



AVIATION MAINTENANCE MANAGEMENT SOFTWARE

USER MANUAL

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CHAPTER 1

Welcome to AeroCoreMX

A complete operations system for General Aviation maintenance shops — built around the same paper trail the FAA already expects, just faster and harder to lose.

What AeroCoreMX Does

AeroCoreMX runs the day-to-day operation of a Part 91/135-focused GA maintenance shop from first phone call to closed-out logbook entry. It replaces the stack of paper work order packets, sticky-note squawk lists, spreadsheet parts inventories, and a filing cabinet of AD compliance records with one connected system that every role in the shop — front desk, technician, inspector, parts room, shop management — works out of at the same time.

Everything in the system is built around three ideas that show up in almost every module:

- **Nothing regulatory happens without a real, verified signature.** A PIN-confirmed digital signature stands in for a pen-and-ink signature, and once written it can never be silently edited or deleted.
- **Explicit beats assumed.** The system never guesses whether an Airworthiness Directive applies, whether a work order needs an Inspection Authorization, or whether an aircraft is airworthy — a real person makes that determination and it's recorded.
- **Every part, every signature, every inspection traces back to where it came from.** A part installed on an aircraft today can be traced back to the purchase order, the receiving inspection, and the 8130/Form 1 that came with it.

Who Uses What

AeroCoreMX is role-based — what a person can see and do depends on the role(s) assigned to their account. The same login screen serves everyone; the navigation menu and available actions adjust automatically.

Role	Typical Use
Administrator	Full access — user management, settings, branding, all modules.
Management	Runs day-to-day operations — work orders, quotes, customers, scheduling, most everything short of system administration.
Technician	Performs the hands-on work — tasks, parts/tool requests, NRWCs, logbook entries.
Inspector / IA	Certificated inspector, including Inspection Authorization holders — sign-offs, applicability determinations, AD/SB compliance, RII sign-off.

Apprentice Technician	Works under direct supervision — tasks and logged hours require a supervisor's cosign.
Inventory Specialist	Parts room — receiving, issuing, purchase orders, reorder management.
Receiving Inspection	Logs incoming parts shipments and their 8130/Form 1 documentation.
Planning	Schedules future work, manages quotes and the customer intake pipeline.
Records & Audit	Read access focused on compliance and historical records review.

A single person can hold more than one role — a small shop's owner is very often Administrator, Management, and Inspector/IA all at once.

NOTE

This manual describes AeroCoreMX as a general-purpose reference. It is not, by itself, a substitute for your shop's own FAA-accepted policies and procedures, and using it does not itself constitute FAA approval of any process. Screens shown are illustrative examples, not live data.

CHAPTER 2

Getting Started

Logging in, understanding your PIN, and finding your way around.

Logging In

- 1 Go to your shop's AeroCoreMX web address (for example, *yourshop.aerocoremx.com*).
- 2 Enter your email address and password.
- 3 If this is your first login, you'll be required to set a new password before continuing.

Sessions stay signed in for a normal working day, but AeroCoreMX will automatically warn you and log you out after 30 minutes of inactivity, for security. Simply log back in to pick up where you left off — nothing is lost.

Your Signature PIN

Separate from your login password, every user with signing authority has a 4-digit PIN. The PIN is what stands in for your signature anywhere the system needs to record that *you*, specifically, certified something — a work order sign-off, a logbook entry, an AD compliance record, a Required Inspection Item.

IMPORTANT

Never share your PIN. Five incorrect PIN attempts locks your signing ability for 15 minutes, even if the login itself is correct — this protects against someone guessing their way into signing something in your name.

An administrator can reset a forgotten PIN from the Users section of Settings.

Finding Your Way Around

The left-hand navigation menu is your home base — it only shows the modules your account's role(s) and your shop's enabled feature set actually grant you. Two small icons sit in the top-right of every page:

-  **Bell** — new squawks waiting for someone to review.
-  **Envelope** — customer maintenance requests and unread portal messages, if your shop uses the Customer Portal.

SCENARIO

It's a tech's first day. They're handed a login and told their PIN is whatever they want, as long as it's 4 digits and not

something obvious like 1234. They log in, see a clean Dashboard with the shop's current aircraft status board, and click into Work Orders to find the job they were told about — no separate spreadsheet, no paper packet to go find.

CHAPTER 3

The Dashboard

Your shop's status at a glance the moment you log in.

How It Works

The Dashboard is a live snapshot of everything currently in motion in your shop. It pulls together five panels:

- **Aircraft Status Board** — every active aircraft, its current airworthiness status, and which work order (if any) it's tied to right now.
- **Live Activity Feed** — a running log of recent actions across the shop (sign-ins, sign-offs, closures).
- **Open Squawks** — pilot write-ups that haven't been acknowledged or converted into a work order yet.
- **Open NRWCs** — non-routine discrepancies still awaiting corrective action.
- **Parts Shortages** — anything requested on an open work order that isn't in inventory yet.

