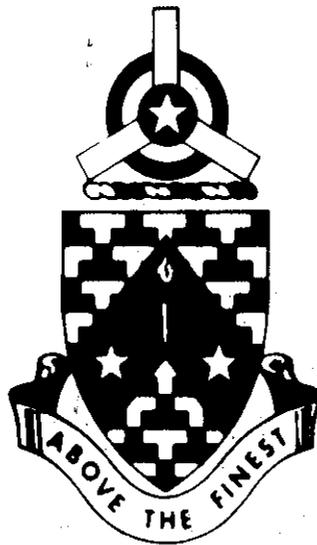


# PROGRAMED TEXT

WEATHER DEPICTION CHART

AM-76



DECEMBER 1968

**UNITED STATES ARMY  
PRIMARY HELICOPTER SCHOOL  
FORT WOLTERS, TEXAS**

# PROGRAMED TEXT

## PROGRAM TEXT

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**FILE NO:**

AM-76

**PROGRAM TITLE**

WEATHER DEPICTION CHART

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**POI SCOPE:** The ceiling and visibility at specific locations and the areas of IFR and VFR weather conditions.

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**INSTRUCTOR REFERENCES:**

TM 1-300, Chapter 12, Section 9, Paragraph b

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**PREPARED BY:**Mr. J. Garza  
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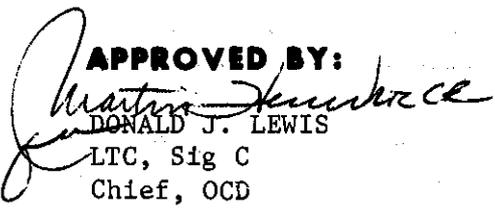
February 1968

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December 1968

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January 1969

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**PROGRAMED TEXT**

**FILE NO:** AM-76

**PROGRAM TITLE:**

WEATHER DEPICTION CHART

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_____	_____

## PREFACE

A weather depiction chart summarizes ceiling and visibility conditions for selected stations across the United States. This information is essential for determining if weather conditions at specific locations are VFR or IFR conditions. An aviator must be able to interpret this information accurately in order to effectively plan his flight.

Start with frame 1 and work each frame in succession. Each frame will usually ask you a question. The correct answer is printed on the top of the next frame. If you were incorrect, turn back and restudy the information before continuing on to the next frame. When you have finished the text, complete the self evaluation exercise. Now begin by studying the performance objectives on page iv.

## PERFORMANCE OBJECTIVES

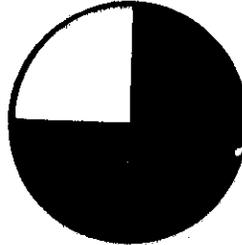
Given a weather depiction chart, you will be able to identify:

1. Areas of IFR and VFR weather conditions.
2. The cloud cover and height of their bases at designated stations.
3. The visibility and obstructions to visibility (if any) at designated stations.

FRAME 1

Sky condition is indicated by the station model in the same way as on a surface weather map. This symbol means that \_\_\_\_\_ of the sky is covered by clouds.

- a. 7/10 to 8/10
- b. 6/10 to 7/10
- c. 2/10 to 3/10
- d. None

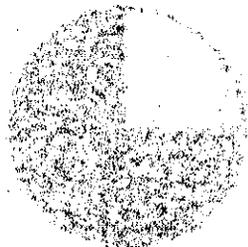


TURN TO PAGE 3 FOR FRAME 2

ANSWER: c. 7

FRAME 7

A wavy line encloses areas shaded blue in which the reported ceiling is between 1,000 and 5,000 feet and the visibility is three miles or more.



BLUE AREA CEILING 1000 to 5000  
VISIBILITY 3 MILES OR MORE.

Areas shaded blue on a weather depiction chart would be considered:

- a. below VFR minimums
- b. areas of VFR conditions.
- c. areas of cloud bases below 1000 feet.
- d. undesirable for helicopter flying.

TURN TO PAGE 4 FOR FRAME 8

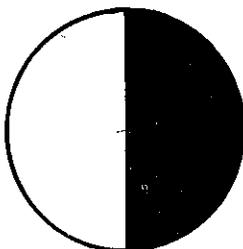
ANSWER: a. 7/10 to 8/10

---

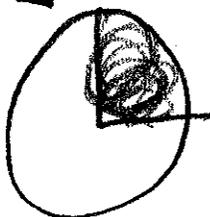
FRAME 2

The base of the cloud layer is shown below the station circle in hundreds of feet (AGL). The bases of the clouds at this station are at \_\_\_\_\_ and the sky coverage is \_\_\_\_\_.

