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Convert Paper Pilot Logbook to Digital: Reconcile Totals

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Executive Summary

Converting a paper pilot logbook to an electronic one is usually judged by a single number: does the new grand total equal the old one? That test is necessary and insufficient. A grand total can agree while page-level errors cancel, classifications have been flattened, or signatures and endorsements have been left behind. This report sets out a vendor-neutral acceptance pack for an individual pilot: a source index, a reconciliation register, a balance-control table, a missing-evidence register and an explicit cutover decision. The practical question it answers is which checks establish that the conversion preserved the flight history and its signed evidence.

The rules differ by authority, so each is named. In the United States, 14 CFR 61.51 requires time to be documented "in a manner acceptable to the Administrator" (www.law.cornell.edu). The UK Civil Aviation Authority (CAA) asks holders of electronic logbooks to download and submit them, electronically signed or printed and hand signed (UK CAA: download and submit electronic logbook; UK CAA: electronic signature; UK CAA: printed and hand signed copies). Ireland's Irish Aviation Authority (IAA) says all logbooks must be sent for inspection when an electronic logbook is submitted (www.iaa.ie). European Union Aviation Safety Agency (EASA) material says electronic records should be certified by the pilot and in a format the competent authority accepts (www.easa.europa.eu). In the sources reviewed, none says a spreadsheet row count proves completeness or that a scanned signature image is a certification.

The arithmetic traps are small and avoidable. In a hypothetical example, 1:25 is 85 minutes while 1.25 decimal hours is 75 minutes, a 10-minute difference. Three 25-minute entries total 75 minutes (1.25 hours), but displaying each as 0.42 hours and adding the displayed values gives 1.26 hours, a 0.01-hour display artefact. The National Institute of Standards and Technology (NIST) advises rounding only the final result (www.nist.gov). A 100-hour opening balance that demonstrably already includes 25 hours of individually imported rows must not become 125 hours, and an uncertain overlap should be recorded as unresolved rather than silently subtracted.

Export is where signed evidence is most often lost. ForeFlight states that its CSV export excludes signatures and endorsements (support.foreflight.com), and LogTen states that its spreadsheet export is not a full backup of its database (support.logten.com). These are vendor-specific behaviours, not universal rules. The

recommended practice, which is an audit control and not a legal requirement, is to keep the original signed books, retain independent backups, and treat any AI-assisted transcription as a draft that a human compares with the original page.

Introduction and Background

This report addresses airline and charter pilots, and pilots building experience toward a licence, rating or airline application, who are converting an established paper logbook, changing electronic providers, or reconciling a licensing or application summary with their own records. It is explanatory analysis, not an authority's decision, an examiner's view or operational guidance replacing an operator's approved procedures. Rules are named with their jurisdiction, because the United States, Canada, the United Kingdom, Ireland, the European Union, Australia and New Zealand differ.

The central claim is narrow. A single matching grand total is weak evidence of a faithful conversion. MyFlightbook's frequently asked questions already explain a useful running-total method for locating where a paper logbook and a spreadsheet diverge (myflightbook.com), and this report does not present that method as new. It places the method inside a wider pack that also tests the source evidence, the overlap between opening balances and detailed rows, time formats, classifications, signatures, error handling and the readability of an export.

A logbook is both a calculation (hours by category) and a body of certified evidence (entries, countersignatures, endorsements, remarks). The certification layer depends on what a tool stores, what it exports and what the authority will accept. The Irish Aviation Authority states that a letter from an employer or training organisation is "not acceptable as the primary evidence of meeting an experience requirement" (www.iaa.ie), which shows how heavily acceptance can rest on the underlying record.

Evidence is labelled in four kinds: **law** (a regulation in force in a named jurisdiction), **guidance or acceptable means of compliance** (AMC, as in EASA material), **administrative acceptance** (what a regulator's application page asks for), and **suggested audit practice** (controls this report recommends, with no legal force). Vendor statements are attributed to the vendor.

One proportionate disclosure applies. This report appears on a site that publishes Pilot Logbook, an invitation-only electronic logbook made by a line pilot. Its handling of conversion is described in the tool comparison below on the same footing as the others, from its own product page and without independent testing. Readers can request an invite, and nothing here implies open sign-up.

What the Evidence Hierarchy Actually Says

Law, guidance, administrative acceptance and audit practice

The first discipline in a conversion is to separate what an authority requires from what a vendor or a forum recommends. Four short examples show the spread.

