2025

Weather Reports and Forecasts

TEST PREP

1
For aviation purposes, ceiling is defined as the height above the Earth's surface of the

a. lowest reported obscuration and the highest layer of clouds reported as overcast.
b. lowest layer of clouds reported as scattered, broken, or thin.
c. lowest broken or overcast layer or vertical visibility into an obscuration.

2
The information in a METAR is:

a. Depends on the amount of data presented.
b. Sequential following a prescribed format.
c. Follows no specific format.

3
What should pilots state initially when telephoning a weather briefing facility for preflight weather information?

a. The address of the pilot in command.
b. The intended route of flight radio frequencies.
c. The intended route of flight and destination.

4
Absence of the sky condition and visibility on an ATIS broadcast indicates that

a. the sky condition is clear and visibility is unrestricted.
b. weather conditions are at or above VFR minimums.
c. the ceiling is at least 5,000 feet and visibility is 5 miles or more.

6
What information is contained in a CONVECTIVE SIGMET?

a. Tornadoes, embedded thunderstorms, and hail 3/4 inch or greater in diameter.
b. Surface winds greater than 40 knots or thunderstorms equal to or greater than video integrator processor (VIP) level 4.
c. Severe icing, severe turbulence, or widespread dust storms lowering visibility to less than 3 miles.

7
(Refer to figure 15.) Between 1000Z and 1200Z the visibility at KMEM is forecast to be?
View Figure 15

a. 1/2 statute mile.
b. 3 statute miles.
c. 6 statute miles.

TAF
KMEM 121720Z 1218/1324 20012KT 5SM HZ BKN030 PROB40 1220/1222 1SM TSRA OVC008CB FM122200 33015G20KT P6SM BKN015 OVC025 PROB40 1220/1222 3SM SHRA FM120200 35012KT OVC008 PROB40 1202/1205 2SM-RASN BECMG 1306/1308 02008KT BKN012 BECMG 1310/1312 00000KT 3SM BR SKC TEMPO 1212/1214 1/2SM FG FM131600 VRB06KT P6SM SKC=
KOKC 051130Z 0512/0618 14008KT 5SM BR BKN030 TEMPO 0513/0516 1 1/2SM BR FM051600 18010KT P6SM SKC BECMG 0522/0524 20013G20KT 4SM SHRA OVC020 PROB40 0600/0606 2SM TSRA OVC008CB BECMG 0606/0608 21015KT P6SM SCT040=

8
Aviation Routine Weather reports (METARs) contain:

a. Wind, visibility, precipitation, cloud coverage, temperature, and altimeter setting.
b. Wind, visibility, precipitation, and temperature only.
c. Wind, visibility, and precipitation only.

9
To get a complete weather briefing for the planned flight, the pilot should request

a. a standard briefing.
b. an abbreviated briefing.
c. a general briefing.

10
(Refer to figure 14.) If the terrain elevation is 1,295 feet MSL, what is the height above ground level of the base of the ceiling?
View Figure 14

a. 1,295 feet AGL.

b. 505 feet AGL.
c. 6,586 feet AGL.

UA/OV KOKC-KTUL/TM 1800/FL120/TP BE90/SK BKN018-TOP055/OVC072-TOP089/CLR ABV/TA M7/WV 08021/TB LGT 055-072/IC LGT-MOD RIME 072-089

11
(Refer to figure 17.) What wind is forecast for STL at 12,000 feet?
View Figure 17

a. 230° true at 56 knots.
b. 230° true at 39 knots.
c. 230° magnetic at 56 knots.

FB WBC 151745
DATA BASED ON 151200Z
VALID 1600Z FOR USE 1800-0300Z. TEMPS NEG ABV 24000

FT	3000	6000	9000	12000	18000	24000	30000	34000	39000
ALS			2420	2635-08	2535-18	2444-30	245945	246755	246862
AMA		2714	2725+00	2625-04	2531-15	2542-27	265842	256352	256762
DEN			2321-04	2532-08	2434-19	2441-31	235347	236056	236262
HLC		1707-01	2113-03	2219-07	2330-17	2435-30	244145	244854	245561
MKC	0507	2006+03	2215-01	2322-06	2338-17	2348-29	236143	237252	238160
STL	2113	2325+07	2332+02	2339-04	2356-16	2373-27	239440	730649	731960

12
(Refer to figure 12.) The remarks section for KMDW has RAB35 listed. This entry means
View Figure 12

a. rain began at 1835Z.
b. blowing mist has reduced the visibility to 1-1/2 SM.
c. the barometer has risen .35 inches Hg.

