PRACTICE EXAM 18: FAA IA KNOWLEDGE TEST SIMULATION

Practice Exam 18 — Questions 1 through 50

1. An IA is inspecting an aircraft and finds a cylinder with a differential compression reading of 56/80 on a Continental engine with a service limit of 60/80. The correct determination is:

A. Compression is within service limits and acceptable

B. Compression is at the exact service limit boundary

C. Compression is below service limits and requires action

D. Compression exceeds the manufacturer's optimum range

2. Under 14 CFR § 43.9(a), the maintenance record entry for work returning the aircraft to service must include all of the following except:

A. The aircraft owner's acknowledgment signature

B. A description of the work performed

C. The date of completion of the work

D. The signature and certificate number of the approving person

3. A recurring airworthiness directive was complied with at aircraft total time 7,450 hours. The AD requires compliance every 200 hours. The next compliance is due at aircraft total time:

A. 7,600 hours

B. 7,625 hours

C. 7,675 hours

D. 7,650 hours

4. An IA is inspecting an aircraft's fuel tank system and finds a section that was welded repaired by an unqualified welder. Under AC 43.13-1B Chapter 4, the work requires:

A. Documentation of the welding procedures used

B. A welder qualified for aircraft structural welding

C. Testing of the welded joints under hydraulic pressure

D. Visual inspection of weld bead geometry

5. Under 14 CFR § 65.95(b), the IA's Form 8310-5 must be returned to the Administrator when:

A. The authorization expires, is surrendered, or is suspended

B. The mechanic relocates to a new state of residence

C. The mechanic retires from aviation maintenance work

D. The mechanic transfers employment to a new facility

6. A Form 337 Block 8 description of work should be written to allow:

A. Identification of the approved data reference used

B. The owner to identify the installation cost easily

C. A future mechanic to verify what was accomplished

D. The FAA to assess the work's commercial value

7. Under 14 CFR § 91.207(c), an ELT battery must be replaced at the earlier of:

A. 5 years from the battery's manufacturing date

B. 50 percent of useful life or 1 cumulative hour of transmission

C. 2 years from the ELT's initial installation date

D. The next annual inspection cycle after installation

8. An IA is inspecting an aircraft's propeller and finds a 2-inch crack exceeding manufacturer dressing limits. The required action is:

A. Document the crack and continue operations

B. Apply a protective coating over the crack

C. Monitor the crack progression at next inspection

D. Replace the propeller blade before return to service

9. Under 14 CFR § 43.13(a), each person performing maintenance must use methods, techniques, and practices:

A. Prescribed in the manual or acceptable to the Administrator

B. Preferred by the aircraft owner's maintenance requirements

C. Specified exclusively by the aircraft's original manufacturer

D. Developed through the mechanic's personal experience

10. The FAA-CT-8080-8D Computer Testing Supplement provides the IA Knowledge Test applicant with:

A. A directory of Inspection Authorization holders nationwide

B. Specific aircraft maintenance history and records

C. Reference materials for regulations, ADs, and TCDS questions

D. Contact information for FAA officials and inspectors

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

A. Permanently as part of the aircraft's regulatory records

B. Until superseded by other work or one year, whichever comes first

C. Until the aircraft is sold to a new registered owner

D. For five years from the work completion date

12. An IA is inspecting an aircraft's electrical bonding at an antenna installation. AC 43.13-1B Chapter 11 specifies bonding resistance measurement in:

A. Current flow amperes through the bond

B. Voltage drop across the bonding wire

C. Percentage of electrical conductivity

D. Milliohms at the bonding interface

13. Under 14 CFR § 43.7(b), approval for return to service after a major repair on a Part 91 aircraft may be granted by:

A. The holder of an Inspection Authorization

B. A certificated mechanic with airframe rating only

C. A pilot holding commercial certificate privileges

D. The aircraft's insurance carrier representative

14. The regulatory basis establishing the FAA's authority to issue airworthiness directives is found in:

A. 14 CFR Part 21 aircraft certification provisions

B. 14 CFR Part 43 maintenance provisions

C. 14 CFR Part 39 airworthiness directives

D. 14 CFR Part 65 mechanic certification requirements

15. A mechanic is performing a weld repair on an aircraft fuselage frame. The work is classified as:

A. Preventive maintenance under § 43.3(g) provisions

B. Minor repair within A&P mechanic authority

C. Routine maintenance not requiring documentation

D. Major repair requiring approved data and IA approval

16. Under AC 43.13-1B Chapter 6, the form of corrosion that produces visible lifting or flaking of metal surface layers is:

A. Exfoliation corrosion

B. Pitting corrosion

C. Galvanic corrosion

D. Filiform corrosion

17. An IA has inspected an aircraft and found it unairworthy at an annual inspection. Under § 43.11(b), the IA must:

A. Ground the aircraft at a specific location

B. Provide the owner with a dated and signed discrepancy list

C. Notify the Aircraft Registry of the unairworthy finding

D. File an enforcement action with the local FSDO

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

A. The aircraft owner at the time of the work

B. The mechanic's IA certificate holder of record

C. The person approving the aircraft for return to service

D. The employee of the aircraft's original manufacturer

19. A Special Flight Permit is issued by the FAA under § 21.197 for aircraft that:

A. Operate under commercial transport certification

B. Have completed all required annual inspections

C. Meet all airworthiness requirements with good records

D. Do not meet airworthiness but are capable of safe flight

20. Under 14 CFR § 65.93, a qualifying IA renewal activity is:

A. Performing annual inspections per 90-day period held

B. Holding a current airman medical certificate

C. Completing recurrent pilot flight training

D. Payment of an annual IA renewal fee

21. An aircraft has an empty weight of 1,620 pounds with an empty moment of 121,500 in-lb. The empty CG is:

A. 75.0 inches

B. 76.0 inches

C. 74.5 inches

D. 73.5 inches

22. Under 14 CFR § 43.15(c), the aircraft engine must be run during an annual inspection at:

A. The beginning of the inspection for warming

B. The midpoint of the inspection for verification

C. The end of the inspection for satisfactory performance

D. The mechanic's discretion based on conditions

23. The IA performing a pre-inspection records review discovers the aircraft's ATC transponder was last tested 25 calendar months ago. The aircraft will be operated IFR. The disposition is:

A. Continue the inspection and note the lapse afterward

B. Approve the aircraft for VFR operation only

C. Ignore the lapse if the transponder functions correctly

D. Require § 91.413 testing before IFR operation

24. Under 14 CFR § 91.203(b), the airworthiness certificate must be displayed:

A. On the aircraft's exterior fuselage in visible location

B. At the cabin or cockpit entrance legible to passengers

C. In the pilot's personal logbook documentation system

D. In the aircraft owner's personal records system

25. An IA is inspecting a flight control cable and finds broken strands at a pulley location. The correct disposition is:

A. Replace the cable before return to service

B. Apply cable lubricant to extend service life

C. Note the condition for future inspection schedule

D. Continue flight operations and monitor progression

26. Under § 43.11(a), the inspection record entry for an airworthy annual inspection must state that the aircraft has been:

A. Approved for commercial passenger service operations

B. Cleared by the aircraft manufacturer's representative

C. Ready for continued operational maintenance

D. Inspected and determined to be in airworthy condition

27. A Supplemental Type Certificate's Approved Model List (AML) specifies:

A. The warranty coverage period for the modification

B. Applicable aircraft by make, model, and serial number

C. The dealer network authorized to sell the STC

D. The pricing structure for STC licensing fees

28. Under 14 CFR § 65.91(c), an applicant for Inspection Authorization must have:

A. Completion of an approved aviation technician course within 5 years

B. Employment at a Part 145 certified repair station

C. An A&P certificate with both ratings in effect for at least 3 years

D. A repair station certificate issued in the preceding 12 months

29. The IA's verification that an STC applies to a specific aircraft includes confirmation of:

A. The aircraft's serial number within the Approved Model List

B. The installer's qualification by the STC holder directly

C. The owner's training completion certification

D. The STC holder's current business license status

30. Under 14 CFR § 91.213(d), an inoperative item may be deferred only if not required by:

A. The aircraft owner's operating preferences

B. The mechanic's professional judgment

C. The aircraft's insurance policy specifications

D. The TCDS, regulations, ADs, or flight manual

31. A mechanic is installing a Parts Manufacturer Approval replacement propeller blade on an aircraft. The PMA approval specifies a specific engine-propeller combination. Installation on a different combination is:

A. Acceptable if the mechanical specifications match

B. Acceptable under alternate approval procedures

C. Acceptable if the installer has equivalent experience

D. Not authorized because PMA approval is application-specific

32. The IA performing an annual inspection verifies all applicable airworthiness directives have been complied with. This verification derives from:

A. 14 CFR § 65.91 IA eligibility requirements

B. 14 CFR § 43.15 additional performance rules for inspections

C. 14 CFR § 91.403 operator airworthiness responsibility

D. 14 CFR § 43.9 maintenance record requirements

33. Under 14 CFR § 43.3(g), a certificated pilot may perform which category of work on the pilot's own aircraft?

A. Preventive maintenance as listed in Appendix A paragraph (c)

B. Minor repairs within the mechanic's professional judgment

C. Major alterations using approved data references

D. Structural repairs to primary control surfaces

34. An IA is inspecting an aircraft's weight and balance record. The current empty CG is 73.5 inches, and the TCDS-approved range is 73.0 to 75.0 inches. The aircraft is:

A. Outside the approved empty CG envelope

B. At the forward limit of approved envelope

C. Within the approved empty CG envelope

D. At the aft limit of approved envelope

35. Under 14 CFR § 91.409(a), an aircraft operated under Part 91 must have had an annual inspection within the preceding:

A. 6 calendar months

B. 18 calendar months

C. 24 calendar months

D. 12 calendar months

36. The IA's Form 337 Block 7 signature represents:

A. The IA's determination that work conforms to approved data

B. A warranty of the installed equipment's performance

C. An appraisal of the aircraft's value increase

D. A guarantee of the modification's operational reliability

37. Under AC 43.13-1B Chapter 7, flight control cable tension must be measured at:

A. Ambient temperature without temperature adjustment

B. Manufacturer-specified temperatures with tensiometer

C. Standard laboratory conditions for accuracy

D. Operating temperature during actual flight

38. Under 14 CFR § 91.207(d), the ELT inspection must be performed within the preceding:

A. 24 calendar months

B. 18 calendar months

C. 6 calendar months

D. 12 calendar months

39. An IA is reviewing a Form 337 submission and finds Block 3 contains an ASI's signature dated 3 years ago, but Block 7 IA signature is missing. The document is:

A. Acceptable because field approval authorizes the work

B. Incomplete because IA return-to-service approval is required

C. Acceptable for routine maintenance documentation

D. Valid for aircraft return-to-service activities

40. Under Part 43 Appendix A paragraph (a), installation of equipment not approved for the engine is classified as:

A. Preventive maintenance under § 43.3(g)

B. Routine maintenance not requiring documentation

C. Major alteration requiring approved data

D. Minor alteration within mechanic authority

41. The IA's records review verifies currency of required periodic inspections including:

A. The aircraft owner's commercial pilot rating status

B. The aircraft's monthly operational flight time records

C. The altimeter, transponder, and ELT inspections

D. The aircraft owner's annual insurance policy renewal

42. Under § 43.5(b), the aircraft's weight and balance record must be revised after:

A. Maintenance that may appreciably change weight or balance

B. Every routine oil change regardless of weight impact

C. Any maintenance requiring a Form 337 submission

D. Major alterations under field approval procedures only

43. An IA discovers during an annual inspection that a required § 91.411 altimeter system test lapsed 3 months ago. The aircraft will operate IFR. The disposition is:

A. Proceed with the annual inspection and note the lapse

B. Require § 91.411 testing before return to IFR operation

C. Approve the aircraft for VFR operation only

D. Ignore the lapse if the aircraft has operated normally

44. Under 14 CFR § 43.11(b), the discrepancy list provided to the owner must be:

A. Approved by the local FSDO before delivery

B. Reviewed by the aircraft manufacturer's representative

C. Signed by the aircraft owner acknowledging receipt

D. Dated and signed by the IA identifying unairworthy items

45. A Form 337 for a field-approved alteration must contain which signature?

A. The performing mechanic's conformity statement only

B. The FAA Aviation Safety Inspector's field approval

C. The aircraft owner's acceptance signature

D. The aircraft manufacturer's endorsement letter

46. Under 14 CFR § 91.417(a)(2), records that must be retained permanently and transferred with the aircraft include:

A. Total time in service and major alteration Form 337s

B. The aircraft owner's monthly flight time logs

C. The mechanic's quarterly billing invoice records

D. The aircraft's fuel purchase and consumption data

47. An IA performing an annual inspection finds an unairworthy condition. Upon finding the condition, the IA should:

A. Stop the inspection at the first discrepancy identified

B. Correct the condition immediately and continue inspecting

C. Continue the inspection to identify all discrepancies

D. Consult the FSDO before further inspection activities

48. The FAA Aircraft Registry maintains a master file of Form 337s primarily to:

A. Determine aircraft market values for insurance purposes

B. Track aircraft owner contact information changes

C. Coordinate with local FSDOs on specific operations

D. Provide historical documentation of major alterations

49. Under AC 43.13-1B Chapter 4, the minimum edge distance for rivets in sheet metal repair is typically:

A. One times the fastener diameter

B. Three times the fastener diameter

C. Two times the fastener diameter

D. Five times the fastener diameter

50. A Supplemental Type Certificate is issued by the FAA to:

A. The aircraft owner who requests the modification

B. The STC holder, typically the modification developer

C. The installing mechanic or repair facility

D. The Aviation Safety Inspector overseeing the approval

PRACTICE EXAM 18: ANSWER KEY AND EXPLANATIONS

1. C — Compression is below service limits and requires action. A differential compression reading of 56/80 is below the Continental service limit of 60/80, indicating excessive leakage past valves, rings, or head gasket. The cylinder must be addressed before return to service — action is required, not acceptance or deferral.

2. A — The aircraft owner's acknowledgment signature. Section 43.9(a) requires description of work, date of completion, performer's name if different from approver, and signature with certificate number of the approving person. Owner acknowledgment is not a regulatory element of the maintenance record entry.

3. D — 7,650 hours. The next compliance is calculated by adding the recurring interval to the last compliance time: 7,450 + 200 = 7,650 hours. Simple addition of the recurring interval produces the next-due time for any recurring AD.

4. B — A welder qualified for aircraft structural welding. AC 43.13-1B Chapter 4 specifically requires welders performing aircraft structural welding to be qualified. Documentation, pressure testing, and visual inspection are not substitutes for welder qualification — the welder's qualification is the fundamental requirement.

5. A — The authorization expires, is surrendered, or is suspended. Section 65.95(b) requires the holder to return FAA Form 8310-5 to the Administrator when the authorization expires, is surrendered, suspended, or revoked. Employer changes, retirement, and relocation do not trigger this regulatory requirement.

6. C — A future mechanic to verify what was accomplished. AC 43.9-1E requires Block 8 to describe the work with specificity allowing a future mechanic unfamiliar with the work to understand what was done. Approved data references alone, cost identification, and commercial valuation are not Block 8 purposes.

7. B — 50 percent of useful life or 1 cumulative hour of transmission. Section 91.207(c) requires ELT battery replacement at the earlier of 50 percent of useful life or 1 cumulative hour of transmission. Manufacturing date, ELT installation date, and inspection cycles are not the regulatory criteria.

8. D — Replace the propeller blade before return to service. A 2-inch crack exceeding manufacturer dressing limits is an unairworthy structural defect. The propeller must be repaired or replaced

before return to service; documentation, protective coatings, and monitoring are not appropriate responses to cracks exceeding limits.

9. A — Prescribed in the manual or acceptable to the Administrator. Section 43.13(a) requires the use of methods prescribed in the current manufacturer's manual or Instructions for Continued Airworthiness, or other methods acceptable to the Administrator. Owner preferences, manufacturer-only restrictions, and personal experience are not accurate regulatory summaries.

10. C — Reference materials for regulations, ADs, and TCDS questions. FAA-CT-8080-8D contains curated regulatory excerpts, sample ADs, and TCDS references used as reference material during the IA Knowledge Test. IA directories, specific maintenance records, and FAA contact information are not included.

11. B — Until superseded by other work or one year, whichever comes first. 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. Permanent retention, sale-triggered retention, and five-year retention are not the default standards.

12. 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 static discharge and lightning protection.

13. A — The holder of an Inspection Authorization. Section 43.7(b) establishes that approval for return to service after major repairs on Part 91 aircraft is exclusive to the IA. A&P mechanics without IA privileges, pilots, and insurance representatives cannot approve major repairs.

14. C — 14 CFR Part 39 airworthiness directives. Part 39 establishes the FAA's authority to issue airworthiness directives and the operator's obligation to comply. Parts 21, 43, and 65 address different regulatory domains.

