Pilot briefing EBDT

This is a mandatory briefing, imposed by the BCAA

You are required to confirm that you did read and do understand this briefing, and that you will comply with it's instructions.

This confirmation must be registered via this link.

This briefing does not include the operational procedures as contained in the airfield operations manual.

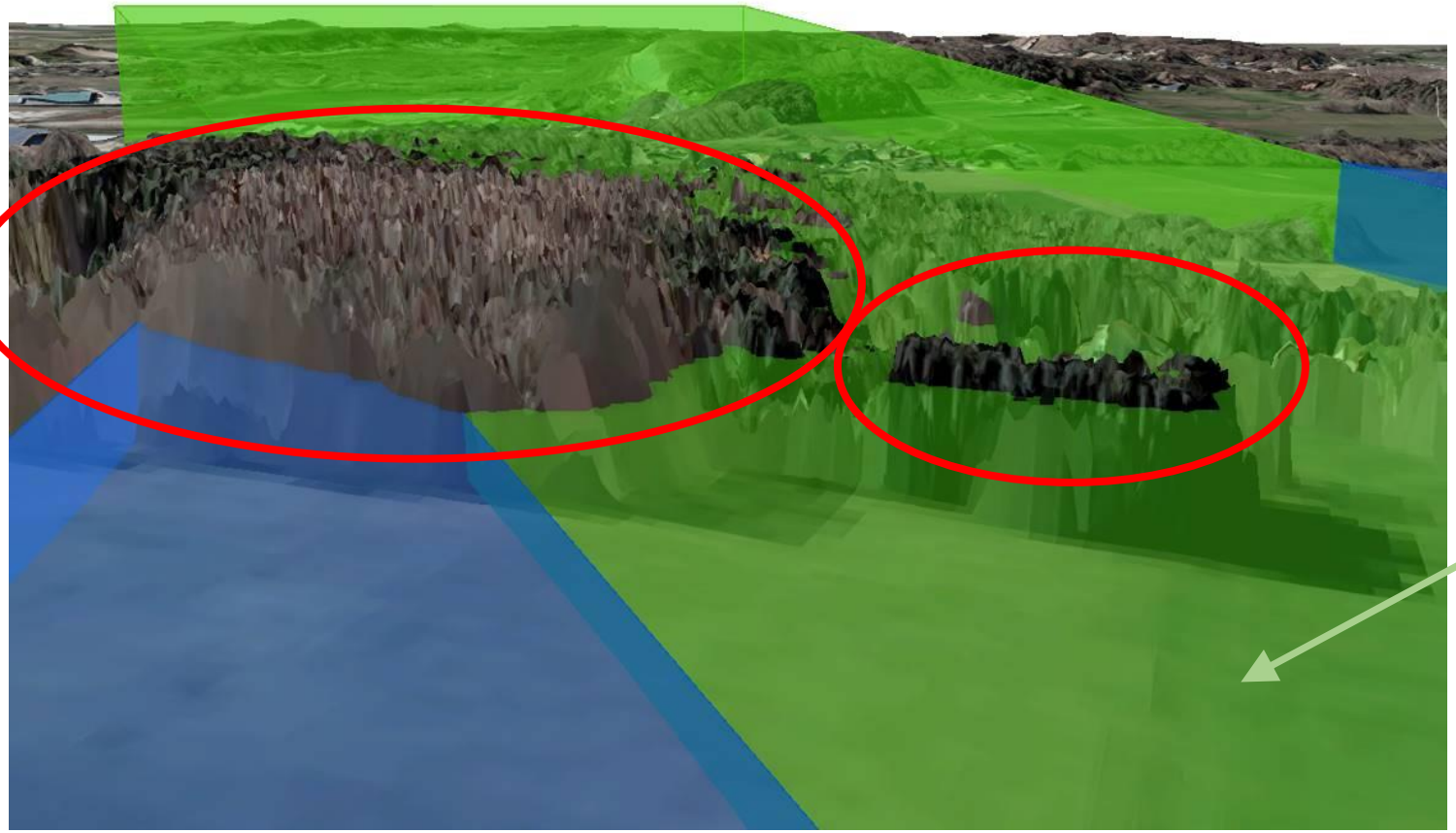
The airfield operations manual can be consulted via this link.

