

# The Weather Company aviation solutions

## The challenges

Aviation operations' teams are working in extremely high-pressure environments, often monitoring many separate systems for critical information needed to make and adjust operations to ensure safety and efficiency.



Nearly 70% of air traffic delays are due to inclement weather, costing airlines billions of dollars annually.<sup>1</sup>



Achieving successful operations requires constant awareness of fleet positions and an overall understanding of weather's impact on flight operations.



Every decision made must account for a wide range of factors, such as safety, aircraft functionality and airline profitability.

Every airline has some way to plan and track flights, but often the input is insufficiently accurate, incomplete, or inconsistent resulting in suboptimal operations.

Here is how The Weather Company can help:

- **Reduce injuries** from and operational costs due to turbulence
- **Optimize flight plans** and **reduce fuel costs** without compromising safety
- **Decrease the number and cost of cancellations**, delays and diversions due to weather
- **Reduce flight delays** with less in-flight paperwork
- **Reduce surface delays** due to ramp closures and taxi time/runway congestion

<sup>1</sup> FAA, Inclement Weather, March 2021,  
<https://www.faa.gov/newsroom/inclement-weather-0>

## Proactively plan for and respond to critical weather events with advanced decision-support solutions

The aviation solutions portfolio offers a wide variety of solutions built to fit your needs with the most precise, accurate and personalized weather insights. By using these solutions, business teams can make more informed decisions for safer, better operational outcomes.

These insights help users control costs, enhance safety and improve efficiency — while enhancing the passenger experience.

These include applications and addons, expert forecast services and access to weather data packages via APIs.

## Solutions that are designed to help organizations

Backed by nearly 30 years of aviation forecasting expertise, The Weather Company has built a portfolio of products enabling customers to proactively manage disruptive weather events, helping to ensure safety and profitable returns.

With these advanced solutions, The Weather Company can assist with optimizing safety and operational efficiency, help guide you in meeting your compliance objective, and deliver an exceptional passenger experience on the ground, in flight and at the destination.

## What's included in the The Weather Company aviation solutions suite?

### **Fusion**

Fusion is a proactive operations management solution that provides early insight into changing flight, airport and airspace conditions. Incorporating a streamlined workflow, dispatchers can make decisions with confidence while helping to ensure the safety and efficiency of the airline operation.

Fusion provides the following benefits:

- Proactively manage an operation with intelligent alerting
- Monitor flight progress with Continuous Global Tracking
- Observe aircraft taxiing with surface movement and insights from predictive analytics
- Streamline workflows with data integrations
- Customize and configure company required and user settings

### **Pilotbrief**

Pilots can visualize aviation weather, airspace notifications, and flight plans in one interactive workspace from their cockpit seat. Once designed as a weather briefing solution, Pilotbrief® has now become an enroute solution where the crew can make deviations and adjustments in their flight plan to their route due to turbulence and inclement weather.

Pilotbrief provides the following benefits:

- Visualize aviation weather, airspace notifications and flight plans in one interactive workspace
- Generate a weather briefing on an iPad or web browser
- Access detailed maps and charts including Vertical Profile
- View updates while enroute
- Use offline mode in a non-connected cockpit

## Total Turbulence Alerting

Reducing the number of passenger and crew injuries, maintenance costs, and lost revenue due to turbulence is a key goal for many customers. Without a way to quickly alert aircraft of turbulence in each area, this can be difficult. The Total Turbulence Alerting solution assists the dispatcher in the responsibility of ensuring the cockpit is advised of the latest weather conditions pertinent to the safety of the flight.

Total Turbulence Alerting provides the following benefits:

- Timely, flight-specific information of imminent, and/or rapidly changing conditions
- Bridges the information gap by providing real-time updates to the cockpit via ACARs after takeoff when connectivity is limited in flight

## Airport Operations Dashboard

The Airport Operations Dashboard allows users to plan and respond to weather disruptions. In events of inclement weather, being aware of these changing conditions ahead of time can ensure business continuity and operational safety. By receiving precise alerts from the Airport Operations Dashboard, users can be aware of these events ahead of time based on specifically configured thresholds. Furthermore, the Risk Outlook feature can be used to track current and future weather situations at specific locations for proactive operations planning.

The Airport Operations Dashboard provides the following benefits:

- Customized dashboard to monitor the real impact and plan ahead
- Precise alerts for increased response times
- Analytics to gain insights on weather impacts to operations and business
- 7-day risk outlook, by airport, for operational mitigation planning

## Aviation and weather data APIs

Unlock access to industry-leading aviation weather forecasts with Aviation Core, Enhanced Core, Flight Planning and Enroute data packages. Subscribing to our aviation-specific data sets allows access to a various assembled global weather data feeds for a wealth of weather-based insights into business processes and applications.

Features of aviation and weather data APIs:

- Currents on Demand uses real-time data to assess weather anywhere and anytime
- Forecasts on Demand applies AI-calibrated data elements of 178 model inputs
- History on Demand has a variety of weather data products available to geocode or airport code

## Forecast Services

The Weather Company meteorologists are among the best in the business. They understand the specifics of flight operations, including unique weather patterns at hubs/focus cities, airport runway configurations, routes, weather limits for fleet types and crews, and so on.

Forecast support specialties by our meteorologists include:

- **Aviation decision support:** Coordinate with airline's dispatchers, management air traffic specialists, FAA ATC personnel, and NWS meteorologists.
- **Custom event briefings:** Designed to heighten situational awareness of airline and airport operations, our event briefings cover everything the users may need to know about an upcoming weather event impacting a major airport.
- **Terminal Aerodrome Forecast (TAF) services:** Scheduled 24, 30 and ad hoc TAF creations for airlines that need them for airport operations. TWC meteorologists are constantly monitoring and adjusting when conditions are changing when things are not in line with METAR observations.

Explore The Weather Company  
aviation solutions



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