

5. 50-meter increments for products between 150 meters and 800 meters.

6. 100-meter increments for products between 800 meters and 1,200 meters.

7. 200-meter increments for products between 1,200 meters and 2,000 meters.

## 7-1-16. Reporting of Cloud Heights

a. Ceiling, by definition in the CFRs and as used in aviation weather reports and forecasts, is the height above ground (or water) level of the lowest layer of clouds or obscuring phenomenon that is reported as “broken,” “overcast,” or “obscuration,” e.g., an aerodrome forecast (TAF) which reads “BKN030” refers to height above ground level. An area forecast which reads “BKN030” indicates that the height is above mean sea level.

### REFERENCE-

AIM, Paragraph 7-1-30, Key to Aerodrome Forecast (TAF) and Aviation Routine Weather Report (METAR), defines “broken,” “overcast,” and “obscuration.”

b. Pilots usually report height values above MSL, since they determine heights by the altimeter. This is taken in account when disseminating and otherwise applying information received from pilots. (“Ceiling” heights are always above ground level.) In reports disseminated as PIREPs, height references are given the same as received from pilots, that is, above MSL.

c. In area forecasts or inflight advisories, ceilings are denoted by the contraction “CIG” when used with sky cover symbols as in “LWRG TO CIG OVC005,” or the contraction “AGL” after, the forecast cloud height value. When the cloud base is given in height above MSL, it is so indicated by the contraction “MSL” or “ASL” following the height value. The heights of clouds tops, freezing level, icing, and turbulence are always given in heights above ASL or MSL.

## 7-1-17. Reporting Prevailing Visibility

a. Surface (horizontal) visibility is reported in METAR reports in terms of statute miles and increments thereof; e.g.,  $\frac{1}{16}$ ,  $\frac{1}{8}$ ,  $\frac{3}{16}$ ,  $\frac{1}{4}$ ,  $\frac{5}{16}$ ,  $\frac{3}{8}$ ,  $\frac{1}{2}$ ,  $\frac{5}{8}$ ,  $\frac{3}{4}$ ,  $\frac{7}{8}$ , 1,  $1\frac{1}{8}$ , etc. (Visibility reported by an unaugmented automated site is reported differently than in a manual report, i.e., ASOS/AWSS: 0,  $\frac{1}{16}$ ,  $\frac{1}{8}$ ,  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$ , 1,  $1\frac{1}{4}$ ,  $1\frac{1}{2}$ ,  $1\frac{3}{4}$ , 2,  $2\frac{1}{2}$ , 3, 4, 5, etc., AWOS:

$M\frac{1}{4}$ ,  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$ , 1,  $1\frac{1}{4}$ ,  $1\frac{1}{2}$ ,  $1\frac{3}{4}$ , 2,  $2\frac{1}{2}$ , 3, 4, 5, etc.) Visibility is determined through the ability to see and identify preselected and prominent objects at a known distance from the usual point of observation. Visibilities which are determined to be less than 7 miles, identify the obscuring atmospheric condition; e.g., fog, haze, smoke, etc., or combinations thereof.

b. Prevailing visibility is the greatest visibility equaled or exceeded throughout at least one half of the horizon circle, not necessarily contiguous. Segments of the horizon circle which may have a significantly different visibility may be reported in the remarks section of the weather report; i.e., the southeastern quadrant of the horizon circle may be determined to be 2 miles in mist while the remaining quadrants are determined to be 3 miles in mist.

c. When the prevailing visibility at the usual point of observation, or at the tower level, is less than 4 miles, certificated tower personnel will take visibility observations in addition to those taken at the usual point of observation. The lower of these two values will be used as the prevailing visibility for aircraft operations.

## 7-1-18. Estimating Intensity of Rain and Ice Pellets

### a. Rain

1. **Light.** From scattered drops that, regardless of duration, do not completely wet an exposed surface up to a condition where individual drops are easily seen.

2. **Moderate.** Individual drops are not clearly identifiable; spray is observable just above pavements and other hard surfaces.

3. **Heavy.** Rain seemingly falls in sheets; individual drops are not identifiable; heavy spray to height of several inches is observed over hard surfaces.

### b. Ice Pellets

1. **Light.** Scattered pellets that do not completely cover an exposed surface regardless of duration. Visibility is not affected.

2. **Moderate.** Slow accumulation on ground. Visibility reduced by ice pellets to less than 7 statute miles.