Strategic Decisions To Optimize Your Speed

Jerzy Szemplinski

Any pilot from first 3 had chance to win

1.	Darroze, Olivier FRA	6853	100%
2.	Termaat, Ronald NLD	6755	-1.5%
3.	Staryszak, Karol POL	6606	-3.6%
4.	Leucker, Hermann GER	6315	-7.9%

To be in the first 25% we can't give up more than 12.5% of winner points

1	EW Darroze, Olivier FRA ASG 29	6853
2	XTC Termaat, Ronald NLD Ventus 2cxa	6755
3	PL Staryszak, Karol POL ASG 29	6606
4	MS Leucker, Hermann GER ASG 29	6315
5	RB Brigliadori, Riccardo ITA Ventus 2cxa	6191
6	HE Heinonen, Erkki FIN ASG 29E	6172
6	WO Janowitsch, Wolfgang AUT Ventus 2c	6172
8	PX Krejcirik, Petr CZE Ventus 2cxt	6150
9	MO Hoelgaard, Mogens DNK Ventus 2cxT	6148
10	E1 Cheetham, Russell GBR ASG 29E	6144
11	XG Szemplinski, Jerzy CAN ASG 29	6109
12	DJ Jacobs, Doug USA Ventus 2cxa	6043
13	10 van Nes, Hadriaan NLD LS 10	5996

WHY ARE TOP PILOTS ABLE TO OUTPERFORM ?


Better ground crew ?
France 10, Poland 10, Canada 3
LB
Y-GOI

Better Equipment ?


Better Training ?
Yes, but in which areas?


Physical and mental state?
Highly probable

Other possible elements of outperformance

More accurate weather forecast ?

Accurate weather provided by organizer

Luck ?

8 races - low probability of luck

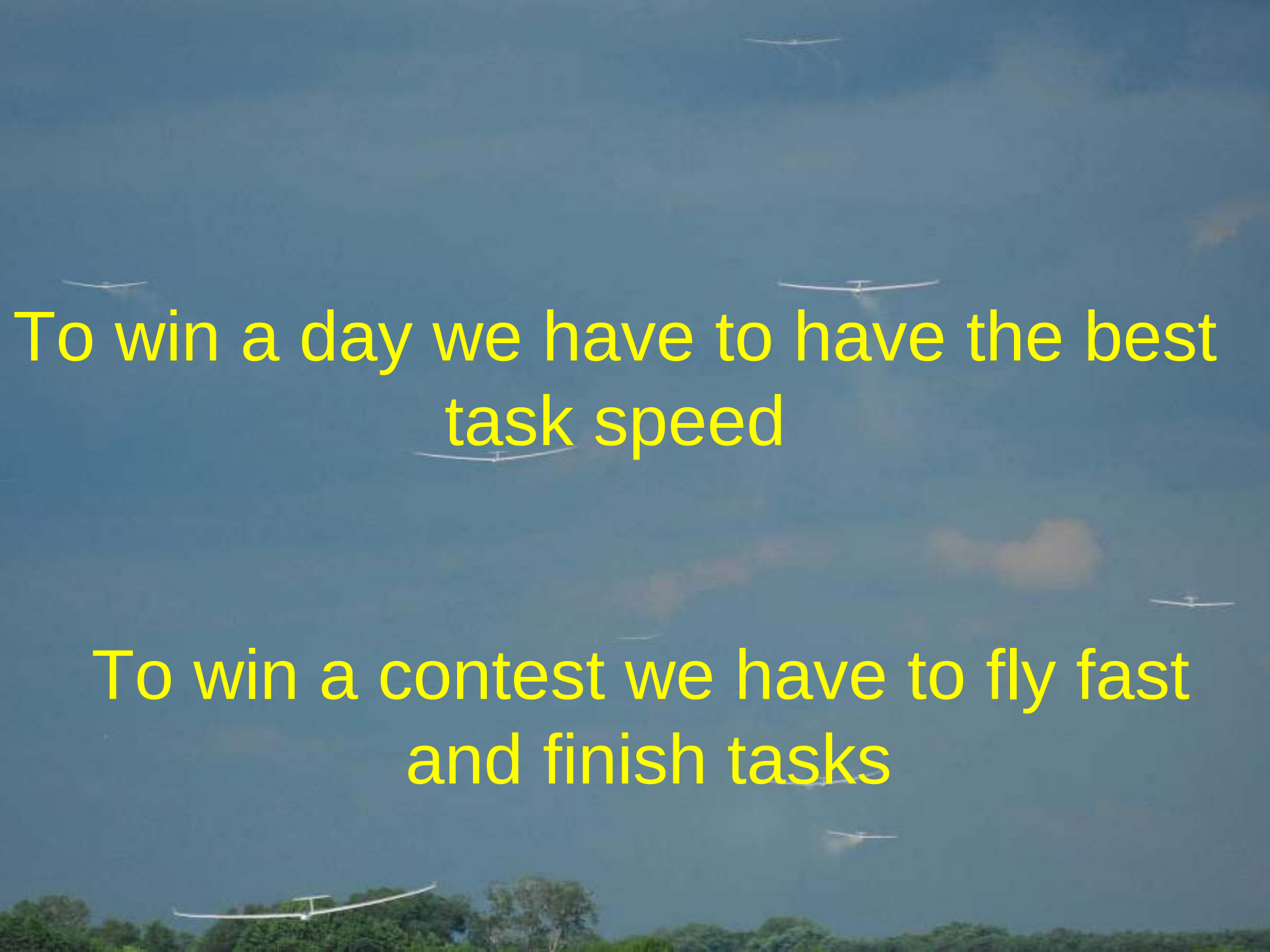

Local knowledge ?
Maybe, but winners were not locals
Information from the ground ?
Maybe, but limited by VHF range.
Weather reading ?
Highly Probable

All winners have common elements:

They fly faster on XC

and

They finish tasks


To win a day we have to have the best task speed
To win a contest we have to fly fast and finish tasks


XC speed depends on weather and where we fly.
100 km/h in Ontario is very good speed


