



Mid-Atlantic Soaring Association

**Introduction To Ridge
Flying**



Why do we want to do this?

- **Challenging**
- **Exciting**
- **Fun**
- **Goal Setting**
- **Is it dangerous?**

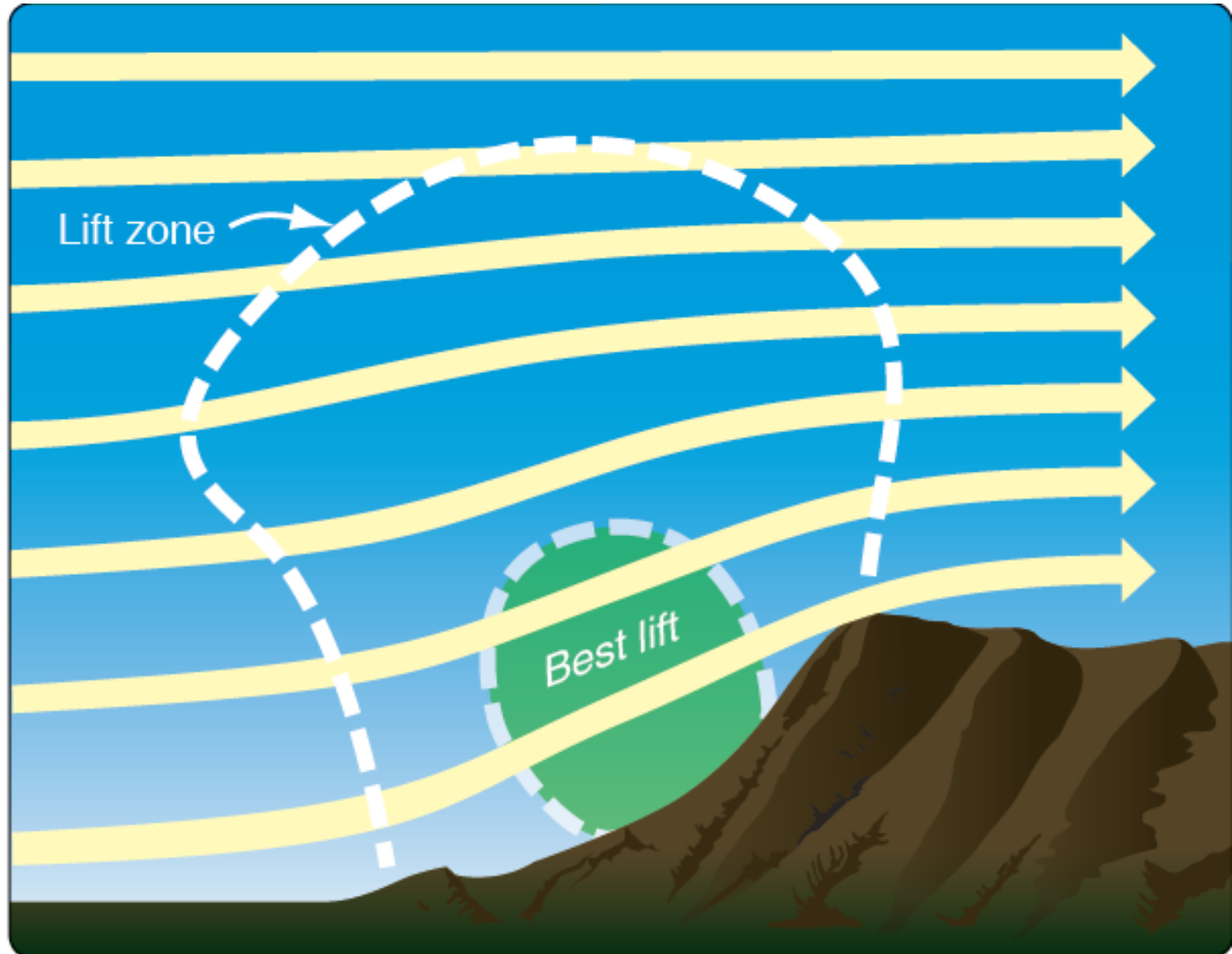


Ridge Flying Basics

- **How does the ridge work, or not?**
- **Basic Criteria**
- **Rules of the Road**
- **Flying The Ridge – Transitions**
- **Problems**
- **Planning**



Where's The Lift?





Basic Criteria

- **Wind at Ridge Level**
 - 15 knots min
 - 30 knots max
 - No more than 30° from Normal to the Ridge
- **Wind at the Field**
 - 15 knot quartering tail wind (usually)
- **X-Country Experience**



