ASA / AFRA CONTRIBUTOR REVIEW

Navigating Documentation Challenges in Aviation Technical Records

A Perspective from Industry Professionals

Introducing the open industry whitepaper for contributor feedback before release

Prepared as a reference and learning tool — not a competing standard or replacement for existing LLP guidance.

Purpose of today's discussion

Review the final draft as a release candidate, not as a training presentation.

Confirm the framing

Does the paper read as an open reference from industry professionals, not a standard or mandate?

Confirm the structure

Does the flow from background, challenges, solutions, conclusion, and tools make sense for release?

Confirm the examples

Are the appendices neutral, practical, and suitable for open distribution?

Agree the review plan

What review period should apply after release, and who should receive comments?

CONTEXT

How the work began

July 2024

ASA Conference discussions in Scottsdale

Working forum

Weekly 90-minute sessions

20 months

Practical examples, debate, and refinement

Whitepaper

A shared industry reference for review

The paper captures what the group kept coming back to: the problems people keep running into, examples drawn from real work, and language the industry can actually use.

Recommended review period after release

Quarterly review has been suggested as the initial cadence.

Pre-release review window

Collect final contributor comments before publication and resolve release-blocking issues.

Quarterly review, first year

Review feedback, clarify examples, correct public-source references, and evaluate suggested additions.

Annual review after stabilization

Move to annual review if no material updates are needed after the first year.

Urgent corrections when needed

Correct factual errors, broken links, attribution issues, or unsafe examples outside the normal cycle.

Table of contents and review map

Introduction - Purpose, Scope, Use, and Background

Establishes what the paper is trying to accomplish and who it is written for.

Purpose and scope

The paper takes an honest, industry-wide look at LLP documentation challenges and offers practical guidance to improve how records are written, how consistently they are applied, and how usable they are in practice. It covers technical records for LLPs installed on engines, landing gear, and APUs, where life usage and supporting records directly affect continued service and market acceptance.

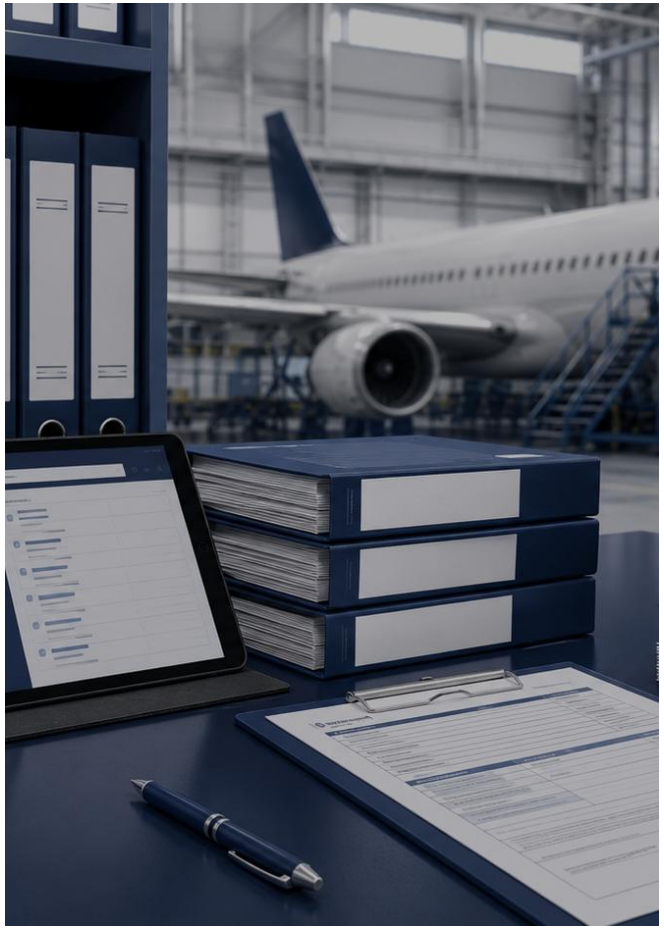
Intended use

The paper is intended for professionals who create, review, manage, or rely on LLP records: airlines, CAMOs, MROs, lessors, asset managers, teardown and material teams, and those building or managing electronic record systems.

The paper is a product of industry discussion

The background section explains why the group kept the work going.