- **United States (law):** 14 CFR 61.51(a) requires a pilot to "document and record" specified time "in a manner acceptable to the Administrator" (www.law.cornell.edu), and 61.51(b) lists what must be entered for each flight or lesson (www.law.cornell.edu). The rule does not prescribe paper. A Federal Aviation Administration (FAA) Safety Briefing article reported that no statement or regulation deems electronic records unacceptable (www.faa.gov), and ForeFlight's own help page says the regulations do not explicitly state that electronic logbooks are unacceptable (support.foreflight.com).
- **United States (guidance):** FAA Advisory Circular (AC) 120-78B, issued 11 December 2024, cancelled AC 120-78A of 22 June 2016 and says that using an electronic signature, electronic recordkeeping system or electronic manual system under part 61 does not require formal FAA approval, acceptance or authorization (FAA AC 120-78B). It defines an electronic signature as an electronic sound, symbol or process attached to, or logically associated with, a record and executed or adopted by an individual with the intent to sign the record (FAA AC 120-78B definitions). An advisory circular is guidance, not law.
- **Canada (law):** Canadian Aviation Regulations (CARs) 401.08 require every holder of a flight crew permit, licence or rating to "maintain a personal log" (laws-lois.justice.gc.ca), with entries including the aircraft type and registration mark (laws-lois.justice.gc.ca) and the flight conditions of day, night, visual flight rules (VFR) and instrument flight rules (IFR) (laws-lois.justice.gc.ca). Transport Canada's application page, which is administrative acceptance, says an applicant can email an e-logbook or a scanned copy of a paper logbook (tc.canada.ca).
- **Australia (administrative guidance):** the Civil Aviation Safety Authority (CASA) says a logbook can be paper or electronic (www.casa.gov.au), and says a pilot who keeps an electronic logbook must produce a printed copy when directed, certifying each page as a true copy.

Named examples, not worldwide rules

The UK and Ireland illustrate how acceptance can turn on the record rather than on the app. The UK CAA's documentation guidance says a sworn affidavit is no longer accepted as the primary means of replacing lost records (www.caa.co.uk), and it covers loss, damage, theft or data corruption (www.caa.co.uk). For electronic submissions it says the logbook should be electronically signed to show who it belongs to (www.caa.co.uk), or printed and hand signed (www.caa.co.uk), and that copies must clearly identify the experience being claimed (www.caa.co.uk). Ireland's FAQ asks whether an electronic logbook can be sent without earlier logbooks, and answers that all logbooks must be sent for inspection (www.iaa.ie).

These are two authorities' positions, not a European or global standard. New Zealand's position is changing: the New Zealand Civil Aviation Authority states that updated rules took effect on 5 April 2025 (www.aviation.govt.nz), that the Director may approve software for an electronic logbook (www.aviation.govt.nz), and that approval guidance is still in development, with the existing requirements applying until it is finalised (www.aviation.govt.nz).

EASA: certified, reliable electronic records

For EASA Part-FCL, FCL.050 concerns the recording of flight time. The Irish Aviation Authority's advisory memorandum quotes it as requiring that the pilot keep a reliable record of the details of all flights flown (www.iaa.ie). The associated AMC1 FCL.050 text says electronic records should be certified by the pilot and in a format acceptable to the competent authority (www.easa.europa.eu), and made and kept so they are readily

available on request (www.easa.europa.eu). The same AMC says entries should be made as soon as practicable after a flight (www.easa.europa.eu). The Irish memorandum accepts electronic logbooks provided that flights requiring endorsement have been signed by the relevant holder (www.iaa.ie).

Two cautions follow. First, the AMC wording quoted here comes from a published EASA decision document; AMC text is amended, and a pilot should read the consolidated current version before relying on a sentence. Second, certification by the pilot is not the same as an optical character recognition (OCR) rendering of a signature image. Scanning a signed page produces a picture of a signature, not a new act of certification.

The Source-Page-to-Export Reconciliation Pack

The pack has seven stages. Each stage ends with an artefact, and the artefacts together form the acceptance record. Stages are suggested audit practice unless a sentence says otherwise.

Stage 1: Inventory the books, page ranges, endorsements and target purpose

Build two artefacts first.

- **Source index:** one line per physical book or file, with the book number, first and last page, date range, aircraft or role mix, condition, and where the originals are stored.
- **Missing-evidence register:** a list of gaps (a missing book, pages with smudged totals, a countersignature never obtained, a period logged on an operator document) so they are visible instead of absorbed into a total.

Then state the target purpose, because it changes how much detail is needed. A pilot updating a personal record for an airline interview has different needs from one preparing an application to a licensing authority. The Irish FAQ indicates earlier books remain part of a submission (www.iaa.ie), and the UK guidance asks that copies identify all requisite experience (www.caa.co.uk). A summary page that cannot be traced to those books may not serve that purpose, even where it is arithmetically perfect.

Record endorsements and certifications in their own list. Under 14 CFR 61.51(h)(2), training time must be endorsed in a legible manner by the authorized instructor (www.law.cornell.edu), and 14 CFR 61.189 requires a flight instructor to sign the logbook of each person given flight training (www.law.cornell.edu). The FAA's current endorsement guidance states that each endorsement must be legible and include the instructor's signature (www.faa.gov). Where Second-in-Command (SIC) time is logged, 61.51(f) limits that logging to qualifying circumstances (www.law.cornell.edu), so role classification is itself an evidence field.

