

**Objective:** *Identify, interpret, and analyze aviation weather information pertaining to a proposed route of IFR flight including destination and alternate airports, to include printed weather reports & forecasts, and graphic weather products, mostly outlined in AIM Chapter 7, Section 1.*

- **Printed weather reports & forecasts :**

- **Current Wx Reports**

1. **Aviation Routine Weather Report (METAR & SPECI)**
  - ✓ METAR is *Issued btwn :45 & :60 minutes after the hour and Valid 1 hour.*
2. **Pilot Weather Reports (UA & UUA)**
  - ✓ UA is *Issued as received and is Valid <4 hours.*
3. **Radar Weather Reports (SD)**
  - ✓ SD is *Issued every :35 after hour and is Valid 1 hour.*

- **Forecast Wx Reports**

4. **Terminal Aerodrome Forecast (TAF)**
  - ✓ TAF is *Issued every 6 hours beginning at 0000z and is Valid 24 hours.*
5. **Aviation Area Forecast (FA)**
  - ✓ FA is *Issued every 8 hours beginning at 0000z and is Valid 18 hours.*
6. **Winds & Temperatures Aloft Forecast (FD)**
  - ✓ FD is *Issued every 12 hours beginning at 0000z and is Valid 12 hours.*

- **Weather Advisories**

7. **AIRMET - Airmen Meteorological Information (WA)**
  - ✓ AIRMETS are *Issued every 6 hours beginning 0200z and Valid 6 hours.*
8. **SIGMET - Significant Meteorological Information (WS & UWS)**
  - ✓ SIGMETS are *Issued as warranted and are Valid 4 hours.*
9. **Convective SIGMET (WST)**
  - ✓ WST is *Issued as warranted :55 after every hour and is Valid 2 hours or until superceded.*
10. **Convective Outlook (AC)**
  - ✓ AC is *Issued every 0700z & 1500z and is Valid 24 hours.*
11. **Center Weather Advisory (CWA)**
  - ✓ CWA is *Issued as warranted and is Valid 2 hours.*
12. **Severe Weather Forecast Alert and Watch Bulletin (AWW & WW)**
  - ✓ AAWs & WWs are *Issued as warranted.*

- **Automated & In-Flight Wx Services**

13. **Automated Surface & Weather Observation Systems (ASOS & AWOS)**
14. **Enroute Flight Advisory Service (EFAS)**
15. **Hazardous in-flight Weather Advisory Service (HIWAS)**
16. **Transcribed Weather Broadcast (TWEB)**
  - ✓ TWEB is *Issued every 6 hours beginning 0200z and is Valid 12 hours.*
17. **Telephone Information Briefing Service (TIBS)**

- **Graphic weather products :**

- **Current Wx Charts**

- 1. **Surface Analysis Chart (METAR derived)**

- ✓ Chart is **Issued every 3 hours** beginning 0000Z and is **Valid 3 hours**.
    - ✓ Source of the Surface Analysis Chart can be found at the NOAA NWS 'Ocean Prediction Center' website - the NOAA NWS 'Aviation Weather Center-Aviation Digital Data Service' provides the same chart without station models.
      - ◆ <http://www.opc.ncep.noaa.gov/UA/USA.gif>
      - ◆ <http://adds.aviationweather.gov/progs/nav.php?current=0>

- 2. **Radar Summary Chart (SD derived)**

- ✓ Chart is **Issued every :35 after hour** and is **Valid 1 hour**.
    - ✓ Source of the Radar Summary Facsimile Chart can be found at the NOAA NWS 'Aviation Weather Center' website:
      - ◆ <http://aviationweather.gov/data/iffdp/2080.gif>

- 3. **Weather Depiction Chart (METAR derived)**

- ✓ Chart is **Issued every 3 hours** beginning at 0100z and is **Valid 8 hours**.
    - ✓ Source of the Weather Depiction Facsimile Chart can be found at the NOAA NWS 'Aviation Weather Center' website:
      - ◆ <http://aviationweather.gov/data/iffdp/2020.gif>

- 4. **Composite Moisture Stability Chart**

- ✓ Chart is **Issued twice daily** at 0000 & 1200z and is **Valid 12 hours**.
    - ✓ Source of the Composite Moisture Stability 'facsimile' chart doesn't appear to be available anymore. Instead use the DUATS version at <http://www.duats.com/graphics/graphics.html>

- **Forecast Wx Charts**

- 5. **Low-level Significant Weather Prognostic Chart**

- ✓ Chart is **Issued every 6 hours** beginning at 0000z and is **Valid for 12 and 24 hour successive periods**.
    - ✓ Source of the Low-level Significant Weather Prognostic Facsimile Chart can be found at the NOAA NWS 'Aviation Weather Center' website:
      - ◆ <http://aviationweather.gov/products/swl/>

- 6. **Forecast Winds & Temperatures Aloft Chart (FD derived)**

- ✓ Chart is **Issued every 12 hours** at 0000 & 1200z and is **Valid 12 hours**.
    - ✓ Source of the Forecast Winds & Temperatures Aloft Facsimile Chart can be found at the NOAA NWS 'Telecommunications Operations Center' website
      - ◆ <http://weather.noaa.gov/fax/wafswind.shtml>
    - ✓ The NOAA NWS 'Aviation Weather Center-Aviation Digital Data Service' provides the same chart in color & without station models.
      - ◆ <http://adds.aviationweather.gov/winds/>
    - ✓ A table of forecast winds & temps aloft for all altitudes according to airport location can be found at the NOAA NWS 'Aviation Weather Center' website:
      - ◆ <http://aviationweather.gov/products/nws/winds/>

7. **Severe Weather Outlook Chart** (also known as **Convective Outlook Chart**)

- ✓ **Day 1** chart is *Issued 5 times daily* beginning at 0600z, and subsequently at 1300Z, 1630Z, 2000Z, and 0100Z - and all issuances are *Valid from 12Z the date of issue until 12Z the following day.*
- ✓ **Day 2** chart is *Issued twice daily* beginning at 0830Z and again at 1730Z and is *Valid from 12Z the following day until 12Z the third day.*
- ✓ Source of the Severe Weather Outlook Chart can be found at the NOAA NWS 'Storm Prediction Center' website:
  - ◆ <http://www.spc.noaa.gov/products/outlook/>

- Weather symbols used in station models on the **Surface Analysis** Chart, as well as the **Weather Depiction & Low-Level Significant Weather Prognostic** Charts can be seen at: [http://www.duat.com/wxSymbols\\_anno1.pdf](http://www.duat.com/wxSymbols_anno1.pdf)