

Time: ____:____

Name: _____

School: _____

Contestant ID: _____

2013 NIFA Nationals SCAN Exam

The following test consists of 40 multiple choice questions. All questions are equally weighted. You will be given 60 minutes to complete the test. All answers must be recorded on the answer sheet within the allotted time or no credit will be given.

Nationals 2013 Test

1. After reviewing your certificates and documents, are you legal to complete this flight as planned?
 - i. No, you need a complex endorsement
 - ii. No, you need a biennial flight review
 - iii. No, you need an ELT inspection
 - iv. No, you need a 100 hour inspection
 - a. ii, iii, iv
 - b. i, iv
 - c. i, iii, iv
 - d. iii
2. Are you current to make the entire trip as planned?
 - a. Yes
 - b. No, you need more night landings
 - c. No, you need more landings, either day or night
 - d. No, you are night current but need more day landings
3. Regardless of your answers to questions 1 and 2, you elect to make this flight as planned. You decide to file a flight plan for extra protection for these first two legs. Due to low ceilings you decide to cruise on leg 1 at 3,500 MSL. How should you open this flight plan?
 - a. Using FSS frequency 122.0
 - b. Using GCO frequency 121.725
 - c. Using CTAF frequency 122.8
 - d. Calling 706-771-1777
4. For this leg, is 3,500 MSL a legal cruising altitude?
 - a. No
 - b. Yes
5. You still fly at 3,500 feet regardless of your answer to question 4. As you're finishing up final preparations for the flight, your brother calls you on your cell phone. He wants to know what time you will be landing in Athens. He also lets you know that his 125lb girlfriend will be joining you on the ride to Atlanta, and she has a 30lb bag. What time will you be touching down in Athens?
 - a. 1:25pm local
 - b. 18:18Z
 - c. 17:18Z
 - d. 1:15pm local
6. What is your takeoff weight and CG when your wheels leave the ground in KHQU?
 - a. 3,075 lbs, 41.47"
 - b. 3,064 lbs, 41.45"
 - c. 3,320 lbs, 43.58"
 - d. 3,309.8 lbs, 43.56"

7. What is your takeoff distance out of KHQU?
 - a. 1,180.5 feet
 - b. 1,112.6 feet
 - c. 1,804.5 feet
 - d. 1,696.23 feet
8. What is your groundspeed in cruise?
 - a. 155.5 kts
 - b. 185.5 kts
 - c. 161.7 kts
 - d. 126.3 kts
9. While reviewing your airport facility directory for Athens, you note one of the runways has information about its slope. When will runway slope information be published?
 - a. When it is more than 1% up or down
 - b. When it is greater than .3% upslope or .5% downslope
 - c. When it is greater than or equal to .3% up or down
 - d. When it is greater than .5% and the runway is >8000 feet long
10. You land in Athens with no problems. At the FBO, your brother and girlfriend Brittany are waiting for you. They are excited to be flying and will ride in the back seats. Since the baggage compartment is full, her bag will ride in the middle seats with mom. How much fuel did you burn flying to Athens?
 - a. 5.48 gallons
 - b. 3.77 gallons
 - c. 7.20 gallons
 - d. 5.88 gallons
11. Athens 100LL gas is super cheap, so you want to fill up as much gas as you can here. Considering everything, how much gas can you have in the tanks total?
 - a. 59.0 Gallons
 - b. 55.8 Gallons
 - c. 20.8 Gallons
 - d. 76.0 Gallons
12. After fueling, you plan your leg to Atlanta. You decide to fly into Fulton County Airport (KFTY) as flying to KATL is way too expensive and a hassle. You decide to fly direct to the PDK VOR, and you will begin your descent over the top of the VOR into KFTY. Cruising at 4,500 feet, and with a wheels up time of 2pm, what will be your time in climb?
 - a. 3:43 minutes
 - b. 3:16 minutes
 - c. 2:51 minutes
 - d. 2:29 minutes
13. What is your magnetic heading in cruise?
 - a. 265°
 - b. 262°
 - c. 256°
 - d. 250°

14. Dad's really excited to be flying so close to the busiest airport in the world and you're kicking yourself for not having the Atlanta TAC. He wonders how much time you will spend in cruise before starting your descent. You tell him...
- 16.77 minutes
 - 17.91 minutes
 - 21.44 minutes
 - 25.11 minutes
15. What will your rate of descent be into KFTY?
- 293 FPM
 - 790 FPM
 - 1000 FPM
 - 1490 FPM
16. Looking at the KFTY METAR, you start to get a little nervous about landing there. Which of the following is true?
- The wind shifted from 160° to 190° in the last hour
 - The ceiling is at 3,100 feet
 - The sea level pressure is 1015.1" HG
 - The peak wind was 100° at 31 kts
17. You get switched over to Fulton Tower, and they clear you to land on runway 14. What is your ground roll landing?
- 764 feet
 - 747 feet
 - 718 feet
 - 1443 feet
18. Tower passes along a PIREP to you reported earlier over Atlanta by a B737. What is **NOT** true about the PIREP?
- The altitude of the PIREP is between 16000 and 17000
 - The PIREP was given during descent
 - The PIREP reported light rain
 - The PIREP report a ceiling at 3800
19. As you're landing on runway 14, what do you need to be aware of?
- Runway 14 is a down-sloping runway
 - There is 199 feet less runway to use for landing
 - There are unlit obstacles at 835' AGL on final to be aware of
 - There is a much higher than normal glide path
20. How much fuel have you burned since you got in the plane in KHQU?
- 7.18 gallons
 - 12.66 gallons
 - 10.95 gallons
 - 9.20 gallons
21. What is your landing weight into KFTY?
- 3600.0 lbs
 - 3575.9 lbs
 - 3556.9 lbs
 - 3399.1 lbs

22. You stay overnight in Atlanta have a lovely dinner with the family, and head to your interview confident and prepared. However there is a lingering feeling that you had done something wrong the day before. You make it through the interview and low and behold they actually liked you! Now you decide to fly home on this gorgeous Monday evening! Dad has a business meeting down near Balwin CO airport (KMLJ) so you decide to depart back out of KFTY direct to PDK VOR and then direct KMLJ. You cruise at 5500 feet and everyone is in the same seats and location as the day before. With a wheels up at 5:30pm what time will you arrive into KMLJ?
- a. 6:05pm
 - b. 6:14pm
 - c. 6:01pm
 - d. 6:19pm
23. Tower taxies you to runway 9 for departure. Since this is a shorter runway, you are thinking about performance. How much runway will be left in front of you when your wheels leave the ground?
- a. 942 feet
 - b. 888 feet
 - c. 1913 feet
 - d. 1859 feet
24. How many miles will you spend in cruise before turning over the VOR?
- a. 5.67 NM
 - b. 5.09 NM
 - c. 2.15 NM
 - d. 12.5 NM
25. As your cruising abeam the Atlanta International Airport you start to wonder about Class B airspace, even though you are squawking VFR and not talking to ATC. With B757s passing over not much higher than you, you think what are the weather requirements for Class B airspace?
- a. 1sm visibility, clear of clouds
 - b. 3sm visibility, 500 below, 1000 above, 2000 horizontal
 - c. 3sm visibility, clear of clouds
 - d. 5sm visibility, 1000 below, 1000 above, 2000 horizontal
26. 26.9 miles after turning over the PDK VOR, you are 100% dead on course and are abeam the Covington Airport (KCVC) and you see a fire occurring under the rudder pedals. You need to divert!! You decide to divert to Monroe Walton CO Airport (D73) direct from your present position. Looking at the sectional you see a parachute jump symbol right next to the airport. How many jumps must be made there annually to have that symbol charted?
- a. 1000
 - b. 2000
 - c. 4000
 - d. 5000

27. Since you are incredibly limited on time, you decide to simply use cruise performance to calculate a time to airport, no descent calculations. After you turn towards the airport, how long will you be in the air before you land at D73?
- 6.36 minutes
 - 6.05 minutes
 - 5.22 minutes
 - 4.63 minutes
28. Luckily your dad, being a volunteer fire fighter, gets the fire extinguisher and puts the fire out. Nevertheless you divert into D73 and taxi towards the FBO. What maintenance services are available at the airport?
- Minor Airframe, Minor Powerplant
 - Major Airframe, Minor Powerplant
 - Minor Airframe, Major Powerplant
 - Major Airframe, Major Powerplant
29. What time do you land in D73?
- 5:55pm
 - 5:50pm
 - 6:05pm
 - 6:10pm
30. You decide to use KFTY METAR for all performance information at D73. However you see they have an AWOS-A on the field. What information does that provide?
- Altimeter and visibility only
 - Temperature, wind, altimeter, dew point, density altitude, and visibility
 - All part in answer B plus ceiling/cloud data
 - Altimeter only
31. Maintenance is excellent at D73 and are able to get you back in the air exactly one hour after you landed. This diversion ended up being a blessing in disguise because Brittany's family lives in Monroe County, so Brittany, your brother, and her bag decide to stay in Monroe leaving you, mom and dad to return to KHQU. What is your ramp weight at D73?
- 3511 lbs
 - 3411 lbs
 - 3211 lbs
 - 3111 lbs
32. What is your takeoff distance and lift off speed on runway 3 out of D73?
- 1289 feet, 49 KIAS
 - 1606 feet, 52 KIAS
 - 1882 feet, 54 KIAS
 - 774.5 feet, 54 KIAS
33. What is your time to climb out of D73? You go direct to KHQU at 5500 feet MSL.
- 4.65 minutes
 - 4.01 minutes
 - 3.45 minutes
 - 3.10 minutes

34. As you fly home, you now become anxious to get back on the ground. Maybe the airline called you! How much time does it take to get home from D73?
- 26.11 minutes
 - 26.80 minutes
 - 32.99 minutes
 - 34.03 minutes
35. How much distance is covered during your descent into KHQU?
- 12.49 NM
 - 13.33 NM
 - 23.11 KM
 - 14.36 SM
36. You land uneventfully in KHQU and glad to have that trip over, you walk back to the FBO. Uh oh, there's an FAA examiner waiting for you. He asks you about your flight and you tell him all about it. He asks few simple questions such as "How much time did you put in your logbook for the flight today?"
- 1.3 hours
 - 1.6 hours
 - 1.9 hours
 - 2.2 hours
37. "How much fuel did you burn on this whole trip?"
- 29.28 gallons
 - 20.70 gallons
 - 27.50 gallons
 - 37.33 gallons
38. You're starting to sweat because you just remembered what you did wrong. What did you do wrong?
- Flew into Class B airspace without a clearance
 - Flew without a valid ELT inspection
 - Flew without a valid 100 hour inspection
 - Landed with passengers without being night current
- i, ii, iii, iv
 - i, ii, iii
 - i, ii
 - ii, iv
39. You hope the fed doesn't ask about any of that. Luckily he doesn't, but he does ask, "Can I remove landing gear tires as part of preventative maintenance?"
- Yes
 - No
40. "One final question before I leave," says the examiner, "Why didn't you divert to Covington (KCVC) instead of Monroe (D73)? It was much closer. You say
- "Covington didn't have any lighted runways"
 - "Monroe had longer runways than Covington"
 - "Monroe didn't have gliders in the area like Covington did"
 - "Covington was closed"

You are still waiting to hear back on your interview...