Stage 2: Choose full history or documented opening balances

There are two defensible designs. A **full-history import** transcribes every flight, preserving detail and classification. A **documented opening balance** (a balance forward, or catch-up entry) summarises a block of earlier time. Vendors support the second approach explicitly: ForeFlight describes catch-up entries as single entries that summarize a block of time (support.foreflight.com), and Safelog describes a single place to enter totals prior to using it (www.dauntless-soft.com).

The trade-off is what the summary cannot carry. PilotAudit's conversion guide, written from a vendor's perspective, says a balance forward leaves the overall figure present while the underlying classification has been lost (www.pilotaudit.com), and that remarks and certification do not transfer (www.pilotaudit.com). That is a general warning about summarised blocks and does not depend on the PICUS (pilot-in-command under supervision) context of the guide.

A practical rule: use full history for the period an authority or employer is most likely to inspect, and a documented opening balance only for earlier time whose source books are retained and indexed. Whatever is chosen, write the scope of the opening balance down: the date it runs to, the last page it covers, and the categories it includes.

Stage 3: Transcribe or import with source-page references

Every converted row should carry a pointer back to the book, page and line. Keep it in a remarks field or a companion spreadsheet. Test three import behaviours in the chosen tool before bulk loading.

- **Update versus create:** MyFlightbook's import documentation says that if the flight identifier field is not present, flights are assumed to be new (myflightbook.com). It also says not to assign the identifier yourself (myflightbook.com). ForeFlight likewise warns that re-importing entries already imported will lead to duplicate logbook entries (support.foreflight.com). These are product behaviours; another tool may match on different keys or none.
- **Date and number parsing:** MyFlightbook says dates and numbers should follow the browser's conventions (myflightbookblog.blogspot.com). Test with dates in which day and month are both below 13.
- **Time format:** ForeFlight's template accepts per-category durations as decimal or hours and minutes (support.foreflight.com) while its total-time field is specified as decimal (support.foreflight.com). Logbook Pro's import wizard accepts HH:mm, raw minutes or hours and tenths (docs.nc-software.com). MyFlightbook warns that spreadsheet software treats HH:MM as a time of day (myflightbook.com). Mixed formats in one column are a primary source of silent errors.

If an AI tool reads photographed pages, treat its output as a draft. Pilot Logbook's product page describes reading photographed pages with AI and flagging items for the pilot to correct, and labels the feature early access; no accuracy benchmark was found, so that is a vendor description, not a measured result. An older NIST report on handprint recognition described routing low-confidence machine decisions to humans for verification (tsapps.nist.gov). Its age limits its weight; the control stands on its own logic, and no source reviewed here mandates a particular workflow.

Stage 4: Reconcile page controls, aircraft types and time categories

Reconcile at four levels, in this order.

1. **Page control totals:** recompute each paper page's total from its lines and compare with the printed page total and carried forward total. The running-total method described in the introduction, adding a column to an export and finding where the paper running totals diverge, locates the first bad page quickly.

2. **Row completeness:** count lines per page against rows imported per page, including blank or cancelled lines that were deliberately skipped. A count proves only that rows exist.
3. **Category subtotals:** reconcile each category the logbook uses (total, pilot-in-command, SIC, night, instrument, cross-country, by aircraft type) separately, because errors can cancel in the grand total.
4. **Classification review:** compare aircraft type, registration, role and conditions with the paper line. Canada's CARs 401.08 list type, registration and flight conditions as entry content (laws-lois.justice.gc.ca), so a conversion that drops them has dropped regulated content, not only convenience.

For multi-leg or multi-sector days, check missing intermediate routes where the paper line showed them. An export that concatenates legs into one row can preserve total time while losing the leg detail. This is a completeness test the grand total will never reveal.

Stage 5: Preserve original certifications and record unresolved issues

The signature layer needs its own test. Documented tool behaviours show the range:

- **Signature as data tied to the entry:** MyFlightbook keeps a copy of the salient details of the flight as signed, so later edits can be detected (see Table 1). It also states that digital endorsements and photos are included in its printed output (myflightbookblog.blogspot.com).
- **Signature as an image on a report:** Logbook Pro describes placing a signature image in printed reports by matching the image file name (helpdesk.nc-software.com).
- **Signature captured on a device:** LogTen describes signing entries and certificates on the pilot's device and recommends periodically printing hard copies for safekeeping (support.logten.com).
- **Endorsements on import:** ForeFlight states that using a compatible file format such as CSV, endorsements cannot be imported (support.foreflight.com).

