

Europe

Germany North

USER GUIDE SEPTEMBER 2016



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Thank you!

Orbx would like to thank you for purchasing FTX EU Germany North (GEN). FTX EU GEN has taken a team of developers many months to complete. It is the seventh region in our Europe series and we hope you'll enjoy its wide range of carefully modelled features.

Product Features

Germany North takes the long anticipated step of FTX Regions into Europe's heartland. A region that, in many aspects, is entirely different from any region done before. FTX Germany North covers ~70,653 square miles (~182,991 sq km) of densely populated terrain. The area extends to the borders of Denmark, the Netherlands and Poland and then south to the boundary of the upcoming FTX Germany South.

You can explore a wide variety of landscapes from the scenic coastlines and offshore islands to the vast agricultural areas of the north German flatlands; the Harz Mountains; well-known rivers like Rhine and Elbe, extensive mudflats. The urban and historic metropolises of Berlin, Hamburg, Lübeck and many others are realistically portrayed and the differences between "East" and "West" are still noticeable. Other areas to look out for are offshore windfarms with helipads; military ranges and bases built by either NATO or Soviet partners - all of which have been recreated with detail and accuracy.

Hand-placed custom landclass (=land use type) along with the road and railroad networks, powerlines, 19,103 (!) wind turbines, alley trees, and major vertical obstructions are included for true-to-life VFR flying. Many key points of interests, urban/industrial as well as natural are featured with local photoreal coverage that are fully annotated with autogen buildings and vegetation. Please make use of the Google Earth kmz file included with this product ("FTX_EU_GEN_Germany_North.kmz", in the \ORBX\User Documents folder) as it provides geographic markers and additional information for the large number of airports, airstrips, and landmarks throughout this diverse region, which actually extends some distance into Denmark, the Netherlands and Poland as well.



The whole city of Berlin (891.7 sq km (344.3 sq mi)) is included as a Cityscape "lite" with full photoreal coverage, landmark buildings, a detailed autogen coverage never seen before in this detail for such a large area. Other important structures throughout FTX GEN include the dams, bridges, well-known points of interest, and more than 60 individually modelled lighthouses. They all sum up to more than 300 (!) of individually modelled POIs – in addition to hundreds of thousands realistically placed ORBX library models. Just like with our other region titles we've given each of the 208 airports in the area a major upgrade, with more accurate placements of runways and taxiways as well as buildings, hangars, static aircraft, moving people (and creatures), and lots of "clutter". We also added 178 unlisted airstrips that do not exist in FSX/P3D by default. Finally yet importantly all ground textures are hand-annotated with our custom autogen objects including the upgraded and spectacular and frame-rate friendly FTX Global-style night lighting.

You will agree that there is a lot of detail packed into FTX Germany North!

- Superb ground textures from local sources
- Hand-placed landclass covers every sq mile
- Custom autogen textures and objects
- FTX Global 3D night lighting effects
- Accurate roads, rivers, lakes, alley trees
- More than 90,000 individually placed and assigned powerline pylons
- 386 airports have been upgraded or added
- Custom models of hundreds of POIs, dams, lighthouses
- Photoreal Cityscape Berlin "lite"
- Photoreal mudflats, Hamburg port, Bremerhaven port, Duisburg Thyssenwerke, open pit mines
- GEN mesh is compiled at 20-m grid spacing (LOD11)



Product requirements

This scenery airport addon is designed to work in the following simulators: **Microsoft Flight Simulator X, Lockheed Martin Prepar3D v1, Lockheed Martin Prepar3D v2 and Lockheed Martin Prepar3D v3**

Quick Installation Guide

Installing Orbx FTX GEN is all managed by our FTX Central application. This app is responsible for many aspects in maintaining your Orbx installation. Please visit the support forums to learn more.

Once you have purchased GEN it will be added to your account and you can have FTX Central download and install it for you. The appropriate scenery library entries will also be managed by FTX Central.

You may also manually download GEN and then have FTX Central manage the installation for you once downloaded.

An internet connection is required for FTX Central to validate your license.

Please note that the above all refers to FTX Central 3. Earlier versions of FTX Central are no longer supported but will still function as before. The integration of FTX Central with your OrbxDirect account is only available with FTX Central version 3 and above.

Additional Steps to consider before your first flight

If FTX EU GEN is your first Orbx product please visit our support page and download and install the current version of our Orbx Libraries, which are essential for the complete and correct display of the components of GEN: <https://www.fullterrain.com/support#Orbxlibs>

If you are using Orbx Global Vector please start its Configuration Tool, switch to the [Airport Elevation Corrections] tab, and select [Run Auto-configuration]. Doing so will ensure that Vector files for airports-within the GEN coverage area will be properly deactivated.

If you already have installed third-party airport or scenery add-ons that overlap spatially with FTX EU GEN -- including some of the global AI airplane traffic add-ons, like MyTraffic -- please see the next page and visit our compatibility forum for specific information.

Compatibility Notes

For an in-depth introduction as to how the different categories of Orbx/FTX add-ons -- Global Base/Vector, openLandClass, FTX Regions, and FTX airports -- work together and should be managed in the FSX/P3D scenery library menu please download and read our extensive "Definitive Guide to FTX Products", available at <http://www.orbxsystems.com/forum/topic/74345-the-definitive-guide-to-ftx-products-the-go-to-source-of-ftx-information/>

Please visit <http://www.orbxsystems.com/forum/forum/80-ftx-compatibility-forum/> for the latest compatibility information regarding FTX EU GEN and **third-party** add-ons, including airports developed by Aerosoft, LimeSim and 29 Palms.

FLIGHT1 - ULTIMATE TERRAIN X Europe (UTX)

Ultimate Terrain X Europe (current version 2.x) is a commercial add-on developed by Scenery Solutions (Allen Kriesman) and distributed by Flight One. It replaces the default water bodies, road/railroad network, and other landscape components with more detailed renditions. FTX Germany North makes the UTX components redundant within its coverage area and is coded so that local exclude files will suppress the display of all UTX features while leaving UTX undisturbed outside the FTX coverage areas.

The current version of UTX may contain elevation corrections files for airports in the FTX GEN overlap area. These would need to be deactivated to prevent floating or sunken runways and other airport elevation issues within FTX GEN. Once available we will post the list of files to be deactivated in our compatibility forum.

Third Party Terrain Mesh

FTX EU GEN comes with a complete set of high-resolution terrain mesh files compiled at 20m grid (LOD11) spacing. Third-party add-on terrain mesh files are compatible as long as they do not provide a higher grid resolution and their scenery library position is of lower display priority than GEN. Which means they would not be displayed in the GEN coverage area and wouldn't conflict with GEN content.

REX Simulations - REAL ENVIRONMENT XTREME

FTX EU GEN is 100% compatible with the sky and airport texture replacements offered by REX and you do not need to do anything special to use REX whilst flying over EU GEN. In fact, most of the Orbx developers and beta testers use REX, and it is an Orbx recommended add-on.

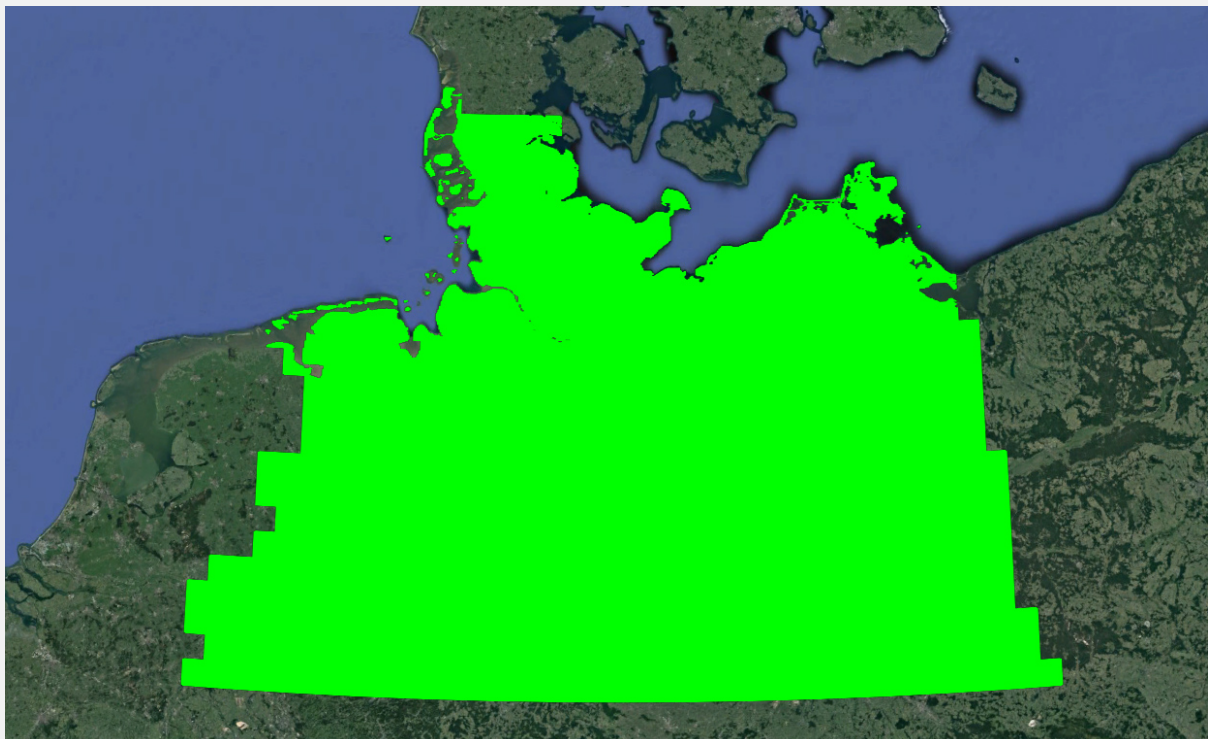
What is Custom Landclass?

