

## FAA Weather Services Quick Reference

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| <p style="text-align: center;"><b>Terminal Aerodrome Forecast (TAF)</b></p> <ol style="list-style-type: none"> <li>1. Produced by over 100 Weather Forecast Offices (WFOs)</li> <li>2. Covers approx. 525 aerodromes in 50 states, Puerto Rico, Caribbean and Pacific Islands</li> <li>3. 4 times daily</li> <li>4. Valid 24 hours, amended as req'd</li> </ol> | <p style="text-align: center;"><b>TWEB (Transcribed Weather Broadcasts)</b></p> <ol style="list-style-type: none"> <li>1. Produced by WFOs</li> <li>2. Over 300 route forecasts and 39 synopses daily</li> <li>3. <b>Route</b> forecasts issued 3 times daily, valid 15 hours</li> <li>4. Broadcast over selected NDBs and VORs</li> </ol>                             |
| <p style="text-align: center;"><b>Area Forecasts (FAs)</b></p> <ol style="list-style-type: none"> <li>1. Issued by AWC (Aviation Weather Center) located in Kansas City</li> <li>2. Covers six different areas</li> <li>3. Issued 3 times per day in US/Alaska, 4 times per day in Hawaii, amended as required</li> </ol>                                       | <p style="text-align: center;"><b>In-flight advisories</b></p> <ol style="list-style-type: none"> <li>1. Issued as required (when conditions warrant)</li> <li>2. Issued by AWC</li> <li>3. SIGMET (WS), Convective SIGMET (WST), AIRMET (WA), Severe Weather Watch (WW), Severe Weather Alert (AWW), and Center Weather Advisories (CWA) are product types</li> </ol> |
| <p style="text-align: center;"><b>Winds Aloft (FDs)</b></p> <ol style="list-style-type: none"> <li>1. Provided for 176 locations in contiguous States and 21 in Alaska</li> <li>2. Winds aloft in Hawaii prepared locally</li> </ol>  | <p style="text-align: center;"><b>Pre-flight briefing</b></p> <ol style="list-style-type: none"> <li>1. Over phone from AFSS/FSS or DUATS (on-line)</li> <li>2. Standard, abbreviated, outlook</li> <li>3. Outlook briefing for departure planned for six or more hours from time of briefing</li> </ol>   |

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| <p style="text-align: center;"><b>Enroute Flight Advisory Service (EFAS)</b></p> <ol style="list-style-type: none"> <li>1. Briefers are specially trained to give in-flight briefings and advisories</li> <li>2. Not intended for complete briefings or filing flight plans</li> <li>3. Available in US/Puerto Rico from 6am to 10pm local</li> <li>4. Available on 122.0 from 5,000 AGL to 17,500 MSL</li> </ol>  | <p style="text-align: center;"><b>SIGMETs (WS)</b></p> <ol style="list-style-type: none"> <li>1. Maximum forecast period 4 hours</li> <li>2. "Widespread" forecasts – must affect at least 3,000 sq. miles at any one time</li> <li>3. Nonconvective activity: <ol style="list-style-type: none"> <li>a) Severe icing not assoc'd w/ thunderstorms</li> <li>b) Severe or extreme turbulence or clear air turbulence (CAT) not associated with thunderstorms</li> <li>c) Dust storms or sandstorms lowering surface or inflight visibilities to below 3 miles</li> <li>d) Volcanic ash</li> <li>e) Hawaii/Alaska also report other types of weather</li> <li>f) See AIM 7-1-6(c)(3) for identifier (WS naming) convention</li> </ol> </li> <li>4. Will be announced once (unless emergency) by ARTCC facilities unless HIWAS nearby</li> </ol> |
| <p style="text-align: center;"><b>Convective SIGMET (WST)</b></p> <ol style="list-style-type: none"> <li>1. Issued for western (W), central (C), and eastern (E) United States</li> <li>2. Bulletins issued hourly at H+55</li> <li>3. Special bulletins issued at any time and updated at H+55</li> <li>4. Will be announced once (unless emergency) by ARTCC facilities unless HIWAS nearby</li> <li>5. Forecast due to: <ol style="list-style-type: none"> <li>a) Thunderstorms w/ surface winds greater than 50 kts</li> <li>b) Hail at surface greater than 3/4" in diameter</li> <li>c) Tornadoes</li> <li>d) Embedded thunderstorms</li> <li>e) A line of thunderstorms</li> <li>f) Thunderstorms producing precipitation greater than or equal to heavy precipitation affecting 40 percent or more of an area at least 3,000 square miles.</li> </ol> </li> <li>6. <i>Any Convective SIGMET implies severe or greater turbulence, severe icing, and low-level wind shear.</i></li> <li>7. If no Convective SIGMET, 'CONVECTIVE SIGMET... NONE' will be issued for each area at H+55</li> <li>8. See AIM 7-1-6(d)(3) for identifier (WTS naming) convention</li> <li>9. May contain observation and a forecast, or just a forecast.</li> <li>10. Forecast valid up to 2 hrs.</li> </ol> |   |

