



Life of a flight operation

Crew planning, dispatch, flight following, check-in and safety in MRO Tracker

For directors of operations, chief pilots, dispatchers and safety officers · MRO Tracker 2.2

A flight department runs on a loop: plan the crew, book the flight, check that the crew and the aircraft are legal, release it, follow it, check it in, and learn from whatever happened. This brief follows that loop through MRO Tracker, one screen at a time. Every step reads the records the step before it wrote, so a pilot whose medical has run out, an aircraft with an open grounding squawk or a flight above the company's risk limit is stopped before it leaves, not found in an audit afterwards.

The sample operator. A coastal patrol operator flies two Beechcraft King Air 350ER on maritime patrol sorties out of Norfolk (KORF) and runs a small training fleet of two Cessna 172s. Its pilot Daniel Hayes flies patrol box Alpha on Tuesday afternoon, comes back late, files a hazard report and checks in with a squawk. The next morning's sortie is released with a FRAT and a load manifest. **Every company, person, tail number and figure in this brief is fictional.** The screenshots are real MRO Tracker screens showing this sample data, all taken on 27 October 2026.

1 · Plan Roster, time off, rest and capacity	2 · Book Schedule, open flights, quotes	3 · Check Crew checks and duty limits	4 · Release FRAT, manifest, route brief	5 · Follow Out now, overdue alerts, tracking	6 · Check in Times, fuel, duty, squawks	7 · Maintain Squawks to the hangar, AOG	8 · Learn Hazard reports and the SMS
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When	What happens in the sample
Through October	The chief pilot builds the roster, approves time off and keeps an eye on rest and duty for the next two weeks. Crew records and recurrent training are kept current.
Tue 27 Oct, 2 PM	Daniel reports for a patrol sortie on N350MQ. His crew checks pass and the flight is dispatched.
Tue, 5 PM to 6 PM	The sortie runs long. MRO Tracker flags it overdue at 6 PM and alerts dispatch, operations control and the chief pilot.
Tue, 6:06 PM	Daniel checks in: times, fuel, duty, a radar altimeter squawk for maintenance and a bird-strike hazard for the safety officer.
Tue evening	The safety officer reviews the hazard and adds a dusk bird brief to every patrol release. Dispatch builds the release for Wednesday's 7 AM sortie: FRAT 28 points, 18 after mitigation; load manifest 295 lb under maximum takeoff weight.

1 The day at a glance

With the Operations workspace selected, Home opens on **Today**: the operation on one screen, refreshed every minute. The tiles count aircraft available and down, flights today and in the next 48 hours, pilots free now, releases waiting and open squawks. Quick buttons start a booking or open the dispatch board, the schedule, flight tracking, airport traffic or the AOG desk.

Operations overview

Search for an aircraft (tail # / S/N) or a pilot...

3Aircraft available
of 4 · none down

3Flights today
1 out now · 1 back

6Next 48 hours
1 in the next 12 h

7Pilots free now
8 on file · 1 flying now

0Releases waiting
All flights covered

2Open squawks
0 MEL deferrals

+ New flight / booking

Dispatch board

Aircraft

Pilots

Flight Tracking

Schedule

Airport Traffic

Declare AOG

AIRCRAFT NEEDING ATTENTION (2 OF 2)

N172AP

S/N 172S11842

6 items to look at

BOOKED TODAY

Ava Chen no medical on file — flying N172AP at 5:00 PM (blocks dispatch)
+5 more

Cessna 172S

N350MQ

S/N FL-9901

Out · Daniel Hayes · due 1:00 PM

FLYING · 2 SQUAWKS

Next flight: Thu 7:00 AM · Daniel Hayes

Beechcraft King Air 350ER

DISPATCH · NEXT 48 H (7)

Dispatch board

Out

N350MQ · Daniel Hayes

Part 91 · KORF — patrol box Alpha — KORF · FR-261028-001 · due 1:00 PM

FLYING

5:00 PM

N172AP · Ava Chen

Part 91

CREW CHECK BLOCKS

Wed

N5287S · Ava Chen

8:00 AM · Part 91

CREW CHECK BLOCKS

Wed

N172AP · Student User

9:00 AM · Part 91

CREW CHECK BLOCKS

Thu

N350MQ · Daniel Hayes

7:00 AM · Part 91 · KORF — patrol box Bravo — KORF

READY

Thu

N5287S · Ava Chen

8:00 AM · Part 91

CREW CHECK BLOCKS

Thu

N172AP · Liam O'Connor

11:00 AM · Part 91

READY

FLEET BY STATUS (4)

All aircraft

N350MQ

Beechcraft King Air 350ER

2 squawks · Daniel Hayes, due 1:00 PM

FLYING

N172AP

Cessna 172S

next Wed 9:00 AM

BOOKED TODAY

N5287S

Cessna 172S Skyhawk

next Wed 8:00 AM

BOOKED TODAY

N351MQ

Beechcraft King Air 350ER

AVAILABLE

Today, at the end of Tuesday afternoon. N350MQ is out with Daniel Hayes and carries two squawks; dispatch for the next 48 hours shows which flights are ready and which a crew check blocks.

Below the tiles, **Aircraft needing attention** puts the worst aircraft first, and each line in **Dispatch, next 48 h** carries its state: ready, flying, or blocked by a crew check. **Needs attention** lists what will stop a flight soon, such as a pilot with no medical on file, a required course not completed or an inspection coming due, each with how soon it matters. The AOG, out now and back today boxes complete the picture.