Rules of the Road

- **SSA Standard**
- **Competition**
- **M-ASA**

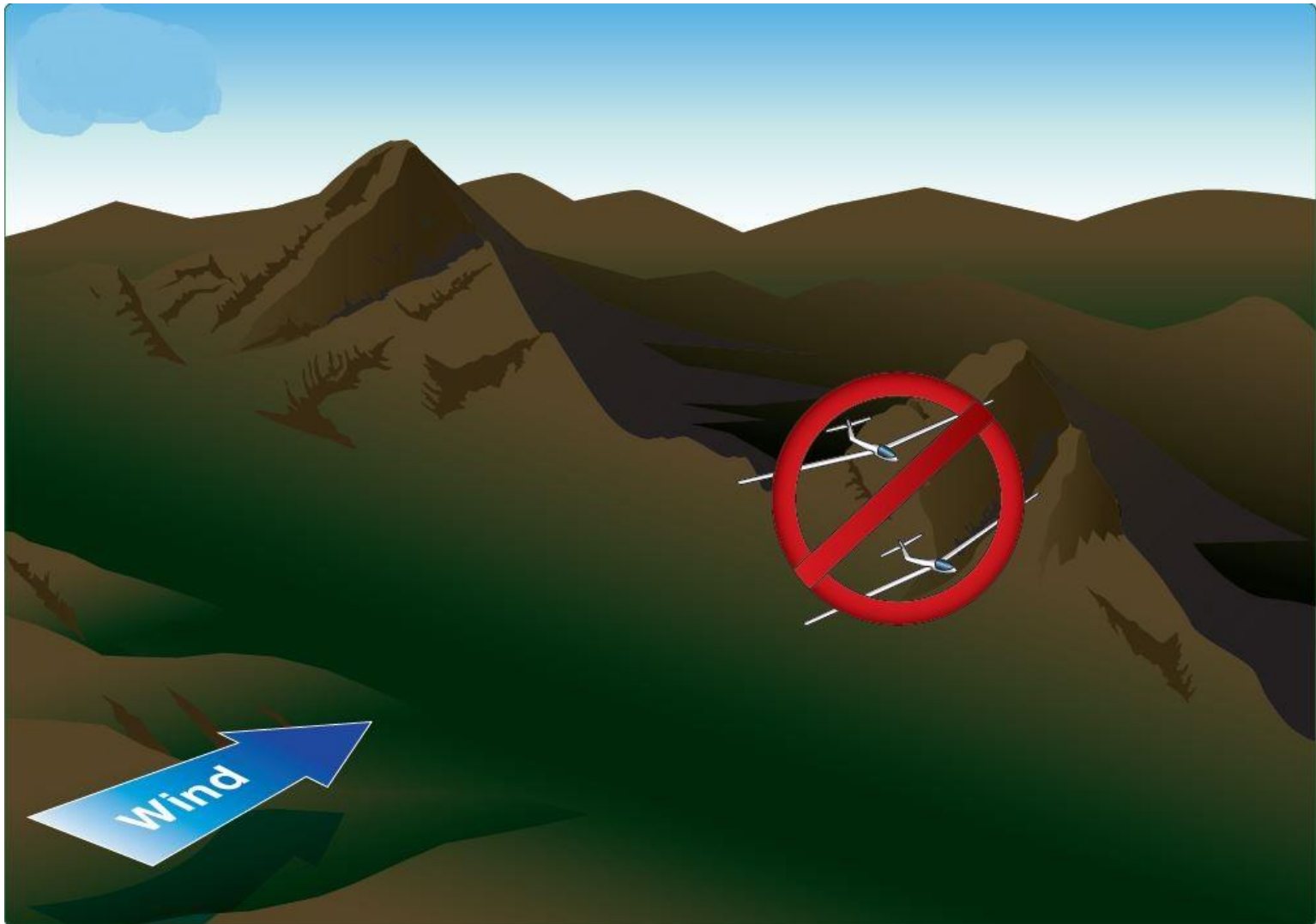


Turn Away From The Ridge



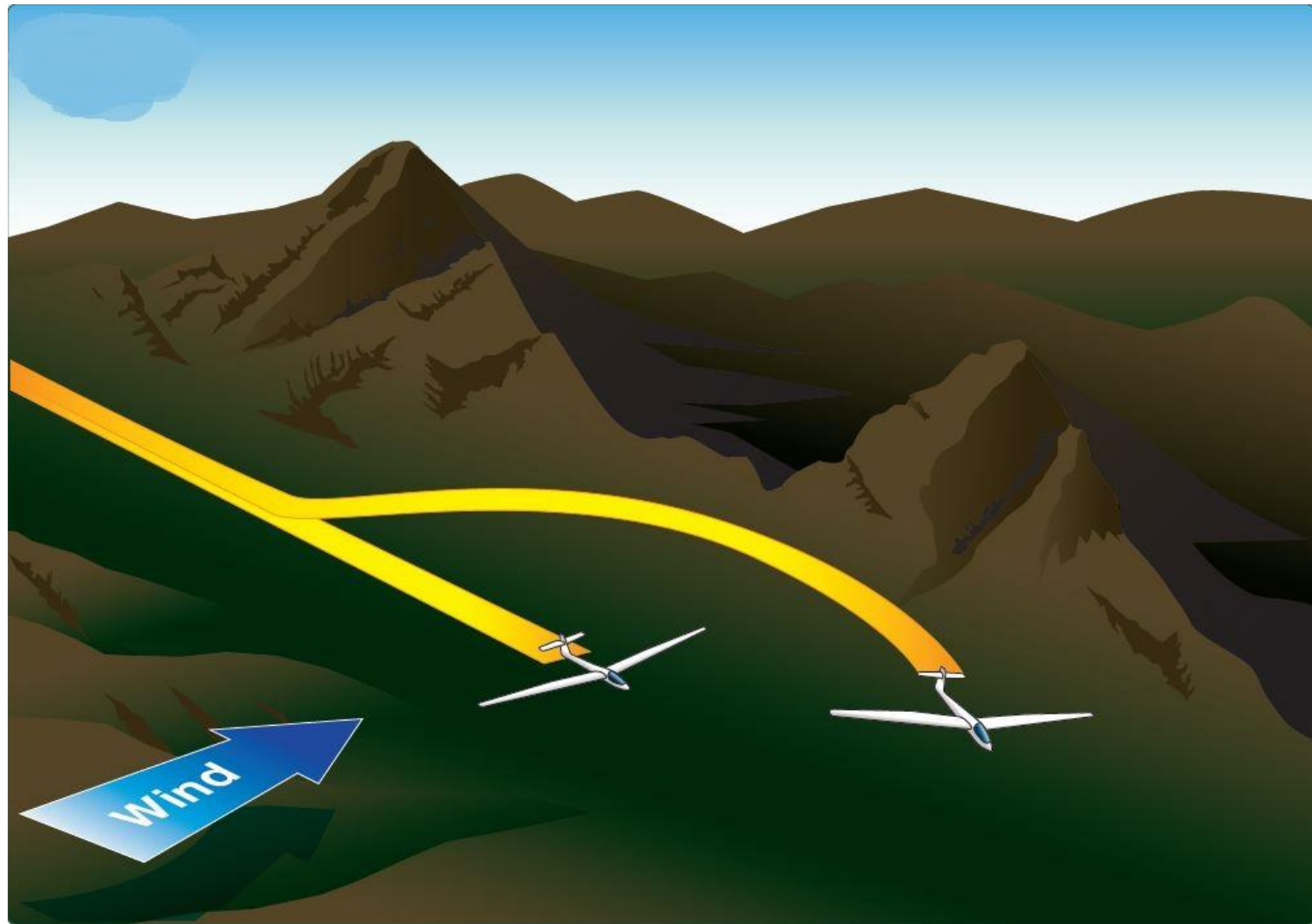


Don't Fly Directly Underneath Another Glider



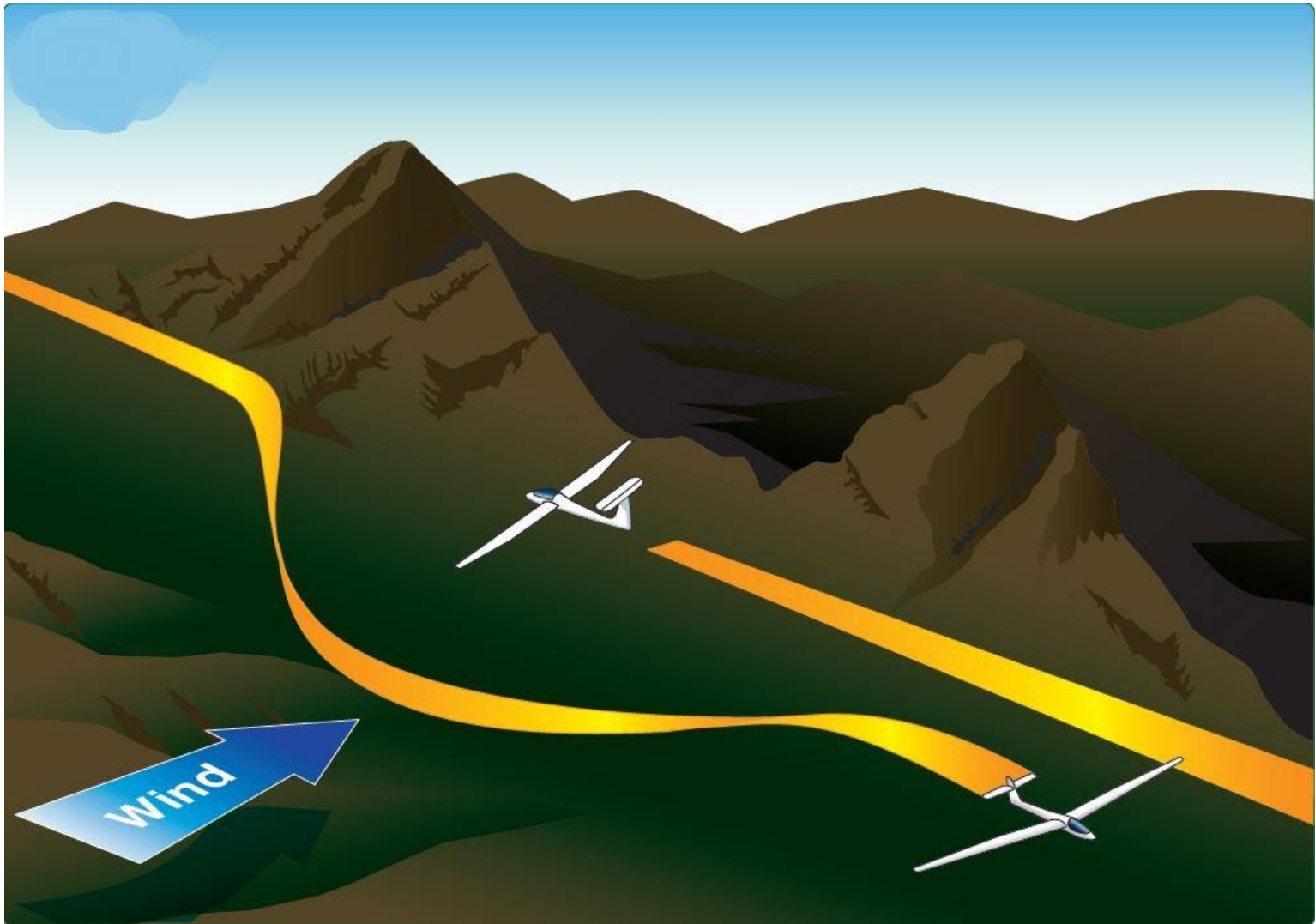


Pass To the Ridge Side (If Possible)





Give Way to the Right (Away From the Ridge)





Flying The Ridge: What's Good?

- **Wind – Lots but not too much**
 - **Perfect Angle – Normal To The Ridge**
- **Speed – Lots but watch the yellow arc**
- **Places to Land**
- **Smooth Air**
- **Thermals**
- **Wave - Sometimes**



What's Not Good?