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| <p style="text-align: center;"><b>AIRMET (WA)</b></p> <ol style="list-style-type: none"> <li>1. Advisories of significant weather with intensities lower than that which is required to issue a SIGMET</li> <li>2. Intended for dissemination to all pilots for pre-flight and enroute use</li> <li>3. Issued every 6 hours</li> <li>4. Unscheduled updates/corrections issued as necessary</li> <li>5. Includes outlook for after valid AIRMET forecast time</li> <li>6. Three types (S, T, Z): <ol style="list-style-type: none"> <li>a) SIERRA: IFR conditions and/or extensive mountain obscurations</li> <li>b) TANGO: moderate turbulence, sustained surface winds of <b>30 kts or greater</b>, and/or nonconvective low-level wind shear</li> <li>c) ZULU: moderate icing (and bulletin includes freezing level heights)</li> </ol> </li> </ol> | <p style="text-align: center;"><b>Severe Weather Watch Bulletin (WW)</b></p> <ol style="list-style-type: none"> <li>1. Issued by Storm Prediction Center (SPC) in Norman, OK</li> <li>2. Unscheduled and issued as required</li> <li>3. Defines areas of possible severe thunderstorms or tornado activity: <ol style="list-style-type: none"> <li>a) Severe thunderstorm watch criteria are <b>expected</b> <math>\frac{3}{4}</math>" hail or larger and/or wind gusts 50kts or greater</li> <li>b) Tornado watch describes areas where the <b>threat</b> of tornados exist</li> </ol> </li> <li>4. Will be announced by ARTCC facilities one time (unless emergency) unless HIWAS nearby</li> </ol> <p style="text-align: center;"><b>Severe Weather Watch Alert Message (AWW)</b></p> <ol style="list-style-type: none"> <li>1. The actual alert advisory</li> <li>2. For more information see AIM 7-1-6(g)</li> </ol> |
| <p style="text-align: center;"><b>Convective Outlook (CA)</b></p> <ol style="list-style-type: none"> <li>1. No information</li> </ol>  | <p style="text-align: center;"><b>Center Weather Advisory (CWA)</b></p> <ol style="list-style-type: none"> <li>1. Considered a 'nowcast,' not a forecast</li> <li>2. Unscheduled advisory</li> <li>3. Generally for conditions beginning within the next 2 hours</li> <li>4. Issued as a supplement to WST, WS, WA</li> <li>5. Issued when reported (PIREPs) or observed conditions meet SIGMET/AIRMET criteria, and such advisories have not yet been issued</li> <li>5. Will be announced once (unless emergency) by ARTCC facilities unless HIWAS nearby</li> </ol>  |