15. D — Major repair requiring approved data and IA approval. Welding of aircraft fuselage frame structural components is specifically listed as a major repair under Part 43 Appendix A paragraph (b). Major repairs require approved data, Form 337 documentation, and IA approval for return to service.

16. A — Exfoliation corrosion. AC 43.13-1B Chapter 6 describes exfoliation corrosion as producing visible lifting or flaking of surface layers. It is a form of intergranular corrosion manifesting with distinctive layered, flaking appearance — distinguishing it from pitting (localized penetration), galvanic (dissimilar metals), and filiform (thread-like) corrosion.

17. B — Provide the owner with a dated and signed discrepancy list. Section 43.11(b) specifically requires the IA to provide the owner with a dated and signed list of discrepancies and unairworthy items. Grounding, Registry notification, and enforcement reporting are not the regulatory requirements.

18. C — The person 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 creates the documentation link between performer and approver when they are different individuals.

19. D — Do not meet airworthiness but are capable of safe flight. Special flight permits under § 21.197 are issued for aircraft that do not meet airworthiness requirements but are capable of safe flight for a specific purpose. Commercial certification, completed inspections, and full airworthiness compliance do not fit the regulatory basis for a permit.

20. A — Performing annual inspections per 90-day period held. Section 65.93 lists five alternative renewal activities, including performing annual inspections in rough proportion to the time the authorization has been held. Medical certificates, flight training, and renewal fees are not IA renewal activities.

21. A — 75.0 inches. Empty CG is calculated as empty moment divided by empty weight: 121,500 ÷ 1,620 = 75.0 inches. This basic computation produces the empty CG for the weight and balance record.

22. C — The end of the inspection for satisfactory performance. Section 43.15(c) specifically requires the engine to be run at the end of the inspection to determine satisfactory performance per manufacturer recommendations. Other timing does not satisfy the regulation.

23. D — Require § 91.413 testing before IFR operation. Section 91.413 requires transponder inspection within the preceding 24 calendar months for operation in controlled airspace. A 25-month lapse exceeds this requirement; the aircraft is not eligible for operation in controlled airspace (IFR) until testing is complete.

24. B — At the cabin or cockpit entrance legible to passengers. Section 91.203(b) specifies the airworthiness certificate display location — at the cabin or cockpit entrance legible to passengers or crew. Exterior fuselage, pilot logbooks, and owner records are not the regulatory display positions.

25. A — Replace the cable before return to service. AC 43.13-1B Chapter 7 establishes that broken strands at pulleys — where cables undergo cyclic flexing — are particularly consequential. A cable with broken strands at a pulley location is an unairworthy condition requiring replacement before return to service.

26. D — Inspected and determined to be in airworthy condition. Section 43.11(a) requires the annual inspection entry to certify the aircraft has been inspected in accordance with an annual inspection and was determined to be in airworthy condition. Commercial authorization, manufacturer clearance, and continued maintenance readiness are not the required certification language.

27. B — Applicable aircraft by make, model, and serial number. The Approved Model List identifies applicable aircraft by make, model, and often serial number range. Warranty coverage, dealer networks, and pricing are commercial matters, not AML regulatory content.

28. C — An A&P certificate with both ratings in effect for at least 3 years. Section 65.91(c)(1) requires the applicant to hold an A&P certificate with both airframe and powerplant ratings in effect for at least three years. Course completions, Part 145 employment, and repair station certificates are not the specific regulatory requirement.

29. A — The aircraft's serial number within the Approved Model List. The IA's STC applicability verification confirms that the specific aircraft's make, model, and serial number fall within the STC's Approved Model List. Installer qualification, owner training, and business licensing are not regulatory verification elements.

30. D — 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.

31. D — Not authorized because PMA approval is application-specific. PMA approval is specific to the aircraft, engine, propeller, or appliance on which the part is eligible for installation. A PMA part approved for one combination is not authorized for installation on a different combination, regardless of mechanical similarity or installer experience.

32. B — 14 CFR § 43.15 additional performance rules for inspections. Section 43.15 requires the IA 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 AD verification during inspection.

33. A — Preventive maintenance as listed in Appendix A paragraph (c). Section 43.3(g) authorizes certificated pilots to perform preventive maintenance on their own aircraft, limited to items listed in Part 43 Appendix A paragraph (c). Minor repairs, major alterations, and structural repairs are not within pilot-owner authority.

