

KEY TO AVIATION WEATHER REPORTS

LOCATION IDENTIFIER AND TYPE OF REPORT *	SKY AND CEILING	VISIBILITY AND OBSTRUCTION TO VISION	SEA LEVEL PRESSURE	TEMPERATURE AND DEW POINT	WIND	ALTIMETER SETTING	RUNWAY	VISUAL RANGE	CODED PIREPS
MKC	150M250	4R-K	132	58/56	/1807	/993/	R04LVR	20V40	/055

SKY AND CEILING

Sky cover symbols are in ascending order. Figures preceding symbols are heights in hundreds of feet above station.

Sky cover symbols are:

- Clear: Less than 0.1 sky cover
- ① Scattered: 0.1 to less than 0.6 sky cover.
- ② Broken: 0.6 to 0.9 sky cover.
- ⊕ Overcast: More than 0.9 sky cover
- Thin (When prefixed to the above symbols.)
- X Partial obscurations: 0.1 to less than 1.0 sky hidden by precipitation or obstruction to vision (bases at surface)
- X Obscurations: 1.0 sky hidden by precipitation or obstruction to vision (bases at surface)

Letter preceding height of layer identifies ceiling layer and indicates how ceiling height was obtained. Thus:

A Aircraft	R Radiosonde Balloon or Radar.
B Balloon (Pilot or ceiling).	W Indefinite
D Estimated height of cirriform clouds on basis of persistency.	U Height of cirriform ceiling layer unknown. Height of cirriform non-ceiling layer unknown.
E Estimated heights of noncirriform clouds	"V" Immediately following numerical value indicates a varying ceiling.
M Measured	

VISIBILITY

Reported in Statute Miles and Fractions. (V=Variable)

WEATHER AND OBSTRUCTION TO VISION SYMBOLS

A Hail	F Fog.	RW Rain Showers
AP Small Hail	GF Ground Fog	S Snow
BD Blowing Dust	H Haze	SG Snow Grains
BN Blowing Sand	IC Ice Crystals	SP Snow Pellets
BS Blowing Snow	IF Ice Fog	SW Snow Showers
D Dust	K Smoke	T Thunderstorm
E Sleet	L Drizzle	ZL Freezing Drizzle
EW Sleet Showers	R Rain	ZR Freezing Rain

Precipitation intensities are indicated thus:

-- Very Light; - Light; (no sign) Moderate; + Heavy

WIND

Direction in tens of degrees from true north, speed in knots. 0000 indicates calm. G indicates gusty. Peak speed of gusts follows G or Q when squall is reported. The contraction WSHTPT followed by local time group in remarks indicates wind-shift and its time of occurrence. (Kts. x 1.15 = statute mi/hr.)

EXAMPLES: 3627 360 Degrees, 27 Knots;
3627G40 360 Degrees, 27 Knots Peak speed in gusts 40 knots.

ALTIMETER SETTING

The first figure of the actual altimeter setting is always omitted from the report.

RUNWAY VISUAL RANGE (RVR)

RVR is reported from some stations. Extreme values for 30 minutes prior to observation are given in hundreds of feet. Runway identification precedes RVR report.

CODED PIREPS

Pilot reports of clouds not visible from ground are coded with MSL height data preceding and/or following sky cover symbol to indicate cloud bases and/or tops, respectively.

DECODED REPORT

Kansas City; Record observation, 1500 feet scattered clouds, measured ceiling 2500 feet overcast, visibility 4 miles, light rain, smoke, sea level pressure 1013.2 millibars, temperature 58°F, dewpoint 56°F, wind 180°, 7 knots, altimeter setting 29.93 inches. Runway 04 left, visual range 2000 ft. variable to 4000. Pilot reports top of overcast 5500 feet.

*TYPE OF REPORT

The omission of type-of-report data identifies a scheduled record observation for the hour specified in the sequence heading; the time of an out-of-sequence, special observation is given as "S" followed by a time group (24-hour clock GMT) e.g., "PIT 8 0715-XM..." A special indicates a significant change in one or more elements. Local reports are identified by "LCL" and a time group. Locals are transmitted on local teletypewriter circuits only.

KEY TO AVIATION WEATHER FORECASTS

TERMINAL FORECASTS contain information for specific airports on ceiling, cloud heights, cloud amounts, visibility, weather condition and surface wind. They are written in a form similar to the AVIATION WEATHER REPORT.

CEILING: Identified by the letter "C"

CLOUD HEIGHTS: In hundreds of feet above the station (ground)

CLOUD LAYERS: Stated in ascending order of height

VISIBILITY: In statute miles, but omitted if over 8 miles

SURFACE WIND: In tens of degrees and knots; omitted when less than 10.

EXAMPLE OF TERMINAL FORECASTS

C150	Ceiling 1500', broken clouds	O11/2GF	Clear, visibility one and one-half miles, ground fog.
200C70 6K 3230G	Scattered clouds at 2000', ceiling 7000' overcast, visibility 6 miles, smoke, surface wind 320 degrees 30 knots, gusty.	CSX1/4S	Sky obscured, vertical visibility 500', visibility one-fourth mile, moderate snow.

AREA FORECASTS are 12-hour forecasts plus 12-hour OUTLOOKS (18 hour outlook in FA valid at 1300Z) of cloud, weather and frontal conditions for an area the size of several states. Heights of cloud tops, icing, and turbulence are ABOVE SEA LEVEL (ASL); ceiling heights, ABOVE GROUND LEVEL (AGL); bases of cloud layers are ASL unless indicated. Area Forecasts are amended by SIGMET's or AIRMET's.

SIGMET or AIRMET warn airmen in flight of potentially hazardous weather such as squall lines, thunderstorms, fog, icing, and turbulence. SIGMET concerns severe and extreme conditions of importance to all aircraft. AIRMET concerns less severe conditions which may be hazardous to some aircraft or to relatively inexperienced pilots. Both are broadcast by FAA on NAVAID voice channels.

WINDS (AND TEMPERATURES) ALOFT FORECASTS are 6- and 12-hour forecasts of direction (nearest 10° true N) and speed (knots) for selected flight levels. Temperatures aloft (°C) are included for all but the lowest and 7000-foot levels.

EXAMPLES OF WINDS ALOFT FORECASTS:

LVL 3000 5000 FT 7000 10000 FT
MLT 2925 2833+00 2930 3030-06

At 5000' ASL wind from 280° at 33 knots with temperature 0°Celsius

PILOTS report in-flight weather to nearest FSS