



Life of a maintenance job

From a pilot's squawk or a build program to a signed release, in MRO Tracker

For directors of maintenance, maintenance control, mechanics, inspectors and engineers · MRO Tracker 2.2

A mechanic's day is a chain of hand-offs: maintenance control plans the work, stores kits it, the mechanic does it, engineering answers what the manual doesn't, an inspector checks it and somebody with the right authority releases the aircraft. This brief follows one job through that chain, screen by screen, and shows the other ways work arrives. Every step writes to the same aircraft record, so nothing is re-typed and nothing is signed out of order.

The sample job. A coastal patrol operator flies two King Air 350ER from Norfolk (KORF). On Tuesday evening its pilot checks in after a patrol with a squawk: the radar altimeter dropped out twice below 500 ft. That evening, mechanic Marco Reyes troubleshoots it and finds a chafed coax. Engineer Priya Natarajan gives an approved repair, inspector Hannah Price signs QC and the release, and the aircraft is ready for Thursday's 7 AM sortie. **Every company, person, tail number and figure in this brief is fictional.** The screenshots are real MRO Tracker screens showing this sample data, taken on 27 October 2026; the people's names on them belong to the sample.

1 · Arrive	2 · Plan	3 · Kit	4 · Work	5 · Ask	6 · Inspect	7 · Release	8 · Close
Squawk, build program or inspection due	Work order and task card	Parts and tools to the card	Clock in, work items, findings	Engineering disposition	QC and RII sign-off	Final sign-off, CRS, logbook	Squawk closed, due items, invoice

When	What happens in the sample
Tue 27 Oct, 6:06 PM	The pilot checks N350MQ in with a radar altimeter squawk. It lands on the New discrepancies list on maintenance's Home.
6:28 PM	Maintenance control makes a task card from the squawk on a new work order, 26-A0008, with four work items, a kit and the tools.
6:30 PM	Marco clocks in, checks out the ramp test set and a cable tester, and finds the RX coax chafed at the edge of a new belly doubler.
6:31 PM	He asks engineering from the card. Priya answers with an approved repair and a 100-hour repeat inspection.
Evening	The coax is replaced and ground tested. Hannah approves each item, signs the FAA and EASA release, and the squawk shows Corrected.

1 Where the work comes from

Work reaches the hangar through three doors, and all three end up as work orders and task cards on the aircraft.

A squawk

Squawks come from pilot check-ins, the aircraft page, the AOG desk and imports. **New discrepancies** on Home, in both the Maintenance and the Operations workspace, lists everything logged today, this week or in the last 30 days. Maintenance control opens each one, marks it reviewed and makes a task card from it. A squawk marked grounding blocks the next dispatch and release until maintenance clears it.

The screenshot shows the 'New discrepancies' section of a software interface. It has a header with a warning icon, the text 'New discrepancies', and a link to 'Discrepancy Log'. Below this, it says '2 logged · 2 not reviewed'. There are filters for 'Today', 'Yesterday', 'This week', 'Last 7 days' (selected), and 'Last 30 days'. A checkbox for 'Not reviewed only' is checked, and 'Include bulk imports' is unchecked. A 'Mark all 2 reviewed' button is on the right. Two discrepancy entries are listed:

- OPEN** N350MQ · S/N FL-9901 Beechcraft King Air 350ER — Radar altimeter dropped out twice below 500 ft AGL on the ILS 05 at KORF; came back after a few seconds. No warning flag. (Today 6:08 PM · Daniel Hayes · Flight check-in) Buttons: View, Task card..., Aircraft, Reviewed.
- OPEN** N350MQ · S/N FL-9901 Beechcraft King Air 350ER — Operator console 2 display flickers while SATCOM transmits. Found at the customer walk-around; console usable. Warranty item. (Today 2:06 PM · Daniel Hayes · Aircraft page · Mission systems) Buttons: View, Task card 008691, W/O 26-A0007, Aircraft, Reviewed.

Tuesday evening: two squawks on N350MQ from the pilot, neither reviewed yet. Task card... turns one into work.

A build program

For a modification or a fleet build, the business case becomes the plan. The AI plan proposes work orders by aircraft and department with their task cards, and nothing is created until a planner has checked and accepted it. The program then tracks those work orders against their line items and schedule.

The screenshot shows a 'Work order 3 Aircraft 1 modification' form. It has a 'Remove' button in the top right. The description states: 'All avionics, mission wiring, sensor integration and cabin-console installation work is performed by the Radio/Instrument shop and is grouped into one work order per aircraft to track avionics labour and parts together.' There are dropdowns for 'Aircraft' (N350MQ · Beechcraft King Air 350ER) and 'Department' (A · Radio/Instrument). Below is a 'Description' field with the text 'N350MQ avionics and mission-system installation — radar, EO/IR turret, consoles, SATCOM, mission'. A table lists task cards with checkboxes, descriptions, and hours:

Task card	What to do	Hours
☒ Install mission power system	Install dedicated mission power	
☒ Install search radar and radome	Mount belly-mounted search radar antenna	
☒ Install EO/IR turret	Mount customer-furnished EO/IR turret	
☒ Install two operator mission consoles and mission power, ICS, cockpit control head	Install two operator console assemblies and associated cables	
☒ Install SATCOM terminal and antenna	Install SATCOM modem, amplifier and data interface cables	
☒ Install radar control head on cockpit pedestal	Install radar display/control head on cockpit pedestal	
☒ Integrate operator stations to aircraft ICS	Connect both operator console positions to aircraft ICS system	
☒ Verify SATCOM data link — video and track data	Conduct bench-level functional test of video	

A proposed work order from the build program's business case: aircraft, department and its task cards, each editable before it's created.