34. C — Within the approved empty CG envelope. An empty CG of 73.5 inches falls within the TCDS-approved range of 73.0 to 75.0 inches. The measurement is within limits but not at either boundary, making it acceptable without corrective action.

35. D — 12 calendar months. Section 91.409(a) requires annual inspection within the preceding 12 calendar months for Part 91 operation. This is the specific regulatory interval for annual inspection currency.

36. A — The IA's determination that work conforms to approved data. The IA's Form 337 Block 7 signature represents the regulatory determination that the work was accomplished per approved data. It is not a warranty, market appraisal, or reliability guarantee.

37. B — Manufacturer-specified temperatures with tensiometer. AC 43.13-1B Chapter 7 requires flight control cable tension to be measured at manufacturer-specified temperatures using a tensiometer. Ambient conditions, laboratory conditions, and flight operating temperature are not the regulatory measurement standards.

38. D — 12 calendar months. Section 91.207(d) requires ELT inspection within 12 calendar months. The inspection covers installation, battery condition, operation of controls, and signal transmission verification.

39. B — Incomplete because IA return-to-service approval is required. Section 43.7(b) requires IA approval for return to service after a major alteration. A field approval in Block 3 authorizes the data, but the IA's Block 7 signature is separately required to return the aircraft to service. Without Block 7 signed, the regulatory return-to-service process is incomplete.

40. C — Major alteration requiring approved data. Part 43 Appendix A paragraph (a) specifically lists installation of equipment not approved for the engine as a major alteration. Major alterations require approved data, Form 337 documentation, and IA approval for return to service.

41. C — The altimeter, transponder, and ELT inspections. The IA's records review verifies currency of altimeter (§ 91.411), transponder (§ 91.413), and ELT (§ 91.207(d)) inspections. Pilot ratings, operational time records, and owner insurance are not part of the regulatory records review.

42. A — Maintenance that may appreciably change weight or balance. Section 43.5(b) requires weight and balance revision when maintenance may appreciably change weight or balance. Routine oil changes not affecting weight, Form 337 submissions alone, and field-approval-only situations are not the complete regulatory standard.

43. B — Require § 91.411 testing before return to IFR operation. Section 91.411 requires altimeter system testing within the preceding 24 calendar months for IFR operation. A 3-month lapse beyond the 24-month interval renders the aircraft ineligible for IFR operation until testing is complete.

44. D — Dated and signed by the IA identifying unairworthy items. Section 43.11(b) specifically requires the discrepancy list to be dated and signed by the IA and to identify the unairworthy items. FSDO approval, manufacturer review, and owner acknowledgment are not regulatory requirements.

45. B — The FAA Aviation Safety Inspector's field approval. Block 3 of Form 337 is reserved for FAA use and contains the Aviation Safety Inspector's signature granting a field approval for the specific alteration. The performing mechanic's conformity signature goes in Block 6; owner acceptance and manufacturer endorsement are not field approval elements.

46. A — Total time in service and major alteration Form 337s. Section 91.417(a)(2) requires permanent retention and transfer of total time in service, life-limited parts status, AD compliance status, and major alteration Form 337s. Owner flight logs, billing invoices, and fuel purchase records are not permanent records.

47. C — Continue the inspection to identify all discrepancies. An IA performing an annual inspection continues the complete inspection after identifying unairworthy conditions. The full inspection ensures the discrepancy list is comprehensive and that additional unairworthy conditions, if present, are identified and communicated to the owner.

48. D — Provide historical documentation of major alterations. The FAA Aircraft Registry maintains the master file of Form 337s for U.S.-registered aircraft, providing historical documentation of major repairs and alterations. Value assessment, owner tracking, and FSDO coordination are not the primary purposes.

49. C — Two times the fastener diameter. AC 43.13-1B Chapter 4 establishes the typical minimum edge distance as 2D (two fastener diameters), measured from the center of the fastener to the nearest edge. This prevents edge tearing and preserves the structural integrity of the repair.

50. B — The STC holder, typically the modification developer. A Supplemental Type Certificate is issued by the FAA to the STC holder, who is typically the developer or manufacturer of the modification. Owners, installers, and ASIs are not the STC holder.