100 km/h on the ridge is slow
XG

How to improve our XC speed

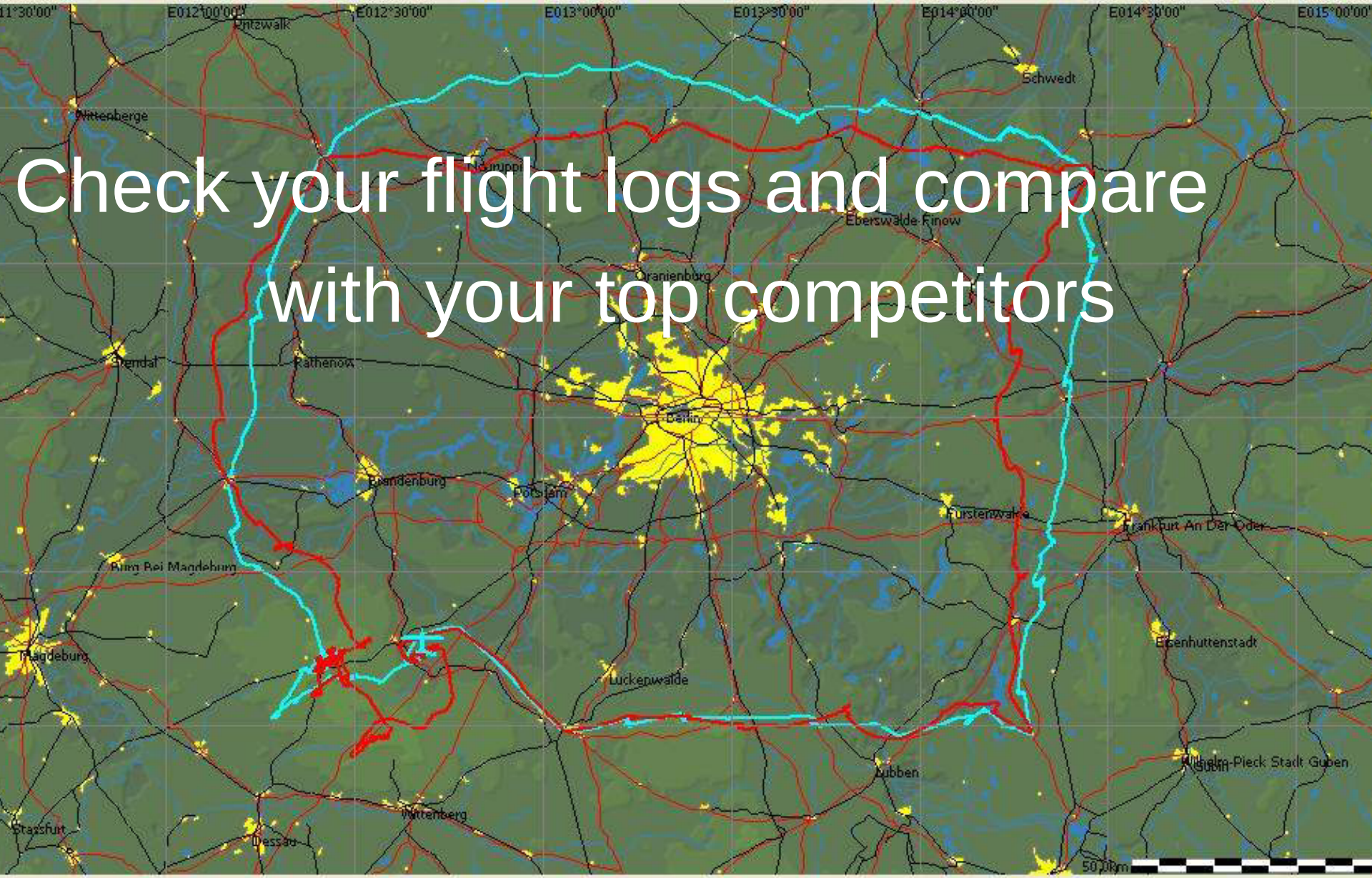
Two elements influence our XC speed

- Decisions and activities on the ground
- Decisions in the air


Make notes from interesting flights:
CollegeHumor


Analyze your old notes and compare
how they change due to new experienc

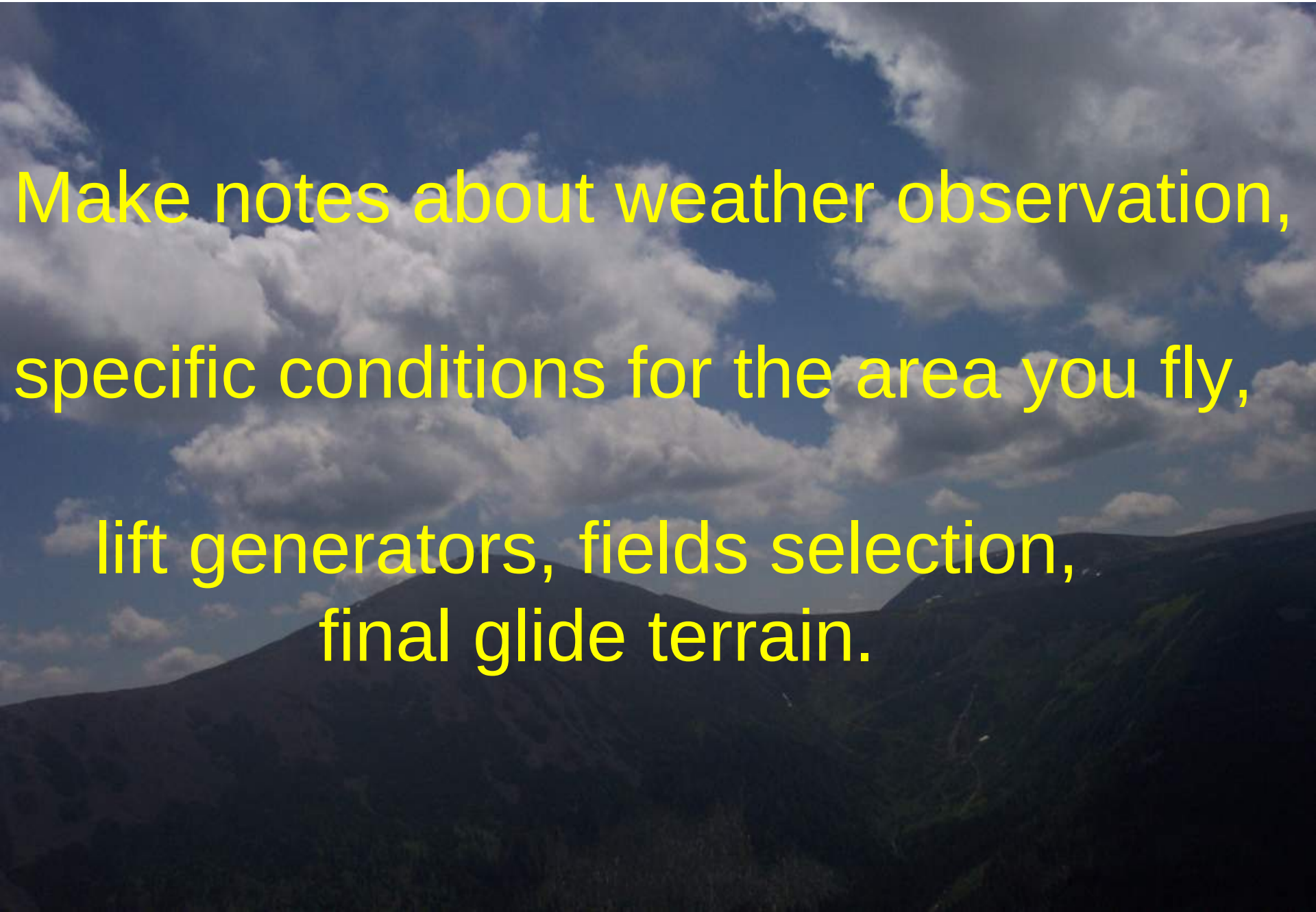

Ask other experienced pilots opinion
about your mistakes



ne	Alt.	Vario	Gsp.	dt	dH	AVario	AGsp	Dis.Done	L/D	Dis.Task	Vt	Vavg.	L/D Finish	Wind
48:15	63m	---m/s	---km/h											232°/32k
31:52	61m	---m/s	---km/h											256°/27k

N52°24'18" E011°39'38" 71m, D=74.9km E=-9421

3 Windows Explorer | Microsoft PowerPoi... | WGC 2008, Lüsse G... | SeeYou | Inbox for akka@rog...


Make notes about weather observation,
specific conditions for the area you fly,
lift generators, fields selection,
final glide terrain.

