

TEMA: 0643 COM-RTC - Weather - Chap. 6

COD_PREG:	PREGUNTA:	RPTA:
PREG20098612	Ice pellets encountered during flight normally are evidence that	C
OPCION A:	a cold front has passed.	
OPCION B:	there are thunderstorms in the area.	
OPCION C:	freezing rain exists at higher altitudes.	
OPCION D:		
PREG20098617	Which would decrease the stability of an air mass?	A
OPCION A:	Warming from below.	
OPCION B:	Cooling from below.	
OPCION C:	Decrease in water vapor.	
OPCION D:		
PREG20098622	The formation of either predominantly stratiform or predominantly cumuliform clouds is dependent upon the	B
OPCION A:	source of lift.	
OPCION B:	stability of the air being lifted.	
OPCION C:	temperature of the air being lifted.	
OPCION D:		
PREG20098628	Which is a characteristic typical of a stable air mass?	C
OPCION A:	Cumuliform clouds.	
OPCION B:	Showery precipitation.	
OPCION C:	Continuous precipitation.	
OPCION D:		
PREG20098629	Which is true regarding a cold front occlusion? The air ahead of the warm front	B
OPCION A:	is colder than the air behind the overtaking cold front.	
OPCION B:	is warmer than the air behind the overtaking cold front.	
OPCION C:	has the same temperature as the air behind the overtaking cold front.	
OPCION D:		
PREG20098600	Every physical process of weather is accompanied by or is the result of	A
OPCION A:	a heat exchange.	
OPCION B:	the movement of air.	
OPCION C:	a pressure differential.	
OPCION D:		
PREG20098601	Which conditions are favorable for the formation of a surface based temperature inversion?	A

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- OPCION A:** Clear, cool nights with calm or light wind.
OPCION B: Area of unstable air rapidly transferring heat from the surface.
OPCION C: Broad areas of cumulus clouds with smooth, level bases at the same altitude.
OPCION D:
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- PREG20098602 What causes wind? C
- OPCION A:** The Earth's rotation.
OPCION B: Air mass modification.
OPCION C: Pressure differences.
OPCION D:
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- PREG20098603 With regard to windflow patterns shown on surface analysis charts: when the isobars are C
- OPCION A:** close together, the pressure gradient force is slight and wind velocities are weaker.
OPCION B: not close together, the pressure gradient force is greater and wind velocities are stronger.
OPCION C: close together, the pressure gradient force is greater and wind velocities are stronger.
OPCION D:
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- PREG20098604 What prevents air from flowing directly from high-pressure areas to low-pressure areas? A
- OPCION A:** Coriolis force.
OPCION B: Surface friction.
OPCION C: Pressure gradient force.
OPCION D:
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- PREG20098605 Which is true with respect to a high-or low-pressure system? C
- OPCION A:** A high-pressure area or ridge is an area of rising air.
OPCION B: A low-pressure area or trough is an area of descending air.
OPCION C: A high-pressure area or ridge is an area of descending air.
OPCION D:
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- PREG20098606 Which is true regarding high-or low-pressure systems? B
- OPCION A:** A high-pressure area or ridge is an area of rising air.
OPCION B: A low-pressure area or trough is an area of rising air.
OPCION C: Both high-and low-pressure areas are characterized by descending air.
OPCION D:
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- PREG20098607 Which is true regarding actual air temperature and dewpoint temperature spread? The temperature spread B
- OPCION A:** decreases as the relative humidity decreases.
OPCION B: decreases as the relative humidity increases.

OPCION C: increases as the relative humidity increases.

OPCION D:

PREG20098623 Which combination of weather-producing variables would likely result in cumuliform-type clouds, good visibility, and showery rain? B

OPCION A: Stable, moist air and orographic lifting.

OPCION B: Unstable, moist air and orographic lifting.

OPCION C: Unstable, moist air and no lifting mechanism.

OPCION D:

PREG20098624 What is a characteristic of stable air? A

OPCION A: Stratiform clouds.

OPCION B: Fair weather cumulus clouds.

OPCION C: Temperature decreases rapidly with altitude.

OPCION D:

PREG20098625 A moist, instable air mass is characterized by B

OPCION A: poor visibility and smooth air.

OPCION B: cumuliform clouds and showery precipitation.

OPCION C: stratiform clouds and continuous precipitation.

OPCION D:

PREG20098626 When an air mass is stable, which of these conditions are most likely to exist? C

OPCION A: Numerous towering cumulus and cumulonimbus clouds.

OPCION B: Moderate to severe turbulence at the tower levels.

OPCION C: Smoke, dust, haze, etc., concentrated at the lower levels with resulting poor visibility.

