



*Piper twin Comanche with a shelf cloud and gust front from an approaching thunderstorm.*

## Did you know...

- The average life expectancy of a VFR pilot encountering IFR conditions is 178 seconds.
- \$6 billion annually is lost as a result of air traffic delays.
- 70% of air traffic delays are attributed to weather.
- 27% of aircraft accidents are weather-related.

*Aviation and flight safety is your primary concern. Weather is an important aspect of that equation. Your National Weather Service is here to assist you with planning for a safe flight.*

## Local Forecast Offices

Forecast offices provide the *Terminal Forecasts (TAF)* for airports within their local service area, typically the nearest 4 to 8 airports. The TAF is a 24 hour aviation forecast, issued 4 times a day, valid for an area within 5 miles from the center of the runway complex. It provides specific values for: wind direction and speed, visibility, weather, cloud amount and base height, any fluctuations, variations or changes to the above, and non-convective low level wind shear when needed.

In eastern Iowa and northwest Illinois, the **Quad Cities Forecast Office** provides TAFs for:  
 KMLI (Moline/Quad Cities),  
 KCID (Cedar Rapids),  
 KDBQ (Dubuque), and  
 KBRL (Burlington)

Local forecast offices also devote a section of the *Area Forecast Discussion (AFD)* to address aviation concerns. The forecast discussion is a concise, semi-technical overview of the expected weather and reasoning behind the forecast. It is updated routinely twice a day and otherwise as needed.

## Aviation Weather Center

The Aviation Weather Center is a national center, forecasting icing, turbulence, and other hazardous aviation conditions for the entire U.S. These forecasts include:

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- **Area Forecast** – Forecast of general weather conditions over an area the size of several states
  - **Airmet** – Advisory of significant weather phenomena, but for conditions at intensities lower than those which require a Sigmet
  - **Sigmet** – Advisory of weather that is potentially hazardous to aircraft (other than convection)
  - **Convective Sigmet** – Advisory concerning convective weather significant to the safety of all aircraft.
  - **Collaborative Convective Forecast** – Thunderstorm forecast valid for the next 2, 4, and 6 hours

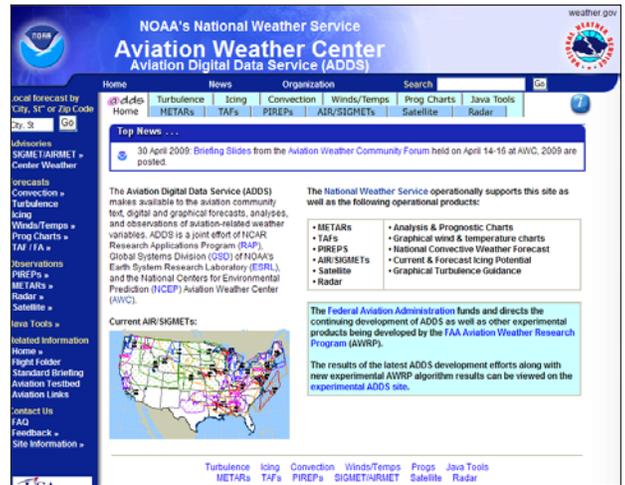
## The Front

*The Front* is an online newsletter published by the National Weather Service. Its purpose is to enhance aviation safety by increasing the pilot's knowledge of weather systems and NWS products and services.

# Aviation Digital Data Service (ADDS)

The ADDS web site provides a convenient “one stop shop” for all of your aviation weather needs. The Federal Aviation Administration (FAA) funds and directs the continuing development of ADDS. Text, digital, and graphical forecasts, analyses, and observations of aviation-related weather variables are available at the click of a mouse.

The web site features powerful interactive Java tools to display important aviation parameters such as Convection, METARs, TAFs, AIR/SIGMETs, and PIREPs. In addition, a powerful flight planning tool allows you to view data along your intended flight route. You can view graphical displays of icing, turbulence, temperature, wind, humidity, AIRMETS, METARs, TAFs, etc. both horizontally and vertically.



*Zoom and pan*

*Define a route and view vertical cross sections*

*Loop through time*

*Select weather and aviation parameters to view*

*Set altitude*

*Choose the time of interest*

*ADDS Flight Path Tool*

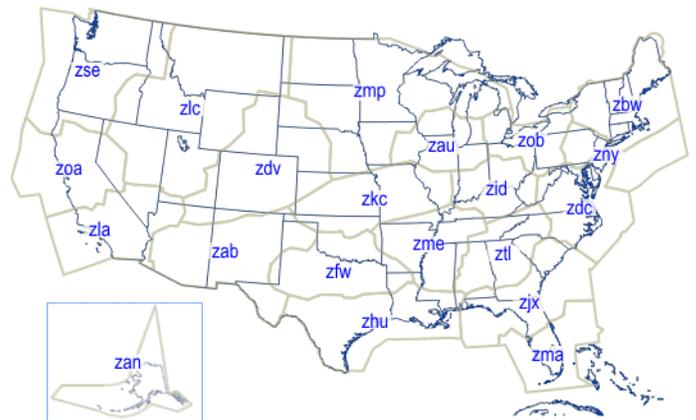
*Flexible!*

*Customizable!*

*Powerful!*

# Center Weather Service Unit

Center Weather Service Units (CWSU) are co-located with Air Route Traffic Control Centers. Staffed by a team of National Weather Service meteorologists, each CWSU provides weather forecasts and hazardous weather advisories to the FAA and the aviation industry. This includes the *Meteorological Impact Statement* (unscheduled flow control and flight planning forecast) and the *Center Weather Advisory* (aviation warning for use by air crews to anticipate and avoid adverse weather conditions in the en route and terminal environments).



On the web:	
Aviation Digital Data Service (ADDS)	<a href="http://adds.aviationweather.gov">adds.aviationweather.gov</a>
The Front (Aviation Newsletter)	<a href="http://aviationweather.gov/general/pubs/front">aviationweather.gov/general/pubs/front</a>
Aviation Weather Center	<a href="http://aviationweather.gov">aviationweather.gov</a>
NWS Quad Cities Aviation page	<a href="http://www.weather.gov/quadcities/?n=aviationforecast">www.weather.gov/quadcities/?n=aviationforecast</a>
Quad Cities Forecast Discussion	<a href="http://www.weather.gov/quadcities/WeatherandForecasts/forecasts.php">www.weather.gov/quadcities/WeatherandForecasts/forecasts.php</a>
National Weather Service	<a href="http://www.weather.gov">www.weather.gov</a>
Center Weather Service (CWSU) Information	<a href="http://aviationweather.gov/products/cwsu">aviationweather.gov/products/cwsu</a>