

Bald Eagle Ridge

The World's Longest Diamond Mine



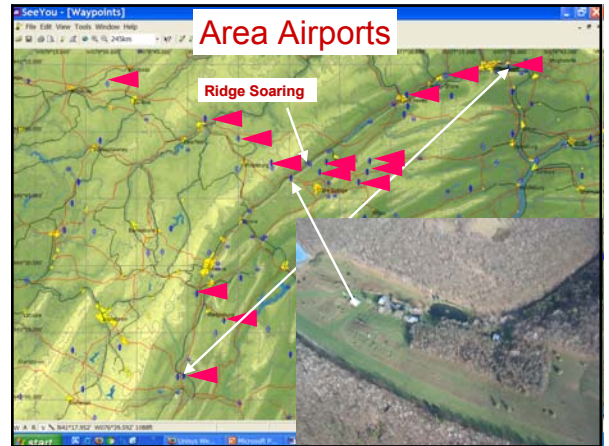
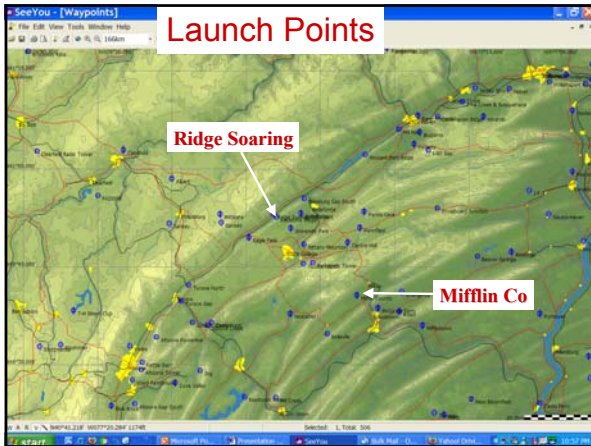
How to Get There

- From Toronto
– 500 km / 6 hrs
- From Montreal
– 900 km / 9 hrs



Canadian Advanced Soaring





Cost (2005)

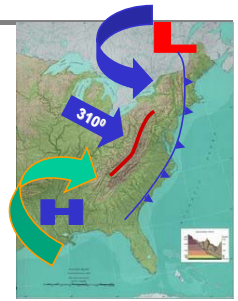
- Ridge Check Flight ~ \$ 120 US
- 2000' Tow \$ 32 US
- Bunkhouse/night \$ 20 US
- Trailer tie down/month \$ 30 US
– (trailer in hangar)
- Hangar/month (rigged) ~ \$ 60 US
- Winter storage/month \$ 30 US

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Weather

- Low over northern Quebec
- Cold front extending south, along the Eastern Seaboard
- High over SE US
- Ideal wind: 310 deg



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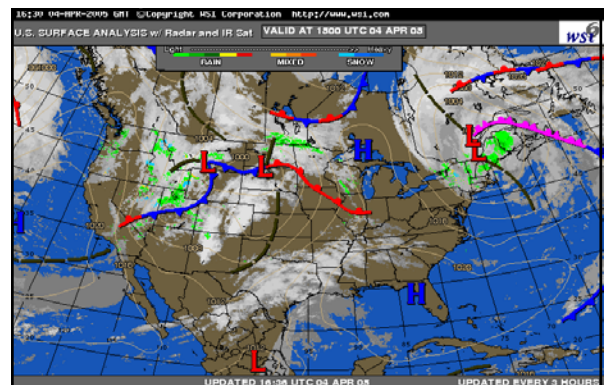


WX Sources – Intellicast

- www.intellicast.com
 - Local 10 day forecast
 - Surface analysis
 - Tomorrow's forecast