EXAMPLE — Aircraft Status Board			
TAIL #	STATUS	WORK ORDER	ASSIGNED
N556CC	✕ AOG — GROUNDED	260718008	Marcus Webb
N912BR	⚙ IN WORK	260716004	Marcus Webb
N4821H	✓ AIRWORTHY	—	—

SCENARIO

A shop manager starts the morning by scanning the Dashboard before anything else: two aircraft are AOG, one part is short on a job scheduled to start today, and three squawks came in overnight that nobody has acknowledged yet. That's the day's real priority list, without opening a single other screen.

CHAPTER 4

Aircraft Management

Every aircraft your shop services — status, hours, engines and propellers, digital logbook, and full maintenance history.

How It Works

Each aircraft record tracks its current airworthiness status, shown as a color-coded badge everywhere the aircraft appears in the system:

Status	Meaning
 RECORDS REVIEW REQUIRED	A newly added aircraft — someone must explicitly review its records before it can be marked airworthy.
 AIRWORTHY	Cleared for flight, no open work.
 IN WORK	Actively being worked on in the shop.
 MEL — GROUNDED	Grounded under an approved Minimum Equipment List deferral.
 AOG — GROUNDED	Aircraft on Ground — cannot fly until resolved.
 PENDING SIGN-OFF	Work complete, awaiting a certificated inspector's return-to-service signature.
 OUT OF SERVICE	Not currently airworthy and not actively being worked.
 DEFERRED	A discrepancy exists but has been deferred under an approved MEL.

Airworthiness status is never inferred from work order activity alone — it's a deliberate flag someone sets, so the board always reflects a real determination, not a guess.

Adding a New Aircraft

- 1 From the Aircraft list, click **+ Add Aircraft**.
- 2 Enter the tail number, make, model, year, and serial number.
- 3 Assign it to a customer and a home location.
- 4 Save — the aircraft starts in **RECORDS REVIEW REQUIRED** until its records are reviewed and it's explicitly marked airworthy.

Engines & Propellers

Single-engine aircraft get one tracked engine and one tracked propeller automatically. Twins (or anything with more than one of either) can have each engine and propeller tracked separately — its own serial number and its own accumulated hours, since a twin's two engines rarely have identical time on them.

Digital Logbook

Every aircraft — and every tracked engine/propeller — has a digital logbook tab: a running, dated list of maintenance notes. This is explicitly a **courtesy reference copy**, not a replacement for the aircraft's official physical logbook, and every logbook screen says so. Entries can be added by shop staff in a maintenance-performing role (technician, inspector, apprentice) or by the aircraft owner themselves through the Customer Portal.

Permanent Aircraft History

Below the logbook sits a second, non-editable list: every closed work order, closed-out NRWC, and installed-part record tied to that aircraft, forever. This is the aircraft's real maintenance history — nothing here can be deleted.

SCENARIO

A twin-engine Baron comes in for an engine fire warning investigation. The tech opens the aircraft record and sees two separately tracked engines, each with its own serial number and hours — Engine 1 at 139.6 hours, Engine 2 at 136.4. That difference matters for figuring out which engine's maintenance interval is actually coming due, and it would be invisible if the aircraft only tracked one combined "engine hours" number.

CHAPTER 5

Customers

Every owner, operator, and flying club your shop bills — and the aircraft, quotes, and work tied to each.

How It Works

A customer record can be an individual owner or a company (a flight school, charter operation, or flying club), and holds contact information, billing details, and notes. Every aircraft, quote, and work order links back to a customer, so a customer's page becomes a running history of everything your shop has ever done for them.

Adding a Customer

- 1 From the Customers list, click **+ Add Customer**.
- 2 Enter their name (and company name, if applicable), contact information, and home location.
- 3 Save. You can now attach aircraft, quotes, and work orders to them.

TIP

If your shop uses the Customer Portal, this is also where you create the customer's portal login(s) — a customer can have more than one person able to log in and see the same aircraft.

CHAPTER 6

Quotes & the Price Catalog

Estimate the job, send it, and convert it straight into a Work Order once it's accepted.

How It Works

A quote is built from line items — either pulled from your shop's Price Catalog (standard jobs like an annual inspection or an oil change, each with a preset price and estimated labor) or typed in fresh for anything one-off. A quote moves through a simple lifecycle:

Status	Meaning
Draft	Still being built, not yet sent to the customer.
Sent	Delivered to the customer (as a PDF, by email) and awaiting their response.
Accepted	Customer approved it — ready to convert into a real Work Order.
Declined	Customer passed.
Expired	Never responded to within the quote's validity window.

