

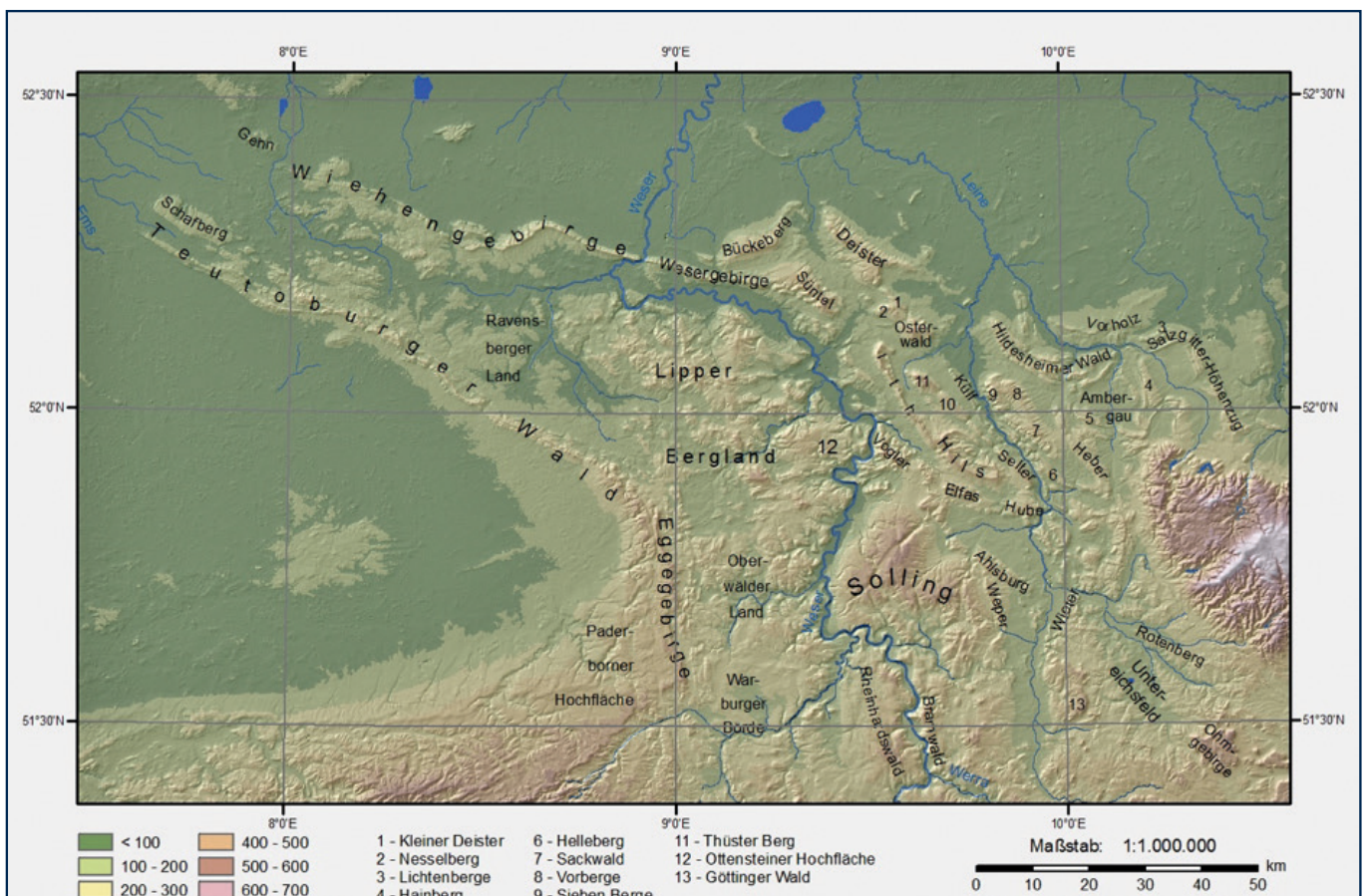
Ridge running at Porta

A detailed look at the secrets of ridge flying in the Wiehengebirge and Niedersaechsisches Bergland

Part 1

It is a winter Saturday, 5:00 AM in the morning, and my alarm clock starts ringing. Outside it is dark, cold, and windy and somehow I manage to drag myself out of bed. What on earth could make me do this (I am really no morning person), when not even during week workdays I start my days so early?

TEXT AND PICTURES TUDOR VACARETU



MAP: https://commons.wikimedia.org/wiki/File:Karte_Niedersaechsisches_Bergland.jpg



I quickly load the car with everything I need: batteries, parachute, oxygen bottle, warm clothes, my winter boots, coffee for the road and some food. I hook the glider trailer behind the car and I start my 3 hour journey towards Porta-Westfalica, an airfield located in NW Germany, ideally located next to a ridge of about 300m AMSL and about 100 km long. I aim to arrive there at about 8:00 AM, be rigged by 09:00 AM and in the air before 10:00 AM. Yes, I have to be there in time, because winter days are short, and the effort should be worth it in order to make a nice flight. In good conditions, even with such short days, a 7 hour flight is possible.