NEEDS ATTENTION (11)

N172AP ELT inspection: overdue (blocks dispatch)

NOW

Ava Chen no medical on file — flying N172AP at 5:00 PM (blocks dispatch)

NOW

Marcus Lee no medical on file — flying N172AP at 5:00 PM (blocks dispatch)

NOW

Ava Chen Hazardous Materials Awareness not completed — flying N172AP at 5:00 PM

SOON

Ava Chen Safety Management System (SMS) not completed — flying N172AP at 5:00 PM

SOON

Marcus Lee Hazardous Materials Awareness not completed — flying N172AP at 5:00 PM

SOON

Marcus Lee Safety Management System (SMS) not completed — flying N172AP at 5:00 PM

SOON

N172AP Annual inspection: due soon, 4 days left

SOON

N172AP 100-hour inspection: due soon, 6.4 h left

SOON

N172AP Seat rail and seat lock inspection (recurring AD): due soon, 6.4 h · 284 days left

SOON

N172AP Oil and filter change: due soon, 3.8 h · 76 days left

SOON

Needs attention: problems that block dispatch now (red) and ones coming up (amber), people and aircraft together.

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2 Plan the crew

Crew Planning is where the chief pilot or scheduler builds the month. The roster shows every pilot by day: on, reserve, standby, training, off, vacation or unavailable. A flight booked on a day the person isn't available gets a red outline, and the count of such flights sits at the top. The bottom row counts pilots free to fly each day. A range fills several days at once, for example a 7-on, 7-off line.

October 2026

2 FLIGHTS ON A DAY OFF

Set a range... Time off...

On Reserve Standby Training Off Vacation Unavailable + flight red outline: flight on a day the person isn't available

Pilot: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Ben Foster

Chloe Davis

Daniel Hayes B350, BE20

David Cho

Elena Novak

Karen Lopez

Mike Ortiz

Rachel Adams

Tom Harris

Free to fly 6 6 7 7 5 2 5 5 6 6 5 4 2 5 6 5 5 7 4 1 3 5 6 5 7 3 1 5 5 5 4

Free to fly: on, reserve or standby that day and not already on a flight. Click a day to set it; Set a range fills several days (for example a 7 on / 7 off line).

The October roster. Two flights fall on a day the pilot is off, and both are outlined in red.

My schedule Roster Requests Rest & duty Capacity Training due Settings

Time off to decide (2)

Karen Lopez: Day off - Fri, Nov 6 (1 d) - Checkride for my CFI.

Decline Approve

Mike Ortiz: Vacation - Fri, Nov 20 - Tue, Nov 24 (5 d) - Family trip, booked in August.

Decline Approve

Swaps (0)

No swaps waiting.

Requests: time off and swaps waiting for a decision. An approved request goes onto the roster.

Rest and duty, next 14 days

Every planned flight is checked against 135.267 with everything planned before and after it (positioning counts as duty). The same check dispatch runs. Red: over a limit. Amber: close.

Pilot: 27 Tue 28 Wed 29 Thu 30 Fri 31 Sat 1 Sun 2 Mon 3 Tue 4 Wed 5 Thu 6 Fri 7 Sat 8 Sun 9 Mon 10 Tue

Ben Foster

Chloe Davis

Daniel Hayes

David Cho

Elena Novak

Karen Lopez

Mike Ortiz

Rachel Adams

Tom Harris

Nothing over a limit - 1 close

Open the booking

Rest and duty for the next 14 days. Every planned flight is checked with everything before and after it; here, one flight comes close to the company's 12-hour limit.

- **My schedule.** Each pilot sees their own trips, accepts or declines them, offers a swap, asks for time off and sets their home base.
- **Rest and duty** looks ahead 7 to 30 days with the same check dispatch runs, so a problem next week shows now. Positioning counts as duty.
- **Capacity** compares pilots needed on the busiest day of each week (booked trips, plus charter quotes sent or accepted) with pilots available by aircraft type, so you know when you'll need a contract pilot.
- **Open flights.** Dispatch can book a flight with the pilot seat open and notify the group's pilots. Pilots ask to fly it, dispatch sees each one's crew checks and approves one, and everyone who asked is told the outcome. A flight with an open PIC seat can't be dispatched.
- **Suggest crew** on the booking form ranks who can fly it: legal with the trips before and after, qualified, on the roster that day, already at or based at the departure airport, and with the fewest recent hours. Saving asks the crew to accept the trip.
- **Trip logistics** per booking: positioning, hotels and ground transport, for one crew member or the whole crew.
- **Daily email.** Each pilot can get their own flights for the next day by email, and dispatchers can get every flight.

3 Book the flight

Flights are booked on the **Schedule**, a week calendar of every aircraft, or from the Today screen. Anyone can book for themselves. Dispatchers, operations control and admins can book for anyone and are the only ones who dispatch or complete a booking. A booking holds the aircraft, the pilot in command, a second pilot or instructor, the operating rule, the route and notes.

Tuesday's patrol sortie. Crew checks pass for Daniel Hayes, with his duty for the day against the company limit. Part 91 needs no release, though one can still be created.

Where bookings come from

- **Direct booking** on the schedule or the Today screen.
- **Charter quotes** (Billing → Quotes). Rates come from the aircraft. The database works out flight charges, the daily minimum, overnights, landings, fees, the 7.5% federal excise tax and segment fees. Once the quote is accepted, Book turns every leg into a booking, and the invoice is later built from the actual checked-in times.
- **A flight release.** Creating a release draft books the aircraft for the ETD to ETA, or links the booking already there.
- **Open flights** that a pilot asked for and dispatch approved.

Planning aids

- **Trip planner:** route by airports, fixes, navaids and airways, climb, cruise and descent profiles, winds, fuel with reserves, a leg-by-leg NavLog, a map and a vertical profile over terrain. "Apply to release" copies the route, ETA and fuel onto a draft.
- **Airports:** frequencies, runways with wind components, METAR, TAF, winds aloft, procedures and charts, NOTAMs and nearby TFRs.

Both are planning aids, not an official briefing.

4 Your rules, enforced at every step

A director of operations sets the company's dispatch rules once, under Flight Ops → Settings. Each check can **block** (it stops booking, dispatch or release unless a dispatcher or admin overrides it with a reason, which is recorded), **warn** (it asks the person to confirm) or be off. A rule can apply to all flights or only to flights under a rule other than Part 91.

