



GE Aerospace

SOFTWARE

FlightPulse® Preflight

Quick review guide on key features and how to navigate.



Preflight is the newest module within the FlightPulse® app that was created intentionally to replace the previous ‘Research’ section.

While the underlying data set is similar, Preflight now expands upon the route and airport-centric analysis features by allowing pilots to tailor aggregations to match the conditions they are expecting for upcoming flights.

Aside from more accurate baseline predictions, Preflight introduces an interactive map to briefing in FlightPulse® so that pilots can now visualize the flight paths that have occurred for those same conditions, gain a better understanding of the airspace as it relates to weather conditions and ATC tendencies, and explore historical safety data related to a specific airport or route.

With Preflight, pilots are also empowered to further filter the data by runway, weather conditions, month, day of week and/or hour of day to match their upcoming flight conditions.

How to Navigate Preflight

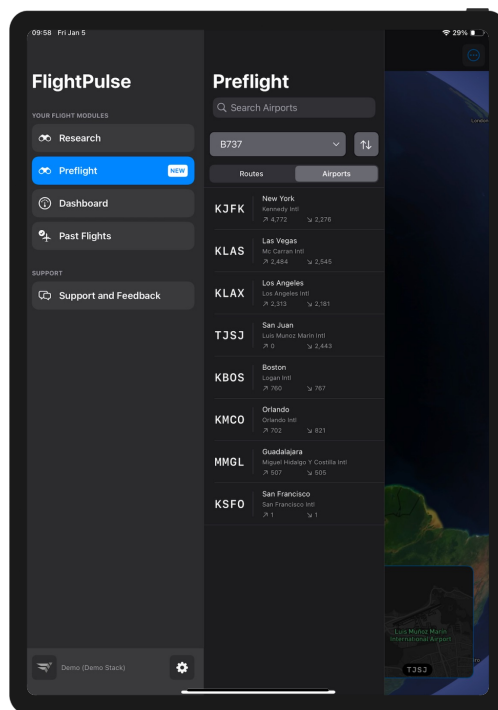
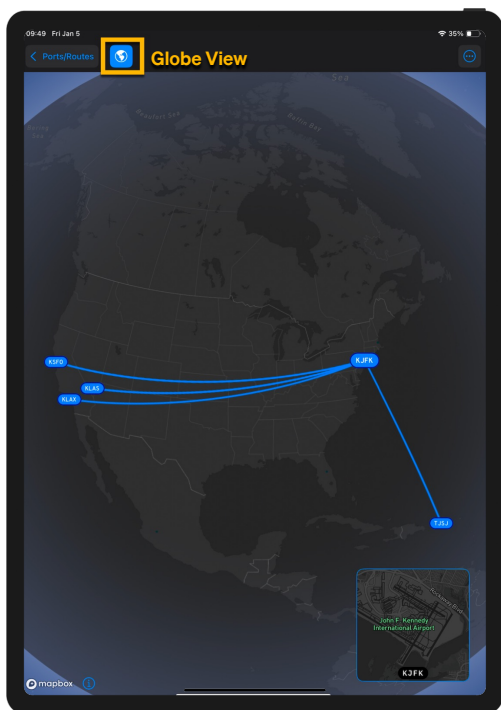
Organized similarly to the other modules in FlightPulse® such as Dashboard and Past Flights, Preflight will take up the entire screen once accessed. From there, pilots can begin briefing research by one of two methods:

Globe View

The landing screen for Preflight is a new globe view, which automatically rotates and highlights all the airports and routes available for researching in your historical data set. Tapping on the labels or the preview window in the bottom right corner will take you to the Preflight page for that airport.

Sidebar Menu

Accessible via the central sidebar menu, the route and airport selection menu now include information about the total number of takeoffs and landings. By default, the assigned fleet of each pilot is used to populate the list of airports and the arrow to the right of the fleet section can be used to control the sorting conditions of the list.



Support

Just like all screens within FlightPulse®, you can contact support or provide feedback by using the Omnimenu at the top right of the screen.

Key Features of Preflight

The Map

When an airport or route is selected, the map will zoom in on the area that captures the historical trajectories available for it.

