

of no significant weather phenomena occurs, the contraction NSW (No Significant Weather) will appear as the weather group in the new time period. (NSW is included only in TEMPO groups).

NOTE-

It is very important that pilots understand that NSW only refers to weather phenomena, i.e., rain, snow, drizzle, etc. Omitted conditions, such as sky conditions, visibility, winds, etc., are carried over from the previous time group.

(d) Sky Condition. TAF sky condition forecasts use the METAR format described in the METAR section. Cumulonimbus clouds (CB) are the only cloud type forecast in TAFs. When clear skies are forecast, the contraction “SKC” will always be used. The contraction “CLR” is never used in the TAF. When the sky is obscured due to a surface-based phenomenon, vertical visibility (VV) into the obscuration is forecast. The format for vertical visibility is “VV” followed by a three-digit height in hundreds of feet.

NOTE-

As in METAR, ceiling layers are not designated in the TAF code. For aviation purposes, the ceiling is the lowest broken or overcast layer or vertical visibility into a complete obscuration.

- SKC “sky clear”
- SCT005 BKN025CB . “five hundred scattered, ceiling two thousand five hundred broken cumulonimbus clouds”
- VV008 “indefinite ceiling eight hundred”

(e) Optional Data (Wind Shear). Wind shear is the forecast of nonconvective low level winds (up to 2,000 feet). The forecast includes the letters “WS” followed by the height of the wind shear, the wind direction and wind speed at the indicated height and the ending letters “KT” (knots). Height is given in hundreds of feet (AGL) up to and including 2,000 feet. Wind shear is encoded with the contraction “WS,” followed by a three-digit height, slant character “/,” and winds at the height indicated in the same format as surface winds. The wind shear element is omitted if not expected to occur.

WS010/18040KT – “LOW LEVEL WIND SHEAR AT ONE THOUSAND, WIND ONE EIGHT ZERO AT FOUR ZERO”

d. Probability Forecast. The probability or chance of thunderstorms or other precipitation events

occurring, along with associated weather conditions (wind, visibility, and sky conditions). The PROB30 group is used when the occurrence of thunderstorms or precipitation is 30–39% and the PROB40 group is used when the occurrence of thunderstorms or precipitation is 40–49%. This is followed by two four-digit groups separated by a “/”, giving the beginning date and hour, and the ending date and hour of the time period during which the thunderstorms or precipitation are expected.

NOTE-

NWS does not use PROB 40 in the TAF. However U.S. Military generated TAFS may include PROB40. PROB30 will not be shown during the first nine hours of a NWS forecast.

EXAMPLE-

- PROB40 2221/2302 1/2SM +TSRA “chance between 2100Z and 0200Z of visibility one-half statute mile in thunderstorms and heavy rain.”
- PROB30 3010/3014 1SM RASN . “chance between 1000Z and 1400Z of visibility one statute mile in mixed rain and snow.”

e. Forecast Change Indicators. The following change indicators are used when either a rapid, gradual, or temporary change is expected in some or all of the forecast meteorological conditions. Each change indicator marks a time group within the TAF report.

1. From (FM) group. The FM group is used when a rapid change, usually occurring in less than one hour, in prevailing conditions is expected. Typically, a rapid change of prevailing conditions to more or less a completely new set of prevailing conditions is associated with a synoptic feature passing through the terminal area (cold or warm frontal passage). Appended to the “FM” indicator is the six-digit date, hour, and minute the change is expected to begin and continues until the next change group or until the end of the current forecast. A “FM” group will mark the beginning of a new line in a TAF report (indented 5 spaces). Each “FM” group contains all the required elements—wind, visibility, weather, and sky condition. Weather will be omitted in “FM” groups when it is not significant to aviation. FM groups will not include the contraction NSW.