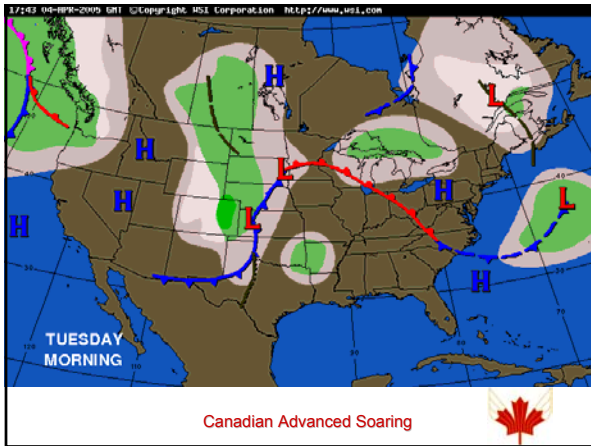


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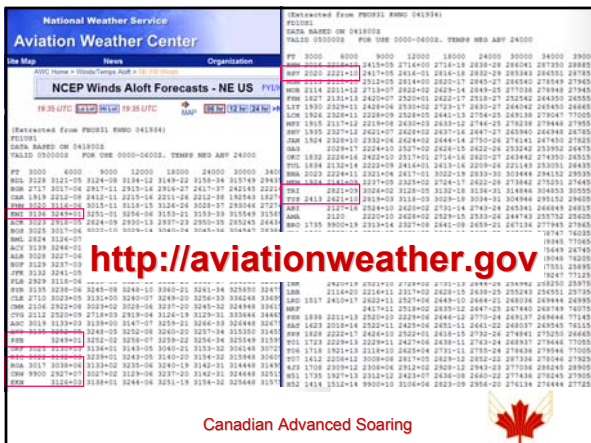
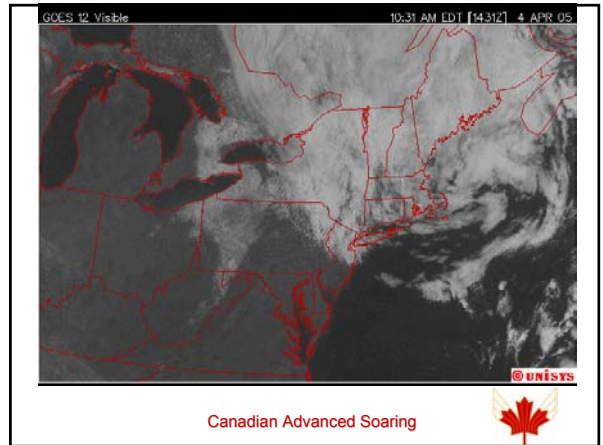
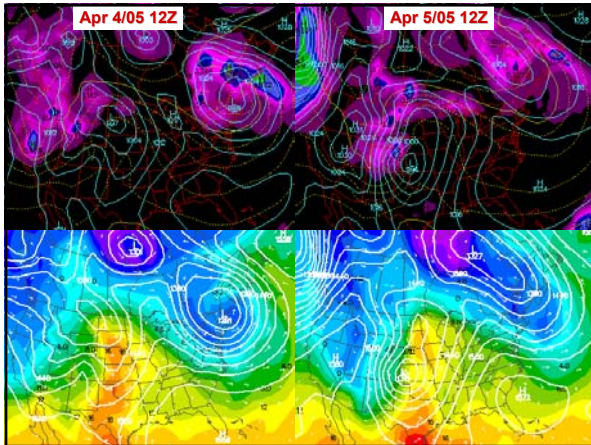
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WX Sources – Unisys

- <http://weather.unisys.com>
 - 10 day forecast SL precip
 - 10 day 850mb winds



Seasons

- Spring – early April to late May
 - Early season:
 - Strong Ridge and Wave
 - Snow showers a frequent problem
 - Very cold – need antifreeze in water ballast / tail tanks
 - Later in Spring:
 - Longer days
 - Thermals more prevalent (best before the leaves come out)
- My personal best flight in PA was on June 3rd (ridge/wave/thermal/)

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Seasons

- Spring – late March to late May
- Fall – late September to mid November
 - Gentler conditions, but weaker thermals
 - More relaxed
 - Not so cold, snow only a problem later in November
 - Amazing fall colors
 - But shorter days
 - Doug Haluza flew over 1000k on Nov 5 and again on Nov 8, 2004

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All Sorts of Lift - Thermals

- Cloud base 8 to 10,000 ft
- Conditions can be excellent over the Plateau
- Thermals line up along the ridges
- With 10 – 15 kt NW winds also cloud streets perpendicular to the ridges
- With SW winds often blue
- Often airmass boundary along the Plateau



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All Sorts of Lift - Wave

- Plateau is the trigger
- Helps crossing gaps before convection kicks in
- Comfortable cruising at 8 – 12,000 ft
- Can stretch for hundreds of kms
- Entry points: Ridge Soaring, Tyrone, Cumberland, Keyser
- Over the valley



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All Sorts of Lift - Ridge

- Requires 15 to 25 kts wind speed, perpendicular to the ridges (+/-20 deg) to be reliable and fast
- Speed 80 kts to max rough airspeed or what the pilot can take.
- 100 ft – 500 ft above the Ridge
- Cloud base often low and overcast



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Is Ridge Soaring Dangerous?

