The Revolving Transient

by Lukas Reichel

"We have to make things visible, which can not be seen!" Stanley Kubrick

The conception of the REVOLVING TRANSIENT is based on the idea of creating a hyper fast vehicle while preserving the spirit of cable railway systems. It will not be the next generation, but a total redevelopment of the concept of moving with the use of a rope or a wire.
Beyond mountainous areas a conventional funicular mutates into a merry-go-round toy and is denied its unspoilt functional claim. Many cities build cable systems not for ordinary transport but for their own short-lived attraction. In that case we have to be on the lookout for its historical intentions and return to the starting point, rather than building oversized furniture for an alleged new-urbanity. A city is more than a panoptical collection of technology, instead it is an organism, which will survive by reproducing new techniques of growth and change.

Inspired by the stages of steel rope production a new blueprint has been defined, how to move not on, but "in" a rope.
The principle is to send out a cabin (designed for 27 passengers) through a cable spinning machine. Two super size spinning drums knot six strings (thickness: ~2.5 cm) to one. Each of them rotates in the opposite direction. The generated pressure moves the cabin. By relaxing one of the drums so that it rotates in the same way like the other, and simultaneously tighten the other drum, the cabin blasts through along the wire. We are theoretically expecting a high-speed of ~200 km/h. Both spinning drums will be moved by two ~7 MW engines (enormous micro-step-motors [400 gon], so that the rotating procedure can be controlled precisely).
For smoother gliding, the cabin has grooves on its metallic surface. Each of those grooves is outfitted with a linear motor installation, to keep the distance between the rope and the first "skin" and help stick it to the cable. This effect ensures that the ropes will always bundle at the endings. Because the cabin will rotate while is "driving", a second skin on ball bearings is needed which keeps the interior in balance. The pilot does not control an ordinary on-board-engine, but the number of revolutions of the drum.
The journey itself becomes an event for the passenger. The transparent front of the cabin shows the function in an impressive way. Flitting impressions accompany the user who is observing the spectacle of the spreading rosette of cables. In addition port-holes guarantee a view outside. You will not notice the surrounding mechanics, because of the high number of revolutions. Rather it will feel like driving trough a transparent, barely existing tube! Your will only hear a dull sound.
By spinning, the ropes will shorten. To compensate, the drums are designed retractable. We assume that the distance between one drum and the opposite one can be up to ~1700 m.

The REVOLVIENT can be used for improving local traffic or as an intercity-transport-system. A trans-continental connection is conceivable if the technology is perfected for even higher speeds (~400 km/h). With the building of offshore-funicular-stations you will reach destinations overseas. The REVOLVIENT does not need an expensive pavement, so it would be a real alternative to expensive suspension bridges. The axle of an R-STATION can be build up variably. So it can be put in service for high altitude transportation as well. The REVOLVIENT will overcome extreme topographical areas without interrupting the motion of moving.

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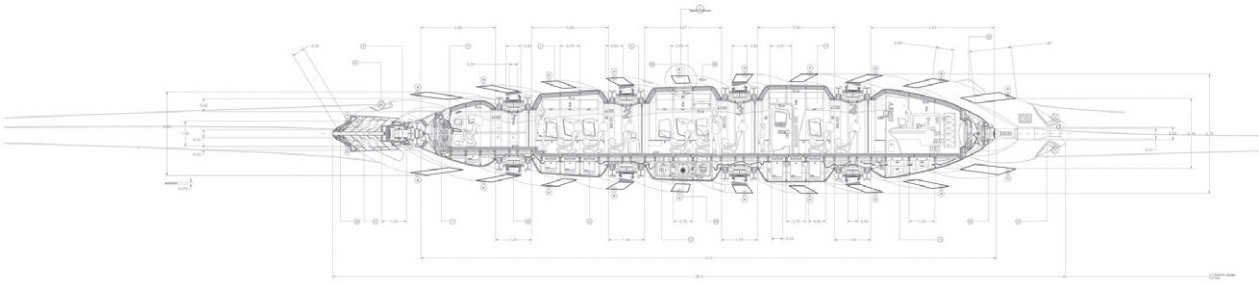

Detailed Section of the REV Gondola
(German Railways Version, Class 1) cutting
the rotating wrapping and the solid axle