- The discussion began at the ASA Conference in Scottsdale in June 2024.
- Participants saw that documentation quality, consistency, and usability issues were shared across different industry segments.
- The group continued the work through 20 months of weekly 90-minute discussions.
- Discussion covered missing or inaccurate data, traceability gaps, inconsistent standards, differences in how records are accepted across organizations, digital vs. physical formats, regulatory interpretation gaps, data migration risks, and the operational and financial fallout when documentation falls short.
- The paper is meant as a reference and a call to action. It is not the final word on aviation documentation.



Current State: three different record questions

The current-state section separates regulatory minimums, commercial expectations, and best-practice overlays.

Regulatory minimum

Asks whether the aircraft, part, or component can be supported for continued airworthiness. It is generally outcome-focused and format-neutral.

Commercial standard

Asks whether the record package supports transferability, value, financing, redelivery, and downstream acceptance.

Best-practice overlay

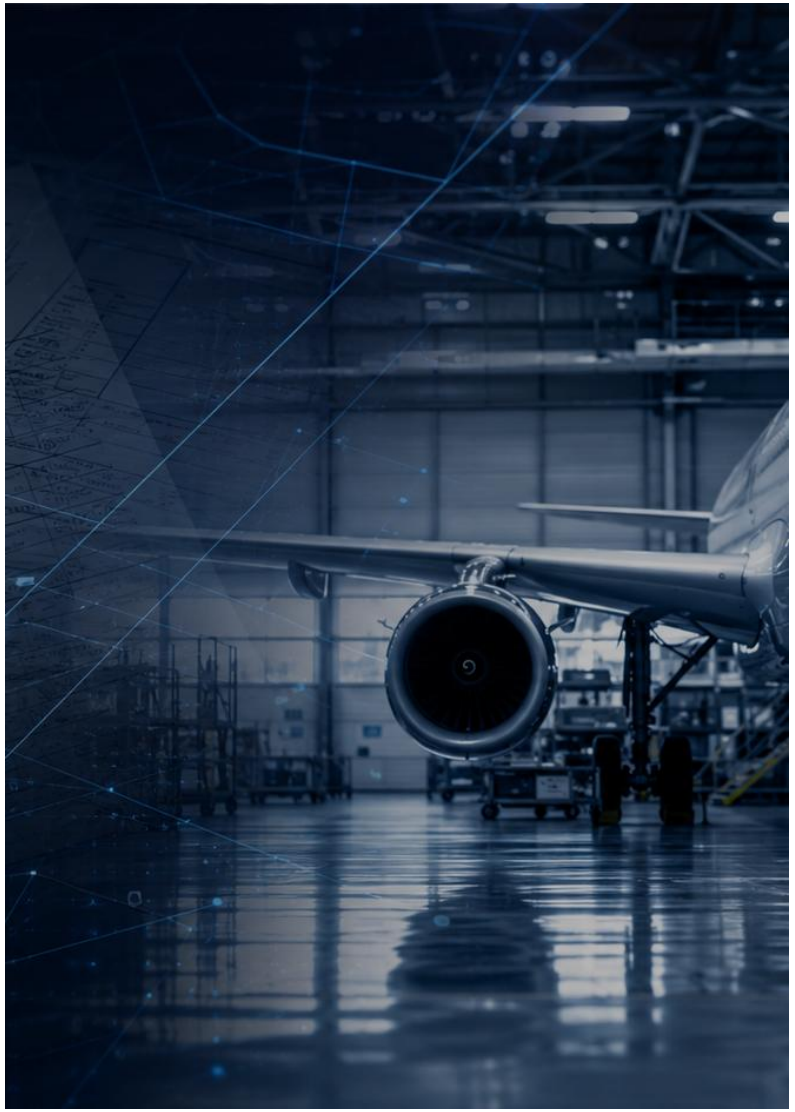
Uses proactive controls, indexing, cross-references, and governance to prevent issues before a transaction or audit.

Key distinction: being legal to operate, being accepted by the market, and treating records as a strategic system are related but not the same thing.

Why the gap matters

An asset may be airworthy but still commercially impaired.

- Regulations are written to be broadly applicable and safety-focused.
- Contracts are written to allocate risk and protect value.
- Best practices evolve from repeated experience with disputes, audits, and value loss.
- Meeting only regulatory minimums often forces expensive records reconstruction later, creates schedule pressure during transitions, and leaves weak negotiating positions at redelivery or sale.
- The most resilient records systems satisfy regulators by default and hand commercial parties a package that does not need remediation.