- a. 150 ft and 4/10
- b. 1500 ft and 5/10
- c. 15,000 ft and 1/2
- d. no ceiling



15



TURN TO PAGE 5 FOR FRAME 3

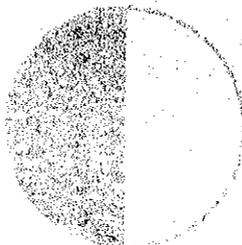
ANSWER: b. areas of VFR conditions

01/10/1971 10:00 AM

FRAME 8

On the weather depiction chart, page 13, station X (Canada) is under IFR conditions, station Z (Carolina Coast) is under VFR conditions.

- a. IFR conditions, IFR conditions.
- b. VFR conditions, VFR conditions.
- c. IFR conditions, VFR conditions.
- d. VFR conditions, IFR conditions.



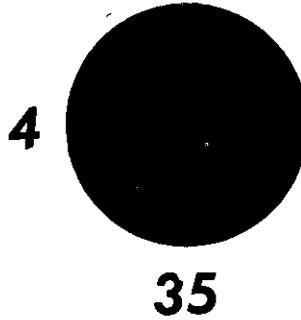
ANSWER: b. 1500 ft and 5/10

---

FRAME 3

When visibility is six statute miles or less, it is plotted to the left of the station circle as shown below. The visibility at this station is \_\_\_\_\_.

- a. four nautical miles.
- b. forty statute miles.
- c. four statute miles.
- d. four knots.



ANSWER: c. IFR conditions, VFR conditions.

---

FRAME 9

Refer to the list of abbreviations below.

This list of abbreviations is used on the weather depiction chart to indicate

- a. wind speeds.
- b. the cause of reduced visibility.
- c. temperature - dew point.
- d. wind direction.

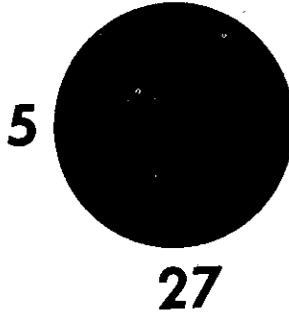
A	hail	F	fog
AP	small hail	GF	ground fog
E	sleet	IF	ice fog
EW	sleet showers	H	haze
IC	ice crystals	K	smoke
R	rain	BD	blowing dust
RW	rain showers	BN	blowing sand
ZR	Freezing rain	BS	blowing snow
L	drizzle	BY	blowing spray
ZL	freezing drizzle		
T	thunderstorm		
S	snow		
SP	snow pellets		
SG	snow grains		
SW	snow showers		
D	dust		

ANSWER: c. four statute miles

---

FRAME 4

The sky condition, visibility, and the bases of the clouds at this station are:

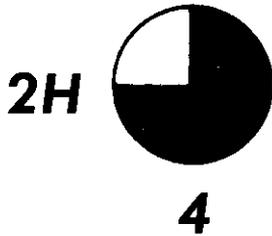


- a. more than 9/10 sky coverage, visibility 5 statute miles, bases of clouds at 270 feet.
- b. 9/10 sky coverage, visibility 5 statute miles, bases of clouds at 2700 feet.
- c. less than 9/10 sky coverage, visibility 5 statute miles, bases of clouds at 2700 feet.
- d. more than 9/10 sky coverage, visibility 5 statute miles, bases of clouds at 2700 feet.

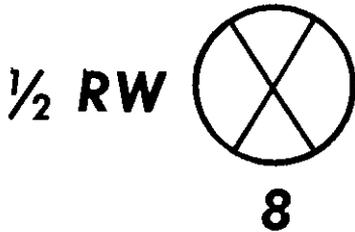
ANSWER: b. the cause of reduced visibility.

FRAME 10

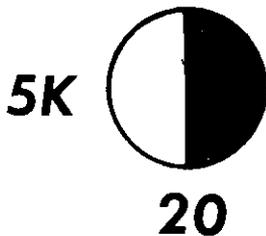
Describe the cause of reduced visibility at each of the stations shown below.