A scanned or photographed signature is evidence that a signed page exists. Whether it is an electronic signature in a legal sense depends on the jurisdiction. The US Electronic Signatures in Global and National Commerce (ESIGN) Act definition turns on a sound, symbol or process attached to or logically associated with a record (www.law.cornell.edu). Under the European Union's eIDAS Regulation as originally adopted, an electronic signature is data attached to or logically associated with other data (this wording is from the UK-retained copy of the regulation; the EU regulation was later amended, and this report did not check whether the definition is unchanged) (UK-retained text, legislation.gov.uk), and an advanced electronic signature must be uniquely linked to the signatory (www.legislation.gov.uk). The UK Law Commission describes electronic signature in terms of the signer's intention to authenticate the document (lawcom.gov.uk). These generic definitions do not decide aviation acceptance; they show why a picture of ink on a page is not self-evidently the signer's certification of the entry.

Therefore: do not claim that a scan recreates a valid endorsement, and do not describe a hand-keyed copy of a flight instructor's endorsement as the endorsement. Keep the original as the certified artefact, and let the electronic row reference it. Record anything that cannot be resolved (a signature that is illegible, a page total that cannot be reproduced) in the missing-evidence register with the reason and the decision taken.

Stage 6: Verify a readable export and independent backups

Test the exit before relying on the entrance. Export, then open the file in software unrelated to the tool and check four things:

- **Readable independently of the app:** the Library of Congress describes PDF/A as designed to be independent of the tools and systems used to create, store or render the files (www.loc.gov), and describes strict-form CSV as a transparent format that is human-readable and machine-processable (www.loc.gov). These describe format properties, not any logbook vendor's output.
- **Fields present, not merely hidden:** compare field lists. ForeFlight's help page says its CSV excludes signatures, endorsements, photos and track logs (support.foreflight.com), and says the Complete Logbook PDF includes endorsements, certificates and license information (support.foreflight.com). LogTen says its spreadsheet export is not a full backup and excludes signatures and other images.
- **Original precision retained:** if the tool stores minutes and the export shows hundredths, record which one is authoritative.
- **Independent backups:** a backup-options paper hosted by the US Cybersecurity and Infrastructure Security Agency (CISA), published in 2012 for US-CERT, says saving just one backup file may not be enough (www.cisa.gov), recommends two different media types (www.cisa.gov), and one copy offsite (www.cisa.gov). A vendor's own server backup is one copy; it is not independence from that vendor.

Several tools schedule exports. ForeFlight describes automatic exports every 30 days by email (support.foreflight.com), and Logbook Pro's import wizard offers a backup before data transfer (docs.nc-software.com). Using such features helps, but only a restore or open test shows that the file works.

Stage 7: Agree a cutover boundary and keep a correction register

- **Cutover boundary:** the first flight recorded only electronically. Choose it as a date and a paper page, and state in writing that the paper book is closed at that page and the electronic record is continuous from it.
- **Boundary reconciliation:** reconcile the closing paper total, the opening electronic total and the first electronic page before accepting the cutover.
- **Correction register:** it never overwrites the original. New Zealand's rules illustrate the principle on paper: an incorrect entry may be altered only by putting a line through it (www.aviation.govt.nz), so the original stays legible. Electronically, store original value, corrected value, correction type (transcription, arithmetic or classification), reviewer and date.
- **Acceptance record:** a short note signed off by the pilot on what was tested, what failed and what remains unresolved.

Do not destroy the originals

Nothing reviewed supports disposing of paper books after scanning, and several sources point the other way. PilotAudit advises that the original signed paper logbooks should still be retained (www.pilotaudit.com). The UK CAA's certified-copy guidance depends on an authorised person having seen the original document (www.caa.co.uk). In an analogous records-management setting, the US National Archives says that where a digitization process falls short, agencies will likely need to retain the originals as the recordkeeping copy

(www.archives.gov); that is a federal agency rule used here as an analogy, not a pilot requirement. Australia's CASA states a 7-year retention period from the last entry for logbooks (www.casa.gov.au), and New Zealand's rules require a bound logbook to be retained permanently by the holder (www.aviation.govt.nz). Retention periods vary and the safe course is to keep the originals unless the relevant authority says otherwise.

Implementation: The Migration Acceptance Checklist

The checklist separates controls the law or an authority's guidance supports from those that are suggested practice.

Evidence the authority may ask for (named jurisdictions):

- **United States:** the record is "acceptable to the Administrator" (www.law.cornell.edu), and the pilot must present the logbook on reasonable request (www.law.cornell.edu). The Aircraft Owners and Pilots Association (AOPA) notes that the FAA has recognized a logbook can be any record from which the information can be read (www.aopa.org), and that an inspection does not require surrendering custody of the logbook (www.aopa.org). AOPA's Pilot Protection Services describes a PDF or printout of an electronic logbook as a preferred means of compliance with a request (pilot-protection-services.aopa.org); that is association advice, not regulation.
- **Canada:** entries may be made by the holder or a person the holder has authorised (laws-lois.justice.gc.ca), and a pilot who lost a log may submit an affidavit or statutory declaration under Standard 421.08 (tc.canada.ca), which differs from the UK position.
- **United Kingdom:** an electronic logbook should be downloaded and submitted (www.caa.co.uk), and only one page of a signed copy needs the signature (www.caa.co.uk).
- **Australia:** a pilot rebuilding a lost logbook will need a statutory declaration for the records entered (www.casa.gov.au).
- **New Zealand:** a non-electronic logbook must be an approved bound book in indelible ink (www.aviation.govt.nz) certified at the bottom of each page by the pilot (www.aviation.govt.nz).

