

PRACTICE EXAM 8: FAA IA KNOWLEDGE TEST SIMULATION

Practice Exam 8 — Questions 1 through 50

1. Under 14 CFR § 43.9(a)(1), the maintenance record entry must include a description of the work performed. The description must be:

- A. A summary of the general type of work completed
- B. A reference to the aircraft owner's work request
- C. Specific enough to identify what was actually done
- D. Limited to a standard industry abbreviation

2. An IA is inspecting an aircraft and finds that the engine installed is not listed in the Type Certificate Data Sheet's approved engines section. The engine installation is:

- A. Acceptable because engine substitution is common practice
- B. Acceptable if the aircraft flies safely with the engine installed
- C. Acceptable because TCDS requirements are advisory
- D. A non-conformity requiring approved data for the installation

3. Under 14 CFR § 43.3(g), a certificated pilot may perform preventive maintenance on the pilot's own aircraft as listed in which section of Part 43?

- A. Part 43 Appendix A, paragraph (c)
- B. Part 43 Appendix A, paragraph (a)

C. Part 43 Appendix B, paragraph (b)

D. Part 43 Appendix D, paragraph (c)

4. The IA performing an annual inspection must run the aircraft engine per § 43.15(c) to determine:

A. The aircraft's operational readiness for the next flight

B. Satisfactory engine performance per manufacturer recommendations

C. The engine's remaining service life and useful time

D. The aircraft owner's compliance with operating limits

5. A mechanic is preparing to approve a 100-hour inspection on an aircraft used for flight instruction for hire. The approval for return to service requires:

A. An Inspection Authorization holder's signature only

B. A Repair Station certificate holder's signature

C. An A&P mechanic with appropriate rating

D. A Designated Engineering Representative's approval

6. Section 65.95(a)(1) establishes the IA's privilege to approve major repairs and major alterations for return to service under specific conditions. These conditions include:

A. The aircraft is not under a continuous airworthiness program

B. The work is completed by a Part 145 certified repair station

C. The alteration is pre-approved by the aircraft manufacturer

D. The work is witnessed by the aircraft owner or operator

7. Under AC 43.13-1B Chapter 4, the minimum pitch between rivets in a sheet metal repair is typically:

- A. 2 times the rivet diameter
- B. 2.5 times the rivet diameter
- C. 4 times the rivet diameter
- D. 3 times the rivet diameter

8. An IA is inspecting an aircraft with a constant-speed propeller and must verify governor operation. The verification involves:

- A. Measuring propeller diameter and blade angles at rest
- B. Cycling the propeller from low to high pitch during run-up
- C. Inspecting propeller hub bolts for torque value
- D. Verifying propeller compliance with aircraft flight manual

9. Under 14 CFR § 91.417(a)(2), records of major alterations on Form 337 must be:

- A. Retained permanently and transferred with the aircraft at sale
- B. Discarded after the aircraft is no longer operated
- C. Available only to the aircraft's current owner and operator
- D. Submitted to the FAA Regional Office upon request

10. A Type Certificate Data Sheet note specifies: "Required placard: INTENTIONAL SPINS PROHIBITED (Near Pilot's View)." The placard is missing during an inspection. The condition represents:

- A. A minor cosmetic issue not affecting airworthiness
- B. An acceptable condition pending placard replacement

- C. A notation for the next inspection schedule
- D. A non-conformity to the approved type design

11. An aircraft has been altered by installing an STC-approved avionics upgrade. The IA's verification sequence must include:

- A. STC applicability to the specific aircraft and data package conformity
- B. The installer's hourly rate and labor cost for the installation
- C. The STC holder's warranty terms for the modification
- D. The aircraft owner's training certification for operation

12. The FAA-CT-8080-8D Computer Testing Supplement provides which resource during the IA Knowledge Test?

- A. A calculator for computational problems
- B. A sample of previous IA Knowledge Test questions
- C. The aircraft's specific maintenance history
- D. Regulatory excerpts, AD samples, and TCDS references

