



Kendall Sheldon

# Remote Pilot Ground School

## Final Exam

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Your Exam Score

# 97%

What is the most important component of CRM?

ID#: B34E

- ☐ An SMS.
- ☐ Weekly meetings.

☒ Coordinating operations and resources.

(Refer to Fig. 80)

A prominent mountain peak exists 8 nautical miles northeast of the Crawford airport. How tall is this peak in relation to the airport's elevation.

ID#: EEE8

☐ 1,805 feet.

☒ 4,926 feet.

☐ 8,275 feet.

On the radio, the callsign N696US is pronounced

ID#: 3CE4

☐ NOVEMBER SIX NINETY SIX UNIFORM SUGAR

☐ NANCY SIX NINER SIX UNCLE SIERRA

☒ NOVEMBER SIX NINER SIX UNIFORM SIERRA

What should be said at the beginning and end of a pilot broadcast while operating near an untowered airport?

ID#: C63C

☐ The aircraft call sign, tail number, or registration number.

☒ The name of the airport.

☐ The time of the broadcast.

Unmanned aircraft means an aircraft operated

ID#: C114

☐ during search and rescue operations.

☒ without the possibility of direct human intervention from within or on the aircraft.

☐ for hobby and recreational use when not certificated.

Constant staring at a bright light in an otherwise featureless field

ID#: 7ABD

☒ reversible perspective.

☐ spatial disorientation.

☐ autokinesis.

What must the remote PIC do before EVERY flight

ID#: 441F

☐ Contact the overlaying airspace controllers

☒ Perform a thorough preflight inspection of the UAS

☐ Recruit a visual observer

You may not operate an aircraft under Part 107 if you have consumed any amount of alcohol within the last

ID#: 10B7

☐ 6 hours.

☒ 8 hours.

☐ 12 hours.

An FDC NOTAM may contain information

ID#: 5A02

- ☐ regarding military operations.
- ☒ regarding public gatherings of large groups.
- ☐ regarding available hard surface runways.

Which of the following features may create downdrafts that affect UAS performance?

ID#: 0E27

- ☐ Plowed ground or barren land.
- ☒ Water and vegetation.
- ☐ Rocks or sand.

(Refer to Fig. 1) The acute angle A is called the angle of

ID#: E8B8

- ☐ lift.
- ☒ attack.
- ☐ incidence.

The sun sets at 8:50 PM. The time is now 9:00 PM. You do not have a daylight waiver but your unmanned aircraft does have anti-collision lights. How long may you fly?

ID#: 8AB0

☐ 50 minutes.

☒ 20 minutes.

☐ 30 minutes.

As the difference between temperature and dew point gets smaller, you might expect

ID#: B521

☐ wind strength to increase.

☒ fog and low clouds to form.

☐ thunderstorms to develop.

In the aeronautical decision making (ADM) process, what is the first step in neutralizing a hazardous attitude?

ID#: E7CC

☐ Making a rational judgement.

☒ Recognizing hazardous thoughts.

☐ Recognizing the invulnerability of the situation.

As a Remote Pilot, you must avoid flying an unmanned aircraft

ID#: 0A2E

- ☐ near rotating beacons and runways.
- ☐ near hangars and ramp areas.

☒ near traffic patterns and taxiways.

Which statement relates to Bernoulli's principle?

ID#: FD77

- ☐ For every action, there is an equal and opposite reaction
- ☐ An additional upward force is generated as the lower surface of the wing deflects air downward.

☒ Air traveling faster over the curved upper surface of an airfoil causes lower pressure on the top surface.

Thunderstorms which generally produce the most intense hazards to aircraft are

ID#: CD90

☐ steady-state thunderstorms.

☒ squall line thunderstorms.

☐ warm front thunderstorms.

A dashed magenta outline indicates

ID#: 65B2

☐ Class D airspace at the surface.

☒ Class E airspace at the surface.

☐ Class C airspace at the surface.

Proper aircraft balancing

ID#: F6FF

☒ will extend the life of the battery.

☐ is required by Part 107.

☐ can only be done by the manufacturer.

(Refer to Figure 15) In the TAF for KMEM, what does "SHRA" stand for?

ID#: 43EE

☒ Rain showers.

☐ A significant change in precipitation is expected.

☐ A shift in wind direction is expected.

How often is the Remote PIC required to inspect the sUAS to ensure that it is in a condition for safe operation?