Landclass are special files which reside in the scenery layer “pie”, and their role is to tell FSX/P3D what type of ground texture to place in any given square kilometre cell. In other words, landclass files tell the simulator to place a field here, a township there, forest here, and a railway yard there, and so on.

As far as we are aware, FTX is the first flight simulation product to feature totally **handcrafted** landclass on such a large scale. Many global or country-specific add-on landclass products for FSX/P3D are created using various data sources, compiled using automated scripts, and then manually rectified for obvious errors.

This is not so with FTX. The diagram below gives you an idea of the custom landclass, which was shipped with FTX EU GEN. Every single square mile in the **green** highlighted areas was hand placed by our team, using a combination of many sources, including street maps, aerial photos, and topography charts to name a few.

The result is nothing like you have ever experienced before, with an almost photoreal feel to all areas which have been edited, but with the added benefit of faster loading times, full five seasons’ support and hand-placed custom autogen and library objects in every single kilometre of the region.



Quick Reference Simulator Settings

Firstly, dragging all your sliders to the right, even with current hardware, will probably result in poor visuals, low frame rates, and potentially crashes. We suggest that you begin your exploration of FTX EU GEN using the settings suggested below. Then, if you find performance to be acceptable, experiment with moving certain sliders to the right, although we recommend you only move one slider at a time to objectively gauge its effect. Also, keep in mind the GEN control panel options discussed previously. The table below lists the minimum recommended settings required in FSX/P3D to enjoy FTX EU GEN the way Orbx designed it. These settings run well on most PCs and take particular advantage of the custom mesh and photoreal imagery used in the scenery area.

Setting	Value	Why?
Global Texture Resolution	Very High	Enables maximum display quality of object textures
Level of detail radius	Large	Influences sharpness of textures with increasing distance
Mesh Complexity	100	Better terrain definition (= interpolation between adjacent grid elevation points)
Mesh Resolution	5m	5m terrain mesh resolution is the slider setting that all Orbx regions and airports are designed for. That being said, using either 10m or 2m are also unlikely to lead to any major display issues unless you look very closely. Since the slider setting governs the horizontal spacing of mesh grid points this value primarily affects the steepness of slopes adjacent to flattened areas at airports or lakes and rivers. If objects are placed on or next to such slopes they can shift a bit.
Texture Resolution	7cm	Enables maximum display quality of vector textures meaning roads, freeways, railroads, and shorelines
Scenery Complexity	Extremely Dense	Lower settings mean fewer custom objects are displayed
Autogen Density	Normal	Regulates the overall density of autogen buildings and trees
Aircraft AI Traffic	15-20%	Plenty of AI traffic given the many airports within GEN
Road Vehicles	15-20%	Good road traffic density; higher settings cost performance!

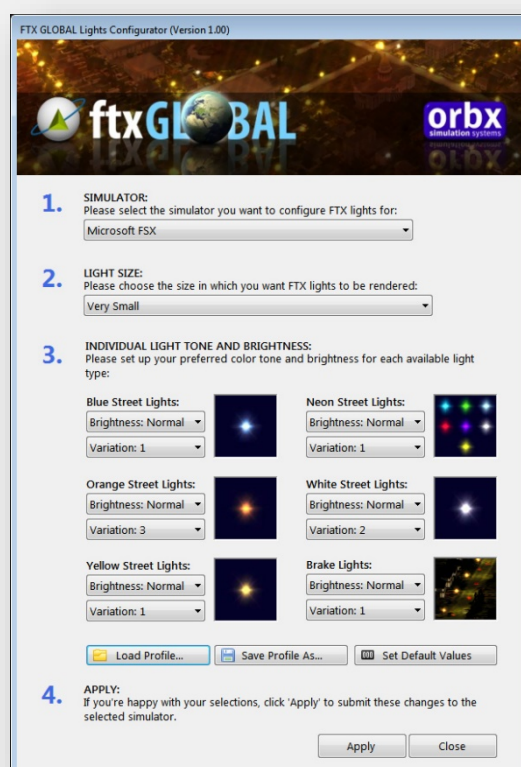
The 3D Lighting System

We have added our new advanced new night lighting tech to major cities. This new technique was debuted with openLC North America and proved a resounding success.

These lights are viewable from a much greater distance than the standard FTX Global lighting and will certainly enhance dawn/dusk/night approaches into the major hub airports.

FTX EU GEN also uses the 3D night lighting system developed by Orbx and exclusive to our products. This system creates multi-colored lighting for all roads in urban areas as well as on major highway interchanges. The same lighting system is also implemented as autogen objects in the landclass textures themselves, so you will find cities, towns, and rural areas depicted very accurately during your dawn/dusk and night flights.

To provide you with the most flexibility we have an optional control utility, called the "FTX Global Lights Configurator", which is available from our Freeware page -- <https://www.fullterrain.com/freeware> . This will allow you to adjust the size, coloring, and brightness of the light points via several different presets. Its interface looks like the screenshot below. Note that you can save different profiles and also use different settings for P3D and FSX.



ORBX Weather Theme #7

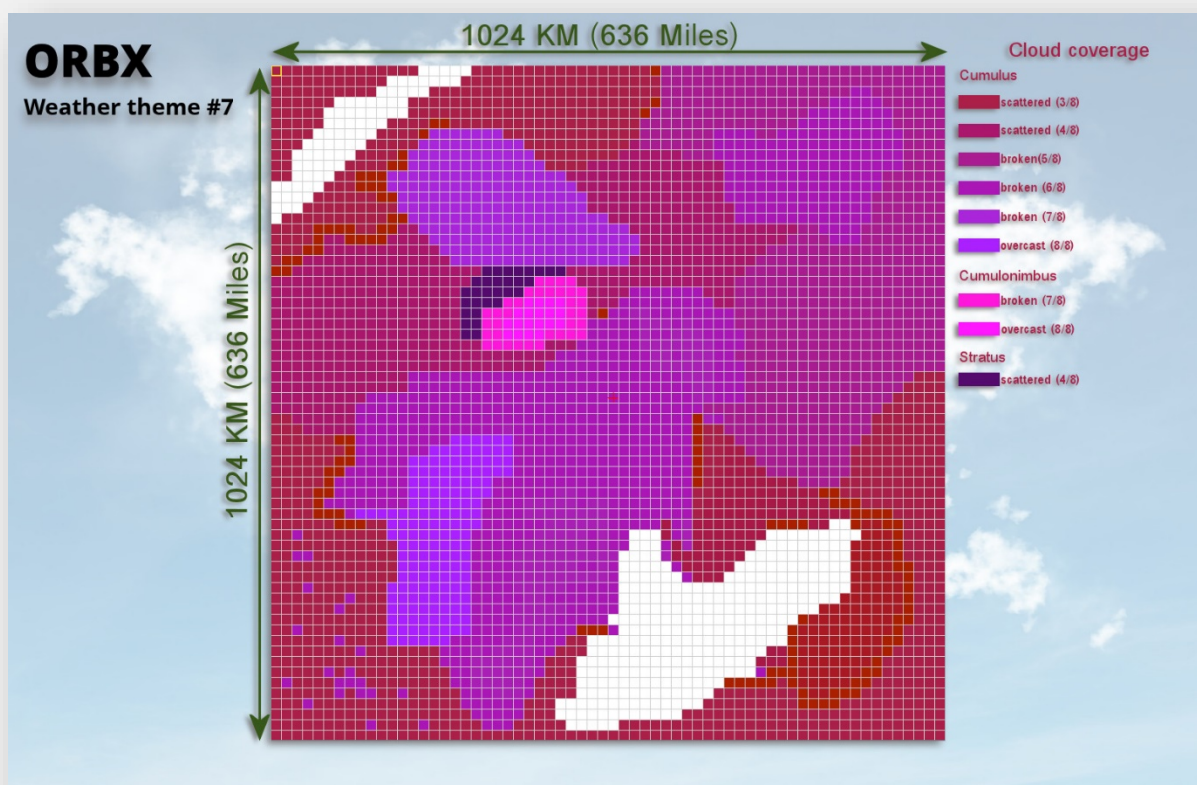
A typical weather theme for Germany. The ORBX weather theme #7 is a dynamic theme that covers one million square kilometers.

When you load the theme, it will be centered on your aircraft position.

Winds are calm at low altitude and visibility is maximum so you can fully enjoy our FTX scenery.

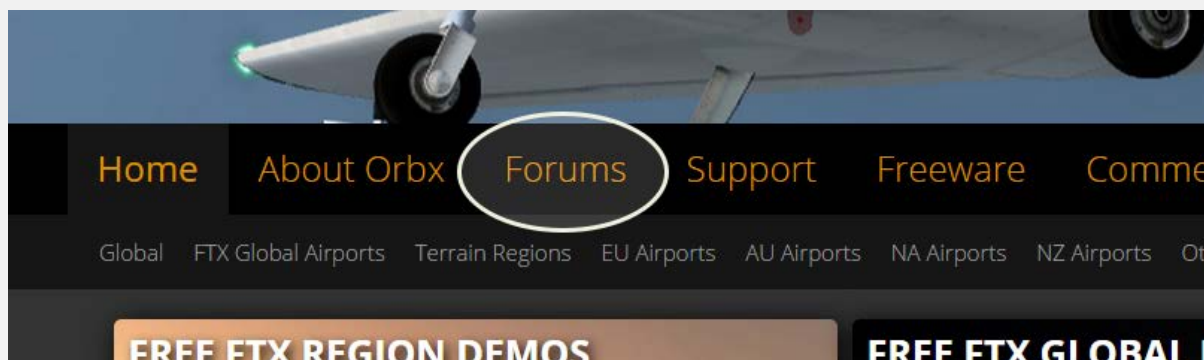
Do you want more fun? Climb over 4.000 feet to get some light turbulences.