OPCION D:

PREG20098632 Fog produced by frontal activity is a result of saturation due to C

OPCION A: nocturnal cooling.

OPCION B: adiabatic cooling.

OPCION C: evaporation of precipitation.

OPCION D:

PREG20098634 Hazardous wind shear is commonly encountered C

OPCION A: near warm or stationary frontal activity.

OPCION B: when the wind velocity is stronger than 35 knots.

OPCION C: in areas of temperature inversion and near thunderstorms.

OPCION D:

PREG20098618 What type weather can one expect from moist, unstable air, and very warm surface temperatures? C

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- OPCION A:** Fog and low stratus clouds.
OPCION B: Continuous heavy precipitation.
OPCION C: Strong updrafts and cumulonimbus clouds.
OPCION D:
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- PREG20098619 Which would increase the stability of an air mass? **B**
- OPCION A:** Warming from below.
OPCION B: Cooling from below.
OPCION C: Decrease in water vapor.
OPCION D:
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- PREG20098620 The conditions necessary for the formation of stratiform clouds are a lifting action and **B**
- OPCION A:** unstable, dry air.
OPCION B: stable, moist air.
OPCION C: unstable, moist air.
OPCION D:
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- PREG20098636 If a temperature inversion is encountered immediately after takeoff or during an approach to a landing, a potential hazard exists due **A**
- OPCION A:** wind shear.
OPCION B: strong surface winds.
OPCION C: strong convective winds.
OPCION D:
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- PREG20098637 Convective currents are most active on warm summer afternoons when winds are **A**
- OPCION A:** light.
OPCION B: moderate.
OPCION C: strong.
OPCION D:
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- PREG20098638 When flying low over hilly terrain, ridges, or mountain ranges, the greatest potential danger from turbulent air currents will usually be encountered on the **B**
- OPCION A:** leeward side when flying with a tailwind.
OPCION B: leeward side when flying into the wind.
OPCION C: windward side when flying into the wind.
OPCION D:
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- PREG20098639 During an approach, the most important and most easily recognized means of being alerted to possible wind shear is monitoring the **C**
- OPCION A:** amount of trim required to relieve control pressures.
OPCION B: heading changes necessary to remain on the runway centerline.
OPCION C: power and vertical velocity required to remain on the proper glidepath.

OPCION D:

PREG20098640 During departure, under conditions of suspected low-level wind shear, a sudden decrease in headwind will cause A

OPCION A: a loss in airspeed equal to the decrease in wind velocity.

OPCION B: a gain in airspeed equal to to the decrease in wind velocity.

OPCION C: no change in airspeed, but groundspeed will decrease.

OPCION D:

PREG20098641 Of the following, which is accurate regarding turbulence associated with thunderstorms? C

OPCION A: Outside the cloud, shearturbulence can be encountered 50 miles laterally from a severe storm.

OPCION B: Shear turbulence is encountered only inside cumulonimbus clouds or within a 5-mile radius of them.

OPCION C: Outside the cloud, shearturbulence can be encountered 20 miles laterally from a severe storm.

OPCION D:

PREG20098642 Select the true statement pertaining to the life cycle of a thunderstorm B

OPCION A: Updrafts continue to develop throughout the dissipating stage of a thunderstorm.

OPCION B: The beginning of rain at the Earth's surface indicates the mature stage of a thunderstorm.

OPCION C: The beginning of rain at the Earth's surface indicates the dissipating stage of a thunderstorm.

OPCION D:

PREG20098643 What visible signs indicate extreme turbulence in thunderstorms? C

OPCION A: Base of the clouds near the surface, heavy rain, and hail.

OPCION B: Low ceiling and visibility, hail, and precipitation static.

OPCION C: Cumulonimbus clouds, very frequent lightning, and roll clouds.

OPCION D:

PREG20098644 Which weather phenomenon signals the beginning of the mature stage of a thunderstorm? A

OPCION A: The start of rain.

OPCION B: The appearance of an anvil top.

OPCION C: Growth rate of cloud is maximum.

OPCION D:

PREG20098645 Which in-flight hazard is most commonly associated with warm fronts? C

OPCION A: Advection fog.

OPCION B: Radiation fog.

OPCION C: Precipitation-induced fog.

OPCION D:

PREG20098646 Advection fog has drifted over a coastal airport during the day. What may tend to dissipate or lift this fog into low stratus clouds? C

OPCION A: Nighttime cooling.

OPCION B: Surface radiation.

OPCION C: Wind 15 knots or stronger.

OPCION D:

PREG20098647 In what ways do advection fog, radiation fog, and steam fog differ in their formation or location? A

OPCION A: Radiation fog is restricted to land areas; advection fog is most common along coastal areas; steam fog forms over a water surface.