The manual is available in Dutch only.
If desired contact pleincdt@dac.be for help.

Trees in the runway axis at W and SW of the field

The trees at the West and Southwest protrude the standard 5% gradient surface

The required gradient from the end of RWY 24 is up to 7 %



Trees in the runway axis at W and SW of the field

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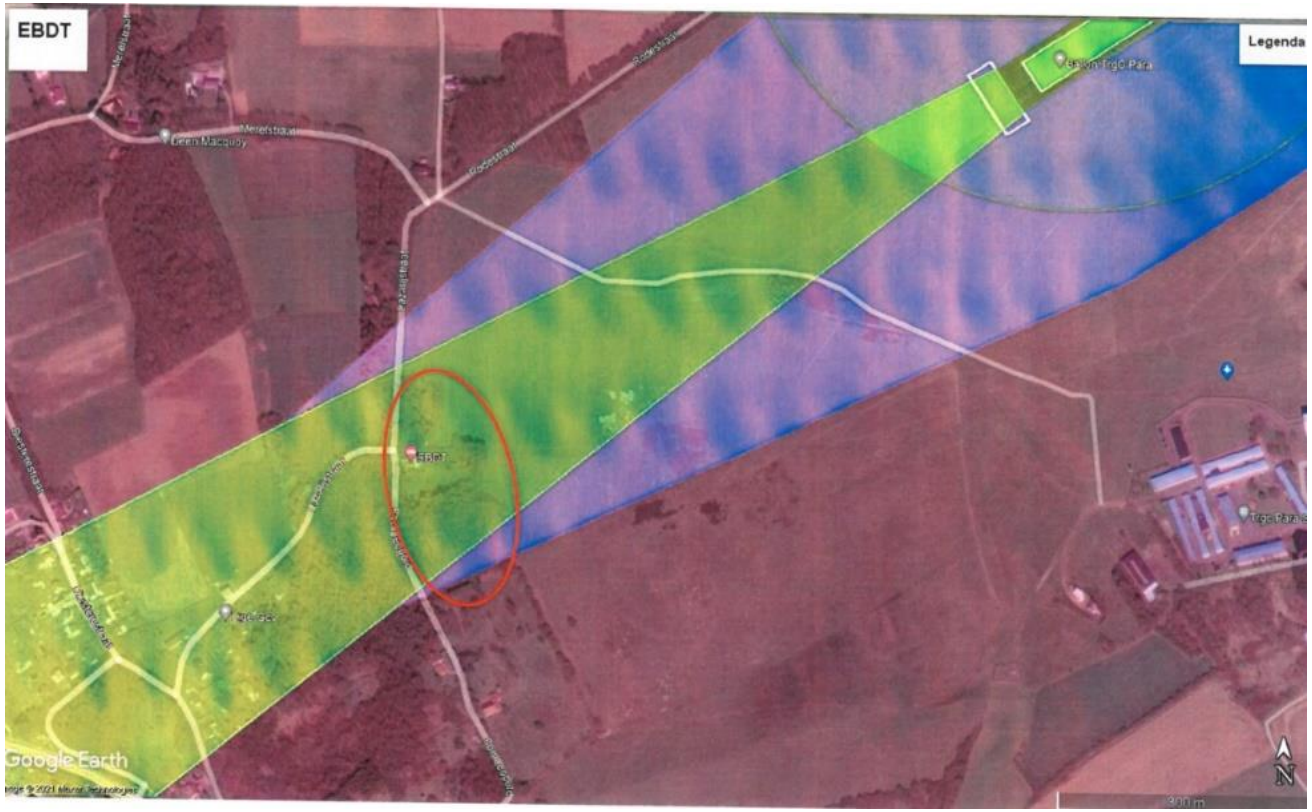