Other ways to improve our XC speed

Each flight has to be a task.

Badge flights

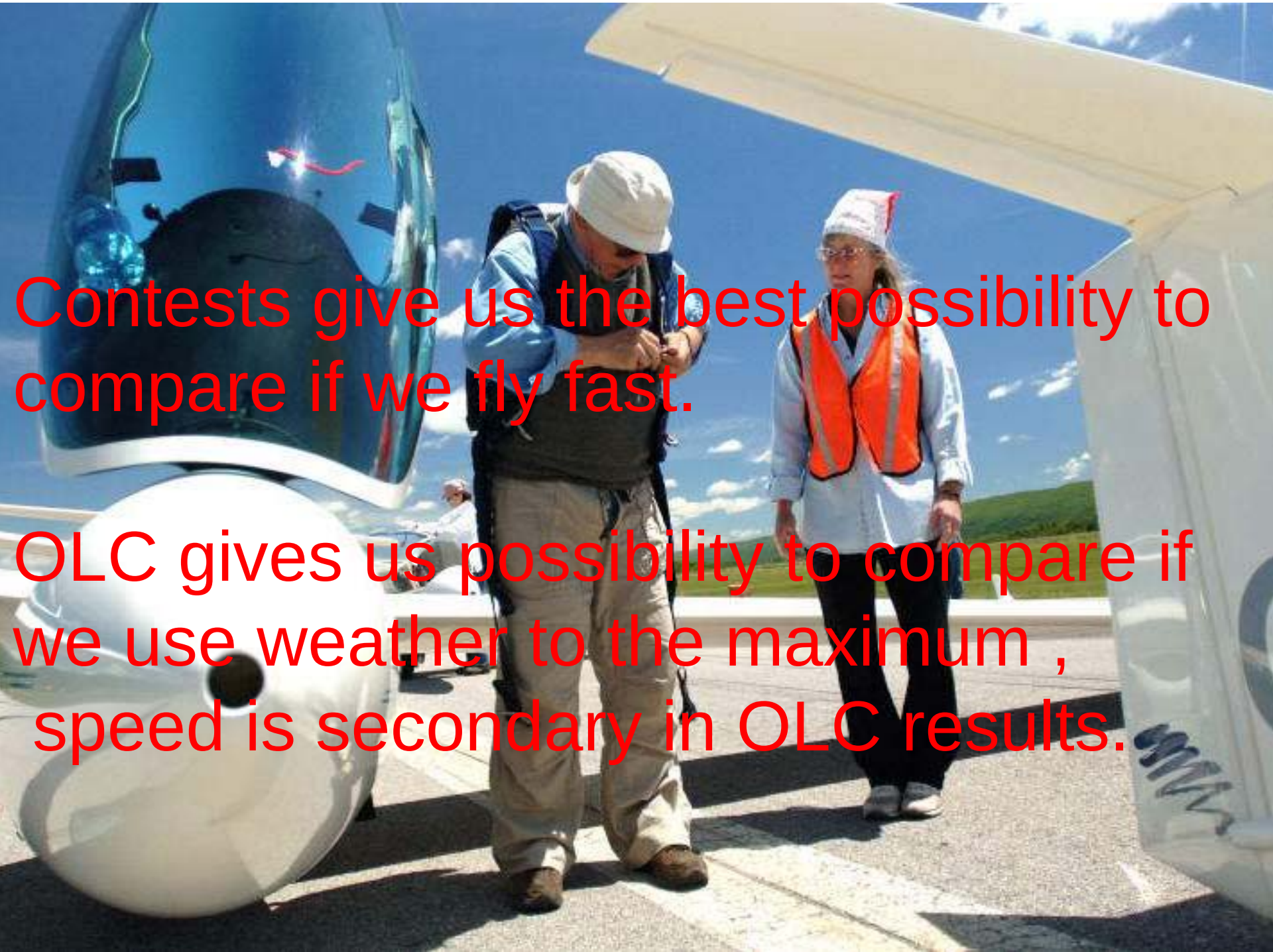
Short assigned tasks

Area tasks

The best way to improve our performance

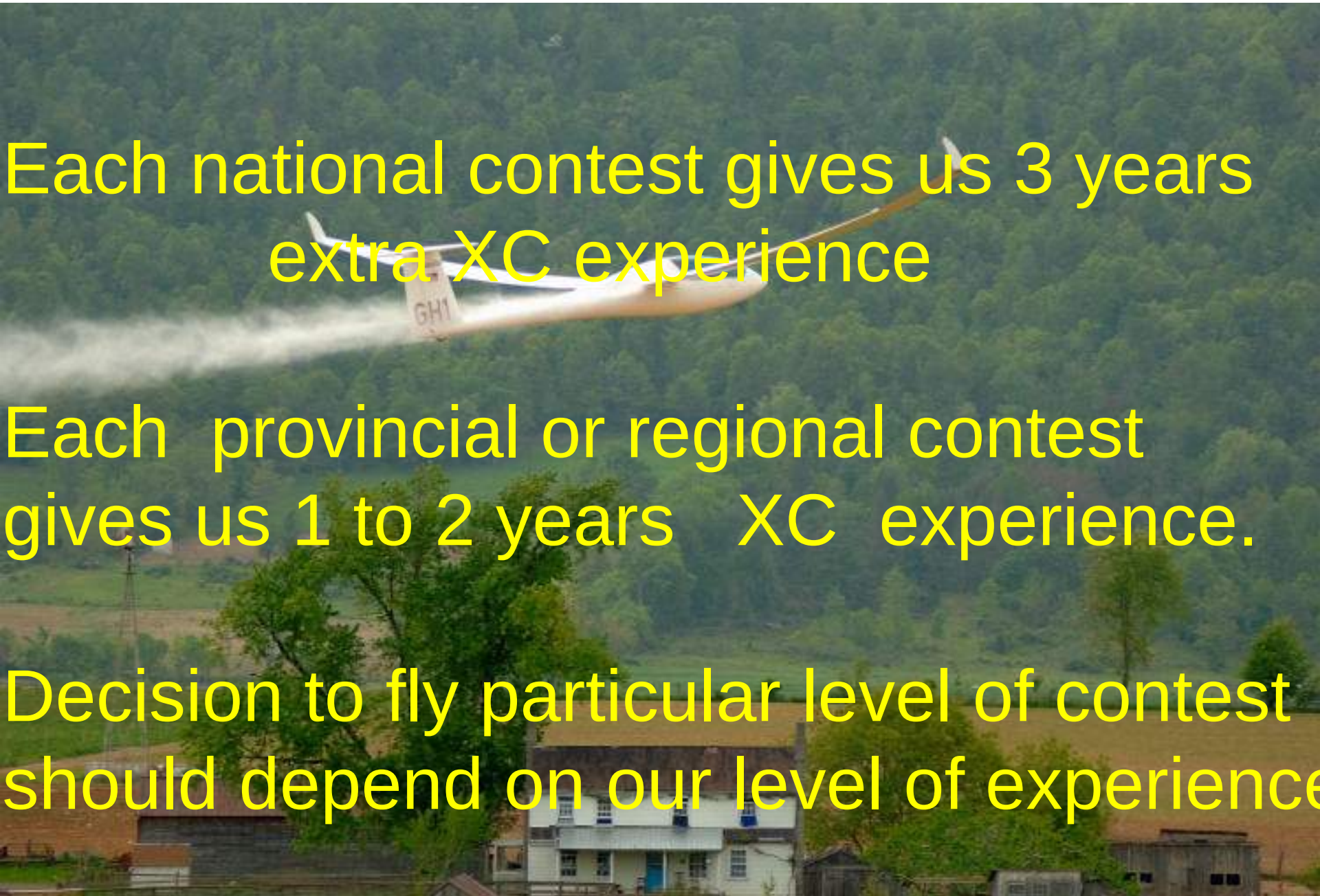
FLY CONTESTS


HI
CONTEST IS FUN


Contests give us the best possibility to compare if we fly fast.
OLC gives us possibility to compare if we use weather to the maximum , speed is secondary in OLC results.


Flying just around the airfield
will not improve our XC speed.

Benefits of contest flying



Each national contest gives us 3 years extra XC experience

Each provincial or regional contest gives us 1 to 2 years XC experience.

Decision to fly particular level of contest should depend on our level of experience