Suggested controls for the acceptance record (audit practice, not law):

- **Completeness:** every source page is in the source index; rows per page match lines per page; multi-sector lines keep legs where the original showed them.
- **Subtotals and classification:** each category reconciles, and every role, type and condition matches the page.
- **Certifications:** each endorsement and countersignature is listed with a pointer to the original.
- **Opening-balance scope:** date, page range and categories are written down.
- **Export and backups:** the export opens in unrelated software, fields are checked against the tool's data, and at least two copies exist on different media, one offsite, restored once as a test.
- **Cutover and corrections:** boundary agreed, original values preserved.

Data Analysis and Evidence

Worked arithmetic (all hypothetical)

The following are educational examples, not observed pilot-error rates and not regulatory tolerances.

Time format (Hypothetical Example). A paper entry reads 1:25, meaning one hour twenty-five minutes. As minutes, $1 \times 60 + 25 = 85$. If a transcriber enters it as the decimal 1.25, the tool reads $1.25 \times 60 = 75$ minutes. The difference is 10 minutes, or about 0.17 of an hour. The conversion factor is simply the definition that one hour is 60 minutes (www.nist.gov); the error arises from reading a colon as a decimal point. A related trap is the reverse: 1.25 in a decimal logbook means 75 minutes, so typing it as 1:25 overstates it by 10 minutes.

Rounding (Hypothetical Example). Three flights of 25 minutes each total 75 minutes, which is 1.25 hours. Each flight is $25 \div 60 = 0.41666$ hours. Displayed to two decimals, each shows 0.42, and $3 \times 0.42 = 1.26$. The displayed sum exceeds the true sum by 0.01 hour, about 0.6 minute. This is a **display difference**, not a flight-time error, provided the stored precision is intact. NIST's unit-conversion guidance says not to round quantities used within a calculation and to round only the final quantity (www.nist.gov). MyFlightbook documents a default of rounding each entry to the nearest whole minute before adding (myflightbook.com), with an option in Preferences for hundredths-of-an-hour math (myflightbook.com), which is the situation that matters when paper totals were kept in decimal hours. Paper practice also varies: an FAA handbook for balloon pilots describes logging in tenths of an hour, with remaining minutes rounded up (www.faa.gov). That is one handbook's practice for one aircraft category, not a general rule, but a pilot who rounded each line up to the next tenth will see paper totals drift above a minute-based electronic sum, and the drift is explained by method, not by error.

Overlap (Hypothetical Example). A paper logbook carries 100.0 hours as an opening balance, documented as running through page 40. The pilot also transcribes the final five pages, pages 36 to 40, as 25.0 hours of individual rows. If the balance demonstrably includes those pages, adding both gives 125.0 hours, which double counts 25.0. The corrected closing total at the end of page 40 is 100.0 hours, with the rows retained as detail. If the evidence is unclear whether the 100.0 includes pages 36 to 40, the right action is not to subtract 25.0 on a guess and not to add it on a guess. Record both candidate totals (100.0 and 125.0), state what document would settle it, and do not invent the missing flights.

Reconciliation and balance-control tables

Table 1 below summarizes how the selected electronic tools document the features that bear on a conversion acceptance test. It uses each vendor's own help pages and is limited to what those pages state. Absence of a statement is shown as not stated on the page reviewed, not as absence of the feature.

Tool	Paper-to-digital route	Signatures and endorsements	Export and backup	Time format
Paper logbook	Original evidence; legal form depends on the authority	Ink signatures on the page	The book itself; copies are the pilot's responsibility	Hours and tenths, or minutes; per book

Tool	Paper-to-digital route	Signatures and endorsements	Export and backup	Time format
MyFlightbook	CSV import; flights without an identifier are assumed new (myflightbook.com)	Signed-flight snapshot detects later edits (myflightbook.com)	CSV download	Minute rounding by default; hundredths option (see text)
ForeFlight	Convert to a digital file first (support.foreflight.com)	Endorsements cannot be imported via CSV (support.foreflight.com)	CSV excludes signatures (support.foreflight.com); PDF includes endorsements (support.foreflight.com)	Decimal or HH:MM per field (support.foreflight.com)
LogTen	Not assessed in detail here	Signing on the pilot's device (support.logten.com)	Export is not a full backup (support.logten.com)	Not assessed here
Logbook Pro	Import wizard with backup option (docs.nc-software.com)	Signature image on printed reports (helpdesk.nc-software.com)	Not assessed here	HH:mm, minutes or tenths on import (docs.nc-software.com)
Pilot Logbook (invitation-only; publisher's own claims, untested)	Reads photographed paper pages with AI; flagged lines are for the pilot to fix; early access; no accuracy benchmark published	Product page describes printing a name, logo and signature on printed layouts; it does not describe endorsement handling	Whole-logbook export described as open formats; daily server backups described	Digits typed as 1217 become 12:17; decimal hours on printouts

