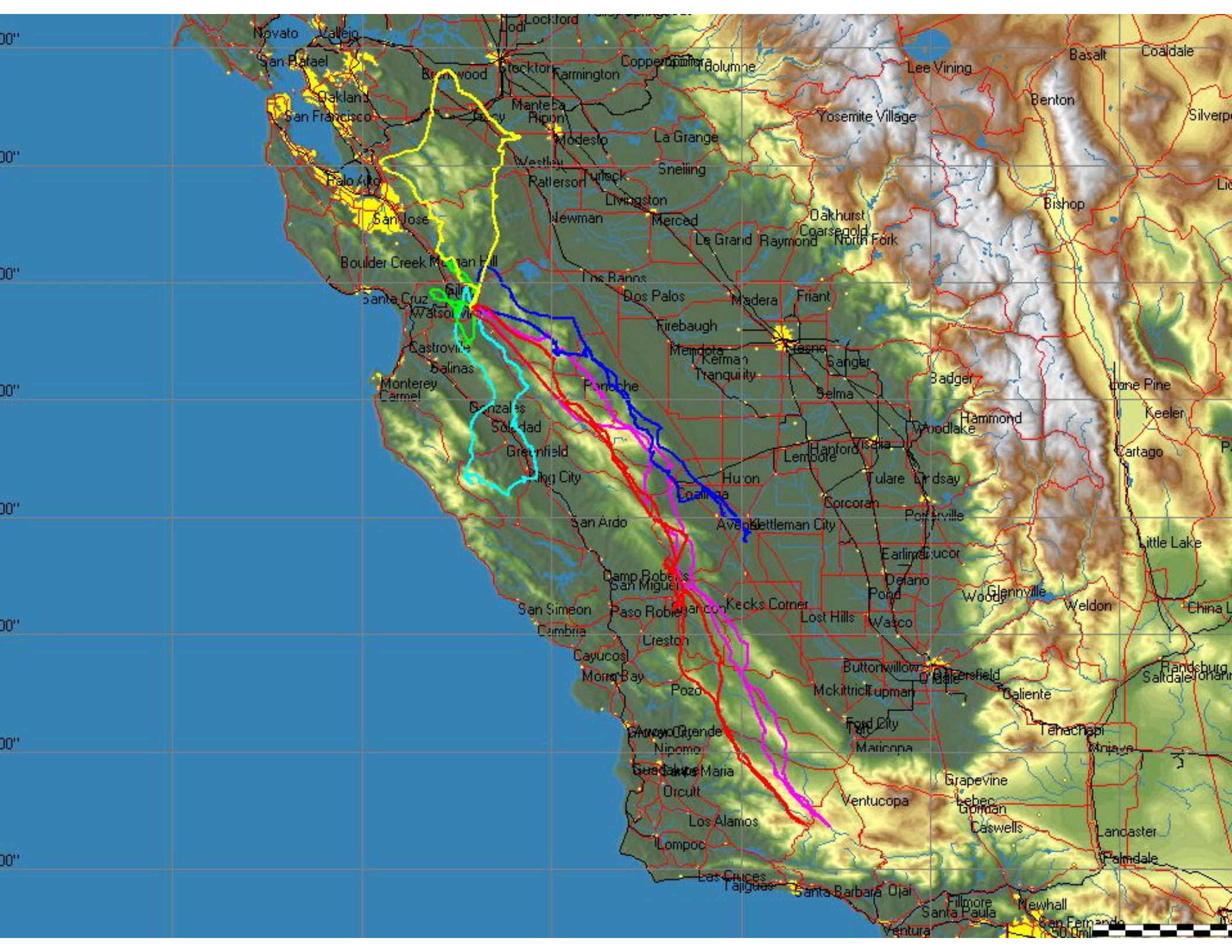


# XC Tactics For Hollister

Ramy Yanetz

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# Preparation

- Prior evening and in the morning – Check weather discussion <http://www.wrh.noaa.gov/mtr/forecast.php>
- Check blipmap models (RUC BLTop, NAM BLTop and clouds prediction, RASP Hcrit and convergence):
- <http://www.drjack.info/BLIP/ETA/CANV/>
- <http://www.drjack.info/BLIP/RUC/CANV/>
- <http://www.drjack.info/RASP/PANOACHE/index.html>
- <http://www.drjack.info/BLIP/RUC/SPOT/index.html>
- Look for at least 6K at Panoche to go XC. You need 6K to make it back.
- Over 7K at Panoche and 8K at Hernandez should be a good day for 200K-300K
- Above 8K – 500km day