13. Under 14 CFR § 39.9, an aircraft subject to an airworthiness directive that has not been complied with is:

- A. Airworthy if the operator has not yet reviewed the AD
- B. In an unairworthy condition until AD compliance is accomplished
- C. Airworthy because ADs apply to future flights only
- D. Airworthy if the compliance is not yet overdue in hours

14. The IA's annual inspection records review should include verification of which required periodic inspection?

- A. The aircraft's owner-preferred inspection schedule
- B. The next scheduled manufacturer-recommended inspection
- C. The altimeter, transponder, and ELT inspection currency
- D. The aircraft's pilot training inspection records

15. Under § 43.13(b), each person performing maintenance must do the work in a manner that ensures:

- A. The completed work meets applicable airworthiness requirements
- B. The work is profitable for the performing facility
- C. The work is documented for future owner reference
- D. The aircraft is returned to pre-maintenance condition

16. An IA inspecting the landing gear of a retractable aircraft discovers the gear warning system is inoperative. The correct disposition is:

- A. Continue the inspection without addressing the finding
- B. Note the condition for deferral under § 91.213(d)
- C. Document the condition as a minor discrepancy
- D. Correct the warning system before return to service

17. Under 14 CFR § 65.93, an activity that satisfies the IA renewal requirement is:

- A. Payment of an annual renewal fee to the FAA
- B. Maintenance of a current airman medical certificate
- C. Performing inspections of major repairs or alterations

D. Completion of recurrent pilot flight training

18. The approved data for a field-approved major alteration is documented in which Form 337 block?

- A. Block 1 aircraft identification
- B. Block 3 FAA field approval signature
- C. Block 6 performer conformity statement
- D. Block 7 return-to-service signature

19. A recurring airworthiness directive has been complied with at aircraft time 2,350 hours. The AD requires recurring compliance every 75 hours. The next compliance is due at aircraft time:

- A. 2,400 hours
- B. 2,415 hours
- C. 2,420 hours
- D. 2,425 hours

20. Under 14 CFR § 91.409(b), a 100-hour inspection is required for aircraft used for:

- A. Flight instruction for hire or carrying persons for hire
- B. Private recreational operations without compensation
- C. Owner-pilot travel to personal destinations
- D. Non-commercial cross-country navigation practice

21. An aircraft has accumulated multiple STCs over its service life. When inspecting such an aircraft, the IA should:

- A. Remove older STCs to simplify the configuration

- B. Evaluate compatibility of combined STC installations
- C. Focus on the most recently installed STC only
- D. Accept the combined installation without further review

22. Section 43.11(a) requires the inspection record entry to include:

- A. The type of inspection and signature with certificate number
- B. The owner's acknowledgment of the work performed
- C. The mechanic's estimated labor cost for the inspection
- D. A copy of the aircraft's flight manual supplement

23. An IA is approving a major alteration performed under an STC. The IA's signature on Form 337 Block 7 represents:

- A. A warranty of the installed equipment's functional performance
- B. An appraisal of the aircraft's market value increase
- C. A guarantee of future operational reliability
- D. The IA's determination that the work conforms to approved data

24. Under § 91.213(d), an inoperative item may be deferred only if the item is not required by:

- A. The aircraft owner's maintenance preferences
- B. The TCDS, regulations, ADs, or flight manual
- C. The mechanic's professional recommendations
- D. The aircraft insurance policy specifications

25. A mechanic has identified an approved data source for a proposed repair. Which of the following qualifies as approved data?

