

**Section 6**  
**WEATHER DEPICTION CHART**

The weather depiction chart, Figure 6-3, is computer-generated (with human frontal analysis) from METAR reports. The weather depiction chart gives a broad overview of the observed flying category conditions at the valid time of the chart. This chart begins at 01Z each day, is transmitted at 3-hours intervals, and is valid at the time of the plotted data.

**PLOTTED DATA**

Observations reported by both manual and automated observation locations provide the data for the chart. The right bracket ( ] ) indicates the present weather information was obtained by an automated system only. The plotted data for each station are total sky cover, cloud height or ceiling, weather and obstructions to vision, and visibility. If the stations on the chart are crowded together, the weather, visibility, and cloud height may be moved up to 90 degrees around the station for better legibility. When reports are frequently updated, as at some automatic stations (every 20 minutes) or when the weather changes significantly, the observation used is the latest METAR received instead of using the one closest to the stated analysis time.

**TOTAL SKY COVER**

The amount of sky cover is shown by the station circle shaded as in Figure 6-1.

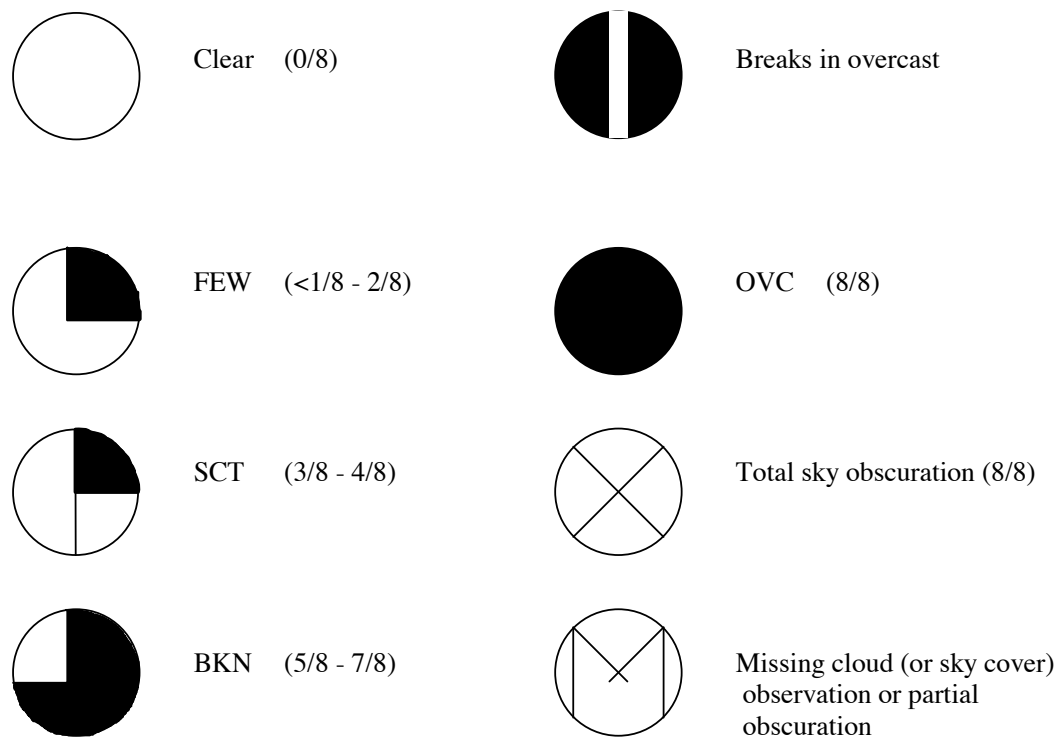


Figure 6-1. Total Sky Cover.

## **CLOUD HEIGHT**

Cloud height above ground level (AGL) is entered under the station circle in hundreds of feet; the same as coded in a METAR report. If total sky cover at a station is scattered, the cloud height entered is the base of the lowest scattered cloud layer. If total sky cover is broken or greater at a station, the cloud height entered is the lowest broken or overcast cloud layer. A totally obscured sky is shown by the sky cover symbol "X" and is accompanied by the height entry of the obscuration (vertical visibility into the obscuration). A partially obscured sky without a cloud layer above, however, is not recognized by the computer program reading the METAR report. It cannot differentiate between a partial obscuration and a missing observation. Therefore, the computer program will enter an "M" in the sky cover circle for either occurrence. Consequently, the user will not know if the observation is missing or a partial obscuration is present. To obtain the most accurate information, the user must consult the METAR report for that specific station. A partially obscured sky with clouds above will have a cloud height entry for the cloud layer, but there will be no entry to indicate that there is a partial obscuration at the surface. So once again the user must consult the METAR report to obtain the most accurate information.