- **Weak wind and/or bad angle**
- **Low speed – especially at low altitude**
- **Unlandable Terrain**
- **Wave – Sometimes**

“If it's not rough, the ridge isn't working good enough.”

Karl Striedieck



The Massanutten Ridge (Example Transitions)



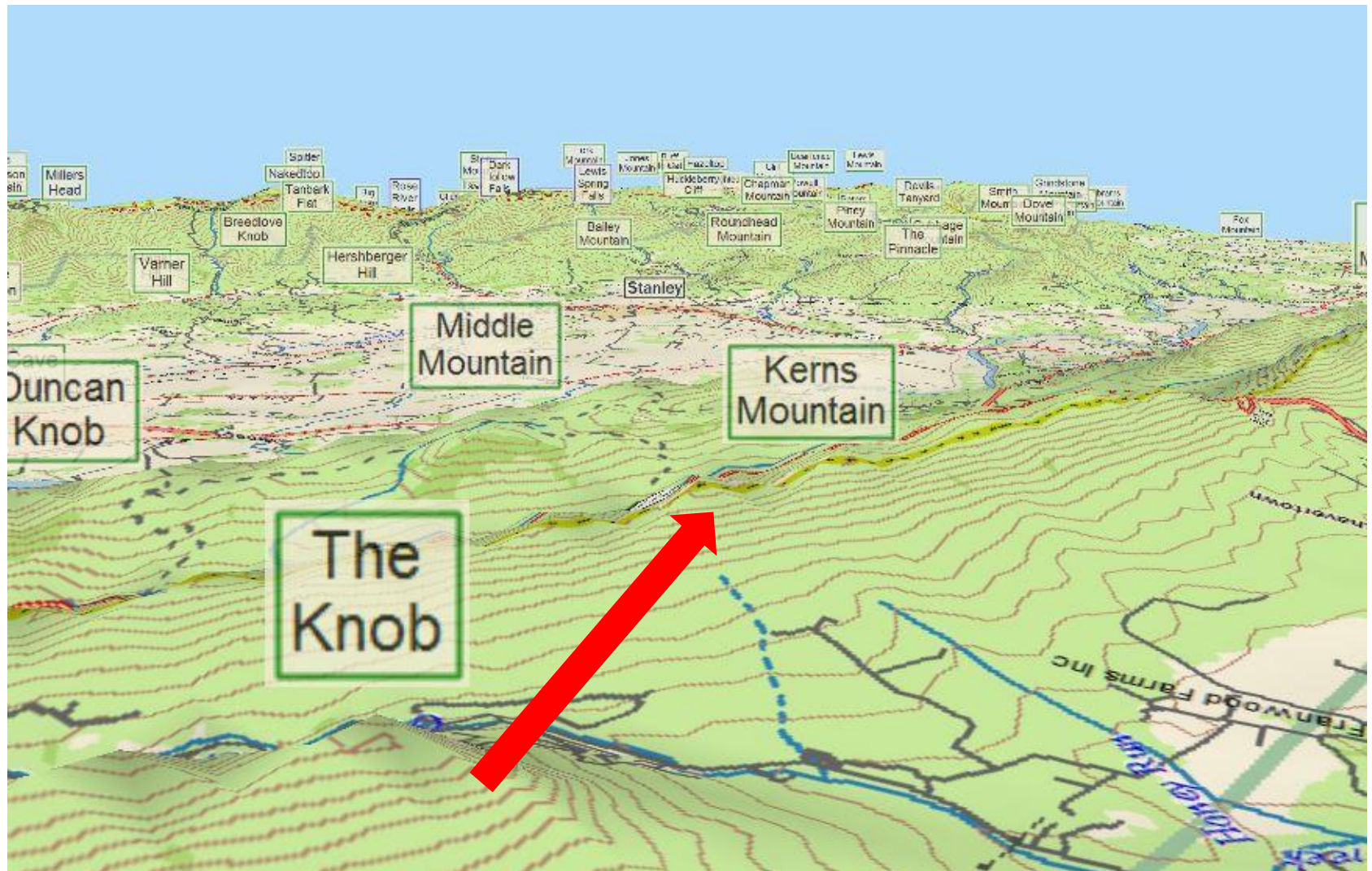


Short Upwind Transition



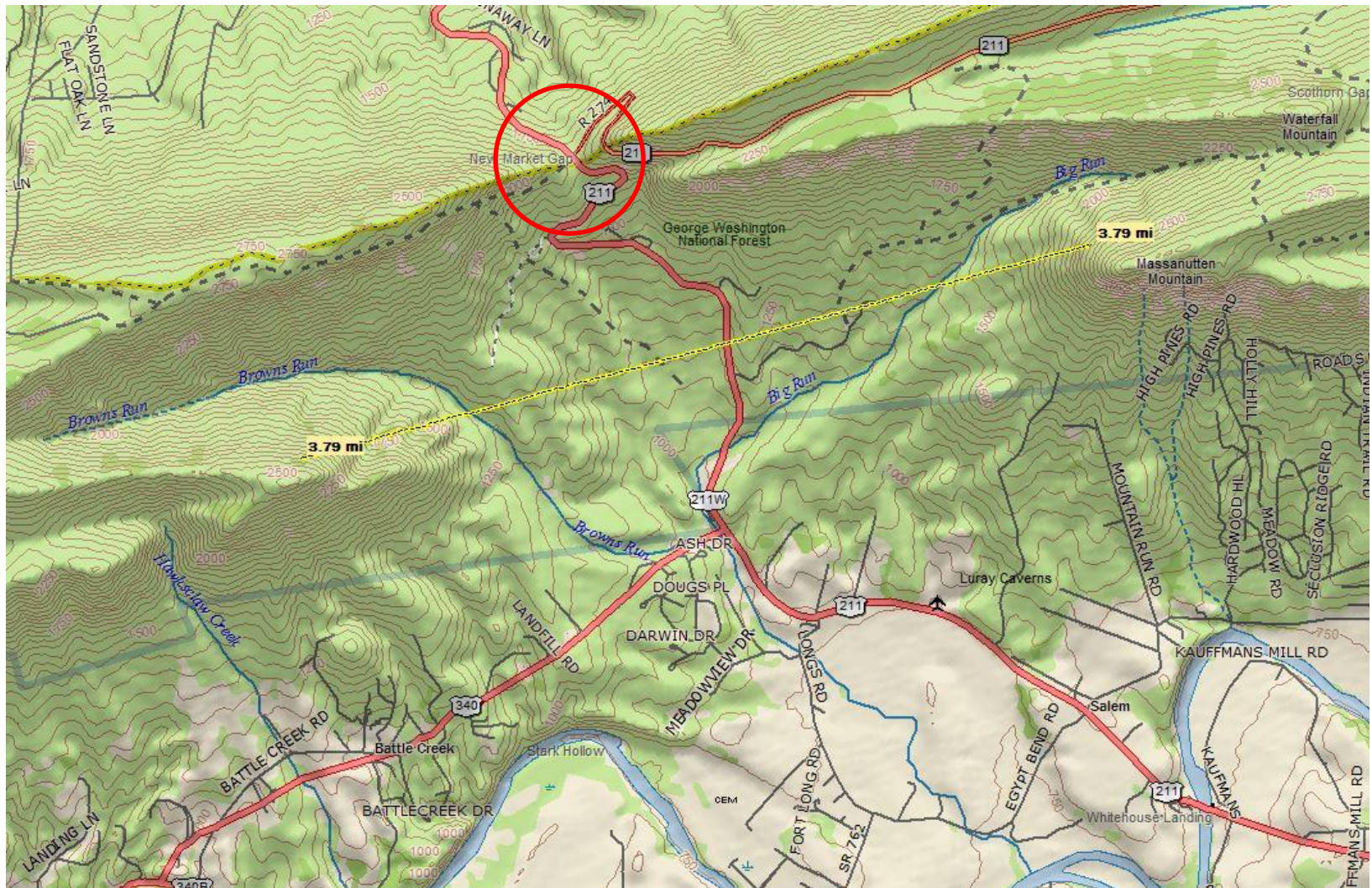


Downwind Transition





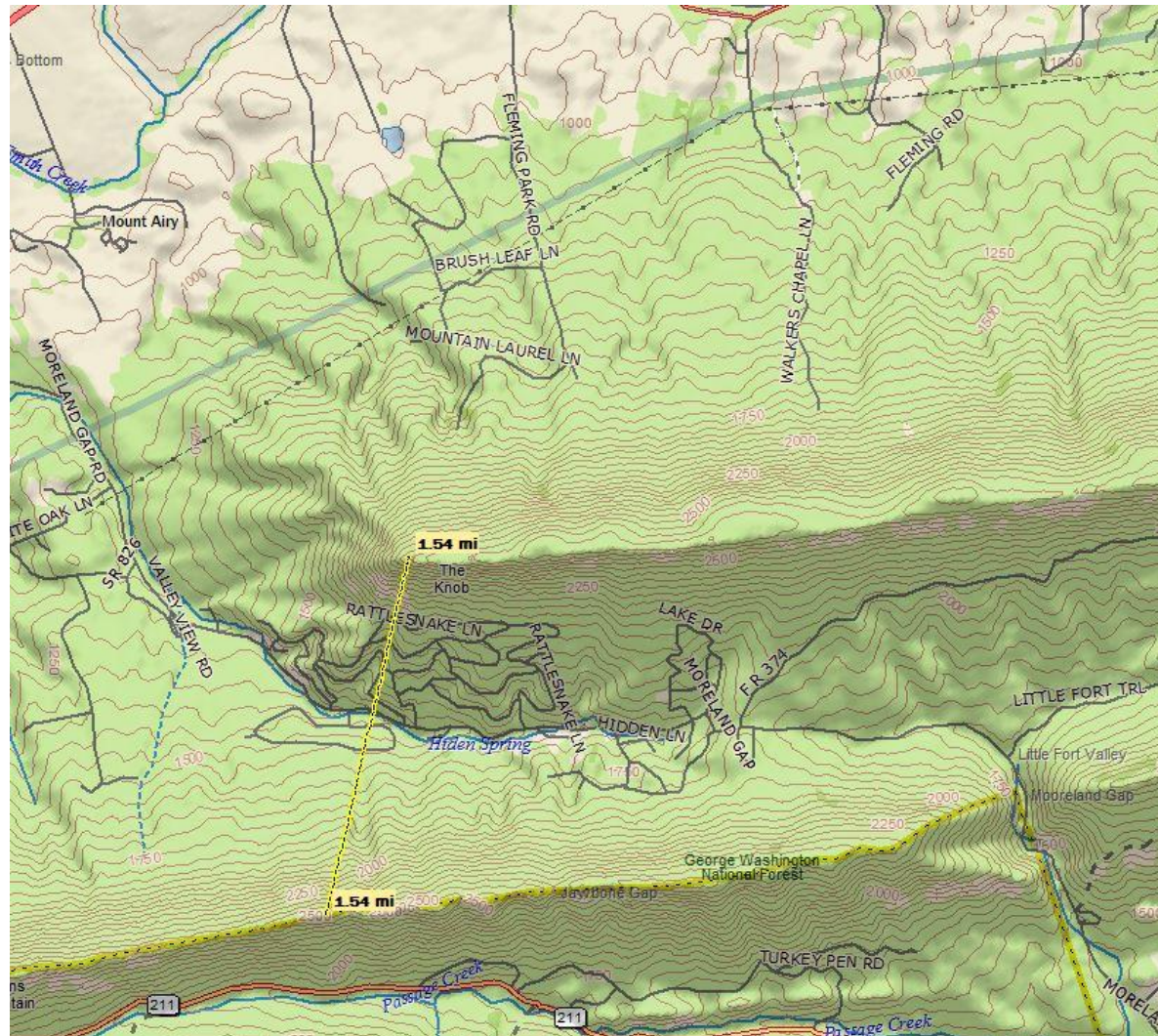
Straight Across (Gap in the Ridge)