Building a Quote

- 1 From Quotes, click **+ New Quote** and select the customer and aircraft.
- 2 Add line items — start typing a job code to autofill its description, price, and labor estimate from the Price Catalog, or add a custom line for anything not in the catalog.
- 3 Save as a draft, review it, then click **Send Quote** when it's ready — this emails the customer a branded PDF.
- 4 Once the customer accepts, click **Convert to Work Order** — this creates a real Work Order pre-filled with the quote's line items as its task list.

SCENARIO

A flying club calls asking what an annual inspection will run on their SR22. The front desk builds a quote using the ANNUAL-100 catalog code (pre-priced at \$1,850, 12 hours labor), sends it as a PDF, and the club replies back accepting two days later. One click converts it into a real Work Order — no re-typing the job description, no separate estimate spreadsheet to reconcile against later.

CHAPTER 7

Work Orders

The center of gravity for everything that happens to an aircraft in your shop.

The Work Order Lifecycle

Every work order moves through a defined sequence of statuses. The system enforces this order — you can't sign off a work order that still has open tasks, for example.

Status	What It Means
Planned	Scheduled ahead of time (by date, or by hours/cycles trigger) — not yet active work.
Open	Created and ready, not yet assigned to a technician.
Assigned	A technician has been assigned but hasn't started yet.
In Progress	Actively being worked.
Pending Inspection	All tasks complete, waiting on a certificated inspector.
Signed Off	Inspector has certified return-to-service. Aircraft is airworthy again.
Closed	Fully wrapped up — logbook entries generated, ready for billing/archival.

Creating a Work Order

- 1 From an aircraft's page, click **+ New Work Order** (or convert an accepted Quote — see Chapter 6).
- 2 Enter a description, set a priority (Routine / High / Urgent), and add the task list.
- 3 Assign it to a technician, or leave it Open for the shop floor to pick up.

Working the Job

As tasks are completed and checked off, technicians can request parts and tools directly from the work order — each request is tracked from "requested" through "issued," so the parts room always knows exactly what's needed and for which job.

Sign-Off & Return to Service

Once every task is done, the work order moves to Pending Inspection. A certificated inspector reviews it and signs off with their PIN. Before that signature is accepted, the system automatically re-checks every release condition — no open

discrepancies, no unresolved parts requests, and (if the job required it) that the signing inspector actually holds a current Inspection Authorization. If a required IA has lapsed, the sign-off is blocked with a clear message rather than allowing an invalid signature to go through.

TIP

Some jobs — like an annual inspection — specifically require IA authority to sign off, not just an A&P certificate. The work order carries a flag for this, so the system knows which standard to hold the sign-off to.

Closing Out

After sign-off, closing the work order generates its logbook entries (see Chapter 9 and the Logbook Stickers section of Chapter 20) and files the job into the aircraft's permanent history.

SCENARIO

A 100-hour inspection work order has four tasks. Three are checked off; the fourth — a compression check — turns up a cylinder below limits. The tech opens an NRWC directly from that task (see Chapter 9) instead of just noting it in a comment, so the discrepancy gets its own tracked corrective-action record rather than getting lost in free text.

CHAPTER 8

Squawks

A pilot's informal write-up — the very first step before any formal work begins.

How It Works

A squawk is deliberately lightweight: a pilot report, a priority (Routine / High / Urgent), and that's it to start. It's not a work order and it's not an NRWC — it's the raw incoming report, waiting for someone at the shop to look at it.

Status	Meaning
Open	Reported, nobody has looked at it yet.
Acknowledged	Shop has seen it and is deciding what to do with it.
Converted	Turned into a real Work Order.
Dismissed	Reviewed and determined not to need action (e.g., a transient condition that cleared itself and was confirmed safe).

SCENARIO

A pilot reports "EGT running high on takeoff, noticed on climbout" and marks it High priority. It shows up on the Dashboard's Open Squawks panel immediately. Management acknowledges it, assigns a technician, and converts it straight into a Work Order — the original pilot report text carries over automatically so nothing gets re-typed or lost in translation.

CHAPTER 9

Non-Routine Work Cards (NRWCs) & Work In Progress

The formal record of a discrepancy found during maintenance — and the corrective-action trail the FAA expects behind it.

How It Works

An NRWC is opened whenever a technician finds something beyond the original scope of the work order — corrosion, a worn part, damage. It always ties back to a work order and an aircraft, and carries a disposition:

Disposition	Meaning
Corrected	Fixed as part of this visit.
Deferred	Not fixed now, deferred under an approved MEL reference.
Referred to Inspector	Needs an inspector's judgment before a corrective path is decided.