An inspection coming due

Maintenance Due tracks recurring items by hours, calendar and cycles, whichever comes first. The **inspection package** on the aircraft gathers everything due by the next annual, 100-hour or phase inspection (with a look-ahead), the ADs that apply and aren't complied with, the service bulletins they call up, and the open squawks and MEL deferrals. One click makes a work order with one task card per item.

The screenshot shows a table titled 'Work orders on this program'. It has a search bar 'Find a work order by number...' and a 'Find' button. The table has columns: Work order, Description, Status, Opened, Hours worked, Parts cost, and Line item. The data is as follows:

Work order	Description	Status	Opened	Hours worked	Parts cost	Line item
26-A0005	Engineering — modification design package for both aircraft (radar, EO/IR, consoles, SATCOM, mission power, structural, STC support)	Closed	Jun 8, 2026	1445.1		0001
26-A0002	N350MQ ground test and functional check flights	Closed	Oct 5, 2026	29.9		0001
26-A0003	N351MQ avionics and mission-system installation — radar, EO/IR turret, consoles, SATCOM, mission power, ICS, cockpit control head	In work	Oct 26, 2026	100.3		0002
26-M0007	N351MQ Phase 3 & 4 inspection at induction	Closed	Sep 14, 2026	252.0		0002
26-M0009	N351MQ quality inspection — RII, conformity and final inspection	Open		0.0		0002
26-M0006	N350MQ quality inspection — RII, conformity and final inspection	Closed	Oct 7, 2026	114.8		0001
26-M0005	N350MQ structural fabrication — belly cut-out, doublers, turret fairing and mounts	Closed	Jul 20, 2026	662.2		0001
26-A0004	N351MQ ground test and functional check flights	Open		0.0		0002
26-A0006	Programme management — project oversight across both aircraft for 9 months	In work	Jun 1, 2026	0.0		0003
26-M0008	N351MQ structural fabrication — belly cut-out, doublers, turret fairing and mounts	In work	Oct 12, 2026	451.0		0002

Hours worked are clocked time on the task cards plus labor lines. Earned value from them is on the Earned value tab.

The program's work orders with status, hours clocked and the line item each one belongs to.

1 Where the work comes from INSPECTIONS

Inspection package · N172AP
Cessna 172S · S/N 172S11842 · TT 4,862.4 h · Hobbs 2,914.6 · 9870 landings

Inspection

Planned date

Also due within (hours)

...or (days after)

100-hour inspection

10/27/2026

50

90

100-hour inspection 0
No inspection checklist on file for Cessna 172S. Upload the maintenance manual's inspection chapter in Records → Programs and MRO Tracker reads the items automatically; until then, use the manual's checklist (14 CFR 43 Appendix D at minimum).

Maintenance due by Jan 25, 2027 or 4,912.4 h 5 [Untick all](#)

☒ **ELT inspection** **OVERDUE**

14 CFR 91.207(d) · Sep 30, 2026 (27 d over)

☒ **Annual inspection**

14 CFR 91.409(a) · Oct 31, 2026 (4 d)

☒ **Oil and filter change**

Lycoming SI 1014 · Jan 11, 2027 (76 d) · 4,866.2 h (3.8 h left)

☒ **Seat rail and seat lock inspection (recurring AD)**

AD 2011-10-09 · Aug 7, 2027 (284 d) · 4,868.8 h (6.4 h left)

☒ **100-hour inspection**

14 CFR 91.409(b) · 4,868.8 h (6.4 h left)

ADs and bulletins that apply, not yet complied with 0
None open. Recurring ADs are under Maintenance due.

Service bulletins called up by these 0
None referenced.

