

Soaring Introduction and Local Sites



For advisory purposes only; 2003

Introduction to Soaring

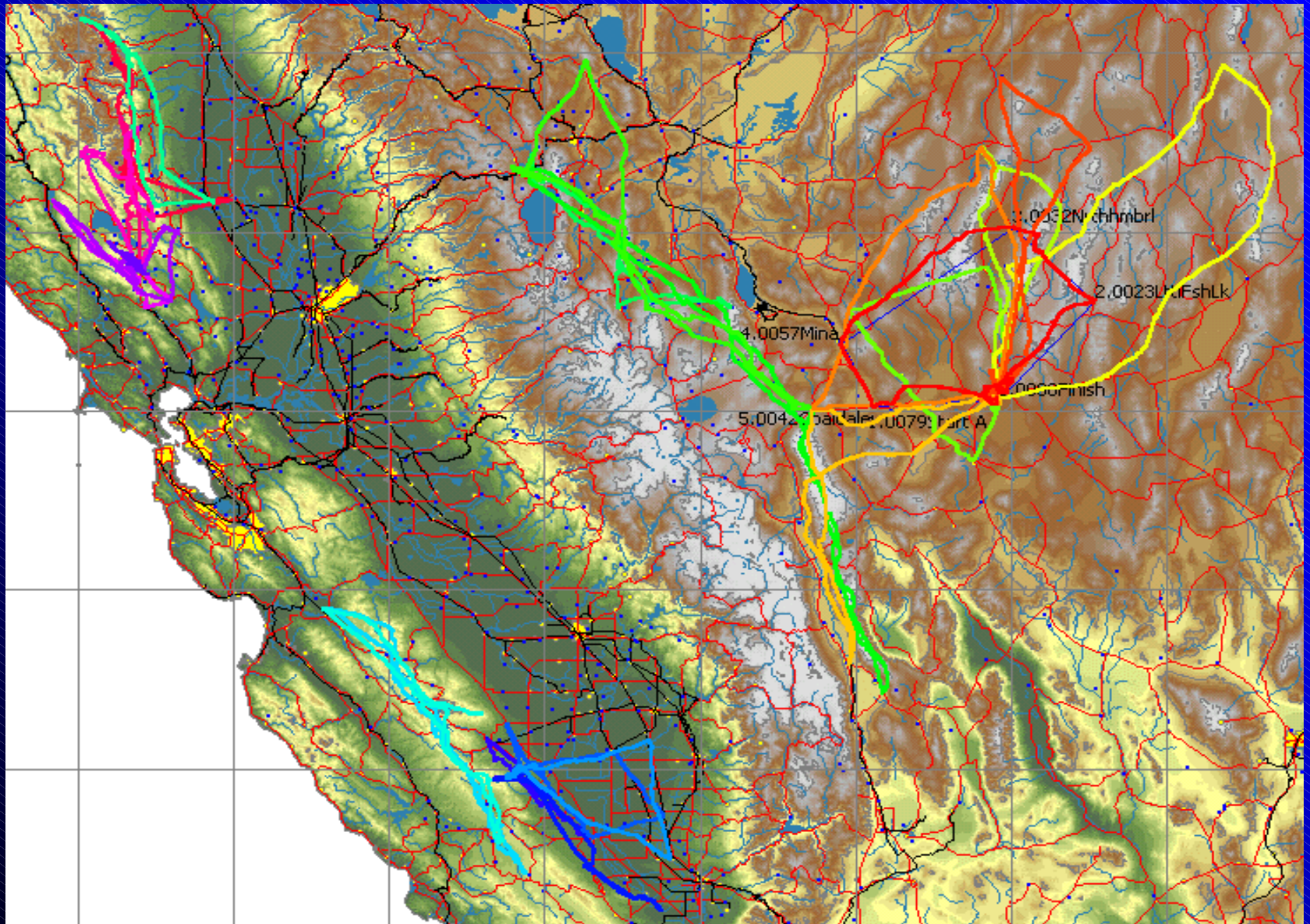
- Unpowered flight
- Gliding;
 - The art of moving forward by gradual descent through the air.
- Soaring;
 - The art of climbing by flying through air which is ascending faster than your glider is sinking.

