PREFLIGHT AND SAFETY

Every flight checked before it leaves the ramp

In MRO Tracker the weather briefing, risk assessment, weight and balance, pilot qualifications and the aircraft's maintenance status all sit on the booking itself. The checks run when someone books, again at dispatch, and the dispatcher sees the same picture the pilot does. Because the maintenance system is the same system, an aircraft with an open grounding squawk or overdue inspection simply can't be sent out.

Book
Qualification, endorsement, currency and balance checks against the school's rules.

Brief
METAR, TAF, crosswind against the aircraft, TFRs and NOTAMs, a plain-language summary.

Assess
Risk assessment, weight and balance, the student preflight checklist.

Dispatch
Blocked on grounding squawks, overdue maintenance, or anything set to Block.

Check in
Times from the phone, squawks with photos straight to the discrepancy log.

Weather briefing for each flight

- **Airports on the flight:** departure, destination and the release's alternates, each with the latest METAR and TAF and its flight category.
- **Crosswind against the aircraft:** the best runway for the current wind and the crosswind on it, compared with the aircraft's maximum demonstrated crosswind.
- **Airspace:** TFRs near the route, with distance, times and altitudes; NOTAMs for the airports when NOTAM access is connected.
- **One verdict:** go, caution or no-go for the whole flight, and a short plain-language summary of what matters.
- **On the home screen:** the iPhone and Android weather widget shows the next flight's airports (or the home airport), the TAF trend, sunrise and sunset, and flags anything outside the pilot's personal minimums.

Student preflight checklist NEW

For flight schools, each student booking gets a checklist the student completes before the flight, on the phone or the website:

1. Weather reviewed
The briefing's go / caution / no-go is recorded with the time it was reviewed.

2. Weight and balance
Takeoff weight and CG against the limits, checked automatically.

3. Risk assessment
Ten PAVE and IMSAFE questions, scored low, medium or high. A no-go answer (outside limits, not fit to fly) is called out for the instructor.

4. Before the flight
Documents aboard, inspections and squawks reviewed, NOTAMs and TFRs, fuel and sumps, walk-around, certificates.

The student signs, the instructor gets a notification and approves it or sends it back with a note. The school chooses whether it's off, a warning at dispatch, or required before dispatch; when required, the database itself refuses to dispatch the flight, whichever app or screen is used.

Risk assessment (FRAT)

- **Ready-made templates:** PAVE personal minimums for Part 91, Flight Training and Rental, Part 135 two-crew turbine, and Maintenance Test and Ferry Flight. Points and limits are starting points each operator adjusts.
- **Scored and mitigated:** each item can be mitigated with a note and reduced points; low, medium and high thresholds per template.
- **Approval when it matters:** above the template's threshold, the FRAT needs a director of operations, chief pilot or chief instructor to approve it before the release can go out.

Weight and balance

Weight and balance from each aircraft's POH (stations, fuel tanks, CG envelope, zone limits) and a load manifest for each flight: zero-fuel and takeoff weight, CG plotted against the envelope, and the PIC's acknowledgement.

Checks at booking and dispatch

Each rule is set to Off, Warn or Block, and an override is recorded with who made it.

Students and renters	Company pilots and crews	The aircraft
Solo endorsement for the make and model, and its expiry	Medical and pilot checks current	Open grounding squawks block dispatch
The student's solo limits: wind, crosswind, ceiling, visibility, day only	Training and recurrent checks current	Overdue inspections, ADs and recurring items block dispatch
Aircraft checkout and rental currency	Checked out on the make and model	Deferred items listed on the release
Flight review, account balance	Rest and duty limits	Hobbs and tach checked at check-in

Safety management

- **Hazard and incident reports** from the phone during or after a flight, with photos and position, confidential if the reporter wants.
- **Part 5 SMS:** safety policy, hazard register, risk analysis, corrective actions and safety assurance in one place.
- **Read-and-sign:** safety bulletins and procedures with reminders until everyone has signed.
- **Flight recording:** the phone records out, off, on and in times, flight time and landings, and fills in the check-in.
- **Squawks at check-in** go straight to the aircraft's discrepancy log; a grounding squawk takes the aircraft off the schedule until maintenance clears it.
- **Duty and currency** tracked per pilot, with expiry reminders for medicals, flight reviews and certificates.

> **Why it works better in one system.** Scheduling tools that check a pilot's currency can't see an aircraft's overdue inspection; maintenance trackers can't see who is about to fly it. MRO Tracker holds both, so the dispatch decision uses the full picture: the pilot, the weather, the load and the airplane.

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