- A. Manufacturer's service bulletins not incorporated into ADs
- B. A general statement in the FAA Order manual system
- C. An STC applicable to the specific aircraft
- D. A written opinion from the mechanic's employer

26. Under 14 CFR § 65.91(c)(4), the applicant for an IA must have available the equipment, facilities, and inspection data necessary to:

- A. Properly inspect airframes, engines, propellers, and appliances
- B. Conduct passenger briefings and flight operations
- C. Perform aircraft delivery flights to customers
- D. Train other mechanics in the certification process

27. An IA is inspecting fabric covering on an aircraft and finds punch-test readings below the AC 43.13-1B Chapter 2 minimum strength. The disposition is:

- A. Document the reading and continue flight operations
- B. Apply additional doping coats to strengthen the fabric
- C. Note the finding in the next inspection schedule
- D. Recover the affected fabric before return to service

28. The FAA Aircraft Registry's master file of Form 337s is useful for the IA to:

- A. Track the aircraft's insurance coverage changes
- B. Research previously filed major repair and alteration documentation

- C. Obtain the aircraft's current fuel efficiency figures
- D. Submit renewal applications for the IA certificate

29. A mechanic is welding an aircraft engine mount. The welder's qualification must be verified because:

- A. All welding requires FSDO-certified welders
- B. The engine manufacturer requires pre-installation certification
- C. AC 43.13-1B Chapter 4 requires qualified welders for aircraft structural welding
- D. The aircraft owner's insurance requires welder certification

30. The IA performing an annual inspection must determine that all applicable airworthiness directives have been complied with. This regulatory obligation derives from:

- A. 14 CFR § 65.91 eligibility for IA
- B. 14 CFR § 43.15 additional performance rules for inspections
- C. 14 CFR § 91.403 operator airworthiness responsibility
- D. 14 CFR § 39.7 AD operational requirements

31. An aircraft's airworthiness certificate is displayed at the cabin entrance and is legible to passengers. Under § 91.203(b), this display is:

- A. Acceptable only for commercial aircraft
- B. Optional if the registration is current
- C. Required only for aircraft carrying passengers
- D. The correct regulatory display position

32. An IA inspecting a propeller finds a crack along the blade length approximately 1.5 inches in length. The appropriate action is to:

- A. Apply a sealant to the crack and continue operation
- B. Note the finding and schedule monitoring
- C. Address through propeller repair or replacement before return to service
- D. Apply protective paint to prevent further damage

33. Under 14 CFR § 43.11(b), when an aircraft is found unairworthy after an annual inspection, the inspector must:

- A. Provide the owner with a dated and signed list of discrepancies
- B. Notify the FAA Aircraft Registry of the unairworthy finding
- C. Ground the aircraft at the local FSDO for 90 days
- D. Issue a corrective action plan with completion deadlines

34. An IA is inspecting an aircraft's electrical system for bonding adequacy. AC 43.13-1B Chapter 11 specifies bonding resistance requirements in:

- A. Amperes of current flow
- B. Volts across the bonding junction
- C. Percentage of electrical efficiency
- D. Milliohms at the bonding interface

35. The annual inspection entry in the aircraft maintenance record must certify that the aircraft has been:

- A. Inspected and approved by the FAA FSDO
- B. Inspected per the applicable inspection and determined airworthy

- C. Cleared for continued commercial operations
- D. Registered and insured for the next 12 months

36. A Type Certificate Data Sheet includes: "Fuel: Aviation Gasoline, 100LL minimum grade." An aircraft has been fueled with 94 octane gasoline. The regulatory status is:

- A. Acceptable because 94 exceeds 90 octane
- B. Acceptable under emergency operating conditions
- C. Non-conformity to the approved type design
- D. Not addressed by the TCDS fuel specification

37. Under AC 43.13-1B Chapter 7, a control cable's tension must be measured and adjusted at:

- A. Manufacturer-specified values at specified temperatures
- B. Standard ambient conditions regardless of temperature
- C. The aircraft owner's preferred tension settings
- D. The mechanic's professional judgment level

38. The IA's verification that an STC is applicable to the specific aircraft includes confirmation of:

- A. The owner's training certification for the modification
- B. The STC holder's current business license
- C. The retail pricing structure of the modification
- D. Aircraft serial number within the Approved Model List

39. An aircraft has an empty weight of 1,585 pounds and an empty moment of 115,210 in-lb. The empty CG is approximately:

- A. 74.5 inches
- B. 72.7 inches
- C. 71.2 inches
- D. 73.8 inches

40. Under 14 CFR § 43.9(a)(3), the maintenance record entry must include the name of the person performing the work if different from the person:

- A. Who owns the aircraft at the time of work
- B. Who holds the aircraft's current certificate of registration
- C. Who is approving the aircraft for return to service
- D. Who is employed by the aircraft's original manufacturer

41. An IA is inspecting an aircraft and finds corrosion with a layered, flaking appearance on a skin panel. The corrosion type is:

- A. Exfoliation corrosion
- B. Surface corrosion
- C. Galvanic corrosion
- D. Filiform corrosion

42. Under § 91.207(c), an ELT battery must be replaced when which condition is reached?

- A. The battery has been installed for 5 years
- B. 50 percent of the useful life has expired

- C. The battery's terminals show corrosion
- D. The battery has been used once in any flight

43. The IA's airworthiness determination requires conformity to approved type design as well as:

- A. An approved maintenance history for the past 10 years
- B. A current insurance policy covering the aircraft
- C. Condition for safe operation of the aircraft
- D. A compliance record for non-mandatory service bulletins

44. A Special Flight Permit is issued by the FAA under § 21.197 for which primary purpose?

- A. Operating an aircraft in commercial passenger service
- B. Conducting routine flight training for student pilots
- C. Operating an aircraft at its maximum certificated weight
- D. Flying the aircraft to a maintenance facility

45. An IA reviewing an STC data package discovers the document has been revised from Revision A to Revision B. The installation was accomplished under Revision A. The IA's action is:

- A. Verify whether Revision B affects the existing installation
- B. Immediately re-accomplish the installation per Revision B
- C. Document the installation as not conforming to current revision
- D. Reject the aircraft until Revision B is fully implemented

46. A mechanic is selecting hardware for an aircraft repair. A bolt specification reads "AN4-10A." The letter "A" suffix indicates:

- A. The aircraft type for which the bolt is approved
- B. The year of manufacture for the specific bolt
- C. A specific material or finish designation
- D. The diameter classification of the bolt

47. Under 14 CFR § 91.417(b)(1), records of ordinary maintenance must be retained until:

- A. The aircraft is sold to a new owner
- B. Superseded by other work, or one year
- C. The mechanic's certificate is renewed
- D. The next annual inspection is completed

48. The Computer Testing Supplement FAA-CT-8080-8D contains sample Type Certificate Data Sheet excerpts. The primary purpose of including these excerpts is to:

- A. Provide a complete TCDS library for every U.S. aircraft
- B. Document the aircraft industry's regulatory history
- C. Replace the need for current TCDS research
- D. Support TCDS-based questions on the IA Knowledge Test

49. An IA finds undercut defects in a weld repair on an aircraft engine mount. The condition indicates:

- A. A normal welding characteristic of alloy steel
- B. A cosmetic issue not affecting structural integrity
- C. Unacceptable weld quality requiring corrective action