## **WEATHER AND OBSTRUCTIONS TO VISIBILITY**

Weather and obstructions to visibility symbols are entered to the left of the station circle. Figure 5-6 explains most of the symbols used. When several types of weather and/or obstructions to visibility are reported at a station, the first one reported in the METAR would usually be the highest coded number in Figure 5-6. Also, for some stations that are not ordinarily plotted, the weather symbol is plotted only if the weather is significant, such as a thunderstorm.

## **VISIBILITY**

When visibility is 5 miles or less, it is entered to the left of the weather or obstructions to vision symbol. Visibility is entered in statute miles and fractions of a mile.

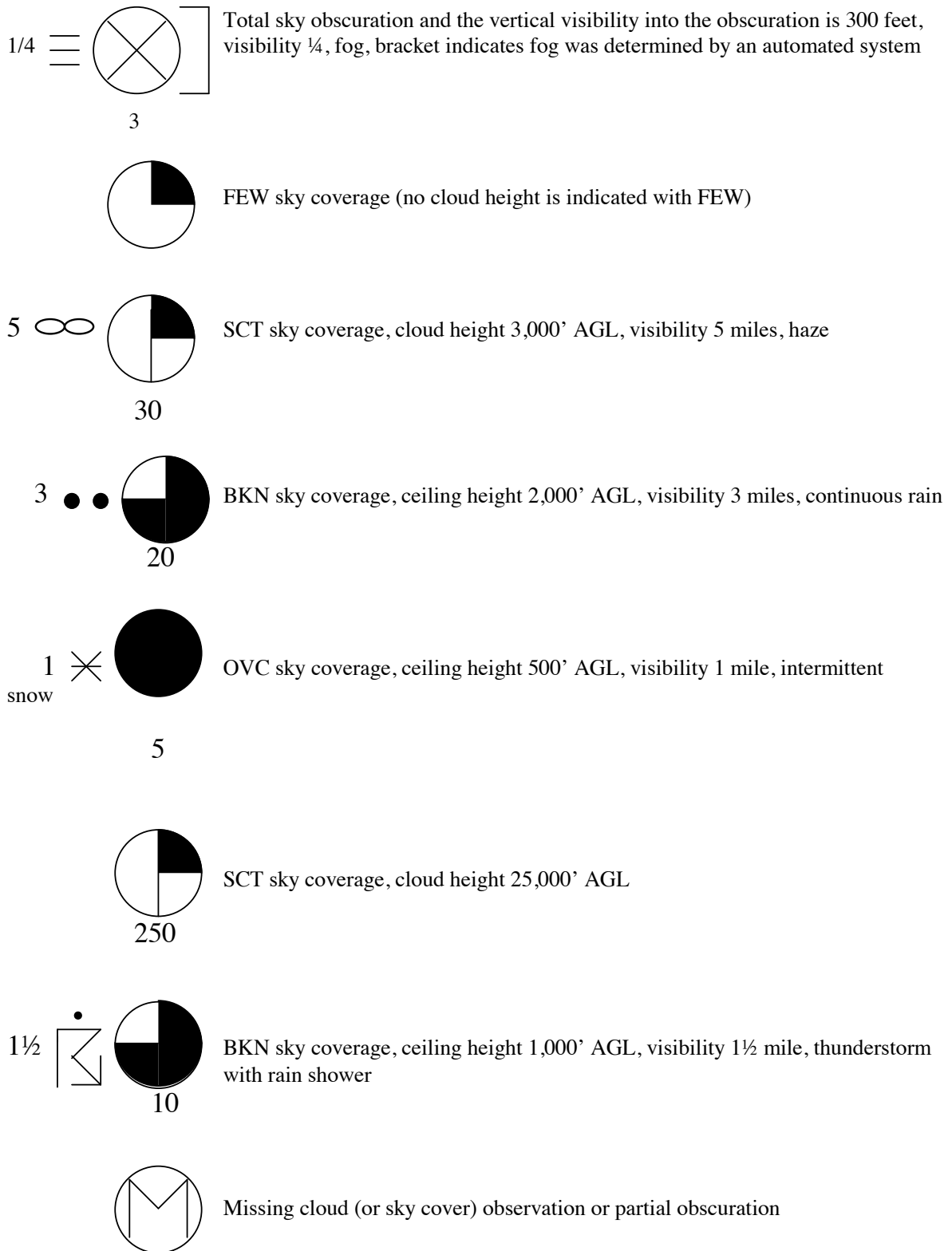


Figure 6-2. Examples of Plotting on the Weather Depiction Chart.