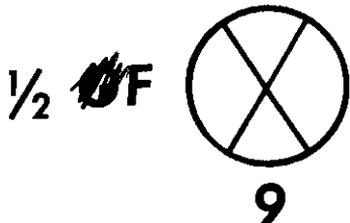
a. 20 mi haze



b.  $\frac{1}{2}$  st. mi. rain shower



c. 50 mi smoke



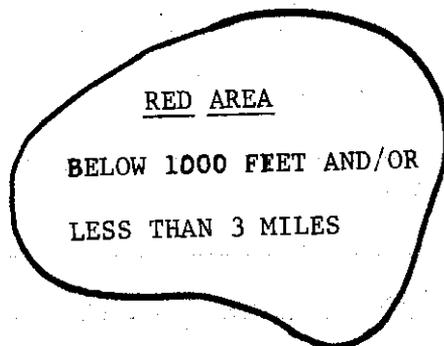
d.  $\frac{1}{2}$  st. mi fog

ANSWER: d. more than 9/10 sky coverage, visibility 5 statute miles, bases of clouds at 2700 feet.

---

FRAME 5

A solid line encloses areas shaded red where the ceiling is below 1,000 feet and/or the visibility is less than three miles.



The area shaded red on a weather depiction chart would be considered:

- a. ideal for VFR conditions.
- b. below VFR minimums (IFR).
- c. ideal for both IFR and VFR.
- d. ideal for helicopter flying only.

- ANSWERS: a. Haze, low ceiling (400')      b. Rain showers  
          b. Smoke                                      d. Ground fog

FRAME 11

Refer to the weather depiction chart on page 13 and describe, as completely as possible, the weather conditions at

- a. Station X 3/4 stat ~~one~~ blowing snow  
ceiling 1000' 1FR
- b. Station Y 1/4 mi drizzle 200' 1FR  
obscured overhead
- c. Station Z 5 mi fog @ 2800' obscured

CONTINUE TO SELF EVALUATION EXERCISE

ANSWER: b. below VFR minimums (IFR).

---

FRAME 6

Refer to the weather depiction chart on page 13 of this programed text.  
How many areas of IFR weather are shown on this map?