D. A minor welding variation acceptable for light loads

50. Under § 65.95(b), when an Inspection Authorization is surrendered, the IA must:

A. Return FAA Form 8310-5 to the Administrator

B. Submit the certificate to the aircraft insurance carrier

C. File the certificate with the local county recorder

D. Retain the certificate as a personal achievement record

PRACTICE EXAM 8: ANSWER KEY AND EXPLANATIONS

1. C — Specific enough to identify what was actually done. Section 43.9(a)(1) requires the maintenance record entry to describe the work performed with specificity that allows a future reader to understand what was done. Generic summaries, work requests, and abbreviations do not meet the regulatory standard for record completeness.
2. D — A non-conformity requiring approved data for the installation. An engine not listed on the TCDS represents a non-conformity to approved type design. The installation requires separate approved data — typically an STC or field approval — authorizing the specific engine for the specific aircraft.
3. A — Part 43 Appendix A, paragraph (c). Part 43 Appendix A paragraph (c) lists preventive maintenance items that a certificated pilot may perform on the pilot's own aircraft under § 43.3(g). The other appendix references govern different categories of work or records.
4. B — Satisfactory engine performance per manufacturer recommendations. Section 43.15(c) specifies that the engine run-up at the end of the inspection determines satisfactory performance per manufacturer recommendations. It is not for operational readiness assessment, service life measurement, or operating compliance.
5. C — An A&P mechanic with appropriate rating. Section 43.7(b) authorizes a certificated mechanic with appropriate rating to approve return to service after 100-hour inspections. IA authority is not required for 100-hour inspections — this distinguishes them from annual inspections, which do require IA approval.
6. A — The aircraft is not under a continuous airworthiness program. Section 65.95(a)(1) specifically prohibits IA approval for aircraft maintained under a continuous airworthiness program under Part 121 or 127. Repair station involvement, manufacturer pre-approval, and owner witnessing are not regulatory conditions.
7. D — 3 times the rivet diameter. AC 43.13-1B Chapter 4 establishes minimum fastener pitch (the distance between fasteners in a row) as typically 3× the fastener diameter. This spacing prevents stress concentration and maintains the structural integrity of sheet metal repairs.
8. B — Cycling the propeller from low to high pitch during run-up. Cycling the propeller through its full pitch range verifies governor operation and pitch-change mechanism function. This is the specific operational check that confirms governor response; diameter measurement, hub bolt torque, and flight manual compliance are separate matters.

9. A — Retained permanently and transferred with the aircraft at sale. Section 91.417(a)(2) requires Form 337 records to be retained permanently and transferred with the aircraft at sale. These permanent records establish the aircraft's configuration history and are among the records any prospective buyer receives.
10. D — A non-conformity to the approved type design. A TCDS-required placard is part of the approved type design. Its absence constitutes non-conformity to type design, which is the first element of the two-part airworthiness definition and renders the aircraft unairworthy until corrected.
11. A — STC applicability to the specific aircraft and data package conformity. The IA's STC verification sequence includes confirming the STC's applicability to the specific aircraft (AML verification) and that the physical installation conforms to the STC data package. Labor rates, warranties, and owner training are not regulatory verification elements.
12. D — Regulatory excerpts, AD samples, and TCDS references. FAA-CT-8080-8D contains curated regulatory excerpts, sample airworthiness directives, and TCDS references used as reference material during the IA Knowledge Test. Calculators, prior test questions, and specific aircraft records are not included.
13. B — In an unairworthy condition until AD compliance is accomplished. Section 39.9 establishes that an aircraft subject to an AD that has not been complied with is unairworthy. Operator awareness, AD timing, and hour/day overrun do not alter this regulatory determination.
14. C — The altimeter, transponder, and ELT inspection currency. The IA's records review verifies currency of required periodic inspections: § 91.411 altimeter, § 91.413 transponder, and § 91.207(d) ELT. Owner preferences, manufacturer recommendations, and pilot training records are not the regulatory references.
15. A — The completed work meets applicable airworthiness requirements. Section 43.13(b) requires each person performing maintenance to do the work in a manner that ensures the completed work meets applicable airworthiness requirements. Profitability, future reference, and pre-maintenance comparison are not regulatory standards.
16. D — Correct the warning system before return to service. A landing gear warning system inoperative condition affects flight safety and is an unairworthy condition requiring correction. Continuing the inspection without addressing, deferring, or documenting as minor are not appropriate responses to a safety-critical finding.
17. C — Performing inspections of major repairs or alterations. Section 65.93 lists five alternative renewal activities, including performing inspections of major repairs or major alterations. Renewal fees, medical certificates, and flight training are not IA renewal activities.

18. B — Block 3 FAA field approval signature. Block 3 of Form 337 is reserved for FAA use and is where an Aviation Safety Inspector signs to grant a field approval for a specific alteration or repair. Block 1 is aircraft ID, Block 6 is performer, Block 7 is the IA signature.
19. D — 2,425 hours. The next compliance is calculated by adding the recurring interval to the last compliance time: $2,350 + 75 = 2,425$ hours. Simple addition of the recurring interval to the last compliance time produces the next-due calculation.
20. A — Flight instruction for hire or carrying persons for hire. Section 91.409(b) requires a 100-hour inspection for aircraft carrying persons other than a crewmember for hire or used for flight instruction for hire. Private recreational, owner-pilot travel, and non-commercial practice operations do not trigger this requirement.
21. B — Evaluate compatibility of combined STC installations. Multiple STCs on a single aircraft may produce configurations neither STC specifically evaluated alone. The IA inspecting such an aircraft should evaluate whether combined STC installations are supported by approved data, not simply accept them individually.
22. A — The type of inspection and signature with certificate number. Section 43.11(a) requires the inspection entry to include the type of inspection performed and the signature with certificate number of the approving person. Owner acknowledgment, labor cost, and flight manual supplement are not required.
23. D — The IA's determination that the work conforms to approved data. The IA's Form 337 signature represents the regulatory determination that the work was accomplished per approved data. It is not a warranty, market valuation, or reliability guarantee.
24. B — The TCDS, regulations, ADs, or flight manual. Section 91.213(d) specifies the regulatory criteria: the inoperative item must not be required by the TCDS, applicable regulations, an AD, or the flight manual. Owner preferences, mechanic judgment, and insurance specifications are not the criteria.
25. C — An STC applicable to the specific aircraft. STCs are FAA-approved data for the alteration. Service bulletins not incorporated into ADs, general FAA order language, and employer opinions do not constitute approved data.
26. A — Properly inspect airframes, engines, propellers, and appliances. Section 65.91(c)(4) requires the applicant to have available the equipment, facilities, and inspection data necessary to properly inspect airframes, engines, propellers, and appliances. The data must be current. Passenger briefings, delivery flights, and mechanic training are not the regulatory requirements.
27. D — Recover the affected fabric before return to service. AC 43.13-1B Chapter 2 establishes that fabric with tear-strength readings below specified minimums has failed the integrity test and must be recovered before return to service. Documentation, additional doping, and scheduling are not substitutes for correction.

28. B — Research previously filed major repair and alteration documentation. The FAA Aircraft Registry maintains the master file of Form 337s for U.S.-registered aircraft. This file is accessible for research of an aircraft's maintenance history, including reconstruction of records.
29. C — AC 43.13-1B Chapter 4 requires qualified welders for aircraft structural welding. Chapter 4 of AC 43.13-1B specifically requires welders performing aircraft structural welding to meet qualification requirements. The IA verifying a structural weld confirms the welder's qualification, not general facility certifications or insurance requirements.
30. B — 14 CFR § 43.15 additional performance rules for inspections. Section 43.15 requires the person performing the inspection to determine that the aircraft meets all applicable airworthiness requirements, including any AD applicable to the aircraft. This is the direct regulatory basis for the AD verification obligation during inspection.
31. D — The correct regulatory display position. Section 91.203(b) requires the airworthiness certificate to be displayed at the cabin or cockpit entrance legible to passengers or crew. This is the regulatory display requirement for all aircraft, not limited to commercial or passenger-carrying operations.
32. C — Address through propeller repair or replacement before return to service. A 1.5-inch crack along a propeller blade length is a structural condition requiring repair or replacement, not dressing or deferral. Sealants, monitoring, and protective coatings are not appropriate responses to structural cracks in propeller blades.
33. A — Provide the owner with a dated and signed list of discrepancies. Section 43.11(b) requires the IA to provide the owner with a dated and signed list of discrepancies and unairworthy items. Registry notification, grounding, and corrective action plans are not the regulatory requirements.
34. D — Milliohms at the bonding interface. AC 43.13-1B Chapter 11 specifies bonding resistance requirements typically measured in milliohms at the bonding interface. Low-resistance connections (measured in milliohms, not amperes, volts, or percentages) are essential for proper static discharge and fault current paths.
35. B — Inspected per the applicable inspection and determined airworthy. Section 43.11(a) requires the annual inspection entry to certify the aircraft has been inspected in accordance with an annual inspection and determined to be in airworthy condition. FSDO approval, commercial clearance, and registration/insurance do not meet the certification requirement.
36. C — Non-conformity to the approved type design. The TCDS specifies the minimum fuel grade required for operation. Use of a lower-grade fuel violates the approved type design. The fuel grade requirement is a regulatory element, not a performance optimization.
37. A — Manufacturer-specified values at specified temperatures. AC 43.13-1B Chapter 7 requires flight control cable tension to be measured and adjusted to manufacturer-specified values at