# Preparation (continue)

- Download latest waypoints <http://soaringweb.org/TP/Hollister> ,
- study landouts [http://www.soaringnet.com/landout\\_data/hollister](http://www.soaringnet.com/landout_data/hollister)
- Study routes using google earth <http://soaringweb.org/TP/Hollister/hllstr6a.kmz>
- Study the XC section on HGC website <http://www.soarhollister.com/xc.htm>
- Download Hollister IGC files from OLC and play them with SeeYou <http://www.onlinecontest.org/olc-2.0/gliding/getScoring.html?scoringId=201&clubId=1323>

# XC Tactics

- Be ready to launch early, no later than noon.
- The key to successful XC flights is timing and commitment. Pilot skills and glider performance are secondary!
- Identify your scratch altitude and comfort altitude. Above scratch altitude, you are in a race with the sun. Below scratch altitude you are in a duel with gravity.
- Scratch altitude is the altitude where you need climb to continue or you will get below glide to a safe landout.
- Comfort altitude is the altitude where you don't need to climb at all.
- If you go below scratch altitude you should have a landout point in your glide range, and you should work any and all lift thoroughly with the focus on getting back above scratch altitude
- The higher above scratch you get, the more aggressive your tactics should be. Above comfort altitude you don't need to circle unless the lift is very strong.

# Safety Tactics

- Do not fly aggressively below your scratch altitude. Try to get higher, but keep moving, do not fool around in bad air. Change heading if in sink.
- Do not turn around in bad air unless you getting out of glide range to a safe landout.
- Below scratch altitude you should have a landing option in mind all the time, preferably in front.
- If landout option in front – keep moving. If behind turn towards the landout before you are getting out of glide range.

# Safety Tactics (continue)

- Use 20:1 or 25:1 depends on your glider performance, and at least 1500 feet arrival altitude. Take headwind into consideration.
- If you are high and doing good, and there is obvious lift ahead, you can stretch your glide back to your last landout option a little if necessary to continue, but as long as you are familiar with the landout area, the terrain on the way and other options. You do not want to arrive low over unknown field to find out it is not landable.
- If you are not sure about the conditions ahead, or it is getting late - turn around.
- If you landout (in an airstrip) more than once every 10 XC flights, or landout in a field more than once every 30 XC flights, you are too aggressive. Panoche doesn't count as landout...

# Tactics (continue)

- Post frontal days – Cu's – Can start from local tow and follow the clouds
- High Pressure days (shear lines – blue or cloud street) – Take a Panoche tow (6000ft) You will arrive at EL1 at least 1000 ft over
- If you encounter head wind on tow – tow a little higher or further



# Tactics (Continue)

- Typical shear line will start at EL1 and follow the line through EL4, Center Peak, Lookout and Black (Castle peak by Avenal)
- Shear line often can be 5-10 miles further east or west than typical – Check RASP in the morning!
- If it is an offshore day (often in Fall season) than shear line can be further west and may start at Chemise Lookout, so tow and glide towards Chemise in off shore days or you will spend the rest of the day trapped below 5K at Panoche
- If there is significant on shore gradient or marine push, the shear line may be further east so try the hills east of Mercy and near T1.

# Tactics (continue)

- On offshore record heat days and/or moderate NE winds – Best lift is right in the middle of the Hollister valley – choppy or even unworkable in the hills.
- Can start from local low tow on post frontal days or hot high pressure days
- When possible to cross Pacheco pass, try to fly north, best lift is in the middle and towards the east side of the Diablo range. Very consistent convergence zone over San Antonio valley to over 8K most days.

# On Route

- Stay at EL1 until above 6K, preferably above 7K to make it to EL2 high enough
- If EL1 is not working (it can happen) the shear line may be further west or east. Use your judgment based on drift, offshore/onshore to decide if to explore further west by Bum ranch and Chemise if you still high enough or further east by Mercy and the Panoche VOR
- Follow the shear line. If it starts at EL1 then go to EL2 – EL4
- If shear line further east, go directly to the New Idria valley or even further east
- It is hard to climb high enough from the ridge directly south of Panoche
- EL2 should give you enough climb to safely go into the Hernandez valley