Decisions in the air to optimize
our speed


There is interaction in the air between weather and pilot's decision

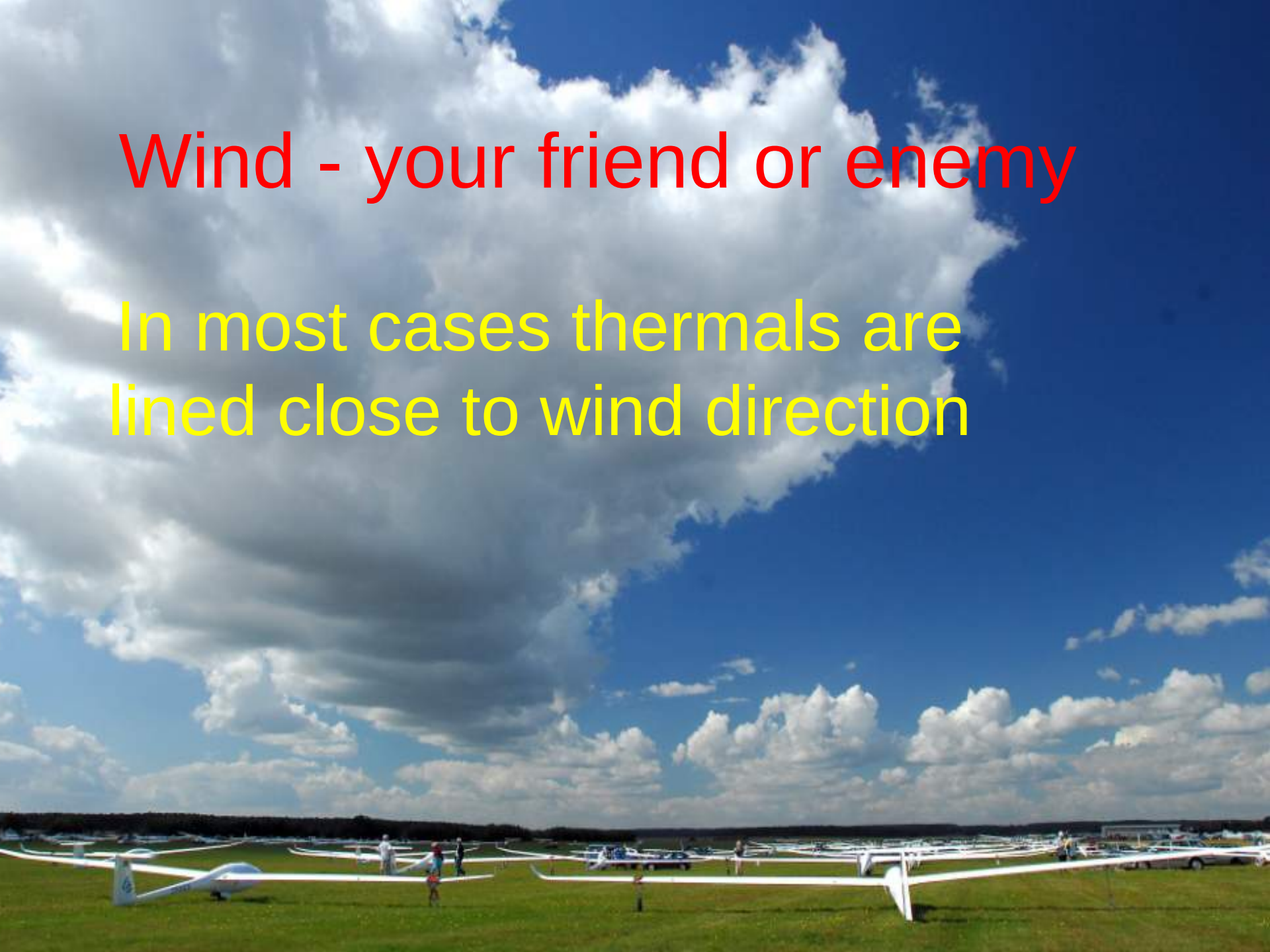
Decisions, Decisions

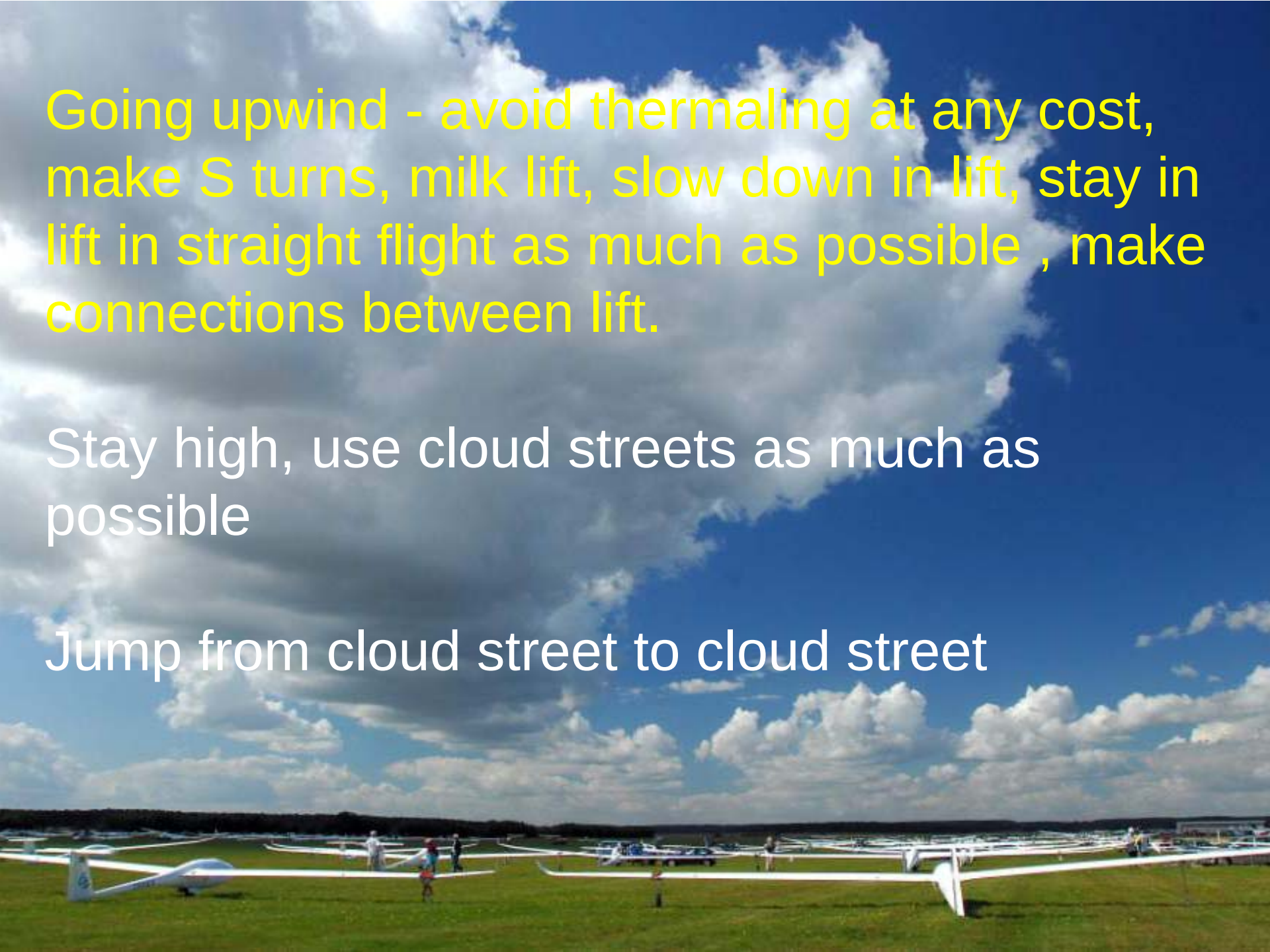
Our decision should be made based on the weather conditions.

Actions of other pilots should have no influence on our decision.

