

1953

Repair of Generator

June 7th at 4:00 pm. Ernest Cabral had turned both bearings and rear end bell. He said he had finished one end last night. It looked good on floor. ^{Bearing of press fit into bell.} The shaft had extension welded on and part built up.

June 9th at 6:00 pm. He had turned other end bell. It looked good. He said front bearing was worn about .005" out of round and was .004" large. He will ream it out round, cut new oil grooves and then turn shaft to fit bearing. He is best machinist I've seen on Maui yet. Took rotor from MVC over to night foreman. He will have it brazed up properly.

June 12th at 2 pm. End bells & rotor all finished but disassembled. He said they had assembled machine and found 2 had not allowed any end play. He then turned $\frac{1}{32}$ " off each end flange of rotor. The rotor spun freely. He was boring out coupling which had been bushed. The bushing was made .003" oversize and pressed in with a $\frac{3}{16} \times \frac{3}{16}$ " key into coupling. The hub on fan had to be reversed, fan plate in front end bell fastened down, brushes adjusted over slip rings, Rear bearing closed and front bearing gasketed.

June 13th picked the machine up and took to Kolo Kolo on June 15th.

July 7th brought machine back to central shops and had wood bearing bushings made. Ernest Cabral worked. 8 hrs on 7th, 4 hrs on 8th and 1 hr on 9th. Picked machine up on 9th and took to Kolo Kolo on 10th. Bearings too tight. Loosened on 10th, more on 11th, more on 13th and more on 15th. The wood seems to shrink when it gets hot.

Wood bearings nice + quiet electrically but didn't last long, only about a month.

On 23rd June 53 the generator was tested at Central Power plant with a megger. The stator showed 50 megohms to frame