Geography and Landmarks

The orientation of the ridge is roughly from West (North-West) to East (South-East), and is comprised of the Wiehengebirge, Wesergebirge, Süntel, Ith and Hils. Between Süntel and Ith there is a 10 kilometer gap – meaning that the terrain is flat and there are no slopes inbetween. Porta Westfalica is not only the name of a town or airfield, but also the name of the gorge where the Weser river splits the chain of the Wiehen Hills to the West and the Weser Hills chain to the east.

From West to East, along the ridge there are a few landmarks which are easy to identify, and which we will refer to often further in this article. The Kaiser-Wilhelm Denkmal next to the Porta Westfalica gorge is maybe the most recognizable landmark as it is very close to Porta-Westfalica airfield and situated next to one of the best spots providing lift on the ridge. Close by, towards the East, the Porta-Westfalica TV Tower is the next recognizable landmark and very easy to spot due to its size and distinct shape. Eight kilometers further East, the A2 highway splits the ridge in two, and a big parking place can be seen from the air. Burg Schaumburg, ten kilometers further East is a good point to aim for entering the wave. The ridge here has a nice slope and most of the time the wave works near the castle. Flying eastwards for another seven kilometers will bring you near Hohenstein, a group of rocks on the top of the ridge. The end of the main ridge is marked by Süntel, a hill of 437.5 m AMSL, with a shallow slope that miraculously works and allows gaining enough altitude to make the jump further to the Ith Hills.

On the other side, the Ith ridge has a well-defined contour and slope, and with South Westerly flows, the ridge works really wonderfully. The Ith Tower is the first landmark on this ridge followed immediately by the quarry at Coppenbrügge. Further as a last landmark, the picturesque airfield of Ithwiesen on the top of the ridge, 15 kilometers Eastwards is easy to spot and always interesting to look at as you are flying past almost at the same level as the gliders on the ground waiting to be launched.

Airfields along the ridge

Germany, as a pioneering country in the sport of gliding, still offers today a great infrastructure for the gliding sport. Along the Wiehen, Weser, and Ith hills, a total of 7 airfields are in proximity of the ridges, enumerated from west to east:

Melle (EDXG, 52°12'03.4"N 8°22'50.9"E, RWY 09/27, Length 609m, Elevation: 72m MSL, Freq: 125.835 MHz). The airfield is quite far from the ridge (8-9 km) and provides a good launch position but landing there means you will have to fly against the wind, which makes the landing there almost not possible. www.flugplatz-melle.de/anflug/

Porta Westfalica (EDVY, 52°13'16.0"N 8°51'35.9"E, RWY 5/23, Length 860m, Elevation: 45m MSL, Freq: 130.640 MHz). The airfield is situated 3 km south of the ridge, providing a perfect launch position. Reaching the airfield from the ridge is easy and it is a good landing option.

flugplatz-porta.de/flugplatzdaten/

Bückeberg-Weinberg (ZZZZ, 52°15'00.2"N 9°01'10.8"E, RWY 11/29, Length: 500m, Elevation: 80m MSL, Freq: 135.090 MHz). Equally a good launch point, and a good landing option, Bückeberg-Weinberg is a big airfield with a friendly atmosphere. It is the only airfield situated on the Northern side of the ridge, therefore when crossing the ridge, after take-off or before landing, prepare for the associated turbulence behind the ridge and increase your airspeed if necessary. Not to be mistaken with the nearby military Bückeberg airfield. www.lsv-bueckeberg.de/flugplatz

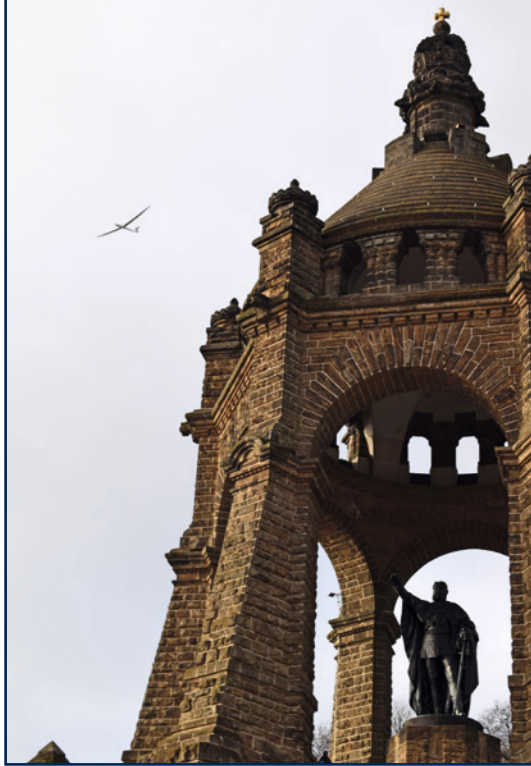
Rinteln (EDVR, 52°10'31.2"N 9°03'13.0"E, RWY 11/29, Length: 600m, Elevation: 55m MSL, Freq: 129.415 MHz). 4.5 km South from the ridge. Usually in reach from the ridge, depending on the weather conditions, altitude and glider you are flying. lsv-rinteln.de/lsv/anflug/