Weather components influencing our decisions.

- Lift strength
- Cloud base
- Wind speed and direction
- Significant weather changes
- Working band
- Duration of soaring condition
- Cloud streets
- Blue thermals

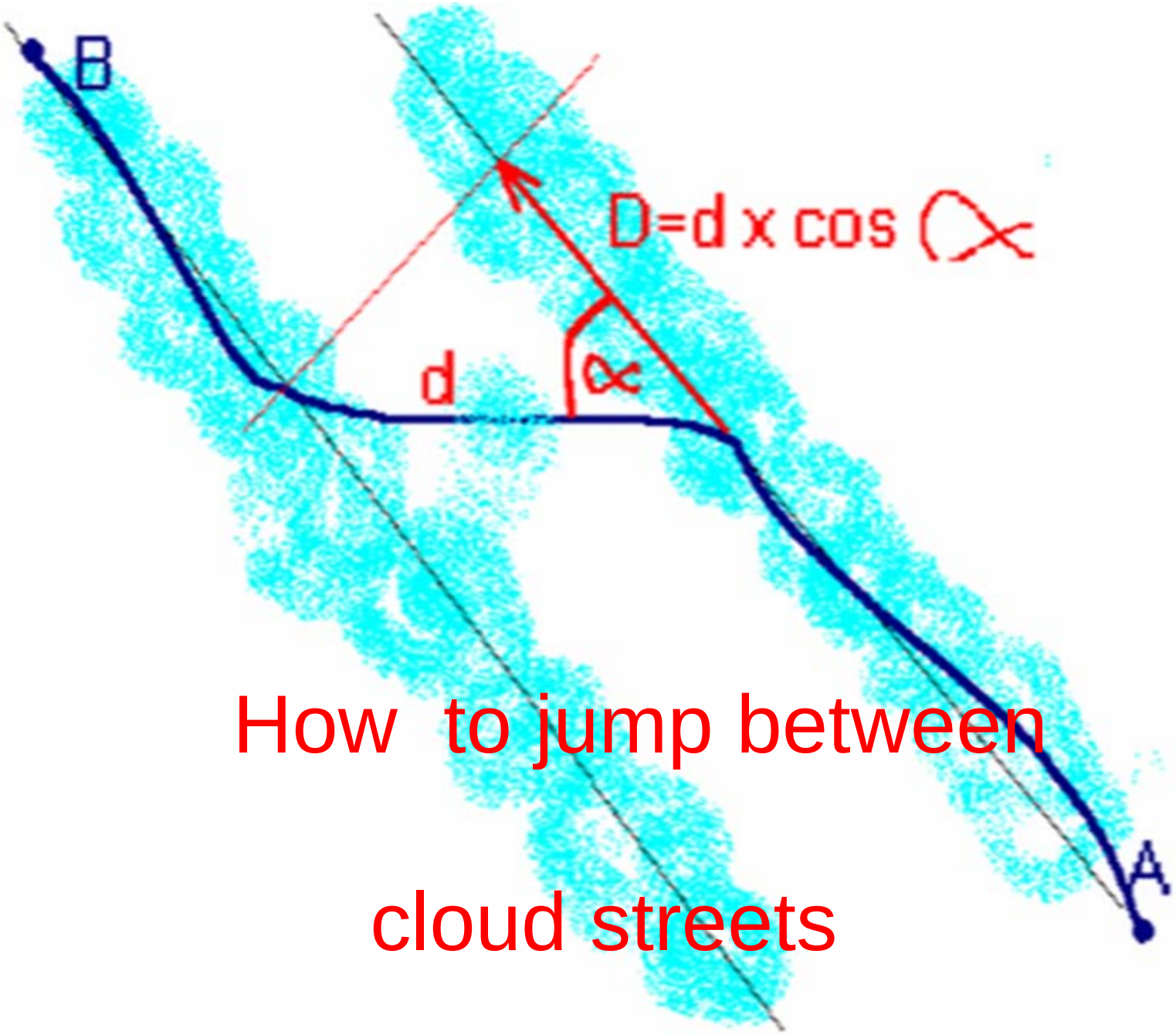

Wind - your friend or enemy
In most cases thermals are lined close to wind direction



