |
| 7-18 | 9805-6 | [B] | **A new question is added to read:**<br>ALL<br>**9805-6.** In order to assess risk in aeronautical decision making, what two basic considerations are recommended?<br>A—Convenience and effort required.<br>B—Likelihood and severity.<br>C—Time and cost efficiency.<br>*The degree of risk posed by a given hazard can be measured in terms of exposure (number of people or resources affected), severity (extent of possible loss), and probability (the likelihood that a hazard will cause a loss). (PLT104, AA.I.F.K3) — FAA-H-8083-25* |
| 7-18 | 9805-7 | [C] | **A new question is added to read:**<br>ALL<br>**9805-7.** To improve the effectiveness and safety of the entire operations team as a working system, CRM training should include<br>A—usage of seat-dependent checklists.<br>B—employee groups beyond the flight crew.<br>C—failures the flight crew must work through as a team.<br>*CRM is the application of team management concepts in the flight deck environment. CRM is one way of addressing the challenge of optimizing the human/machine interface and accompanying interpersonal activities. (PLT104, AA.I.E.K12) — FAA-H-8083-25* |

| Page Number | Question Number | Correct Answer | Explanation |
|---|---|---|---|
| 7-19 | 9815 | [C] | **The ACS code is changed to read:**<br>*AA.I.F.R2* |
| 7-19 | 9815-1 | [A] | **The ACS code is changed to read:**<br>*AA.I.F.R2* |
| 7-19 | 9833 | [A] | **The ACS code is changed to read:**<br>*AA.I.F.R2* |
| 7-20 | 9928-1 | [A] | **A new question is added to read:**<br>ALL<br>**9928-1.** What type of stressor can lead to poor decision making?<br>A—Lack of sleep.<br>B—Lack of high workload.<br>C—Lack of motivation.<br>*Fatigue is frequently associated with pilot error. Some of the effects of fatigue include degradation of attention and concentration, impaired coordination, and decreased ability to communicate. These factors seriously influence the ability to make effective decisions. (PLT098, AA.I.F.K3) — FAA-H-8083-25* |
| 7-20 | 9929-1 | [C] | **A new question is added to read:**<br>ALL<br>**9929-1.** The maximum tailwind component of the airplane is 10 knots. The actual tailwind calculated is 11 knots. Other aircraft are continuing to land, so you decide to ignore the limitation and land as well. Which hazardous attitude are you displaying?<br>A—Impulsivity.<br>B—Resignation.<br>C—Anti-authority.<br>*The anti-authority attitude is demonstrated by someone ignoring the rules. (PLT104, AA.I.F.R2) — FAA-H-8083-2*<br>*Answer (A) is incorrect because impulsivity is the attitude of people who frequently feel the need to do something, anything, immediately. Answer (B) is incorrect because resignation attitude is demonstrated by someone thinking "what's the use."* |
| 7-20 | 9929-2 | [B] | **A new question is added to read:**<br>ALL<br>**9929-2.** Which of the following is one of the five traits discovered to be common in pilots who have had accidents in their past?<br>A—A low correlation between traffic safety violations and flying safety mishaps.<br>B—A tendency to be impulsive rather than disciplined, especially in decision making.<br>C—A sense of respect for rules and procedures.<br>*The five traits discovered in pilots prone to having accidents are: (1) disdain toward rules; (2) very high correlation between accidents on their flying records and safety violations on their driving records; (3) frequently fall into the "thrill and adventure seeking" personality category; (4) impulsive rather than methodical and disciplined, both in their information gathering and in the speed and selection of actions to be taken; (5) a disregard for or tend to underutilize outside sources of information, including copilots, flight attendants, flight service personnel, flight instructors, and ATC. (PLT104, AA.I.F.K3) — FAA-H-8083-25* |
| 8-11 | 9776-1 | [C] | **A new question is added to read:**<br>ALL<br>**9776-1.** Jet streams are strongest during which season in the Northern Hemisphere?<br>A—Spring.<br>B—Summer.<br>C—Winter.<br>*(continued)* |

