

PRACTICE EXAM 12: FAA IA KNOWLEDGE TEST SIMULATION

Practice Exam 12 — Questions 1 through 50

1. An IA is inspecting an aircraft and finds a recent Form 337 on file for a major alteration. The Form 337 Block 3 contains an ASI's signature dated three years prior, but Block 7 IA signature is missing. The regulatory status is:

- A. Acceptable because the field approval authorizes the work
- B. Acceptable if the work is operating as expected
- C. Incomplete because IA return-to-service approval is required
- D. Acceptable for routine maintenance documentation

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

- A. 50 percent of useful life or 1 cumulative hour of transmission
- B. 24 calendar months or 500 operational hours
- C. 12 calendar months from the date of installation
- D. Replacement at every annual inspection cycle

3. The aircraft's empty weight is 1,540 pounds, and an alteration removes 12.5 pounds at station 68.0 inches. The moment change produced is:

- A. +850 in-lb
- B. +850 in-lb

C. -850 in-lb

D. -850 in-lb

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

A. Perform flight tests of specific aircraft systems

B. Properly inspect airframes, engines, propellers, and appliances

C. Conduct pilot training on the specific aircraft types

D. Provide commercial passenger service operations

5. An IA is inspecting an aircraft's fuel tank system and finds a section welded repair that was completed by an unqualified welder. AC 43.13-1B Chapter 4 establishes that structural welding requires:

A. Documentation of welding techniques used

B. Visual inspection of weld bead geometry

C. Testing of welded joints under hydraulic pressure

D. A welder qualified for aircraft structural welding

6. A recurring airworthiness directive has been complied with at aircraft total time 1,875 hours. The AD requires recurring compliance every 200 hours. The next compliance is due at:

A. 1,975 hours

B. 2,075 hours

C. 2,175 hours

D. 2,275 hours

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

- A. The holder of an Inspection Authorization
- B. Any certificated mechanic with airframe rating only
- C. A pilot holding commercial privileges
- D. The aircraft's original manufacturer distributor

8. An IA is reviewing a Form 337 submission for completeness and finds Block 8 reads: "Installed new autopilot per STC." The description:

- A. Provides sufficient information for regulatory review
- B. Meets AC 43.9-1E guidance requirements
- C. Is inadequate without specific STC identification
- D. Is complete given the brief nature of the alteration

9. Under 14 CFR § 43.11(a), the inspection certification statement for an airworthy annual inspection must identify:

- A. The aircraft owner's authorization for the inspection
- B. The type of inspection and airworthy determination
- C. The mechanic's labor hours expended on the inspection
- D. The manufacturer's recommended next inspection date

10. The regulatory basis establishing the FAA's authority to require airworthiness directives is:

- A. 14 CFR Part 21 aircraft certification procedures
- B. 14 CFR Part 43 maintenance provisions

- C. 14 CFR Part 65 mechanic certification requirements
- D. 14 CFR Part 39 airworthiness directives

11. An aircraft has flown 12 hours since the last annual inspection and is now being inspected again. The owner requests the inspection be classified as a 100-hour inspection due to low operating hours. The classification:

- A. Must be based on operational use, not total hours since last inspection
- B. Depends on the mechanic's professional discretion in the matter
- C. Is determined by the aircraft owner's preference
- D. Follows the operator's choice of annual or 100-hour categorization

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

- A. Operated privately by the owner for personal flights
- B. Used for cross-country navigation training without compensation
- C. Transported by the owner for personal travel
- D. Used for flight instruction for hire or carrying persons for hire

13. The IA performing an annual inspection verifies that the aircraft conforms to approved type design. This verification element is:

- A. One aspect of a multi-part airworthiness determination
- B. The first element of a two-part airworthiness determination
- C. The entire airworthiness determination in all cases
- D. The second element of the airworthiness determination

14. Under AC 43.13-1B Chapter 6, corrosion that occurs beneath a paint film and produces thread-like patterns is:

- A. Pitting corrosion
- B. Galvanic corrosion
- C. Filiform corrosion
- D. Intergranular corrosion

