

Sunstate Aviation – Flight Review Questionnaire

You may use your AFD, POH and charts to complete this questionnaire. Please also prepare a one way cross country to Winter Haven KGIF.

Pilot Name _____ Date ____//____//____

Instructors Name _____

General Questions

1. What personal documents are required to be in your possession when you fly?
a. _____ b. _____ c. _____
2. As a pilot, are you able to carry passengers or cargo and/or fly for compensation or hire?

3. What documents must be on board the aircraft prior to flight?
a. _____ b. _____ c. _____ d. _____
4. Who has the final authority and responsibility for operation of the aircraft you are flying?

5. Describe the requirements relating to the use of safety belts and shoulder harnesses?

6. What are the requirements to remain current as a private pilot? What are your personal minimums?

Aircraft Questions (Systems, Performance)

7. For weight and balance calculations, what are the weights used for aircraft fuel and oil?
Aircraft Fuel _____ Aircraft Oil _____

8. What basic equation is used in all weight and balance problems to find the center of gravity location of an airplane?

9. Determine the density altitude for these conditions:

Altimeter Setting.....29.86
 Runway Temperature.....95 degrees F
 Airport Elevation.....82'

10. At your departure airport, the air temperature is 98 degrees Fahrenheit, with a high relative humidity and high density altitude. What effect, if any, will this have on your aircraft's performance?

11. What is the best glide speed for your aircraft? _____

12. Describe the use of flaps for takeoff in your aircraft?

13. Fill in the V speed definitions and corresponding speeds for your airplane.

V Speed	Definition	Speed
V _{so}		
V _s		
V _x		
V _y		
V _{fe}		
V _a		
V _{no}		
V _{ne}		

14. What grade(s) of fuel can be safely used in your airplane? _____

15. Minimum oil capacity for your aircraft is _____ quarts and Sunstate Aviation's minimum oil capacity to begin a flight is _____ quarts.

16. Total usable fuel for your aircraft is _____ gallons.

17. What is the approximate stall speed with 30 degrees flaps and a 45 degree bank angle when operating at 2,550 pounds and a most forward center of gravity?

18. Calculate the headwind and crosswind components for the following conditions.
 Runway 15 in use, wind reported as 190 degrees at 20 knots.

Headwind Component _____ Crosswind Component _____

19. Calculate takeoff and landing distances for the following conditions.

Pressure Altitude: Sea Level

Temperature: 35 degrees Centigrade

Headwind: 9 knots

Runway: Paved, level, dry

50' obstacle to clear

Takeoff _____ Landing _____

20. Describe positioning of ailerons and elevator during a taxi with a right quartering tailwind.

Aerodynamics

21. What is ground effect and when/how does it affect your airplane?

22. What is "angle of attack"? Draw a picture of a wing, chord line and relative wind to explain.

23. True/False: An airplane can be stalled at any airspeed in any flight attitude?

24. What is load factor and why is it a critical value for the pilot to know?

25. True/False: At a 30 degree angle of bank, load factor increases by 2 g's.

26. What is minimum controllable airspeed and describe some potential real world use?

Weather

27. What is an Airmet? What are the types of Airmets and how often are they issued?

28. What is a Sigmet? What is a Convective Sigmet and how often are they issued?

29. Decode the following METAR?

KISM 021053Z 19006KT 1/2SM FG OVC003 23/22 A2999

30. Decode the following TAF?

KISM 021141Z 0212/0312 21004KT P6SM SCT004 BKN250
TEMPO 0212/0213 BKN004
FM021400 23007KT P6SM SCT025 BKN200
FM021800 25008KT P6SM VCTS SCT030CB SCT050 BKN120
TEMPO 0218/0222 3SM TSRA BKN025CB OVC050
FM030000 22005KT P6SM FEW020 BKN150

31. Describe the ways you could get updated weather information while in flight?

32. Describe wind shear and why it is a hazard to flight?

33. What is a squall line thunderstorm?

33. Flight through visible moisture and temperatures at freezing or below are ingredients for what hazard to aircraft? _____

34. What are the three life cycle phases of a thunderstorm?

35. Match the type of air with its characteristics.

Characteristic	Stable	Unstable
Stratiform clouds		
Turbulent Air		
Good Visibility		
Poor visibility		
Continuous Precipitation		
Smooth Air		
Showery Precipitation		
Cumuliform Clouds		

Airspace Questions

36. What is the transponder equipment and use requirements when operating within the Class B airspace?

37. Explain the minimum visibility and ceiling requirements for VFR flight into Class D airspace (ISM)?

38. What is the traffic pattern direction for each runway at Kissimmee Airport?

15 _____ 33 _____ 06 _____ 24 _____

39. How would you contact Sunstate Aviation using your communication radios?

40. Draw a runway hold short line.

41. What is the traffic pattern altitude for ISM? _____

42. Describe the Class B boundaries that affect Kissimmee's Airport?

43. You receive the following taxi instructions. "N1688C, taxi to runway 24 via Alpha and Bravo". Using the ISM Airport Diagram, describe your taxi and any points where you would hold short.

44. Using the ISM Airport Diagram, with the instruction, "N1688C, taxi to runway 15 via Alpha", may you cross runway 06/24 without permission?

45. What radio calls are recommended in the traffic pattern at an uncontrolled airport?

46. How can you determine if a runway is closed?

47. What radio communications are required and when while operating at ISM?

48. Describe the airspace from the surface at ISM up to 60,000'. How does this airspace change when the tower is closed?

Personal Minimums and Risk Management

49. Define the legal requirements as well as your personal minimums in the following areas.

Requirement	Legal	Personal Minimum
To Exercise Pilot Privileges		
VFR – Ceiling & Visibility		
Night Currency		
Cu		
To operate IFR (if applicable)		

50. Complete the following with the meaning of each light gun signal?

Signal	Ground	In Flight
Steady Red		
Steady Green		
Flashing Red		
Flashing Green		
Alternating Red/Green		
Flashing White		

Emergency Procedures

51. What general steps should you follow after an engine failure in flight?

52. What is the transponder code for lost communications? _____

53. When is a go-round appropriate and what are the procedures for a go-round?

54. What is porpoising and what action should be taken if it occurs during landing?