Why challenges persist despite compliance

Most issues are not caused by negligence; they arise from how records move across time, systems, and organizations.

Cumulative records

Small deficiencies build up quietly as records move across years, operators, MROs, and systems.

Late discovery

Problems often surface during audits, lease transitions, sale, shop visits, or secondary-market review.

Different expectations

A record may be sufficient for continued operation but still fail a contractual or commercial review.

Fragmented ownership

When records are treated as paperwork rather than safety and asset data, ownership gets diffused and nobody escalates.

High-impact failure modes

These are the issues the draft identifies for contributor review.

Incomplete traceability: missing or broken Back-to-Birth support, loss of early-life records, or partial tracing only to a mid-life shop visit.

Installation without full eligibility documentation: valid physical part, but missing release, linkage, or register eligibility support.

Summaries used as source records: AD, LLP, or maintenance status summaries without enough underlying source evidence.

Transcription and interpretation risk: manual transfer of hours, cycles, dates, and threshold calculations over long asset lives.

Data, format, and governance issues

Several common issues are process problems as much as technical-records problems.

- Ambiguous maintenance entries: vague work descriptions, missing references to approved data, or release signatures without context.
- Inconsistent templates and record names: acceptable records may look different between operators, CAMOs, MROs, and authorities.
- Hybrid paper-digital environments: duplicate records, poor scans, broken links, and uncertain versions.
- Data mismatches and configuration drift: hours/cycles do not align, modifications are not reflected, or installed configuration is unclear.
- Legacy records reviewed against modern expectations without enough context.

SECTION 3

Recommended Solutions: practical controls

The recommendations convert the challenges into review habits and control points.

Start early and identify the basis for the request

The draft emphasizes timing and the source of the requirement.

Review records early

Records should be reviewed before closing, redelivery, shop release, customer acceptance, or component transfer. The earlier a gap is found, the better the chance the party that still has the original knowledge or system access can fix it.

Identify the basis

Before accepting or rejecting a record, ask whether it is fulfilling a regulation, a contract clause, a commercial expectation, or an internal procedure. That keeps commercial requests from being treated as regulatory defects and stops regulatory records from being overlooked just because they also matter commercially.

Evaluate by purpose and review older records in context

This is one of the central principles of the paper.

Purpose, not title alone

A record may be called an Operational History Record, In-Service History Record, On/Off Log, MTS, PMTS, Disk Sheet, or Component Listing. What matters is whether the document does the job: identifies the item, shows its current status and history, and gives the next reviewer something they can actually rely on.

Historical context

Older records should not be rejected automatically because they do not use modern wording or formatting. Review whether the historical package is understandable, consistent, and sufficient to support identity, status, and history today.

Reconcile event history and treat corrections carefully

Event and correction records can resolve uncertainty or create more of it.

Event history

Known events should be carried into aircraft, component, and shop records. MRO work scopes and releases should show that the shop was evaluating the correct condition when a known event may affect the asset.

Correction statements

A correction statement should identify the error, explain the correction, identify supporting source data, reference the support, and be approved by the appropriate party. A pattern of corrections may indicate a deeper records-control issue.

Protect source evidence and control transitions

The next reviewer should not have to rebuild the record package from scattered documents.

Do not rely on summaries alone

AD/SB summaries, LLP status reports, and delivery checklists may state the conclusion, but source records show how that conclusion was reached.

Control system changes

Treat migrations, scans, platform changes, and ownership transitions as records-control events, not just IT or administrative projects.

Define responsibility and authority

The person or group responsible for records review should also have authority to stop, delay, or escalate when the package does not support the asset.