METAR KINK 121845Z 11012G18KT 15SM SKC 25/17 A3000

METAR KBOI 121854Z 13004KT 30SM SCT150 17/6 A3015

METAR KLAX 121852Z 25004KT 6SM BR SCT007 SCT250 16/15 A2991

SPECI KMDW 121856Z 32005KT 1 1/2SM RA OVC007 17/16 A2980 RMK RAB35

SPECI KJFK 121853Z 18004KT 1/2SM FG R04/2200 OVC005 20/18 A3006

Figure 12. Aviation Routine Weather Reports (METAR).

13
(Refer to figure 17.) What wind is forecast for AMA at 12,000 feet?
View Figure 17

a. 230° magnetic at 56 knots.
b. 230° true at 56 knots.
c. 260° true at 25 knots.

FB WBC 151745
DATA BASED ON 151200Z
VALID 1600Z FOR USE 1800-0300Z. TEMPS NEG ABV 24000

FT	3000	6000	9000	12000	18000	24000	30000	34000	39000
ALS			2420	2635-08	2535-18	2444-30	245945	246755	246862
AMA		2714	2725+00	2625-04	2531-15	2542-27	265842	256352	256762
DEN			2321-04	2532-08	2434-19	2441-31	235347	236056	236262
HLC		1707-01	2113-03	2219-07	2330-17	2435-30	244145	244854	245561
MKC	0507	2006+03	2215-01	2322-06	2338-17	2348-29	236143	237252	238160
STL	2113	2325+07	2332+02	2339-04	2356-16	2373-27	239440	730649	731960

Figure 17. Winds and Temperatures Aloft Forecast.

15
Which type weather briefing should a pilot request, when departing within the hour, if no preliminary weather information has been received?

a. Abbreviated briefing.
b. Standard briefing.
c. Outlook briefing.

17
A TAF includes:

a. Wind, obstructions to vision, and cloud tops in feet MSL.
b. Wind, visibility, cloud coverage, and cloud tops in feet MSL.
c. Wind, visibility, weather phenomena, obstructions to vision, and cloud coverage.

18
On a TAF, the broken cloud layer written as, BKN250 indicates:

a. A broken cloud layer at 250 feet AGL.
b. A broken cloud layer at 2,500 feet AGL.
c. A broken cloud layer at 25,000 feet AGL.

20
SIGMETs are issued as a warning of weather conditions hazardous to which aircraft?

a. Large aircraft only.
b. All aircraft.
c. Small aircraft only.

21
(Refer to Figure 17.) Determine the wind and temperature aloft forecast for ALS at 12,000 feet.
View Figure 17

a. 050° true at 7 knots, temperature missing.
b. 260° true at 35 knots, temperature -8°C.
c. 200° magnetic at 6 knots, temperature +3°C.

FB WBC 151745
DATA BASED ON 151200Z
VALID 1600Z FOR USE 1800-0300Z. TEMPS NEG ABV 24000

FT	3000	6000	9000	12000	18000	24000	30000	34000	39000
ALS			2420	2635-08	2535-18	2444-30	245945	246755	246862
AMA		2714	2725+00	2625-04	2531-15	2542-27	265842	256352	256762
DEN			2321-04	2532-08	2434-19	2441-31	235347	236056	236262
HLC		1707-01	2113-03	2219-07	2330-17	2435-30	244145	244854	245561
MKC	0507	2006+03	2215-01	2322-06	2338-17	2348-29	236143	237252	238160
STL	2113	2325+07	2332+02	2339-04	2356-16	2373-27	239440	730649	731960

Figure 17. Winds and Temperatures Aloft Forecast.

22
A weather briefing that is provided when the information requested is 6 or more hours in advance of the proposed departure time is

a. a prognostic briefing.
b. an outlook briefing.
c. a forecast briefing.