ADs and bulletins still to review 0

5 of 5 items in the package

Create work order

Spreadsheet

Download PDF

Email to mechanic

Work it on screen

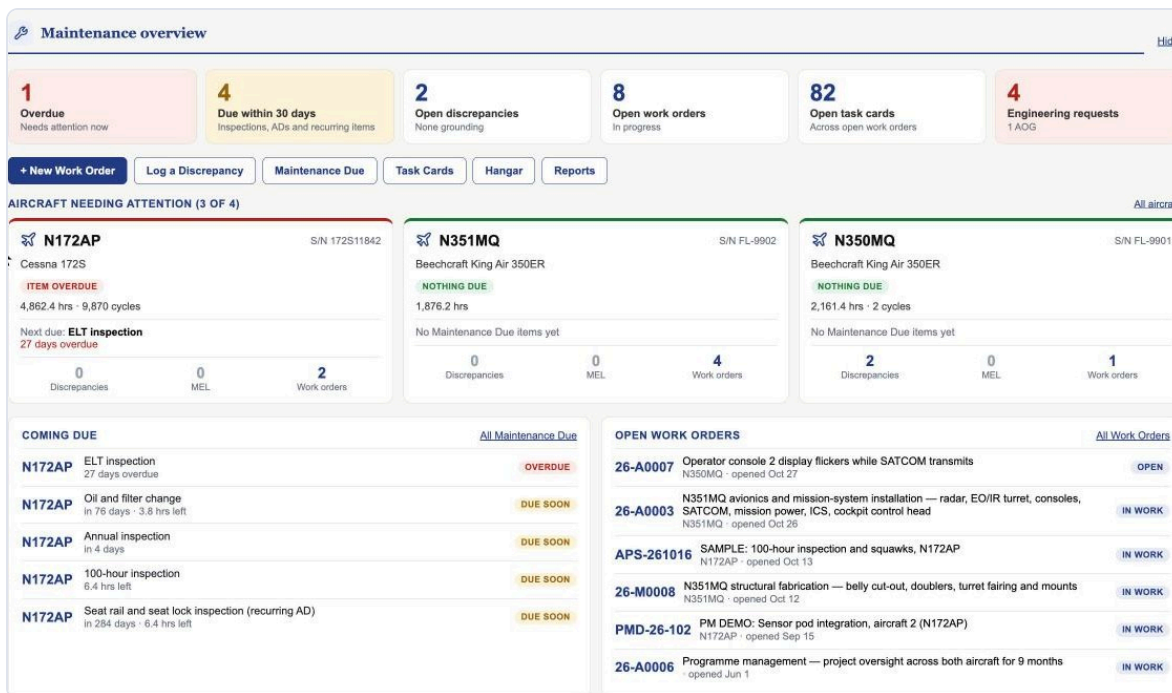
Close

The 100-hour inspection package for a training Cessna: the overdue ELT inspection, the annual, an oil change, a recurring AD and the 100-hour itself, all ticked. From here: a work order, a spreadsheet, a PDF with tick boxes and a sign-off block, an email to the mechanic, or "Work it on screen".

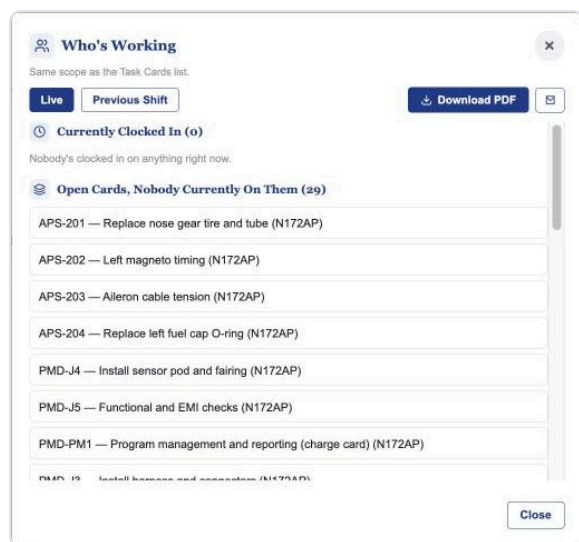
Work it on screen is for an independent A&P or IA who doesn't use work orders: each line is marked done, not applicable or a discrepancy as they go, and signing the worksheet (with the 14 CFR 43.11 statement) can sign off the Maintenance Due items and close the squawks marked done. The signed PDF, the owner's discrepancy list and the logbook entry follow from it.

2 The hangar at a glance

In the Maintenance workspace, Home opens on the **maintenance overview**: items overdue and due within 30 days, open discrepancies (and how many ground an aircraft), open work orders and task cards, and engineering requests waiting. The aircraft needing attention come first, then what's coming due across the fleet and the open work orders.



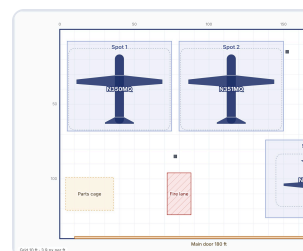
The maintenance overview on Tuesday evening, with the new work order 26-A0008 at the top of the open work orders.



Who's Working: who is clocked in on what right now, the open cards nobody is on, and the previous shift, as a PDF for the shift handover.

For the supervisor

- **Who's Working** shows live clock-ins and open cards with nobody on them.
- **Task Cards** filters by status: open, pending QC, ready for sign-off, approved and voided. Pending QC is the inspector's queue.
- **The hangar plan** books each aircraft into a spot and shows the equipment booked to the job.
- **Calendar** and **Weekly Plan** lay out the week's work and who is on it.



The hangar floor plan to scale, with aircraft in their spots.

3 From squawk to task card

Make a task card takes the squawk's text, lets maintenance control write the card's title, and puts it on an open work order for the aircraft or a new one in the chosen department. Approving the card later closes the squawk, so nobody has to remember to.

The screenshot shows a web form titled "Make a task card". At the top, it says "N350MQ · Beechcraft King Air 350ER. Approving the card closes this squawk." Below this is a "Card description" field containing the text "Troubleshoot radar altimeter dropouts below 500 ft AGL". Underneath is a "Discrepancy / work required" field with the text "Radar altimeter dropped out twice below 500 ft AGL on the ILS 05 at KORF; came back after a few seconds. No warning flag." Below that is a "Work order" dropdown menu showing "+ New work order for this aircraft". Underneath is a "Department for the new work order" dropdown menu showing "A · Radio/Instrument". At the bottom right are two buttons: "Cancel" and "Create task card".

Other ways to start a card

- **New Task Card** on the Task Cards screen or a work order.
- **Scan a Card:** a photo of a paper task card fills in the new card.
- **Work order templates** for repeat jobs, saved from any work order.
- **Make task card** on a Maintenance Due item: approving the card signs the item off.
- **Sub-cards** for non-routine findings on a card, with their own work items and sign-offs.

The radar altimeter squawk becomes a card on a new Radio/Instrument work order.

The screenshot shows a detailed view of a work order. At the top, it says "26-A0008" and "Troubleshoot radar altimeter dropouts below 500 ft AGL". Below this is a table with columns "OPENED", "TASK", and "HOURS WORKED". The "OPENED" column shows "10/27/2026", the "TASK" column shows "Troubleshoot Radar Altimeter Dropouts Below Ft Agl", and the "HOURS WORKED" column shows "0.2 h (clocked)". Below the table is a section titled "Engineering requests" with a link "ER-0009" and the text "Chafed radar altimeter RX coax at the new belly doubler edge". Below this is a row of buttons: "+ Add Task Card", "Save as Template...", "Edit", "Logbook sticker", "Release to service (CRS)", "Ask engineering", "History", "Estimate", "Invoice", and "Close Work Order". Below the buttons is a section titled "Task Cards on this Work Order" with a link "1" and the text "— Troubleshoot radar altimeter dropouts below 500 ft AGL". Below this is a section titled "Sub Work Orders" with a link "+ Add Sub Work Order". Below the link is the text "No sub work orders. Use '+ Add Sub Work Order' to split off part of this job (e.g. an engine change or a component repair) with its own number, status and task cards." Below the text is a section titled "Parts & Labor" with a link "+ Add Line". Below the link is the text "No parts or labor lines yet."