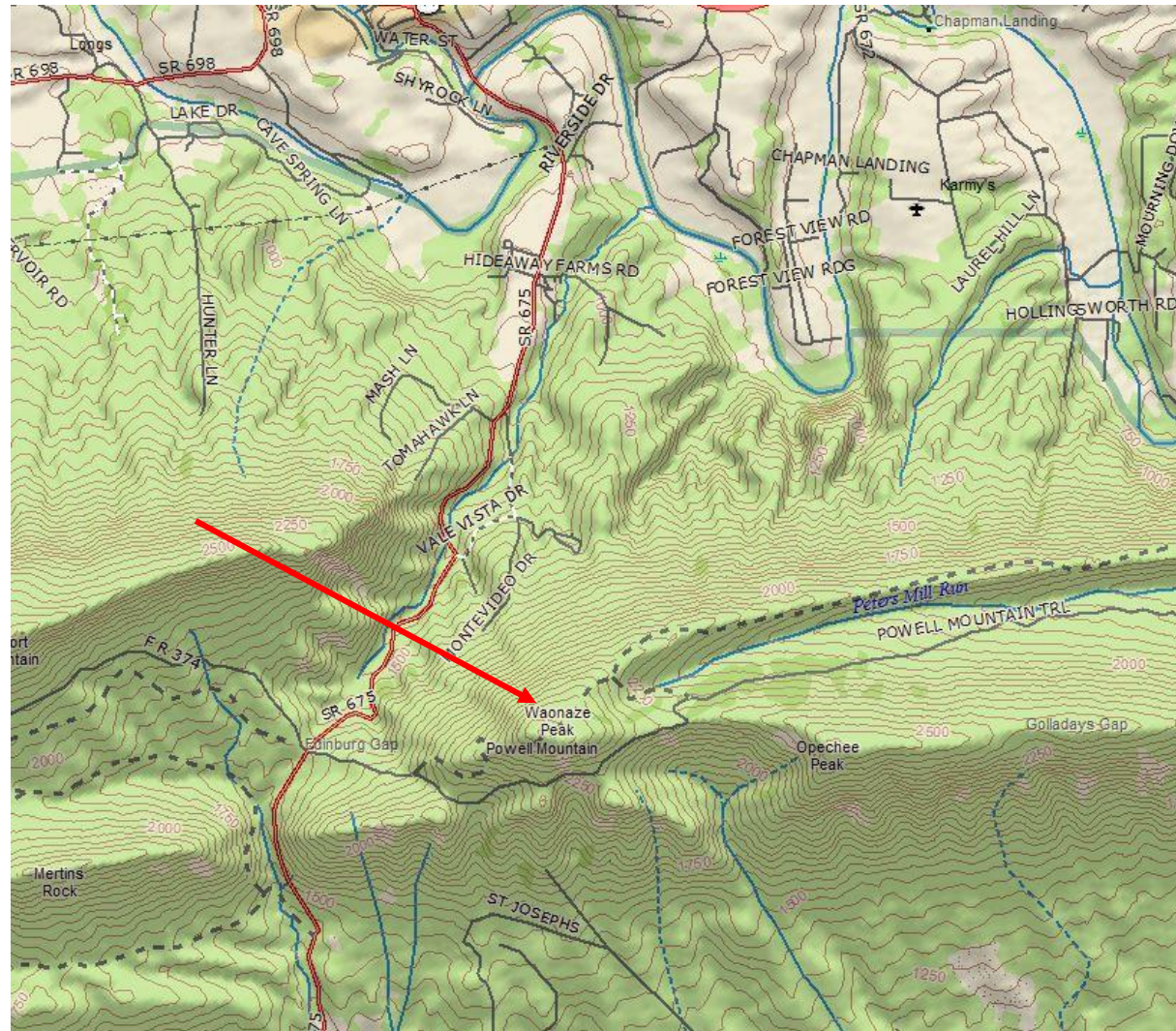


Serious Upwind Jump





Piece of Cake



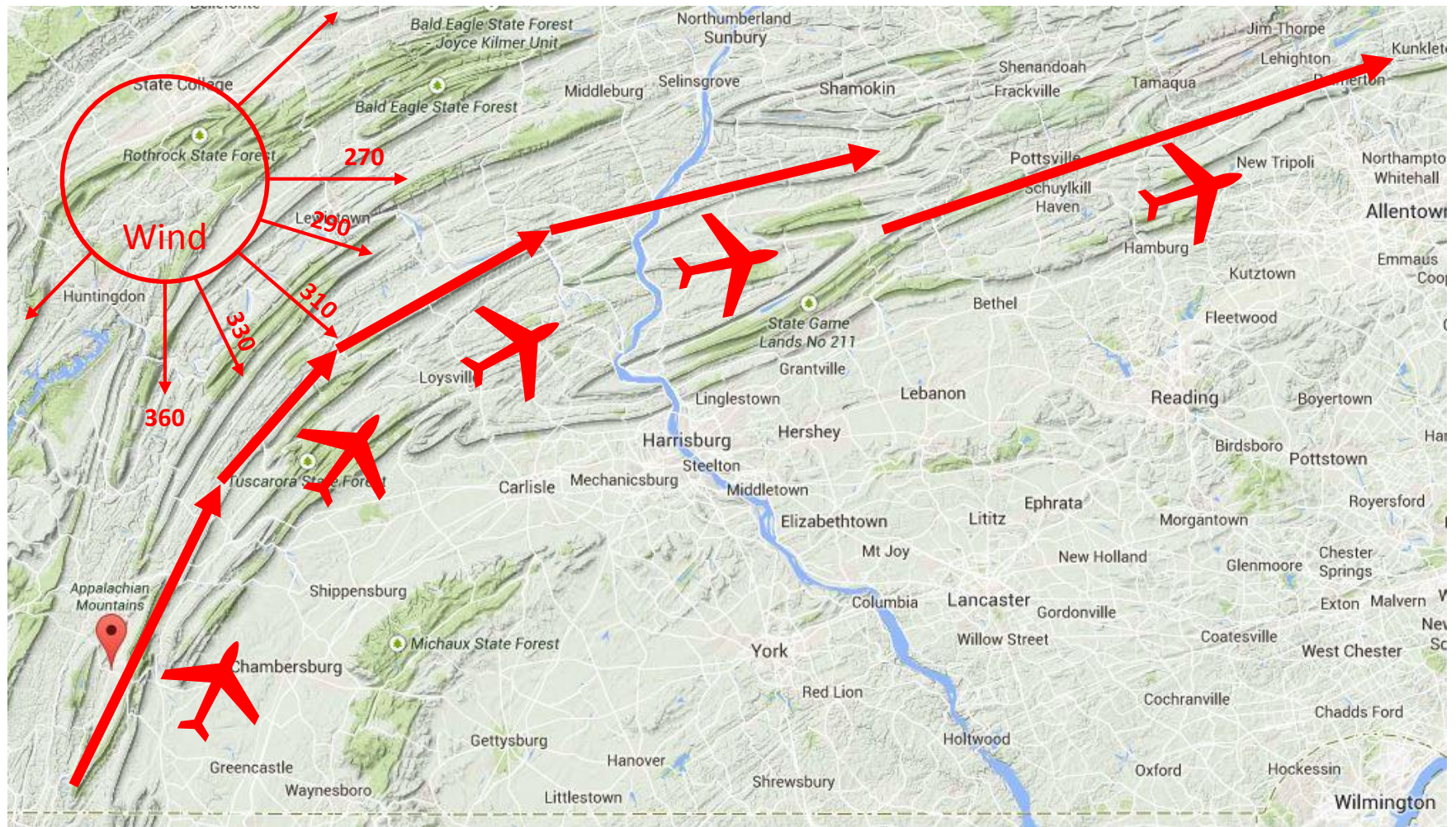


Problems

- **Wind Change (Direction or Velocity)**
- **Wave Suppression**
- **Turbulence**
- **Clouds and Precipitation**
- **Upwind Obstacle**

