## Oahu Sugar Company - 1944

#### **Rationale**

I have modeled Hawaii's three-foot (36 inch) narrow gauge Oahu Sugar Company as it appeared and operated in 1944 under wartime conditions. Perhaps I chose the WWII era as: most published photographs were taken by servicemen/railfans stationed in Hawaii during this period. I am modeling Waipahu, Oahu and surrounding areas in summer with clear skies. This layout demonstrates how techniques of European exhibition layouts can be applied to an American semi-permanent layout. Valuable assistance was rendered by Paul Dolkos. Inspiration was also garnered from Ty Treutelaar's Aina Nani Railway, Iain Rice, Chris Nevard,, and Doug Gurin. Two themes will be evident – sugar cane operations and WWII as it affected the home front.

#### **Subject and Scale**

Benjamin F. Dillingham founded the Oahu Sugar Company (OSC) on 20 acres of land leased from James Campbell in the vicinity of Waipahu. IN 1897, its first locomotive arrived, and in 1899 the first sugar cane was harvested. Additional locomotives then followed. The plantation grew to over 12,000 acres of leased land. By 1939, the railroad reached sixty miles of three-foot gauge track plus an unspecified amount of portable track on which 939 plantation cars (860 four-ton cane cars, fifty flat cars, and 29 other cars) operated. During WWII, over 2,800 acres were commandeered from the OSC for a POW camp for German prisoners.

I decided to model Hawaii's OSC railroad as it appeared in 1944, as available photos of ammunition trains show the OSC towing bombs to be dispersed in sugar cane fields. After the surprise attack on Pearl Harbor, the US Navy decided it prudent to separate bombs from planes and ships in the event of another attack. Also, the US Army Air Force Kipapa Airport was operational in 1944 is depicted on my backdrop with a gate modeled in three dimensions. By late 1950 the railway system was eliminated from the plantation. I am considering modeling Waipahu Battery (1942 - 1945), located in a sugarcane field somewhere in the West Loch vicinity which included **Naval Antiaircraft Shore Battery No. 2** (1942 - 1944) four 5-inch naval guns. A 120mm AA battery was located near the Waipahu High School in 1944.

I decided to model Waipahu's water tank with a flat roof given the lack of snow in Oahu and some available photos. The number of figures has minimized since their stationary poses require too much suspension of disbelief (a lesson learned from Paul Dolkos). Based on available photos, many O scale vehicles are parked in Waipahu to demonstrate what a busy mercantile center it was. O scale photos were utilized to make a convincing scene quickly with false fronts.

Modeling in Fn3, I have modified a Bachmann Porter engine to run on batteries as Waikane Number 9, and I have scratch built a tender for it as well. A second locomotive (0-6-0T) by Piko with battery installed by G Scale Graphics awaits repainting and vinyl rub ons. The sandbags resting on the front of my locomotives are mc1041 1:18 scale from Marauder Gun-Runners www.marauderinc.com.

For those curious, the sugar cane crane was a 1:50 scale Northwest Dragline Model 25-D by Spec Cast which I painted to reflect long service in the Hawaiian sunshine. I modified it by removing the bucket and replacing it with O Scale Detail, LOGGING CLAW, Finished Model by Model Tech Studios. Crossing the Waipahu Yard tracks is an International D-2 pickup Truck in 1:25 scale. Some of my palm trees were by Creative Accents (distributed by Handley House). I also used two Ameri-Towne 503-Trackside Shed in O scale for field sheds in forced perspective. The Military Police Figure III is a 1:18 scale from American Diorama AD-77416.

Future modeling projects include modeling irrigation ditches.

# Oahu Sugar Company – 1944 Content and Scope

My layout consists of various Layout Design Elements (LDE) including the town of Waipahu in O scale (forced perspective) and Waipahu engine terminal. Another LDE is a trestle (appearing in a photograph of 1946) which I have scratch built.

### **Modeling Standards**

I have scratch built most of the major structures on my layout. Shapeways-produced sugar cane cars are based on drawings by the late Jim Dunlop as they appeared in Bob Brown's *Narrow Gauge and Shortline Gazette*. Visitors may note W. Britain's 1/30 scale *Air Base Sentry Box & Gate with 15 MPH Sign, WWII* (No. 51019) stands in for a US Army sentry box for which photographic evidence exists. I use Llagas Creek Railways code 215 track (scales to 65 pounds/yard) with no ballast (as verified by photographs of the prototype).

### **Operational Design**

My layout is a continuous oval with some possibilities for realistic operation built in.

#### Construction

Largely built in my garage and then assembled and completed in my finished basement, my layout consists of fascia, valance, and wings. Valances conceal LED and florescent lighting. Backdrops are Curved styrene, concealed by wings. Minimal scenery with a low horizon was chosen. Most backdrops have two artfully disguised penetrations allowing train to move from one scene to another. I was assisted by Gary Eames, Jim Stapleton, Dick Kilday and many others who know who they are.

### **Presentation and Visual Design**

Layout skirts are made of white paneling. Valances and fascia match the room walls. My wife Kate painted the backdrops using acrylic paints on styrene (note XT-10 Kipapa military material storage tunnel). Kate plans to paint a POW camp on one of our backdrops.

# **Bibliography**

Honouliuli Gulch and Associated Sites

Draft Special Resource Study and Environmental Assessment, National Park Service, US Department of the Interior, May 2014

Sugar Trains Pictorial Glenwood Publishers, 1975 Jesse C. Conde

"The Oahu Sugar Cane Plantation", Waipahu Author(s): John Wesley Coulter Economic Geography, Vol. 9, No. 1 (Jan., 1933), pp. 60-71

Hawaiian Railway Album WWII Photographs Volume 3 – Plantation Railways on Oahu The Railroad Press 2007 Gale E Treiber

Affidavit Hans L'Orange et. al March 31 1942