- I never had a problem in 20 years of flying the Ridge
- However there is less room for error
 - plan ahead
 - never take any risks
- Never low and slow at the Ridge
- Flying X/C at 800 ft AGL
- Landing fields smaller and not as plentiful as in Ontario
- Few options in case there is a rope failure on take off
- X-winds and turbulence can make landings difficult



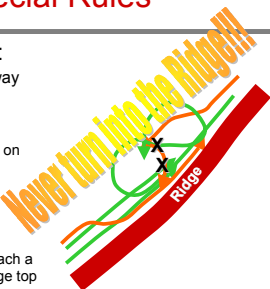
SafetyLink

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Special Rules

- Opposing Traffic:
 - Southbound gives way
 - deviate to the right!
- Overtaking:
 - Overtake other gliders on the ridge side!
 - Never directly over- or under-fly other gliders!
- Thermalling:
 - Figure 8s until you reach a safe height above ridge top (min 500 ft)

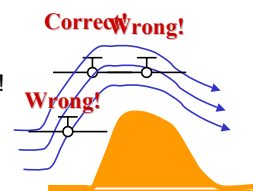


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Ridge Soaring Techniques

The best lift is ahead and above the Ridge!



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Ridge Soaring Techniques

The Ridge gets unreliable at wind angles of more than 30 degrees off the perpendicular!

Watch for knobs and waves in the Ridge, watch out for changes in direction!

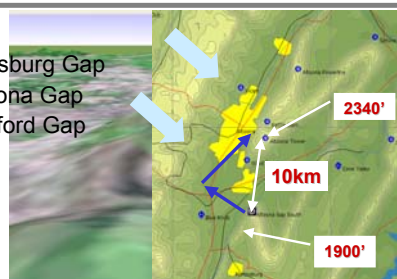


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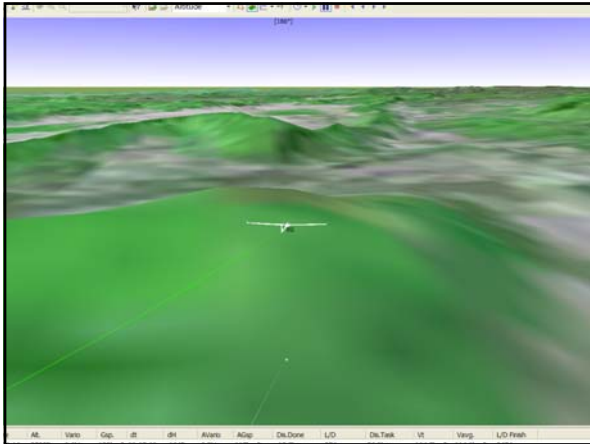
Challenges

- Gaps
 - Milesburg Gap
 - Altoona Gap
 - Bedford Gap



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Challenges

- Gaps
 - Milesburg Gap
 - Altoona Gap
 - Bedford Gap



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Challenges

- Bends in the Ridge
 - Lock Haven
 - Eagle Field
 - Tyrone
 - General change in direction
 - Hyndeman
 - Mountain Grove



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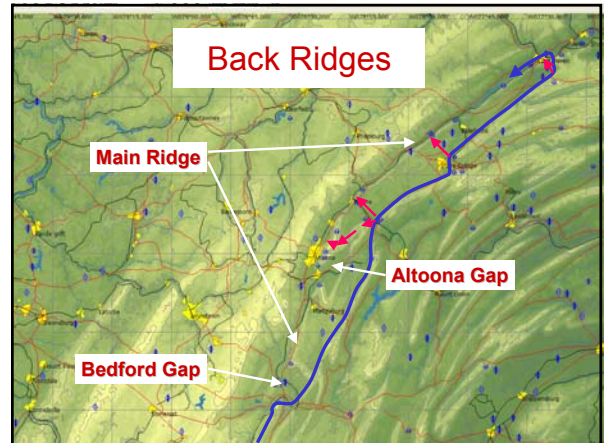


Back Ridges

Main Ridge

Altoona Gap

Bedford Gap



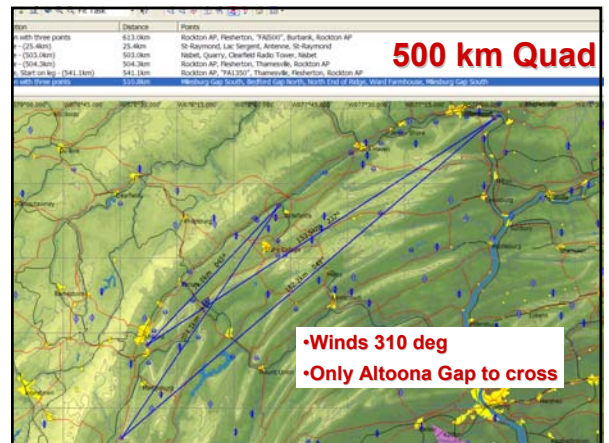
Task Options

- Out & Return – max 1600 km
 - Good when the wind favours the entire length of the Ridge (310 deg)
 - But: Possibility of multi-day retrieves
- FAI Triangles – BHC
- Quadrilaterals (Zig-zag)
 - Closer to home
 - Allows to pick a good section of the Ridge