In real life, you would certainly avoid storms but in your simulator, you will sure want to fly straight to it. Fly North West for about 30 minutes and you will find yourself in a heavy storm. Beware of the winds and severe turbulences.



Product Technical Support

Orbx has a very simple support policy: no question unanswered. That means should you have any questions about EU GEN or its use, please feel free to register on the forums at fullterrain.com and then log a support question in the FTX Payware Support Forum section. Orbx FTX experts will be available to review your support questions and you will usually get a reply on the forums within 12 hours, often much sooner than that.



To visit our support forums, click on the “Forums” button shown on the homepage of fullterrain.com.

Please do NOT email support requests

Orbx provides world-class support on our forums, and it's the only way in which you can receive support for EU GEN. Provided you adhere to the forum terms of use and have a legitimate copy of EU GEN, you will always be offered our support at no cost as we work toward a resolution to your problem each time.

Use the forum search function

Before you post a question, please try searching for the answer first, using the forum's built in search function located on the forum menu bar.

What to include in your support requests

If at all possible, this is what we'd like to see provided for each request you log:

- A separate post on the FTX support forums for each issue (don't tag new issue reports onto existing threads).
- Include your ORDER NUMBER from your EU GEN purchase in your post or forum signature section.
- A screenshot to highlight what you are talking about.
- A descriptive post title which clearly states what the issue is.
- Detailed comments in your post about what you are reporting on.

The Orbx support team is always on standby to assist you with any problems you may have, or will comment on your issue reports. Please remember, our priority is fixing any urgent issues first, and addressing bug reports second. Clearly though, any “show stopper” bugs will be given top priority though.

FTX Community Forums

FTX already has quite a thriving and active user community on the forums, with over 63,000 members as of August 2016. To visit the forums, just point your web browser to fullterrain.com and from the front page click the “Forums” menu item.

You don’t need a user account to view other people’s posts and information posted by Orbx staff, but if you’d like to join in on the discussion there, simply create an account. It’s instant and no validation email is required. We like to keep things simple☺.

We hope to see you there soon!

Thanks for reading!

You have stuck with us through all these pages of information, and we appreciate you taking the time to read the user guide. We hope it gave you some tips and insights. See you on the forums!

The Germany North Team



The FTX EU GEN Team

Lead Developers

Sascha Normann (Project Manager)	Geospatial data processing including vector roads and railroads, rivers, lakes, powerlines and coastlines; vector textures; photoreal areas preparation and color adjustments; custom seasons file; terrain elevation mesh; moving road traffic; road and railroad extrusion bridges; tunnel portals; lists of airports and VFR objects; airport models; modelling of some POIs; static aircraft repaints; Google Earth .kmz file; manual; compatibility testing; team management.
Holger Sandmann	land use data GIS processing; landclass raster and polygon placements; custom waterclass placement and textures; vector textures; editing of some landclass texture and autogen files.
Frank Schnibben	Cityscape Berlin; Landclass ground textures including seasonal variations and blendmasks; custom autogen textures.
Eugene Krikunov	Night lighting system on ground textures and road vectors; autogen core files management.
Neil Hill	Initial enhancements of airports and airfields, including unlisted airstrips.
Chris Clack	Further refinements of all airports and airfields, including scenery objects, terrain shaping, and AI ground movement.
Lars Pinkenburg/Martin Pahnev	Placement and final management of vertical obstructions, POIs, VFR objects; modelling of majority of individually crafted models for GEN; Google Earth .kmz file.
Phil Speakman	Cityscape Berlin AGN additional vegetation.
Sylvain Delepierre	Initial enhancements and refinements of some airports and airfields; modelling of some POIs; ORBX weather theme #7.
Ed Correia	Installer and build management; manual.

Specialist Roles

- **Ed Correia:** Production management
- **John Venema:** Business management
- **Ben McClintock:** Website and FTX Central

Acknowledgments

- Hamburg PR and elevation data (visually enhanced to match FTX): Landesbetrieb Geoinformation und Vermessung (LGV)
- Berlin PR and elevation data (visually enhanced to match FTX): Geoportal Berlin / Digitale farbige Orthophotos 2010 (DOP20RGB) / ATKIS® DGM (1m-Rasterweite)
- Bremerhaven PR (visually enhanced to match FTX): Nationalparkverwaltung Niedersächsisches Wattenmeer
- Duisburg PR (visually enhanced to match FTX): Spatial base data of the municipalities and the state of North Rhine-Westphalia © Geobasis NRW 2016
- GEN Elevation data (visually enhanced to match FTX): Produced using Copernicus data and information funded by the European Union - EU-DEM layers
- Mudflat satellite imagery (visually enhanced to match FTX): Image courtesy of the U.S. Geological Survey
- Season data: Data basis: Deutscher Wetterdienst, data averaged to match MS Flight Simulator X's season technique
- LC textures sourced and commercially licensed from DigitalGlobe, Inc. Copyright 2015. All rights reserved.
- POI models for Schleswig-Holstein, Niedersachsen, Hamburg, Meck-Pomm, Bremen; generic models; lighthouse models; airport library licensed from: Thorsten Reichert
- Additional POI models and generic models licensed from: Daniel Büchter, Martin Reiffer, Richard Bui and Matthias Basler

Beta Testing Team

Adam Banks, Rob Abernathy, Eberhard Haberkorn, Jon Murchison, Friedi Gulder, John Dow, Sylvain Delepierre, Richard Bui

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For the most recent version of the EULA, see fullterrain.com/eula.

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Appendix: FTX EU GEN airport index

ID	City:	Name:	Type	Rwy	Alt	Lat	Lon	Country	State
EDXA	Achmer	Achmer	ICAO	GRASS	55	52.377500	7.913667	Germany	NRW
EP09	Achterstedt	Achterstedt	Private UL	GRASS	1	53.397500	8.329667	Germany	Niedersachsen
EJ18	Ahlen	Ahlen Nord	(Heli)	Heli	81	51.784500	7.912167	Germany	NRW
EU65	Ahlen	Ahlen Drensteinfurt	UL	GRASS	70	51.767491	7.747110	Germany	NRW
EP22	Ahlhorn	Ahlhorn Metropolpark Hansalinie	Militär	ASPHALT	48	52.889167	8.232500	Germany	Niedersachsen
EDHO	Ahrenlohe	Ahrenlohe	ICAO	ASPHALT	9	53.700000	9.740500	Germany	Schleswig-Holstein
EDBT	Allstedt	Allstedt	ICAO	ASPHALT	284	51.380500	11.446667	Germany	Sachsen-Anhalt
ES05	Alte Ems	Alte Ems Bei Herbrum	Glider	GRASS	2	53.030833	7.305500	Germany	Niedersachsen
EDKD	Altena	Altena Hegenscheid	ICAO	GRASS	471	51.312833	7.703667	Germany	NRW
CS19	Alteno	Alteno	Closed	BITUMINOUS	59	51.867500	13.781167	Germany	Brandenburg
ES09	Am Salzgittersee	Am Salzgittersee	Glider	GRASS	81	52.170333	10.315833	Germany	Niedersachsen
ES10	Am Stauffenberg An den Sieben Bergen	Am Stauffenberg	Glider	GRASS	365	51.361667	9.629500	Germany	Niedersachsen
ES13		An den Sieben Bergen	Glider	GRASS	135	52.057500	9.810500	Germany	Niedersachsen
EDCA	Anklam	Anklam	ICAO	ASPHALT	6	53.832833	13.668833	Germany	Meck-Pomm
EDLA	Arnsberg	Arnsberg Menden	ICAO	ASPHALT	241	51.483667	7.898000	Germany	NRW
ES15	Arnsberg	Arnsberg Ruhrwiesen	Glider	GRASS	185	51.387500	8.060500	Germany	NRW
EDCQ	Aschersleben	Aschersleben	ICAO	GRASS	162	51.767000	11.498833	Germany	Sachsen-Anhalt
ES17	Aue	Aue	Glider	GRASS	188	51.633333	10.254667	Germany	Niedersachsen
ES18	Aukrug	Aukrug	Glider	GRASS	25	54.064667	9.798333	Germany	Schleswig-Holstein
ES19	Aventoft	Aventoft	Glider	GRASS	1	54.896167	8.820500	Germany	Schleswig-Holstein
EU24	Bad Bibra	Bad Bibra	UL	GRASS	298	51.202167	11.497833	Germany	Sachsen
EDHX	Bad Bramstedt	Bad Bramstedt Fuhlendorf	(Heli)	ASPHALT	35	53.939000	9.903333	Germany	Schleswig-Holstein
EDOF	Bad Frankenhausen	Bad Frankenhausen	ICAO	GRASS	241	51.372833	11.143000	Germany	Thüringen
EDVA	Bad Gandersheim	Bad Gandersheim	ICAO	GRASS	241	51.852500	10.026333	Germany	Niedersachsen
EZ21	Bad Lippspringe	Bad Lippspringe	Private	GRASS	112	51.789974	8.785327	Germany	NRW
EDVW	Bad Pyrmont	Bad Pyrmont	ICAO	ASPHALT	360	51.966167	9.290833	Germany	NRW
ES26	Bad Zwischenahn	Bad Zwischenahn Rostrup	Glider	GRASS	9	53.210333	7.988667	Germany	Niedersachsen
EDCB	Ballenstedt	Ballenstedt	ICAO	ASPHALT	153	51.745833	11.229167	Germany	Sachsen-Anhalt
EDWZ	Baltrum	Baltrum	ICAO	ASPHALT	3	53.725333	7.372167	Germany	Niedersachsen
EDXL	Barssel	Barssel	ICAO	GRASS	3	53.164167	7.794500	Germany	Niedersachsen
EDBH	Barth	Barth	ICAO	ASPHALT	6	54.338000	12.710333	Germany	Meck-Pomm
CS40	Basepohl	Basepohl	Closed	GRASS	51	53.742000	12.951500	Germany	Meck-Pomm
EDAB	Bautzen	Bautzen	ICAO	ASPHALT	174	51.193667	14.519667	Germany	Sachsen
EDLQ	Beelen	Beelen	ICAO	GRASS	60	51.931777	8.081979	Germany	NRW
CS15	Berlin	Berlin Gatow	Closed	ASPHALT	43	52.475500	13.144167	Germany	Berlin
EDDB	Berlin	Berlin Brandenburg	ICAO	CONCRETE	49	52.378667	13.520500	Germany	Berlin
EDDT	Berlin	Berlin Tegel	ICAO	ASPHALT	37	52.559667	13.287833	Germany	Berlin
EDDI	Berlin	Berlin Tempelhof	Closed	CONCRETE	52	52.473667	13.401667	Germany	Berlin
ES31	Berliner Heide	Berliner Heide	Glider	GRASS	69	52.669500	10.370333	Germany	Niedersachsen
EDLI	Bielefeld	Bielefeld	ICAO	ASPHALT	137	51.964667	8.544667	Germany	NRW
EDOI	Bienenfarm	Bienenfarm	ICAO	GRASS	29	52.661167	12.747167	Germany	Brandenburg