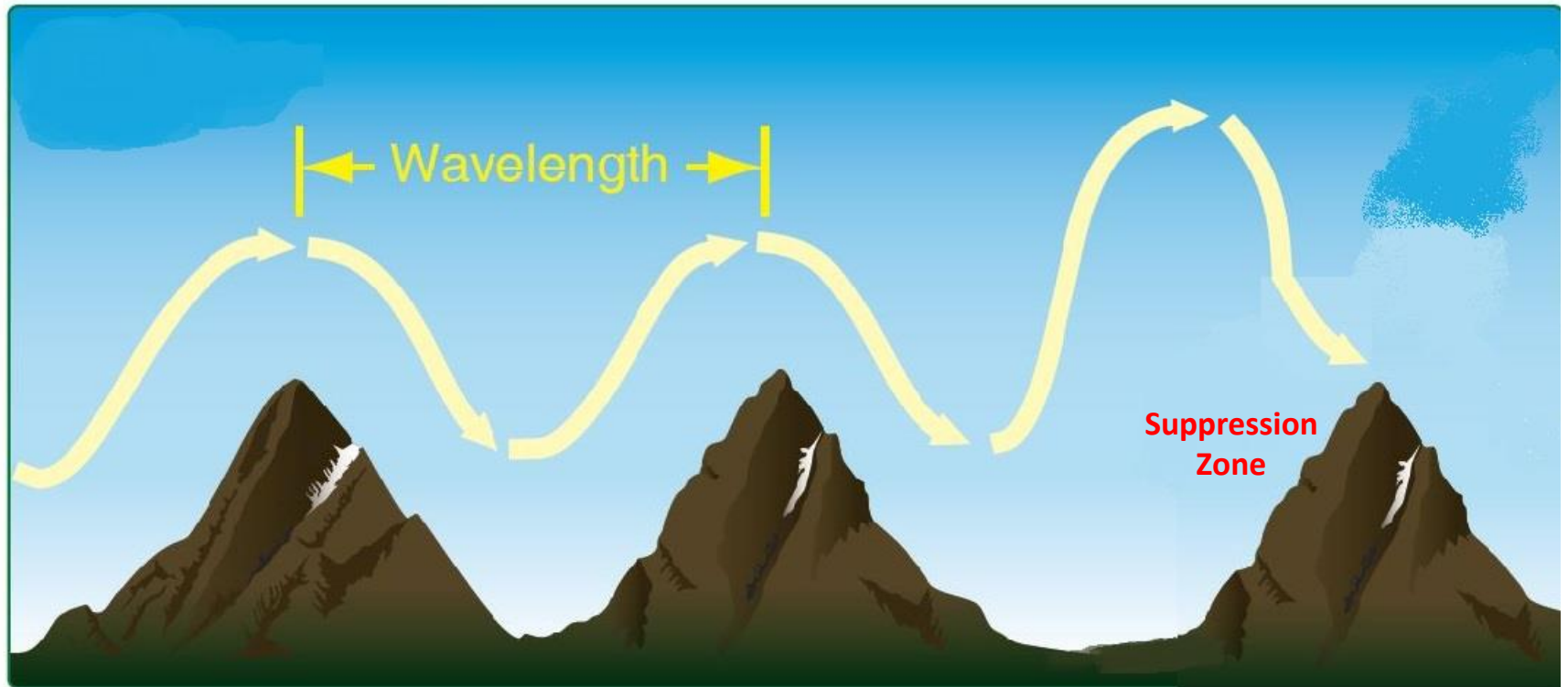


Wind Change or Not





Wave Suppression



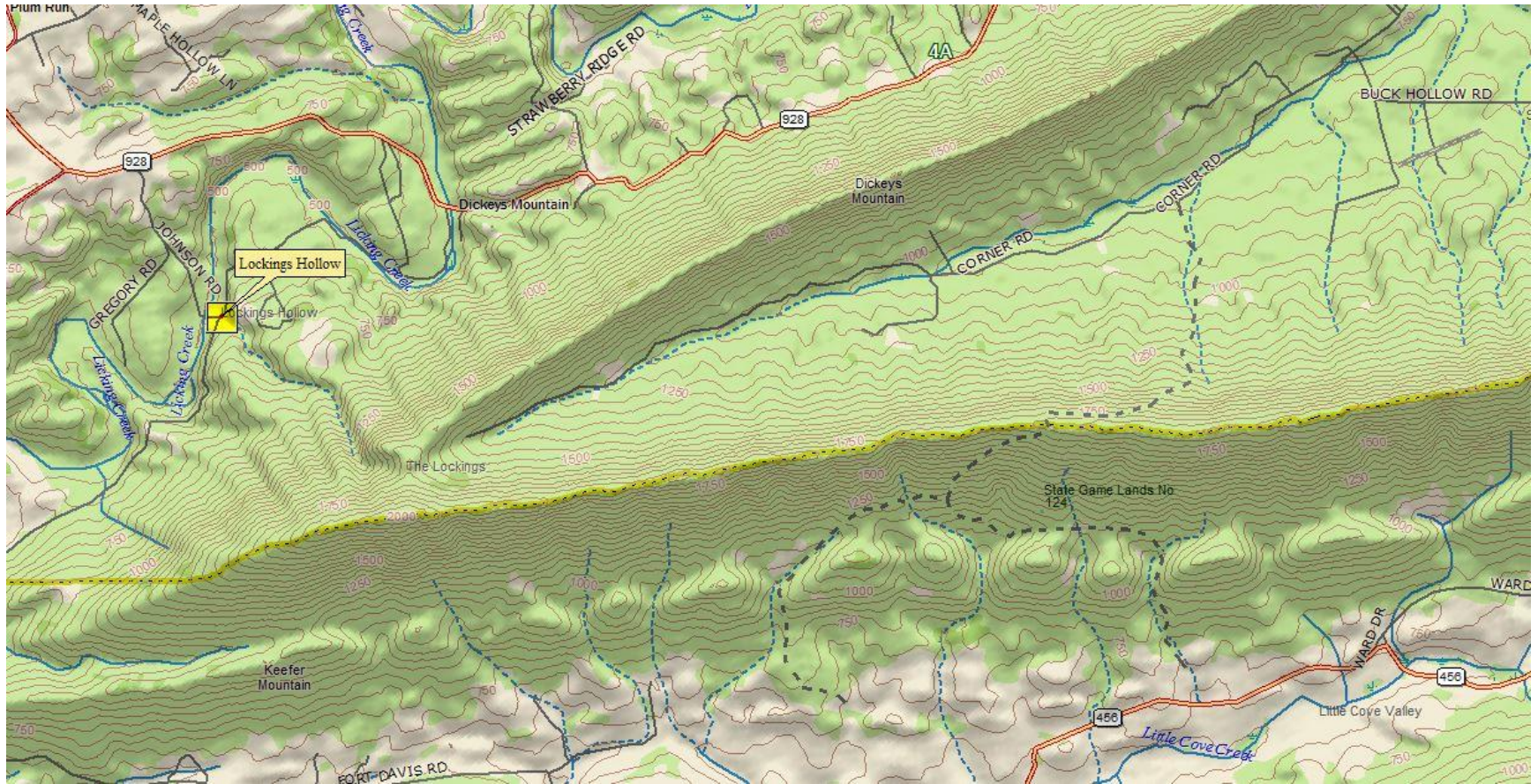


Clouds & Precipitation





Upwind Obstacles





Planning

- **Weather – What to Expect**
- **How Fast to Fly**
- **Where to Land (Should it be necessary)**
 - **Considerations**
 - **Happens Fast**
 - **Be aware of slope**
 - **May not be able to land into the wind**
 - **Lee Side?**



Questions?

