



## Instructions

Refer to this sample for which step fills in each cell.

Wind Direction	Wind Speed	Pressure Altitude	True Course	True Heading	Magnetic Heading	GS Estimate	Checkpoints	Engine Power	Compass Heading	Distance Leg	Est Fuel Leg	Est Time Leg	Actual Time
Temperature	Altimeter	KTAS	WCA	Variation +W -E	Compass Deviation	Distance		Altitude	VOR	Distance Remaining	Est Fuel Required	Est Time Remaining	
							(3)	(4)			(21)		(in flight)
(11)	(11)	(12)	(5)	(14)	(15)	(14)	(3)	(14)	(17)	(6) (7)	(8) (22)	(7) (18)	(in flight)
(11)	(11)	(7) / (13)	(14)	(10)	(16)	(5)	(3)	(4)	(3)	(9)	(24)	(20)	(in flight)
							(3)			(8)	(23)	(19)	

### From the VFR Charts (steps 1-10 can be done the night before)

- Fill in the airport information section at the bottom of the page from the A/FD.
- Draw a runway and pattern entry diagram at the bottom of the page next to the airport information section.
- From the VFR charts, choose the Checkpoints and VOR radials. Mark whether the VOR is from (FR) or to (TO). For the legs that will have a climb segment and a cruise segment, leave an extra row.
- Choose the cruise altitudes. For the first altitude put the departure airport altitude. For the last altitude, put the traffic pattern altitude.
- Fill in the True Course and Distance columns from the VFR charts. For climb legs, fill in the total distance for one of the segments. In step 7 you will split it into the cruise and climb legs.
- For cruise legs, copy the Distance column to the Distance Leg column.
- For legs with climb segments, measure the total distance. Then use the climb performance table in the POH to determine the time, fuel and distance to climb. Subtract the climb distance from the total distance, and fill in the Leg Distance column for both rows. For the climb rows, also fill in the KTAS, Est Time Leg and Fuel Leg columns.
- Add up the Distance Leg column and put the total at the bottom of that column.
- Starting at the top of the Distance Leg column, subtract one row at a time from the total, and write the Distance Remaining for each row. The last row will be zero. This serves as a cross check for the math.
- Fill in the Variation column by finding the nearest isogonic lines. Round to the nearest degree. Variations marked E are negative and variations marked W are positive.

### Get a Weather Briefing

- Using the data from your weather briefing, fill in the Wind Direction, Wind Speed, Temperature and Altimeter columns. Use the Winds Aloft data and the METARs from airports near the route.

### From the Cruise Performance Table

- Fill in the Pressure Altitude from the table, based on the the Altimeter setting. For climb and descent legs pick an average altitude for the leg.
- Fill in the KTAS and Engine Power columns. Use the climb performance charts for climb legs and cruise performance charts for cruise legs.

### Headings and Speed

- Fill in the ground speed (GS Estimate), True Heading and wind correction angle (WCA) columns. Use the HDG/GS function on the E6B to calculate them from the Wind Direction, Wind Speed, True Course and true airspeed (KTAS) columns.
- Add True Heading and Variation to get Magnetic Heading.
- Get the Compass Deviation from the card in the plane.
- Add Magnetic Heading and Compass Deviation to get Compass Heading.

### Time

- Use the FLIGHT > LEG TIME function on the E6B to calculate the Est Time Leg column for the cruise segments from the Distance Leg and GS Estimate columns.  
*Note: The Est Time Leg was already filled in from the climb performance table for climb segments.*
- Add up the Est Time Leg columns and put the total at the bottom of that column.

- Starting at the of the Est Time Leg column, subtract one row at a time from the total, and write the Est Time Remaining for each row.

### Fuel

- At the top of the fuel column, write that taxi, run up and takeoff fuel amount from the POH.
- Using the REQUIRED > FUEL function on the E6B, calculate the Est Fuel Leg from the Est Time Leg and Fuel GPH columns.
- Add up the Est Fuel Leg columns and put the total at the bottom of that column.
- Starting at the of the Est Fuel Leg column, subtract one row at a time from the total, and write the Est Fuel Required for each row.

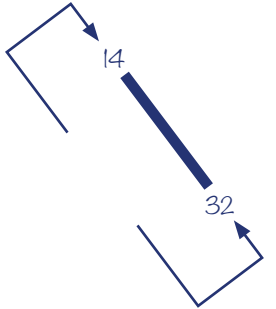
### Airport and VOR Information

- For each VOR that is used (including off-course ones used to locate intersections, record the name, frequency and morse code identifier on the bottom, next to the airport information section.

Wind Direction	Wind Speed	Pressure Altitude	True Course	True Heading	Magnetic Heading	GS Estimate	Checkpoints	Engine Power	Compass Heading	Distance Leg	Est Fuel Leg	Est Time Leg	Actual Time
Temperature	Altimeter	KTAS	WCA	Variation +W -E	Compass Deviation	Distance		Altitude	VOR	Distance Remaining	Est Fuel Required	Est Time Remaining	
							KPAO Palo Alto	7			1.4		
320	12	7500	142	142	128	85		full	128	18	2.8	13:00	
0	29.90	73	0	-14	0	—	Top of Climb	↑ 7500	—	100	7.4	44:36	
320	12	7500	142	142	128	135		2675	128	8	0.6	3:33	
0	29.90	123	0	-14	0	26	VPDLR	7500	—	92	6.8	41:03	
320	12	7500	116	114	100	134		2675	99	54	4.0	24:10	
0	29.90	123	-2	-14	-1	54	PXN Panoche	7500	103 TO PXN	38	2.8	16:53	
320	12	7500	137	137	123	135		2675	123	38	2.8	16:53	
0	29.90	123	0	-14	0	38	308 Harris Ranch	7500	121 FR PXN	0	0	0:00	
										118	11.6	57:36	

SAMPLE ONLY  
NOT FOR NAVIGATION

Airport	KPAO	308
Elevation	7	470
TPA	800 / 1000	1470
ATIS	135.275	Coalinga 119.275
CTAF / Tower	118.6	122.9
Ground	125.0	—
Clearance	—	—
App / Dep	NORCAL 120.1	—



Panoche PXN 112.6