Work In Progress (WIP) Steps

The real substance of an NRWC lives in its WIP steps — each one pairs a specific discrepancy with its specific corrective action, numbered sequentially (W01, W02, ...). A step can require a **Required Inspection Item (RII)** sign-off — a second, independent inspector's signature confirming the work — which blocks any further steps or close-out until that signature is on record.

Correcting a Signed Entry — the Right Way

Once a corrective action is signed, it can never be silently edited — that would break the very record the signature was meant to protect. If a signed entry turns out to need correction, AeroCoreMX follows the same convention a paper logbook uses: the original entry is **struck** (marked "EIE" — Entered In Error — with who struck it and when, shown with a strikethrough), and a new lettered continuation (W01(a), W01(b), ...) carries the corrected text, chained back to the original.

EXAMPLE — WIP Correction Chain	
STEP	STATUS

260710004-001-W01	Struck (EIE) — corrected below
260710004-001-W01(a)	Corrected entry — replaced all 6 engine mount bolts with new, no reuse

Apprentice Cosign

When an apprentice technician performs a task or a WIP step, it's recorded as **pending supervisor** until their supervising technician reviews and cosigns it — the record shows both who actually did the work and who verified it.

Requesting Parts & Tools From Inside an NRWC

Parts and tools can be requested directly from an NRWC or a specific WIP step — no need to leave the work card to go do it elsewhere. Anything requested this way automatically shows up tied to that exact step.

Parts Tags

When a part comes off an aircraft, a tech can generate an **Unserviceable Tag** right from the WIP step — part name, serial number, removed reason, disposition. When a part comes into the shop and clears inspection, the parts room generates a matching **Serviceable Tag**. Both print to whatever label size your shop has configured (see Chapter 19).

SCENARIO

On engine removal, a tech finds visible thread damage on the engine mount bolts. They open an NRWC, log the discrepancy, and their supervisor signs off replacing 4 of 6 bolts — reusing 2 after inspection. A day later, on second thought, the shop decides no bolts should have been reused. Rather than editing the signed entry, the original gets struck EIE and a new W01(a) entry replaces all 6 bolts with new, referencing the correct torque spec — the full history of what actually happened stays visible, not erased.

CHAPTER 10

Parts Inventory

Barcode-tracked stock, full receiving traceability, and a reorder report that tells you what to buy before you run out.

How It Works

Every part in inventory tracks not just quantity and location, but the details that actually matter for aviation parts: condition, serial number (for serialized parts), lot/date code and expiration (for consumables with shelf life), and a minimum/maximum stock level for reorder planning.

Condition	Meaning
New	Unused, factory condition.
Overhauled	Rebuilt to factory-new tolerances.
Repaired	Fixed, not fully overhauled.
Bench Check	Tested on the bench, functional.
Inspected/Tested	Visually inspected and/or functionally tested.
Quarantined	On hold — not available for use until resolved.

Barcode & QR Labels

Every part can print a label carrying both a QR code (scan with a phone to open that part's record, or assign it straight to a work order) and a Code128 barcode (scan with a warehouse scanner into the Parts search box — it "types" the part number for you). No app or special hardware is required on the scanning side; a phone camera or any standard USB barcode scanner works.

Receiving a Part

- 1 From Parts, find the part (or add it new) and click **Receive**.
- 2 Enter quantity received and, if applicable, the 8130-3 or Form 1 reference number.
- 3 Attach the actual 8130/Form 1 document as a photo or PDF.
- 4 Save — inventory quantity updates immediately, and this receiving event becomes a permanent traceability record.

The Reorder Report

Any part at or below its minimum stock level surfaces automatically on the Reorder Report, grouped by preferred supplier, with a bulk "Create Purchase Order" action that pre-fills a draft PO per supplier.

SCENARIO

A tech scans a part's barcode into the search box while standing at the parts shelf, confirms it's the right one, and pulls two units for a work order. Later that day, the Inventory Specialist notices Spark Plugs and Wheel Bearings both dropped below minimum stock on the Reorder Report and creates one purchase order to Wentworth Aircraft Parts covering both, instead of two separate orders.

CHAPTER 11

Purchase Orders

Ordering and receiving parts from suppliers, start to finish.

How It Works

A Purchase Order tracks parts on order from a specific supplier, moving through a straightforward lifecycle:

Status	Meaning
Draft	Being built, not yet sent to the supplier.
Ordered	Sent — awaiting shipment.
Partially Received	Some, but not all, line items have arrived.
Received	Everything on the PO has arrived.
Cancelled	Called off before receiving.

Creating a Purchase Order

- 1 From Purchase Orders, click **+ New Purchase Order** and choose a supplier.
- 2 Add line items — pick from existing inventory parts, or type in something not yet cataloged.
- 3 Mark it Ordered once it's actually been placed with the supplier — this is also where tracking carrier/number can be added.
- 4 As shipments arrive, receive each line individually — quantity received, and 8130/Form 1 reference if applicable. The PO's status updates automatically as lines are fulfilled.