Dispatch rules: medical current through the flight, checks current, required training, flight and duty time, crew member active. Flight school operators also get checks for student solo endorsements and weather limits, renter checkouts and currency, flight reviews and account balance.

Flight and duty time limits: the rule set the organization follows (here 135.267), report and release times, and stricter company limits on top. They're checked at booking, dispatch and release, and again at check-in with the actual times.

Setting	What it controls
Operating authorities	Each rule the organization flies under (91, 91K, 135, 121), with certificate number, OpSpec reference and e-signature authorization. A release can only use a rule set up here.
Flight roles	Who is a pilot, dispatcher, ops control, director of operations, chief pilot, FRAT approver, load agent, safety officer or training staff. Most permissions follow the role.
Aircraft profiles	Empty weight and maximum takeoff weight per aircraft, prefilled on the load manifest.
FRAT templates	The risk questions, points and limits (section 5).
Takeoff and landing performance	Whether the pilot must sign that takeoff and accelerate-stop distances fit the runway before release, and for which operating rules.
Missions and customers	Mission segments and customers for each flight, used in the flight activity review (Reports → Flight Ops).

5 The release

For Wednesday's 7 AM sortie, dispatch starts a release from the booking. The draft carries a checklist of everything still blocking. It updates as each section is completed, and **Release Flight** only works once nothing is left.

[← Back to Flights Board](#)

FR-261028-001
DRAFT

[Print Flight Package](#)
[Cancel Release](#)

On the Schedule: Wed, Oct 28, 7:00 AM–1:00 PM RESERVED

[Open Booking](#)

NOT READY TO RELEASE

- readiness check missing for Daniel Hayes
- aircraft status check not passed
- FRAT not completed

Release FR-261028-001 as a draft: the readiness check for the pilot, the aircraft status check and the FRAT are still to do.

Sections of a release

Section	What's in it
Header and aircraft	Operating rule, aircraft, flight number and date, IFR or VFR, operational control entity (91K), ETOPS
Route and airports	Departure, destination, route, ETD and ETA, alternates and other airports by role
Fuel and weather	Minimum fuel, taxi, trip, reserve, alternate and contingency; weather and NOTAMs reviewed; dangerous goods (adds a NOTOC list); MEL and deferred items; performance reference
Crew and readiness	The crew by position, with each person's medical, checks, route qualifications and cumulative time prefilled from their records, logbook currency, and fitness for duty
Aircraft status	Open discrepancies, grounding items and MEL deferrals pulled from maintenance, the last return to service, and the checks before flight
FRAT, load manifest, performance	See below
Sign and release	Dispatcher, PIC and operational control signatures where the rule requires them
Route brief, eAPIS, ForeFlight	Live airport and weather brief, the CBP eAPIS manifest for international flights, and .fpl / .gpx files for ForeFlight

5 The release FRAT

Every released flight needs a finalized flight risk assessment. The crew answers the template's questions, the database scores it, and each answer that carries points can be mitigated with a note and lower points after mitigation. Above the template's approval limit, a FRAT approver has to approve it before the flight can be released; those wait under **Pending FRATs**. A finalized FRAT can't be edited.

Flight Risk Assessment (FRAT)

PAVE Personal Minimums (Part 91) v1 Score 28 → 18 after mitigation **LOW RISK** **DRAFT** All questions answered

Low ≤ 25 · Medium ≤ 45 · High ≤ 70 · Extreme above · approval needed above 45

AIRCRAFT

Aircraft - Inoperative equipment or open squawks

None 0 **Minor, legal for this flight 5** Affects IFR, night or icing capability 15

Mitigation (optional) Pts after

Aircraft - fuel reserve at destination

More than 60 minutes 0 45 - 60 minutes 5 Less than 45 minutes 15

Aircraft - weight and balance

Well within limits 0 Within 5% of a limit 5

PILOT / CREW

Pilot - flight hours in the last 90 days

Fewer than 15 10 15 - 50 5 **More than 50 0**

Pilot - time in this make and model

Fewer than 25 hours 10 25 - 100 hours 5 **More than 100 hours 0**

Pilot - instrument currency (if IFR or the weather may need it)

Not current 15 Current, few approaches lately 5 **Current and proficient, or VFR day only 0**

Pilot - IMSAFE (illness, medication, stress, alcohol, fatigue, eating)

Something is not right 20 **All good 0**

Pilot - sleep last night

Less than 6 hours 10 **6 - 8 hours 3** More than 8 hours 0

Mitigation (optional) Pts after

WEATHER

Weather - destination

VFR 0 **MVFR 5** IFR 10 LIFR 20

Mitigation (optional) Pts after

Weather - icing or thunderstorms on the route

None forecast 0 **Possible or light 10** Moderate or embedded 25

Light icing possible above 8,000 ft. The patrol box is flown at 2,500 to 4,500 ft; anti-ice checked; exit to KPHF if needed. 3

Wednesday's FRAT on the PAVE template: 28 points before mitigation, 18 after. Light icing above 8,000 ft is mitigated by the patrol altitude and an exit plan to KPHF.

Four standard templates come with MRO Tracker and can be added in one click: PAVE personal minimums (Part 91), Part 135 charter (two-crew turbine), flight training and rental, and maintenance test and ferry flights. Each is a starting point for your own points and limits. To change a template in use, you add a new version; existing FRATs keep the version they were scored against.

Items (43, 16 questions)

pilot: Pilot: flight hours in the last 90 days pick one

Fewer than 15 10 pts ×

15 - 50 5 pts ×

More than 50 0 pts ×

pilot: Pilot: time in this make and model pick one

Fewer than 25 hours 10 pts ×

25 - 100 hours 5 pts ×

More than 100 hours 0 pts ×

pilot: Pilot: instrument currency (if IFR or the weather may need it) pick one

Not current 15 pts ×

Current, few approaches lately 5 pts ×

Current and proficient, or VFR day only 0 pts ×

pilot: Pilot: IMSAFE (illness, medication, stress, alcohol, fatigue, eating) pick one

Something is not right 20 pts ×

All good 0 pts ×

pilot: Pilot: sleep last night pick one

Less than 6 hours 10 pts ×

6 - 8 hours 3 pts ×

More than 8 hours 0 pts ×

The PAVE template: 16 questions with points per answer, grouped by pilot, aircraft, environment and external pressures.

