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

on each piece of equipment before they operate it. The head mechanic is responsible for training the equipment operator to properly check all oil and fluid levels, along with the correct starting and transporting procedures. The assistant superintendent is then responsible for teaching the safe operation of the machine out on the course. He is with the equipment hands-on to ensure that the job is done correctly. He then follows the equipment operator out onto the course to show him/her the correct mowing procedure.

Is It Maintenance Or Repair?

BY ROY WILSHIRE, CGCS
Grasslands Golf and Country Club

Most of our budgets have a line item called M&R Equipment. The question is, which of those two letters do we rely upon the most — M or R? At the Grasslands, we are trying to use the M for maintenance more than R for repair. We are accomplishing this only after more than three years of adjusting schedules and simplifying our equipment purchases to best match the equipment that is already here. In simplifying our equipment, we are purchasing more items with the same engines, similar hydraulic systems and equipment that has proven itself in the field. In utilizing this system, we are reducing the need for unnecessary parts inventory, which is time consuming to count and reorder when needed, thus putting the labor time in the shop versus out of the shop. We are also finding that there are less in-the-field repairs now than in previous years.

This system is working because the shop foreman and his assistant are more able to schedule their work, rather than take the next one in line. And if something does go down repairs are more easily taken care of. Let's not fool ourselves! We still have our days when it's, "Take the next number, and we'll be with you in a minute." In addition to operating under less stress, it allows the employee in the shop more time to educate himself by reading the articles in the trade magazine and attending seminars. I'm very fortunate in having a very skilled shop foreman with a good background (thanks, Bobby Ellis.). His persistence, my willingness to allow him to establish the programs and utilize a computer program for equipment are paying great dividends for us at the Grasslands.

So, do you replace the grease zerk or the bearing? Change belts in the shop when they're cracked or after their broken in the field? These are just a couple of examples of how maintenance versus repair can assist you in being more productive and cost effective. And once it's in effect, you'll find that it's much easier to use the M rather than the R.

Non-Stop Mechanics - Better than an apple a day!

BY CHUCK GAST, CGCS
Superintendent
AND BILL ELLMAN
Chief Mechanic
Jupiter Hills C.C.

Key components of a successful golf course operation involve careful coordination of a myriad of programs relating to cultivation, fertilization, irrigation, regulation and all other sorts of "-ations." However, even with all these aspects in their proper place, basic, yet technical turfgrass mowing operations are the core of a sound golf course maintenance operation for quality playing conditions.

Just as important as having the appropriate equipment to complete specific turfgrass mowing operations, proper equipment maintenance on a routine basis is essential to maintain desired mowing quality with optimum efficiency. To help us in achieving this goal at the 36-hole Jupiter Hills Club our staff has worked to establish a mechanics program with specific duties and responsibilities to each of three mechanics. We have incorporated rotational scheduling to ensure a mechanic is on duty no less than eight hours a day, seven days a week.

The mechanics staff at Jupiter Hills consists of a chief mechanic and two assistant mechanics, each with specific areas of responsibility. The chief mechanic oversees all operations in the shop area including maintaining parts inventory and prioritizing specific equipment maintenance relative to scheduled golf course operations. Correcting emergency breakdowns and general troubleshooting of less-than-cooperative equipment is also the responsibility of the chief mechanic. Primarily the chief mechanic maintains a work schedule of Monday through Friday, 6:00 a.m. to 3:00 p.m., while also filling in on weekends depending on workload and assistant mechanics' scheduling.

As for the two assistant mechanics, one is primarily responsible for routine daily maintenance that involves a thorough check of all greens mowers following each mowing operation. Roller performance, motor and clutch operation, and reel-to-bedknife adjustments are maintained on all greens mowers on a daily basis. Attention to tires, batteries, fluid levels and servicing of air filters, as well as other aspects of daily maintenance of various other equipment is also handled by this assistant mechanic.

The workweek of this mechanic is generally Monday through Friday, 7:00 a.m. to 4:00 p.m. With the majority of the maintenance crew clocking out daily at 3:00 p.m., the extra hour at the end of the day allows this mechanic the opportunity to check out all equipment and perform all necessary set-up procedures for the following day as necessary.