Every part page shows an "Order in progress" indicator whenever it has an open PO line against it, so nobody has to ask around to find out if more is already on the way.

SCENARIO

A magneto and a starter motor are ordered together on one PO. The magneto arrives first with its 8130-3 tag; it's received and immediately shows as in-stock with full traceability back to that PO and that specific 8130. The starter is still on backorder — the PO correctly shows Partially Received until it catches up.

CHAPTER 12

Tool Inventory & Calibration

Checkout, return, and a permanent calibration history for every tool that requires one.

How It Works

Status	Meaning
Available	In the crib, ready to check out.
Checked Out	In a technician's hands, tied to a specific job.
Out for Calibration	Sent out and unavailable until it comes back and passes.
Retired	No longer in service.

Checking a Tool Out

A tool can be checked out generally, or tied to a specific task, NRWC, or WIP step — whichever it's actually being used for. This matters for traceability: if a torque wrench is later found to have been out of calibration during a job, you can find exactly which work it touched.

Calibration Records

Every calibration event — not just the most recent one — is kept permanently: date, pass/fail/pass-with-adjustment, the standard used, tolerance, the calibrating lab, and their certificate number. If a tool fails calibration, the record captures what that means for anything the tool touched beforehand.

IMPORTANT

A tool overdue for calibration is flagged clearly on the Tools list. Using an overdue tool doesn't get silently allowed — the calibration due date is visible right where the checkout happens.

SCENARIO

A pitot-static test set fails its scheduled calibration — out of tolerance above FL180. The record captures exactly that: which standard was used, what the tolerance was, and a note that the unit is pulled from service pending repair and shouldn't be used for any RVSM-required check in the meantime.

CHAPTER 13

Compliance Tracking & Technical Publications

Airworthiness Directives, Service Bulletins, and recurring inspections — with a real applicability determination behind every one, and a controlled library of the source documents behind that.

How It Works

A compliance item can be an AD, a Service Bulletin, a recurring inspection, or an annual — each tied to a specific aircraft, with its own due date or due-hours/cycles trigger.

Status	Meaning
Pending Review	Newly added — applicability hasn't been determined yet.
Applicable / Not Applicable	A real, documented applicability determination has been made.
Open	Applicable and not yet complied with.
Overdue	Computed automatically once the due date passes or the aircraft's hours catch up — never manually tracked.
Complied	Signed off with a documented method of compliance.
Superseded	Replaced by a newer AD/SB — points at whichever item replaced it.
Terminated	No longer applicable, with a documented reason.

NOTE

Applicability is never assumed from make/model/year alone — a qualified person reviews the aircraft's actual serial number and records and makes an explicit determination, which is what the "Pending Review" starting status enforces.

Recording Compliance

Closing out a compliance item requires a documented method of compliance, the compliance date (and hours/cycles, where relevant), and a PIN-verified signature. For a recurring item, the next due point is calculated automatically from whichever interval you've set — days, hours, or cycles — so nothing has to be manually re-scheduled after each inspection.

The Technical Publications Library

Rather than a free-text "source" field nobody can verify, AeroCoreMX keeps a real, controlled library of the manuals, ADs, Service Bulletins, and Advisory Circulars your shop cites — each with its own revision, effective date, and a record of what superseded it. When a compliance item cites a publication that's since been superseded, the item's page shows a clear warning naming the current revision — a heads-up, not a hard block, since the library is something your shop builds up over time.

EXAMPLE — Stale Citation Warning

⚠ This citation references a superseded revision — current revision is "Cessna 172S Maintenance Manual (Rev 12)". Review against the Technical Publications library before relying on this citation.

SCENARIO

An AD citing the Cessna 172S Maintenance Manual was recorded against a revision that's since been superseded by Rev 12. The compliance item's page shows the warning the moment anyone opens it — the inspector reviews the newer revision before relying on the older citation, instead of finding out the hard way that the procedure had changed.

CHAPTER 14

Apprentice Training

Logged hours toward certification, tied to real work and a real supervisor.

How It Works

Every hour an apprentice logs is tagged with a task category, optionally tied to the specific work order and aircraft it was earned on, and requires a supervising user. The Apprentices section shows each apprentice's running total and full entry history — useful both for day-to-day supervision and for documenting progress toward certification requirements.

SCENARIO

An apprentice spends 3.5 hours assisting with a landing gear seal replacement, cosigned by their supervising technician, plus 4 hours of ground school logged separately with no work order attached. Both show up on their running total — hands-on shop time and classroom time tracked side by side.