OPCION B: Advection fog deepens as windspeed increases up to 20 knots; steam fog requires calm or very light wind; radiation fog forms when the ground or water cools the air by radiation.

OPCION C: Steam fog forms from moist air moving over a colder surface; advection fog requires cold air over a warmer surface; radiation fog is produced by radiational cooling of the ground.

OPCION D:

PREG20098648 The conditions most favorable to wave formation over mountainous areas are a layer of A

OPCION A: stable air at mountaintop altitude and a wind of at least 20 knots blowing across the ridge.

OPCION B: unstable air at mountaintop altitude and a wind of at least 20 knots blowing across the ridge.

OPCION C: moist, unstable air at mountaintop altitude and a wind of less than 5 knots blowing across the ridge.

OPCION D:

PREG20098649 One of the most dangerous features of mountain waves is the turbulent areas in and A

OPCION A: below rotor clouds.

OPCION B: above rotor clouds.

OPCION C: below lenticular clouds.

OPCION D:

PREG20098613 When conditionally unstable air with high-moisture content and very warm surface temperature is forecast, one can expect what type of weather? C

OPCION A: Strong updrafts and stratonimbus clouds.

OPCION B: Restricted visibility near the surface over a large area.

OPCION C: Strong updrafts and cumulonimbus clouds.

OPCION D:

PREG20098614 If clouds form as a result of very stable, moist air being forced to ascend a mountain slope, the clouds will be C

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- OPCION A:** cirrus type with no vertical development or turbulence.
OPCION B: cumulus type with considerable vertical development and turbulence.
OPCION C: stratus type with little vertical development and little or no turbulence.
OPCION D:
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PREG20098615 What determines the structure or type of clouds which will form as a result of air being forced to ascend? B

- OPCION A:** The method by which the air is lifted.
OPCION B: The stability of the air before lifting occurs.
OPCION C: The relative humidity of the air after lifting occurs.
OPCION D:
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PREG20098621 The presence of standing lenticular altocumulus clouds is a good indication of B

- OPCION A:** lenticular ice formation in calm air.
OPCION B: very strong turbulence.
OPCION C: heavy icing conditions.
OPCION D:
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PREG20098608 Virga is best described as A

- OPCION A:** streamers of precipitation trailing beneath clouds which evaporates before reaching the ground.
OPCION B: wall cloud torrents trailing beneath cumulonimbus clouds which dissipate before reaching the ground.
OPCION C: turbulent areas beneath cumulonimbus clouds.
OPCION D:
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PREG20098616 What are the characteristics of stable air? B

- OPCION A:** Good visibility; steady precipitation; stratus clouds.
OPCION B: Poor visibility; steady precipitation; stratus clouds.
OPCION C: Poor visibility; intermittent precipitation; cumulus clouds.
OPCION D:
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PREG20098627 Which is a characteristic of stable air? C

- OPCION A:** Cumuliform clouds.
OPCION B: Excellent visibility.
OPCION C: Restricted visibility.
OPCION D:
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PREG20098630 Which are characteristics of a cold air mass moving over a warm surface? B

- OPCION A:** Cumuliform clouds, turbulence and poor visibility
OPCION B: Cumuliform clouds, turbulence, and good visibility
OPCION C: Stratiform clouds, smooth air, and poor visibility
OPCION D:
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PREG20098631 The conditions necessary for the formation of cumulonimbus clouds are a lifting action and C
OPCION A: unstable, dry air.
OPCION B: stable, moist air.
OPCION C: unstable, moist air.
OPCION D:

PREG20098633 What is an important characteristic of wind shear? C
OPCION A: It is present at only lower levels and exists in a horizontal direction.
OPCION B: It is present at any level and exists in only a vertical direction.
OPCION C: It can be present at any level and can exist in both a horizontal and vertical direction.
OPCION D:

PREG20098635 Low-level wind shear may occur when B
OPCION A: surface winds are light and variable.
OPCION B: there is a low-level temperature inversion with strong winds above the inversion.
OPCION C: surface winds are above 15 knots and there is no change in wind direction and windspeed with height.
OPCION D:

PREG20098609 Moisture is added to a parcel of air by C
OPCION A: sublimation and condensation.
OPCION B: evaporation and condensation.
OPCION C: evaporation and sublimation.
OPCION D:

PREG20098610 Ice pellets encountered during flight normally are evidence that B
OPCION A: a warm front has passed.
OPCION B: a warm front is about to pass.
OPCION C: there are thunderstorms in the area.
OPCION D:

PREG20098611 What is indicated if ice pellets are encountered at 8,000 feet? A
OPCION A: Freezing rain at higher altitude.
OPCION B: You are approaching an area of thunderstorms.
OPCION C: You will encounter hail if you continue your flight.
OPCION D:
