- 1. After reviewing the aircraft records, is everything in order for this flight?
  - A. Yes, everything is in order.
  - B. No, you need a pitot-static inspection.
  - C. No, you need a transponder inspection.
  - D. You need an ELT inspection.
- 2. Reviewing the weather you printed off of DUATS, you notice an AIRMET for turbulence. Based on the AIRMET, which of the following can you expect?
  - A. Variations in indicated airspeed.
  - B. Large, abrupt changes in altitude or attitude.
  - C. Difficulty maintaining control of the aircraft.
  - D. None of the above.
- 3. After filling up the fuel tanks to their full 56 gallon usable capacity, you load up Ron and Jody. Just to be on the safe side, you complete a weight and balance calculation. What will be your aircraft weight once you get everyone loaded up?
  - A. 2988 pounds
  - B. 2994 pounds
  - C. 3000 pounds
  - D. 3006 pounds
- 4. How much runway will you need for your takeoff roll and to clear a 50' obstacle? (Choose closest answer.)
  - A. 2557 feet for takeoff roll, 3324 feet to clear obstacle.
  - B. 2622 feet for takeoff roll, 3582 feet to clear obstacle.
  - C. 2783 feet for takeoff roll, 3642 feet to clear obstacle.
  - D. 3104 feet for takeoff roll, 3978 feet to clear obstacle.
- 5. Your planned route of flight to Alamosa (KALS) is Raton (KRTN) direct to and through Cuchara Pass to the small lake near La Veta pass, located at N37 26 20, W105 10 26, and then from there direct to KALS. You will be cruising at 12500 feet MSL. How long do you expect it to take you to climb to your cruising altitude? (Choose the closest answer.)
  - A. 16:34
  - B. 16:18
  - C. 16:50
  - D. 16:03
- 6. What feature do you expect to see underneath you as you reach the top of your climb?
  - A. A highway.
  - B. The Canadian River.
  - C. A dry creek bed.
  - D. The Colorado/New Mexico state line.
- 7. You finally wind up taking off at 12:30 zulu, about 20 minutes after sunrise. What local time do you expect to arrive in Alamosa? (Choose the closest answer.)
  - A. 06:14
  - B. 07:14
  - C. 08:14
  - D. 09:14

- 8. Your turn point over the lake has you crossing the Sangre de Cristo mountain range in the vicinity of La Veta pass. How can you check the weather conditions at La Veta pass prior to reaching that point of your flight?
  - A. You can't.
  - B. Contact Alamosa Unicom and ask the observer there to report what he sees in the direction of the pass.
  - C. Monitor Alamosa ASOS on 135.175. Since it's the closest weather reporting station to the pass, you should be able to judge the weather based on what they're reporting.
  - D. The state of Colorado puts AWOS stations on major mountain passes, you can just listen to the La Veta pass AWOS.
- 9. Based on your answer in question 8, what kind of weather can you expect in the La Veta pass area?
  - A. Unknown, hopefully the area forecast covers everything.
  - B. Clear skies below 12000, good visibility and unknown wind conditions.
  - C. Clear skies below 12000, 10 miles visibility and winds 010/06.
  - D. Clear skies below 12000, 10 miles visibility and winds 230/09 gusting to 20.
- 10. Approaching Alamosa, you notice some fog and low clouds forming over some of the reservoirs in the valley, although the airport seems to be in the clear. What visibility and cloud separation requirements will you face as you make your landing in Alamosa?
  - A. Visibility: 5 statute miles. Separation: 1000' below, 1000' above and 1 mile horizontally.
  - B. Visibility: 3 statute miles. Separation: 500' below, 1000' above and 2000' horizontally.
  - C. Visibility: 3 statue miles. Separation: Clear of clouds.
  - D. Visibility: 1 statute mile. Separation: Clear of clouds.
- 11. Based on the METAR for Alamosa, what are the last reported winds at the airport? (Choose the best answer.)
  - A. 010 magnetic at 6 knots.
  - B. 357 magnetic at 6 knots.
  - C. 010 true at 6 mph.
  - D. 357 magnetic at 6mph.
- 12. After landing at Alamosa and everyone taking a quick restroom break, you're ready to depart for Taos (KSKX.) For this leg, you decide to cruise at 11500 feet and go GPS direct. However, there are two ridges in excess of 9000 feet along your route of flight. One has a high point of 9211 feet and the other a high point of 9476 feet. At what altitude will you be when you pass abeam the 9211' peak?
- 13. If you start your engine in Alamosa at 13:43 zulu, and it takes 5 minutes to taxi to the runway and do your run-up, what local time will you be arriving in Taos? (Choose the closest answer.)
  - A. 09:13
  - B. 08:43
  - C. 08:13
  - D. 09:43
- 14. What will be your weight at engine start in Alamosa? (Choose the closest answer.)
  - A. 2959 pounds
  - B. 2949 pounds
  - C. 2944 pounds
  - D. 2955 pounds

- 15. You decide you want to file a VFR flight plan for the leg to Taos. There is no internet available in the FBO, so you have to do it over the telephone. What phone number would you call to file your flight plan?
  - A. 1-800-992-7433
  - B. 1-800-358-7526
  - C. 1-800-992-7343
  - D. 1-800-238-7527
- 16. Who would you open your flight plan with after taking off from Alamosa?
  - A. Albuquerque Radio on 122.25.
  - B. Albuquerque Radio by transmitting on 122.1 and receiving on 117.6.
  - C. Denver Radio on 122.15.
  - D. Denver Radio by transmitting on 122.1 and receiving on 113.9.
- 17. After taking off from Alamosa, you decide to also ask for flight following, who would you contact for this service?
  - A. Denver Radio on 122.15.
  - B. Denver Center on 128.375
  - C. Albuquerque Radio on 122.25
  - D. Albuquerque Center on 132.8
- 18. While you were busy getting set for takeoff out of Alamosa, Ron fell asleep in the back seat. He wakes up 20 minutes after takeoff wondering how much longer before landing? Your answer is: (Choose the closest answer.)
  - A. 3 minutes
  - B. 4 minutes
  - C. 5 minutes
  - D. 6 minutes
- 19. Approximately where will you begin your descent into Taos?
  - A. Abeam the 8655' peak to the right of your course.
  - B. Abeam the town of San Cristobal.
  - C. Passing the Taos VOR 242 Radial.
  - D. Passing the Taos VOR 062 Radial.
- 20. Assume that the TAF for Alamosa is also valid for Taos. What weather conditions should you expect for your arrival in Taos?
  - A. Visibility greater than 6 miles, clear skies and winds 010/06.
  - B. Visibility greater than 6 miles, scattered clouds at 20000 feet and variable winds at 4 knots.
  - C. Visibility greater than 6 miles, scattered clouds at 12000 feet, broken clouds at 20000 feet and winds 240/07.
  - D. Visibility greater than 6 miles, clear skies and winds 010/03.
- 21. Can you expect anyone to be at the airport to let you into the FBO upon your arrival?
  - A. Yes
  - B. No
- 22. Based on the last METAR for Taos, and assuming you use runway 4 for landing, how much runway will you need to clear a 50' obstacle and your landing roll? (Choose the closest answer.)
  - A. 2227 feet to clear obstacle, 1139 feet for landing roll.
  - B. 2227 feet to clear obstacle, 1319 feet for landing roll.
  - C. 2353 feet to clear obstacle, 1139 feet for landing roll.
  - D. 2353 feet to clear obstacle, 1319 feet for landing roll.

- 23. Since you're arriving from the north anyway, you decide to make a straight in approach and landing on runway 22 instead. How much runway will you need now to clear a 50' obstacle and for your landing roll? (Choose the closest answer.)
  - A. 2882 feet to clear obstacle, 1667 feet for landing roll.
  - B. 2882 feet to clear obstacle, 1783 feet for landing roll.
  - C. 3124 feet to clear obstacle, 1667 feet for landing roll.
  - D. 3124 feet to clear obstacle, 1783 feet for landing roll.
- 24. After pulling into the ramp in Taos, you and your passengers hop out and head into the FBO. It turns out Jody made some breakfast burritos for everyone as a surprise breakfast. After eating and cleaning some excess ice out of the cooler, reducing its weight by 4 pounds, you put it back in the luggage area. What will be your takeoff weight in Taos? (Choose the closest answer.)
  - A. 2923 pounds
  - B. 2919 pounds
  - C. 2913 pounds
  - D. 2909 pounds
- 25. Since your next leg back to Raton takes you over the highest terrain of today's trip, you start thinking about oxygen requirements. What requirements for supplemental oxygen must you meet prior to the next leg of today's flight? (You're going to fly Taos direct to Raton at 13500 feet.)