CHAPTER 15

Shift Turnover

Nothing gets lost between shifts.

How It Works

At the end of a shift, a technician submits a turnover report covering: work completed, open tasks still in progress, open NRWCs, parts still pending, and any notes or recommendations for the next shift. It's a simple form, but it turns "ask around and hope someone remembers" into an actual written handoff record.

SCENARIO

The day shift wraps up with an engine change still mid-job — the new engine is mounted but controls aren't rigged yet. Their turnover note says exactly that, plus a heads-up that the starter motor is still on backorder. The night shift technician reads it before touching anything and knows precisely where to pick up.

CHAPTER 16

Planning

Stage work — and the manpower and parts behind it — before the aircraft even shows up.

How It Works

A Planned work order sits ahead of the normal Open queue, scheduled either by a calendar date or by an hours/cycles trigger (for example, "100 hours from now"). It automatically moves itself into Open once its trigger is reached — no one has to remember to convert it manually.

TIP

Scheduling by hours/cycles is only as accurate as the hours data feeding it. If your shop uses the Customer Portal, owner-reported hours (Chapter 18) keep that trigger current between visits.

SCENARIO

An owner mentions their annual is coming up in about a month. Rather than trusting memory, the shop schedules it as a Planned work order for that date — parts and a technician can be lined up in advance, and the job appears in the normal Work Orders queue automatically the moment its date arrives.

CHAPTER 17

Reporting & Analytics

The same underlying data, two different views — one for the numbers, one for the trends.

How It Works

Reporting gives you tabular, exportable numbers: labor hours by technician, work order turnaround time, parts spend, aircraft downtime, revenue by customer, apprentice hours progress, and tool calibration compliance — each filterable by a date range.

Analytics takes the same underlying data and presents it as trends: recurring-discrepancy patterns by system, AOG frequency per aircraft, and technician productivity over time. It's kept as a separate module from Reporting deliberately — one is "what happened," the other is "what's the pattern."

SCENARIO

Management notices on Analytics that one particular aircraft has triggered three AOG events in the last six months — more than anything else in the fleet. That pattern wouldn't jump out from a single work order's history; it only shows up when the trend is laid out across the whole period.

CHAPTER 18

The Customer Portal

A separate, secure login where your customers can check status, approve costs, and message the shop directly — without ever seeing your internal shop-floor detail.

How It Works

Each customer can have one or more portal logins, created by shop staff (not self-signup). Once logged in, a customer sees a card for each aircraft they own:

EXAMPLE — Customer Portal Dashboard		
AIRCRAFT	CURRENT WORK ORDER	STATUS
N556CC	WO 260718008 — 1 open NRWC	⚠ Approval needed
N670CC	WO 260718010 — 0 open NRWCs	On track

Notice what's *not* shown: no task-level detail, no labor hours, nothing shop-floor-internal. The customer sees exactly enough to know where things stand — nothing more.

Cost Approval

When an NRWC is flagged as requiring customer approval, the aircraft's card glows red until the customer explicitly approves the cost right from their dashboard — no phone tag, no waiting on a callback.

Messaging

A simple, continuous message thread per customer — texting-style, not a ticket system — restricted on the shop side to Management and Administrator roles.

My Aircraft

From here, a customer can report current hours (feeding Planning's scheduling trigger directly), view their aircraft's digital logbook, see read-only past maintenance records, and submit a Schedule Maintenance request — which staff review and turn into a real work order manually.

NOTE

The digital logbook shown in the portal is explicitly a courtesy reference copy — every screen makes clear the physical

logbook remains the aircraft's official record.

SCENARIO

A customer opens the portal and sees their Baron's card glowing red with "Approval needed" — a \$2,400 fire detection loop replacement. They message the shop asking a quick question first, get an answer within the same thread, and approve the cost right from their phone. The shop sees the approval land in real time and proceeds with the repair.

CHAPTER 19

Settings

Branding, locations, label formats, and this manual.

How It Works

Section	What It Controls
Branding	Your shop's display name, logo, and the contact details that appear on every generated PDF (quotes, work orders, purchase orders).
Locations	Each physical facility your shop operates — address, phone, email, timezone.
Printing	The label size/format your printer uses, so barcode labels and parts tags come out sized correctly (standard letter sheet, or a dedicated label printer format).
User Manual	This document — available for any logged-in user to download, any time.

TIP

Set your label printer format once in Settings → Printing and every barcode label and parts tag across the whole system will size correctly from then on — no need to adjust it per-label.

CHAPTER 20

Digital Signatures, PINs & Recordkeeping

What actually happens, technically and legally, when you sign something in AeroCoreMX.

