PRACTICE EXAM 15: FAA IA KNOWLEDGE TEST SIMULATION

Practice Exam 15 — Questions 1 through 50

1. Under 14 CFR § 21.9(a)(5), an owner-produced part qualifies for installation on the owner's aircraft when:

A. The part is purchased from an approved commercial distributor

B. The part carries FAA-PMA markings at the time of installation

C. The owner participates meaningfully in the production of the part

D. The part is manufactured at a Part 145 certified facility

2. An IA is inspecting an aircraft and discovers a Suspected Unapproved Part (SUP) installed in the engine. The correct disposition is:

A. Decline to approve the aircraft until the part's approval is verified

B. Accept the part if it has been installed for several years

C. Note the condition and defer verification to the next inspection

D. Install additional documentation to establish approval status

3. Under 14 CFR § 43.9(a)(4), the maintenance record entry must include the signature and certificate number of:

A. The aircraft owner at the time of work completion

B. The person approving the aircraft for return to service

C. The installing mechanic's employer of record

D. The aircraft's original manufacturer representative

4. The hierarchy of approved data for a major alteration, from most specific to most general, includes:

A. AC 43.13-1B, manufacturer manual, owner preferences

B. Field approval, manufacturer manual, AC 43.13-1B

C. STC, owner preferences, manufacturer manual

D. STC, field approval, DER-approved data

5. An IA is inspecting an aircraft's landing gear system and finds a hydraulic actuator with an external leak that has left a visible stain on the aircraft structure. The correct disposition is:

A. Address the leak before return to service

B. Document the leak and continue flight operations

C. Apply additional hydraulic fluid to compensate

D. Note the condition for the next 100-hour inspection

6. Under AC 43.13-1B Chapter 6, the form of corrosion that occurs in sheltered or stagnant areas where moisture accumulates is:

A. Galvanic corrosion between dissimilar metals

B. Stress corrosion cracking under sustained load

C. Concentration-cell (crevice) corrosion

D. Filiform corrosion beneath paint films

7. The FAA Form 337 Block 3 is reserved for which type of signature?

A. The IA's approval for return to service

B. The FAA Aviation Safety Inspector's field approval

C. The aircraft owner's acceptance of the work

D. The performing mechanic's conformity statement

8. A recurring airworthiness directive requires compliance every 400 flight hours. The aircraft was in compliance at 2,100 hours total time. The next compliance is due at:

A. 2,500 hours total time

B. 2,400 hours total time

C. 2,600 hours total time

D. 2,700 hours total time

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

A. The owner's fuel purchase records and consumption data

B. The mechanic's quarterly billing records and invoices

C. The aircraft's weekly operational log of flight hours

D. The aircraft's total time in service for airframe and each engine

10. An IA is inspecting an aircraft's fuel tank system and finds evidence of water in the fuel sumps. The water has been present for an extended period. The correct action is:

A. Note the condition for the next inspection schedule

B. Drain the water and sump until fuel is water-free

C. Apply fuel additive to address the contamination

D. Document the condition and continue operations

11. The approval for return to service signature on Form 337 Block 7 indicates:

A. A warranty of the modification for a specific period

B. An appraisal of the aircraft's market value increase

C. A guarantee of the modification's operational reliability

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

12. Under 14 CFR § 43.15(c), the aircraft engine must be run:

A. At the beginning of the inspection procedure

B. At the end of the inspection to verify satisfactory performance

C. At the discretion of the mechanic based on weather conditions

D. Before the pre-inspection records review is initiated

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

A. The STC holder, typically the modification developer

B. The aircraft owner who requests the modification

C. The Aviation Safety Inspector overseeing the approval

D. The installing mechanic or repair facility

14. An IA is verifying AD compliance during an annual inspection. The verification covers:

A. Only ADs issued in the preceding 12 months

B. Only ADs with terminating action options

C. All applicable ADs on aircraft and components

D. Only the airframe-specific ADs for the aircraft

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

A. 18 calendar months

B. 24 calendar months

C. 6 calendar months

D. 12 calendar months

16. An aircraft has an empty weight of 1,895 pounds and an empty moment of 142,125 in-lb. The empty CG is:

A. 75.0 inches

B. 76.5 inches

C. 77.5 inches

D. 78.0 inches

17. Under 14 CFR § 43.13(a), a mechanic performing maintenance must use methods, techniques, and practices prescribed in:

A. The local FSDO's regional guidance materials

B. The mechanic's personal experience and training

C. The manufacturer's manual or acceptable to the Administrator

D. The aircraft owner's preferred methods of repair

18. An IA is inspecting a flight control cable and finds two broken strands at a pulley location. The condition is:

A. Acceptable if both strands are small diameter

B. An unairworthy condition requiring cable replacement

C. Acceptable with cable lubricant application

D. Acceptable if no further damage is evident

19. The FAA-CT-8080-8D Computer Testing Supplement provides:

A. A complete database of all current FAA regulations

B. A directory of certified Inspection Authorization holders

C. The specific aircraft's maintenance history

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

20. Under 14 CFR § 65.95(a)(1), the IA may approve major repairs for return to service on aircraft not maintained under:

A. A continuous airworthiness program under Part 121 or 127

B. A progressive inspection program under § 91.409(d)

C. An alternative inspection program under § 91.409(f)

D. A 100-hour inspection program under § 91.409(b)

21. An IA performing a pre-inspection records review should verify:

A. The aircraft owner's personal insurance policy coverage

B. The airworthiness certificate and required periodic inspections

C. The aircraft owner's commercial pilot rating currency

D. The aircraft's fuel consumption rate documentation

22. Under 14 CFR § 43.3(g), a certificated pilot may perform preventive maintenance on the pilot's own aircraft as listed in:

A. Part 43 Appendix B, paragraph (b)

B. Part 43 Appendix D, paragraph (a)

C. Part 43 Appendix A, paragraph (a)

D. Part 43 Appendix A, paragraph (c)

23. An IA performing an annual inspection finds a placard required by the TCDS is missing. The condition is:

A. A non-conformity to the approved type design

B. Acceptable if the owner intends to replace the placard soon

C. Acceptable for continued operations during the cure period

D. Acceptable if the aircraft has operated safely without it

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

A. Ambient temperature without temperature adjustment

B. The mechanic's operational preference

C. Manufacturer-specified temperatures with a tensiometer

D. Standard laboratory conditions for accuracy

25. An IA is approving a major alteration performed under an STC. The STC data package is at Revision B, but the installation used Revision A. The action is:

A. Require re-accomplishment per the current revision

B. Verify whether Revision B affects the existing installation

C. Accept the installation as completed under Revision A

D. Issue a new Form 337 referencing Revision B

26. 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

27. A mechanic is inspecting an aircraft's ELT battery and finds the expiration date has been reached. The correct action is:

A. Replace the battery before return to service

B. Apply a new installation date label to the battery

C. Document the expiration as a deferrable condition

D. Defer replacement until the next annual inspection

28. Under 14 CFR § 43.11(a), the inspection record entry must include:

A. The aircraft owner's acceptance of the findings

B. The mechanic's hourly rate for the inspection

C. The type of inspection and airworthy condition determination

D. The aircraft's market value at the inspection date

29. An aircraft's airworthiness certificate ceases to be effective when:

A. The aircraft is sold to a new registered owner

B. The aircraft is flown at higher altitudes than typical

C. The owner fails to renew the certificate every 24 months

D. Maintenance required by Parts 43 and 91 is not performed

30. The IA's records review identifies a gap in AD compliance history. The appropriate action is:

A. Ignore the gap if the aircraft operates normally

B. Research and verify AD compliance before airworthiness determination

C. Complete the inspection and address the gap afterward

D. Accept the gap if the aircraft has been hangared

31. An IA is performing an annual inspection. The aircraft has been altered through the installation of multiple STCs. The IA should:

A. Evaluate whether combined STC installations remain supported by approved data

B. Remove older STCs to simplify the aircraft configuration

C. Accept each STC as independent without compatibility review

D. Focus only on the most recently installed STC modification

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

A. The aircraft owner's maintenance preferences

B. The mechanic's professional recommendations

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

D. The aircraft insurance policy specifications

33. A mechanic is performing a weld repair on a control surface. The work is classified as:

A. Preventive maintenance under § 43.3(g)

B. Minor repair within A&P mechanic authority

C. Routine maintenance not requiring documentation

D. Major repair requiring approved data and IA approval

34. Under AC 43.13-1B Chapter 11, the primary function of bonding at an antenna installation is:

A. To ensure RF performance and lightning protection

B. To reduce electrical power consumption

C. To simplify the installation procedure

D. To prevent corrosion of the mounting hardware

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

A. The owner's training completion for the modification

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

C. The installer's relationship with the STC holder

D. The aircraft's operational history with the modification

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

A. Holding a current airman medical certificate

B. Payment of an annual renewal fee to the FAA

C. Performing inspections of major repairs or alterations

D. Completing recurrent pilot flight training

37. A Special Flight Permit under § 21.197 is issued by:

A. The aircraft's original manufacturer's service division

B. The certified maintenance facility performing the ferry

C. The local Aviation Safety Inspector without FSDO involvement

D. The FAA through the local Flight Standards District Office

38. Under AC 43.13-1B Chapter 6, filiform corrosion is characterized by:

A. Deep pits penetrating the metal substrate

B. Thread-like patterns beneath the paint film

C. Uniform thinning of the metal surface

D. Layered flaking of the metal surface

39. An IA inspecting a propeller finds damage on the leading edge within manufacturer dressing limits. The appropriate action is:

A. Dress the damage per manufacturer guidance

B. Apply a protective coating to the area

C. Replace the propeller blade before return to service

D. Document the damage for the next scheduled inspection

40. The IA's airworthiness determination is a two-part regulatory concept requiring:

A. TCDS approval and owner acceptance

B. FSDO clearance and airworthiness certificate

C. Type design conformity and condition for safe operation

D. Aircraft insurance and registration currency

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

A. Permanently in the aircraft's maintenance file

B. The aircraft is sold to a new registered owner

C. The next annual inspection is completed and logged

D. Superseded by other work or one year, whichever occurs first

42. An IA is reviewing a Form 337 for a major alteration. Block 8 reads: "Installed per STC SA12345NM, Rev. B, dated 01/15/2025. Installation drawing 601-0023 used. Replaced original unit with upgraded unit per STC data package." The description is:

A. Inadequate because the owner's information is not included

B. Adequate for regulatory review under AC 43.9-1E

C. Inadequate because the mechanic's labor rate is not stated

D. Inadequate because the aircraft's value change is not noted

43. Under 14 CFR § 43.5(b), the aircraft's weight and balance record must be revised after:

A. Every routine oil change and minor maintenance event

B. Maintenance not affecting weight or balance significantly

C. Maintenance that may appreciably change weight or balance

D. Only alterations documented on a field approval Form 337

44. A mechanic has identified approved data sources for a major alteration. Which of the following qualifies as approved data?

A. A general statement in the FAA Order manual system

B. Manufacturer service bulletins not incorporated into ADs

C. A written opinion from the mechanic's employer

D. A Supplemental Type Certificate applicable to the aircraft

45. Under 14 CFR § 65.91(c), an applicant for IA must:

A. Hold an A&P certificate with both ratings in effect for at least 3 years

B. Hold a repair station certificate issued in the preceding 12 months

C. Be employed at a certified Part 145 repair station

D. Complete an approved aviation technician course within 5 years

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

A. Determine aircraft market values for insurance purposes

B. Provide historical documentation of major repairs and alterations

C. Coordinate with local FSDOs on aircraft operations

D. Track ownership changes through commercial databases

47. Under Part 43 Appendix A paragraph (b), which work is classified as a major repair?

A. Replacement of a tire and tube assembly

B. Adjustment of a cabin door latch mechanism

C. Weld repair of an engine mount attachment

D. Installation of an approved replacement filter

48. 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 after alteration

D. A guarantee of operational reliability of the modification

49. 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. Any certificated mechanic with airframe rating only

B. Any certificated mechanic with powerplant rating only

C. A Designated Engineering Representative exclusively

D. The holder of an Inspection Authorization

50. An IA has determined that an aircraft is unairworthy at the conclusion of an annual inspection. The IA must:

A. Ground the aircraft at a specific airport 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 report with the local FSDO

PRACTICE EXAM 15: ANSWER KEY AND EXPLANATIONS

1. C — The owner participates meaningfully in the production of the part. Section 21.9(a)(5) permits owner-produced parts when the owner participates meaningfully in production — providing design data, tooling, quality control, or materials. Mere purchase, PMA markings, or Part 145 manufacture do not qualify a part as owner-produced under this provision.

2. A — Decline to approve the aircraft until the part's approval is verified. An IA who cannot verify the approval status of a part through documentation treats the installation as a non-conformity. Approving the aircraft with a suspect part installed exposes the IA to enforcement action for approving a non-conforming installation regardless of how long the part has been installed.

3. B — The person approving the aircraft for return to service. Section 43.9(a)(4) requires the maintenance record entry to include the signature and certificate number of the person approving the aircraft for return to service. Owners, employers, and manufacturer representatives are not the regulatory signatories.