ES34	Bisperode	Bisperode West	Glider	GRASS	180	52.078833	9.475833	Germany	Niedersachsen
ID	City:	Name:	Type	Rwy	Alt	Lat	Lon	Country	State
EDVF	Blomberg	Blomberg Borkhausen	ICAO	GRASS	165	51.918000	9.113333	Germany	NRW
ES37	Bobzin	Bobzin	Glider	CONCRETE	49	53.486167	11.168333	Germany	Meck-Pomm
EDOE	Bohlen	Bohlen	ICAO	GRASS	131	51.216167	12.368333	Germany	Sachsen
ES38	Bohlenbergerfeld	Bohlenbergerfeld	Glider	GRASS	8	53.418333	7.904167	Germany	Niedersachsen
EDXD	Bohmte	Bohmte Bad Essen	ICAO	GRASS	46	52.351333	8.326167	Germany	Niedersachsen
ES40	Borghorst	Borghorst Fuchten	Glider	GRASS	47	52.150833	7.452833	Germany	NRW
EDLY	Borken	Borken Hoxfeld	ICAO	GRASS	49	51.853000	6.815333	Germany	NRW
EDLB	Borkenberge	Borkenberge	ICAO	ASPHALT	49	51.780000	7.288000	Germany	NRW
EDWR	Borkum	Borkum	ICAO	ASPHALT	1	53.595500	6.709167	Germany	Niedersachsen
EU90	Brakel	Brakel	UL	GRASS	170	51.738992	9.202670	Germany	NRW
CS18	Brand	Brand	Closed	CONCRETE	69	52.035833	13.746167	Germany	Brandenburg
EDBE	Brandenburg	Brandenburg Muhlenfeld	ICAO	GRASS	30	52.437000	12.591167	Germany	Brandenburg
EDBN	Brandis	Brandis	Closed	CONCRETE	159	51.328000	12.655833	Germany	Sachsen
EU25	Brauna	Brauna	UL	GRASS	180	51.283000	14.055833	Germany	Sachsen
EDVE	Braunschweig	Braunschweig	ICAO	ASPHALT	92	52.319167	10.554500	Germany	Niedersachsen
EU61	Bredstedt	Bredstedt	UL	ASPHALT	33	54.632825	8.985628	Germany	Schleswig-Holstein
EDDW	Bremen	Bremen	ICAO	ASPHALT	3	53.047500	8.787000	Germany	Bremen
EDWB	Bremerhaven	Bremerhaven Am Luneort	ICAO	ASPHALT	3	53.507000	8.573000	Germany	Bremen
EDUB	Briest	Briest Brandenburg	Closed	CONCRETE	31	52.437500	12.454500	Germany	Brandenburg
EDKO	Brilon	Brilon Hochsauerland	ICAO	ASPHALT	460	51.402500	8.642000	Germany	NRW
ES43	Brockzetel	Brockzetel	Glider	GRASS	9	53.481333	7.651667	Germany	Niedersachsen
EU23	Brodau	Brodau	UL	GRASS	102	51.498000	12.329667	Germany	Sachsen
EDBQ	Bronkow	Bronkow	ICAO	GRASS	128	51.671667	13.960833	Germany	Brandenburg
ETUR	Bruggen	Bruggen	Closed	ASPHALT	73	51.199667	6.132167	Germany	NRW
ETHB	Buckeburg	Buckeburg	ICAO	ASPHALT	70	52.278333	9.082167	Germany	Niedersachsen
ES45	Buckeburg	Buckeburg Weinberg	Glider	GRASS	74	52.253667	9.014167	Germany	Niedersachsen
ES46	Buren	Buren Am Schwalenberg	Glider	GRASS	279	51.542833	8.581333	Germany	NRW
EDBG	Burg	Burg	ICAO	GRASS	52	52.241667	11.856167	Germany	Sachsen-Anhalt
EDVC	Celle	Celle Ahrlöh	ICAO	GRASS	64	52.687833	10.112167	Germany	Niedersachsen
ETHC	Celle	Celle Wietze	ICAO	ASPHALT	40	52.591167	10.022167	Germany	Niedersachsen
EDBC	Cochstedt	Cochstedt	ICAO	ASPHALT	176	51.855833	11.417167	Germany	Sachsen-Anhalt
ETHT	Cottbus	Cottbus	Closed	ASPHALT	70	51.768000	14.292000	Germany	Brandenburg
EDCD	Cottbus	Cottbus Drewitz	ICAO	CONCRETE	82	51.889500	14.532000	Germany	Brandenburg
EU06	Crussow	Crussow	UL	GRASS	52	53.014667	14.068667	Germany	Brandenburg
CS06	Damgarten	Damgarten Putnitz	Closed	ASPHALT	4	54.263833	12.442500	Germany	Meck-Pomm
EDWC	Damme	Damme	ICAO	ASPHALT	46	52.487500	8.185333	Germany	Niedersachsen
EU07	Dankern	Dankern Haren	UL	ASPHALT	9	52.802167	7.160333	Germany	Niedersachsen
EDBD	Dedelow	Dedelow	Closed	CONCRETE	58	53.356167	13.786167	Germany	Brandenburg
ES54	Dehausen	Dehausen	Glider	GRASS	305	51.463333	9.049167	Germany	Hessen
ES55	Der Dingel	Der Dingel	Glider	GRASS	219	51.536167	9.379667	Germany	Hessen
EDAD	Dessau	Dessau	ICAO	ASPHALT	58	51.831667	12.184500	Germany	Sachsen-Anhalt
EDLJ	Detmold	Detmold	ICAO	ASPHALT	188	51.940833	8.904667	Germany	NRW
ETND	Diepholz	Diepholz	ICAO	ASPHALT	40	52.585500	8.341167	Germany	Niedersachsen
EU12	Dingelstedt	Dingelstedt	UL	GRASS	124	51.986167	10.967333	Germany	Sachsen-Anhalt

