

# Equipment Maintenance Programs: People and Their Machines

*Undeniably, people are the most important ingredient in a successful operation. Coming in a close second is the equipment these people use to groom a golf course. How we organize, house, purchase, operate, and care for the equipment also plays a crucial role in the overall success of our operations. I was hoping for more details on cutting-unit maintenance, but we'll visit that topic in more detail when we discuss mowing practices in coming issues. For your consideration in this issue, several superintendents and equipment managers have shared their thoughts and practices on organizing their overall programs.*

*Joel Jackson*

## Best Practices

BY JOE EAGLE

*Shop Manager, Quail Ridge C.C.*

Preview - I am basically new to the golf course business, although my background is in the equipment field as well as in teaching continuing education courses at Palm Beach Community College. This may sound like a strange mix. Stay with me.

I applied for the chief mechanic position at Quail Ridge Country Club in Boynton Beach in January 1995. During the initial interview I was told that they had combined the POA (Property Owners' Association) and Country Club maintenance operations, and it needed some help.

Step One - Assess the total layout and highlight inefficiencies to create a work flow. The operation was in desperate need of a complete overhaul. This is a practice that I do on a monthly basis now, just tweaking the system where needed. After developing a plan of action I spent time with the superintendent to get his views of the whole project. In addition, I welcomed input from other department heads of the POA. My plan seemed logical to me even though it appeared there were reservations on the part of most others. I wanted their thoughts, not their approval or disapproval.

Step Two - I created a business atmosphere in my office. I am there first as the shop manager — a leader for others — and last, a mechanic/technician.

Step Three - The employees of the maintenance department and I sat down

several times over the next two weeks to discuss past problems, including employees outside of the shop, department heads, spending constraints, equipment, responsibilities and my tentative plans for the future of the combined operation. Change does not come easily.

Step Four - I started putting my plans to work and kept a diary of positives and negatives for the first year. Questions and inquisitions would arise. The diary was a great source for helping department heads and employees see past situations and solutions. We moved on.

Step Five - Six months after these plans were enacted, my technicians and I had another roundtable discussion. We had worked very hard to get past attitude problems and work schedules and bring the equipment to a dependable and presentable level. All 437 pieces of it. No small task for myself and four others. We were now in a day-to-day routine that needed to move on. A PM schedule was finally hammered out and implemented. A PM schedule is simply a requirement of a good working atmosphere.

The figures justify the expenses in creating the atmosphere of fair workloads, operator comfort and eliminating over time requirements in all areas due to efficiently performing equipment. Most importantly, we got a true handle on expenses.

With the operators' needs now being taken care of at a rapid, pit stop fashion, we were able to shift a great deal of problem prevention back to the operators. Checking fluids on a per use basis, lubricating all fittings as needed on a per use

basis and being responsible for the machines' daily cleaning and storage were now delegated to the operator.

At about the six month period, a work order and central inventory system was re-created to put accountability on my technicians for the hours worked, repairs made, come-back prevention and accountability for parts used. A rebuilding program for accessories and main units was now also in place so rebuilt spares were available more frequently and down time was at a minimum.

A truth of nature came about because of the involvement of all concerned. Valued input by the technicians was utilized in the business plan appraisal, shared by all, then adopted or temporarily sent back to the drawing board. By not being run by a dictator who expects clones, but instead uses sound business and people

skills, the shop gets better all the time.

I expect each technician to do their job without being constantly watched over. I expect each technician to communicate with me at all times when any doubt arises pertaining to his work environment, machines, supplies, other employees or his benefits as an employee of Quail Ridge. I try to keep all promises whether they are promises of information, those requiring disciplinary action or promises to procure the necessary items to create and maintain a productive atmosphere.

The shop runs well because it must. The reels cut well and machines work as they should because of the teamwork that is the outcome of technicians knowing their job requirements, expecting quality and giving them the ability to do the best that they can. I educate with a

constant back-to-basics approach. Keep it simple, be safe and enjoy your day. The department heads have the opportunity to do what they need to do, and the superintendent can concentrate on growing grass and giving me an equipment needs list with the Height Of Cut requirements.

At budget time, I share with him my thoughts for replacement of certain equipment, and he shares his wish list with me. Last year we were able to convince the powers that be to put together a contingency fund for major rebuilds or special needs that could not be forecasted. This fund has worked well in protecting the allocated budget. This interaction has built trust and appreciation for each other's job requirements. In the end, it is a true win for each of us.

## Duties, Record Keeping and Training

BY MIKE SWINSON, CGCS

*Cypress Run G.C.*

### Operator Responsibilities

The equipment operator is responsible for checking all fluids — fuel, oil, coolant and water. These are the levels that are to be checked daily. Rear ends, differentials and some cooling levels are checked only by the mechanic at their scheduled intervals unless an operator suspects a leak. The equipment operator is also responsible for the greasing of all the rollers, pulleys, etc. that are to be greased on a daily basis. The mechanic must be informed immediately of any problems whatsoever of the machine. Good communication between the mechanic and the operator about the machine's performance is essential. They can prevent accidents before they happen. After completing their work assignments the equipment operator cleans his/her machine with an air hose, followed by a complete rinsing of the machine with water. The equipment is then returned to the shop clean — the way it left.

### Equipment Records

All of our equipment has an identification number. That number is on a master equipment inventory sheet that lists the date of purchase, equipment name, purchased new or used, and the supplier's name. This is useful for the depreciation of our equipment along with inventory control and cost of repairs. A copy of this list is supplied to the superintendent, head mechanic and secretary. Our procedure works as follows: The mechanic fills out a work order for repair parts that are needed. He dates the work order and puts the identification number for each part that is used for that particular machine. The work order goes to the secretary who calls the main office for a purchase order (P.O.) number. That number is then used for the mechanic's work order. After typing the P.O. and placing the order (blue copy), the superintendent then signs the order as the purchasing agent and turns it into the main office. The main office then types a gold P.O. which is an exact duplicate of the blue copy. The gold copy is then sent to the superintendent. After the parts arrive, the assistant superintendent checks all the packages against the packing slip and the original purchase order. If all is in, he dates and signs the packing list. The

packing list is then given to the secretary who attaches all the receipts behind the gold copy. Quantities and the date received are then written on the gold copy along with comparing the receipt price against the original purchase order price. The gold copy, along with any discrepancies, is turned over to the superintendent for final approval. After signature approval, the gold copy is turned in to the accountant.

The secretary keeps a log for each piece of equipment in our computer. Each repair part is then charged to a particular piece of equipment. This is very helpful when you are trying to get approval for new equipment; you can show what the repair cost is, not including labor, for any specific time frame. This also helps you with your budget preparation for the following year. Each year you have a record so that you can start a data base which will help you with the equipment's life expectancy. The head mechanic also has an hour meter log that will help in the data base.

### Operator Training

Equipment operators are educated with training videos about the correct operation of the machine. Operators are also required to read the owner's manual