23
When telephoning a weather briefing facility for preflight weather information, pilots should state

a. fuel on board.
b. true airspeed.
c. the aircraft identification or the pilot's name.

24
(Refer to figure 15.) In the TAF from KOKC, the 'FM (FROM) Group' is forecast for the hours from 1600Z to 2200Z with the wind from
View Figure 15

a. 160° at 10 knots.
b. 180° at 10 knots, becoming 200° at 13 knots.
c. 180° at 10 knots.

TAF

KMEM 121720Z 1218/1324 20012KT 5SM HZ BKN030 PROB40 1220/1222 1SM TSRA OVC008CB
FM122200 33015G20KT P6SM BKN015 OVC025 PROB40 1220/1222 3SM SHRA
FM120200 35012KT OVC008 PROB40 1202/1205 2SM-RASN BECMG 1306/1308 02008KT BKN012
BECMG 1310/1312 00000KT 3SM BR SKC TEMPO 1212/1214 1/2SM FG
FM131600 VRB06KT P6SM SKC=

KOKC 051130Z 0512/0618 14008KT 5SM BR BKN030 TEMPO 0513/0516 1 1/2SM BR
FM051600 18010KT P6SM SKC BECMG 0522/0524 20013G20KT 4SM SHRA OVC020
PROB40 0600/0606 2SM TSRA OVC008CB BECMG 0606/0608 21015KT P6SM SCT040=

Figure 15. Terminal Aerodrome Forecasts (TAF).

25
Which type of weather briefing should a pilot request to supplement mass disseminated data?

a. An abbreviated briefing.
b. An outlook briefing.
c. A supplemental briefing.

26
Radar weather reports are of special interest to pilots because they indicate

a. large areas of low ceilings and fog.
b. location of precipitation along with type, intensity, and cell movement of precipitation.
c. location of precipitation along with type, intensity, and trend.

27
What should pilots state initially when telephoning a weather briefing facility for preflight weather information?

a. Tell the number of occupants on board.
b. State their total flight time.
c. Identify themselves as pilots.

28
(Refer to figure 12.) What are the wind conditions at Wink, Texas (KINK)?
View Figure 12

a. 110° at 12 knots, gusts 18 knots.
b. 111° at 2 knots, gusts 18 knots.
c. Calm.

METAR KINK 121845Z 11012G18KT 15SM SKC 25/17 A3000

METAR KBOI 121854Z 13004KT 30SM SCT150 17/6 A3015

METAR KLAX 121852Z 25004KT 6SM BR SCT007 SCT250 16/15 A2991

SPECI KMDW 121856Z 32005KT 1 1/2SM RA OVC007 17/16 A2980 RMK RAB35

SPECI KJFK 121853Z 18004KT 1/2SM FG R04/2200 OVC005 20/18 A3006

Figure 12. Aviation Routine Weather Reports (METAR).

29
What is indicated when a current CONVECTIVE SIGMET forecasts thunderstorms?

a. Moderate thunderstorms covering 30 percent of the area.
b. Moderate or severe turbulence.
c. Thunderstorms obscured by massive cloud layers.

30
(Refer to figure 15.) What is the valid period for the TAF for KMEM?
View Figure 15

a. 1200Z to 1800Z.
b. 1218Z to 1324Z.
c. 1800Z on the 12th to 2400Z on the 13th.

TAF
KMEM 121720Z 1218/1324 20012KT 5SM HZ BKN030 PROB40 1220/1222 1SM TSRA OVC008CB FM122200 33015G20KT P6SM BKN015 OVC025 PROB40 1220/1222 3SM SHRA FM120200 35012KT OVC008 PROB40 1202/1205 2SM-RASN BECMG 1306/1308 02008KT BKN012 BECMG 1310/1312 00000KT 3SM BR SKC TEMPO 1212/1214 1/2SM FG FM131600 VRB06KT P6SM SKC=
KOKC 051130Z 0512/0618 14008KT 5SM BR BKN030 TEMPO 0513/0516 1 1/2SM BR FM051600 18010KT P6SM SKC BECMG 0522/0524 20013G20KT 4SM SHRA OVC020 PROB40 0600/0606 2SM TSRA OVC008CB BECMG 0606/0608 21015KT P6SM SCT040=

Figure 15. Terminal Aerodrome Forecasts (TAF).

