|                               | CESSNA SKYHAWK M<br>172M/N<br>CHECKOUT EXA<br>(All aircraft documents may be used | <b>ODEL</b><br>M<br>1 for this exam.) |
|-------------------------------|---|---------------------------------------|
|                               | NAME  | DATE                                  |
|                               | CHECKOUT INSTRUCTOR(s)  |                                       |
|                               | AIRCRAFT USED FOR THE EXAM  | N6843H / N6506D                       |
| ENGINE:                       |   |                                       |
| 1. What is the engine model   | number, type, and rated horsepower?   |                                       |
| 2. What is the oil capacity?_ | For extended flights?Normal level?  | Add oil at 5.5 Qt                     |
| 3. How do you determine the   | e engine oil type?  |                                       |
| 4. Why is it important to lea | an the mixture?   |                                       |
| On taxi                       |   |                                       |
| • In flight                   |   |                                       |
| 5. Mixture should be          | during take-off, climb and maximum cruise p                                       | oower.                                |
| 6. Between 30F- 90F what i    | s the desired oil TempF Maximum   | F                                     |
| 7. The maximum oil pressur    | re for startup isPSI andPSI for normal  | operation.                            |
| 8. The minimum oil pressur    | re for Idle isPSI andPSI for normal oper  | ration.                               |
| 9. CHT's should be maintai    | ned belowF for high performance cruise and  | F for economy cruise.                 |
| 10. What is the maximum RI    | PM drop on the left or Right Mag?   |                                       |
| 11. What is the maximum dre   | op between the Mags?  |                                       |
| 12. What are the proper proc  | edures to follow when the engine runs rough while che                             | ecking the mags on runup?             |
|                               |   |                                       |

## **FUEL SYSTEM:**

 13. What is the minimum fuel grade (octane) and color?

 14. How many fuel tanks are there?

 15. What is the total *usable* fuel capacity? N6843H

 N6506D

 16. Where are the fuel drains located?

- 17. Where are the fuel vent(s) located?\_\_\_\_\_
- 18. What would happen in the event of fuel vent blockage?\_\_\_\_\_
- 19. What position should the fuel selector valve be placed in for takeoff, climb, and landing?\_\_\_\_\_

#### **ELECTRICAL SYSTEM:**

20. What voltage of N6843H?\_\_\_\_\_

21. What is the voltage of N6506D?\_\_\_\_\_

22. What is the ammeter telling you?\_\_\_\_\_

What documents are required to be in the aircraft?

Circle all that apply:

POH

Weight & Balance

Garmin 430 Flight Manual Supplement

GTX -345 Transponder Flight Manual Supplement

G3X Flight Manual Supplement

Engine Flight Manual Supplement

GI275 / G5 Flight Manual Supplement

GFC 500 Flight Manual Supplement

You are correct, Its all of them!

Please do not remove from the aircraft,.

## AIRSPEEDS: (Express in MPH For N6843H and Knots for N6506D)

| 23. Vr_/ Vx_/ Vy_/ Cruise Climb/ Vno/ Vne/ Vs/ Vso_/                                  |
|---|
| Vfe/ Va @ 2300 lbs/ Max demonstrate crosswind/  |
| 24. What is the recommended best glide speed @ 2300 lbs. with flaps up?MPHKTS         |
| 25. What is the recommended <i>normal</i> final approach speed with flaps down?MPHKTS |

WEIGHT AND BALANCE: (Aircraft used for exam / checkout purposes N6843H, Normal Category.)

