

Discovery Aviation N363X Tecnam P2008 Checkout

Pilot: _____ Phone: _____ Email: _____

Part 1: Aircraft Operation and Systems

Utilize the Aircraft Flight Manual, Federal Aviation Regulations, and linked references to answer the questions. If you cannot find the answer, seek support from a Discovery Aviation approved Flight Instructor.

1. N363X is a certificated light sport aircraft that is not certificated in the standard aircraft category. What type of airworthiness certificate does this aircraft have?
2. What document must accompany the airworthiness certificate of a light sport aircraft ([14 CFR 91.327\(d\)](#)).
3. What special passenger briefing is required of the pilot-in-command of a light sport aircraft ([14 CFR 91.327\(e\)](#))
4. What is the wingspan and length of the aircraft?
5. What is the engine manufacturer and model, and what do the letters signify in the engine model?
6. What is the maximum continuous horsepower and what rpm does that reflect? Can the aircraft produce more power, if so for how long and at what rpm?
7. What is the maximum and minimum oil quantity capacity and what type of oil should be used?
8. Why must the aircraft be “burped” prior to your first flight of the day? Describe the procedure. [Watch video here](#) or [this article](#) for more information.

9. What types of fuel can be used? What is the preferred fuel?
10. What is the total capacity of the fuel system? How much per tank? How much unusable?
11. How many alternators does the engine have? If one fails, what happens? If all fail, what happens?
12. Is there pitot heat on this aircraft?
13. Please fill out the table below with all the aircraft speeds

V-speed	Definition	KIAS	What does this mean for you when flying?
V _{NE}	Never exceed spd		
V _{NO}	Max Struct spd		
V _A	Maneuvering spd		
V _Y	Best Rate Climb		
V _X	Best Angle Climb		
V _{FE}	Max flaps extend		
V _{APP}	Final Appr speed		
V _G	Best Glide speed		
V _R	Rotate speed		
V _S	Clean stall speed		
V _{SO}	Flaps ext. stall spd		

14. Are spins or aerobatic maneuvers allowed in this aircraft?
15. Can you fly this aircraft at night? Can you fly in instrument conditions?
16. What is the demonstrated crosswind?
17. What is the max takeoff and landing weight? What is the max baggage compartment weight? What is the empty weight of N363X?

18. Assuming the CG remains within range and no more than 10 pounds of aircraft equipment and headsets, and fuel burn of 4 gal/hr. How much fuel is required for a 1-hour flight with reserves and how much can the pilot and passenger weigh (combined)?

19. Complete a weight and balance for the following scenario and complete the table: Empty Weight = 827lbs., Pilot = 190 lbs., Passenger = 190 lbs., Headsets, chocks, various baggage & carry-ons = 20lbs., 20 gals of fuel. Can you take off in this scenario? If not, what can you do?

	Weight (lbs.)	Arm (inches)	Moment
Empty Aircraft			
Pilot + Passenger			
Fuel			
Baggage			
Total			

20. Complete a weight and balance for the following scenario and complete the table: Empty Weight = 827lbs., You = ____ lbs., Passenger = ____ lbs., Headsets, chocks, various baggage & carry-ons = 20lbs., 15 gals of fuel. What is the heaviest passenger you can carry and how long and how far can you fly (factoring for reserves) at 4000 pressure altitude at 70% power?

	Weight (lbs.)	Arm (inches)	Moment
Empty Aircraft			
Pilot + Passenger			
Fuel			
Baggage			
Total			

21. Calculate the takeoff and landing distance required (ground run and over 50' obstacle) using the following scenario: Max gross weight, field elevation 3000', OAT 80 degrees F, altimeter 30.20, tailwind of 5kts, runway upslope of 1 degree on a dry paved runway, and use of appropriate takeoff and landing flaps.

22. In zero wind conditions at 3000 feet AGL, how far can you glide with the engine out?
23. What do you do if the engine fails at altitude? Describe immediate actions and then the series of checklists that you would use. Assume the engine does not restart. You do not need to list all the steps in each checklist.
24. How long can you fly if one of the Lane A/B lights is flashing and the other is off? What is they are both flashing? Or one is on and the other off?
25. Why should the engine be run at 2400-2800 rpm after start and for how long?
26. Why should the engine be run at 3000 for 2 minutes after landing?
27. What do the inner and outer knobs on the lower right side of the Garmin G3X touch PFD do?
28. How do you change the transponder code and the altimeter setting on the G3X? Do you have to also make a manual change to the second altimeter?
29. How do you enter a flight plan on the G3X?
30. What are your VFR minimums when flying this aircraft?

Part 2: Document and Aircraft Flight Check out

For the aircraft checkout, bring Part 1 completed, and also bring your pilot license/certificate(s), medical, driver's license, citizenship/TSA verification (if checking out as an instructor or if you plan to receive instruction for a certificate or rating), logbook and proof of rental insurance. The instructor will fill out the rest of this form as you walk through the checkout.

- ☐ Application review and document check, instructor signoff the application and upload to schedule platform, along with any documents missing.
- ☐ Aircraft check-out/check-in procedures and use of Flight Schedule Pro
- ☐ Review and discuss all emergency procedures as documented in the Aircraft Flight Manual and checklist.
- ☐ Preflight including aircraft documents, and review of operating limitations.
- ☐ Demonstration of burping procedure and ensuring proper direction of propeller turn.

The following to ACS standards relevant to the level of renter's pilot certificate:

- ☐ Proper engine start and taxi procedures.
- ☐ Normal, short field and crosswind takeoff and landing and pattern work
- ☐ Power off and power on stalls
- ☐ Proper power and propeller rpm management
- ☐ Use of radios and the G3X Garmin navigation and autopilot features sufficient to fly a route of flight with at least 3 waypoints, including use of autopilot.
- ☐ Emergency procedures including engine failure, electrical malfunction (lane A or B failure)
- ☐ Other procedures as deemed by the instructor to ensure verification of safe operation of the aircraft.

Part 3: Flight Instructor Sign Off

I _____ (approved Flight Instructor) have reviewed all the renter's documents and found them in compliance. I have reviewed the answers to the quiz, discussed any answers that were unclear or incorrect and ensured the renter understands the correct answers. I have also flown with the renter, and he/she satisfactorily completed all required tasks. I hereby determine that the renter is safe to rent N363X.

_____ (Signature) _____ (Name) _____ (Date)