# Shear Lines

- Try to stay in the shear line. If you noticed you are in continuous sink try to correct towards the direction you drifted from
- Typically over the highest terrain, west slopes of the Ridge between Hernandez and New Idria
- Offshore flow may push the shear line to the high ground to the west of the reservoir
- If you get low keep moving towards EL4. You will have much better chance to get high and make it back then turning around low in the Hernandez valley
- The strongest conversion is typically over EL4, often marked with wispy cu and typically goes to 8K-10K, and lasting till late

# Shear Line (continue)

- To follow the shear line further south go to Center Peak and from there to Black (following the ridge). There is often good lift right over Center Peak. No need to go to the VOR.
- The ridge towards the MW Towers typically do not produce good lift unless the shear line is further east. If EL4 worked it is better to continue to Center Peak.
- Don't get low in the Coalinga valley, it may be difficult to reconnect with the shear line. Try to stay above the ridge the whole way to Black.
- To go back to EL4 from Center Peak you should be above 6K.

# Continuing beyond Avenal

- The best lift is usually on the west side of Black Mountain. You can land at Pine Canyon if you get stuck low west of Black.
- The shear line is often broken between Black and the California valley.
- It will get soft further south until you get to California Valley. Shift gears. If you are over 8K at Black you should be able to continue to at least Hwy 46 for a 300km O&R.

# Going for 500km

- If it is a booming day and you arrive at Black at around 2PM, there is a good chance to fly 500km O&R especially if you can see cu's further south.
- You will often need to shift gears and may get low while crossing the 20 miles gap south of Black until you get over the next ridge leading to Taft.
- Best lift is in the middle of California valley or further west over the mountain.
- Following the ridge to Taft will give you more land out options in the valley, however often the lift is not strong enough to sustain you above the ridge, and if there is westerly wind you may get flushed into the valley and your chances to make it back are small. Stay in the California valley or follow the clouds.
- Turn around over New Cuyama for a 500km O&R.

# Beyond Cuyama

- If it is early enough (before 3PM) you can go further and follow the Cuyama shear line towards Pine Mountain and Santa Barbara.
- If you are going for a straight out, you should get as high as possible over the mountains south of Cuyama before you start heading east towards Mt Pinos, Kern mountains or Tehachapi.
- It is very difficult to get above the Kern Mountains and Tehachapi from the north. The San Joaquin valley does not produce good lift and most often you would be able to ridge soar but not high enough to continue south. This is why you should go south of New Cuyama and towards Pine Mountain first.



# Straight Out

- Once high over Mt Pinos or Fraizer Mountain you can go to the Mojave desert towards Crystal if you are high enough to make it there. The marine air is blowing into the Mojave desert by this time and you wouldn't find lift till you get to the shear line between Palmdale and Crystal.
- It may be better to follow the mountains further east towards Tehachapi before crossing the Mojave desert.
- If it is a post frontal day with strong NW winds and clouds, You may not get very high in the Kern or Tehchapi mountains to continue south, and there will be no much thermal activity in the Mojave desert, but you can do the Brian Choate thing by diving over the back at the lower point near the grapevine, fall like a rock and catch the wave over the Mojave desert , climb to 18K and go downwind to Jacumba.

# Returning home

- Follow your GPS trace on the way back. You will often find thermals in the same areas. If the shear line is marked with clouds, then follow the clouds and ignore your trace, since the shear line may have shifted.
- You may need to change gears again some 20 miles before Black, although often the shear line extends across the gap late in the day and is marked with cu.
- Get as high as possible at Black and fly conservatively if necessary so to stay over the highest terrain. Dropping down towards Coalinga late in the day will most likely end in a land out. Your goal is to make it back high enough to cross the gap from Center peak to Hernandez.

# Returning Home (continue)

- If you made it so far it is most likely a great day and you will climb to 10,000 ft or more at EL4 for a final glide home.
- If you have final glide from EL4, even if marginal, the best bet will be to take a straight line to Hollister and not via Panoche since Panoche is often flushed with sea breeze in the afternoon and is first to shutdown.
- If you don't have final glide then continue to EL2 and try to get over 7000 ft there for a final glide to Hollister.

# Returning Home (continue)

- Only if you can't get high enough at EL2 then go to EL1 and hope it is still working. You will need 6000ft at EL1 to make it back to Hollister
- Once you leave the Panoche area, expect to find nothing but smooth marine air for final glide. Don't expect to find any lift.
- You will have increasing head wind below 4000ft, but most likely not strong until you get below 2000 ft.

# Best Landout Options

- Bickle
- Panoche
- Hernandez South
- Rocky
- Cotton (Duster)
- New Coalinga
- Avenal
- California Valley
- New Cuyama