Work order 26-A0008: its engineering request, task cards, sub work orders, parts and labor lines, and the logbook sticker, release to service, estimate and invoice actions.

4 On the card: clock, kit and tools

Marco opens the card and clocks in; the banner across MRO Tracker shows what he's clocked in on until he pauses or clocks out. Clocked time rolls up to the work order's hours worked. The card carries the aircraft, discrepancy, kit, work items, parts and documents in one place.

1 — Troubleshoot radar altimeter dropouts below 500 ft AGL

Created by marco.reyes@example.com · 10/27/2026, 6:28:16 PM

You're clocked in on this card. **00:01:33** **Pause** **Clock Out**

Time Log

Card Barcode (for tool checkout)

Tools

Scan or type tool ID / description **Check Out** **2 still out**

Tool ID	Description	Status	Action
T-0301	Time domain reflectometer (cable tester) (checked out)	Checked out	
T-0301	marco.reyes@example.com · 10/27/2026, 6:30:25 PM	Check In	Damaged Lost
T-0412	marco.reyes@example.com · 10/27/2026, 6:30:23 PM	Check In	Damaged Lost

W/O MNT No.: 008692 Tail No.: N350MQ Type/Model: Beechcraft King Air 350ER Aircraft S/N: FL-9901

Discrepancy

Radar altimeter dropped out twice below 500 ft AGL on the ILS 05 at KORF; came back after a few seconds. No warning flag.

The card with Marco clocked in and two tools checked out to it: the radar altimeter ramp test set and the cable tester. Each can be checked in, or reported damaged or lost.

Parts

- **Kitting** lists the parts and materials the card needs, with part number, quantity and bin, from a saved kit template or by hand. Each item moves from needed to requested, staged and issued, and the card shows when the kit is ready.
- **Stores on the card** finds a part in stock, shows where and whether it can be issued, and issues or reserves it to the card. Issued parts land on the work order as lines, and so on the invoice. Serialized rotatables update the aircraft's component list, and a removed part goes to the unserviceable store.
- **The kitting queue** in Stores is the parts team's list, AOG first, with a pick list sorted by bin.
- **Parts requisitions** and orders for the card show the order number and expected date.

Tools

- Tools are checked out to the card by scanning or typing the tool number; the card's own barcode works for checkout at the tool crib.
- Calibration due dates are tracked per tool, with an overdue report and calibration history.
- At close-out the card warns about tools still out and kit parts staged but not issued.

Scan a label or type a part number Stores room computer or tablet? It can keep working when the connection drops. Use this device offline

Overview Kitting Requests Quotes Orders Receive Returns Bills Stock Counts Parts Vendors Movements Reports Web store

Marketplaces Locations Settings

Metric	Value
Awaiting inspection	0
At or below reorder point	0
Expiring in 90 days	0
Unserviceable / quarantine	0
Adjustments to approve	0
Stock value (standard cost)	\$11,395.10
Open parts requests	0
Orders to approve	0

0 Order lines past due

Stores overview: receiving inspection, reorder points, shelf life, quarantine and stock value.

5 Ask engineering

The ground test passes, but flexing the belly panel drops the signal, and the cable tester finds the RX coax chafed where it crosses the edge of a doubler added by the radar installation. That's a question for engineering. **Ask engineering** on the card opens a request prefilled with the aircraft, card and work order.

The screenshot shows a web form titled "New engineering request" with the subtitle "From task card 1 - N350MQ". The form contains the following fields and sections:

- Title ***: A text field containing "Chafed radar altimeter RX coax at the new belly doubler edge".
- Kind**: A dropdown menu set to "Repair disposition".
- Priority**: A dropdown menu set to "Urgent - answer within 1 day".
- Aircraft**: A text field containing "N350MQ - Beechcraft King Air 350ER".
- ATA chapter**: A text field containing "34".
- Part number**: A text field containing "M17/128-RG400".
- Location / zone**: A text field containing "Belly, radome bay, aft of the new doubler (mod 26-M0)".
- Send to**: A dropdown menu set to "— Anyone —".
- Question / what you found**: A text area containing the text: "Ground test passes, but the RX antenna coax is chafed through the outer jacket where it crosses the aft edge of the new belly doubler from the radar installation. Shield is intact, about 1.5 in of jacket worn. Can we splice and re-route with two added cushioned clamps, or does the run need a new cable to the receiver? Photos attached on the card. Aircraft is on the next patrol Thursday 7 AM."
- Similar answered requests**: A section titled "Engineering has answered these before; the answer may already be here." containing a list item: "ER-0005 Harness routing through the firewall" with a status of "Approved repair". Below this is a "Similar words" section with the text: "Use the existing pass-through with a new grommet and fire sleeve over the new harness through the firewall. Keep 2 in separation from the fuel line and secure every 6 in with MS21919 clamps. Seal with fire-rated sealant. Approved data: Data package SP-172-001 rev B sheet 14; AC 43.13-1B ch. 11 section 8 N172AP - Cessna 172S - ATA 92-00 - answered by DemoAdmin User Oct 15, 2026".
- Open**: A button at the bottom right of the form.

The request: repair disposition, urgent (answer within a day), ATA 34, the part number and location. Engineering has answered similar requests before, and those show up under the request so the answer may already be there.