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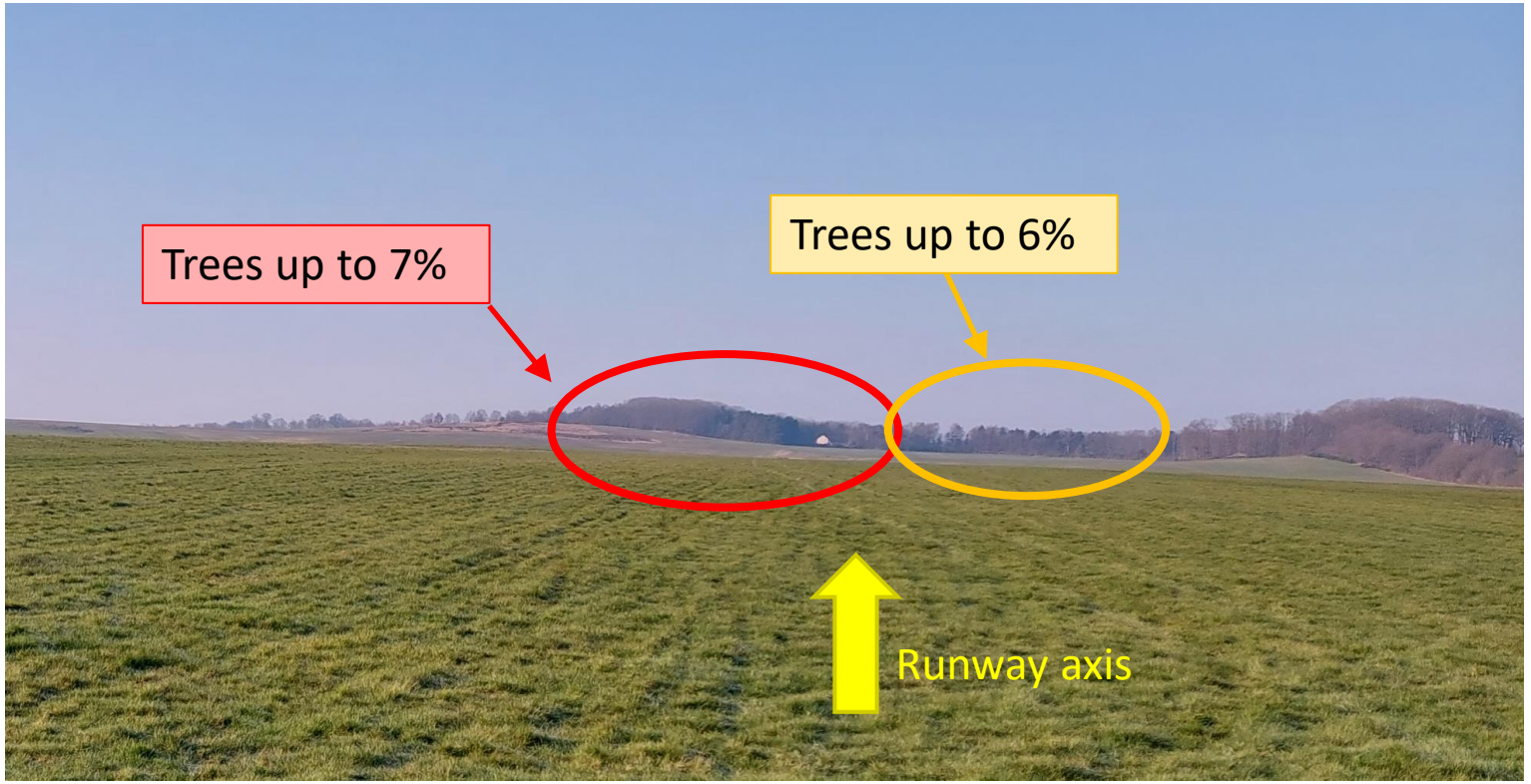
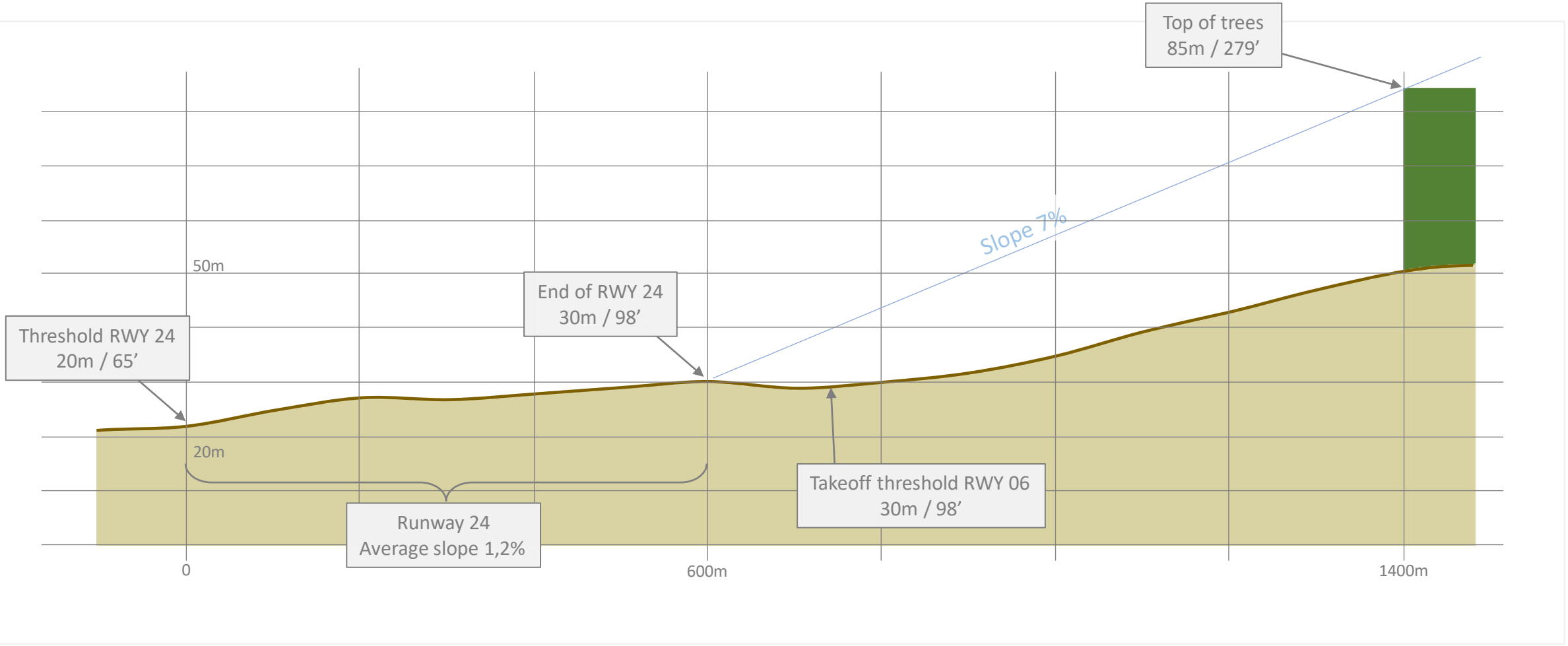