31
When requesting weather information for the following morning, a pilot should request

a. a standard briefing.
b. an abbreviated briefing.
c. an outlook briefing.

32
(Refer to figure 12.) What are the current conditions depicted for Chicago Midway Airport (KMDW)?
View Figure 12

a. Sky 700 feet overcast, visibility 1-1/2SM, moderate rain.
b. Sky 700 feet overcast, visibility 11, occasionally 2SM, with light rain.
c. Sky 7000 feet overcast, visibility 1-1/2SM, heavy rain.

METAR KINK 121845Z 11012G18KT 15SM SKC 25/17 A3000
METAR KBOI 121854Z 13004KT 30SM SCT150 17/6 A3015
METAR KLAX 121852Z 25004KT 6SM BR SCT007 SCT250 16/15 A2991
SPECI KMDW 121856Z 32005KT 1 1/2SM RA OVC007 17/16 A2980 RMK RAB35
SPECI KJFK 121853Z 18004KT 1/2SM FG R04/2200 OVC005 20/18 A3006

Figure 12. Aviation Routine Weather Reports (METAR).

33
(Refer to figure 14.) The intensity of the turbulence reported at a specific altitude is
View Figure 14

a. light from 5,500 feet to 7,200 feet.
b. moderate at 5,500 feet and at 7,200 feet.
c. moderate from 5,500 feet to 7,200 feet.

UA/OV KOKC-KTUL/TM 1800/FL120/TP BE90/SK BKN018-TOP055/OVC072-
TOP089/CLR ABV/TA M7/WV 08021/TB LGT 055-072/IC LGT-MOD RIME 072-089

Figure 14. Pilot Weather Report.

34
When speaking to a Flight Service weather briefer, you should state:

a. whether the flight is VFR or IFR.
b. the pilot in command`s full name and address.
c. a summary of your qualifications.

35
If you read in a METAR the symbols “SKC” and “OVC”, refer to:

a. Sky clear and broken clouds.
b. Few clouds and scattered clouds.
c. Sky Clear and Overcast.

37
The Terminal Aerodrome Forecast (TAF) is:

a. Covers an area of up to 20 miles from the center of an airport.
b. Specific to an airport.
c. Contains weather data for a large area—typically a 50 square mile area.

39
When telephoning a weather briefing facility for preflight weather information, pilots should state

a. the full name and address of the formation commander.
b. whether they intend to fly VFR only.
c. that they possess a current pilot certificate.

40
(Refer to figure 12.) Which of the reporting stations have VFR weather?
View Figure 12

a. KINK, KBOI, and KLAX.
b. KINK, KBOI, and KJFK.
c. All.

Figure 12. Aviation Routine Weather Reports (METAR).

41
METARs have a four letter identifier. In the U.S. METARs begin with the letter:

a. M.
b. C.
c. K.

42
When the term 'light and variable' is used in reference to a Winds Aloft Forecast, the coded group and windspeed is

a. 9900 and less than 5 knots.
b. 0000 and less than 7 knots.
c. 9999 and less than 10 knots.

43
What values are used for Winds Aloft Forecasts?

a. True direction and knots.
b. Magnetic direction and knots.
c. Magnetic direction and miles per hour.

44
(Refer to figure 17.) What wind is forecast for STL at 9,000 feet?
View Figure 17

a. 230° true at 25 knots.
b. 230° true at 32 knots.
c. 230° magnetic at 25 knots.

FB WBC 151745
DATA BASED ON 151200Z
VALID 1600Z FOR USE 1800-0300Z. TEMPS NEG ABV 24000

FT	3000	6000	9000	12000	18000	24000	30000	34000	39000
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HLC		1707-01	2113-03	2219-07	2330-17	2435-30	244145	244854	245561
MKC	0507	2006+03	2215-01	2322-06	2338-17	2348-29	236143	237252	238160
STL	2113	2325+07	2332+02	2339-04	2356-16	2373-27	239440	730649	731960

Figure 17. Winds and Temperatures Aloft Forecast.