15. A mechanic completes a major alteration using an STC with Revision C as the approved data package. The installation is complete on December 10, 2025. The Form 337 must reference:

- A. The STC number and Revision C
- B. Any subsequent revision of the STC
- C. Only the most recent STC revision available
- D. The aircraft manufacturer's service bulletin

16. An IA is inspecting an aircraft's control cable for broken strands. AC 43.13-1B Chapter 7 establishes that broken strands at:

- A. The center of straight runs are most critical
- B. Turnbuckle barrel sections are most critical
- C. Terminal end fittings are most critical
- D. Pulleys and fairleads are particularly consequential

17. Under § 43.13(a), a mechanic performing maintenance must use:

- A. Only methods specified by the aircraft manufacturer
- B. The owner's preferred maintenance techniques

- C. Methods in the manual or acceptable to the Administrator
- D. Manufacturer service bulletins only, not ACs

18. An aircraft has an empty weight of 1,760 pounds and empty moment of 134,640 in-lb. The empty CG is:

- A. 75.5 inches
- B. 76.5 inches
- C. 77.0 inches
- D. 78.2 inches

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

- A. Performing inspections of major repairs or major alterations
- B. Completing recurrent flight training in the aircraft type
- C. Maintaining a current airman medical certificate
- D. Paying the annual IA renewal fee on schedule

20. A special flight permit under § 21.197 may be issued for an aircraft that:

- A. Has been recently sold to a new owner
- B. Is under normal operating conditions for commercial service
- C. Has completed its required annual inspection
- D. Does not meet airworthiness requirements but is capable of safe flight

21. Under 14 CFR § 91.417(a)(2), records of major alterations that must be retained permanently include:

- A. The aircraft owner's service maintenance agreements
- B. The mechanic's quarterly billing and labor records
- C. The aircraft's monthly operational flight logs
- D. The Form 337 documentation for the alteration

22. An IA inspecting a propeller finds a 3-inch crack in the blade that exceeds manufacturer dressing limits. The appropriate action is:

- A. Apply a protective coating to the damaged area
- B. Replace the propeller blade before return to service
- C. Continue operation and monitor the crack
- D. Note the condition for the next 100-hour inspection

23. The FAA Form 337 Block 7 return-to-service signature represents:

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

24. Under § 43.15(c), the aircraft engine must be run at the end of an annual or 100-hour inspection to determine:

- A. The engine's remaining useful service life in hours
- B. The aircraft's readiness for the next flight operation
- C. Satisfactory performance per manufacturer recommendations

D. The operator's compliance with operating limitations

25. A mechanic is installing a replacement alternator on an aircraft. The installation requires reference to approved data because the alternator:

- A. Is larger in amperage than the originally installed model
- B. Is smaller in dimensions than the originally installed model
- C. Is installed in a different mounting position
- D. Is not listed on the aircraft's TCDS approved equipment

26. Under AC 43.13-1B Chapter 4, a welded repair of aircraft structural components requires the welder to be:

- A. Certified by the aircraft manufacturer directly
- B. Qualified for aircraft structural welding
- C. Approved by the local FSDO for the specific work
- D. Employed by a Part 145 certified repair station

27. An IA has inspected an aircraft and found it unairworthy at the conclusion of an annual inspection. The IA must:

- A. Ground the aircraft at a specific airport location
- B. Notify the Aircraft Registry of the unairworthy finding
- C. Provide the owner with a dated and signed discrepancy list
- D. File an enforcement action report with the FSDO

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

- A. Reference materials for regulations, ADs, and TCDS questions
- B. A certificate of completion for course attendance
- C. A complete library of current FAA regulations
- D. Contact information for FAA officials and inspectors

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

- A. The aircraft is sold to a new owner of record
- B. The mechanic's certificate is renewed every two years
- C. The next annual inspection is completed and logged
- D. Superseded by other work or one year, whichever is first

