GOLF COURSE OWNER SAYS:

Mini-computer adds efficiency to administrative operations

by John W. Urban

Golf courses, like most other businesses, are burdened with tedious, repetitive, and time-consuming administrative office work. These procedures lend themselves to errors, either by transposition of numbers or errors in posting. The great majority of golf courses still rely on the tried-and-true hand methods of posting and office computations. Some larger courses use billing machines or other labor-saving devices to speed up their work or to improve accuracy. Only a few have the need, or the financial ability, to install a full-size computer.

At Urban Hills, we did the essential office procedures by hand methods, then turned the data over to our CPA to prepare monthly statements; monthly reports for withholding taxes, FICA, state taxes, sales tax; and quarterly and annual reports.

The accountant speeds his job by sending his work to a data center which processes the information and completes our reports. We decided that we needed a method to simplify and speed up the preparation of the data we sent to him. After considerable searching, we found a mini-computer would help us get our work done faster at a reasonable cost.

We looked for a machine which would handle accounts receivable and accounts payable, compute payroll, compile daily and monthly sales summaries, compute golf handicaps, and take care of similar office procedures.

We found many manufacturers who make units which could do the jobs we wanted done. All manufacturers make models in every price range. Obviously, if the machine has greater capacity or has more desirable features, it becomes more expensive.

**Between calculator and computer**

Our selection was the Texas Instruments SR-60. The regular unit has 40 data registers (memories) and can handle a program with 480 steps; it costs about $1,500. The expanded unit (our final choice) is needed for payroll computation. It has 100 data registers and can handle a program with 1,920 steps; it costs about $2,000.

We selected the SR-60 because it has a display feature which can be programmed to guide the operator through each step of any operational sequence. It is described as "a programmable prompting calculator," and it is designed to bridge the gap between simple desktop calculators and commercial computers.

The machine is about the size of a standard office typewriter and weighs 16 pounds, so it is easily portable. We can program it to perform operations similar to large computers, except that the capacity is not as great. It performs its functions fast and accurately. Anyone can learn to process a program with a small amount of training.

The key to solving any problem with the SR-60 is the preparation of the program. Learning to set up the programs requires more training and technique. The operating manual, programming manual, and other information which comes with the unit are awesome at first sight, but after reading the manuals and progressing from simple to more complex programs, the basic concepts become clear. The distributor was of great help in advising how some programs could be simplified. On several occasions a representative came out to guide us through programs which were too complex for us to understand.

Before we started using the SR-60 we were as skeptical as many of you are. At one time or another all of us have complained about computers and the problems these machines seem to create. The fact is that the computer is no better than the operator. If the wrong data is put into the computer, incorrect information comes out. People connected with the computer industry have coined an acronym — GIGO — from the words Garbage In — Garbage Out. Errors which all of us have seen in computer billings have been caused by an operator who put the garbage in, and not by the inanimate machine which was doing exactly what the operator told it to do.

The SR-60 uses magnetic cards, rather than punch cards, for storing programs. It is programmed in "English" rather than complex computer language, so there is no need to learn special codes or special rules. Once a program is recorded on a magnetic card it can be run through the SR-60 as often as required. The magnetic card is permanent, and a separate card is made for each program.

A program is defined as an accumulation of keystrokes or instructions which will solve a particular...
problem. After a program is developed, it is recorded on a magnetic card for future use. When this card is passed through the card-reading unit of the calculator, the calculator remembers the pre-recorded instructions. It will then automatically run the program (execute the necessary key strokes) to solve the problem, stopping only where necessary for the operator to make pertinent decisions or to enter required data. Changing from one program to another is very simple.

An outstanding feature of the SR-60 is the “prompting” capability which enables a program to display a message which tells the operator what to do next. Responses to a display may be yes, no, not apply, not known, or enter. In addition, the display can contain a message of up to 20 characters (letters or numbers) that “prompt” the operator as the program is being run.

Applications
The SR-60 can be programmed to accumulate totals, if required. For example, one of the uses is in payroll computation. As each employee’s card is inserted into the card-reading slot (and the magnetic card already has been programmed to show hourly pay, marital status, number of withholding allowances, as well as federal income tax tables, state income tax tables, FICA tables, and other deductions) the SR-60 will ask through the display how many hours the employee worked. When the hours are entered, the machine will compute gross pay and will automatically compute appropriate withholding amounts in each category, and will print these amounts and net pay on a printout.

Re-inserting the employee’s card, the machine will read the data and add the amount for each category to totals previously accumulated on the card. Thus a running total of each amount will be available on each employee’s data card, and it can be used for preparation of quarterly and/or annual reports. In addition to the cumulative totals for each employee, the SR-60 will provide at the end of the payroll computation, a complete breakdown of total amount of the payroll, amounts withheld in each category, and net payroll. This data is also available on a printout and is helpful when making up monthly or quarterly reports.

We use the SR-60 for accounts receivable, accounts payable, payroll, daily and monthly sales summaries, golf handicaps, computation of area of greens, and for a food sales summary which compiles sales by items and dollar value of each item sold in the dining room. We plan to expand the use for complete inventory control, to include computation of dollar value of inventory separated into categories such as food, liquor, fertilizer, golf equipment, shoes, etc.

The most complex problem can be readily solved with the SR-60. Its capacity literally staggers the imagination. In addition to doing the work of a regular calculator, it can be programmed to solve complex problems and to print the solutions on tape to give a permanent record.

Many tasks which were formerly farmed out can now be performed in our office more readily and more cheaply than before, and at the time we want it done. Repetitive jobs, formerly done by hand, can be done more quickly, and with less chance of error. Complex calculations, once placed on magnetic cards, can be processed many times without having to set up the problem all over again, each time you have to refer to it.

Exclusive golf programs
We have the SR-60 programmed to compute golf handicaps. The individual’s name is printed out, the date is printed, then the total of differentials is entered in the machine (for example lowest 10 of the last 20 games) then the number of differentials used is entered, and the machine will compute and print out the golfer’s handicap. If the handicap is over 45 (limit set by USGA) the machine will print out 45+. We have approximately 250 names on our handicap list, and at the prevailing price we pay to have this work done by an outside firm, and taking into consideration the cost of the operator, depreciation, and other cost factors, the amount we save will go a long way toward paying for the cost of the SR-60.

One interesting program we set up (of interest only to golf course operators) is determining size of a green. Since greens are neither completely rectangular nor completely round (but somewhere in between), we felt that if we obtained the area of a rectangle with a given perimeter and averaged that with the area of a circle with that same circumference, we would have a fairly accurate figure for area of our greens. Accordingly, we obtained the perimeter of our greens, in feet, using a wheel. We programmed the SR-60 to compute the area of a square with any given perimeter, and to compute the area of a circle with that same circumference, then average the two areas and print out the average. To obtain the area of any green we simply enter the perimeter in feet and within 5 seconds the machine gives us the area and prints it on a tape. We feel this figure is more accurate than what we used before, without going through elaborate computations to determine to the exact square foot what the size of the green is.