45
What are the types of preflight weather briefings?

a. Standard, abbreviated, and outlook.
b. Standard, specific, and complete.
c. Initial, specific, and outlook.

46
(Refer to Figure 17.) Determine the wind and temperature aloft forecast for HLC at 9,000 feet.
View Figure 17

a. 230° true at 53 knots, temperature -47°C.
b. 230° magnetic at 53 knots, temperature 47°C.
c. 210° true at 13 knots, temperature -3°C.

FB WBC 151745
DATA BASED ON 151200Z
VALID 1600Z FOR USE 1800-0300Z. TEMPS NEG ABV 24000

FT	3000	6000	9000	12000	18000	24000	30000	34000	39000
ALS			2420	2635-08	2535-18	2444-30	245945	246755	246862
AMA		2714	2725+00	2625-04	2531-15	2542-27	265842	256352	256762
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HLC		1707-01	2113-03	2219-07	2330-17	2435-30	244145	244854	245561
MKC	0507	2006+03	2215-01	2322-06	2338-17	2348-29	236143	237252	238160
STL	2113	2325+07	2332+02	2339-04	2356-16	2373-27	239440	730649	731960

Figure 17. Winds and Temperatures Aloft Forecast.

47
(Refer to figure 15.) In the TAF from KOKC, the clear sky becomes
View Figure 15

a. overcast at 2,000 feet during the forecast period between 2200Z and 2400Z.
b. overcast at 200 feet with a 40 percent probability of becoming overcast at 600 feet during the forecast period between 2200Z and 2400Z.
c. overcast at 200 feet with the probability of becoming overcast at 400 feet during the forecast period between 2200Z and 2400Z.

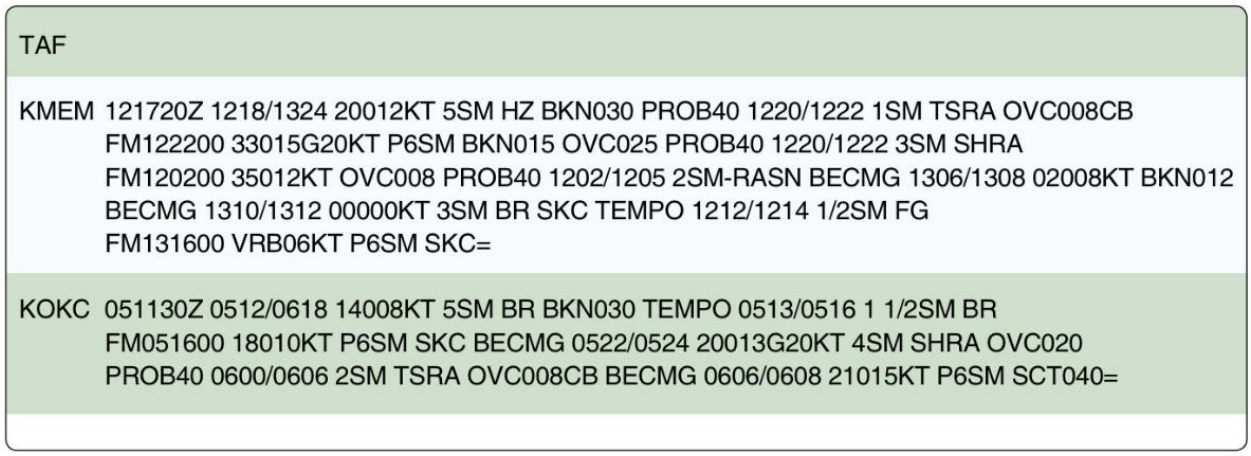

Figure 15. Terminal Aerodrome Forecasts (TAF).

48
To obtain current information regarding cloud tops, icing, and turbulence check the:

a. Pilot reports (PIREPs).
b. Low-Level Significant Weather Prog Charts.
c. Graphical Forecasts for Aviation (GFA).

