

# Cessna 172 Checkout

## Introduction

Thank you for choosing Spinks Flight Center for your flying adventure.

To maximize your safety you should be knowledgeable on all topics contained in this supplement prior to your checkout flight.

It is essential to be familiar with the following:

- Emergency engine failure checklists.
- V-speeds
- Answers to all questions contained in the supplement packet.
- For N21706 an additional G1000 supplement must also be completed.

The information in this supplement is condensed and good for note taking, please take your time, and ask many questions.

## Required Maneuvers

Pilots receiving a checkout will be asked to perform the following maneuvers on the checkout flight:

- Normal and crosswind takeoffs and landings
- Go around
- Engine failure in flight
- Simulated engine fail landing
- Steep turns
- Slow flight
- Power-on stall
- Power-off stall
- Unusual Attitudes

# N733UD

Cessna 172N

Maximum takeoff weight: 2,300 Lbs.

N733UD has long range tanks: 54 gal. total, 50 gal. useable  
(27 total per side, 25 useable)

Oil: 5 qts. for flights of less than 3 hours.  
6 qts. for extended flights

## V-Speeds

Vr.....	55 KIAS
Vne.....	160 KIAS
Vno.....	128 KIAS
Va 2300 lbs.....	97 KIAS
1950 lbs.....	89 KIAS
1600 lbs.....	80 KIAS
Vfe.....	85 KIAS
Max window open speed.....	160 KIAS
Vso, max. weight, landing config.....	41 KIAS
Vs1, max.weight, max. forward CG, clean config.....	47 KIAS
Best glide.....	65 KIAS
Vy sea level.....	73 KIAS
Vx sea level.....	59 KIAS
Normal enroute climb, sea level, flaps up.....	75-80 KIAS
Normal landing approach, flaps up.....	60-70 KIAS
Normal landing approach, full flaps.....	55-65 KIAS
Short field approach, full flaps.....	60 KIAS
Maximum demonstrated crosswind component.....	15 KIAS

# N225FR

Cessna 172N

Maximum ramp weight: 2,407 lbs

Maximum takeoff weight: 2,400 lbs

Maximum landing weight: 2,400 lbs

43 gal. total, 40 gal. useable, (21.5 total per side, 20 useable)

Oil: 5 qts. for flights of less than 3 hours.

6 qts. for extended flights

## V-Speeds

Vr.....	55 KIAS
Vne.....	158 KIAS
Vno.....	127 KIAS
Va 2400 lbs.....	99 KIAS
2000 lbs.....	92 KIAS
1600 lbs.....	82 KIAS
Vfe.....	85 KIAS
10°.....	110 KIAS
20°.....	85 KIAS
30°.....	85 KIAS
Max window open speed.....	158 KIAS
Vso, max. weight, landing config.....	33 KIAS
Vs1, max.weight, max. forward CG, clean config.....	40 KIAS
Best glide.....	65 KIAS
Vy sea level.....	76 KIAS
Vx sea level.....	60 KIAS
Normal enroute climb, sea level, flaps up.....	75-85 KIAS
Normal landing approach, flaps up.....	65-75 KIAS
Normal landing approach, full flaps.....	60-70 KIAS
Short field approach, full flaps.....	61 KIAS
Maximum demonstrated crosswind component.....	15 KIAS

# N21706

Cessna 172SP G1000

Maximum takeoff weight: 2,550 Lbs.

Fuel capacity: 56 gal. total, 53gal. usable  
(28 total per side, 26.5 usable)

Oil: Maintain oil level at 6 qts.  
Fill to 8 qts. for extended flights  
No less than 5 qts. at any time

## V-Speeds

Vr.....	55 KIAS
Vne.....	163 KIAS
Vno.....	129 KIAS
Va 2550 lbs.....	105 KIAS
2200 lbs.....	98 KIAS
1900 lbs.....	90 KIAS
Vfe 0-10 degrees.....	110 KIAS
10-30 degrees.....	85 KIAS
Max window open speed.....	163 KIAS
Vso, max. weight, landing config.....	40 KIAS
Vs1, max. weight, max forward CG, clean config.....	48 KIAS
Best glide.....	68 KIAS
Vx, sea level.....	62 KIAS
Vy, sea level.....	74 KIAS
Normal enroute climb, sea level, flaps up.....	75-85 KIAS
Normal landing approach, flaps up.....	65-75 KIAS
Noraml landing approach, full flaps.....	60-70 KIAS
Short field approach, full flaps.....	61 KIAS
Maximum demonstrated crosswind component.....	15 KIAS

1. In order to act as Pilot in Command what must a pilot have in his/her possession?
2. What are the requirements to remain current as a private pilot? To carry passengers?
3. How long is a third class medical valid for?
4. What equipment is required in the aircraft according to 91.205?
  - a. Day?
  - b. Night?
5. What documents are required to be in the aircraft?
6. What are the fuel reserves for day VFR? Night VFR?
7. How often must the pitot static system be checked?
8. How often must the transponder be checked?
9. How often must the ELT be checked?  
When must the ELT battery be replaced?
10. Your pre-flight inspection reveals that the left fuel tank gauge is Inoperative. Is the airplane legal to fly?