How a request is handled

- **Kinds:** repair disposition, damage assessment, technical question, alternate part, deferral / MEL, other.
- **Priorities with answer times:** AOG within 4 hours, urgent within a day, routine within 5 days.
- **Routing** to an engineering group by kind, ATA range, aircraft, customer or program, with an on-call person, escalation times, and Take it / Assign / Hand back.
- **Engineer authorisations** (company, FAA DER, EASA DOA, national authority) set what each engineer may answer; the database refuses or records answers outside them.
- **Independent check** for chosen answers: a second engineer agrees before the mechanic is told.
- **Customer approval** for dispositions on customer aircraft, signed by e-mail link; until then the card and work order show a blocking banner.

5 Ask engineering THE ANSWER

Priya answers with a disposition, instructions for the mechanic and the approved data the answer rests on. Because the doubler edge will keep rubbing, she adds a **condition back to the floor**: a repeat inspection every 100 hours. Conditions can also be a time-limited repair, something to do before the next flight, or before the next check. They take effect when the answer is sent.

ER-0009 · Chafed radar altimeter RX coax at the new belly doubler edge Urgent Open

Repair disposition · N350MQ · ATA 34 Navigation · Belly, radome bay, aft of the new doubler (mod 26-M0008)
 Raised by Marco Reyes · Oct 27, 6:31 PM · answer due in 24 h
[Open the task card](#) [Open the work order](#)

Ground test passes, but the RX antenna coax is chafed through the outer jacket where it crosses the aft edge of the new belly doubler from the radar installation. Shield is intact, about 1.5 in of jacket worn. Can we splice and re-route with two added cushioned clamps, or does the run need a new cable to the receiver? Photos attached on the card. Aircraft is on the next patrol Thursday 7 AM.

▼ Answer

Disposition: Approved repair Send to: — Anyone —

Discipline: Avionics / electrical

Answer *

Do not splice. Replace the RX coax from the antenna to the receiver with RG-400 and new TNC connectors (crimp with T-0418). Re-route 0.5 in clear of the doubler edge, with two MS21919WDG6 cushioned clamps at the doubler flanges and chafe sleeve where it passes the stringer. TDR check the new run, then ground test. Inspect the TX run at the same station while the panel is open.

Approved data / references
 AC 43.13-1B ch. 11 sec. 8 and 15; King Air 350 AMM 34-40-00; radar installation data package 26-M0008 sheet 6

[I'm looking at it](#) [Send the answer](#)

Conditions back to the floor

Type	Condition	Status	Interval / due	Blocks dispatch
Repeat inspection	Inspect the radar altimeter TX and RX coax runs at the belly doubler for chafing and clamp security	Not in force yet	Every 100 h	Yes, when overdue

They go to Maintenance Due, the task card or a squawk when the answer is sent.

[Add a condition](#)

The answer being written: approved repair, avionics/electrical, the instructions, AC 43.13-1B and the installation data, and the repeat inspection.

ER-0009 · Chafed radar altimeter RX coax at the new belly doubler edge Urgent Answered

Repair disposition · N350MQ · ATA 34 Navigation · Belly, radome bay, aft of the new doubler (mod 26-M0008)
 Raised by Marco Reyes · Oct 27, 6:31 PM · answer due Oct 28, 6:31 PM
[Open the task card](#) [Open the work order](#)

Ground test passes, but the RX antenna coax is chafed through the outer jacket where it crosses the aft edge of the new belly doubler from the radar installation. Shield is intact, about 1.5 in of jacket worn. Can we splice and re-route with two added cushioned clamps, or does the run need a new cable to the receiver? Photos attached on the card. Aircraft is on the next patrol Thursday 7 AM.

Answer · Approved repair

Do not splice. Replace the RX coax from the antenna to the receiver with RG-400 and new TNC connectors (crimp with T-0418). Re-route 0.5 in clear of the doubler edge, with two MS21919WDG6 cushioned clamps at the doubler flanges and chafe sleeve where it passes the stringer. TDR check the new run, then ground test. Inspect the TX run at the same station while the panel is open.

Approved data / references: AC 43.13-1B ch. 11 sec. 8 and 15; King Air 350 AMM 34-40-00; radar installation data package 26-M0008 sheet 6

Priya Natarajan · Oct 27, 6:34 PM

► Change the answer

ANSWERED BY
Priya Natarajan
 Oct 27, 6:34 PM

INDEPENDENT CHECK
 Not needed for this answer

Conditions back to the floor

Type	Condition	Status	Interval / due	Blocks dispatch
Repeat inspection	Inspect the radar altimeter TX and RX coax runs at the belly doubler for chafing and clamp security	In force	Every 100 h · next due 2261.4 h On Maintenance Due	Yes, when overdue

[Close](#) [Terminate](#)

[Add a condition](#)

Answered. The repeat inspection is in force, next due at 2,261.4 hours, and already on the aircraft's Maintenance Due. Overdue, it blocks dispatch.

▼ Maintenance Due

Airframe 2,161.4 h Landings 2 [set](#) OK

Hours and landings add up from check-ins. Limits are whichever comes first. An overdue item marked "blocks dispatch" stops releases and dispatch until it's signed off.

[+ Add item](#) [Import from Excel](#) [Add standard items](#) [Start from a common item...](#)

List **Calendar**

CAMP Not linked to CAMP [CAMP connection...](#)

OK

Engineering condition: Inspect the radar altimeter TX and RX coax runs at the belly doubler for chafing and clamp security

Inspection · ER-0009
 Due 2,261.4 h · 100 h left
 every 100 h · last done Oct 27, 2026 at 2,161.4 h · Repeat until engineering terminates it (ER-0009).

[Sign off done](#) [Make task card](#) [Extension...](#) [History](#) [Logbook sticker](#) [Edit](#) [Remove](#) [Engineering request ER-0009](#)

N350MQ's Maintenance Due: the engineering condition with its interval and a link back to ER-0009. It repeats until an engineer terminates it.