5 The release **WEIGHT & BALANCE**

The load manifest takes the basic operating weight, fuel and oil, cargo, crew and passengers by seat, and checks takeoff weight against the limit and the loaded CG against the envelope. When the aircraft has a weight and balance document, stations, tanks and the CG envelope are worked out from it; otherwise the limits are entered by hand. The database refuses to finalize a manifest that is overweight or out of CG limits. After it's finalized, any change is recorded as a last-minute change, and the preparer and the PIC sign.

Weight & Balance / Load Manifest

Optional for this flight. No flight profile is set up for this aircraft (Settings → Aircraft Profiles), so empty weight and max takeoff weight aren't prefilled.

Basic operating wt (lb)	Fuel & oil (lb)	Cargo & baggage (lb)	Max allowable TOW (lb)	Limited by	Planned landing wt (lb)	Weight unit	Passenger weights
10850	4700	120	16500	Max structural	13250	lb	Actual

This aircraft has no W&B document, so the loading and CG envelope can't be worked out here. Add it under Aircraft → Weight & Balance, or enter the CG and limits by hand below.

CENTER OF GRAVITY

CG unit	Forward limit	Aft limit	Loaded CG
in aft of datum	185.0	196.4	190.6

350ER weight and balance, mission configuration 2 consoles (rev. Oct 2026)

CREW

Daniel Hayes · PIC · 190

PASSENGERS

Rosa Alvarez (sensor operator) · 165 · Console

Owen Fisher (tactical coordinator) · 180 · Console

+ Passenger

☐ Passenger names kept elsewhere

Weight & Balance Bar Chart:

- Crew 190 lb
- Passengers 2 · 345 lb
- Zero fuel 11,505 lb
- Takeoff 16,205 lb
- Max 16,500 lb
- Margin 295 lb
- Fwd 185
- Loaded 190.6
- Aft 196.4

Buttons: Save Manifest, Finalize Manifest, Discard

Wednesday's manifest: the pilot and two mission crew at their consoles. Takeoff weight is 16,205 lb against 16,500 lb, and the loaded CG of 190.6 in sits inside the 185.0 to 196.4 in envelope.

Route brief

The route brief on the release shows both airports with runways, frequencies and the live METAR, which wind each runway end gets, and the ATC frequencies along the route. METARs refresh every 5 minutes while it's open, and it prints as a PDF for the flight package.

Refresh METARs ☒ Keep updating every 5 min. METARs as of 05:55 PM

DEPARTURE
KORF — Norfolk Intl
Norfolk, VA · Elevation 26 ft · Towered (24) · Fuel 100LLA

RUNWAYS

Runway	Size	Ends
05/23	9,001 × 150 ASPH-CONC · lights HIGH	05: 047° RP ILS/DME 23: 227° ILS/DME

FREQUENCIES

Frequency	Value
ATIS	127.15
Clearance	118.5
Ground	121.9
Tower 24	120.8
Norfolk Approach 010-080, 180-310	118.9
Norfolk Departure	125.2

WEATHER 21:51Z
METAR KORF 272151Z 06006KT 10SM CLR 17/14 A3030 RPK A02 SLP259 T01720139
VFR 060° true at 6 kt · 30.30 inHg

Runway	Head / tail	Crosswind
05 best	6 kt head	2 kt right
23	6 kt tail	2 kt left

DESTINATION
KORF — Norfolk Intl
Norfolk, VA · Elevation 26 ft · Towered (24) · Fuel 100LLA

RUNWAYS

Runway	Size	Ends
05/23	9,001 × 150 ASPH-CONC · lights HIGH	05: 047° RP ILS/DME 23: 227° ILS/DME

FREQUENCIES

Frequency	Value
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WEATHER 21:51Z
METAR KORF 272151Z 06006KT 10SM CLR 17/14 A3030 RPK A02 SLP259 T01720139
VFR 060° true at 6 kt · 30.30 inHg

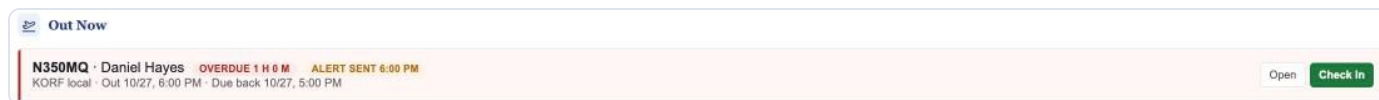
Runway	Head / tail	Crosswind
05 best	6 kt head	2 kt right
23	6 kt tail	2 kt left

The KORF brief at release time, with the head- and tailwind for each runway end.

Release and amend. Once released, the header, crew, airports and readiness checks become read-only and the booking is dispatched. Changes go through an amendment, which needs approval. **Print Flight Package** picks the sections and copies for the paper package: the release, takeoff performance, route brief, weight and balance with the CG envelope drawn, load manifest, FRAT worksheet, and a crew sheet with each person's medical, checks, duty status and a fitness-for-duty signature line.

