

Line 311



User's Guide

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About the line

Line 311 connects Jelenia Góra with Poland/Czech Rep. state border in Jakuszyce and Korenov (CZ). It's a single-track line, 46 km long and 50 km/h speed restriction, electrified from Jelenia Góra to Szklarska Poręba Góra. Runs mostly throughout Pogórze Sudeckie, Góry Izerskie and Karkonosze mountains. Szklarska Poręba Góra (708 m n.p.m.) is the highest railway station in Poland, and Jakuszyce (884 m n.p.m.) highest railway stop.

Cross-country World Cup takes place every year in Jakuszyce (Polana Jakuszycka) as well as Bieg Piastów contest. Also Olympic Biathlon Centre is located down there

Poland/Czech Rep. state border is located on 40,100 km of the line.



History

Genesis

Today's line 311 had been built between 1888 and 1902 as Kolej Izerska (ger. *Tannwalder Zahnradbahn*) in Karkonosze and Góry Izerskie mountains. The line connected Austria-Hungary's towns *Jungbunzlau* (today's Mladá Boleslav in Czech Rep.), *Reichenberg* (Liberec) and *Gablonz* (Jablonec nad Nisou) with Prussian cities *Hirschberg* (today's Jelenia Góra in Poland) and *Waldenburg* (Wałbrzych). The line allowed export coal from Prussia (Waldenburg) to Austria, wood from Karkonosze and Góry Izerskie mountains and glass products produced in glassworks surrounding area.



Before 1945 r.

First section of the route from Liberec to Jablonec, was opened 28/11/1888, and Tanvald extension in 11/10/1894. In the same time, prussian section from Jelenia Góra to Piechowice were finished and started operation in 20/12/1891. In 1899 another section had been built - now from Tanvald to Kořenov where, besides couple of tunnels and bridges, the 4744 meters long cog railway mechanism was applied, on the places where gradient was 58‰. The Tanvald-Kořenov section was opened 30/06/1902, and after the construction of the bridge over Iżera River in 1/10/1902 the whole route was completed.



In 1911 Prussians started to electrify their part of Kolej Izerska with 15kV AC power. But electrification of the whole section from Jelenia Góra to Kořenov was finished just in 15/02/1923, due to First World War. In 1926 Prussians started to operate with ET-89 Rübezahl electric locos, which were designed and dedicated only to Kolej Izerska. They were produced in Linke-Hoffman factory in Wrocław (today's Pafawag) with cooperation with Siemens. Typical train consisted of two ET-89 locos (in front and rear) and eight passenger cars. The trip from Jelenia Góra to Kořenov lasted about 1:40, so the average speed was 33km/h (20 mph).



EZT ET89 (źródło: wikipedia.org)

After 1945 r.

Second World War doesn't result any serious damages to line infrastructure, but post-war plunder by Soviet Red Army and locals does. Reconstruction of railway traction was not possible, because power plant in Ścinawka Średnia - which was built especially to provide power supply to Kolej Izerska - was completely destroyed by USSR Army. In this time, the train from Jelenia Góra to Kořenov run about 2:17 (~19km/h - 12mph). There were only two pairs of trains on this section in 1946, but another two were added in early 50's, and the driving time was reduced by 30 minutes.

More restrictive rules about border zones and lack of agreement between polish and czechoslovakian government causes suspension of international trains on this line, and additionally, section between Jakuszyce and Tkacze was closed to civilians (only forest guards and military border guards were allowed there). Due to these restrictions, passenger trains reaches only Szklarska Poręba Górna station. But in 1958 governments of Poland and Czechoslovakia signed document which corrected the border course. Thereat, Poland transferred Tkacze village with railway station, tunnel and bridge over Izera River to the other side of the border. Tkacze were renamed to Mýtiny, and shortly became a part of Harrachov town. In 1963 refurbishment of Mýtiny – Kořenov section had been done, and therefore Harrachov obtained railway connection with the rest of the country.



Re-electrification of Szklarska Poręba Górna - Jelenia Góra had been done in 30/09/1987, and from this time, passenger trains are operated by electric locos or EMUs. The section from Harrachov to Szklarska Poręba Górna via Jakuszyce was not used till 2010, although ineffective attempts to its reactivation were made in 1992. But in 2008 tracks and infrastructure were transferred from Polish State Railways to Exchequer, and then to Dolnośląskie Regional Board in concept of reconstruction the line.

The refurbishment of Szklarska Poręba Górna to Kořenov via Jakuszyce (state border) has started 8/05/2009, and finished 2/07/2010. Actually passengers are operated by polish and czech railcars.

