

Cross Country Checklist

1. Draw a line on the chart between your departure & destination airports.
2. Get total distance with the plotter. (Be sure to use "sectional-nautical mile" scale)
 - Enter the total distance under the Dist. Column in the first open block.
3. Use your plotter to determine true course. (T.C.)
 - place bold line, parallel to ruler edge on the plotter, across your course line.
 - Lineup center hole with a line of longitude.
 - Read true course where rounded edge of plotter intersects longitude line.
 - If course line doesn't cross a line of longitude, read true course on a line of latitude off the inner scale.
4. Put True Course (TC) in the 2nd block in the TC column.
5. Decide what altitude to use.
 - Look at Maximum Elevation Figures(MEF) for each quadrangle that your course line passes through.
 - Look for obstacles along your route 10 nm to either side.
 - Remember: East = odd thousands +500 West = even thousands +500
6. Put altitude in Altitude column 2nd box down.
 - In the 1st box, put arrow up to show a climb. -eg. ↑ 5500
7. Determine the approximate temperature at field elevation and cruising altitude.
8. Now use your Time, Fuel, and Distance chart from chapter 5 in your P.O.H.
 - Interpolate to find time, fuel, and distance to climb to your cruise altitude.
 - If your field elevation is more than 500 feet above sea level, determine the time, fuel, and distance to climb figures for this elevation.
 - Subtract the field elevation figures from the cruise altitude figures.
 - Be sure to read the ****NOTES**** in calculating your final climb figures!
9. Once you have determined you time, fuel, and distance to climb:
 - Put the time in the Time Off column under the ETE block.
 - put the fuel in the GPH column under the Fuel block.
 - put the distance in the Dist. Column under the Leg block.

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Plan TAS 10.
CAS → TAS

Now go to your cruise performance chart in the P.O.H. to determine your True Airspeed (TAS) and Gallons Per Hour (GPH). Base the figures on 75% power.

- For the Piper Warrior use the Best Power Cruise Performance chart that has the label (Serial NOS. 28-78 16001 and up)
- Read the note about how wheel fairings change your true airspeed.

11. Once you get your TAS and GPH, put them in their blocks.

12. Go to your sectional chart.

- Mark your distance to climb from which you are leaving.

13. In the check points column, put your departure airport name in the first block.

- In the next block underneath it, put T.O.C. in the top half of the block
- In the bottom half of the same block, put a ground reference point that corresponds with your distance from your departure airport.

14. Find check points along the course line drawn about 15-20 nm apart.

- Mark an "X" on the course line and circle the actual check point.

15. As you do this, get the distance between each check point. each distance in the Leg Block.

- Calculate Distance between Check points

16. You need to determine your Ground Speed and Wind Correction Angle.

- Use the wind side of your E6B.
- Follow, the directions at the top of your E6B.
- Remember to align the pencil mark with your TAS.

Plan Leg
HDG/GS

17. Put the Ground Speeds in the GS column under the estimated block.(EST)

18. Put the Wind Correction Angle right below your True Course in the TC column.

- Calculate your True Heading and put that figure in the TH column.

19. Get the magnetic variation off the chart and put it under your True Heading.(TH)

- Calculate your Magnetic Heading and put it in the MH column.
- Transfer your Magnetic Heading to the Course Heading box.(CH)

Get
Winds Aloft
3 or 6 K

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20. Now you need to figure out your time.

Calculator - ON

$$\text{Time} = \frac{\text{Dist}}{\text{GS}} \times 60$$

- Put the BIG BOLD pointer of the E6B on Ground Speed
- Use the distance on the outer scale and read your time underneath it. (inner scale)
- put the times in the Time Off column under ETE (Estimated Time Enroute)
- Do this for all of the legs.

21. Now you need to figure out your fuel usage.

$$\text{Fuel} = \frac{\text{Dist.}}{\text{GS}} \times \text{FB}$$

$$\text{Fuel} = \frac{\text{Time}}{60} \times \text{FB}$$

- Put the BIG BOLD pointer of the E6B on the GPH.
- Read the gallons on the outside scale above the time from the inner scale.
- put the amount in the GPH column in the Fuel Block and fill in the remaining fuel under each figure.

22. Total the Time and Fuel columns and enter these figures at the bottom of the log.

23. Fill out the Flight Plan on the Back of the navigation log.

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Diversions

Mark a spot on the sectional chart with the time and your current position.

Draw a quick course line to your destination and note the distance, using the side of your flight computer (sectional scale)

Turn to the approximate heading.

Determine the actual course by paralleling your drawn line to a VOR Compass Rose or by use of the plotter.

Use the wind side of your computer to determine the WCA and GROUND SPEED Determine the time and fuel to reach the alternate.

Revise your destination with FSS including your current position. (This is so they can follow over a course from your last known position to your alternate if a problem occurs) Also inform FSS of your time enroute and your ETA at the alternate.

Remember, VOR radios can be used to determine position or to navigate to your alternate if they are available. Use all resources available.