26. Maximum *takeoff / landing* weight?\_\_\_\_\_Max weight in baggage compartment?\_\_\_\_\_

27. Work the following weight and balance problem. (Use current weight for aircraft used for checkout.)

| <u>ITEM</u>   | <b>WEIGHT</b>  | ARM  | <b>MOMENT</b>  |  |
|---|--|--|--|--|
| Licensed empty weight   |  |  |  | -  |
| Oil (8 quarts)  | 15   |  | -200   |  |
| Pilot and front passenger   | 350  |  |  | -  |
| Rear seat passenger(s)  | 175  |  |  | -  |
| Fuel (38 Gal. usable @ 6 Lt   | os./gal.) 228  |  |  | -  |
| Baggage   | 50   |  |  | -  |
| <u>TOTALS:</u>  |  |  |  |  |
| CG LOCATION   | Are yo   | u within limits?   |  |  |
| PERFORMANCE:  |  |  |  |  |
| 28. Find the ground run and ta  | keoff distance @ 2300  | blbs., flaps up, zero wind   | d. for the following con   | ditions:   |
| 0   | 55   | , <b>1 1</b> ,   | .,   |  |
| <u>a</u> . 2,500 ft., 75 degrees F.   | Ground run   | Total to clear:  | 50 foot obstacle   |  |
| <u>a</u> . 2,500 ft., 75 degrees F. What is the <i>average rate of cli</i>  | Ground run<br>mb from 3,000 ft. to 6   | Total to clear :<br>,000 ft. @ 2300 lbs, std.  | 50 foot obstacle<br>temp., no wind?  | FPM  |
| <u>a</u> . 2,500 ft., 75 degrees F. What is the <i>average rate of cli</i><br>Elapsed time?   | Ground run <u></u><br><i>mb</i> from 3,000 ft. to 6<br>Fuel used?  | Total to clear :<br>,000 ft. @ 2300 lbs, std.<br>Approx. Dist.?  | 50 foot obstacle<br>temp., no wind?<br>SM ( <i>Use IAS as TA</i>   | FPM  |
| <ul> <li><u>a</u>. 2,500 ft., 75 degrees F. 6</li> <li>What is the <i>average rate of cli</i> Elapsed time?</li> <li>22. <u>Cruise condition</u>: 2300 lbs</li> </ul>   | Ground run <u></u><br><i>mb</i> from 3,000 ft. to 6<br>Fuel used?<br>., recommended lean r   | Total to clear :<br>,000 ft. @ 2300 lbs, std.<br>Approx. Dist.?<br>nixture, 60% power, 5,0   | 50 foot obstacle<br>temp., no wind?<br>SM ( <i>Use IAS as TA</i><br>00 ft., standard tempera   | FPM<br>AS in climb.)   |
| <ul> <li><u>a</u>. 2,500 ft., 75 degrees F. 6</li> <li>What is the <i>average rate of cli</i> Elapsed time?</li> <li>22. <u>Cruise condition</u>: 2300 lbs Find the following:</li> </ul>   | Ground run<br><i>mb</i> from 3,000 ft. to 6<br>Fuel used?<br>., recommended lean r<br>RPM, TAS   | Total to clear :<br>,000 ft. @ 2300 lbs, std.<br>Approx. Dist.?<br>nixture, 60% power, 5,0<br>MPH,   | 50 foot obstacle<br>temp., no wind?<br>SM ( <i>Use IAS as TA</i><br>00 ft., standard tempera<br>GPH  | FPM<br>AS in climb.)<br>ature.                                     |
| <ul> <li><u>a</u>. 2,500 ft., 75 degrees F. 6</li> <li>What is the <i>average rate of cli</i> Elapsed time?</li> <li>22. <u>Cruise condition</u>: 2300 lbs Find the following:</li> <li>23. Find the approximate <i>range</i> following:</li> </ul>   | Ground run<br><i>mb</i> from 3,000 ft. to 6<br>Fuel used?<br>., recommended lean r<br>RPM, TAS<br><i>e</i> and <i>endurance</i> @ 23   | Total to clear :<br>,000 ft. @ 2300 lbs, std.<br>Approx. Dist.?<br>nixture, 60% power, 5,0<br>MPH,<br>00 lbs., zero wind, 38 ga  | 50 foot obstacle<br>temp., no wind?<br>SM ( <i>Use IAS as TA</i><br>00 ft., standard tempera<br>GPH<br>Illons usable fuel, for th  | FPM<br>LS in climb.)<br>ature.                                     |