6 In the air

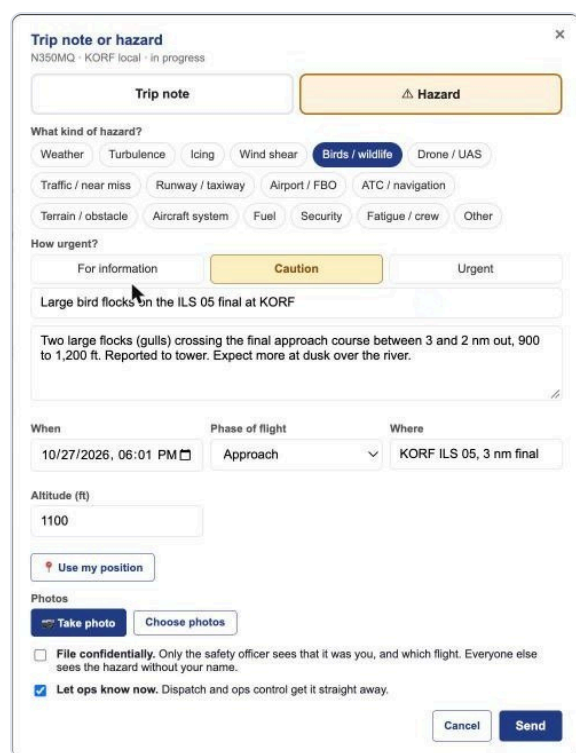
Flight Following lists every flight that is out, with its release, when it went out and when it's due back. Every 5 minutes MRO Tracker checks flights still out past their booked end plus a grace period. For each one it alerts the crew, the dispatcher, operations control, the director of operations, the chief pilot and the admins by web push and email, at most twice per flight, with the aircraft's last known position from flight tracking.



The screenshot shows a flight status bar for N350MQ, piloted by Daniel Hayes. It indicates the flight is 'OVERDUE 1 H 0 M' and an 'ALERT SENT 6:00 PM'. The flight is scheduled to depart KORF local on 10/27 at 6:00 PM and return at 5:00 PM. There are 'Open' and 'Check In' buttons on the right.

Tuesday's sortie, due back at 5 PM, shown overdue at 6 PM after the alert went out. Check In is one click away.

- **Flight Tracking** shows recent flights and the live position for a tail number from the tracking provider set up on the server (Flightradar24 by default, FlightAware as the alternative). Flight Following keeps its own automatic record of dispatched flights.
- **Flight recording.** On a phone mounted in the cockpit, the MRO Tracker web app records position, altitude, groundspeed and g-load once a second. The flight can be replayed with exceedances marked, and the recorded times go to maintenance for approval.
- **Hazard reports from the flight.** The crew can report a hazard during or after the flight, with what kind, how urgent, phase of flight, where, GPS position and altitude, and photos. A report can be filed confidentially, so only the safety officer sees who filed it, and "Let ops know now" sends it straight to dispatch and operations control. Reports are saved on the device first and sent when there's a connection.



The screenshot shows the 'Trip note or hazard' form. The 'Hazard' tab is selected. Under 'What kind of hazard?', 'Birds / wildlife' is chosen. Under 'How urgent?', 'Caution' is selected. The report text describes large bird flocks on the ILS 05 final at KORF. The 'When' field shows 10/27/2026, 06:01 PM, 'Phase of flight' is 'Approach', and 'Where' is 'KORF ILS 05, 3 nm final'. The altitude is 1100 ft. There are options to 'Take photo' or 'Choose photos'. At the bottom, there are checkboxes for 'File confidentially' (unchecked) and 'Let ops know now' (checked), followed by 'Cancel' and 'Send' buttons.

Daniel's hazard report: two flocks of gulls crossing the ILS 05 final at 900 to 1,200 ft.

When something goes wrong

MRO Tracker doesn't replace ATC or your emergency procedures. Emergencies are declared on the radio. What it does is make sure the people on the ground know, and that the follow-up happens:

- **Overdue aircraft** raise the alert above without anyone watching the board.
- **Urgent hazards** with "Let ops know now" reach dispatch at once.
- **A grounding squawk** at check-in blocks the next dispatch and release until maintenance clears it.
- **Declare AOG** opens an AOG event, creates the grounding item, and notifies the group's AOG list at every step until the aircraft is returned to service in maintenance.
- **The SMS** holds the emergency response plan for everyone to read and sign, and investigations of accidents, incidents and occurrences (section 9).
- **The eAPIS manifest** carries the operator's 24-hour emergency contact on international flights.

7 Check-in

After landing, the pilot checks in from Flight Following, My Flights or the booking. Block times, Hobbs and tach are prefilled where MRO Tracker knows them, and the form works out block and Hobbs time as you type. Duty on and off is logged for each crew member and checked against the limits straight away.

Check In

N350MQ · booked Tue, Oct 27, 3:00 PM–5:00 PM · PIC Daniel Hayes

10/27/2026, 03:05 PM 10/27/2026, 05:52 PM

Hobbs out: 2158.9 Hobbs in: 2161.6

Tach out: Tach in:

Flight time (hrs): 2.5 Landings / cycles: 2

Block time 2.6 h · Hobbs 2.7 h · Aircraft Hobbs on record 2158.9

ROUTE

From: KORF To: KORF

CREW DUTY

☒ Log duty time for this flight

Daniel Hayes PIC

Duty on: 10/27/2026, 02:05 PM Duty off: 10/27/2026, 06:22 PM

Duty 4.3 h · no earlier duty on file · flight time 24 h 2.5 h · 7 d 2.5 h

✓ Within Company limits

Cancel Complete Check-In

Times, Hobbs, landings, route and duty. Daniel's 4.3-hour duty day is within the company limits.

Check In

N350MQ · booked Tue, Oct 27, 3:00 PM–5:00 PM · PIC Daniel Hayes

2350 lb 1

FLIGHT SCHOOL

Ground instruction (h): Fuel paid by the pilot (\$):

The flight is invoiced to the pilot when you check in.

Fuel Order fuel

TRIP NOTES AND HAZARDS

Anything ops or the next crew should know, and hazards for the safety officer. Hazards to the aircraft itself go in Squawks below as well.

⚠ HZ-2026-0001 Birds / wildlife CAUTION

Two large flocks (gulls) crossing the final approach course between 3 and 2 nm out, 900 to 1,200 ft. Reported to tower. Expect more at dusk over the river.