30. An IA is performing a pre-inspection records review and verifies currency of which required periodic inspections?

- A. The pilot's currency in aircraft type and model
- B. The altimeter system, transponder, and ELT inspections
- C. The aircraft owner's annual insurance policy renewal
- D. The aircraft's fuel consumption rate documentation

31. Under AC 43.13-1B Chapter 2, fabric covering on a restored aircraft must pass:

- A. A punch test meeting minimum tear strength requirements
- B. Visual inspection for evidence of cosmetic weathering
- C. Chemical analysis of the fabric's fiber composition

D. An owner-acceptance test for appearance quality

32. A Type Certificate Data Sheet for an aircraft specifies the approved fuel grade. An aircraft has been fueled with a fuel grade below the TCDS specification. The operating condition:

A. Is acceptable if the pilot manages throttle settings conservatively

B. Is acceptable under emergency operating conditions

C. Is a non-conformity to approved type design

D. Does not affect the aircraft's airworthiness

33. An IA inspecting a landing gear system finds an actuator with 0.010 inch of end play, while manufacturer specifications allow a maximum of 0.005 inches. The condition:

A. Is acceptable because end play is not a critical specification

B. Is acceptable if the actuator operates without binding

C. Is acceptable within standard manufacturing tolerance

D. Exceeds manufacturer specifications and requires correction

34. 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 A, paragraph (c)

B. Part 43 Appendix B, paragraph (a)

C. Part 43 Appendix D, paragraph (b)

D. Part 43 Appendix A, paragraph (a)

35. The Supplemental Type Certificate's Approved Model List specifies:

- A. The warranty coverage period for the modification
- B. Applicable aircraft by make, model, and serial number
- C. The dealer network authorized to install the STC
- D. The pricing structure for STC licensing

36. An IA performing an annual inspection verifies that all applicable airworthiness directives have been complied with. This regulatory requirement derives from:

- A. 14 CFR § 65.91 IA eligibility requirements
- B. 14 CFR § 91.403 operator airworthiness responsibility
- C. 14 CFR § 43.9 maintenance record requirements
- D. 14 CFR § 43.15 additional performance rules for inspections

37. An aircraft has multiple STCs, and the IA discovers a new STC was installed without evaluation of compatibility with existing modifications. The correct disposition is:

- A. Evaluate combined installation compatibility for continued approval
- B. Accept the new STC without compatibility review
- C. Remove older STCs to simplify the configuration
- D. Defer the evaluation to the next inspection

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

- A. In the aircraft's instrument panel cover
- B. On the exterior fuselage of the aircraft
- C. At the cabin or cockpit entrance legible to passengers

D. In the aircraft owner's personal flight records

39. The IA has determined an aircraft airworthy at the conclusion of an annual inspection. The aircraft is approved for:

- A. Commercial passenger service without limitation
- B. Operation per the aircraft's approved operating limitations
- C. Training operations under Part 141 only
- D. Special purposes requiring FAA approval

40. Under AC 43.13-1B Chapter 6, the type of corrosion characterized by deep, localized penetration of the metal surface is:

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

41. An IA inspecting an aircraft's ELT under § 91.207(d) should verify:

- A. The ELT's compatibility with the aircraft's transponder system
- B. Installation, battery condition, controls, and signal transmission
- C. The ELT's compatibility with the air traffic control radar
- D. The ELT manufacturer's certification of production date

42. A Form 337 for a field-approved alteration must include which element to establish approval authority?

- A. The mechanic's professional training certificate

- B. The aircraft owner's acceptance of the alteration
- C. An FAA Aviation Safety Inspector's signature in Block 3
- D. The aircraft manufacturer's written endorsement

43. Under 14 CFR § 65.95(a)(1), the IA may approve major repairs and major alterations for return to service on aircraft NOT maintained under which program?