4. D — STC, field approval, DER-approved data. Approved data for major alterations has a hierarchy from most specific to most general: STC (specifically approved for the aircraft by make/model/serial), field approval (specifically approved for the one aircraft), and DER-approved data (FAA-approved engineering data). AC 43.13-1B is acceptable data, not approved data for major alterations.

5. A — Address the leak before return to service. A hydraulic actuator with an external leak affects system function and represents an unairworthy condition. The leak must be addressed before return to service; documentation, continued operation, fluid replenishment, and scheduling are not appropriate responses to active leaks.

6. C — Concentration-cell (crevice) corrosion. AC 43.13-1B Chapter 6 describes concentration-cell corrosion as occurring in sheltered or stagnant areas where moisture or electrolyte concentrations develop differently at adjacent points. The stagnant or crevice conditions distinguish it from galvanic (dissimilar metals), stress corrosion (combined corrosion and tensile stress), and filiform (thread-like under paint) corrosion.

7. 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. Block 7 is the IA return-to-service approval; Block 6 is the performer's conformity; Block 1 is aircraft identification.

8. A — 2,500 hours total time. The next compliance is calculated by adding the recurring interval to the last compliance time: 2,100 + 400 = 2,500 hours. Simple addition of the recurring interval produces the next-due time for any recurring AD.

9. D — The aircraft's total time in service for airframe and each engine. Section 91.417(a)(2) requires permanent retention and transfer of total time in service records for the airframe and each engine, along with life-limited parts, AD compliance, and Form 337s. Fuel records, billing invoices, and weekly operational logs are not permanent records.

10. B — Drain the water and sump until fuel is water-free. Water contamination in fuel tank sumps is addressed by draining the water and continuing to sump until fuel is water-free. This is the standard procedure regardless of how long the water has been present. Deferral, additives, and continued operations without correction are not appropriate responses.

11. D — 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.

12. B — At the end of the inspection to verify 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.

13. A — 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, ASIs, and installers are not the STC holder.

14. C — All applicable ADs on aircraft and components. Section 43.15 requires the inspector to determine that all applicable ADs have been complied with, extending to the airframe, engine, propeller, and installed appliances. This is not limited to recent issuance, terminating action ADs, or airframe-specific ADs.

15. 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.

16. A — 75.0 inches. Empty CG is calculated as empty moment divided by empty weight: 142,125 ÷ 1,895 = 75.0 inches. This basic computation produces the empty CG for the weight and balance record.

17. C — The manufacturer's 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. AC 43.13-1B is commonly cited as methods acceptable to the Administrator.

18. B — An unairworthy condition requiring cable replacement. AC 43.13-1B Chapter 7 establishes that broken strands at pulleys — where cables undergo cyclic flexing — are particularly consequential. Multiple broken strands at a pulley location indicate fatigue progression and require cable replacement before return to service.

19. D — 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. Complete regulation databases, IA directories, and specific maintenance histories are not included.

20. A — A continuous airworthiness program under Part 121 or 127. Section 65.95(a)(1) specifically prohibits IA approval for aircraft maintained under continuous airworthiness programs under Part 121 or 127. Progressive inspections, alternative inspection programs, and 100-hour inspections are within IA scope for Part 91 aircraft.

21. B — The airworthiness certificate and required periodic inspections. The IA's records review verifies the airworthiness certificate, registration, and currency of required periodic inspections (altimeter, transponder, ELT). Owner insurance, pilot ratings, and fuel records are not part of the regulatory records review.

22. D — Part 43 Appendix A, paragraph (c). Section 43.3(g) authorizes pilot-owner preventive maintenance limited to items in Part 43 Appendix A paragraph (c). Paragraphs (a) and (b) address major alterations and major repairs respectively; Appendix B addresses records; Appendix D is the inspection scope.

23. A — A non-conformity to the approved type design. A TCDS-required placard is part of the approved type design. Its absence constitutes a non-conformity to type design, which is the first element of the two-part airworthiness definition and renders the aircraft unairworthy until corrected.

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

25. B — Verify whether Revision B affects the existing installation. An STC revision may or may not affect a previously completed installation depending on whether the revision changes the AML, installation requirements, or flight manual supplement. The IA's action is to verify what the revision changed before deciding on disposition.

26. 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.

27. A — Replace the battery before return to service. Section 91.207(c) requires ELT battery replacement when the expiration date is passed. An expired battery renders the ELT non-compliant with § 91.207; replacement is required before return to service, not deferral, labeling, or documentation.