EDLD	Dinslaken	Dinslaken Schwarze Heide	ICAO	ASPHALT	65	51.616167	6.865500	Germany	NRW
ID	City:	Name:	Type	Rwy	Alt	Lat	Lon	Country	State
EU89	Donstorf	Donstorf	UL	GRASS	33	52.655000	8.556944	Germany	Niedersachsen
EU87	Dorstadt	Dorstadt	UL	GRASS	100	52.100000	10.551389	Germany	Niedersachsen
ES60	Dorsten	Dorsten Am Kanal	Glider	GRASS	32	51.662167	6.984667	Germany	NRW
EDLW	Dortmund	Dortmund	ICAO	ASPHALT	128	51.518667	7.612000	Germany	NRW
EU20	Drosa	Drosa	UL	GRASS	74	51.825333	11.896667	Germany	Sachsen-Anhalt
EDDL	Dusseldorf	Dusseldorf	ICAO	ASPHALT	46	51.280833	6.757167	Germany	NRW
ES63	Dusseldorf	Dusseldorf Wolfsaap	Glider	GRASS	113	51.264667	6.853667	Germany	NRW
ETME	Eggebeck	Eggebeck	Closed	ASPHALT	21	54.625000	9.345833	Germany	Schleswig-Holstein
EDCE	Eggersdorf	Eggersdorf	ICAO	GRASS	67	52.480333	14.083667	Germany	Brandenburg
ES64	Ehlershausen	Ehlershausen Grosses Moor	Glider	GRASS	42	52.536167	10.019667	Germany	Niedersachsen
CS22	Eilenburg	Eilenburg	Closed	ASPHALT	98	51.507833	12.682500	Germany	Sachsen
EU67	Eimbeckhausen	Eimbeckhausen	UL	GRASS	165	52.225866	9.424997	Germany	Niedersachsen
EDAE	Eisenhüttenstadt	Eisenhüttenstadt	ICAO	ASPHALT	46	52.197167	14.585500	Germany	Brandenburg
EDWE	Emden	Emden	ICAO	ASPHALT	1	53.391167	7.225500	Germany	Niedersachsen
ES65	Emmerich	Emmerich Palmersward	Glider	GRASS	16	51.822000	6.274500	Germany	NRW
EHTW	Enschede	Enschede Twenthe AB	ICAO	ASPHALT	35	52.275833	6.889111	Netherlands	Netherlands
EDLE	Essen	Essen Mulheim	ICAO	ASPHALT	128	51.402167	6.937167	Germany	NRW
EU66	Everswinkel	Everswinkel	UL	GRASS	56	51.884564	7.838149	Germany	NRW
EDUF	Falkenberg	Falkenberg Lonnewitz	ICAO	ASPHALT	85	51.547833	13.228000	Germany	Brandenburg
ETHS	Fassberg	Fassberg	ICAO	ASPHALT	76	52.919500	10.183833	Germany	Niedersachsen
EDAV	Finow	Finow	ICAO	CONCRETE	37	52.827167	13.693667	Germany	Brandenburg
EDAS	Finsterwalde	Finsterwalde Heinrichsruh	ICAO	GRASS	117	51.634667	13.671333	Germany	Brandenburg
EDUS	Finsterwalde	Finsterwalde Schacksdorf	ICAO	ASPHALT	122	51.607500	13.738000	Germany	Brandenburg
EDXF	Flensburg	Flensburg Schaferhaus	ICAO	ASPHALT	40	54.773333	9.378833	Germany	Schleswig-Holstein
EW02	Flensburg	Flensburg Sonwik Marina	Water	WATER	0	54.808439	9.452685	Germany	Schleswig-Holstein
EU17	Frankfurt	Frankfurt Gronenfelde	UL	GRASS	63	52.354167	14.495333	Germany	Brandenburg
EDCF	Friedersdorf	Friedersdorf	ICAO	GRASS	35	52.282000	13.802833	Germany	Brandenburg
EP13	Friesoythe	Friesoythe	Private	GRASS	7	53.029500	7.800000	Germany	Niedersachsen
EDAL	Furstenwalde	Furstenwalde	Closed	GRASS	55	52.389667	14.094500	Germany	Brandenburg
EDWQ	Ganderkesee	Ganderkesee Atlas Airfield	ICAO	ASPHALT	31	53.036167	8.505333	Germany	Niedersachsen
EDOC	Gardelegen	Gardelegen	ICAO UL	GRASS (Heli)	73 61	52.530500 52.495000	11.356333 10.510333	Germany	Sachsen-Anhalt Niedersachsen
EDVX	Gifhorn	Gifhorn	(Heli)	Heli	61	52.495000	10.510333	Germany	Niedersachsen
EDLG	Goch	Goch Asperden	ICAO	GRASS	16	51.690833	6.104167	Germany	NRW
EDBX	Gorlitz	Gorlitz	ICAO	GRASS	238	51.158833	14.950333	Germany	Sachsen
ES84	Goslar	Goslar Bollrich	Glider	GRASS	289	51.904667	10.459167	Germany	Niedersachsen
EDHD	Gottingen	Gottingen Heilbad Heiligenstadt	ICAO	ASPHALT	363	51.407500	10.144667	Germany	Thüringen
ES85	Grambeker Heide	Grambeker Heide	Glider	GRASS	42	53.583333	10.698667	Germany	Schleswig-Holstein
EZ15	Gransee	Gransee	Private	GRASS	51	53.006667	13.202000	Germany	Brandenburg
EDLF	Grefrath	Grefrath Niershorst	ICAO	GRASS	34	51.333833	6.359500	Germany	NRW
ES88	Grifte	Grifte	Glider	GRASS	201	51.221167	9.447833	Germany	Hessen
CS46	Gross Lubars	Gross Lubars	Closed	GRASS	101	52.137333	12.153833	Germany	Sachsen-Anhalt
CS04	Gross Mohrdorf	Gross Mohrdorf	Closed	CONCRETE	3	54.382500	12.912833	Germany	Meck-Pomm
ES89	Grosse Hohe	Grosse Hohe	Glider	GRASS	20	52.986333	8.572167	Germany	Niedersachsen
ES90	Grosse Wiese	Grosse Wiese	Glider	GRASS	78	52.137167	10.570833	Germany	Niedersachsen

EDAK	Grossenhain	Grossenhain	ICAO	CONCRETE	128	51.308000	13.555500	Germany	Sachsen
ID	City:	Name:	Type	Rwy	Alt	Lat	Lon	Country	State
EDHB	Grube	Grube	ICAO	GRASS	3	54.244500	11.023833	Germany	Schleswig-Holstein
EDCU	Gustrow	Gustrow	ICAO	GRASS	15	53.805500	12.230000	Germany	Meck-Pomm
ETUO	Gutersloh	Gutersloh	Closed	ASPHALT	73	51.923000	8.306333	Germany	NRW
EP03	Hagen	Hagen Hof Wahl	Private	GRASS	392	51.307500	7.427000	Germany	NRW
EU14	Hain	Hain	UL	GRASS	266	51.438000	10.771333	Germany	Thüringen
EDAQ	Halle	Halle Oppin	ICAO	ASPHALT	107	51.552167	12.053833	Germany	Sachsen-Anhalt
EDDH	Hamburg	Hamburg Fuhlsbüttel	ICAO	ASPHALT	15	53.632833	9.993833	Germany	Hamburg
EDHI	Hamburg	Hamburg Finkenwerder	ICAO	ASPHALT	6	53.535333	9.835500	Germany	Hamburg
ES36	Hamburg	Hamburg Boberg	Glider	GRASS	2	53.514667	10.144167	Germany	Hamburg
ES74	Hamburg	Hamburg Fischbek	Glider	GRASS	62	53.455833	9.829500	Germany	Hamburg
EDLH	Hamm	Hamm Lippewiesen	ICAO	ASPHALT	58	51.690333	7.817833	Germany	NRW
EDDV	Hannover	Hannover	ICAO	ASPHALT	55	52.460333	9.683667	Germany	Niedersachsen
EDXP	Harle	Harle	ICAO	ASPHALT	3	53.706667	7.820333	Germany	Niedersachsen
EDHM	Hartenholm	Hartenholm	ICAO	ASPHALT	37	53.914500	10.035000	Germany	Schleswig-Holstein
EU70	Hasselfelde	Hasselfelde	UL	GRASS	501	51.705000	10.868779	Germany	Sachsen-Anhalt
EDXB	Heide	Heide Busum	ICAO	ASPHALT	3	54.153333	8.901667	Germany	Schleswig-Holstein
EDXH	Helgoland	Helgoland Dune	ICAO	ASPHALT	3	54.185333	7.915833	Germany	Schleswig-Holstein
EO05	Hellenhagen	Hellenhagen	Glider	GRASS	181	52.025333	9.564500	Germany	Niedersachsen
EO06	Hellingstedt	Hellingstedt	Glider	GRASS	23	53.375000	8.850000	Germany	Niedersachsen
EO07	Helmstedt	Helmstedt Rote Wiese	Glider	GRASS	111	52.233833	10.978333	Germany	Niedersachsen
EO08	Hengsten	Hengsten Opherdicke	Glider	GRASS	132	51.473333	7.645000	Germany	NRW
EDAH	Heringsdorf	Heringsdorf	ICAO	ASPHALT	28	53.878667	14.152167	Germany	Meck-Pomm
EO11	Hessisch Lichtenau	Hessisch Lichtenau	Glider	GRASS	410	51.188833	9.742833	Germany	Hessen
EDVM	Hildesheim	Hildesheim	ICAO	ASPHALT	88	52.179667	9.945500	Germany	Niedersachsen
EDVH	Hodenhagen	Hodenhagen	ICAO	GRASS	23	52.762500	9.612167	Germany	Niedersachsen
ETNH	Hohn	Hohn	ICAO	ASPHALT	12	54.312167	9.538333	Germany	Schleswig-Holstein
EDVL	Holleberg	Holleberg	ICAO	GRASS	257	51.611167	9.398833	Germany	Hessen
EO19	Holtorfsloh	Holtorfsloh	Glider	GRASS	53	53.322167	10.074500	Germany	Niedersachsen
ETSH	Holzdorf	Holzdorf	ICAO	ASPHALT	82	51.768000	13.167500	Germany	Brandenburg
EO16	Hopen	Hopen	Glider	GRASS	79	53.147500	9.796167	Germany	Niedersachsen
EV03	Hopstein	Hopstein Einbeck	UL	GRASS	180	51.786383	9.755283	Germany	Niedersachsen
ETNP	Hopsten	Hopsten	Closed	ASPHALT	40	52.338667	7.541333	Germany	NRW
EDVI	Hoxter	Hoxter Holzminden	ICAO	ASPHALT	284	51.806667	9.378667	Germany	NRW
EO22	Hoya	Hoya	Glider	GRASS	15	52.812000	9.163833	Germany	Niedersachsen
EU13	Hoym	Hoym	UL	GRASS	143	51.777833	11.287000	Germany	Sachsen-Anhalt
EW03	Hubertushohe	Hubertushohe	Water	WATER	37	52.236731	13.969593	Germany	Brandenburg
EDXJ	Husum	Husum	ICAO	ASPHALT	18	54.510000	9.138333	Germany	Schleswig-Holstein
EDXU	Huttenbusch	Huttenbusch	ICAO	GRASS	3	53.286333	8.947167	Germany	Niedersachsen
EO27	Iserlohn	Iserlohn Rheinermark	Glider	GRASS	200	51.429167	7.643667	Germany	NRW
EO28	Iserlohn	Iserlohn Summern	Glider	GRASS	180	51.436333	7.699667	Germany	NRW
EO30	Ithwiesen	Ithwiesen	Glider	GRASS	375	51.951167	9.662833	Germany	Niedersachsen
EDHF	Itzehoe	Itzehoe Hungriger Wolf	ICAO	ASPHALT	24	53.994500	9.578667	Germany	Schleswig-Holstein
ETNJ	Jever	Jever	Closed	ASPHALT	6	53.533667	7.888667	Germany	Niedersachsen
EDWJ	Juist	Juist	ICAO	CONCRETE	3	53.681333	7.056667	Germany	Niedersachsen