So Why Soar?

- Don't do it to get rich.
- A sport and a challenge.
- Dances with Eagles.
- 10kn up is its own reward.
- The challenge and achievement of cross country flight without an engine.



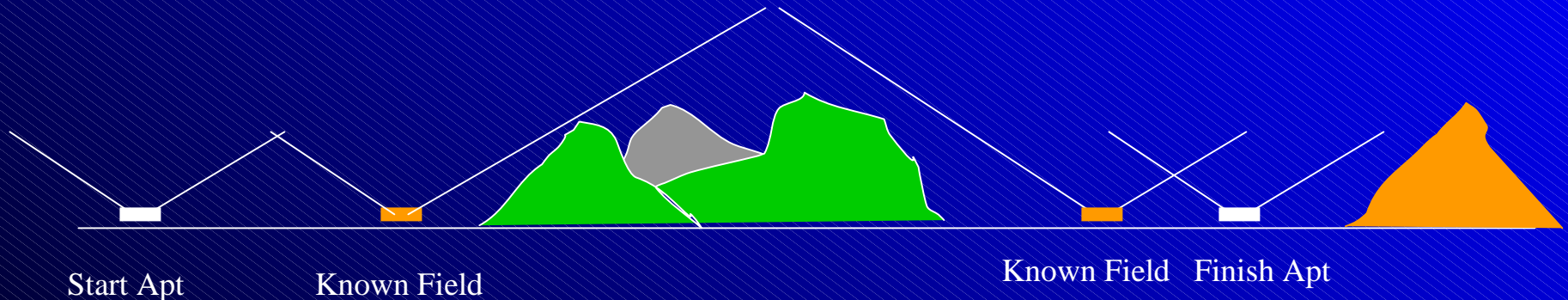
Where we fly; Generally in the mountains!



How we go Cross Country

25:1 glide ratio for sink & wind margin (glass)
(dependent on glider & conditions)

Plan glide over mtns or through passes



- Get low in the vicinity of your field and stop going XC. You are now local soaring. Begin to study the field for wind direction, slope, texture, drainage, power lines, sprinklers, fences, obstructions, and trailer access.

Lift Types

- Types of lift
 - Wind driven
 - Ridge lift
 - Wave lift
 - Sun driven
 - Thermal lift
 - Mountain breezes
 - Airmass driven
 - Convergences

It is as important to avoid Sink as it is to find Lift

Sink or turbulence in the mountains can completely overpower any aircraft, powered or otherwise.

- How to find it
 - Blunder into it. Or...
 - Figure out where it probably is and then blunder into it.

Powerless Flight Issues

- One chance landings.
- Higher chance of landing off-field
- Fly closer to the terrain than the average power pilot.
- Make more decisions per minute than most forms of aviation.

- We use micrometeorology to stay airborne.

Badges and Records

- Badges;
 - Internationally recognized proficiency levels
 - Silver, Gold, Diamond
 - Altitude, distance and duration requirements
- Records, by glider class and gender
 - Altitude,
 - Speed over a range of distances and course types
 - Distance

Contests

- By Glider Class
- Regional, National and International levels
- Cross country races round a different course each day;
 - Fastest one round gets the most points;
 - Most points at the end of the contest wins.

15-meter Nationals Grid Tonopah 2003



A photograph taken from the perspective of a pilot in a white sailplane. The cockpit is visible in the lower-left foreground, showing a pilot wearing a brown jacket. The view extends over a vast, green valley with a patchwork of fields and forests. In the upper right, another sailplane is seen in flight, and several other birds are scattered across the clear blue sky. The text "A Gaggle of Sailplanes share a thermal" is overlaid in yellow in the center of the image.

A Gaggle of Sailplanes
share a thermal

Commercial Sites & Clubs

- Hollister Gliding Club (Hollister)
- Northern California Soaring Association (Byron)
- Williams Soaring Center (Williams)
- Crazy Creek Soaring (Middletown/Clear Lake)
- Central California Soaring Club (Avenal)
- Soar Truckee (Truckee CA)
- Soar Minden, High Country Soaring (Minden NV)
- AirSailing (Sparks NV)