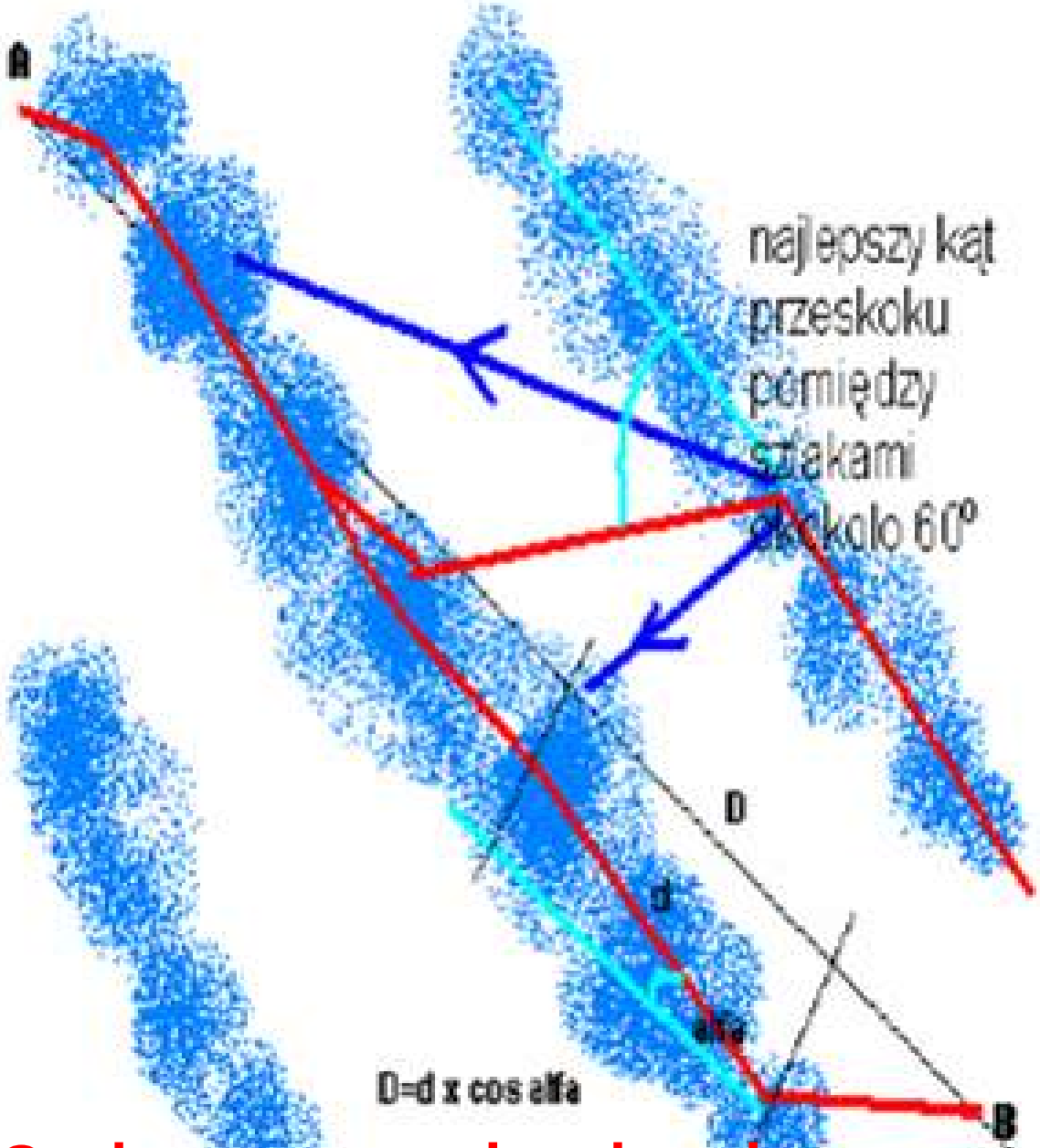
Going upwind - avoid thermaling at any cost, make S turns, milk lift, slow down in lift, stay in lift in straight flight as much as possible , make connections between lift.