Abbreviations

The following abbreviations are used in this briefing:

- RWY : runway
- TOD : take off distance
- PIC : pilot in command

Profile of terrain and obstacles at EBDT



Take-off from runway 24

Perform an accurate performance calculation

- With a climb gradient after takeoff of 7%
- Including a safe margin above the trees
- Using accurate and/or conservative parameters
  - ✓ Make sure you are using up-to-date information
  - ✓ Apply margins / conservative assumptions in case of uncertain or variable conditions
- Take into account
  - ✓ The runway upslope (average 1,2%)
  - ✓ The condition of the surface

Take-off from runway 24

If no performance data are available at the required gradient

Extrapolation of performance data is not reliable !

The table on the next slide may provide useful information

Take-off from runway 24

If no performance data are available at the required gradient

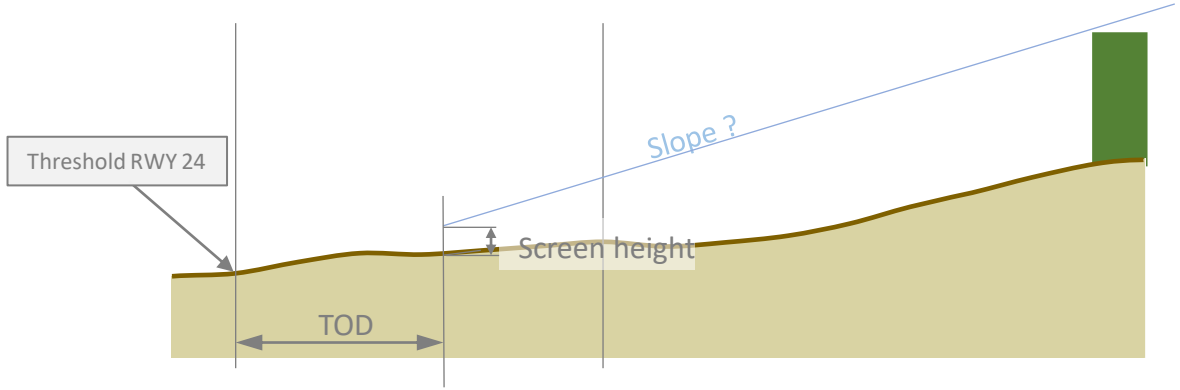
If the takeoff roll distance is less than 600 m, the gradient from the actual TOD (takeoff distance) to the trees is less than 7%.