ID#: 72A7

☐ Monthly

☒ Before each flight

☐ Annually

The Remote PIC and the Visual Observer must work together in a way that

ID#: 4DA6

☒ allows for effective communication, determined before the flight, and could utilize hand-held radios.

☐ allows for communication without the use of communication-assisting devices.

☐ ensures they are never more than 25 feet away from each-other.

A risk matrix

ID#: AA27

☐ allows a pilot to limit risk in an operational environment.

☐ identifies the levels of acceptable risk based on environmental factors.

☒ compares the likelihood of the event versus the severity of the outcome.



(Refer to Figure 19) At what altitude is the freezing level over the middle of Florida on the 12-hour Significant Weather Prognostic Chart?

ID#: 15B0

☐ 8,000 feet.

☐ 4,000 feet.

☒ 12,000 feet.

You have contacted Flight Service for a weather briefing. The briefing indicates a low-level temperature inversion with high relative humidity. What conditions should you expect?

ID#: F41B

☒ Smooth air, poor visibility, fog, haze, or low clouds.

☐ Turbulent air, poor visibility, fog, low stratus-type clouds, and showery precipitation.

☐ Light wind shear, poor visibility, haze, and light rain.

If the outside air temperature (OAT) at a given altitude is warmer than standard, the density altitude is

ID#: C238

☐ equal to pressure altitude.

☒ higher than pressure altitude.

☐ lower to pressure altitude.

Which condition would most likely result from hyperventilation?

ID#: 6992

- ☐ Insufficient oxygen.
- ☐ Excessive carbon monoxide.

☒ Insufficient carbon dioxide.

What is the best way to prevent dehydration?

ID#: 4179

- ☐ Drink plenty of water the day prior to flight day.

☒ Make sure you are drinking enough water.

- ☐ Don't eat salty foods before flight.

What effect does high density altitude have on aircraft performance?

ID#: D772

- ☐ Performance is increased when density altitude is abnormally high.
- ☐ Aircraft may carry heavier loads on high density altitude days.

☒ Performance is reduced when density altitude is abnormally high.

May a Remote PIC operate more than one UAS at a time?

ID#: 5159

☐ Yes, as long as all other regulations are being followed.

☒ No, unless a waiver has been given.

☐ Yes, but only in uncontrolled airspace.

(Refer to Figure 19) Interpret the weather symbol depicted in Utah on the 12-hour Significant Weather Prognostic Chart.

ID#: 1935

☒ Moderate turbulence, surface to 18,000 feet.

☐ Base of clear air turbulence, 18,000 feet.

☐ Thunderstorm tops at 18,000 feet.

What could be a consequence of operating a small unmanned aircraft above its maximum allowable weight?

ID#: 8BD0

☒ Shorter endurance

☐ Faster speed

☐ Increased maneuverability

Pilots can obtain current NOTAMs by

ID#: 6A13

✓ calling Flight Service.

- calling the tower controller.
- looking them up in the A/FD.

(See Fig. 26, Area 4) You have been hired to inspect the tower at 46.9N and

98.5W, near Jamestown Regional (JMS). What must you receive prior to flying

your unmanned aircraft in this area?

<a target=\_blank

href=https://www.goldsealgroundschool.com/uav-groundschool.com/image

s/quiz/fig26.pdf>

<u>Click here to open Fig 26 as a PDF in a new browser tab.</u></a>

✓ Nothing. No authorization will be needed.

- Authorization from the airport manager.
- Authorization from ATC

If the center of gravity (CG) on a fixed wing airplane lies aft of the CG limits, what undesirable effect may occur?

ID#: BFF3

- The airplane may stall at a slower airspeed.

✓ The airplane may become stalled in an unrecoverable configuration.

- The forward CG limit will be moved to the rear.

Under what condition should the owner/operator of a small unmanned aircraft establish a scheduled maintenance protocol?

ID#: 3320

- When mandated by contractor requirements.
- When the FAA requires you to, following an accident.

✓ When the manufacturer does not provide a maintenance schedule.

On an airplane, the rudder controls

ID#: 8206

☐ roll.

☒ yaw.

☐ pitch.

(Refer to Fig. 2) If an unmanned airplane weighs 33 pounds, what approximate weight would the airplane structure be required to support during a 45 degree banked turn while maintaining altitude?

ID#: 2588

☒ 47 pounds

☐ 34 pounds

☐ 38 pounds

(Refer to Figure 31) At Coeur D'Alene, which frequency should be used as a Common Traffic Advisory Frequency (CTAF) to monitor airport traffic?