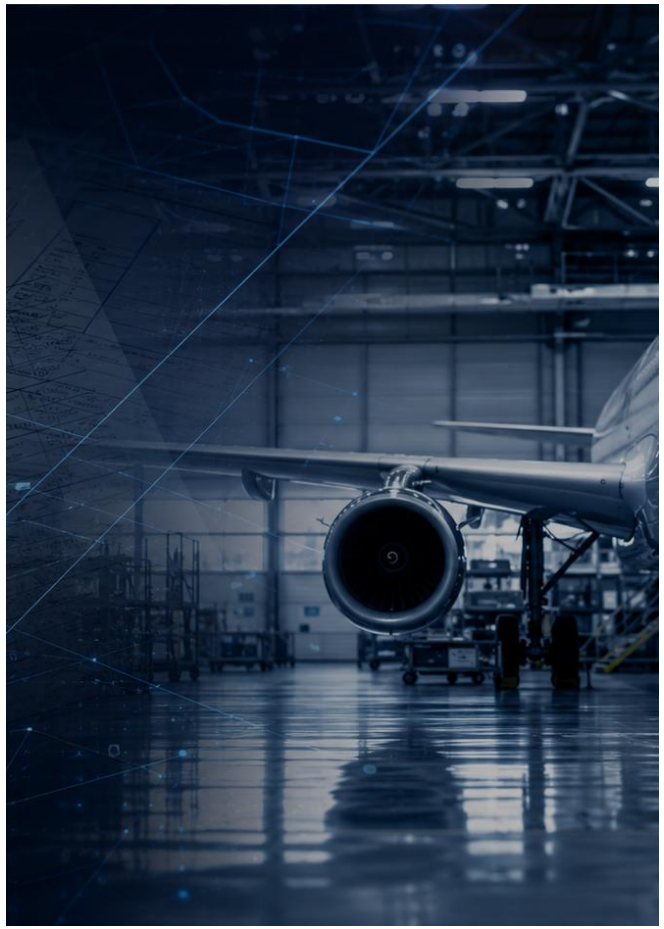
Build record packages the next holder can use

A strong package lets the next reviewer answer the basics: what the item is, where it has been, what happened to it, what work was performed, what its current status is, what corrections or assumptions were made, and what evidence backs all of it up.

Conclusion: the paper's central message

Technical records remain connected to the asset throughout its lifecycle.

- Aircraft and components may change operators, owners, maintenance providers, storage locations, financing structures, and operational roles.
- Records remain the primary evidence of identity, configuration, maintenance history, life status, and continuing airworthiness.
- Documentation issues usually result from breaks in continuity, not a single missing document.
- Strong records programs need real controls that are actually followed, owners who are accountable, disciplined handoffs between parties, and a willingness to escalate concerns early.
- The paper is not trying to set a new regulatory standard. It is trying to help the industry see where documentation problems start and keep records continuous as assets move.



Useful tools, guides, and case studies

The final section provides practical reference material to support the body of the paper.

A

Regulations & Regulatory Bodies: FAA, EASA, ICAO, and NCA reference framework.

B

Terms, Acronyms and Definitions: common language for review and training.

C

Documentation issues by part type: LLPs, engines, landing gear, APUs, AD/SB, releases.

D

Timeline and Trigger Event Mapping: where issues begin, surface, and impact transactions.

E

Basis-for-Requirement Table: regulatory vs contractual vs commercial requests.

Use the section as a starting point for review, training, and discussion. It is not a substitute for your own procedures or contract terms.

Reference tools and examples in the appendices

The appendices are where the paper becomes most useful for training and practical review.

F

Terminology Matrix: alternate names for record functions and document types.

G

Case Studies: real-world examples of event history, component records, identity discrepancies, and commercial impact.

H

Acknowledgements: contributors from airlines, lessors, MROs, asset managers, legal, distributors, records specialists, and service providers.

Examples

Operational history, movement tracking, LLP status, ICS/ACS, and records failure examples support training use.

Feedback

Flag anything that does not read as neutral, is not safe to release publicly, or would not actually be useful to readers.

Working Group Participation, Stewardship, and Distribution

Working Group Participation

Who would like to continue participating in future working group discussions?

Are there individuals or organizations that should be invited to participate?

What areas of expertise would strengthen future discussions?

Acknowledgements

Would you like to remain listed in the acknowledgements section of the whitepaper?

Are any updates needed to names, titles, or company affiliations?

Are there contributors who should be added before release?

Whitepaper Stewardship and Distribution

Who should receive future comments and suggested revisions?

What review cadence should be adopted following release?

Should a distribution list be maintained for future editions and updates?

Who would like to receive a copy of the released whitepaper?

Session intent: share the final draft with those who wish to remain involved, join the group, or remain listed in the acknowledgements.

Thank you

This draft reflects the time, experience, examples, and judgment contributed by the working group.

Whitepaper Edition Team:
Sherry Chaput – Avion Trace Group
Michele Dickstein – Aviation Suppliers Association
Mitzie Duckett – Universal Asset Management, Inc.
Laura Reiff – CFM Materials

Today's ask

Help decide what revisions are recommended before release