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Article in *The Fife News:* Falkland Road to Falkland Light Railway: Proposed 'Railplane' System



Proposed 'Railplane' System to Falkland

"The Great War put a stop to the steps that were being taken by a Company of local gentlemen to construct a light railway from Falkland Road to Falkland. The sum of \pounds 7,000 was to be granted by the Light Railway Commissioners, and the County Council were to give a loan of \pounds 2,000. After the war, the cost of construction was found to be prohibitive, and the scheme was dropped.

Recently, Mr George Bennie, a Glasgow engineer, approached the Ministry of Transport with details of his patent 'railplane' system, and was referred by the Ministry to the promoters of the Falkland light railway, among other schemes mooted in Britain. Mr Bennie has paid a visit to Falkland district, and he was in Cupar last week, accompanied by several Falkland gentlemen. He was most enthusiastic in explaining his 'railplane' system of transport, which is very ingenious, and involves a great saving in construction and running costs. Briefly, the system is a link between the existing land and air system of locomotion. Mr Bennie, when in Cupar, stated that he intended to drive the propellers of his carriages with engines made by the Wolseley Motors Ltd., Birmingham. The engine is the ordinary car pattern, the only alteration being that the controls are altered to make it suitable for an aerial car. This car may, if desired, be made to travel at the speed of two miles a minute, if the length of track permits. When, however, he was informed that the Fife Light and Power Tramways Company had a cable in Freuchie, Mr Bennie said that would simplify matters. His original idea apparently was to take electric current from the guiding rails of his track to drive electric motors which would work the propellers.

Uses

When told that the Falkland light railway was mainly intended for the transport of agricultural products and goods, as well as passengers, Mr Bennie replied that his aerial cars were quite fitted to carry potatoes, etc. It is said that the London and North Eastern Railway Co. favour the scheme. Seeing the rails can be put over any land or hill, Mr Bennie holds that all the principal towns in Fife could easily be connected by his 'railplane'.

'The Electrical Times' last autumn contained the following descriptive article, which gives a clear idea of the Bennie 'railplane':

'There must be many engineers who have their doubts as to the soundness of the present ideas concerning high-speed railway traction. Need the electrical engineer necessarily copy the steam engineer? The deadweight per unit of passenger in the modern railway train is enormous; the faster the train travels, the more necessary is it to keep down the leading bogie so that it does not actually leave the track on down gradients. And the punishment of the track is terrible. We have always thought that there was something totally out of proportion in a modern steam railway express,

with its enormous locomotive punishing and pounding the rails at a speed of sixty miles an hour. Such thoughts lead one to take an interest in schemes that to some people and in some respects may at first seem almost fantastical. Why tie the vehicle down to the track by weight or by any other means? Why not let it even press upwards instead of downwards if necessary?

Mr Bennie claims that his aerial railway is a link between the existing land and air systems. He says that is it safer than the land railway, and as swift as an airship or aeroplane. It eliminates the main dangers of aerial travel without sacrificing the advantage of speed which the aircraft of today possesses over any form of road locomotion.'

Structure and Mechanism

The structure and mechanism of the thing can be seen from the above illustration. A steel rail is carried on cantilevers supported from upright standards. The height depends on the object to be cleared. Suspended from the steel rail is a saloon car driven preferably by an electric motor, with air propeller operating in front. At the rear is another propeller. Both propellers, however, can operate for either forward or reverse speed. As the saloon car will not have to withstand the many shocks incidental to road travel, it does not require to be built in the same substantial manner as the railway saloon, but there is no reason why it should not embrace all the popular features of this class of land travel. We are told that it would accommodate fifty passengers, and would have a total weight of between six and eight tons.

Reverse from Ordinary Railway

According to Mr Bennie's idea, with his aerial system, the cars will be so constructed that the greater the speed, the lighter the cars become; with the ordinary railway saloon, the greater the speed, the heavier the cars become; and heavy cars require a greater horse-power to drive them. Parallel to the overhead steel rail, but immediately below the saloon car, is another rail which is equipped with a device designed to keep the vehicle from swaying in its flight. Otherwise the car hangs free. Flight is really the correct word to use, because when the saloon is travelling under its own power at a speed of anything from 60 to 120 miles per hour, it is obvious that the load which it imposes on the overhead rail will be negligible. The rails will merely act as guides.

Capable of Wide Adaption

A new system of transport on those lines might have advantages both from the engineering and from the economic points of view. It dispenses with much survey work, and renders unnecessary the work of tunnels, heavy cuttings, high embankments, bridges of large and small spans, as well as the cost of land and fencing. The interference with land suitable for cultivation is quite eliminated. Such a railway is capable of being adapted to widely varying conditions as regards configuration and contour of the land, and may be laid practically at ground level or at any convenient height above it. Such a system of transport should be less costly in respect of operation, capital outlay and maintenance than a modern railway, and would thus conduce to cheaper travel.

The carrying capacity and headway of such a railway are mainly dependent on the efficiency of the electrical signalling devices under which the system would be operated.

An Adjunct to Existing Railways

Of course, one need not assume that the existing railways must be superseded. They will always have a use for freight purposes. The idea is that the new system could be grafted on to the present railway systems as an adjunct to their permanent way services. It might, for instance, be introduced as supplementary means of travel either to open up new districts or to give fast communication to popular resorts, such as Brighton, or for linking up large industrial towns. It could also be employed with beneficial effects to relieve the transport congestion which is becoming a pressing problem in big cities. This is a point that requires no elaboration."