

Replication Planning for  
**Oahu Railway and Land Company Pearl City Peninsula Railbus**



Hawaiian Railway Society Collection

**Purpose:**

This document is a planning guide for the replication of the Oahu Railway and Land Company (OR&L) Model TT railbus used on the Pearl City Peninsula for the convenience of the residents.

## **Background:**

OR&L records at Bishop Museum including Annual Reports, accounting records and one shop report document the construction of a railbus for use on the 1.1 miles of track between the Pearl City railroad station and the tip of the peninsula in 1921. The railbus was built on a Model TT (ton truck) chassis. Personal photographs of both residents and visitors of the Pearl City Peninsula document the appearance of the railbus and provide clear clues to its construction.

The late Victor Wiseburger left a significant gift to the Hawaiian Railway Society and it was decided to remember both Mr. Wiseburger's love of antique cars and interest in trains and the Hawaiian Railway Society by building a replica railbus in his memory.

Should the funding provided by the gift be found insufficient for completion of the railbus, the Hawaiian Railway Society will provide the funds necessary to finish the project.

## **Replication Philosophy:**

The Model TT Railbus will be replicated using period parts and construction techniques throughout except where good engineering principles and practices to increase safety by using more modern materials or construction techniques are called for. Original parts are in all other cases preferred over reproduction parts. It has been already decided by the Restoration Committee, who are in overall charge of restoration and replication, that hydraulically operated drum or disk brakes will be used on the railbus in the interest of safety and the original wood spoked and later pressed paper wheels will be replaced with aluminum centered wheels with steel tires which will appear identical to the pressed paper wheels.

## **Replication Plan:**

### Frame and running gear:

A period correct 1919 Ford Model TT chassis, engine, Ruckstall two speed rear axle with Hassler springs has been acquired. The chassis will be stripped of all un-necessary attachments, inspected, repaired as required, sand blasted, primed and painted. The Ruckstall axle will be narrowed to fit the 36-inch track gauge and rebuilt in its entirety. The front axle and elliptical springs will be fabricated using new materials. Wheels will be custom manufactured of aluminum centers and steel tires from plans provided by HRS.

### Engine/transmission:

The existing 1919 engine or comparable engine and transmission will be restored by a professional shop experienced in repair of Ford Model T engines and transmissions.

### Body Work:

The radiator and engine hood which form part of the body work will be original, rebuilt or restored Ford Model T parts as appropriate. The main body will be built of sheet metal panels over a wood frame. Period appropriate accessory parts either original or reproduction will be acquired as needed.

**Milestones:**

Within one year from start of replication a rolling chassis to be completed.

Within two years a fully operational and tested chassis to be completed.

Within three years the project will be completed and the railbus placed in service.

**Operation:**

It is intended that the railbus be regularly operated under charter for small groups of visitors (12 or less). Fares received from the operation of the vehicle will accrue to the vehicle's maintenance fund which will be maintained at no less than \$3,000.00. If funds exceed \$3,000.00 the excess will be applied to the general restoration fund.