| <ul> <li><u>a</u>. 2,500 ft., 75 degrees F. 6</li> <li>What is the <i>average rate of cli</i> Elapsed time?</li> <li>22. <u>Cruise condition</u>: 2300 lbs Find the following:</li> <li>23. Find the approximate <i>range</i> following:</li> <li>7,500 ft., std. temp., 63% power</li> </ul>   | Ground run<br><i>mb</i> from 3,000 ft. to 6<br>Fuel used?<br>., recommended lean r<br>RPM, TAS<br><i>e</i> and <i>endurance</i> @ 23<br>er, recommended lean   | Total to clear :<br>,000 ft. @ 2300 lbs, std.<br>Approx. Dist.?<br>nixture, 60% power, 5,0<br>MPH,<br>00 lbs., zero wind, 38 ga<br>mixture, 30 min reserve   | 50 foot obstacle<br>temp., no wind?<br>SM ( <i>Use IAS as TA</i><br>00 ft., standard tempera<br>GPH<br>illons usable fuel, for th<br>. RangeSM, Endura   | FPM<br>AS in climb.)<br>ature.<br>ae                               |
| <ul> <li><u>a</u>. 2,500 ft., 75 degrees F. 6</li> <li>What is the <i>average rate of cli</i> Elapsed time?</li> <li>22. <u>Cruise condition</u>: 2300 lbs Find the following:</li> <li>23. Find the approximate <i>range</i> following:</li> <li>7,500 ft., std. temp., 63% powe</li> <li>24. Find the <i>landing ground rop</i></li> </ul>                                      | Ground run<br><i>mb</i> from 3,000 ft. to 6<br>Fuel used?<br>., recommended lean r<br>RPM, TAS<br><i>e</i> and <i>endurance</i> @ 23<br>er, recommended lean<br><i>bll &amp; landing distance</i>                | Total to clear :<br>,000 ft. @ 2300 lbs, std.<br>Approx. Dist.?<br>nixture, 60% power, 5,0<br>MPH,<br>00 lbs., zero wind, 38 ga<br>mixture, 30 min reserve<br>@ 2300 lbs., full flaps, z                   | 50 foot obstacle<br>temp., no wind?<br>SM ( <i>Use IAS as TA</i><br>00 ft., standard tempera<br>GPH<br>allons usable fuel, for th<br>. RangeSM, Endura   | FPM<br><i>LS in climb.)</i><br>ature.<br>ne<br>ne<br>unce<br>ving: |
| <ul> <li><u>a</u>. 2,500 ft., 75 degrees F. 6</li> <li>What is the <i>average rate of cli</i> Elapsed time?</li> <li>22. <u>Cruise condition</u>: 2300 lbs Find the following:</li> <li>23. Find the approximate <i>range</i> following:</li> <li>7,500 ft., std. temp., 63% powe</li> <li>24. Find the <i>landing ground rot</i> <u>a</u>. 5,000 ft., 41 degrees F. 6</li> </ul> | Ground run<br><i>mb</i> from 3,000 ft. to 6<br>Fuel used?<br>., recommended lean r<br>RPM, TAS<br><i>e</i> and <i>endurance</i> @ 23<br>er, recommended lean<br><i>bll &amp; landing distance</i><br>Ground roll | Total to clear :<br>,000 ft. @ 2300 lbs, std.<br>Approx. Dist.?<br>nixture, 60% power, 5,0<br>MPH,<br>00 lbs., zero wind, 38 ga<br>mixture, 30 min reserve<br>@ 2300 lbs., full flaps, z<br>Total to clear | 50 foot obstacle<br>temp., no wind?<br>SM ( <i>Use IAS as TA</i><br>00 ft., standard tempera<br>GPH<br>allons usable fuel, for the<br>. RangeSM, Endura<br>zero wind, for the follow<br>50 foot obstacle | FPM<br>AS in climb.)<br>ature.<br>ne<br>nce<br>ving:               |

