

MRO Intelligence Network — User Guide

For: Part 145 helicopter maintenance shops using the platform under SOW v8 Phase I.

Version: Phase I — covers signup through quote export, AD/SB/parts browsing, and operator settings.

Live URL: <https://mro-platform-production-dabf.up.railway.app>

Support: Send feedback through the **Feedback** button in the lower-right of any page.

1. Sign in

1. Visit the URL above.

2. **First time:** click **Sign up**. Provide:

- Shop name (used for tenant slug — pick the name you'd want on your quote PDFs)
- Email + password (8+ chars)
- Primary OEM (optional — Bell, Airbus, Leonardo, MD, or skip for multi-OEM)

3. **Returning:** click **Log in** with the email + password you signed up with.

Each shop is a separate tenant. Your quotes, customers, vendors, and operational data are walled off from every other tenant by `operator_id` row-level scoping.

2. Operator settings — set these first

Click **Settings** in the top-right nav after logging in.

Field	What it controls
Shop name	Appears on quote PDFs and the dashboard heading
Primary OEM	Currently informational; will drive default model dropdown order in a later release
Default labor rate (\$/hr)	Multiplied into every labor line on new quotes. Defaults to \$165/hr — adjust to your shop's standard.
Default labor margin (decimal)	E.g., 0.42 = 42% gross margin on labor. Affects the "internal" Excel tab's cost columns.
Cooperative parts pricing pool	OFF by default. Off-by-default, opt-in only. When ON: your purchase prices feed an anonymized network percentile pool, and you see pooled percentiles in return on each part detail page. When OFF: you see your own purchases plus the public seed catalog. You can toggle this anytime.

Click **Save settings**. Confirmation is shown at the top of the page.

3. Generate a quote draft

1. Click **+ New Quote** from the dashboard or top nav.

2. Fill the RFQ form:

- **Aircraft model** — dropdown of 14 supported models. Bell 407 and Airbus H125/AS350 are Tier-1 (deep). Other models are Tier-2 scaffold (they generate a draft but the line list is sparse until Phase II ingest deepens them). The dropdown labels them "(scaffold)" so you know.

- **Tail number** — auto-completes from your past quotes.

- **Serial number** (*optional*) — Bell 407 is 53000-series, AS350 is 1000-9000s. Stored on the quote.

- **Inspection type** — 100-Hour, 200-Hour, 300-Hour, Annual, 12-Month, Hot Section, Custom.

- **Customer name** — auto-completes from your past customers.

- **Description** (*optional, customer-facing*) — short text shown on the customer-facing PDF.

- **Internal notes** (*not shown to customer*) — discrepancies, special conditions, any context for shop personnel.

3. Click **Generate Quote**. The draft renders in 1-3 seconds.

A typical Bell 407 100-hour quote produces ~49 lines: ~33 from the maintenance manual chapters, ~8 AD compliance lines, ~8 parts lines (filters, fluids, seals, igniter plugs, fuel nozzles), one "open inspection" line.

4. Review and edit the draft

The draft review page groups lines by category (Scheduled Inspection, Lubrication & Servicing, AD COMPLIANCE, Parts & Materials, etc.). Each line shows:

- Task code (ATA chapter or part number)
- Description (with a citation to the AMM/MSM/ALS section)
- Hours, Rate, Parts Estimate, Total
- Status badge (pending / accepted / edited / rejected)
- Per-line **Accept / Edit / Reject** controls (only on pending lines)

Accept all pending — top button, marks every pending line accepted in one shot.

Edit a line — click **Edit**, change the labor hours, optionally add a note (saved as internal). The line moves to "edited" status and the totals recompute.

Reject a line — removes that line from the customer-facing total but keeps it in the internal Excel tab for audit.

All mutations persist to the database immediately. Reload safely.

5. Export

Three export formats from the draft review page:

Format	Use	What's inside
Customer View	Print or screenshot	Read-only HTML view, customer-facing only (no margins, no rejected lines, NTE highlighted)
Export Excel	Send to customer or save for shop records	Two tabs: Internal (full detail with status column, all lines including rejected) and Customer (clean version, no margins, rejected lines hidden, valid-until date)
Export PDF	Send to customer	One-page-per-quote PDF with header, RFQ summary, line items grouped by category, totals, 15% discrepancy allowance, NTE

The Excel internal tab shows every line including rejected ones so you can audit what was considered. The customer tab and the PDF show only active (accepted/edited/pending) lines.

All quotes also include a 15% discrepancy allowance line, summed into a Not-To-Exceed (NTE) figure.

6. AD Browser (/ads)

290 helicopter Airworthiness Directives indexed: 214 from FAA Federal Register API, 76 from EASA. 17 cross-linked bidirectionally. 9 timing-gap pairs (>14 days difference between FAA and EASA effective dates).

