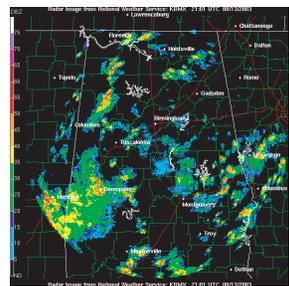




The National Weather Service, NWS, part of the U.S. Department of Commerce, provides continuous, up to the minute, weather observations and forecasts across the country. By utilizing satellite, Doppler radar, ASOS (Automated Surface Observing System), and atmospheric modeling from super computers, meteorologists at the NWS produce aviation forecasts for many of the nation's airports and points in between.

Weather is a primary or contributing factor in nearly 1/3 of all aviation accidents. It is critical that pilots make use of every tool at their disposal to fly safely. Saving lives and protecting property is the core mission of the NWS by providing forecast products and warnings to the public. Be sure to make us a priority in your next flight plan.



NEXRAD Radar Image of Precipitation



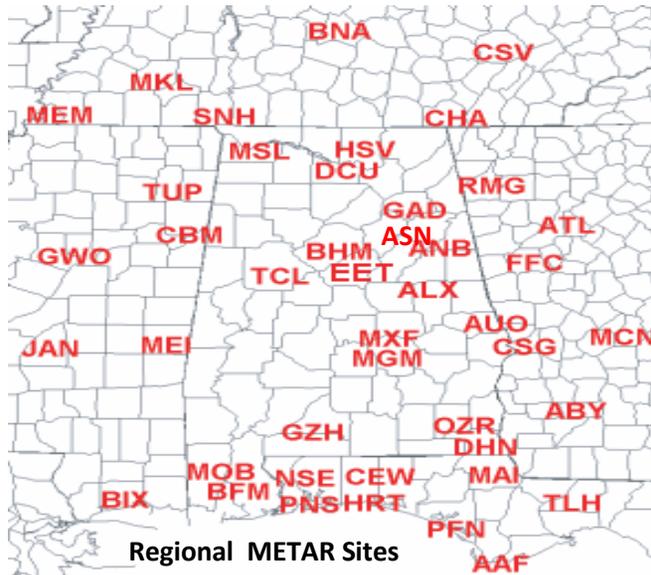
NEXRAD Radar

Commonly Used Codes in METARs and TAFs

- BR...Mist/Fog > 1/2 Mile
- CB...Cumulonimbus
- DU...Dust
- DZ...Drizzle
- FG...Fog <= 1/2 mile
- FU...Smoke
- FZ...Freezing
- HZ...Haze
- RA...Rain
- SH...Shower
- SN...Snow
- TS...Thunderstorm
- VC...5 to 10 SM from Airport
- VRB...Variable Winds
- WS...Non-Convective Low Level Wind Shear
- +/-...Intensity

Automated Surface Observing System (ASOS)

METAR is the scheduled weather observation taken at the end of each hour that includes surface wind, visibility, sky condition, type of precipitation, surface temperatures, dew point, and altimeter. **SPECI** is an observation taken at an unscheduled time due to certain criteria that is met such as low visibility, low clouds, frozen precipitation, or thunderstorms.



Regional METAR Sites



Greater prudence is needed rather than greater skill. *Wilbur Wright, 1901*

Terminal Aerodrome Forecasts (TAFs) are routinely issued every 6 hours and are valid generally 24 hours (some cases 30) from issuance time. A TAF is a forecast for a 5 mile wide radius around the center of the identified airport. TAFs include a forecast of cloud heights and ceilings, wind direction and speed, non-convective low level wind shear, visibilities, and prevailing weather conditions.

TAFBHM

TAF

```
KBHM 031730 0318/0418 23005KT P6SM SCT040 BKN250
TEMPO 2321/2323 VRB20G35KT 1SM +TSRA BKN020CB
FM032300 VRB03KT 5SM -RA BKN050 BKN120
TEMPO 2323/2401 2SM TSRA BKN030CB
FM240300 20004KT P6SM BKN080
TEMPO 2409/2413 4SM BR BKN015=
```

FM - indicates the start time of when conditions are expected.

TEMPO - indicates variable conditions are possible to occur between the hours indicated.