| Page Number | Question Number | Correct Answer | Explanation |
|---|---|---|---|
| | | | *Jet streams follow the boundaries between hot and cold air. Since these hot and cold air boundaries are most pronounced in winter, jet streams are strongest during Northern and Southern Hemisphere winters. (PLT302, AA.I.C.K3e) — AC 00-6* |
| **8-16** | **9206** | **[C]** | **The question and answer stems are changed to read:**<br>**9206.** You are planning a flight to the West Coast of the United States, which is currently below the published weather minimums for an ILS approach to that airport. Winds are forecast to increase to above 20 knots from the west at your scheduled arrival time. What weather conditions should you expect?<br>A—Visual meteorological conditions.<br>B—Advection fog will deepen with winds above 20 knots.<br>C—A layer of low stratus or stratocumulus is expected. |
| **8-17** | **8723** | **[B]** | **The question is changed to read:**<br>**8723.** A flight is scheduled at daybreak. The current weather is rainy but is expected to clear, with temperature/dew point spread forecast to be 10°C/10°C and winds 330° at 5 knots. What weather conditions should you expect?<br>A—Visual meteorological conditions until later in the day.<br>B—These conditions could produce radiation fog.<br>C—Dense fog that deepens later in the day.<br>*Conditions favorable for radiation fog are clear sky, little or no wind, and small temperature/dew point spread (high relative humidity). Radiation fog is restricted to land because water surfaces cool little from nighttime radiation. (PLT226, AA.I.C.K3j) — AC 00-6* |
| **8-21** | **9189-1** | **[B]** | **A new question is added to read:**<br>ALL<br>**9189-1.** Embedded thunderstorms, which can be hazardous during instrument flight, are most likely to occur<br>A—behind a fast-moving cold front.<br>B—in a warm front occlusion.<br>C—in a cold front occlusion.<br>*A warm front occlusion occurs when the air ahead of the warm front is colder than the air of the cold front. When this occurs, the cold front rides up and over the warm front. If the air forced aloft by the warm front occlusion is unstable, the weather will be more severe than the weather found in a cold front occlusion. Embedded thunderstorms, rain, and fog are likely to occur. (PLT192, AA.I.C.K3h) — FAA-H-8083-25* |
| **8-35** | **9161-1** | **[A]** | **A new question is added to read:**<br>ALL<br>**9161-1.** What course of action should the pilot take if encountering freezing rain?<br>A—Climb because the temperature is warmer at a higher altitude.<br>B—Descend because the temperature is warmer at a lower altitude.<br>C—No change is necessary if all anti-ice/deice equipment is working.<br>*Freezing rain occurs when there is a deep layer aloft with above freezing temperatures and with a shallow layer of below freezing air at the surface. Pilots should climb to warmer temperatures if encountering freezing rain. (PLT512, AA.I.C.K3d) — AC 00-6* |
| **8-44** | **9272** | **[B]** | **The question, answer stem B, and explanation are changed to read:**<br>**9272.** SPECI KGLS 131802Z 10012G21KT 060V140 2SM +SHRA SCT005 BKN035 OVC050CB 24/23 A2980 RMK RAB1857 WS TKO RW09L WSHFT 58 FROPA.<br>This SPECI report at Galveston (KGLS) indicates which condition?<br>B—Precipitation started at 1857.<br>*The remarks "RAB1857" indicates rain began at 57 minutes past the hour.* |

| Page Number | Question Number | Correct Answer | Explanation |
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| 8-47 | 9707 | | **This question has been removed.** |
| 8-48 | 9711 | [B] | **The question is changed to read:**<br>ALL<br>**9711.** You are planning to arrive at the KHOU airport at 0900Z, what conditions can be expected as indicated by this TAF:<br>KHOU 151720Z 1518/1618 22009KT P6SM SCT030 SCT250<br>FM160000 18005KT P6SM BKN050 BKN120 FM160600 21007KT P6SM VCSH SCT025 BKN200<br>FM160900 34010KT P6SM VCTS BKN035CB BKN250<br>TEMPO 1611/1613 TSRA BKN012 OVC025CB<br>FM161600 35007KT P6SM BKN020<br>A—Winds from the south blowing to the north at 10 knots.<br>B—Thunderstorm activity 5 to 10 miles from the airport's runway complex.<br>C—Rain showers, scattered clouds at 2,500 feet, and overcast at 20,000 feet.<br>*At 0900Z (FM160900), the TAF indicates the wind will be from 340° at 10 knots, with visibilities greater than 6 miles, thunderstorms in the vicinity of the airport, skies broken at 3,500 feet. (PLT283, AA.I.C.K2)* |
| 8-51 | 9255 | [B] | **The question is changed to read:**<br>**9255.** A station is forecasting wind and temperature aloft to be 280° at 205 knots; temperature –51°C at FL390. How would this data be encoded in the FB? |
| 8-54 | 9252 | | **This question has been removed.** |
| 8-54 | 9758 | [C] | **The question category, question, answer stems, and explanation are changed to read:**<br>ALL<br>**9758.** When does the National Weather Service release an Aviation Notification Watch Message (SAW)?<br>A—At 0000 (UTC).<br>B—At 0000 and 1200 (UTC).<br>C—Unscheduled and issued as required.<br>*A SAW provides threat alerts on an unscheduled and as-needed basis to forecast organized severe thunderstorms that may produce tornadoes, large hail, and/or convective damaging winds.* |
| 8-55 | 9285 | [C] | **Answer stems A and B are changed to read:**<br>A—the installed transport category aircraft ice protection system protecting against all types and levels of icing as designed.<br>B—very little airframe icing because of an OAT of –10°C or colder, the moisture is already frozen and cannot adhere to aircraft surfaces. |