- A. A progressive inspection program under § 91.409(d)
- B. The standard 100-hour inspection under § 91.409(b)
- C. An FAA-approved alternative inspection program
- D. A continuous airworthiness program under Part 121 or 127

44. An IA is evaluating an aircraft for a special flight permit attestation. The assessment addresses:

- A. The aircraft's capability for safe flight under permit limitations
- B. The pilot's personal qualifications for the ferry operation
- C. The owner's insurance coverage during the permit period
- D. The destination airport's facility capabilities and services

45. 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 authorized to request the work
- B. The mechanic holding the IA certificate
- C. The person approving the aircraft for return to service
- D. The employee of the aircraft's original manufacturer

46. A mechanic performing an alteration under a field approval must:

- A. Obtain manufacturer endorsement before proceeding
- B. Complete the work per the approved data in the Form 337
- C. Submit a separate report to the Aircraft Registry
- D. Coordinate with the aircraft owner's insurance carrier

47. The FAA Aircraft Registry maintains a master file of Form 337s for what purpose?

- A. To determine aircraft market values for insurance
- B. To track the aircraft owner's contact information changes
- C. To coordinate with the local FSDO on aircraft operations
- D. To provide historical documentation of major repairs and alterations

48. Under 14 CFR § 43.3(d), approval for return to service following a major repair on a Part 91 aircraft may be granted by:

- A. The holder of an Inspection Authorization
- B. Any certificated pilot with commercial privileges
- C. A Designated Engineering Representative only
- D. The aircraft's insurance carrier representative

49. A mechanic is welding an aircraft engine mount tube. The work:

- A. Is minor repair within A&P mechanic authority
- B. Is major repair requiring approved data and IA approval
- C. Is preventive maintenance under § 43.3(g)
- D. Requires no documentation or special approval

50. Under § 43.11(b), when an aircraft is found unairworthy at annual inspection, the IA must provide the owner with a list identifying:

- A. The estimated repair cost for each discrepancy item
- B. The available qualified mechanics to perform corrections
- C. The specific discrepancies and unairworthy conditions
- D. The timeline for required corrective action completion

PRACTICE EXAM 12: ANSWER KEY AND EXPLANATIONS

1. C — 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.
2. A — 50 percent of useful life or 1 cumulative hour of transmission. Section 91.207(c) specifies ELT battery replacement at the earlier of 50 percent of useful life or 1 cumulative hour of transmission. Calendar-month intervals, inspection-cycle triggers, and hour-based alternatives are not the regulatory criteria.
3. C — -850 in-lb. Moment change from removal of weight is negative: $-12.5 \times 68.0 = -850$ in-lb. The negative sign reflects that weight removal reduces the moment. Negative moment change is the correct sign convention for weight removal.
4. B — Properly inspect airframes, engines, propellers, and appliances. Section 65.91(c)(4) requires the applicant to have the equipment, facilities, and inspection data necessary to properly inspect airframes, engines, propellers, and appliances. Flight testing, pilot training, and commercial service are not the regulatory purposes.
5. D — A welder qualified for aircraft structural welding. AC 43.13-1B Chapter 4 specifically requires welders performing aircraft structural welding to be qualified. Documentation, visual inspection, and pressure testing are not substitutes for welder qualification — the welder's qualification is the fundamental requirement.
6. B — 2,075 hours. The next compliance is calculated by adding the recurring interval to the last compliance time: $1,875 + 200 = 2,075$ hours. Simple addition of the recurring interval produces the next-due time for any recurring AD.
7. 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 distributors cannot approve major work.
8. C — Is inadequate without specific STC identification. AC 43.9-1E requires Block 8 to describe the work with sufficient specificity that a future mechanic can verify conformity. "Installed new autopilot per STC" lacks the STC number, revision, and installation details — it is inadequate and likely to be rejected.

9. B — The type of inspection and airworthy determination. Section 43.11(a) requires the inspection entry to identify the type of inspection performed and the airworthy determination. Owner authorization, labor hours, and manufacturer recommendations are not required certification elements.
10. D — 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 (certification, maintenance, and mechanic qualification respectively).
11. A — Must be based on operational use, not total hours since last inspection. Inspection classification depends on the aircraft's operational use — 100-hour inspections are required for aircraft used for flight instruction for hire or carrying persons for hire. Low hours since a prior inspection does not convert an annual to a 100-hour inspection by choice.
12. D — Used for flight instruction for hire or carrying persons for hire. Section 91.409(b) specifically requires a 100-hour inspection for aircraft used for flight instruction for hire or carrying persons other than a crewmember for hire. Private operations, navigation training without compensation, and personal travel do not trigger the requirement.
13. B — The first element of a two-part airworthiness determination. The airworthiness determination has two elements: conformity to approved type design (the first element) and condition for safe operation (the second element). Both elements must be affirmatively met for an aircraft to be airworthy.
14. C — Filiform corrosion. 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, galvanic, or intergranular corrosion, each of which has different characteristic appearances.
15. A — The STC number and Revision C. Form 337 for an STC-based alteration must reference the STC number and the applicable data package revision level. Subsequent revisions are not retroactively required; the approved data is the revision actually used during installation.
16. D — Pulleys and fairleads are particularly consequential. AC 43.13-1B Chapter 7 identifies broken strands at pulleys and fairleads as particularly consequential because cables at these locations experience cyclic flexing. This cyclic stress makes broken strands indicative of ongoing fatigue damage that may progress to cable failure.
17. C — Methods 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 (commonly AC 43.13-1B). Manufacturer-only methods, owner preferences, and SB-only restrictions are not accurate regulatory summaries.

18. B — 76.5 inches. Empty CG is calculated as empty moment divided by empty weight: $134,640 \div 1,760 = 76.5$ inches. This basic computation produces the empty CG for the weight and balance record.
19. A — Performing inspections of major repairs or major alterations. Section 65.93 lists five alternative renewal activities, including performing inspections of major repairs or major alterations. Recurrent flight training, medical certificates, and renewal fees are not IA renewal activities.
20. D — Does not meet airworthiness requirements but is 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. Recent sale, commercial service, and completed inspection do not fit the regulatory basis for a permit.
21. D — The Form 337 documentation for the alteration. Section 91.417(a)(2) requires permanent retention and transfer of Form 337 records for major alterations. Owner service agreements, billing records, and operational logs are not permanent aircraft records.
22. B — Replace the propeller blade before return to service. A 3-inch crack exceeding manufacturer dressing limits is an unairworthy structural defect. The propeller must be repaired or replaced before return to service — protective coatings, monitoring, and deferral are not appropriate responses to structural cracks exceeding limits.
23. 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.
24. C — Satisfactory performance per manufacturer recommendations. Section 43.15(c) specifically requires the engine run-up at the end of inspection to determine satisfactory performance per manufacturer recommendations. Service life measurement, operational readiness assessment, and operating compliance are not the regulatory purposes.
25. D — Is not listed on the aircraft's TCDS approved equipment. An alternator not listed on the TCDS requires approved data authorizing the installation. Amperage, dimensions, and mounting position are secondary to the regulatory non-conformity to type design when equipment is not TCDS-approved.
26. B — Qualified for aircraft structural welding. AC 43.13-1B Chapter 4 specifically requires welders performing aircraft structural welding to meet qualification requirements. Manufacturer certification, FSDO approval, and repair station employment alone are not the specific requirement.
27. C — Provide the owner with a dated and signed discrepancy list. Section 43.11(b) 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.