The table gives the actual gradient from the end of the takeoff and the screen height (as found in the performance calculation charts of the aircraft).

The table does not include any margin over the trees.

→ *If you want X feet clearance above the trees: reduce the screen height by X feet*

Example:
The performance calculation shows that a distance of 400 m is required from start of roll to 35' screen height. This means that the gradient from that point is 4,8%
For 20' clearance over the trees, use the 15' screen height column → 5,4%



Required gradient from end of TOD for given TOD/screen height (no margin)				
TOD (m)	Screen height (ft)			
	0	15	35	50
200	5,1	4,7	4,2	3,8
250	5,2	4,8	4,3	3,9
300	5,4	5,0	4,4	4,0
350	5,6	5,2	4,6	4,2
400	5,8	5,4	4,8	4,3
450	6,1	5,6	5,0	4,5
500	6,4	5,8	5,2	4,7
550	6,7	6,1	5,4	4,9
600	7,0	6,4	5,7	5,1

Take-off from runway 24

If no performance data are available at the required gradient

The table below may be useful as well.

It can be used in wo directions:

- During preflight: to estimate the gradient you can get
- During climb-out: to check if you are obtaining the required gradient

Climb gradient in function of ground speed and rate of climb

Ground speed			Rate of climb									
kmh	mph	kts	mps	fpm	mps	fpm	mps	fpm	mps	fpm	mps	fpm
			1	200	1,5	300	2	400	2,5	500	3	600
80	50	43	4,5		6,8		9,0		11,3		13,5	
100	62	54	3,6		5,4		7,2		9,0		10,8	
120	75	65	3,0		4,5		6,0		7,5		9,0	
140	87	76	2,6		3,9		5,1		6,4		7,7	
160	99	86	2,3		3,4		4,5		5,6		6,8	

Take-off from runway 24

If no performance data are available at the required gradient

Pilots familiar with the airfield can estimate performance based on experience

Be conservative, apply ample margins on any estimates

Take-off from runway 24

Further recommendations

- ✓ **Start the takeoff roll from the beginning of the runway**
- ✓ The runway length available for takeoff on runway 24 is 600m. **The portion beyond 600m must not be used for takeoff.**
  → From the end of the displaced threshold, the required gradient approaches 10%!
- ✓ In case of doubt or marginal performance:
  - Reduce takeoff weight, and/or,
  - Delay takeoff: wait for better circumstances, or,
  - Check with the operator if a runway change is possible

Take-off from runway 24

At the moment the PIC opens the throttle,

he assumes full responsibility for the performance of his aircraft!

Take-off from runway 24

Contingencies during takeoff

In case you realize that the performance is insufficient while the takeoff is in progress

→ for any reason: error during the preparation, unanticipated environmental condition, technical problem

Two options :