Z11K	Juterborg	Juterborg	UL	CONCRETE	96	51.996667	12.967000	Germany	Brandenburg
ID	City:	Name:	Type	Rwy	Alt	Lat	Lon	Country	State
EO32	Kamen	Kamen Heeren	Glider	GRASS	63	51.590333	7.710000	Germany	NRW
EDCM	Kamen	Kamen	ICAO	CONCRETE	153	51.297000	14.127500	Germany	Sachsen
EO33	Kammermark	Kammermark	Glider	GRASS	83	53.195333	12.164167	Germany	Brandenburg
EDLC	Kamp	Kamp Lintfort	ICAO	GRASS	24	51.528833	6.536167	Germany	NRW
EDWK	Karlshofen	Karlshofen	ICAO	ASPHALT	6	53.332833	9.028667	Germany	Niedersachsen
EDVK	Kassel	Kassel Calden	ICAO	ASPHALT	277	51.408333	9.377833	Germany	Hessen
EU09	Kerken	Kerken	UL	GRASS	33	51.438833	6.445500	Germany	NRW
EDHK	Kiel	Kiel Holtenau	ICAO	ASPHALT	31	54.379500	10.145333	Germany	Schleswig-Holstein
EZ51	Klein Kreutz	Klein Kreutz	Private	GRASS	26	52.434333	12.588667	Germany	Brandenburg
EDOM	Klein Muhlingen	Klein Muhlingen	ICAO	GRASS	52	51.947500	11.769667	Germany	Sachsen-Anhalt
EU22	Kleinkoschen	Kleinkoschen	UL	GRASS	106	51.510000	14.083000	Germany	Brandenburg
EO39	Kleve	Kleve Wisselder Dunen	Glider	GRASS	18	51.769500	6.299167	Germany	NRW
EDCL	Klietz	Klietz Scharlibbe	ICAO	GRASS	31	52.709500	12.073333	Germany	Sachsen-Anhalt
EDCI	Klix	Klix	ICAO	GRASS	149	51.273667	14.506333	Germany	Sachsen
EDGK	Korbach	Korbach	ICAO	GRASS	390	51.253000	8.875000	Germany	Hessen
EDCK	Kothen	Kothen	ICAO	CONCRETE	91	51.723833	11.949167	Germany	Sachsen-Anhalt
EDLK	Krefeld	Krefeld Egelsberg	ICAO	GRASS	43	51.384667	6.587833	Germany	NRW
EU63	Kremmen	Kremmen Ot. Hohenbruch	UL	GRASS	37	52.795391	13.104831	Germany	Brandenburg
EDXZ	Kuhrstedt	Kuhrstedt Bederkesa	ICAO	GRASS	9	53.568000	8.789500	Germany	Niedersachsen
EU62	Kunrau	Kunrau Jahrestedt	UL	GRASS	66	52.567490	10.995247	Germany	Niedersachsen
EDBK	Kyritz	Kyritz	ICAO	ASPHALT	40	52.918833	12.425333	Germany	Brandenburg
EDWL	Langeoog	Langeoog	ICAO	ASPHALT	3	53.742833	7.498667	Germany	Niedersachsen
EDBL	Laucha	Laucha	ICAO	GRASS	226	51.246167	11.693333	Germany	Sachsen-Anhalt
EDHU	Lauenbruck	Lauenbruck	ICAO	GRASS	31	53.207167	9.573833	Germany	Niedersachsen
EDXK	Leck	Leck	ICAO	GRASS	6	54.790000	8.961333	Germany	Schleswig-Holstein
EDWF	Leer	Leer Papenburg	ICAO	ASPHALT	1	53.272167	7.443000	Germany	Niedersachsen
EDDP	Leipzig/Halle	Leipzig/Halle	ICAO	CONCRETE	143	51.423833	12.236333	Germany	Sachsen
EDWD	Lemwerder	Lemwerder	ICAO	ASPHALT	6	53.143333	8.623333	Germany	Niedersachsen
EZ50	Lobnitz	Lobnitz Roitzschjora	Private	GRASS	85	51.573833	12.483500	Germany	Sachsen
EU18	Locktow	Locktow	UL	GRASS	66	52.116667	12.709333	Germany	Brandenburg
EDHL	Lubeck	Lubeck Blankensee	ICAO	ASPHALT	15	53.805333	10.719167	Germany	Schleswig-Holstein
EDHC	Luchow	Luchow Rehbeck	ICAO	ASPHALT	11	53.017167	11.144667	Germany	Niedersachsen
EDHG	Luneburg	Luneburg	ICAO	GRASS	49	53.248333	10.458667	Germany	Niedersachsen
EO55	Lunen	Lunen Lippewiden	Glider	GRASS	49	51.617000	7.501333	Germany	NRW
EDOJ	Lusse	Lusse	ICAO	GRASS	65	52.143333	12.670333	Germany	Brandenburg
EDBM	Magdeburg	Magdeburg City	ICAO	ASPHALT	82	52.073667	11.627000	Germany	Sachsen-Anhalt
CS14	Mahlwinkel	Mahlwinkel	Closed	ASPHALT	37	52.388333	11.826167	Germany	Sachsen-Anhalt
EU60	Malden	Malden	Glider	GRASS	26	51.785449	5.880989	Netherlands	Netherlands
EDLM	Marl	Marl Loemuhle	ICAO	ASPHALT	73	51.647000	7.163667	Germany	NRW
EO60	Meiersberg	Meiersberg	Glider	GRASS	152	51.299667	6.956333	Germany	NRW
EDXG	Melle	Melle Gronegau	ICAO	ASPHALT	73	52.200833	8.381167	Germany	Niedersachsen
EU04	Mellenthin	Mellenthin	UL	GRASS	18	53.917500	14.026000	Germany	Meck-Pomm
EO61	Menden	Menden Barge	Glider	GRASS	207	51.459667	7.836167	Germany	NRW
EDVG	Mengeringhausen	Mengeringhausen	ICAO	GRASS	363	51.376333	8.981167	Germany	Hessen