Table 1 is not a ranking. The MyFlightbook, ForeFlight, LogTen and Logbook Pro rows rest on the cited vendor pages; the Pilot Logbook row rests on the publisher's own product page as read on 31 October 2026 and has not been independently tested. The pattern worth testing in any product is that signatures and endorsements often sit outside the CSV, the CSV is not necessarily a full backup, and time formats can differ between import and total fields. Keeping a periodic PDF output next to the CSV lets each format cover what the other leaves out.

The **reconciliation register** (Table 2 below) is the central working asset. The three rows are hypothetical illustrations of the three correction types, each preserving the original value.

Source (book / page / line)	Original value and unit	Transcribed value	Aircraft and role	Source image location	Certification reference	Discrepancy reason	Reviewed resolution
Book 2 / p. 14 / line 6	1:25 (hours: minutes)	1.25 (decimal)	Type A, SIC	scans/b2_p14.jpg	Captain's signature, p. 14 footer	Transcription: colon read as decimal point	Corrected to 1:25 (stored as 85 min, displays 1.42 h); original retained; reviewed

Source (book / page / line)	Original value and unit	Transcribed value	Aircraft and role	Source image location	Certification reference	Discrepancy reason	Reviewed resolution
Book 2 / p. 14 / printed page total	31.4 (decimal hours)	31.3 (sum of lines)	All lines	scans/b2_p14.jpg	Pilot's page signature	Arithmetic: printed total exceeds line sum by 0.1 h (6 min)	Keep 31.4 as printed; record 31.3 as computed; carry the 0.1 h difference as a documented adjustment with date
Book 3 / p. 2 / line 11	"PICUS" in remarks	Role entered as PIC	Type B	scans/b3_p02.jpg	Supervising captain's name and licence number in remarks	Classification: supervised role flattened to PIC	Reclassified to the role shown on the page; certification reference kept; reviewed

Table 2 shows why the three correction types must be kept apart. A transcription fix changes a value to match the page. An arithmetic fix concerns a total on the page and should not silently rewrite the paper evidence. A classification fix changes how time counts and should always point to the certification that supports it. In the PICUS case, the IAA memorandum states that such certification should include the printed name and licence number of the PIC (www.iaa.ie), and EASA's AMC lists the name and signature of the PIC where time is recorded as SPIC (student pilot-in-command) or PICUS (www.easa.europa.eu), so the remarks column is evidence, not decoration.

Table 3 below is the **balance-control table**, again hypothetical, using the 100-hour example.

Case	Opening total	Included date and page range	Detailed rows imported	Proven overlap	Corrected closing total	Unresolved evidence
A: scope proven	100.0 h	To 30 June, pages 1 to 40	25.0 h (pages 36 to 40)	25.0 h	100.0 h at page 40; 112.5 h after 12.5 h of later flights	None
B: scope unclear	100.0 h	To 30 June; last page not stated	25.0 h (pages 36 to 40)	Unproven	Two candidates held: 100.0 h or 125.0 h	Document showing whether the opening balance includes pages 36 to 40
C: naive import	100.0 h	Not recorded	25.0 h	Ignored	125.0 h (double counted)	Overlap never examined

Table 3 turns the overlap principle into a control. Case A reaches 112.5 hours because $100.0 + 12.5 = 112.5$, whereas adding the rows twice would give 137.5. Case B is the honest outcome when evidence is missing: two candidate totals and a named document that would settle it. Case C is the failure the register is designed to prevent.

What the sources do and do not establish

The evidence is strong on principle and thin on cross-product detail. Authorities consistently expect a record that is reliable and, where electronic, certified or signed in some way: EASA's AMC1 FCL.050 says so (www.easa.europa.eu), the UK CAA says so (www.caa.co.uk), and 14 CFR 61.51 requires an acceptable manner of documentation (www.law.cornell.edu). None of the sources reviewed publishes tolerances for conversion errors, and no public benchmark of paper-page AI accuracy, retention guarantee or cross-vendor transfer test was identified. A comma-separated values (CSV) file's row count proves neither completeness nor certification: the Library of Congress characterises CSV as a transparent format (www.loc.gov), not an authenticated one.

Implications and Future Directions

Two shifts make this checklist more relevant. Regulators are making explicit what they accept: New Zealand's rule change in April 2025 (www.aviation.govt.nz) and the UK CAA's guidance on electronic submissions (www.caa.co.uk) show authorities specifying form and signature, with detail still evolving. And tools increasingly offer to read paper pages or to attest a PDF: the MyFlightbook blog describes digital attestation of a PDF version of a logbook (myflightbookblog.blogspot.com), though what an authority does with such an attestation is a separate question.