How a Signature Works

Any time the system needs to record that a specific, certificated person certified something — a return-to-service, an AD compliance record, an RII sign-off, a logbook entry — it asks for that person's 4-digit PIN and re-verifies it server-side at the moment of signing. A successful signature captures, permanently:

- Who signed — name and certificate number, exactly as they were *at that moment*.
- Whether they held Inspection Authorization at that moment.
- What action was being certified, and when.

NOTE

That identity snapshot is captured once, at signing, and is permanently immune to later changes — if someone's certificate number is corrected in their profile next year, every signature they made in the past still shows exactly what was true when they signed it.

Content Verification

For the records that matter most — a printed 14 CFR 43.11 logbook statement, an AD method-of-compliance entry — the signature also captures a cryptographic fingerprint of the exact text that was certified. If that underlying text is ever found to differ from what was originally signed, the record shows a clear "content differs from what was signed" flag rather than silently trusting it.

Logbook Stickers & Return to Service

Once a work order is signed off, an inspector can generate a logbook sticker — the FAA-worded 14 CFR 43.11 statement, pulled directly from the real signed return-to-service event (not freshly re-typed), for each affected logbook (airframe, each tracked engine, each tracked propeller). If an inspection determines the aircraft is *not* airworthy, a disapproval sticker records that determination instead, with a required discrepancy list — and the work order returns to In Progress rather than being left in limbo.

IMPORTANT

Five incorrect PIN attempts locks that user's signing ability for 15 minutes. This is deliberate — it protects against someone else guessing their way into a signature that isn't theirs to make.

CHAPTER 21

Scenario Walkthroughs

A few realistic, start-to-finish walks through the system, tying multiple chapters together.

A Routine Annual, Start to Finish

- 1 Owner calls asking for a price. Front desk builds a Quote from the ANNUAL-100 catalog item and sends it.
- 2 Owner accepts. One click converts the Quote into a Work Order, pre-loaded with its task list.
- 3 A technician is assigned and works through the tasks. A compression check turns up a low cylinder — an NRWC is opened, corrected, and signed.
- 4 All tasks complete — the Work Order moves to Pending Inspection.
- 5 An Inspector/IA reviews it, confirms every release condition is clear, and signs off with their PIN. The aircraft returns to Airworthy.
- 6 The Work Order is closed — logbook stickers generate automatically for the airframe and engine, pulling the actual signed date and signer directly from the sign-off event.

Handling an AOG

- 1 A pilot squawk comes in flagged Urgent — an aircraft is grounded away from base.
- 2 It's converted to a Work Order immediately; the aircraft's status flips to AOG — Grounded, visible on the Dashboard for the whole shop.
- 3 Diagnosis turns up a needed part not in stock. A Purchase Order goes out same-day; the part page shows "Order in progress" so nobody duplicates the order.
- 4 Part arrives, is received with its 8130 attached, installed, and the job proceeds to sign-off exactly like any other work order.

Receiving and Installing a Traceable Part

- 1 A magneto arrives against an open Purchase Order line.
- 2 Receiving logs the quantity and attaches the 8130-3 tag as a photo.

- 3 A technician requests that exact part from an open Work Order; the parts room issues it.
- 4 Once installed, the aircraft's permanent history shows the part, its 8130, and the work order it was installed on — a complete chain from supplier to installed component.

A Customer Cost Approval, From the Portal Side

- 1 An NRWC is opened requiring customer approval before proceeding, with a quoted cost attached.
- 2 The customer's portal dashboard card immediately glows red with "Approval needed."
- 3 The customer messages a quick question through the portal thread and gets an answer same-day.
- 4 They approve the cost from their phone. The shop proceeds — no phone tag required on either side.

CHAPTER 22

Quick Reference

The essentials, in one place.

Work Order Lifecycle

Planned → Open → Assigned → In Progress → Pending Inspection → Signed Off → Closed

Compliance Item Lifecycle

Pending Review → (Applicable / Not Applicable) → Open → Complied — or Superseded / Terminated at any point

Purchase Order Lifecycle

Draft → Ordered → Partially Received → Received — or Cancelled at any point

All Roles

Role	Focus
Administrator	Full system access
Management	Day-to-day shop operations
Technician	Hands-on work, NRWCs, logbook entries
Inspector / IA	Sign-offs, applicability, AD/SB compliance, RII
Apprentice Technician	Supervised work, cosigned
Inventory Specialist	Parts room, purchasing
Receiving Inspection	Incoming shipment logging
Planning	Scheduling, quotes, intake
Records & Audit	Compliance/records review

Getting Help

Email support@AeroCoreMX.com or call **317-699-2234**.

Taskcard Library

A reusable, digital jobcard system — build a procedure once from the AMM, then every technician who performs it fills out, PIN-signs, and files the same standardized card, digitally or on paper.