+ Trip note Report a hazard

SQUAWKS

Each one goes to the aircraft's discrepancy log for maintenance. A grounding squawk blocks the next dispatch until it's cleared.

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

+ Add squawk

Grounding

Cancel Complete Check-In

Fuel added, the hazard filed in flight, and the squawk for maintenance. The Grounding box decides whether it blocks the next flight.

What one check-in does

Record	What changes
Aircraft	Hobbs, tach and airframe hours move forward, so inspections due on hours count down with them
Flight log	The flight is added to the aircraft's history, and to the flight activity review by mission and customer
Discrepancy log	Each squawk goes to the aircraft's discrepancy log, Maintenance Control is alerted, and a grounding squawk blocks the next dispatch
Duty	Duty periods are written for the crew, so the next booking's rest and duty check uses the actual times
Pilot logbook	The flight waits in the pilot's logbook for them to confirm, with approaches, holds and landings; confirmed entries drive 61.57 currency
Release and booking	The release is closed and the booking completed; charter and rental flights are invoiced from the actual times

The fuel section can also order fuel, and flight school check-ins add ground instruction and fuel paid by the pilot.

8 Squawks to maintenance

Tuesday's radar altimeter squawk lands in N350MQ's discrepancy log and on the **New discrepancies** list on Home, in both the Operations and the Maintenance workspace, where someone marks it reviewed. From there Maintenance Control turns it into a task card on a work order; approving the card closes the squawk. The lifecycle brief, *From first call to first mission*, follows that path on the hangar floor.

- **Grounding items** block dispatch and release until corrective action is signed.
- **MEL deferrals** come from the aircraft type's active MEL list with dual sign-off, and an expired deferral blocks the release.
- **The AOG desk** tracks status, ETR, the parts being sourced with PO, tracking and 8130-3, and the affected bookings. The database won't close an AOG event while its grounding item is open, so the return to service is always signed off in maintenance.
- **Aircraft status** on the release reads all of this, so dispatch sees what maintenance sees.

One record, both sides. Pilots and dispatch never re-type a squawk for maintenance, and maintenance never phones operations to say an aircraft is down. The grounding item is the message.

9 Crew records and training

Every crew check reads the pilot's qualification file under **Crew Records**. The header shows the medical, checks and flight time at a glance. **What's due** lists every check and course with its next due date, green when current, amber within 30 days and red when expired or failed.

[Back to Crew](#)

Daniel Hayes
 pilot@mrotracker.com

Medical thru 2027-04-30 61.58 PIC proficiency · due 2027-05-31 Other · due 2027-10-31 7 d 2.5 h 28 d 2.5 h 365 d 3 h

[Overview](#) [Profile](#) [Certificates & medical](#) [Checks](#) [Training](#) [Experience](#) [Operating exp.](#) [Route / airport quals](#) [Check airman](#) [Employment actions](#) [Duty](#)

What's due

Training: Safety Management System (SMS)	2026-11-20 · due soon
Training: Crew Resource Management (CRM)	2027-03-18
Training: Emergency Equipment & Evacuation Drills	2027-03-19
Training: King Air 350 Recurrent Ground	2027-05-08
Training: King Air 350 Proficiency Check	2027-05-12
61.58 PIC proficiency	2027-05-31
King Air 350 recurrent (simulator) (recurrent)	2027-05-31
Other	2027-10-31
Training: Hazardous Materials Awareness	2027-11-05

Green = current, amber = due within 30 days, red = expired or failed. Readiness checks on a release are prefilled from these records.

Daniel Hayes: first-class medical through April 2027, the 61.58 proficiency check and a mission line check current, and SMS training due within 30 days.

Tab	What it holds
Profile	Current duties (for example PIC B350), hire and separation dates, drug and alcohol program, PRD reporting, address
Certificates and medical	Pilot certificates and medicals with expiry
Checks	135.293(a) and (b), 135.297 IPC, 135.299 line checks, 91.1065, 61.58, 121 checks, with result, next due, examiner and the 8410-3 scan
Training	Initial, recurrent, transition, upgrade, differences and requalification, with the training record
Experience and operating experience	Total, PIC, SIC, multiengine, instrument, night and cross-country time, time in type, and OE hours and cycles
Route and airport qualifications	Routes and special airports with qualified and expiry dates
Check airman, employment, duty	Check airman authorizations, employment actions (director of operations and chief pilot only), and the duty history

9 Crew records and training TRAINING

The **Training** module covers pilots, mechanics and inspectors alike. Courses carry a recurrence, a warning window, who they're required for and the regulation they meet. Records hold pass or fail, the instructor, hours, notes and a file, and expiry is worked out from the course interval. Every pass also goes into the person's crew file, so an expired course blocks or warns at dispatch automatically.

Training

Dashboard | My Training | Record Training | Courses | History

63% COMPLIANCE | 1 OVERDUE | 24 NOT DONE | 2 DUE SOON | 11 PEOPLE TRACKED | 7 ACTIVE COURSES

Search people... | All courses | Pilots | ☐ Only people with something due | Export CSV

Person	Crew Resource Management (CRM) 12 mo	Emergency Equipment & Evacuation Drills 12 mo	Hazardous Materials Awareness 24 mo	Human Factors in Maintenance 24 mo	King Air 350 Proficiency Check 12 mo	King Air 350 Recurrent Ground 12 mo	Safety Management System (SMS) 12 mo
Ben Foster pilot, student	Current 2027-09-01	Current 2027-09-02	Not done	—	Not done	Not done	Not done
Chloe Davis pilot, student	Current 2027-09-01	Current 2027-09-02	Not done	—	Not done	Not done	Not done
Daniel Hayes pilot	Current 2027-03-18	Current 2027-03-19	Current 2027-11-05	—	Current 2027-05-12	Current 2027-05-08	Due soon 2026-11-20
David Cho pilot	Current 2027-08-04	Current 2027-08-05	Current 2028-08-05	—	Not done	Not done	Current 2027-08-06
Elena Novak pilot	Current 2027-02-10	Current 2027-02-11	Current 2027-06-03	—	Current 2027-04-20	Current 2027-04-16	Current 2027-01-15
Karen Lopez pilot	Current 2027-07-14	Current 2027-07-15	Due soon 2026-11-20	—	Not done	Not done	Current 2027-07-16
Mike Ortiz pilot	Current 2027-03-18	Current 2027-03-19	Current 2027-11-05	—	Current 2027-06-09	Current 2027-06-05	Current 2026-12-02
Rachel Adams pilot	Current 2027-05-06	Current 2027-05-07	Current 2028-05-08	—	Not done	Not done	Current 2027-05-08
Tom Harris pilot	Overdue 2026-10-02	Current 2027-01-21	Current 2027-09-14	—	Not done	Not done	Current 2027-02-03