About the route

Informations

I've been working on this route for six months. The Szklarska Poręba Górna - Harrachov section is 16 km long, and driving time is about 30 minutes. The route starts on Szklarska Poręba Górna station (708 m n.p.m.) and rises throughout Szklarska Poręba Huta stop (749 m n.p.m.) until reaches Szklarska Poręba Jakuszyce stop (886 m n.p.m.). The elevation on this section is 20‰. These values are not identical in the game, but similar to authentic. After Jakuszyce stop, the route decreases also about 20‰ until reaches Harrachov, passes state border through the way. Speed limit is 50 km/h on the whole route, except some crossings where limit is 15 km/h.

To create this route I used:

- "Szklarska Poręba Górna - Jakuszyce - Szklarska Poręba Górna" cz.1 & cz.2 video by **Pt47-94**
- "Cabview SA134 KD Szklarska Poręba Jakuszyce - Granica Państwa - Harrachov HD" video by **alfajet777**
- Google Maps & Google StreetView + Wikimapia
- ...and many websites and images/photos :)

Known bugs

Both the author and the game itself has its limitations. You shouldn't expect 100% realism due to the fact, that the route was based only on photos and videos. Surely you can find some objects errors. But you can close one eye and just enjoy the ride, it's just for fun :)

- there are no culverts. Because no.
- buildings and its textures are just to be. Nothing more.
- mileposts are located every 100 m, but mileposts with distance only every 1000 m.
- you can find many "blinking" objects. It's because of overlapping textures. I'm trying to fix that successively , however I still find new ones.
- In the places with many objects (i.e. Jakuszyce) the game can slow a bit. I had 8 FPS there. Well, the game graphic engine is quite archaic.
- You shouldn't care too much about punctuality. It's hard to reach. Even A.I. has problems with this, driving too slow uphill and too fast downhill.

Signaling

You can find some signals and indicators throughout the route. On the **polish** side:



There is a section in braking distance where max speed is 15 km/h. You should reduce your speed.



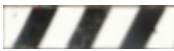
Beginning of section with reduced speed



The end of section with reduced speed



You should play a horn [**Numpad ENTER**] or [**Numpad +**]



There is a railway stop in braking distance



Marks train stop place

On the **czech** side:



There is a railway stop in braking distance



Marks train stop place



The end of platform

Controls

Basic keys:

[F] - reverser forward; **[V]** - reverser backward
[Z] - power increase; **[A]** - power decrease
[Q] - brake increase; **[A]** - brake decrease
[1] - emergency brake
[Numpad ENTER] / **[Numpad +]** - horn primary/secondary
[F5] - opens/close left doors
[F6] - opens/close right doors
[DELETE] - EB cancel

Other keys:

[CTRL+V] - shows current speed in kph/mpg
[CTRL+A] - activates/deactivates A.I.
[CTRL+X] - shows FPS
[CTRL+T] - opens/close timetable(s)
[F1] **[F2]** **[F3]** **[F4]** - different cameras

How to start? It's easy:

1. Wait for green light on the semaphore
2. Close the door **[F5]**
3. Decrease brake **[A]** until it reaches 0
4. Move reverser forward **[F]**
5. Increase power by **[Z]**

Make sure not to exceed 50 km/h speed limit and remember that you riding uphill to Jakuszyce and downhill after that :) Also remember about cancelling EB (bottom-right corner of the screen), if you don't do that, the emergency brakes will apply. Have fun!

Objects used in the route

Autor	Obiekt(y)
Adam Priseman	straight.b3d
Uwe Post	las_row.b3d
A.Lobach	Golf.b3d, Kadett.b3d
P.Barnett	all cuttings&embankments
HLJ	hungarian trees objects
Kusza	sc4.b4d
bubu88	Suzuki Ignis.b3d
krisz	kerites_20m.b3d
phontanka	peron-regi.b3d
Luca Revello	oropa.bmp
graymac	pw1.b3d, pw3.b3d, pw7.b3d, midi-coach.b3d, peugeot_van.b3d, Polo.b3d, toyota_van.b3d, transit.b3d
Luigi Cartello Sergio Usai	Panda.b3d
Iacopo Di Battista Eugenio Rago	binarionomassicciata.csv, pontecurvo2.csv, abete.csv, gbhs.csv, pendiodx.csv, campo_tennis.csv

Thanks to

I would like to thank the following people, without whom this route will never be created:

- **TaffyCross**: for huge help given with version 1.1 of the route, advices and tests
- **zgred07**: for permission to use his SA134-003 textures
- **andrzejlandrzej**: for permission to use his CABVIEW from SA134
- **HLJ**: for magnificent trees, shrubs and other vegetation objects
- **graymac**: for great cars objects
- **Pt47-94 & alfajet777**: for videos
- ...and my employer: for looooooots of free time in work ;)

Version history

v1.1 [25/10/14]

- graphics: some graphic files have been optimized, so the route should work better from now
- objects: improved curves - they are a lot smoother from now
- objects: fixed some switches
- objects: fixed signal on Szklarska Poręba Górna station
- others: added autumn version of the route

v1.0 [21/03/14]

- the route is done and published