49
What can you learn about current weather conditions from this PIREP?
RFD UUA /OV RFD090005/TM 1818/FL015/TP B767/RM +/- 15 KTS ON FINAL

a. It is an urgent pilot report for a plus or minus 15 knots wind shear at 1,800'.
b. It is an urgent pilot report for a plus or minus 15 knot variation of airspeed on final approach.
c. It is a routine pilot report for a plus or minus 15 knot wind gust at 1,500'.

50
The most accurate part of a forecast occurs:

a. At the beginning of the forecast period.
b. Some hours after the forecast period.
c. At the end of the forecast period.

51
(Refer to figure 15.) In the TAF for KMEM, what does 'SHRA' stand for?
View Figure 15

a. Rain showers.
b. A significant change in precipitation is possible.
c. A shift in wind direction is expected.

TAF

KMEM 121720Z 1218/1324 20012KT 5SM HZ BKN030 PROB40 1220/1222 1SM TSRA OVC008CB
FM122200 33015G20KT P6SM BKN015 OVC025 PROB40 1220/1222 3SM SHRA
FM120200 35012KT OVC008 PROB40 1202/1205 2SM-RASN BECMG 1306/1308 02008KT BKN012
BECMG 1310/1312 00000KT 3SM BR SKC TEMPO 1212/1214 1/2SM FG
FM131600 VRB06KT P6SM SKC=

KOKC 051130Z 0512/0618 14008KT 5SM BR BKN030 TEMPO 0513/0516 1 1/2SM BR
FM051600 18010KT P6SM SKC BECMG 0522/0524 20013G20KT 4SM SHRA OVC020
PROB40 0600/0606 2SM TSRA OVC008CB BECMG 0606/0608 21015KT P6SM SCT040=

Figure 15. Terminal Aerodrome Forecasts (TAF).

52
(Refer to figure 15.) The only cloud type forecast in TAF reports is
View Figure 15

a. Scattered cumulus.
b. Cumulonimbus.
c. Nimbostratus.

TAF

KMEM 121720Z 1218/1324 20012KT 5SM HZ BKN030 PROB40 1220/1222 1SM TSRA OVC008CB
FM122200 33015G20KT P6SM BKN015 OVC025 PROB40 1220/1222 3SM SHRA
FM120200 35012KT OVC008 PROB40 1202/1205 2SM-RASN BECMG 1306/1308 02008KT BKN012
BECMG 1310/1312 00000KT 3SM BR SKC TEMPO 1212/1214 1/2SM FG
FM131600 VRB06KT P6SM SKC=

KOKC 051130Z 0512/0618 14008KT 5SM BR BKN030 TEMPO 0513/0516 1 1/2SM BR
FM051600 18010KT P6SM SKC BECMG 0522/0524 20013G20KT 4SM SHRA OVC020
PROB40 0600/0606 2SM TSRA OVC008CB BECMG 0606/0608 21015KT P6SM SCT040=

Figure 15. Terminal Aerodrome Forecasts (TAF).

53
AIRMETs are advisories of significant weather phenomena but of lower intensities than SIGMETs and are intended for dissemination to

a. only VFR pilots.
b. only IFR pilots.
c. all pilots.

54
(Refer to figure 14.) The intensity and type of icing reported by a pilot is
View Figure 14

a. light to moderate rime.
b. light to moderate.
c. light to moderate clear.

UA/OV KOKC-KTUL/TM 1800/FL120/TP BE90/SK BKN018-TOP055/OVC072-
TOP089/CLR ABV/TA M7/WV 08021/TB LGT 055-072/IC LGT-MOD RIME 072-089

Figure 14. Pilot Weather Report.

55
(Refer to figure 14.) The wind and temperature at 12,000 feet MSL as reported by a pilot are
View Figure 14

a. 090° at 21 MPH and -9 °F.
b. 080° at 21 knots and -7 °C.
c. 090° at 21 knots and -9 °C.

UA/OV KOKC-KTUL/TM 1800/FL120/TP BE90/SK BKN018-TOP055/OVC072-
TOP089/CLR ABV/TA M7/WV 08021/TB LGT 055-072/IC LGT-MOD RIME 072-089

Figure 14. Pilot Weather Report.

56

To update a previous weather briefing, a pilot should request

a. a standard briefing.
b. an abbreviated briefing.
c. an outlook briefing.