28. C — The type of inspection and airworthy condition determination. Section 43.11(a) requires the inspection entry to identify the type of inspection performed and the airworthy condition determination. Owner acceptance, labor rates, and market values are not required certification elements.

29. D — Maintenance required by Parts 43 and 91 is not performed. Section 21.181 establishes that a standard airworthiness certificate remains effective as long as maintenance is performed per Parts 43 and 91. Altitude operations, sales, and periodic certificate renewal do not affect certificate validity directly.

30. B — Research and verify AD compliance before airworthiness determination. Section 43.15 requires the inspector to determine that all applicable ADs have been complied with. An AD compliance gap must be researched and verified before airworthiness can be affirmed; proceeding while ignoring the gap is inconsistent with regulatory requirements.

31. A — Evaluate whether combined STC installations remain supported by approved data. Multiple STCs on a single aircraft may create configurations that no individual STC specifically approved. The IA evaluates combined STC compatibility rather than simply accepting each STC independently or removing older modifications.

32. C — 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.

33. D — Major repair requiring approved data and IA approval. Weld repair of control surface 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.

34. A — To ensure RF performance and lightning protection. AC 43.13-1B Chapter 11 establishes that bonding at antenna installations is critical for RF performance (the airframe acts as counterpoise) and for lightning protection. Power consumption, installation procedures, and hardware corrosion are not the primary bonding functions.

35. B — 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. Training, installer relationships, and operational history are not regulatory verification elements.

36. C — Performing inspections of major repairs or alterations. Section 65.93 lists five alternative renewal activities, including performing inspections of major repairs or alterations. Medical certificates, renewal fees, and flight training are not IA renewal activities.

37. D — The FAA through the local Flight Standards District Office. Section 21.197 authority resides with the FAA, exercised through the local Flight Standards District Office. Manufacturer service divisions, maintenance facilities, and ASIs acting without FSDO involvement are not the regulatory authority for special flight permit issuance.

38. B — Thread-like patterns beneath the paint film. AC 43.13-1B Chapter 6 describes filiform corrosion as thread-like corrosion occurring beneath paint films. The distinctive thread-like pattern distinguishes it from pitting, uniform thinning, or exfoliation corrosion.

39. A — Dress the damage per manufacturer guidance. A nick within manufacturer dressing limits is addressed by dressing the damage per manufacturer guidance. Protective coatings, replacement, and documentation are not appropriate responses to correctable within-limits damage.

40. C — Type design conformity and condition for safe operation. The airworthiness determination has two elements: (1) conformity to approved type design and (2) condition for safe operation. Both elements must be affirmatively met. TCDS approval with owner acceptance, FSDO clearance, and insurance/registration are not the regulatory airworthiness criteria.

41. D — Superseded by other work or one year, whichever occurs 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 annual inspection-based retention are not the default standard.

42. B — Adequate for regulatory review under AC 43.9-1E. The description identifies the STC number, revision, date, drawing number, and specific work performed. AC 43.9-1E standards require specificity allowing a future mechanic to verify conformity; this description meets that standard. Owner information, labor rates, and value changes are not Block 8 requirements.

43. C — 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. Every oil change, routine maintenance not affecting weight/balance, and field-approval-only situations are not the complete regulatory standard.

44. D — A Supplemental Type Certificate applicable to the aircraft. STCs applicable to the specific aircraft constitute approved data for major alterations. FAA Orders, non-AD service bulletins, and employer opinions do not qualify as approved data.

45. A — Hold 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. Repair station certificates, Part 145 employment, and course completions are not the specific regulatory requirement.

46. B — Provide historical documentation of major repairs and alterations. The FAA Aircraft Registry maintains the master file of Form 337s for U.S.-registered aircraft, providing historical documentation accessible for research of an aircraft's maintenance history. Value assessment, FSDO coordination, and ownership tracking are not the primary purposes.

47. C — Weld repair of an engine mount attachment. Part 43 Appendix A paragraph (b) specifically lists weld repair of engine mount attachments as a major repair. Tire replacement, door latch adjustment, and filter installation are routine or preventive maintenance, not major repairs.

48. A — The IA's determination that work conforms to approved data. The IA's Block 7 signature represents the regulatory determination that the work conforms to approved data. It is not a warranty, market appraisal, or reliability guarantee of the modification.

49. D — 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 (regardless of airframe or powerplant rating) and DERs cannot approve major repairs.

50. 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 FSDO enforcement reporting are not the regulatory requirements.