Tap a name to see that person's training, or a cell to record that training for them. Dates are when it expires (or is due).

The training dashboard for pilots: compliance, overdue and due soon, by person and course. Click a cell to record training.

- **Assignments** require a course of one person, with its own due date, on top of the role-based rules.
- **My Training** shows everyone else their own records and what is coming due; courses and records are kept by admins and the training, director of operations, chief pilot and director of maintenance roles.
- **Training due** under Crew Planning lists checks and courses coming due, and books them on the roster as training (sim slot, location, check airman) before they lapse.
- **The crew sheet** in the printed flight package lists each crew member's training due.

10 Safety: from one report to the system

Trip Reports is the safety officer's queue: hazards to review, trip notes for the ops desk to acknowledge, and each person's own reports. The safety officer sets likelihood and severity (MRO Tracker shows the risk), assigns someone, records what was found and done, and writes feedback that the reporter gets when the report is closed. From the same screen a hazard can go into the SMS risk register or become a Quality finding.

1

New hazards

0

Under review

0

Urgent, open

0

High risk, open

0

Closed in 30 days

Hazards (1 open)

Trip notes (0 not seen)

Mine (0)

Open

All types

Search notes, places, aircraft...

When	Hazard	Report	Where	Aircraft	By	Status
Oct 27, 2026, 5:41 PM HZ-2026-0001	Birds / wildlife CAUTION	Large bird flocks on the ILS 05 final at KORF Two large flocks (gulls) crossing the final approach course between 3 and 2 nm out, 900 to 1,200 ft. Reported to tower. Expect more at dusk over the river.	KORF ILS 05, 3 nm final Approach - 1,100 ft	N350MQ	Daniel Hayes	NEW

The last 12 months. You see every report as the safety officer. Safety officers are set in Flight Ops → Settings → Flight Roles.

Tuesday's bird hazard in the queue, with its number, category, urgency, place and aircraft.

Hazard HZ-2026-0001

CAUTION

NEW

PDF

Large bird flocks on the ILS 05 final at KORF

Two large flocks (gulls) crossing the final approach course between 3 and 2 nm out, 900 to 1,200 ft. Reported to tower. Expect more at dusk over the river.

Hazard

Birds / wildlife

When

Oct 27, 2026, 5:41 PM · Approach

Where

KORF ILS 05, 3 nm final · 1,100 ft

Aircraft

N350MQ Beechcraft King Air 350ER

Flight

Oct 27, 2026, 3:00 PM · KORF local [Booking](#)

Filed by

Daniel Hayes

Filed

Oct 27, 2026, 6:01 PM

Ops

Asked for ops to see it straight away

Safety review

Status

Under review

Likelihood

3 Possible

Severity

3 Moderate

Risk

MEDIUM 9

Who's on it

email

Review notes (safety only)

Third gull report on the KORF ILS 05 final since September, all at dusk. Seasonal, linked to the landfill east of the field.

Action taken

Bird activity added to the crew brief for KORF arrivals after 1600 local. Airport wildlife coordinator informed; patrol returns planned before dusk where the mission allows.

Feedback to the reporter

Thanks, Daniel. Your report matched two earlier ones, so we have added a KORF dusk bird brief to every patrol release and passed it to the airport.