Engineering also keeps major and minor repairs and alterations (approved data, instructions for continued airworthiness, weight and balance, Form 337 worksheet), the AD review queue, reliability by ATA chapter, and engineering hours by customer and work order.

6 Work items, QC and RII

Each **work item** on the card is one step: what to do, then the corrective action (what was done). The mechanic signs each item with a drawn signature, a PIN or biometrics, and can log the hours spent on it. Signing moves the item to **Pending QC**, and the QC roster is emailed. The inspector approves the item with their own signature, or rejects it with a reason, which reopens it as a new revision; earlier revisions stay visible.

Item 3 after the repair: Marco's corrective action and signature with 2.6 hours logged, then Hannah's QC approval.

Required inspection items

A card marked **RII** needs an inspector with RII authority, not just any QC reviewer, and that inspector can never be the person who signed the item as mechanic (14 CFR 121.369(b)(7) and 135.427). MRO Tracker enforces both.

A training Cessna's aileron cable tension card from its 100-hour inspection: ATA 27-10, RII.

The mechanic's sign-off waiting for an authorized RII inspector.

Rule	What MRO Tracker does
Item order	A card can only be signed off once every work item on it is approved
Who may inspect	QC reviewers, RII inspectors and approval admins are set per group; each check has its own rule
Voids	An item or a whole card is voided with a reason and a signature, and stays visible, marked invalid
Where and when	Each signature keeps the signer, time and, when the device allows, the location

7 Release to service

With every item approved, the card is ready for its final sign-off. Before that, the card checks the close-out: here, the two tools still checked out. In an organization under both FAA and EASA, the card needs both sign-offs.



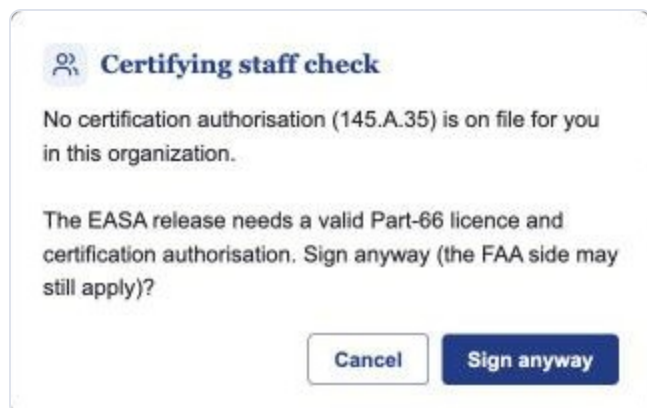
Tools still checked out: T-0412, T-0301. Check them in before sign-off.

Dual sign-off required — FAA and EASA

Sign as FAA

Sign as EASA

The close-out warning and the dual sign-off, FAA and EASA.



Certifying staff check

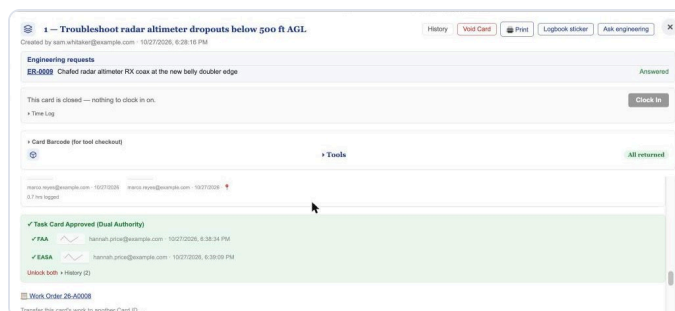
No certification authorisation (145.A.35) is on file for you in this organization.

The EASA release needs a valid Part-66 licence and certification authorisation. Sign anyway (the FAA side may still apply)?

Cancel Sign anyway

The certifying staff check: the EASA release needs a Part-66 licence and a certification authorisation (145.A.35) on file for the signer.

For organizations with an approval number, **Release to service (CRS)** on the work order issues the certificate of release with the organization's own statement; the national statement is used for KCAA, SACAA and GCAA organizations.



1 - Troubleshoot radar altimeter dropouts below 500 ft AGL.

Created by sean.white@easample.com - 10/27/2026, 6:28:16 PM

Engineering requests

EB-0008 Chafed radar altimeter RX coax at the new belly doubler edge

Answered

This card is closed — nothing to clock in on.

Time Log

Card Barcode (for tool checkout)

Tools

All returned

Task Card Approved (Dual Authority)

FAA

EASA

Unlock both

History (2)

Work Order 26-A0008

Transfer this card's work to another Card (ID...

Task card approved under both authorities. The card is closed to clock-ins, and the squawk it came from is closed.

7 Release to service RECORDS

The **logbook sticker** fills a 6 × 4 in maintenance record entry from the card: aircraft, date, total time and Hobbs, the work performed from every item, and the return-to-service statement for the organization's authority (14 CFR 43.9, 43.11 for inspections, with the EASA CRS where it applies). Everything can be edited before it's printed and signed by hand, or it can be signed electronically.

Logbook sticker

A 6 × 4 in maintenance record entry for the logbook (14 CFR 43.9, 43.11 for inspections) with the EASA certificate of release to service (CRS). Check every field, print it on a 6 × 4 label, and sign it by hand.

Make	Model	S/N	Reg No
Beechcraft	Beechcraft King Air 3	FL-9901	N350MQ
Date	TTA (total time airframe)	Hobbs	Entry type
10/27/2026	2161.4	2161.6	Maintenance (43)

Work performed

Troubleshoot radar altimeter dropouts below 500 ft AGL. Discrepancy: Radar altimeter dropped out twice below 500 ft AGL on the ILS 05 at KORF; came back after a few seconds. No warning flag.