11. Explain how to obtain weather information and interpret a Metar and Taf?
12. How can a pilot obtain weather while airborne? What are the frequencies that can be used?
13. Explain the airspace within KFWS on your sectional?
14. Explain how to obtain pressure and density altitude for the current Metar at KFWS?
15. What type of engine does the Cessna 172 have?  
N733UD?  
N21706?
16. What type of fuel system?
17. How many useable gallons?
18. Describe the electrical system?
19. What happens to the pitot/static instruments when you use the alternate static source?
20. Which instruments operate from the vacuum system?
21. What is the crosswind component for the Cessna 172? Is it a limitation?
22. Explain the importance of following a pre and post flight checklist walk around?

Interested in getting weather at home?

<http://aviationweather.gov>

[www.duats.com](http://www.duats.com)

[www.avweather.com](http://www.avweather.com)

For pilots with an instrument rating please answer the following.

1. What is required to maintain instrument currency?
2. When is an alternated not required?
3. When an alternate airport is required, what must the forecast weather be to conduct a precision approach? Non-precision approach?
4. What are reserve fuel requirements for an IFR flight?
5. If communications were lost on an IFR flight, what would be your actions in choosing a route, altitude, and when to arrive at your destination airport?
6. How often must a VOR be checked? Give some examples?

## **Standard Briefings:**

Prior to engine start, you as the pilot in command are required to brief your passengers on some simple operations.

1. How to fasten and unfasten seatbelts
2. How to exit the aircraft
3. Where you should meet
4. Where emergency equipment is located

As pilots we need to be aware of all emergency procedures prior to boarding any aircraft we intend to fly. In order to increase safety, you the pilot in command should have a plan of action prior to taking the runway for takeoff.

1. Runway length
2. Your takeoff distance
3. Rotation speed
4. Departure procedures
5. Describe your course of action in the event of a power failure

Landing, the most important phase of flight, therefore this should be one of the most important briefings.

1. Pattern entry
2. Pattern altitude
3. Approach speed
4. Field elevation
5. Landing distance
6. Runway length

I \_\_\_\_\_, understand all of the above and agree to operate this aircraft within the above limitations at all times. In addition, I understand all the systems and operational limits, and will assure that the weight and center of gravity limitations are within the allowable values at all times.

Signature \_\_\_\_\_

Date \_\_\_\_\_

## **G1000 Checkout**

1. Name and briefly describe the G1000 replaceable units (LRU).
2. What are 3 alert levels, and what actions are required by the pilot?
3. How is the CDI navigation source changed from GPS to VOR mode?
4. What are the steps used to have the MFD help assist in leaning the engine?
5. How can you reset the amount of fuel displayed by the fuel totalizer?
6. How can you tell which of the two comm radios is currently in use?
7. What are the steps necessary to change a transponder code?
8. List the steps required to activate “Direct To” navigation?
9. List the steps to make traffic appear on the Navigation Map page?
10. Describe how to interpret traffic symbols on the Navigation Map page?
11. List the steps to display Terrain and Obstacles on the Navigation Map page?
12. Describe the color schemes for Terrain and Obstacles?

13. What is reversionary mode and what would cause it to automatically occur?
14. Name ways you can tell when any instrument or sensor has failed?
15. What is the difference between a Warning and Caution on the TAWS?
16. What instruments will not be present if the Air Data Computer fails?
17. What instruments will not be present if the AHRS fails?
18. Define the following equipment acronyms:
  - AHRS
  - ADC
  - TIS
19. Where is the equivalent of the turn coordinator and the “ball”?
20. Where can you find bearing and distance information for your GPS destination?
21. Describe the steps necessary to tune a VOR?
22. How can you see a detailed picture of airport taxiways with your airplane superimposed on the diagram?
23. What devices are powered by the standby battery when the main battery fails?

24. How do you adjust the volume and squelch of the intercom?
25. How can you determine the floor and ceiling of Class B airspace on the MFD?
26. How can you verify the effective dates of the various databases during system startup?
27. Will the analog fuel tank gauges read correctly even if you forgot to reset the digital fuel gauge?
28. Will the fuel ring still be accurate if you set the digital fuel gauge to the wrong value?
29. What buttons must be pushed to be able to see a list of the nearest airports?
30. If the entire electrical system fails, what standby gauges exist and which ones will continue to work?

My instructor has reviewed this sheet with me and answered all my questions to my satisfaction:

**Student**

Print name \_\_\_\_\_

Sign name \_\_\_\_\_

Date \_\_\_\_\_

**Instructor**

Print name \_\_\_\_\_

Sign name \_\_\_\_\_

Date \_\_\_\_\_