For pilots choosing a tool, the useful questions are the checklist's, asked of current vendor documentation: what is exported, whether signatures survive, what the backup contains, and how time formats are handled. Established products (MyFlightbook, ForeFlight, LogTen, Logbook Pro, Safelog and others) differ in these respects. Safelog's help page, for example, says the vendor does not provide legal advice on regulator acceptance (www.dauntless-soft.com). A pilot should not assume any application is approved by a regulator unless the regulator says so.

Pilot Logbook is one option in that field and suits only some readers. Its published description includes paper-page reading with AI in early access, layouts matching the paper logbooks of several authorities, whole-logbook export and daily backups. It is invitation-only: a pilot can request an invite, with no open sign-up. It is not presented as regulator-approved, an attractive print layout is not an authority's acceptance, and the acceptance tests above apply to it as to any product. Useful future work includes a cross-vendor transfer test using synthetic logbooks with known totals and a published benchmark for paper-page extraction.

Frequently Asked Questions (FAQs)

How do I convert a paper pilot logbook to digital?

Follow the seven stages above. ForeFlight's help says a paper logbook must first be converted to a digital file before import (support.foreflight.com).

Can I transfer a paper logbook to an electronic logbook without retyping every flight?

Yes, with a trade-off. A catch-up entry summarises a block of time (support.foreflight.com), but summarising keeps the overall figure while the underlying classification is lost (www.pilotaudit.com). Treat AI reading of photographed pages as a draft and compare it with the page.

Are electronic pilot logbooks legal?

It depends on the authority. CASA in Australia says a logbook can be paper or electronic (www.casa.gov.au), Transport Canada accepts an e-logbook or a scan for applications (tc.canada.ca), and EASA's AMC speaks of certified electronic records (www.easa.europa.eu). Check the authority that will receive the record.

How do I reconcile pilot logbook totals, and why do carry-forward totals not match?

Add a running total to the export and find the first row that diverges from the paper running total, then reconcile page totals, categories and classifications separately. Common causes are a colon read as a decimal point, display rounding, per-entry minute rounding, or an opening balance that already includes imported rows.

How do I preserve signed logbook entries when going digital?

Keep the signed originals, reference them from each converted row, and note that a scan is a copy, not a new endorsement. Some tools exclude signatures from spreadsheet exports (support.logten.com).

Paper or electronic logbook for pilots?

Paper is original evidence in a fixed form. Electronic records offer search, totals and backups but depend on export and signature handling. Some authorities require printed or signed copies of electronic records (www.casa.gov.au) (www.caa.co.uk).

What does an audit error in totals look like?

Typical examples are transcription slips, a page total that does not equal its lines, and a supervised role entered as PIC. AOPA notes that logged flight times can be compared with other pilots' logbooks or aircraft records to identify discrepancies (www.aopa.org).

Conclusion

A conversion should be accepted on evidence, not on one matching number. The pack asks the pilot to build a source index, reconcile pages and categories, preserve the certification layer by reference to the originals, test a readable export and independent backups, and agree a cutover boundary with a correction register that never overwrites the original. The authorities named here take different positions, and none, in the sources reviewed, accepts a row count or a scanned signature image as proof by itself.

The arithmetic is simple but unforgiving. A colon mistaken for a decimal point shifts a 1:25 entry by 10 minutes. Display rounding can add a hundredth of an hour without any flight-time error. An opening balance that already contains imported rows must not be added twice, and an unclear overlap should be held as an unresolved item. Pilots who keep the originals, test the export and write down what was checked will be better placed to answer an employer, an examiner or an authority, whichever tool they use.

Source links

Links cited in this article, in order of first appearance. Full addresses are provided for readers using extracted text.