PROB30 - indicates that there is a 30 percent chance of occurrence. (Not to be used in the 1st 9 hours of the TAF)

WS (Non-Convective Low Level Wind Shear) a loss or gain of 20 knots or more within 2000 feet of the surface. WSL/ DDDFFKT (WS - wind shear, LLL - height of layer, DDD - wind direction, FF - wind speed, KT - knots)

TAFs are issued for the following airports in Alabama. (ASOS/AWOS frequencies provided)

- KANB...Anniston (119.675)
- KBHM...Birmingham (ATIS - 119.4)
- KDHN...Dothan (ATIS - 135.72)
- KHSV...Huntsville (ATIS 121.25)
- KMOB...Mobile (ATIS - 124.75)
- KMGM...Montgomery (ATIS - 120.675)
- KMSL...Muscle Shoals (119.425)
- KASN...Talladega (118.425)
- KTOI...Troy (ATIS 120.925)
- KTCL...Tuscaloosa (132.825)



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FLIGHT RULES

- Class A...N/A...IFR
- Class B...3SM...Clear of Clouds
- Class C...3SM...500/1000/2000 (ft)
- Class D...3SM...500/1000/2000 (ft)
- Class E...<10K...500/1000/2000 (ft)...>10K
 - Day 3SM...500/1000/2000(ft)...>10K
 - Night 5SM...1000(ft)/1000(ft)/15M
- Class G...(uncontrolled)...<1200 ft
 - Day 1SM...Clear of Clouds
 - Night 3SM...500/1000/2000 (ft)
 - >1200<10K
 - Day 1SM...500/1000/2000 (ft)
 - Night 3SM 500/1000/2000 (ft)
 - <10K...5SM...1000(ft)/1000(ft)/15M

xxxx/yyyy/zzzz
below/above/horizontal



AVIATION SERVICES

Meeting the needs of the aviation community through science...technology and service.

Local Forecast Office Information

National Weather Service
465 Weathervane Road
Calera, AL 35040
Phone: (205) 664-3010
Fax: (205) 664-7821

www.weather.gov/bmx/

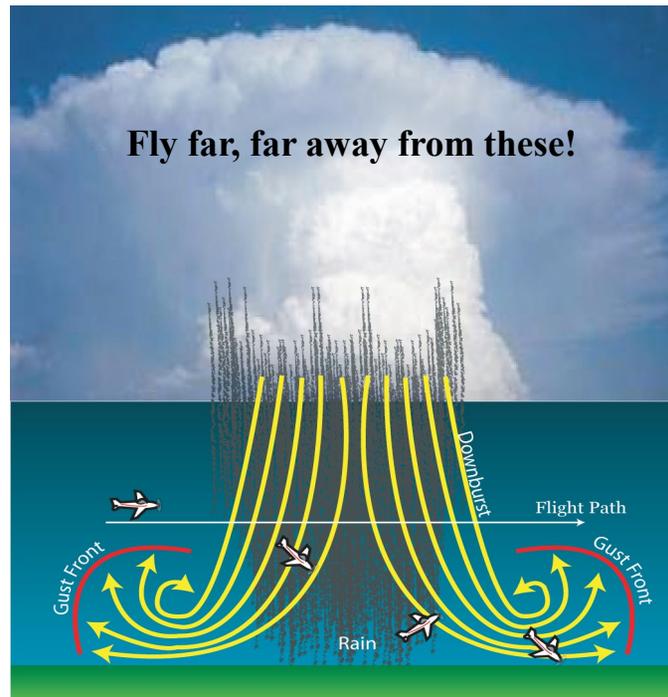
Like us on Facebook: NWSBirmingham

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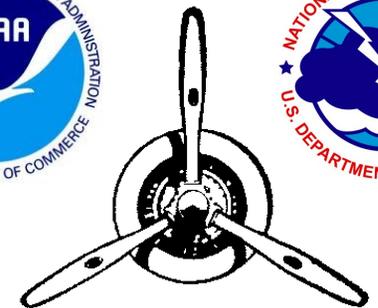
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Aviation Hazards due to Thunderstorms



Fly far, far away from these!



For a pre-flight briefing, call Lockheed Martin
Flight Service at **1-800-WX BRIEF**.

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www.airnav.com - Comprehensive airport information.

adds.aviationweather.gov - Digital and graphical analyses, forecasts and observations.

www.weather.noaa.gov/radar/_tab.php - National radar.