Save

Close and tell the reporter

Add to risk register

Raise a Quality finding

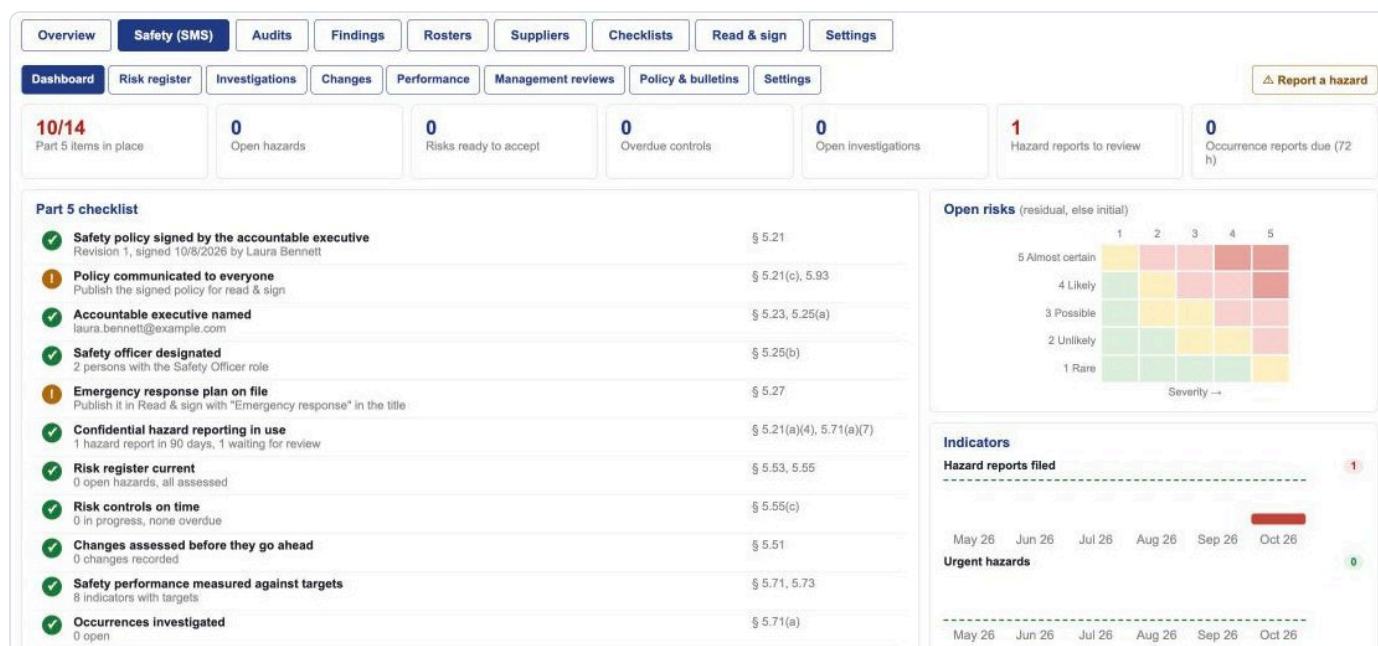
Close

The safety review: possible likelihood and moderate severity give a medium risk of 9. A dusk bird brief is added to patrol releases, and Daniel is thanked for the report.

MRO Tracker · Life of a flight operation · © 2026 Leesburg Aviation LLC · Page 14 of 17

10 Safety PART 5 SMS

The **Safety (SMS)** section under Quality is built around 14 CFR Part 5. Its dashboard is a checklist of the Part 5 elements, each with its section reference and what's still missing, next to the open risks on a 5 × 5 matrix and the safety performance indicators.



The sample's SMS dashboard: 10 of 14 Part 5 items in place. The policy still has to be communicated to everyone, and an emergency response plan has to be published in Read & sign.

Part	What it does
Risk register	Hazards with initial and residual risk, controls with owners and due dates, and risk acceptance
Investigations	Accidents, incidents and occurrences, with root cause, contributing factors and the hazards found
Changes	Management of change: new aircraft, routes, procedures or people assessed before they go ahead
Performance	Safety performance indicators with targets, fed by hazard reports and investigations
Management reviews	The accountable executive's reviews, with decisions and actions
Policy and bulletins	The safety policy, the emergency response plan and safety bulletins, each read and signed by everyone it's for

For EASA operators, the SMS also covers mandatory occurrence reporting under EU 376/2014, with its 72-hour deadline on the dashboard. For audits, Quality prints an **auditor packet** (training, authorizations, findings and rosters in one PDF) and a **Safety Review Board** pack.

11 The pilot's own tools

Pilots can make **My Flights** their home screen. It brings together what a pilot needs before and after a trip, from the same records dispatch uses:

On My Flights	What it gives the pilot
My status	Medical, checks, required training, rest and duty, and flight time over 24 hours, 7 days and 28 days
Out now	The flight they're on, with a big Check In button and Report a hazard
Next 14 days	Each flight with its release, FRAT and load manifest state and their own crew checks; accept or decline trips
Open flights	Flights without a pilot that they can ask to fly
Logbook	Flights from MRO Tracker to confirm, ForeFlight imports, and 61.57 currency for passengers, night and IFR
Trip planner, airports, my routes	Planning, saved routes and airports, and a weather email at the times they choose
Expenses	Trip expenses with a receipt photo, submitted for approval; approved ones export to Expensify, SAP Concur or Brex, and billable ones go on the charter invoice
Contract flying	For a pilot who flies for several owners: clients and aircraft, trips with day, travel and hourly rates and per diem, receipts, and invoices emailed with the receipts attached

Flight schools get their own edition on the same records: students, lessons graded and signed, AC 61-65 endorsements, aircraft checkouts, accounts and block-time packages, with rental and instruction invoiced at check-in.

12 Who uses what

Role	Where they work	What MRO Tracker does for them
Director of operations	Settings, Today, flight activity review, crew records	Sets the rules once; sees the whole operation and every override
Chief pilot	Crew Planning, Crew Records, Training	Roster, time off and swaps, checks and training due, look-ahead rest and duty
Dispatcher / ops control	Schedule, Flights Board, releases, Flight Following	Books and releases with every check done for them; overdue alerts without watching the board
FRAT approver	Pending FRATs	Approves the flights above the company's risk limit
Pilot	My Flights, check-in, logbook	Own status and trips, check-in in a minute, squawks and hazards in the same form
Load agent	Load manifest	Weight and CG checked as it's built; last-minute changes recorded
Safety officer	Trip Reports, Quality → Safety (SMS)	Every hazard in one queue, risk-scored, fed into the register and indicators
Maintenance Control	Discrepancy log, task cards, AOG desk	Squawks arrive from check-in; grounding and MEL status flows back to dispatch
Training staff	Training, Crew Records	Courses, records and expiry; passes reach the crew checks automatically

Records you can show an inspector

- Releases with the FRAT, manifest, crew readiness and aircraft status as they were when signed, plus every amendment and last-minute change.
- Every crew-check override, with who made it and why.
- Duty periods from check-ins, checked against the rule set and the company limits.
- Crew qualification files with checks, scans and training records.
- Hazard reports with the safety review, actions and feedback, and the SMS checklist against Part 5.

Getting started

1. Add your operating authorities, flight roles and aircraft profiles.
2. Set the dispatch rules and the flight and duty limits you fly under.
3. Add the standard FRAT templates and adjust the points and limits.
4. Enter each pilot's medical, checks and training, and your training courses.
5. Build the first month's roster and turn on the daily email.
6. Book, release and check in one flight end to end before you go live.

Companion brief: *From first call to first mission* follows the maintenance side, from winning the work to delivering the aircraft. © 2026 Leesburg Aviation LLC. All rights reserved.