Stay high, use cloud streets as much as possible

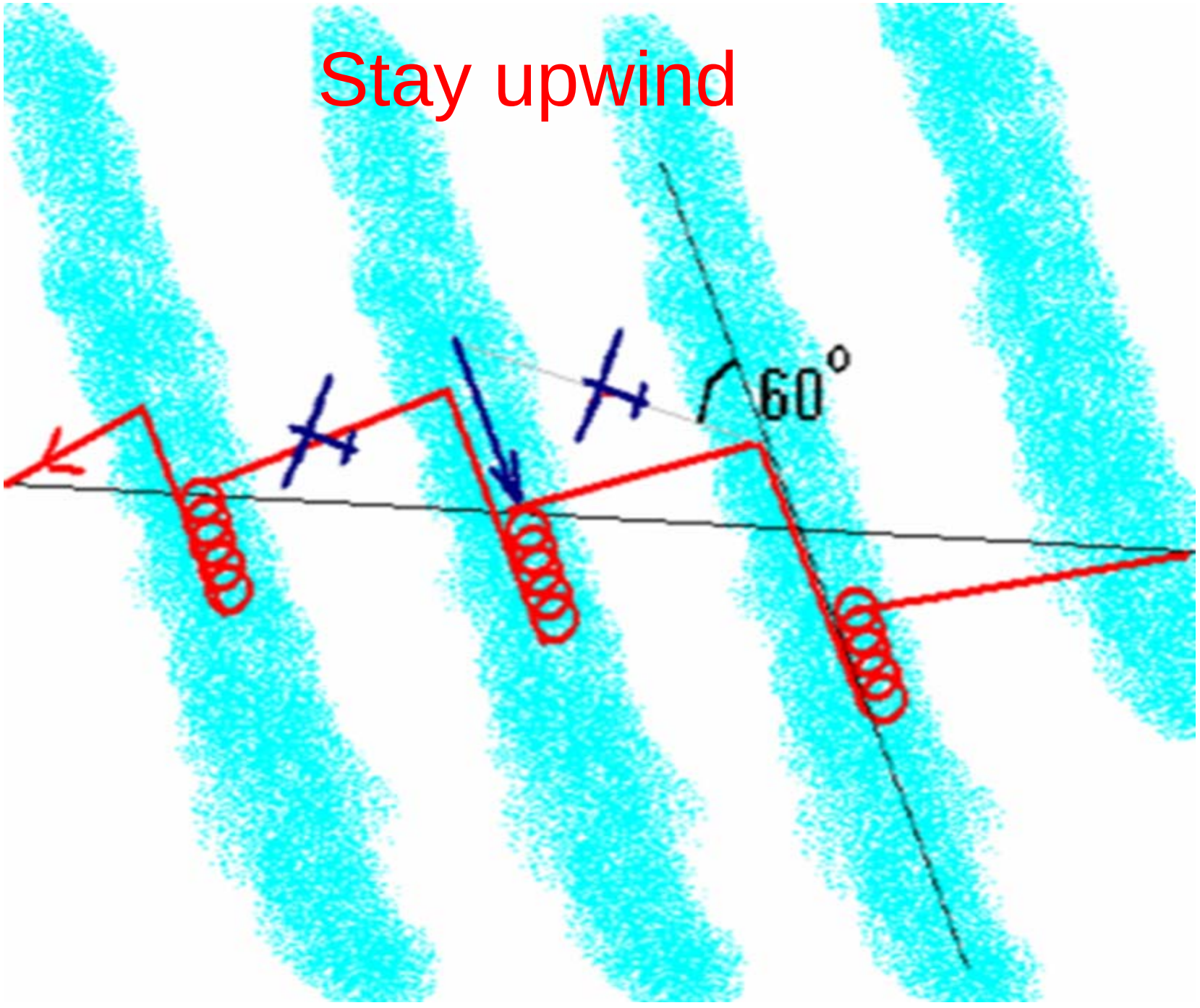
Jump from cloud street to cloud street

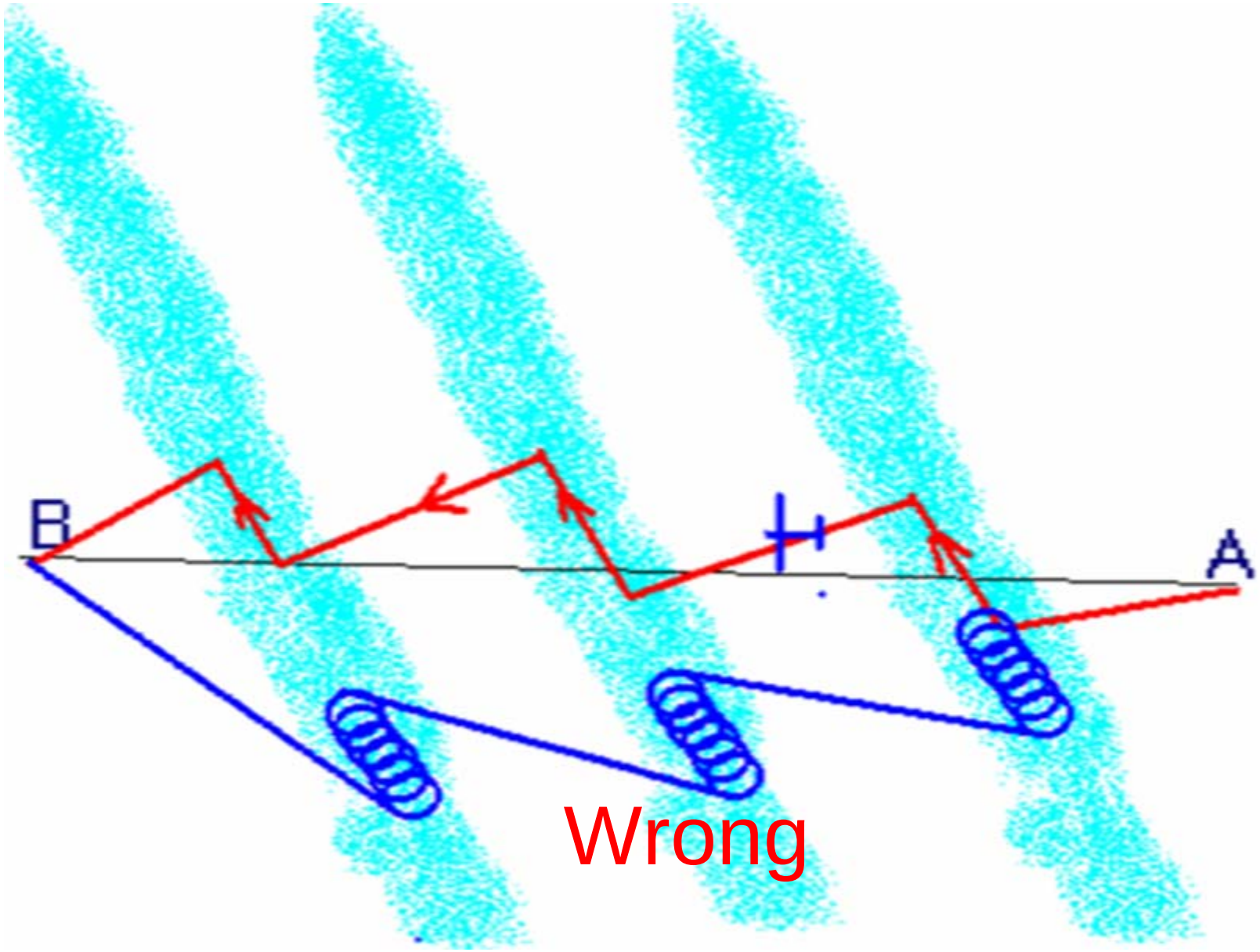


How to jump between cloud streets



60 degrees is the best angle


Stay upwind
60°


B
H
A
Wrong

What about Thermals

Thermals

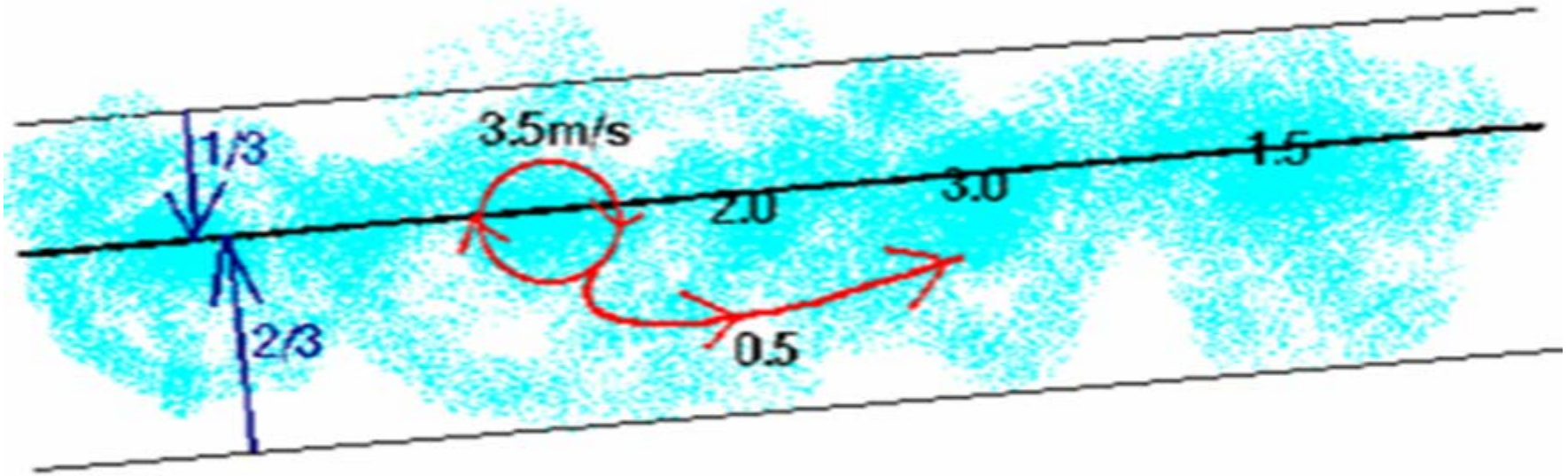
Lift areas

Sink areas

Low sink area

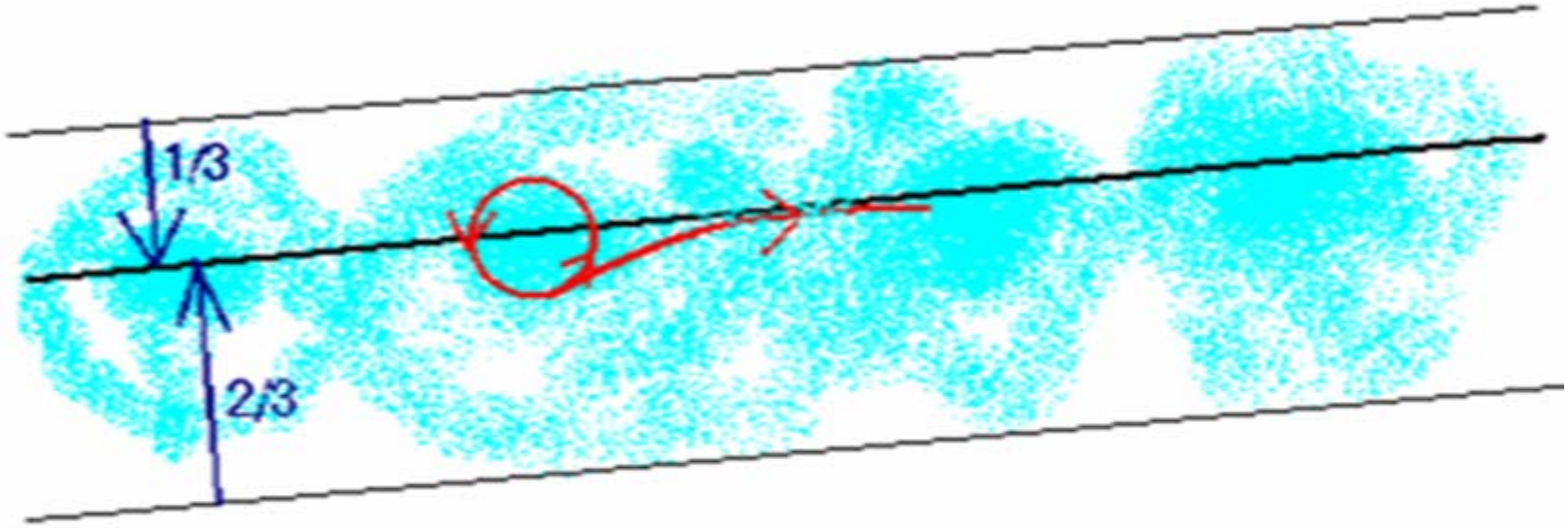
WRONG

Loss of efficiency



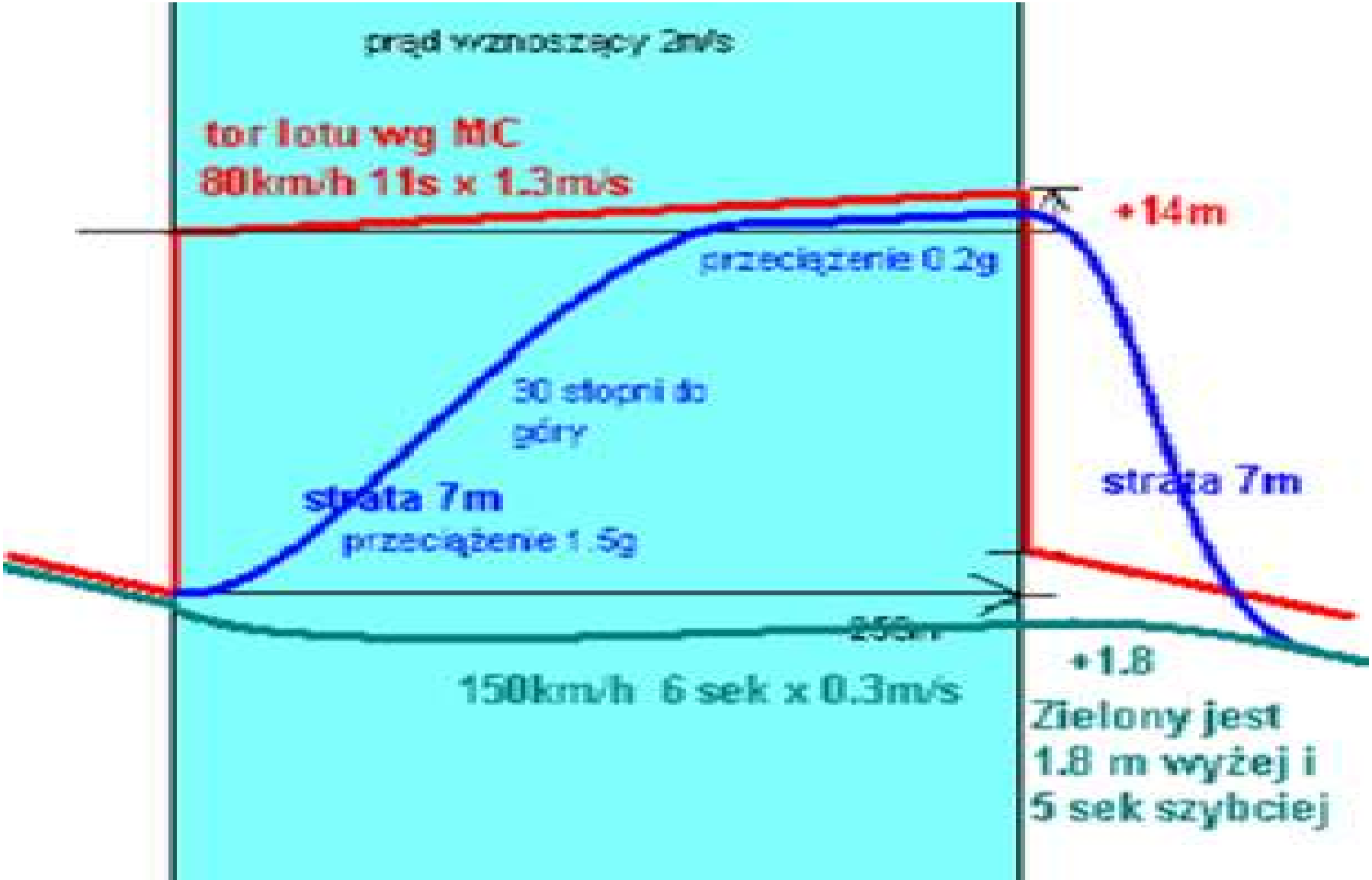
UNSAFE

10% gain if we are able to recognize when and how to leave thermal



SAFE

We can gain or lose 5 sec in each pull up



If we stop in thermal our forward speed is 0 km/h

If we stop, we lose 100% forward speed.

Will you trade loss of 100% for 90%

90% loss is better than 100%

We can cut 10-20% of our loss if we

Thermal technique must be perfect

10% gain if we stay within 65% of cloud base.

But what about our 100% how to keep it.

DO NOT TURN


In perfect no wind condition if we don't turn in thermal our speed will be equal to indicated speed.
The best method to have a good speed
DO NOT TURN


DO NOT TURN.?????
Wave, Ridge, Cloud streets
Convergence ,Sea Breeze

Extend your glide as much as possible

Fly energy lines

Fly lift areas

If you have to fly through sink

fly through lowest sink areas

DO NOT TURN

Useful ideas:

- If you’re in crisis - your opponents may have hard time also.
- It is better to have 1 kt in the air than 5 kts on the ground.

- If you are alone:
  -you are the fastest
  -the slowest,
  -you took a different route.
- Don't waste your time to confirm which ones apply to you, just fly .

- Fly according to the weather not to other contestants.

„As long as you are in the air anything can happen”

„There is time when you race and there is time when you stay in the air”

ALWAYS FLY THE GLIDER :)