- ✓ **Late abort**
- ✓ **Avoiding the trees by a left turn**

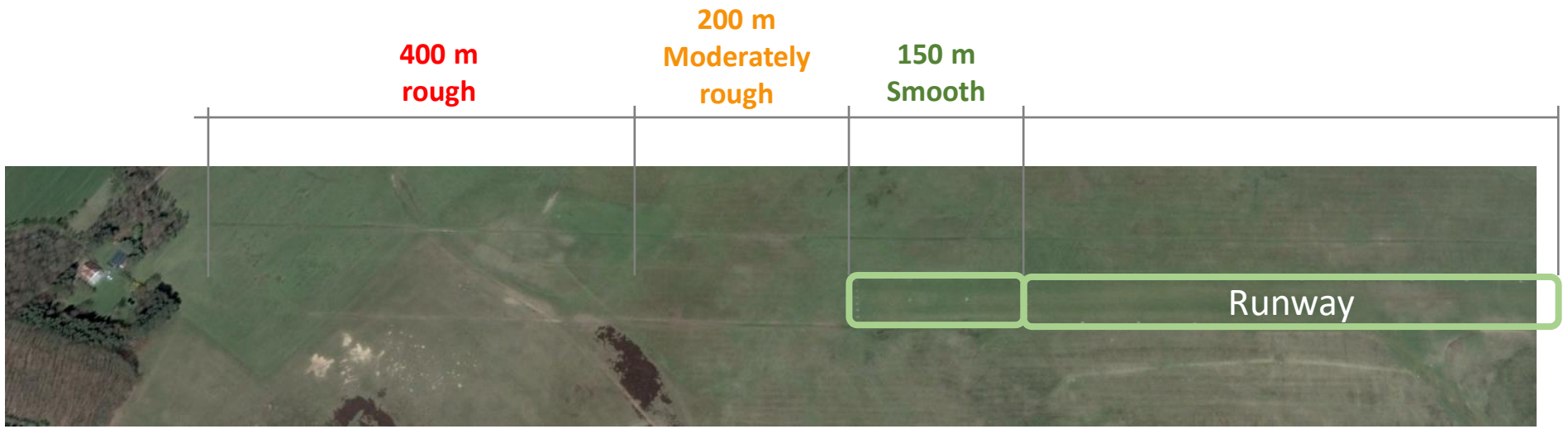
Take-off from runway 24

Contingencies during takeoff

In case you realize that the performance is insufficient while the takeoff is in progress

- ✓ **Late abort:** a runway overrun is a valid option

  The condition of the terrain is as follows:



In the rough area, a nose gear collapse or prop strike may be anticipated

Take-off from runway 24

Contingencies during takeoff

In case you realize that the performance is insufficient while the takeoff is in progress