What the Taskcard Library Does

A Taskcard is a step-by-step maintenance procedure — a tire change, a brake overhaul, an oil change, anything your shop performs the same way every time. Instead of a technician working from a loose printout of the AMM (or from memory), a Taskcard captures the real procedure once, with warnings, cautions, notes, and required sign-offs built in, and reuses it every time that job comes up again.

It is a separately-priced add-on module (like Parts Inventory or Compliance Tracking) — a tenant needs it enabled before the Taskcards nav item appears.

Two Roles: Building vs. Using

Role	Can Do
Administrator, Management, Inspector/IA	Build and edit templates (the reusable procedure itself) — add steps, warnings, required sign-offs, publish, archive.
Planning, Technician (plus the above)	Use a published template — start an instance, fill it out, sign off steps.

A template only appears to Planning/Technician users once it is **Published** — a Draft is only visible to whoever can build it, so an in-progress template never gets used by mistake.

Building a Template

From the Taskcards page, use **+ New Taskcard**. Fill in the Jobcard #, Revision Date, a specific Description (this is what shows up in search), the ATA chapter/sub-chapter, and the aircraft Make/Model this procedure is written for — that Make/Model/ATA combination is exactly how a card gets filed and found later.

A new template starts with one blank step already in place. Use **+ Add New Step** for each additional step. Per step, you can set:

- **Instruction text** — the actual thing to do.
- **Warning / Caution / Note** — optional callouts, each rendered distinctly (Warning in red, Caution in amber, Note in italic) on both the digital card and the printed PDF.
- **May be marked N/A** — lets whoever is filling out the card mark this specific step as not applicable to this job, still with a PIN confirmation, not a silent skip.
- **Highlight this step** — flags a step visually (a soft amber background), useful for the one step in a procedure that most often gets missed or done wrong.
- **TECH sign-off / INSP sign-off** — check either or both to require a PIN-confirmed digital signature on that step before the card can be completed. Leave both unchecked for an informational or section-header row that does not need its own sign-off.

A template can also have an optional P/N & S/N On/Off block (for a component-replacement job) and reference Figures — photos or diagrams attached to the template itself, useful for illustrating a step (an exploded-view diagram, a torque sequence, etc.). Reference Figures are attached once to the template and appear on every instance filled out from it.

Using a Template

From the Taskcards list, hit **Use Taskcard** on any published card. If you reached the Taskcards page from a Work Order (via that Work Order's own **+ Add Taskcard** button), the aircraft and W.O. # carry over automatically.

A card can be started before a W.O. # exists. A technician who finds something during a routine inspection can grab and start a card right away — the W.O. # just needs to be added (from the card's own Card Information section) before that card can be completed.

Filling out an instance works through the same three sections every time:

Card Information & P/N-S/N

Aircraft #, Task Code, W.O. #, Position, and P/N/S/N are all editable at any point while the card is open — save updates as you go, no need to have everything ready up front.

Steps

Each step shows its instructions, warnings, cautions, and notes exactly as written. Where the template requires TECH and/or INSP sign-off, a button appears for whoever is authorized to provide it — INSP sign-off is restricted to Inspector/IA and Administrator roles, same as everywhere else in AeroCoreMX.

Every sign-off is double PIN-confirmed. Hitting Sign-Off or Mark N/A opens a PIN entry screen that asks for the PIN twice — both entries have to match, and the PIN is re-checked against the real hash on the server before anything is recorded. This applies to a real sign-off, an N/A, and the card's own final completion. An N/A carries the same signer name, ID#, and timestamp as a real signature — it is a certified decision, not a silent skip.

Final Sign-Off

Once every required TECH/INSP sign-off is in and a W.O. # is on file, **Complete Taskcard** becomes available — double PIN-confirmed like every other sign-off. Completing a card tied to a real aircraft automatically files it into that aircraft's permanent maintenance record, the same place a completed Work Order or NRWC lands.

Reference Figures vs. Job Photos

An instance shows two distinct photo sections: **Reference Figures** (read-only, attached to the template — the same illustration every technician who uses this card sees) above **Job Photos** (specific to this one job — documentation, before/after condition, anything worth keeping with this particular instance). Any figure can be clicked to enlarge it full-screen.

The Printed Card

Every instance has a **View PDF** link, available at any point — in progress or complete. The PDF is built to work as a real, printable paper form: a bordered header table with the revision date, steps laid out with TECH/INSP as real columns (shaded when a step does not need that signoff), a blank underscore line for P/N & S/N fields that have not been filled in yet, and — critically — a step is never split across a page break; if one would not fit, the whole step moves to the next page instead. Some shops will run this as a fully digital record; others will print a blank in-progress card, work from paper, and either re-enter it digitally afterward or file the signed printout directly. Both are fully supported.