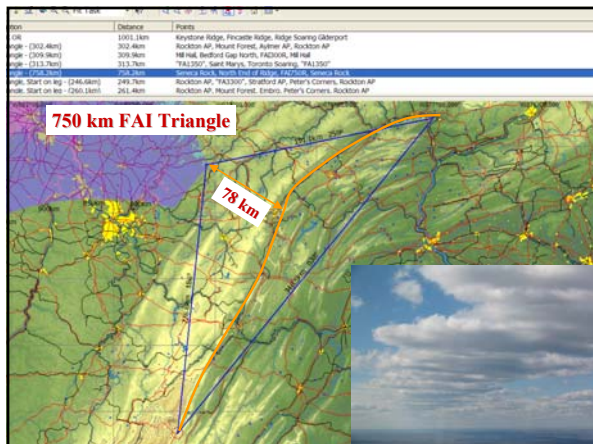
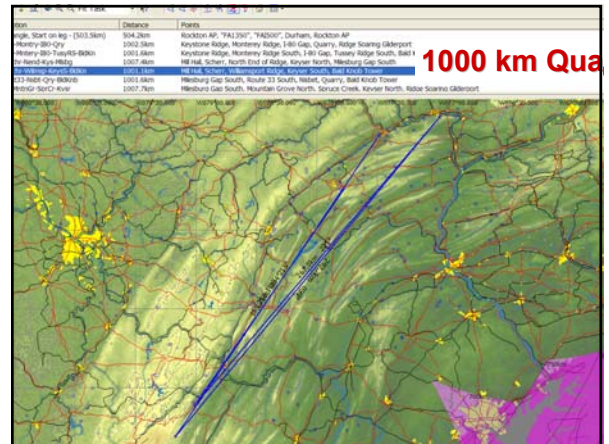
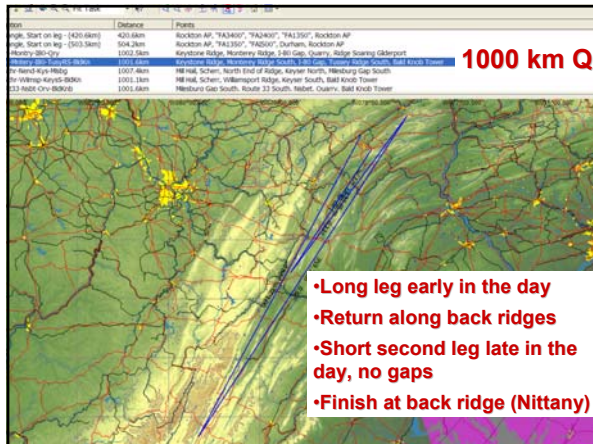
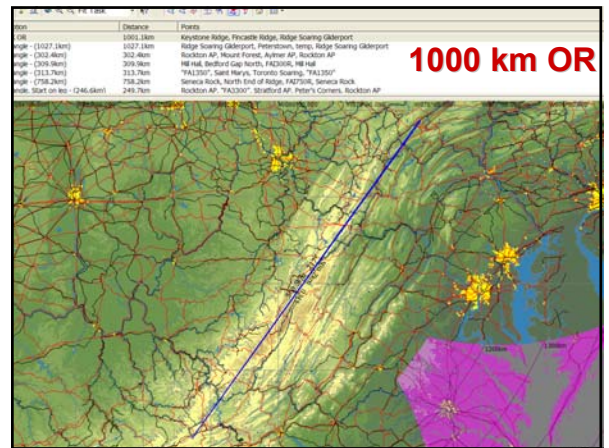
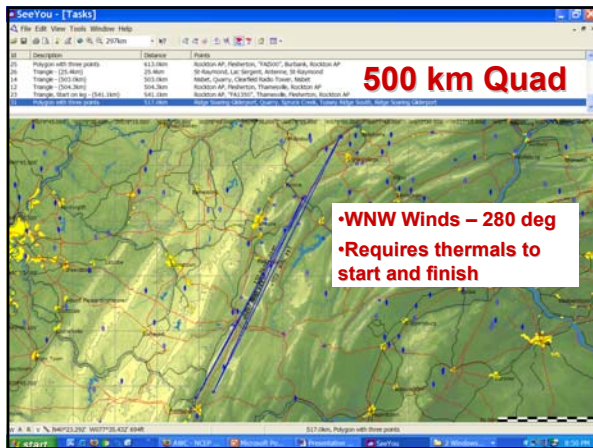
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500 km Quad



- Winds 310 deg
- Only Altoona Gap to cross



How to Prepare for Long Flights

- Practice long flights to build up stamina
- Comfortable seating
- Enough water and food
- Battery capacity
- Logger capacity
- Lots of rest beforehand
- Light breakfast – no coffee



Let's Look at some Flights

- Ridge flight from Ridge Soaring north
- Wave flight from Ridge Soaring south
- Ridge flight from Ridge Soaring south



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It's a Fun Place!



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