- **Search:** model, source (FAA / EASA), or free text.
- **Per-AD detail:** subject, effective date, compliance time, source URL, applicable models, cross-references to peer ADs (when both regulators have addressed the same issue).
- **Differential flags:**
 - "Not yet adopted by FAA" appears on EASA ADs without an FAA counterpart in our index — useful for N-reg aircraft imported from Europe.
 - "Timing differs from {peer} by N days" appears when FAA and EASA effective dates diverge meaningfully.
 - "Compliance timing differs" appears when the compliance language between regulators differs.

Tail-specific applicability (does this AD apply to *this* serial range / mod state / hours-since-overhaul?) is **Phase II**. The Phase I AD list is model-level: "this AD affects Bell 407s."

7. SB Browser (/sb)

Phase I framework: surfaces every Service Bulletin cited within an FAA or EASA AD body. Filterable by model and OEM. 40+ unique SBs across Bell, Airbus, Leonardo, MD as of Phase I shipping.

Each SB row shows:

- The SB designation (e.g., "Bell ASB 412-24-197")

- The OEM
- Which AD(s) cite it (clickable to the AD detail page)

Direct OEM portal ingestion (pulling SBs directly from mybell.com / airbusworld / Leonardo customer portal / MD ATP) **and active notification** when a new bulletin affects your fleet are Monthly Support work, enabled per-OEM as portal access is established.

8. Parts Catalog (/parts)

28 part numbers across all 14 models, each with multiple vendor offers (OEM list, distributor, PMA alternate, USM/exchange). Sortable by category (FILTERS, FLUIDS, ENGINE, ROTOR, SEALS, etc.).

- **Per-part detail:** all visible vendor offers, sorted by effective cost. Shows OEM list as the baseline, savings vs OEM as a percentage.
- **Cooperative network percentiles** (only when you've opted into the cooperative in Settings): anonymized P25/median/P75 across contributing tenants, based on actual paid prices.

The seed catalog is labeled `INDICATIVE_SEED` — the price spreads are realistic but the specific dollar figures are not sourced from a live Aviall / Skygeek / PMA query. Real prices come from:

- OEM portal scrapes (RSG-tenant-scoped, where Bell IPC live ingest produces 38 entries with `list_price=NULL` because Bell gates pricing behind quote-request flows)
 - Your own purchase history when you start logging actual paid prices
 - Live vendor API integrations — Phase II
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9. Data export (/api/export/quotes.csv)

Logged-in operators can pull a complete CSV of all their quotes + line items at any time. Structure: one row per quote line, with the parent Quote header columns repeated. Use this for:

- Importing quotes into your existing ERP (Corridor, Quantum, EBIS, QuickBooks)
- Backups
- Reconciling actuals vs estimates

Per SOW v8 §7.1, this satisfies the "RSG may export all operational data at any time in standard formats" promise.

10. Feedback

Click the **Feedback** button (lower-right corner of every page). Pick a sentiment (general / bug / wishlist / praise), write what you noticed, send. The platform captures the page URL and your shop context automatically.

This is the most important channel during Phase I. Every "this doesn't make sense," every "I wish it did X," every "this works well" goes into our backlog and shapes Phase II.

11. Demo (/demo)

Anonymous viewers (and you, if you log out) can browse /demo for a sample Bell 407 100-hour quote. Each visitor gets a fresh per-request UUID-keyed copy — your demo session is isolated from anyone else's. Demo drafts are read-only; mutations require a logged-in operator.

Use /demo when showing the platform to a colleague who hasn't signed up yet.

12. What's Phase II (not yet shipped)

Per SOW v8 Section 2.3, the following are explicitly Phase II:

- Tail-specific AD applicability (per-aircraft serial-number / mod-history verification)
- Multi-vendor live parts pricing integrations (Aviall, Skygeek, PMA distributors)
- Historical quote calibration against your existing quote database
- RWA (revision) workflow automation
- Shop management system integration (Corridor, Quantum, EBIS, QuickBooks)
- ERP integrations
- Multi-user authentication, role-based access control, SSO
- ITAR-controlled work
- On-premise deployment

If something on this list is critical to your shop's workflow, mention it in feedback so we can prioritize Phase II accordingly.

13. Troubleshooting

"Draft not found" — usually means the quote was deleted or you're not logged in as the operator who created it. Quotes are tenant-scoped and never visible across operators.

Bell 412 / Leonardo / MD draft has only 4-5 lines — those are Tier-2 scaffold models. The line count is intentional pre-Phase-II. Send feedback if you'd like a specific model deepened first; we'll prioritize per actual usage.

"Demo draft expired" — demo drafts live in process memory and are recycled after 256 visits. Refresh /demo for a new one.

Excel/PDF export fails — should not happen. If it does: send feedback with the page URL and exact error. The export endpoints are tenant-scoped; demo drafts are read-only and produce both formats too.

Cross-site request blocked (HTTP 403) — the platform rejects mutating requests that come from a different origin. If you see this in the browser console, you're either being targeted by a malicious site or running an unusual browser extension. Logging in fresh fixes most cases.

Send feedback. That's the whole thing.