1. <https://www.law.cornell.edu/cfr/text/14/61.51>
2. <https://www.caa.co.uk/commercial-industry/pilot-licences/introduction-to-pilot-licences/documentation-guidance-for-pilot-licences/guidance-on-documentation>
3. <https://www.iaa.ie/personnel-licensing/pilot-licences-%28eu-regulations%29/licensing-faq/faq--logbook---eu-part-fcl-irish-national-licences>
4. <https://www.easa.europa.eu/en/downloads/111528/en>
5. <https://www.nist.gov/pml/owm/metric-si/unit-conversion>
6. <https://support.foreflight.com/hc/en-us/articles/214896818-Is-logbook-data-backed-up-in-ForeFlight>
7. <https://support.logten.com/en/articles/11632689-spreadsheet-export>
8. <https://myflightbook.com/logbook/mvc/faq?q=57>
9. <https://pilots.landing.aero>
10. <https://www.faa.gov/sites/faa.gov/files/2022-01/MayJun2016.pdf>
11. <https://support.foreflight.com/hc/en-us/articles/216184148-Is-a-paper-logbook-required-when-using-ForeFlight-s-digital-logbook>
12. https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC_120-78B_FAA_Web.pdf
13. <https://laws-lois.justice.gc.ca/eng/regulations/SOR-96-433/section-401.08.html>
14. <https://tc.canada.ca/en/aviation/licensing-pilots-personnel/flight-crew-licences-permits-ratings/apply-pilot-permit-licence-rating>
15. <https://www.casa.gov.au/licences-and-certificates/pilots/flight-crew-logbooks>
16. <https://www.aviation.govt.nz/licensing-and-certification/pilots/pilot-logbook>
17. <https://www.aviation.govt.nz/rules/rule-part/part-61/subpart-a>
18. <https://www.iaa.ie/docs/default-source/publications/advisory-memoranda/personnel-licensing-advisory-memoranda-%28plam%29/recording-of-flight-time-and-formatting-acceptable-to-the-irish-aviation-authority.pdf>
19. <https://www.law.cornell.edu/cfr/text/14/61.189>
20. https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC_61-65K.pdf
21. <https://support.foreflight.com/hc/en-us/articles/360039711954-How-do-I-create-catch-up-logbook-entries->
22. <https://www.dauntless-soft.com/helpdesk/phraseview.asp?PID=513>
23. <https://www.pilotaudit.com/europe-easa/picus-easa-logbook-guide>
24. <https://myflightbook.com/logbook/mvc/pub/ImportTable>
25. <https://support.foreflight.com/hc/en-us/articles/215562527-How-do-I-import-my-current-paper-logbook>
26. <https://myflightbookblog.blogspot.com/2020/05/importing-in-depth.html>
27. <https://support.foreflight.com/hc/en-us/articles/215647217-What-are-the-formatting-requirements-for-each-field-in-the-Logbook-template>
28. <https://docs.nc-software.com/display/LPDOCS/Import%20Wizard>
29. <https://myflightbook.com/logbook/mvc/faq>
30. https://tsapps.nist.gov/publication/get_pdf.cfm?pub_id=900805

31. <http://myflightbookblog.blogspot.com/2020/05/printing-in-depth.html>
32. <https://helpdesk.nc-software.com/knowledgebase/article/View/209/0/how-do-i-add-an-electronic-signature-to-my-printed-logbook>
33. <https://support.logten.com/en/articles/11625726-getting-my-logbook-and-endorsements-signed-in-logten>
34. <https://support.foreflight.com/hc/en-us/articles/215600517-Can-endorsements-be-imported-from-another-logbook-program-into-ForeFlight-s-logbook>
35. <https://www.law.cornell.edu/uscode/text/15/7006>
36. <https://www.legislation.gov.uk/eur/2014/910/article/3/adopted>
37. <https://www.legislation.gov.uk/eur/2014/910/article/26/adopted>
38. <https://lawcom.gov.uk/document/electronic-execution-of-documents>
39. <https://www.loc.gov/preservation/digital/formats/fdd/fdd000318.shtml>
40. <https://www.loc.gov/preservation/digital/formats/fdd/fdd000323.shtml>
41. https://www.cisa.gov/sites/default/files/publications/data_backup_options.pdf
42. <https://support.foreflight.com/hc/en-us/articles/27888315969815-How-can-logbook-auto-export-be-set-up-and-enabled>
43. <https://www.archives.gov/files/records-mgmt/faqs/faq-for-digitization-guidance.pdf>
44. <https://www.aopa.org/news-and-media/all-news/2020/may/pilot/for-the-record-logbook-inspections>
45. <https://pilot-protection-services.aopa.org/news/2020/september/01/logbook-inspection-102-part-two>
46. <https://tc.canada.ca/en/corporate-services/acts-regulations/list-regulations/canadian-aviation-regulations-sor-96-433/standards/standard-421-flight-crew-permits-licences-ratings-canadian-aviation-regulations-cars>
47. <https://www.nist.gov/node/1579591>
48. https://www.faa.gov/regulations_policies/handbooks_manuals/aviation/Balloon_Flying_Handbook_FAA-H-8083-11B/bfh_chapter_8.pdf
49. <https://www.easa.europa.eu/sk/downloads/136948/en>
50. <https://myflightbookblog.blogspot.com/2026/01/what-airlines-look-for-in-logbook.html>
51. <https://www.dauntless-soft.com/HelpDesk/phraseview.asp?PID=690>

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Operations tools that reduce manual steps in day-to-day flight operations; integration of existing systems and data sources into one operational picture; workflow automation; real-time operational dashboards; bridges between legacy systems and modern applications; and mobile apps for staff in the field. Each application is designed around the operator's own workflows rather than sold as an off-the-shelf platform.

How it works

Work starts with discovery of the operator's workflows, continues with iterative development alongside the operator's team, and includes integration with the tools already in use and ongoing support.

Its own tools

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