ID#: C648

☐ 135.075 MHz

☒ 122.8 MHz

☐ 122.05 MHz

There is an overcast layer of clouds overhead at 700 feet AGL. How high may you fly your unmanned aircraft?

ID#: ED9D

☒ 200 feet AGL

☐ 200 feet MSL

☐ 400 feet AGL

Whose sole task during an sUAS operation is to watch the sUAS and report potential hazards to the rest of the crew?

ID#: 78CB

☐ Remote Pilot in Command (RPIC)

☐ Person manipulating the controls

☒ Visual observer

In what Class of airspace do Federal Airways exist?

ID#: 5377

☐ G

☒ E

☐ A



(Refer to Figure 23, area 2.)

What is the floor of controlled airspace over the Statesboro-Bulloch County Airport?

ID#: 8AA5

☒ 700 feet AGL

☐ 1200 feet MSL

☐ 1200 feet AGL

Where would you look to find information about airport signs and markings?

ID#: B57A

☒ AIM (Aeronautical Information Manual)

☐ Chart Supplements publication

☐ Sectional Chart legend

When are the four forces that act on an airplane in equilibrium?

ID#: CB0B

☐ When the aircraft is accelerating.

☐ When the aircraft is at rest on the ground.

☒ During unaccelerated flight.

During a night operation, you see a manned aircraft in flight. You see a red light on the right and a green light on the left.

ID#: 9ED1

- ☐ The aircraft is moving away from you.
- ☒ The aircraft is moving toward you.
- ☐ This combination of lights will not occur.

According to 14 CFR Part 107, an sUAS is an unmanned aircraft system weighing

ID#: 7C76

- ☐ 55 lbs or less.
- ☐ 55kg or less.

☒ less than 55 lbs.

Which factor would tend to increase the density altitude at a given airport?

ID#: 0754

- ☐ A decrease in relative humidity.
- ☒ An increase in ambient temperature.
- ☐ An increase in barometric pressure.

The development of thermals depends upon

ID#: B045

☐ temperature inversions.

☒ solar heating.

☐ a counterclockwise circulation of air.

You are planning on storing some unused lithium batteries for an extended period. You should

ID#: A5CF

☐ drain them to near zero volts.

☐ charge them to full charge.

☒ drain them to the recommended storage level.

The amount of excess load that can be imposed on the wing of an airplane depends upon the

ID#: 8BC8

☒ speed of the airplane.

☐ position of the CG (center of gravity).

☐ the direction of the relative wind.

Which action is recommended prior to night flight operations?

ID#: 5195

☒ Visit the site during full daylight hours for a visual survey.

☐ Install lighting in the flight area so that it can be completely lit.

☐ Visit the site during night hours for a visual survey.

May a Remote PIC deviate from regulations?

ID#: D6BB

☒ Yes, if it is in response to an emergency situation.

☐ No, under no circumstances.

☐ Yes, because regulations are guidelines, not requirements.

When load factor increases

ID#: 7DF1

☐ stall speed decreases.

☐ stall speed is unaffected.

☒ stall speed increases.

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

ID#: CC37

- ☐ blowing mist has reduced the visibility to 1-1/2 SM.
- ☐ the barometer has risen .35"Hg.

✓ rain began at 1835Z.

(Refer to Figure 20, Area 2.)

Why would the small flag at Lake Drummond of the sectional chart be important to a Remote PIC?

ID#: 65E2

✓ The flag indicates a VFR checkpoint for manned aircraft, and a higher volume of air traffic should be expected there.

- ☐ The flag indicates that there will be a large obstruction depicted on the next printing of the chart.
- ☐ The flag indicates a GPS checkpoint that can be used by both manned and remote pilots for orientation.

How soon after you move must you update your address with the FAA?

ID#: 3226

✓ 30 days

- ☐ 60 days
- ☐ 90 days

Angle of attack is defined as the angle between the chord line of an airfoil and the

ID#: FD21

☐ pitch angle of an airfoil.

☒ direction of the relative wind.

☐ rotor plane of rotation.

Dimly lit objects may

ID#: 810B

☐ may be easier to see in the night-time visual field.

☐ appear closer than they actually are.

☒ appear further away than they actually are.

Which of the following operations would be regulated by 14 CFR 107?

ID#: 9485

☒ Operating an sUAS for an imagery company.

☐ Conducting public aircraft operations.

☐ Flying for enjoyment with family and friends.