28. A — Reference materials for regulations, ADs, and TCDS questions. FAA-CT-8080-8D contains regulatory excerpts, sample ADs, and TCDS references used as reference material during the IA Knowledge Test. Course certificates, complete regulations, and FAA contact information are not included.
29. D — Superseded by other work or one year, whichever is 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. Sales, certificate renewal, and annual inspection completion are not the retention triggers.
30. B — The altimeter system, transponder, and ELT inspections. The IA's records review verifies currency of the altimeter (§ 91.411), transponder (§ 91.413), and ELT (§ 91.207(d)) inspections. Pilot currency, owner insurance, and fuel documentation are not part of the regulatory records review.
31. A — A punch test meeting minimum tear strength requirements. AC 43.13-1B Chapter 2 establishes the punch test methodology for fabric covering integrity assessment. Fabric must meet the minimum tear strength specified in Chapter 2; visual inspection, chemical analysis, and owner acceptance are not substitutes for the punch test regulatory requirement.
32. C — Is a non-conformity to approved type design. The TCDS specifies the minimum fuel grade required for operation. Use of a lower-grade fuel violates the approved type design. Operator conservatism, emergency conditions, and operational effects do not change the non-conformity classification.
33. D — Exceeds manufacturer specifications and requires correction. End play exceeding manufacturer specifications (0.010 vs. maximum allowed 0.005 inches) is a non-conformity to approved data requiring correction. Manufacturing tolerance, operational smoothness, and specification significance do not justify accepting excess clearance beyond manufacturer limits.
34. A — 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). Appendix A paragraphs (a) and (b) address major alterations and major repairs respectively; Appendix D is the inspection scope.
35. B — Applicable aircraft by make, model, and serial number. The Approved Model List identifies applicable aircraft by make, model, and serial number range. Warranties, dealer networks, and pricing are commercial matters, not AML regulatory content.
36. D — 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.
37. A — Evaluate combined installation compatibility for continued approval. Multiple STCs on a single aircraft may create configurations that no individual STC approved. The IA evaluates

combined STC compatibility and whether the integrated installation remains supported by approved data, rather than simply accepting each STC independently.

38. C — 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. Instrument panel covers, exterior fuselage, and owner records are not the regulatory display locations.
39. B — Operation per the aircraft's approved operating limitations. An airworthy aircraft is approved for operation per its approved operating limitations, documented in the flight manual and flight manual supplements. Commercial service, Part 141 limitation, and special-purpose restrictions are not part of an airworthy disposition of a Part 91 aircraft.
40. D — Pitting corrosion. AC 43.13-1B Chapter 6 describes pitting corrosion as deep, localized penetration of the metal surface. The localized, small-diameter, deep-penetration characteristic distinguishes it from exfoliation (layered flaking), galvanic (dissimilar metals), or filiform (thread-like) corrosion.
41. B — Installation, battery condition, controls, and signal transmission. Section 91.207(d) specifies the ELT inspection elements: proper installation, battery condition, operation of controls and crash sensor, and presence of sufficient signal radiated from the antenna. Transponder compatibility, ATC radar compatibility, and production date are not regulatory elements.
42. C — An FAA Aviation Safety Inspector's signature in Block 3. Block 3 of Form 337 is reserved for the FAA field approval signature. The ASI's signature in this block establishes the approved data for the specific alteration. Training certificates, owner acceptance, and manufacturer endorsement are not field approval elements.
43. D — 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, 100-hour inspections, and alternative inspection programs are not the prohibition.
44. A — The aircraft's capability for safe flight under permit limitations. The IA's attestation for a Special Flight Permit assesses whether the aircraft is capable of safe flight under the specific permit's operating limitations. Pilot qualifications, insurance coverage, and destination facilities are not regulatory assessment elements.
45. 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 different individuals.
46. B — Complete the work per the approved data in the Form 337. A field-approved alteration requires the work to be completed per the specific approved data identified in Block 3 of the Form

337. Manufacturer endorsement, Registry reports, and insurance coordination are not regulatory requirements for field-approved work.

47. D — To provide historical documentation of major repairs and alterations. The FAA Aircraft Registry maintains a master file of Form 337s to provide historical documentation of major repairs and alterations for all U.S.-registered aircraft. This file is accessible for record reconstruction, alteration history research, and regulatory review purposes.
48. 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. Pilots, DERs, and insurance representatives cannot approve major repairs for return to service.
49. B — Is major repair requiring approved data and IA approval. Welding of aircraft engine mount tubes 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.
50. C — The specific discrepancies and unairworthy conditions. Section 43.11(b) requires the discrepancy list to identify each unairworthy condition found during the inspection. Repair costs, qualified mechanic directories, and timelines are not regulatory elements of the list.