Bisperode (ZZZZ, 52°04'39.9"N 9°28'22.8"E, RWY 24, Length: 575m MSL, Elevation: 170m, Freq: 126.010 MHz). The airfield is situated 3 km west from the ridge, the airfield has an upslope on the landing direction which is also aligned into the wind when the ridge is working.

www.lsv-hamel.de/wordpress/?page_id=285

Hellenhagen (ZZZZ, 52°01'36.1"N 9°33'39.5"E, RWY 10/28 and 11/29, Length: 250-300m and 474m, Elevation: 200m MSL, Freq: 128.755 MHz). The airfield is located 1km west from the ridge, easy to reach but it has an upslope which is tailwind with SW situation making the landing challenging. flugsportclub.com/infos-fuer-piloten/

Ithwiesen (EDVT, 51°56'57.9"N 9°39'52.5"E, RWY 14/32 or 18/36 Length: 570m or 360m, Elevation: 374m MSL, Freq: 130.655 MHz). Situated on the ridge top, the surface is uneven and upslope. Landings are usually done upslope but can also be done on the secondary smaller runway into the wind. The air can be quite rough and turbulent on final. www.



Kaiser Wilhelm Denkmal, the Tv Tower and the A2 highway cutting the ridge The well defined slope on the Ith Hills (left) and the picturesque airfield of Ithwiesen (bottom)

ithwiesen.de/flugplatzdaten.html

All above mentioned airfields operate during normal season time, and a few of them are operating in the winter as well, depending on the condition of the runway and availability of a tow-plane & tow pilot. During the normal season both winch launches and air-tows are possible whereas in the winter season it is most-likely you will be launched behind a tow-plane. It is good to know that in some cases the actual usable runway is longer than it is officially listed.. These airfields not only offer a great infrastructure for launching but it is also good to be aware of their position in case an outlanding is imminent.

Ridge, Wave, Thermals, Convergence

The most beautiful part about flying in this region is that the weather can always surprise. Since I've been flying here I have never seen two identical days or situations and I have encountered all types of lift: ridge, wave, thermals and convergence. In my opinion this makes flying at Porta so complex and fascinating.

The flying that can be done here resembles mountain flying, even though we are playing with very small hills, but the technique is the same. The situation where you have a mountain chain, complemented by valleys wide enough to allow the wind to channel or bounce, the gaps that can be bridged by glider (for instance the jump to Ith) definitely offers a "litt-



The German Northern Hills Offer Everything: Blue Sky Ridge, Ridge and Thermals ...

le alpine” experience and keeps you sharp and trained for when the gliding season starts in the spring.

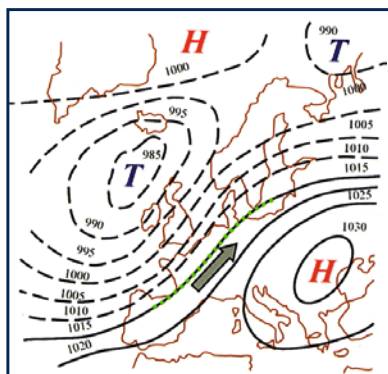
Thermals can form throughout the spring, summer and autumn season, and if you are really lucky you might get a taste of thermals during the winter season as well but in my entire experience I haven’t been able to exploit thermals consistently in the winter. Wave is predominant during the autumn and winter season, due to the fact that spring and summer seasons can be too unstable to allow the formation of waves, but during early mornings or evenings this is well possible. Both thermals and waves can come in handy to make the jump to Ith, or even further towards the Harz for instance, but they can also disturb the ridge flow, and because of this, the ridge must be flown carefully to anticipate such scenarios. The downdraft between thermals or the sinking side of the wave can “hit” the ridge in unpleasant spots, and if timed wrongly this might lead to a premature outlanding.