ETWM	Meppen	Meppen	ICAO	GRASS	21	52.723333	7.326333	Germany	Niedersachsen
ID	City:	Name:	Type	Rwy	Alt	Lat	Lon	Country	State
EDAM	Merseburg	Merseburg	ICAO	ASPHALT	104	51.362500	11.941167	Germany	Sachsen-Anhalt
EDKM	Meschede	Meschede Schuren	ICAO	ASPHALT	439	51.302833	8.239500	Germany	NRW
EU91	Metelen	Metelen	UL	GRASS	52	52.158611	7.240278	Germany	NRW
EU19	Mockern	Mockern	UL	GRASS	71	52.177500	11.928333	Germany	Sachsen-Anhalt
EDLN	Monchengladbach	Monchengladbach	ICAO	ASPHALT	40	51.230333	6.504500	Germany	NRW
EP46	Muhlberg	Muhlberg Waldeck	Glider	GRASS	408	51.225833	9.055333	Germany	Hessen
EDEQ	Muhlhausen	Muhlhausen	ICAO	GRASS	247	51.213000	10.549500	Germany	Thüringen
EDLT	Munster	Munster Telgte	ICAO	ASPHALT	55	51.944500	7.773667	Germany	NRW
EDDG	Munster/Osnabruck	Munster/Osnabruck	ICAO	ASPHALT	49	52.134667	7.684667	Germany	NRW
EDAX	Muritz	Muritz Airpark	ICAO	CONCRETE	67	53.305333	12.752167	Germany	Meck-Pomm
EDAT	Nardt	Nardt	ICAO	GRASS	116	51.451333	14.202500	Germany	Sachsen
EO72	Neu Gulze	Neu Gulze	Glider	GRASS	12	53.381167	10.804167	Germany	Meck-Pomm
ETNU	Neubrandenburg	Neubrandenburg	ICAO	ASPHALT	70	53.602167	13.306167	Germany	Meck-Pomm
EDON	Neuhardenberg	Neuhardenberg	ICAO	CONCRETE	12	52.613000	14.242833	Germany	Brandenburg
EDAP	Neuhausen	Neuhausen	ICAO	GRASS	85	51.684667	14.423000	Germany	Brandenburg
EZ04	Neujellingsdorf	Neujellingsdorf	Private	GRASS	7	54.455833	11.109500	Germany	Schleswig-Holstein
EDHN	Neumunster	Neumunster	ICAO	ASPHALT	21	54.079500	9.942000	Germany	Schleswig-Holstein
EO74	Neuruppin	Neuruppin	Glider	GRASS	43	52.942833	12.779500	Germany	Brandenburg
EDAN	Neustadt	Neustadt Glewe	ICAO	GRASS	37	53.362000	11.614500	Germany	Meck-Pomm
EDLV	Niederrhein	Niederrhein	ICAO	ASPHALT	34	51.602500	6.142167	Germany	NRW
EDXI	Nienburg	Nienburg Holzbale	ICAO	GRASS	24	52.709667	9.162500	Germany	Niedersachsen
EDWS	Norden	Norden Norddeich	ICAO	ASPHALT	1	53.633000	7.190000	Germany	Niedersachsen
ES35	Nordenham	Nordenham Blexen	Glider	GRASS	3	53.539167	8.539500	Germany	Niedersachsen
EDWY	Norderney	Norderney	ICAO	ASPHALT	3	53.706667	7.230000	Germany	Niedersachsen
EDAO	Nordhausen	Nordhausen	ICAO	GRASS	210	51.492833	10.837833	Germany	Thüringen
EDXN	Nordholz	Nordholz Spieka	ICAO	GRASS	21	53.767000	8.643667	Germany	Niedersachsen
ETMN	Nordholz	Nordholz	ICAO	ASPHALT	21	53.767500	8.658333	Germany	Niedersachsen
EDWN	Nordhorn	Nordhorn Lingen	ICAO	ASPHALT	28	52.457833	7.182500	Germany	Niedersachsen
EDVN	Northeim	Northeim	ICAO	GRASS	122	51.706333	10.040000	Germany	Niedersachsen
EDCO	Obermehler	Obermehler Schlotheim	ICAO	ASPHALT	277	51.267833	10.634667	Germany	Thüringen
EDUO	Oberrissdorf	Oberrissdorf	ICAO	GRASS	226	51.543333	11.594667	Germany	Sachsen-Anhalt
EDBO	Oehna	Oehna	ICAO	ASPHALT	88	51.899667	13.053000	Germany	Brandenburg
EDLU	Oelde	Oelde Bergeler	ICAO	GRASS	82	51.830500	8.174667	Germany	NRW
EDLO	Oerlinghausen	Oerlinghausen	ICAO	ASPHALT	171	51.932500	8.662000	Germany	NRW
EO79	Oeventrop	Oeventrop Ruhrwiesen	Glider	GRASS	211	51.395833	8.147500	Germany	NRW
EV01	Offenbittel	Offenbittel	UL	GRASS	3	54.175833	9.378050	Germany	Schleswig-Holstein
CS05	Oldenburg	Oldenburg	Closed	ASPHALT	6	53.180167	8.161500	Germany	Niedersachsen
EDWH	Oldenburg	Oldenburg Hatten	ICAO	GRASS	9	53.068667	8.312500	Germany	Niedersachsen
EO80	Oppertshausen	Oppertshausen	Glider	GRASS	47	52.595500	10.223000	Germany	Niedersachsen
EDOQ	Oschatz	Oschatz	ICAO	GRASS	153	51.297000	13.080000	Germany	Sachsen
EDOL	Oschersleben	Oschersleben	ICAO	GRASS	104	52.038000	11.205500	Germany	Sachsen-Anhalt
EDWO	Osnabruck	Osnabruck Atterheide	ICAO	ASPHALT	88	52.286667	7.969667	Germany	Niedersachsen
EO82	Osterholz	Osterholz Scharmbeck	Glider	GRASS	2	53.213333	8.810333	Germany	Niedersachsen
EKPB	Padborg	Padborg Krusa	ICAO	ASPHALT		54.870306	9.279014	Denmark	Denmark

EDLR	Paderborn	Paderborn Haxterberg	ICAO	GRASS	244	51.688333	8.774667	Germany	NRW
ID	City:	Name:	Type	Rwy	Alt	Lat	Lon	Country	State
EDLP	Paderborn/Lippstadt	Paderborn/Lippstadt	ICAO	ASPHALT	213	51.613833	8.615833	Germany	NRW
EV04	Paradiek	Paradiek	UL	GRASS	39	52.668050	8.321383	Germany	Niedersachsen
EDCV	Pasewalk	Pasewalk	ICAO	ASPHALT	21	53.505500	13.948333	Germany	Meck-Pomm
EDCP	Peenemunde	Peenemunde	ICAO	CONCRETE	3	54.158833	13.773000	Germany	Meck-Pomm
EDVP	Peine	Peine Eddesse	Closed	ASPHALT	76	52.402500	10.228833	Germany	Niedersachsen
EO86	Peine	Peine Glindbruchklippe	Glider	GRASS	71	52.323667	10.182000	Germany	Niedersachsen
EDHP	Pellworm	Pellworm	Private	GRASS	1	54.536667	8.680000	Germany	Schleswig-Holstein
EO87	Perleberg	Perleberg	Glider	GRASS	31	53.070500	11.818333	Germany	Sachsen-Anhalt
EDBP	Pinnow	Pinnow	ICAO	GRASS	43	53.615833	11.562833	Germany	Meck-Pomm
EDKP	Plettenberg	Plettenberg Huinghausen	ICAO	GRASS	307	51.192167	7.789500	Germany	NRW
EU16	Plotzin	Plotzin	UL	GRASS	49	52.353333	12.821667	Germany	Brandenburg
EDVY	Porta Westfalica	Porta Westfalica	ICAO	ASPHALT	44	52.221167	8.859667	Germany	Niedersachsen
ETNR	Preschen	Preschen	Closed	CONCRETE	95	51.663833	14.634667	Germany	Brandenburg
EDBU	Pritzwalk	Pritzwalk Sommersberg	ICAO	GRASS	88	53.180000	12.184500	Germany	Brandenburg
EDCX	Purkshof	Purkshof	ICAO	GRASS	21	54.162000	12.247833	Germany	Meck-Pomm
EO92	Quakenbruck	Quakenbruck	Glider	GRASS	25	52.663000	7.926167	Germany	Niedersachsen
EO93	Radevormwald	Radevormwald Leye	Glider	GRASS	390	51.216333	7.382167	Germany	NRW
EDOD	Reinsdorf	Reinsdorf	ICAO	GRASS	104	51.900500	13.196167	Germany	Brandenburg
EDXR	Rendsburg	Rendsburg Schachtholm	ICAO	ASPHALT	6	54.221167	9.600833	Germany	Schleswig-Holstein
EDOX	Renneritz	Renneritz	ICAO	GRASS	94	51.595000	12.237833	Germany	Sachsen-Anhalt
EDCR	Rerik	Rerik Zweedorf	ICAO	GRASS	9	54.082000	11.648833	Germany	Meck-Pomm
EDXE	Rheine	Rheine Eschendorf	ICAO	GRASS	41	52.276667	7.492167	Germany	NRW
ETHE	Rheine	Rheine Bentlage	ICAO	ASPHALT	40	52.291167	7.387167	Germany	NRW
EDAU	Riesa	Riesa Gohlis	ICAO	ASPHALT	98	51.293000	13.357167	Germany	Sachsen-Anhalt
EZ01	Riesa	Riesa Canitz	Glider	GRASS	123	51.303000	13.227833	Germany	Sachsen-Anhalt
EDVR	Rinteln	Rinteln	ICAO	ASPHALT	55	52.175333	9.053667	Germany	Niedersachsen
EU05	Roggenhagen	Roggenhagen	UL	GRASS	44	53.670833	13.399500	Germany	Meck-Pomm
EDAW	Roitzschjora	Roitzschjora	ICAO	GRASS	88	51.577833	12.494500	Germany	Sachsen
ETNL	Rostock	Rostock Laage	ICAO	CONCRETE	43	53.918000	12.278333	Germany	Meck-Pomm
EDXQ	Rotenburg	Rotenburg Wumme	ICAO	ASPHALT	31	53.128333	9.348667	Germany	Niedersachsen
EDBR	Rothenburg	Rothenburg Gorlitz	ICAO	ASPHALT	159	51.363833	14.951167	Germany	Sachsen
EDCG	Rugen	Rugen	ICAO	ASPHALT	21	54.383833	13.325500	Germany	Meck-Pomm
EDBF	Ruppiner Land	Ruppiner Land	ICAO	ASPHALT	41	52.793333	12.760333	Germany	Brandenburg
EDCS	Saarmund	Saarmund	ICAO	GRASS	52	52.308333	13.100500	Germany	Brandenburg
EDVJ	Salzgitter	Salzgitter Schaferstuhl	ICAO	GRASS	203	52.030833	10.362167	Germany	Niedersachsen
EDVS	Salzgitter	Salzgitter	ICAO	ASPHALT	101	52.154500	10.426333	Germany	Niedersachsen
EZ06	Salzwedel	Salzwedel	Glider	GRASS	36	52.828000	11.316333	Germany	Sachsen-Anhalt
EZ08	Scheuen	Scheuen	Glider	GRASS	55	52.669500	10.088833	Germany	Niedersachsen
EDBZ	Schipkau	Schipkau Schwarzeheide	ICAO	GRASS	101	51.489667	13.879500	Germany	Brandenburg
EDXC	Schleswig	Schleswig Kropp	ICAO	GRASS	15	54.425500	9.542000	Germany	Schleswig-Holstein
ETNS	Schleswig	Schleswig Jagel	ICAO	ASPHALT	21	54.459500	9.516333	Germany	Schleswig-Holstein
EDKR	Schmallenberg	Schmallenberg Rennefeld	ICAO	GRASS	466	51.161333	8.260500	Germany	NRW
EDBY	Schmoldow	Schmoldow	ICAO	GRASS	26	53.972833	13.343000	Germany	Meck-Pomm
EZ10	Schnuckenheide	Schnuckenheide Repke	Glider	GRASS	106	52.716167	10.533333	Germany	Niedersachsen

