AC 43-9D AND AC 120-78B

# Digital maintenance records: what the FAA now expects, and why it pays to switch.

The FAA has replaced both of its main guidance documents on maintenance records. AC 43-9D (September 22, 2025) recognizes electronic maintenance records and brings Form 8130-3 guidance into one place. AC 120-78B (December 11, 2024) sets out what an acceptable electronic signature and recordkeeping system looks like. Together they give shops a clear path to paperless records that hold up in an audit.

43.9 / 43.11 content | Electronic records recognized | Electronic signatures | OpSpec A025 | 145.219 retention

THE SHORT VERSION

## What changed, and what didn't

### What didn't change: the law

- The record content rules are still **14 CFR 43.9** and **43.11**: what was done, the date, and the signature, certificate number and kind of certificate of the person approving return to service
- Owners still must keep the records in **91.417**; repair stations keep theirs under **145.219**
- Both ACs are guidance: "one means, but not the only means" of compliance

### What did change: the FAA's guidance

- **AC 43-9D** replaces AC 43-9C from 1998 and adds guidance on electronic records and automated systems
- Form 8130-3 return-to-service guidance moves into AC 43-9D, block by block
- **AC 120-78B** replaces AC 120-78A (2016) with clearer criteria for electronic signatures and records systems
- Electronic systems are optional; if a Part 145 shop uses one, it is accepted through **OpSpec A025**

Neither AC sets a new compliance deadline. AC 43-9D has been in effect since its issue on September 22, 2025, and AC 120-78B since December 11, 2024.

AC 43-9D

## Maintenance records and Form 8130-3

| Topic | What the AC says |
|---|---|
| Description of work | Enough detail "to permit a person unfamiliar with the work to understand" what was done (para. 8.4). |
| Date and signature | The completion date, normally the return-to-service date, and the approver's signature and certificate number; the certificate type may be shown (paras. 8.5, 8.6). |

| Topic | What the AC says |
|---|---|
| Inspections | Entries under 43.11 identify the inspection program and the part of it accomplished (para. 13.3). |
| Work orders | Repair stations should give owners copies of work orders with the information the owner must keep under 91.417(a)(1) (para. 8.4 note). |
| Major repairs | A repair station may use a maintenance release instead of Form 337 when it meets Part 43 appendix B (para. 19.2). |
| Form 8130-3 | Recommended for articles returned to service; content is still governed by 43.9 and 91.417. It cannot be used to return an aircraft to service (paras. 23.2.3, B.12.3). |
| Corrections | Electronic 8130-3 systems must keep both the original and the corrected data (para. 23.3.1). |
| Electronic records | Off-the-shelf software "usually does not meet" 43.9 or 91.417 on its own; the system must capture all required information, including signatures (para. 16). |

AC 120-78B

## What makes an electronic signature acceptable

### The signature (para. 2.1.2)

- Unique to the signer, and the signer is identified and authenticated
- Under the signer's sole control: their own login, never shared
- Made with intent to sign, by a deliberate action
- The signer can't later deny signing (non-repudiation)
- Signed content can't be changed without a new signature; a correction supersedes the original (para. 2.2.8)

### The records system (para. 3.2)

- Safeguards against uncontrolled access
- Records stay unaltered and protected from corruption
- Backups equivalent to the primary records
- Regular quality checks and audits of the system
- Records provided to the FAA or NTSB in a form they accept on request (para. 3.2.8.6)

**For a Part 145 repair station**, an electronic signature or recordkeeping system is accepted by the FAA and authorized through OpSpec A025 (paras. 1.9.2, 1.9.3). The shop describes the system in its manual and sends a letter of intent to its certificate-holding office with the planned start date. Part 91 owners need no FAA acceptance, though the FAA recommends following the AC (para. 1.9.5).

WHY SWITCH

## The benefits for a shop

### Audit-ready

Every entry shows who signed, when and in what role. Inspectors and customers get complete records on request instead of a box of paper.

### Fewer errors

Required fields can't be skipped, AD and inspection references come from the system, and nothing is lost to bad handwriting or missing pages.

### Faster close-out

Technicians sign off on the job, QC and RII sign in sequence, and the customer gets the work order and return-to-service record the same day.

### Corrections done right

A correction keeps the original and the new entry, with who changed it and why, as AC 120-78B and AC 43-9D expect.

### Retention handled

Records are kept, backed up and searchable for as long as 145.219 and your customers require, without filing cabinets.

### Better for owners

Owners receive the information they must keep under 91.417, which helps resale value and their next pre-buy.

CHECKLIST

## Getting your shop ready

1. Review your work order and logbook entry templates against AC 43-9D paras. 8.4 to 8.6 and 13.3.
2. Check Form 8130-3 completion against AC 43-9D appendix B, and stop using it for aircraft return to service.
3. Choose a records system that meets AC 120-78B: personal logins, signatures that lock the record, corrections that keep the original, backups, and export for the FAA.
4. Describe the system in your repair station manual (access, signatures, corrections, backup, audits).
5. Send a letter of intent to your certificate-holding office and get OpSpec A025 issued before going paperless.
6. Train technicians and inspectors, and audit the system at regular intervals.

HOW AVISTRATA FITS

## Built for this

- **Every sign-off on its own login**, with name, certificate, role, date and time stored with the record; technician, QC, RII and return-to-service signatures in sequence.
- **Signed records lock**, and every later change keeps its approver and reason, with the original preserved.
- **Full audit trail** of administrative actions and sign-ins, and multi-factor sign-in or single sign-on.
- **Work orders and task cards** with the description of work, parts, references and inspection status, exportable to PDF and CSV for the FAA and the owner.
- Records separated by organization at the database level, with backups.

Avistrata supports the records and signature controls in AC 120-78B; FAA acceptance and OpSpec A025 are issued to your repair station, based on your manual and procedures.

### See your records in Avistrata

A 30-minute walkthrough, or a free 14-day trial on your own work orders.

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Sources: AC 43-9D, Maintenance Records and FAA Form 8130-3 Return to Service (Sept. 22, 2025); AC 120-78B, Electronic Signatures, Electronic Recordkeeping, and Electronic Manuals (Dec. 11, 2024); 14 CFR 43.9, 43.11, 91.417, 145.219. This brief summarizes FAA guidance and is not legal advice. © 2026 Leesburg Aviation LLC. All rights reserved.