a. 5

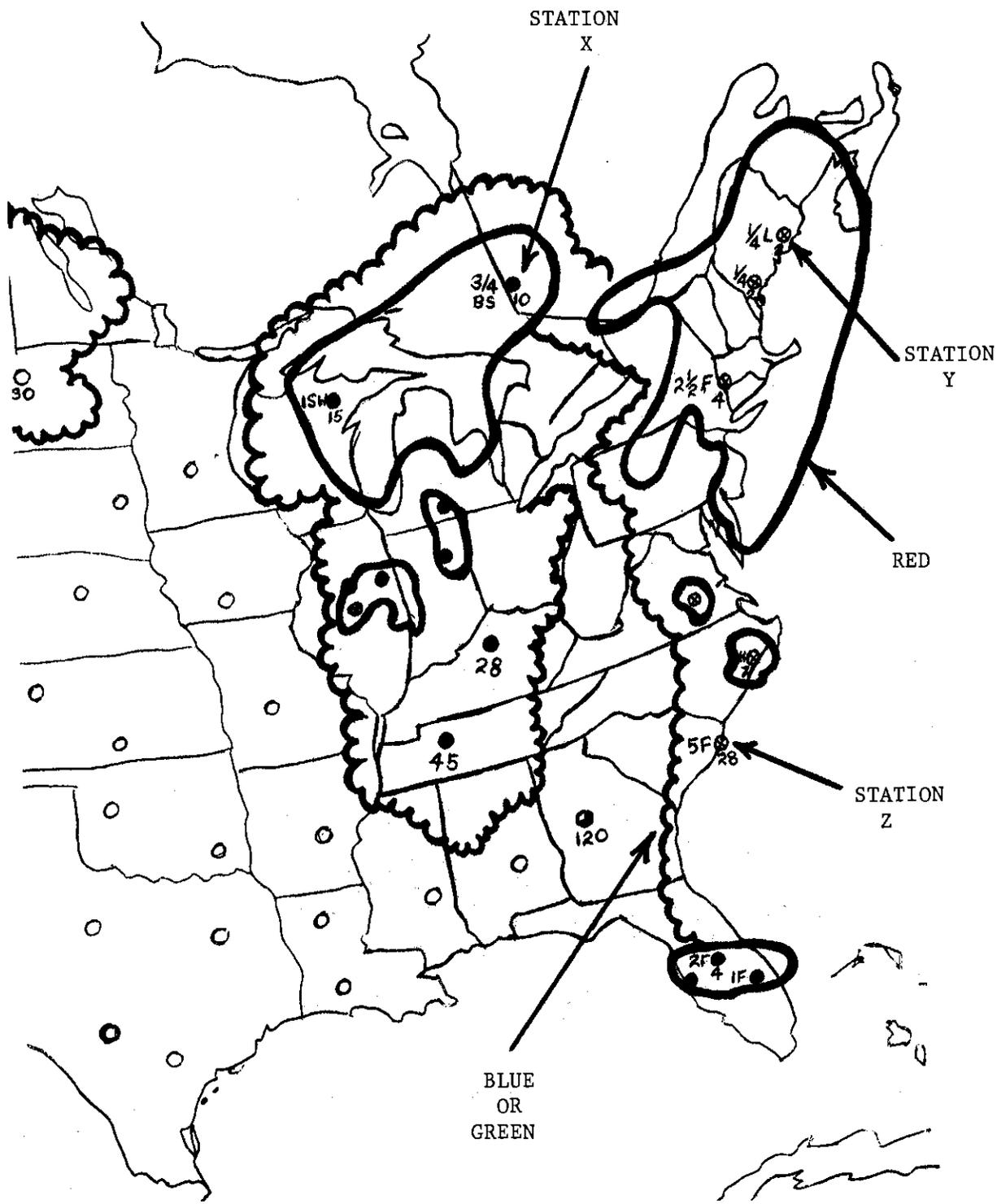
~~b. 6~~

c. 7

d. none

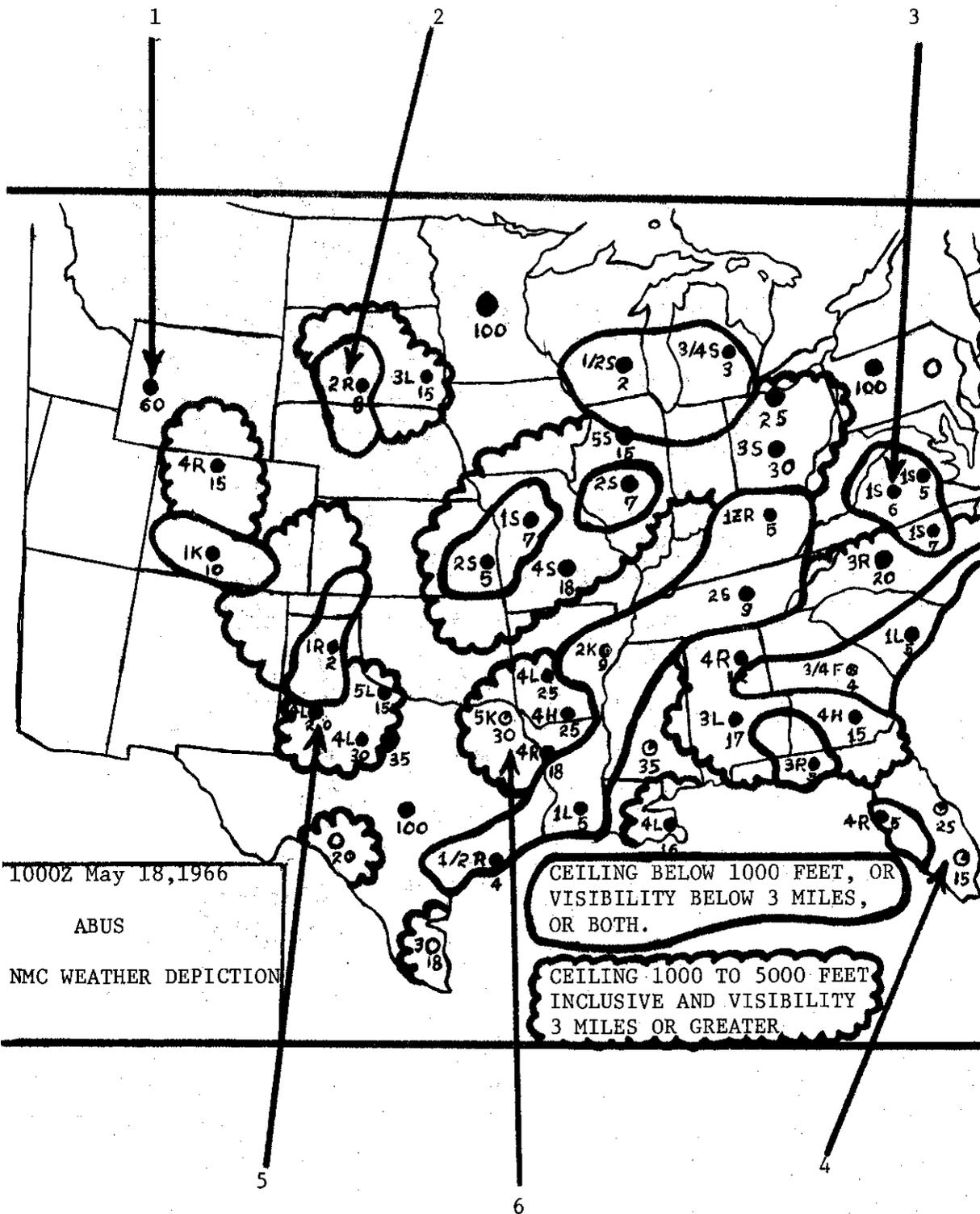
STOP RETURN TO PAGE 2 FOR FRAME 7

- ANSWER: a. 3/4 mile visibility in blowing snow, ceiling at 1000 feet.
- b. 1/4 mile visibility in drizzle, 200 feet vertical visibility in obscuration.
- c. 5 mile visibility in fog, ceiling at 2800 feet.
-



WEATHER DEPICTION CHART

WEATHER DEPICTION CHART  
 SELF EVALUATION EXERCISE



1000Z May 18, 1966  
 ABUS  
 NMC WEATHER DEPICTION

CEILING BELOW 1000 FEET, OR  
 VISIBILITY BELOW 3 MILES,  
 OR BOTH.

CEILING 1000 TO 5000 FEET  
 INCLUSIVE AND VISIBILITY  
 3 MILES OR GREATER.

A	hail
AP	small hail
E	sleet
EW	sleet showers
IC	ice crystals
R	rain
RW	rain showers
ZR	freezing rain
L	drizzle
ZL	freezing drizzle
T	thunderstorm
S	snow
SP	snow pellets
SG	snow grains
SW	snow showers
D	dust
F	fog
GF	ground fog
IF	ice fog
H	haze
K	smoke
BD	blowing dust
BN	blowing sand
BS	blowing snow
BY	blowing spray

ABBREVIATIONS USED ON WEATHER DEPICTION CHARTS  
TO INDICATE THE CAUSE OF REDUCED VISIBILITY

SELF EVALUATION EXERCISE

To answer the following questions, refer to the chart on page 14.

1. The base of the cloud layer at station number 1 is:
  - a. 600 ft.
  - b. 6000 ft.
  - c. 60 ft.
  - d. no cloud layer is reported.
  
2. The visibility at station number 2 is:
  - a. 2 nautical miles.
  - b. 2 statute miles.
  - c. 2 meters.
  - d. no visibility is being reported at station number 2.
  
3. Station number 2 would be considered:
  - a. below VFR minimums. (IFR)
  - b. ideal for VFR conditions.
  - c. ideal for daylight flying only.
  - d. closed to all air traffic.
  
4. The cause of reduced visibility at area number 3 is:
  - a. fog.
  - b. snow.
  - c. drizzle.
  - d. freezing rain.
  
5. At station number 4, the amount of sky coverage is:
  - a. 1/10 to 2/10.
  - b. 2/10 to 3/10.
  - c. 3/10 to 4/10.
  - d. clear skies.
  
6. The ceilings for all stations in area number 5 are:
  - a. below 1000 ft.
  - b. between 1000 ft and 5000 ft.
  - c. overcast, and below VFR minimums.
  - d. ceilings are not reported.

7. There are \_\_\_\_\_ areas reporting weather below VFR minimums (IFR).

- a. 10
- b. 11
- c. 9
- d. none

8. The cause of reduced visibility at area number 6 is:

- a. smoke, rain, drizzle, and haze.
- b. rain, haze, snow, and fog.
- c. drizzle, hail, sleet, and dust.
- d. snow, dust, smoke, and fog.

SWMI

1. b

2. b

3. a

4. b

5. b

6. b

7. b

8. a

01 a

11 b

2 c

3 none d

The cause of reduced visibility at sea number 6 is:

a. smoke, rain, drizzle, and haze.

b. rain, haze, snow, and fog.

c. drizzle, hail, mist, and dust.

d. snow, dust, smoke, and fog.

JAW