HAWAII - Thomas A. Caranci, Superintendent Oahu Country Club

On the chain of Islands of Hawaii there are about 50 golf courses, more than half of the total in the state are on Oahu. Of these, four are public courses operated by the city, twelve are private or semi-private courses open to the public, two are country clubs open to members and their guests only, eight are military courses where civilian guests of military members may play. One new course is being built on Oahu which Mr. Basil Moulder is Superintendent Waielea Golf Course in Kihei, a resort development which is in process of building their second golf course. Also money from Japan is going to build several golf courses in Mauna Loa, heart of the Volcanos where a large resort will begin.

Many changes here of superintendents moving to other golf courses on the Islands. Bill Hayashi moved from Kakaha Course to Waikoloa Golf Course which is a resort course.

Oahu Country Club has quite a bit of history behind it. It was started in 1906 and only a few holes at a time were built. They bought a mule for \$1500.00 and hired a manager for \$150.00 a month

Oahu C.C. has the annual Manoa Cup and the Title of Hawiian Amateur match play Champion, which comes down to a story book finish.

I believe that here in Hawaii it is much more difficult to maintain a golf course than anywhere in the mainland or the States (in Hawaii they rather use the word mainland)

- 1. Insects, ary worms, lawn moth, bill bugs, ants, sod web worm, here these are all year round problems.
- 2. Fungus, only problem we have here is pythium and only when we have heavy rains between November and March.
- e. We have a regular maintenance program here, 12 months of the year. We mow greens 7 days a week, mow tees four days a week, mow green banks 3 days a week, mow fairways 2 days a week.

Fertilizing programs are much greater here. We use much more fertilizer than any of the mainland course. But, as for where I'm at- at Oahu C.C. I use no more than I used in the mainland. Our repairs are much higher for replacement parts due to the fact of shipping and our busy 12 month growing season.

Is maintenance more difficult or tough? One thing I must say, the weather is great! Here we cannot compare one course with another because of soil and weather conditions. On Oahu C.C. I get from 90 to 180 inches of rain per year, bit it all comes between October and March. We can get as much as 3" in one hour or 30" in Oct. Nov. Dec. and Jan. so you see with that kind of rain our maintenance level costs rise because we must do a great deal of hand rotary mowing. At times even cut fairways with rotary mowers. In my 7 years at Oahu C.C. I had to do this 3 different years. Any construction or heavy renovation must be done during our dry months - June, July, August September. This year we had some light rains

all summer, getting only 2" per month - that 2" in only a very little at a time (periodically), like .05 of an inch and drys in a very short time. So, therefore, I have just completed a new irrigation system with fully automatic for greens, tees, green banks, and approach areas and areas like fairways and roughs and between we have quick coupling system, when we must have water and get it through our clay soil Here sometimes the cracks are large enough for you to put your foot into it, so you see it's "feast or famine".

Weed control can be accomplished here and I am determined to do it. We have rebuilt 13 greens since I was first appointed here in 1970. My second phase was a complete irrigation system and my third phase is weed control and fairway renovation. Then I must travel to new pastures that's for sure.

My greens are verti-cut once a week, topdressed lightly every two weeks and a liquid program for all the greens every 7 to 10 days all year round. Fairways, tees, aprons, banks, roughs are fertilized 4 times a year, with new irrigation it may increase a bit until I get all my fairways in Bermuda then go back to my required 4 applications per year. Again I repeat, rain fall on all courses is different, even though only a few miles apart. Oahu C.C. 180" - Waialae C.C., 21"-25" and the west side of the Island 4" to 6" per year.

Budgets here in the finer courses including the resort courses, go from \$300,000.00 to \$600,000.00. Labor is 70% of the budget. Some of the \$600,000.00 budgets are mostly supplies and fertilizer. Some of the resort courses use \$80,000.00 to \$100,000.00 for fertilizer and chemicals At Oahu C.C. I spend \$32,000. We also spray all trees for insects and fertilize all trees twice a year.

Some of the \$600.000 budgets on courses, labor is covered with 80% of 300,000.00. But all in all we do have a beautiful area here, the weather is fine and it does get cold in the rainy season. Our temperature can drop from 72 average to 58-60 and Bermuda grasses then grow slowly. We had a dry summer, high humid days. Very little trade winds which is quite regular. Now it's Oct 5, and we are getting temperature 72 -91. I wish to mention that we have started an organization "Golf Course Superintendents Association of Hawaii" of which I am the president. All forms have been sent to the National Association and we are waiting to be accepted. Mr. J. Bentivegna is secretary, Mr. B. Moulder is treasurer, Mrs. E. Caranci is executive secretary. It is all coming along really well.

December 9 - Northern California Turfgrass Council Industry Awards Program at Spenger's, 1919 Fourth Street, Berkeley. Advance Reservation deadline Friday, December 3