

Weather Information for the Communicator

Weather plays a vital role in the decision making process that a pilot goes through before accepting a flight. Pilots may utilize many different tools to assess the weather such as Doppler radar, PIREPS, area forecast and/or METAR/TAF. **Doppler Radar** measures radial velocity and has the capability of providing limited information concerning winds. **PIREPS** stands for Pilot Reports and contains types of weather conditions encountered, the intensity level of coverage for that condition. Due to constantly changing weather conditions "PIREPS" may be the most important tool that a pilot can use. **METAR/TAF**- METAR is Aviation Routine Weather Reporting and TAF is Aerodrome Forecast both of which utilizes abbreviations to describe weather for specific areas. Abbreviations such as: BR-Mist, DZ-Drizzle, RA- Rain, FC- Funnel cloud, GR- Hail, HZ- Haze, IC- Ice crystals, UP- Unknown Precipitation, FG- Fog and SN- Snow.

From time to time a pilot may ask the communication specialist to check weather or assess weather for them to be relayed during the flight. Some of the basic terms that communicator should be familiar with include; **Front**- is a boundary or transition zone between two air masses of different density and usually of different temperatures. **Wind direction**- the direction from which the wind is blowing, consideration of wind directions and speed is imperative for pilots in weight and balance calculations. **Fog**- Most common and persistent weather hazard pilots may encounter. Fog is a stratus cloud whose base is on the surface of the earth, is often present before it is reported especially in areas of large bodies of water Fog forms when cool air begins to mix with warm moist air. The best information available to determine the potential for fog is the temperature/ dew point spread, the closer the two the greater the potential for fog. **Temperature**- a measure of heat or cold in relation to the environment. Converting Celsius to Fahrenheit is easy! Double the Celsius temperature, then subtract 10% of the doubled temperature and add 32.

Dew point- temperature to which air must be cooled to reach saturation. Dew point gives direct measures of the water vapor in the air. **Ceilings**- height of the cloud base above ground level. **Visibility**- the distance you can see. Each flight service has their own ceiling and visibility minimums and the communication specialist should be familiar with their company minimums.

Irregardless of what the communicator thinks the weather looks like, the decision to fly or not to fly is the responsibility of the pilot in command (PIC).

NAACS Quarterly CE Quiz

Answers to this quiz are found in the CE article “**Weather**”. After completing, mail a copy of the answer sheet along with \$2.00 to the NAACS Education Committee. Please allow four weeks for notification of your score. Once processed CE acknowledgement will be mailed to you. (You must answer 8 of the 10 questions correctly to receive credit). **Please retain your CE acknowledgement to be submitted with your recertification.**

1. The most common and persistent weather hazard is?
 - Wind direction
 - Fog
 - Icing
 - Thunderstorms
2. The communication specialist always has the final say as to fly or not to fly.
 - a. True
 - b. False
3. Wind direction and wind speed is a consideration when pilots calculate weight and balance.
 - a. True
 - b. False
4. The best information available to determine the potential for fog is?
 - Ceiling and visibility
 - Mist and drizzle
 - Temperature and dew point spread
 - Haze and mist
5. Dew point is described as?
 - Temperature that air must be cooled to reach saturation.
 - How far you can see
 - Forms when cool air mixes with warm air
 - How much rain has fallen
6. METAR/TAF utilize abbreviations to describe weather reports.
 - a. True
 - b. False
7. PIREPS stands for Pilot Instrument Rating system.
 - a. True
 - b. False
8. The following measures radial velocity and has the capability of providing limited information concerning winds.
 - METAR
 - TAF
 - Area forecast
 - Doppler radar
9. PIREPS may be the most important weather tool a pilot may utilize due to constantly changing weather conditions.
 - a. True
 - b. False
10. The final decision to fly or not to fly should be made by the Pilot in Command (PIC).
 - a. True
 - b. False

Name _____
Organization _____
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Answer Sheet:
Circle the appropriate letter

1. a. b. c. d. e.
2. a. b. c. d. e.
3. a. b. c. d. e.
4. a. b. c. d. e.
5. a. b. c. d. e.
6. a. b. c. d. e.
7. a. b. c. d. e.
8. a. b. c. d. e.
9. a. b. c. d. e.
10. a. b. c. d. e.

Please include \$2.00 and Return to:

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