  - A. You will need to use oxygen for the entire flight.
  - B. You and your passengers will need to use oxygen for the entire flight.
  - C. You must have oxygen available for use during the flight.
  - D. No oxygen needed.
- 26. What oxygen servicing is available in Taos if you decide you need oxygen for the leg home?
  - A. None.
  - B. Low pressure servicing.
  - C. Low pressure replacement bottles.
  - D. High pressure replacement bottles.
- 27. While you were eating your breakfast, several other aircraft arrived and parked near your aircraft. Before starting, you decide to pull the plane by hand into a more suitable starting location in order to avoid blasting the other airplanes with your prop wash. Ron and Jody assist you, complaining about how heavy the airplane is. You tell them that at this point, the aircraft only weighs: (Round to the nearest pound.)
- 28. Due to the high terrain along your route of flight, you decide that you're going to climb while circling over the Taos airport until reaching 11500 feet, and then turning on course while continuing your climb to 13500 feet. Given this information, if you take off at 09:10 local, what time will you arrive in Raton? (Choose the closest answer.)
  - A. 10:47 local
  - B. 16:47 zulu
  - C. 17:47 zulu
  - D. 15:47 zulu
- 29. What will be your ground speed in cruise on this leg?
- 30. What will be your true heading in cruise on this leg?
- 31. As you reach your cruising altitude, you look off to the north and note standing lenticular clouds in the distance. You know that lenticular clouds are a sign of:
  - A. Developing convective activity.
  - B. An approaching cold front.
  - C. Mountain wave activity.
  - D. Freezing precipitation.

- 32. While flying over the town of Eagle Nest, near the northern edge of Eagle Nest Lake, Jody asks you what would happen if your engine quit. You tell her that you would just glide the plane to a safe landing at Angel Fire airport further down the valley. Assuming a glide ratio of 10.9 to 1 and that winds are not a factor, are you lying to her?
  - A. Yes
  - B. No
- 33. As you approach the next ridge line to the east of Eagle Nest Lake, you notice that your ground speed has increased due to the winds changing direction to due west and increasing in velocity. What can you expect as you approach the ridge line?
  - A. Updrafts on the leeward side, and downdrafts on the windward side.
  - B. Downdrafts on the leeward side, and updrafts on the windward side.
  - C. Updrafts on both sides of the ridge.
  - D. Downdrafts on both sides of the ridge.
- 34. You should approach the windward side of a ridge at a 45 degree angle. True or false?
  - A. True
  - B. False
- 35. Thanks to the GPS installed in your aircraft, you determine that the winds aloft are now 270/32. What is your new ground speed?
- 36. Wanting to maintain your original ETA at Raton (you're an ex-NIFA navigation event competitor, after all,) you slow down to maintain your original ground speed. Assuming that the temperature aloft has not changed, there is no instrument error, and using the Angel Fire (KAXX) altimeter setting, what indicated airspeed will you have to fly to achieve this?
- 37. After quickly and successfully getting back on your planned ground speed and time, you dial in the Cimarron VOR at 15:35 zulu time. If you center your OBS, what indication should you see?
  - A. 110 with a TO indication.
  - B. 290 with a TO indication
  - C. 110 with a FROM indication
  - D. None of the above.
- 38. As you get further from the mountains, the winds return to their originally reported values (310/16,) and of course, you compensate to stay on your planned ground speed and time by returning to your original true airspeed (143 knots.) How far from Raton will you need to start your descent?
- 39. After landing in Raton, you have the tanks refilled back to their starting point. What will the meter on the fuel truck read after doing this? (While you were slowed down on leg 3, you adjusted your mixture to keep your fuel flow at its original planned value.)
- 40. What did you do wrong on this flight?
  - I. Flew one leg without being day current for landings.
  - II. Flew two legs without being day current for landings.
  - III. Flew over a national wildlife refuge without authorization.
  - IV. Landed over your maximum landing weight on leg 1.
  - V. Landed over your maximum landing weight on leg 2.
  - VI. Hit the mountain while climbing out of Taos.
  - A. II, III and VI.
  - B. I, III and V.
  - C. I, IV and V.
  - D. III, V and VI.