A weather change situation with an approaching low from the west brings the strong southwest winds needed to fly the

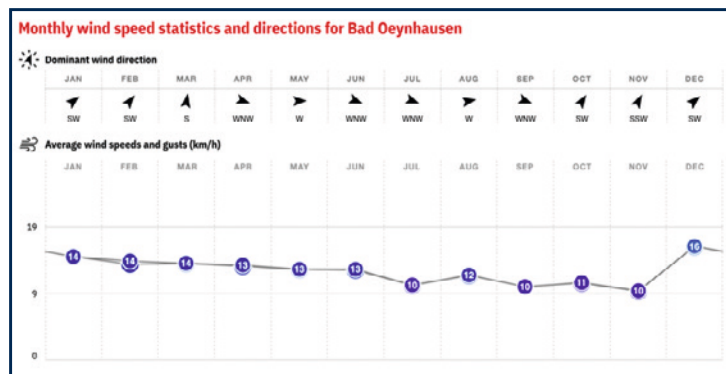
ridge. However, together with the low pressure system, the associated fronts can bring rain and low clouds, which can of course influence the outcome of a flying day. For a successful flying day, timing of the frontal areas is essential because we can exploit only the dry sectors of the low pressure system. During the passage of the low pressure system, the wind direction and intensity can be variable. The ideal weather conditions provide wind from 210° with an intensity of more than 30 kilometers per hour, no rain and enough clearance between cloud base and the ridgetop. With these conditions the ridge can be flown entirely, however, this is rather rare.

Getting Started with Ridge flying and Ridge flying at Porta

Before flying at Porta, it is good to have certain ridge experience in your logbook as well as currency with regards to outlanding experience. The flying here is lower compared to thermal flying, if conditions deteriorate you will have to make a good outlanding decision fast.. To fly effectively in ridge lift, close to a hill, requires precise flying. The presence of other



Left Typical weather situation. Quelle: Leewellenfluge am Harz, Karl-Heinz Dannhauer
Right Dominant wind directions and average wind speeds and gusts during the year. Quelle: Windfinder.com.





... Convergence and Wave

gliders demands a good lookout. Flying in weak conditions requires flying close to minimum sink speed which increases the danger of stalling if the pilot is not flying accurate. According to Sebastian Kawa, one hour of difficult ridge flying is the equivalent of 10 hours of thermal flying for a student pilot. And I totally agree, reflecting back to the way I started with ridge flying on a small slope at my local airfield in Dezmir, Romania, some 10 years ago.

If you have a small ridge at your local airfield try to learn the ridge flying technique, even if it is just local. If you are not that lucky, maybe a (summer/autumn) camp with your club on a foreign airfield can provide this opportunity.

Master 8 turns & learn the rules of the ridge:

- A glider with the right wing pointing towards the ridge has right of way.
- Always turn away from the hill.
- If overtaking is necessary do this only on the valley side.
- Below the ridge always fly elongated figure 8 turns, and do not circle.
- Circle only when you have enough clearance from the ground and the obstacle, and monitor the other gliders in the area
- If the ridge is very busy, try to adjust your speed to the others and form a chain instead of overtaking as this is unnecessary and possibly dangerous.
- Don't enforce your right of way.

Before your first Porta ridge experience flying with an instructor accustomed to the area is recommended and will most likely speed up the learning process..

In his article from 2005, "Ridge and Wave Flying at Porta Westfalica", Arndt Hovestadt was presenting a 4 phase approach for getting started at Porta. I think this approach is still

relevant today and provides a systematic approach to conquer these hills.

Phase 1: In the first phase it is best to fly in the area of the monument/main slope until just before Bergkirchen.

Phase 2: In the second phase flying from the monument/main slope to the Heidbrink TV Tower (This is a different and smaller TV Tower compared to the Porta-Westfalica TV Tower, and is located in the West in the proximity of the Lübbecke). Recommended to maintain at least 400m MSL

Phase 3: The jump over the Weser (with an altitude of at least 500m at the monument) continue towards the A2 motorway to Schaumburg (attention: if active obtain clearance from the Bückeberg CTR and keep enough separation from the Porta-Westfalica TV Tower). Maintain your altitude above the slope level. Then from the Schaumburg continue to the Süntel.

Phase 4: Flight from Süntel to the Ith and back. At Süntel and Ith, at least a departure altitude of 800m is required in order to be able to safely bridge the gap of approx. 10 kilometers. Higher performance gliders might require less altitude for making the jump whereas a lower performing glider (i.e. wooden gliders) will require more. If the approach to Ith slopes is too marginal, you can land at Bisperode airfield, but the landing options between Süntel and Ith are also very good. In very strong winds, more altitude is required for the return flight! In South-West wind conditions the slopes at Ith usually work better than those on the Wiehengebirge & Wesergebirge, because their shape is better and the ridge tops are slightly higher, so if you made it there, you will have a lot of fun for sure. ♦

In the next issue, we will familiarize ourselves with the weather situation and flight options.