#### **EMERGENCY PROCEDURES:**

- 26. How do you detect carburetor ice?
- 27. In the event of carburetor ice, what do you do?\_\_\_\_\_
- 28. What are the *general* procedures for an engine failure in flight?
- 29. Find the approximate glide distance. Cruise altitude 7,500 ft. MSL. Terrain altitude 1,000 ft. MSL.\_\_\_\_SM
- 30. How do you recover from a spin?\_
- 31. What do the following transponder codes mean?
  - 7500\_\_\_\_\_7600\_\_\_\_7700\_\_\_\_\_
- 32. Emergency Radio Frequency\_\_\_\_\_
- 33. How can you get the Emergency Frequency on the 430 or GNC 255 with one touch?

## Aircraft Specifics: (Reference Checkist, or flight manuals @ gjc.aero)

- 34. After turning on the Master Switch, what must you wait for before starting the engine?\_\_\_\_\_
- 35. If you lose power, what happens to the G3X and other glass instruments?\_\_\_\_\_
- 36. If the PFD fails, the G5 battery will last \_\_\_\_\_\_ hours.
- 37. If the PFD fails, the GI275 will last how long? (section 3.1.7)
  - Green battery indicated\_\_\_\_\_\_
  - Yellow battery Indicated\_\_\_\_\_\_
  - Red battery indicated\_\_\_\_\_\_
- 38. What does INT on the G3X HSI indicate? (Pg.95)\_\_\_\_\_

39. What does a yellow "REV" on the HSI indicate? (Pg. 96)\_\_\_\_\_

- 40. If the Guardian CO detector ALERT annunciation activates in flight, what should you do?
  - •

  - •

# Flight Checks –look up but must be demonstrated in flight

| 41.                            | How do you change the G5 from an ADI (Attitude Display Indicator) to an HSI?  |
|--------------------------------|---|
| 42.                            | How do you change the heading bug on the PFD?   |
| 43.                            | How do you select or change a Nav/Com Frequency?  |
| 44.                            | How do you adjust the altimeter setting?  |
| 45.                            | How do you get to and use the lean assist?  |
| 46.                            | How can you quickly reference aircraft glide range using the G3X MFD?   |
| 47.                            | How can you display airport information, including weather, frequencies, runway information, and charts using the G3X MFD?  |
| 48.                            | How can you see ADS-B traffic alerts using G3X MFD?Garmin 430?  |
| <u>AU</u><br>49.<br>50.<br>51. | TOPILOT N6506D       Refer to Flight Manual Supplement on GJC.AERO         What does green text indicate in the autopilot status box?       White text?         What are the default modes when the autopilot is engauged?       What is ESP and when will it engage? |
| 52.                            | What will happen if ESP is active for more than 10 seconds?   |
| 53.                            | How can you disable ESP for maneuvers?  |
| 54.                            | At what altitude can the autopilot be engaged?  |
| 55.                            | At what altitude must the autopilot be disengaged during approaches?  |
| 56.                            | At what altitude must the autopilot be disengaged during all other operations?  |
| 57.                            | What is the maximum fuel imbalance with the autopilot engaged?  |

## **Emergency Procedures**

58. What are the four ways to manually disconnect the autopilot?

| 1  | <br> |  |
|----|------|--|
| 2. |      |  |
| 3. |      |  |
| 4. |      |  |

59. What is the procedure for a pitch trim runaway?

| Ground Portion: Written Corrected and approved by |           | , Date                       |  |
|---|-----------|------------------------------|--|
| Flight Portion: I certify that I have found       |           | competent in the Cessna 172M |  |
| Print Name  | Signature | Flight Circle Updated        |  |