- ✓ **Avoiding the trees by a left turn**

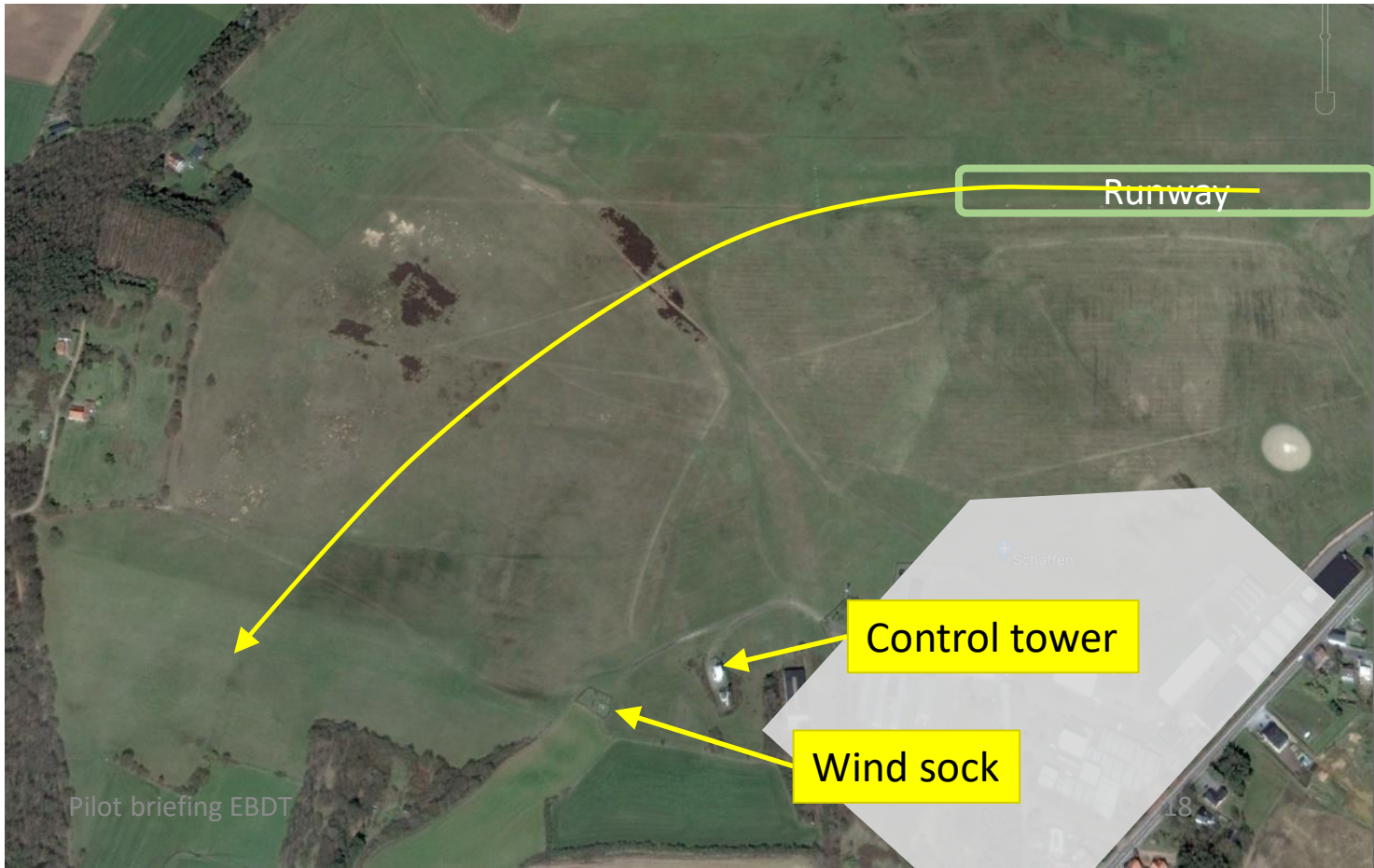
  Turn to the left of the trees

  → Into the saddle in the hill

  - ✓ No obstacles
    but obstacles further left
  - ✓ Gradient below 5%

  Keep the turn safe !

  - ✓ Execute a **flat turn**
  - ✓ Make sure the airspeed is adequate
  - ✓ Start turn **at safe height**



Take-off from runway 24

View on the saddle, from threshold RWY 24

Take-off from runway 24

View on the saddle, from runway end

Take-off from runway 24

Touch and go's on RWY 24

Be extremely careful during touch and go's

- ✓ Prepare the exercise, perform the required perfo calculations
- ✓ Take into account the guidelines for takeoff in the previous slides
- ✓ Do not "go" after a long landing
- ✓ Keep the speed during the roll, don't apply brakes
- ✓ Evaluate the performance and available options before every "go"

Take-off / go-around / balked landing / touch and go on runway 24

General guidelines

- ✓ **Perform an accurate/conservative performance calculation**
- ✓ **Run through all scenarios/contingencies before any take-off, go-around or touch and go**
- ✓ **Monitor and evaluate the performance continuously**
- ✓ **Take decisions early, don’t wait until no more options remain**
- ✓ **Don’t rush decisions**
  - → **Evaluate the feasibility of a turn to the left before starting the execution**

Landing on runway 06

During a landing on 06, the trees in final cause the following risks

- Collision with the trees due to too low final approach
- Hard landing due to the higher than usual approach angle
- Long landing, resulting in a runway overrun

Landing on runway 06

Risk: collision with the trees due to too low final approach

- ✓ Make sure you overfly the trees with sufficient margin
- ✓ Take into account turbulence downwind of the trees

Landing on runway 06

Risk: hard landing due to the higher approach angle as usual

- Take into account the slightly higher than usual rate of descent
- If desired, the normal approach profile can be regained between the trees and the runway, but :
  - ✓ Limit the rate of descent
  - ✓ Mind the speed control while executing this maneuver

Landing on runway 06

Risk: long landing, resulting in a runway overrun

A long landing on runway 06 may be the result of two combining factors:

- ✓ Overspeed due the steeper than usual approach angle
- ✓ The downslope of the runway

→ Mind the speed control during final,

→ Perform a go-around or balked landing when a long landing is developing

Beyond runway 06 there is 130 m “stopway” available.
The area is not smoothed, a prop strike or nose gear collapse may occur

General restrictions

Minima applicable to visiting pilots

- Minimum visibility: 3000m
- Ceiling: 1000 ft AGL

Solo training flights allowed only after two familiarization flights with a flight instructor

Registration

You are required to confirm that you did read, that you do understand, and that you will comply with the instructions in this briefing by filling in this form.