manufacturer-specified temperatures. Standard ambient, owner preferences, and mechanic judgment are not the regulatory specification.

38. D — Aircraft serial number within the Approved Model List. The IA's STC applicability verification includes confirming the specific aircraft's make, model, and serial number fall within the STC's Approved Model List. Aircraft outside the AML are not eligible for the STC's approved data.
39. B — 72.7 inches. Empty CG is calculated as empty moment divided by empty weight: $115,210 \div 1,585 = 72.69$, which rounds to 72.7 inches. This basic computation is the foundation of empty CG determination.
40. C — Who is approving the aircraft for return to service. Section 43.9(a)(3) requires the maintenance record to include the performer's name when different from the approving person. This regulatory requirement creates the documentation link between performer and approver when they are different individuals.
41. A — Exfoliation corrosion. Exfoliation corrosion is characterized by layered, flaking appearance and is a form of intergranular corrosion. The distinctive lifting and flaking of surface layers distinguishes it from surface corrosion, galvanic corrosion, or filiform corrosion.
42. B — 50 percent of the useful life has expired. Section 91.207(c) requires ELT battery replacement at the earlier of 50 percent of useful life or 1 cumulative hour of use. Installation duration (5 years), terminal corrosion, and one-flight use are not regulatory triggers.
43. C — Condition for safe operation of the aircraft. The airworthiness determination is a two-part regulatory concept requiring both (1) conformity to approved type design and (2) condition for safe operation. Maintenance history, insurance, and service bulletin compliance are not regulatory airworthiness requirements.
44. D — Flying the aircraft to a maintenance facility. Section 21.197(a)(1) identifies flying to a base where repairs, alterations, or maintenance will be performed as a permitted purpose for a special flight permit. Passenger-for-hire, student training, and maximum-weight operations are not permitted purposes.
45. A — Verify whether Revision B affects the existing installation. An STC revision may or may not affect a previously completed installation. The IA should verify whether Revision B changes the AML, installation requirements, or flight manual supplement before making a disposition. Immediate re-accomplishment or rejection without verification is not the appropriate response.
46. C — A specific material or finish designation. The letter suffix on AN hardware specifications indicates a specific material, finish, or manufacturing variant. The AN4 indicates the bolt type; the -10 indicates grip length; the A suffix specifies a material/finish distinction.

47. B — Superseded by other work, or one year. Section 91.417(b)(1) establishes that ordinary maintenance records must be retained until the work is repeated or superseded by other work, or for one year, whichever occurs first. Sale, certificate renewal, and annual inspection completion are not the retention triggers.
48. D — Support TCDS-based questions on the IA Knowledge Test. The Computer Testing Supplement includes sample TCDS excerpts specifically to support TCDS-based questions on the IA Knowledge Test. These excerpts provide the reference material for test questions about TCDS interpretation and application.
49. C — Unacceptable weld quality requiring corrective action. AC 43.13-1B Chapter 4 identifies undercut as a weld defect — erosion at the edge of the weld bead into the parent material. Undercut is unacceptable welding practice and indicates a weld that requires correction; it is not a normal characteristic or cosmetic variation.
50. A — Return FAA Form 8310-5 to the Administrator. Section 65.95(b) specifically requires the holder to return FAA Form 8310-5 (the physical IA certificate) to the Administrator when the authorization is surrendered, suspended, revoked, or expired. Insurance carriers, county recorders, and personal retention are not regulatory alternatives.