EDOZ	Schonebeck	Schonebeck Zackmunde	ICAO	GRASS	52	51.996333	11.790000	Germany	Sachsen-Anhalt
ID	City:	Name:	Type	Rwy	Alt	Lat	Lon	Country	State
EDAZ	Schonhagen	Schonhagen	ICAO	ASPHALT	40	52.203667	13.158333	Germany	Brandenburg
EU88	Schwedenstebel	Schwedenstebel Beckendorf	UL	GRASS	74	52.822222	10.041667	Germany	Niedersachsen
EDOP	Schwerin	Schwerin Parchim	ICAO	ASPHALT	52	53.427000	11.783333	Germany	Meck-Pomm
EO84	Schwerin	Schwerin Parchim Kleiner Platz	Glider	GRASS	44	53.418667	11.801667	Germany	Meck-Pomm
EDXS	Seedorf	Seedorf	ICAO	GRASS	21	53.335500	9.259500	Germany	Niedersachsen
EDAI	Segeletz	Segeletz	ICAO	GRASS	43	52.826333	12.542000	Germany	Brandenburg
EU92	Senden	Senden Ottmarsbocholdt	UL	GRASS	61	51.823333	7.515000	Germany	NRW
EDXT	Sierksdorf	Sierksdorf Hof	ICAO	GRASS	28	54.067167	10.742833	Germany	Schleswig-Holstein
EDLZ	Soest	Soest Bad Sassendorf	ICAO	GRASS	120	51.578000	8.213833	Germany	NRW
EDBS	Sommerda	Sommerda Dermsdorf	ICAO	GRASS	137	51.198667	11.191167	Germany	Thüringen
EKSB	Sonderborg	Sonderborg	ICAO	ASPHALT	7	54.963758	9.790503	Denmark	Denmark
CS17	Sperenberg	Sperenberg	Closed	ASPHALT	44	52.137000	13.305833	Germany	Brandenburg
EDCY	Spremberg	Spremberg Welzow	ICAO	CONCRETE	116	51.577000	14.137000	Germany	Brandenburg
EDXM	St. Michaelisdonn	St. Michaelisdonn	ICAO	ASPHALT	37	53.978333	9.145500	Germany	Schleswig-Holstein
EDXO	St. Peter	St. Peter Ording	ICAO	ASPHALT	3	54.308833	8.686667	Germany	Schleswig-Holstein
EDHS	Stade	Stade	ICAO	CONCRETE	19	53.561167	9.499167	Germany	Niedersachsen
EDLS	Stadtlohn	Stadtlohn Vreden	ICAO	ASPHALT	49	51.995833	6.840500	Germany	NRW
EP21	Stauffenbuhl	Stauffenbuhl	Glider	GRASS	265	51.159667	10.047167	Germany	Hessen
EDUA	Stechow	Stechow Ferchesar	ICAO	GRASS	46	52.650500	12.487833	Germany	Brandenburg
EDOV	Stendal	Stendal Borstel	ICAO	CONCRETE	55	52.628833	11.820000	Germany	Sachsen-Anhalt
EDOR	Stolln	Stolln Rhinow	ICAO	GRASS	40	52.740500	12.390000	Germany	Brandenburg
EDBV	Stralsund	Stralsund	ICAO	GRASS	15	54.335833	13.043667	Germany	Meck-Pomm
EDAY	Strausberg	Strausberg	ICAO	CONCRETE	79	52.580000	13.915500	Germany	Brandenburg
EP26	Stude	Stude Bernsteinsee	Glider	GRASS	75	52.563667	10.684167	Germany	Niedersachsen
EP27	Sultmer Berg	Sultmer Berg	Glider	GRASS	221	51.729500	9.992167	Germany	Niedersachsen
EZ22	Surwold	Surwold Steinberg	Glider	GRASS	30	52.956333	7.557000	Germany	Niedersachsen
EP29	Tarmstedt	Tarmstedt Westertimke	Glider	GRASS	44	53.251333	9.108667	Germany	Niedersachsen
EDCT	Taucha	Taucha	ICAO	GRASS	149	51.395500	12.538000	Germany	Sachsen
EU03	Teldau	Teldau	UL	ASPHALT	5	53.328333	10.833050	Germany	Niedersachsen
EDUT	Templin	Templin Gross Dolln	Closed	ASPHALT	61	53.032000	13.542500	Germany	Brandenburg
EKTD	Tonder	Tonder	ICAO	GRASS		54.929625	8.840316	Denmark	Denmark
EDOG	Torgau	Torgau Beilrode	ICAO	GRASS	82	51.571167	13.052167	Germany	Sachsen
EDUW	Tutow	Tutow	ICAO	ASPHALT	6	53.922000	13.218833	Germany	Meck-Pomm
EU64	Uehrde	Uehrde	UL	GRASS	133	52.100931	10.738241	Germany	Niedersachsen
EDVU	Uelzen	Uelzen	ICAO	ASPHALT	76	52.983667	10.465500	Germany	Niedersachsen
EDHE	Uetersen	Uetersen	ICAO	GRASS	6	53.647000	9.704167	Germany	Schleswig-Holstein
EP36	Ummern	Ummern	Glider	GRASS	71	52.620000	10.410333	Germany	Niedersachsen
EP39	Uslar	Uslar	Glider	GRASS	260	51.662167	9.605333	Germany	Niedersachsen
EDWU	Varrelbusch	Varrelbusch	ICAO	GRASS	40	52.908333	8.043333	Germany	Niedersachsen
EU69	Venlo	Venlo	Glider	GRASS	42	51.363835	6.215488	Netherlands	Netherlands
EDWV	Verden	Verden Scharnhorst	ICAO	GRASS	43	52.965333	9.282833	Germany	Niedersachsen
EP43	Vinsebeck	Vinsebeck Frankenberg	Glider	GRASS	247	51.842167	9.015333	Germany	NRW
EDHW	Wahlstedt	Wahlstedt	ICAO	GRASS	40	53.969500	10.221667	Germany	Schleswig-Holstein
EP47	Walsrode	Walsrode Luisenhohe	Glider	GRASS	60	52.888333	9.600833	Germany	Niedersachsen

EU08	Waltrop	Waltrop	UL	GRASS	50	51.640000	7.425833	Germany	NRW
ID	City:	Name:	Type	Rwy	Alt	Lat	Lon	Country	State
EDWG	Wangerooze	Wangerooze	ICAO	ASPHALT	3	53.782500	7.918833	Germany	Niedersachsen
EP69	Warburg	Warburg Am Heineberg	Glider	GRASS	172	51.497500	9.087000	Germany	NRW
EDOW	Waren/Vielist	Waren/Vielist	ICAO	GRASS	85	53.568667	12.652833	Germany	Meck-Pomm
EDUY	Welzow	Welzow Sedlitzer See	Water	WATER	101	51.557833	14.105000	Germany	Brandenburg
EP53	Wenzendorf	Wenzendorf	Glider	GRASS	70	53.336333	9.778333	Germany	Niedersachsen
EP54	Weper	Weper	Glider	GRASS	360	51.712500	9.802833	Germany	Niedersachsen
EDKW	Werdohl	Werdohl Kuntrop	ICAO	GRASS	317	51.297000	7.816667	Germany	NRW
EDBW	Werneuchen	Werneuchen	ICAO	ASPHALT	80	52.631667	13.768667	Germany	Brandenburg
EDLX	Wesel	Wesel Romerwardt	ICAO	GRASS	21	51.662833	6.595833	Germany	NRW
EDWM	Weser	Weser Wumme	ICAO	GRASS	18	53.053833	9.208667	Germany	Niedersachsen
EP23	Wesseln	Wesseln Steinberg	Glider	GRASS	191	52.083667	10.018333	Germany	Niedersachsen
EDXW	Westerland	Westerland Sylt	ICAO	ASPHALT	15	54.911667	8.342500	Germany	Schleswig-Holstein
EDWX	Westerstede	Westerstede Felde	ICAO	ASPHALT	9	53.288667	7.930833	Germany	Niedersachsen
EDWP	Wiefelstede	Wiefelstede Conneforde	ICAO	GRASS	7	53.321333	8.073667	Germany	Niedersachsen
EDWI	Wilhelmshaven	Wilhelmshaven Mariensiel	ICAO	ASPHALT	6	53.502167	8.052167	Germany	Niedersachsen
EDVQ	Wilsche	Wilsche	Glider	GRASS	55	52.524667	10.461333	Germany	Niedersachsen
EDCW	Wismar	Wismar	ICAO	GRASS	12	53.914667	11.501333	Germany	Meck-Pomm
ETNT	Wittmundhafen	Wittmundhafen	ICAO	ASPHALT	9	53.547833	7.667500	Germany	Niedersachsen
CS08	Wittstock	Wittstock	Closed	ASPHALT	69	53.202500	12.523667	Germany	Brandenburg
EP57	Wittstock	Wittstock Berlinchen	Glider	GRASS	79	53.225833	12.567833	Germany	Meck-Pomm
EP58	Witzenhausen	Witzenhausen Burgberg	Glider	GRASS	206	51.350333	9.824500	Germany	Hessen
EDGW	Wolfhagen	Wolfhagen Graner Berg	ICAO	GRASS	314	51.307167	9.175333	Germany	Hessen
ETNW	Wunstorf	Wunstorf	ICAO	ASPHALT	58	52.457167	9.427167	Germany	Niedersachsen
EDXY	Wyk auf Fohr	Wyk auf Fohr	ICAO	GRASS	9	54.685333	8.532000	Germany	Schleswig-Holstein
EDUZ	Zerbst	Zerbst	ICAO	CONCRETE	82	52.002000	12.152500	Germany	Sachsen-Anhalt
EP68	Zierenberg	Zierenberg Dornberg	Glider	GRASS	420	51.362500	9.339667	Germany	Hessen
EU86	Zschorna	Zschorna	UL	GRASS	141	51.386389	12.820278	Germany	Sachsen