1. Run the radar altimeter self-test and ground test per the AMM; record readings at the test set: Self-test passes. Ground test with T-0412 at 0, 50, 200 and 500 ft simulated: readings within limits, but the RX signal dropped out twice when the belly panel was flexed by hand.

2. Inspect the radar altimeter TX and RX antenna coax and connectors from the belly radome.

A long entry continues onto more stickers, numbered 1 of 2, 2 of 2 and so on.

Statement

FAA: I certify that the work described above was performed in accordance with 14 CFR Part 43 and the current regulations of the Federal Aviation Administration, and that the aircraft, airframe, engine, propeller or component identified herein is approved for return to service with

☐ Save this wording as the organization's default for this entry type

Signer name: Hannah Price Certificate / licence No (A&P / IA / Part-66): A&P / IA (sample)

Signer address: Hangar 4, Norfolk International Airport, Norfolk, VA

☐ Remember my name, address and certificate number

Cancel Sign electronically... Print sticker (PDF)

The electronic logbook

- Maintenance (43.9), inspection (43.11) and AD compliance (91.417) entries for the airframe, engine, propeller and appliance logbooks.
- Signed with the signer's PIN: the server numbers the entry, records the PIN check and seals it (SHA-256, chained to the aircraft's previous entry).
- A signed entry can't change. It's voided with a reason and a correcting entry is signed.
- Exports: the logbook PDF with each entry's signature, seal and check link, CSV, and the sticker.

The sticker for the radar altimeter job, with the inspector's name and address.

Electronic logbook

Maintenance record entries signed with your PIN (14 CFR 43.9, 43.11, 91.417; EASA: certificate of release to service (CRS), AMP inspections, EASA AD compliance). Signed entries are numbered and can't be changed: void one with a reason and sign a correcting entry. Print the 6 × 4 sticker for the paper logbook from any signed entry.

N172AP · Cessna 172S (S/N 172S1) All logbooks All (9) Search work, AD, signer...

No.	Date	Logbook	Type	Work performed	Signed by	Status
—	Oct 16, 2026	Engine	Maintenance	Left magneto timing found at 22 deg BTC; reset to 25 deg BTC per Lycoming data. Run-up: L 75 RPM, R 70 RPM drop, smooth.	AP Sample Mechanic	Draft
8	Oct 13, 2026	Airframe	Maintenance	Replaced left fuel cap O-ring, P/N S1495-1. Fuel tank filled, no leaks after 30 minutes.	AP Sample Mechanic A&P mechanic DEMO 3456789	Signed
7	Sep 11, 2026	Propeller	Maintenance	Dressed small nick on blade 2 leading edge, 6 in. from tip, within limits per McCauley manual. Repainted tips. Tracked within 1/16 in.	AP Sample Mechanic A&P mechanic DEMO 3456789	Signed
6	Aug 7, 2026	Airframe	AD compliance	Inspected pilot and copilot seat rail seals, seat lock pins and stops per AD 2011-10-09. No cracks or worn holes found; stops installed and secure.	AP Sample Mechanic A&P mechanic DEMO 3456789	Signed
5	Aug 7, 2026	Airframe	Inspection	Performed 100-hour inspection per Cessna 172 Service Manual and 14 CFR 43 Appendix D. Replaced spark plugs (rotated, gapped). Serviced brakes. All findings corr...	AP Sample Mechanic A&P mechanic DEMO 3456789	Signed
4	Jun 18, 2026	Airframe	Maintenance	Replaced right landing light lamp, P/N 4509. Operational check good. (Corrects the voided entry of the same date: aircraft total time.)	AP Sample Mechanic A&P mechanic DEMO 3456789	Signed correction
3	Jun 18, 2026	Airframe	Maintenance	Replaced right landing light lamp, P/N 4509—Operational check good.	AP Sample Mechanic A&P mechanic DEMO 3456789	Void corrected
2	May 9, 2026	Engine	Maintenance	Changed oil and filter. Drained 7 qt, installed Champion CH48110-1 filter, serviced 8 qt Aeroshell W100 Plus. Cut filter open: no metal found. Leak check good.	AP Sample Mechanic A&P mechanic DEMO 3456789	Signed
1	Oct 11, 2025	Airframe	Inspection	Performed annual inspection per Cessna 172 Service Manual inspection checklist and 14 CFR 43 Appendix D. Compression: 78/80, 77/80, 79/80, 76/80. Lubricated per...	AP Sample Mechanic Inspection Authorization (IA) DEMO 3456789	Signed

A training Cessna's electronic logbook: numbered, signed entries, a draft, and a voided entry with its correction.

8 Closing the loop

Approving the card closed the squawk. In the discrepancy log it now shows **Corrected**, with its task card and work order, and the pilot's next release sees an aircraft with nothing open against the radar altimeter. The repeat inspection from engineering is on Maintenance Due, so it will come back to the floor in 100 hours without anyone keeping a list.

New discrepancies 2 logged · 2 not reviewed

Today Yesterday This week **Last 7 days** Last 30 days

☐ Not reviewed only ☐ Include bulk imports Mark all 2 reviewed

CORRECTED N350MQ · S/N FL-9901 Beechcraft King Air 350ER — Radar altimeter dropped out twice below 500 ft AGL on the ILS 05 at KORF; came back after a few seconds. No warning flag.
Today 6:06 PM · Daniel Hayes · Flight check-in View Task card 008692 W/O 26-A0008 Aircraft Reviewed

OPEN N350MQ · S/N FL-9901 Beechcraft King Air 350ER — Operator console 2 display flickers while SATCOM transmits. Found at the customer walk-around; console usable. Warranty item.
Today 2:06 PM · Daniel Hayes · Aircraft page · Mission systems View Task card 008691 W/O 26-A0007 Aircraft Reviewed

The discrepancy log: the radar altimeter squawk corrected through task card 008692 and work order 26-A0008.