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| <p style="text-align: center;"><b>Categorical Outlook</b></p> <ol style="list-style-type: none"> <li>1. For advanced planning purposes</li> <li>2. Used only in Area Forecasts (FAs)</li> <li>3. Predicts the following conditions: <ol style="list-style-type: none"> <li>a) LIFR (low IFR): ceiling less than 500 feet and/or vis. less than 1 mile</li> <li>b) IFR: ceiling 500 to less than 1,000 feet and/or vis. 1 to less than 3 miles</li> <li>c) MVFR: ceiling 1,000 to 3,000 feet and/or vis. 3 to 5 miles inclusive</li> <li>d) VFR: ceiling &gt; 3,000 feet and visibility greater than 5 miles</li> </ol> </li> </ol> | <p style="text-align: center;"><b>Telephone Information Briefing Service (TIBS)</b></p> <ol style="list-style-type: none"> <li>1. Provided by AFSS'</li> <li>2. Continuous recording including at least 4 route and/or area briefings</li> <li>3. May include airspace procedures and special aviation announcements</li> <li>4. Not a substitute for standard briefing</li> <li>5. Call 1-800-WX-BRIEF and use touch-tone menu to access</li> </ol>           |
| <p style="text-align: center;"><b>Hazardous In-flight Weather Advisory Service (HIWAS)</b></p> <ol style="list-style-type: none"> <li>1. Continuous broadcast of advisories including summarized AWW, SIGMET, Convective SIGMET, CWA, AIRMET, and urgent PIREP reports</li> <li>2. ARTCC will announce HIWAS update one time (unless emergency)</li> </ol>   | <p style="text-align: center;"><b>Flight Information Services Data Link (FISDL)</b></p> <ol style="list-style-type: none"> <li>1. Two products: FAA product distributed through various vendors; and Non-FAA FSDL systems</li> <li>2. Broadcast directly to cockpit device</li> <li>3. Requires special equipment</li> <li>4. Does not replace other briefing products (augment only)</li> <li>5. Meant primarily to increase situational awareness</li> </ol> |

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| <p style="text-align: center;"><b>Automated Weather Observation System (AWOS)</b></p> <ol style="list-style-type: none"> <li>1. AWOS observations include prefix "AUTO"</li> <li>2. Sometimes augmented by observers</li> <li>3. Four levels usually consist of: <ol style="list-style-type: none"> <li>a) AWOS-A: altimeter setting only</li> <li>b) AWOS-1: altimeter, wind data, temp, dewpoint, density altitude</li> <li>c) AWOS-2: includes AWOS-1 plus visibility</li> <li>d) AWOS-3: includes AWOS-2 plus cloud/ceiling data</li> </ol> </li> <li>4. Transmitted over discrete VHF radio frequency or voice portion of local navaid</li> <li>5. Can often be accessed by telephone (phone number in A/FD)</li> </ol> | <p style="text-align: center;"><b>Automated Surface Observation System (ASOS)</b></p> <ol style="list-style-type: none"> <li>1. Transmitted over discrete VHF radio frequency or voice portion of local navaid</li> <li>2. Includes: <ol style="list-style-type: none"> <li>a) cloud height</li> <li>b) visibility</li> <li>c) precipitation sensor</li> <li>d) freezing raing sensor (select sites)</li> <li>e) pressure</li> <li>f) temp/dewpoint</li> </ol> </li> <li>3. When observer adds comments, 'AUTO' disappears from prefix</li> </ol> |
| <p style="text-align: center;"><b>Pilot Reports (PIREPs)</b></p> <ol style="list-style-type: none"> <li>1. Urgent (UUA) and normal (UA)</li> <li>2. Can be made by radio to FSS or FlightWatch</li> <li>3. Can report after landing via telephone (timeliness is important)</li> </ol>   | <p style="text-align: center;"><b>Aviation Routine Weather Report (METAR)</b></p> <ol style="list-style-type: none"> <li>1. Made hourly</li> <li>2. Human observers/automated reports</li> <li>3. Can usually be heard over ATIS frequencies</li> </ol>   |