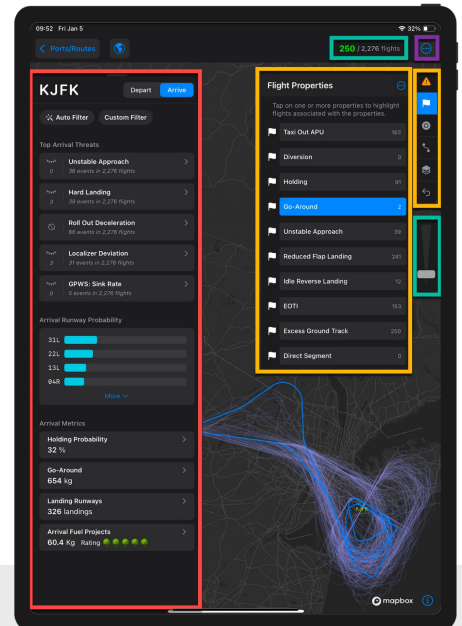
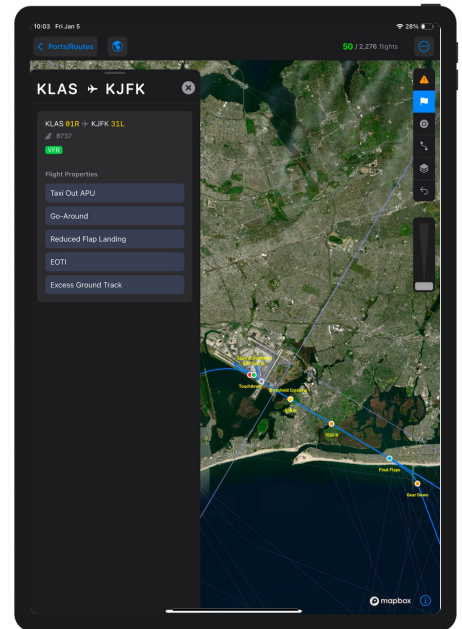
Trajectory Slider

Move this slider up or down to control the number of displayed trajectories. The number of trajectories can be noted on the slider or at the top right of the screen. This will show the number of displayed flights over the total number of flights available in the database for that airport or route, per the applied filters.

The Map Toolbar

This menu of options controls how trajectory data is displayed on the map. The list of selections available within each option is configurable by your FlightPulse® administrators and multiple selections can be applied simultaneously. In order from top to bottom, the options are:

- **Safety event locations:** Select from a list of event types matching filtering criteria to show markers on the map where events occurred. Examples include Glideslope Deviation, TCAS Advisory, and High Rate of Decent.
- **Flight properties:** Use a list of classifications to highlight trajectories for flights that encountered something of note. Examples include Go-Arounds, Holdings, and Direct Segments/Shortcuts Achieved.
- **Timepoint locations:** A list of markers can be added to all trajectories to indicate the location of something happening during flight. Examples include Gear Down, Final Flaps Set, 500 ft. Crossing, and Touchdown.
- **Path highlights:** When selected, a list of intervals will highlight portions of the trajectories in different colors. Examples include 2000-1000 ft. HAT, EOT/SET Period, and Autopilot Engaged.
- **Layers:** A list of map display options. Examples include Satellite view and Waypoint markers.



Trajectory Slider
The Map Toolbar
The Drawer
Support

Key Features of Preflight

The Drawer

Now located in a floating modal that allows for more screen space to be occupied by the map, the drawer enables further selections to be applied to activate filters, display safety event information, and examine topical briefing considerations for the airport or route.

Filtering

Filters applied in the drawer affect the data results shown everywhere else throughout the page – including the list of relevant safety events and trajectories displayed on the map. Flight data for a specific route or airport can be specified via one or two methods:

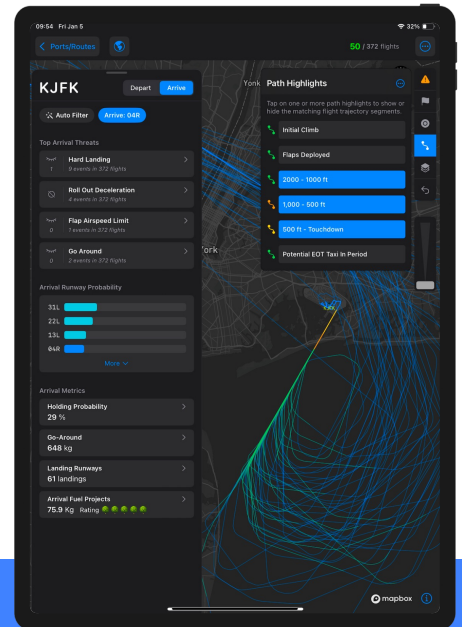
- **Recent Flights Filter:** Configurable by your FlightPulse® administrator, a quick and effective way to tap into some of the most recent flight data.
- **Custom Filter:** Enables the user to input specific runway(s), visibility condition(s), departure/arrival hour(s), month(s) of year, and day(s) of the week. Below each filtering selection, the grey number reflects the number of applicable flights in the entire data set. These numbers will automatically update with the new available flight count as more filters are applied.

Runway Probability

A new chart that shows the runways used at the airport of interest, sorted in order of most to least used. When a runway filter is applied in Custom Filtering, that runway will be highlighted in the chart, while the other runways will still display for reference.

Metrics

Things such as holding probability display with summary values that indicate the average values for the set of data included by the active filtering. Tapping on any one of these will open a detailed view containing additional visualizations that provide greater context.



Multiple Path Highlights can be selected simultaneously to generate a depiction of common approach profiles.