Where it lands	What happens
Operations	Aircraft status on the next release reads the closed squawk; a grounding item would have blocked dispatch until signed
Maintenance Due	The engineering condition and any items signed off by the card move to their next due; alerts go out every 15 minutes for items coming due
Work order	Clocked hours and issued parts roll up; close the work order when its cards are done
Billing	Estimates the customer approves online (optional items can be declined), then invoices from labour hours at the labour rate plus parts with the markup, paid online, recorded and pushed to the accounting system
Customer portal	The customer sees work in progress, aircraft status, maintenance due and documents through a private link

Demo
Coastal Patrol Agency (sample) · updated 10/27/2026, 2:12:06 PM Refresh Print

Overview Work in progress Aircraft status Maintenance due Documents & billing

Your aircraft

N350MQ *Airworthy*
Beechcraft King Air 350ER · S/N FL-9901

2,158.9 hours — 0 landings — 0 open work orders — 0 due soon

N351MQ *Airworthy*
Beechcraft King Air 350ER · S/N FL-9902

1,876.2 hours — 4 landings — 4 open work orders — 0 due soon

Work in progress

Work order 26-A0004 *Open* N351MQ

N351MQ ground test and functional check flights

0% complete - 0 of 4 task cards signed off - opened

► Task cards (4)

Work order 26-M0009 *Open* N351MQ

N351MQ quality inspection — RII, conformity and final inspection

0% complete - 0 of 3 task cards signed off - opened

► Task cards (3)

Work order 26-A0003 *In work* N351MQ

N351MQ avionics and mission-system installation — radar, EO/IR turret, consoles, SATCOM, mission power, ICS, cockpit control head

The customer's portal: their aircraft and the work in progress on each.

9 The records behind it all

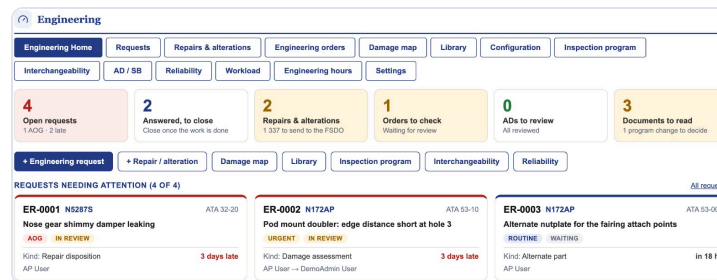
Record	What MRO Tracker keeps
Maintenance Due	Recurring items with limits by hours, calendar and cycles, sign-off and history; overdue items marked "blocks dispatch" stop releases and dispatch
AD / SB	ADs matched every day to each aircraft and its engines, propellers and APU, marked applies, not applicable or complied, with the service bulletins they reference; recurring ADs go to Maintenance Due
Life-limited parts	Each part's life against every limit (first to occur), installs and removals, approved extensions, back-to-birth record; a part at its limit blocks dispatch
MEL	Lists per aircraft type, deferrals with dual sign-off; an expired deferral blocks the release
Phase inspections	Progressive programs with each phase's checklist and completions
Discrepancy log	Every squawk with its corrective action, task card and work order
Logbook	Sealed electronic entries and logbook stickers

Quality and people

- **Audits and findings:** the audit programme with checklists and evidence; findings from audits, the FAA, customers, occurrences and suppliers, with root cause (including the Dirty Dozen), containment, corrective and preventive actions, and an effectiveness check.
- **Suppliers:** a scorecard from receiving inspection, on-time delivery and findings, with risk tiers and audit intervals.
- **Read and sign** for procedures and bulletins, with progress per person and a signed record.
- **Training and authorizations:** courses with recurrence for mechanics and inspectors, certificates and classifications, and the auditor packet PDF that puts training, authorizations, findings and rosters in one file for the inspector.

10 Who uses what

Role	Where they work	What MRO Tracker does for them
Director of maintenance	Maintenance overview, Records, Quality	The fleet's status, everything due, and the audit trail behind every sign-off
Maintenance control	New discrepancies, work orders, inspection packages	Squawks become cards in one click and close themselves when the card is approved
Supervisor / lead	Who's Working, Task Cards, hangar plan	Who is on what, what nobody is on, and the shift handover as a PDF
Mechanic	The task card	Clock, kit, tools, work items, engineering and sign-off on one screen
Inspector (QC / RII)	Pending QC, the card's sign-off	Every item to approve, with the independence rule and authorities checked for them
Engineer	Engineering Home, requests	Questions from the floor with photos, answers reused, and conditions that reach the floor by themselves
Stores	Kitting queue, Stores	What each card needs, AOG first, issued straight onto the work order
Quality manager	Quality, Read and sign	Audits, findings and their follow-up, and the auditor packet
Billing	Estimates, invoices	Hours and parts from the job, approved and paid online



Engineering Home: open requests with AOG and late ones first, answers to check, alterations in work and ADs to review.

Getting started

1. Add the aircraft with their engines and propellers, and import Maintenance Due and the AD set-up.
2. Set the QC reviewers, RII inspectors and approval admins, and the engineers and their authorisations.
3. Set the organization's authority (FAA, EASA, both or national) and its release statement.
4. Load stock and tools with calibration dates; save kit and work order templates for repeat jobs.
5. Run one squawk end to end: card, kit, sign-off, QC, release and logbook.

Companion briefs: *From first call to first mission* (the program side) and *Life of a flight operation* (the flight department side). © 2026 Leesburg Aviation LLC. All rights reserved.