FM Radios on the Golf Course: The Next Best Thing to Being Two Places at the Same Time

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HETHER you choose to admit it, you live in and are part of a hi-tech society. You can't start your car without activating a series of micro-computers beneath the hood. Remember when your television set was full of vacuum tubes, and how much fun you had with your father testing them on a machine at the drug store? Or how about sitting in a quiet library and suddenly hearing a wide assortment of bells, chimes, and beeps as everyone's digital watch reached the top of the hour?

Well the computers under the hood may baffle you, you may not have looked in the back of your TV lately, and your old Timex may still be merrily ticking away, but even if you are shy of technology, as a golf course superintendent you need to take a hard look at FM twoway radio communication, one of the most useful and sensible hi-tech tools ever introduced to the golf course. Radios are not new to golf course maintenance; they have been around in one form or another for years. In the past, however, they have been inefficient, costly, and bulky. Although they occasionally accomplished their goal of allowing voice communication between two parties, their use was limited to this sole function. If you think this is all radios can do today, you are in for some surprises.

The most obvious application of a radio system on the golf course is helping the superintendent better manage his crew. Piercing whistles and bullhorns have obvious limitations, particularly during the member-guest or club championship. Citizen-band radios occasionally meet this need. Unfortunately, CBs are limited in their range, and are not very portable because they need antennae. There is also the very real problem of unexpected visitors to the channel you may be using. A CB blasting out, "How bout ya, Sugar Bear? You got your ears ears on?" could really prove embarrassing on ladies' day.

Fortunately, highly compact and portable FM radios have solved these problems and many others. They have plenty of range for the typical golf course.

If communication is necessary over a larger area, the signal can be strengthened by a repeater extending the range to many miles. A repeater is actually an amplifier that takes your transmitted signal, makes it stronger, and re-transmits it to the various receivers on your frequency.

FM systems allow you to communicate privately with your crew since you are assigned your own frequency. They are small and easily carried, with some units being as little as $6 \times 3 \times 1$ inches. They are quickly rechargeable and extremely reliable. And now the really good news—they are finally affordable!

Two types of FM units should be acquired.

- 1. Base station. This unit is usually the same or similar to the type of FM two-way radio installed in a vehicle. As a base station it is equipped with a dc power supply, an external antenna, and a desk microphone. The base unit is typically installed in the mechanic's area of the shop or in the superintendent's office, if a secretary is employed.
- 2. Portables. These are the small, handheld units. A minimum configuration for most courses would provide a unit to the superintendent, each assistant superintendent, the irrigation technician, and the mechanic.

A touch keypad for making and receiving telephone calls is a valuable and inexpensive option for the superintendent's unit. Similar in operation to a mobile or cellular car phone, it helps the superintendent stay in touch regardless of his location. This allows him to meet his often conflicting duties of direct supervision of the crew and managerial responsibilities in the office.

The advantages of reliable and immediate communication between the superintendent and the crew are too numerous to cover fully. Obvious applications include:

- 1. Testing, repair, and adjustment of the irrigation system.
- 2. Avoiding lost man-hours due to equipment breakdown.
- 3. Constant adjustment of the daily maintenance schedule to make the maximum use of available man-hours.
- 4. The coordination of activities such as tournaments, chemical applications, and special projects.
- 5. Since the maintenance workers are almost constantly on the course, they are usually close by when an accident or medical emergency occurs. Once equipped with radios, they can quickly summon help.

THE TECHNOLOGY is already available to make FM radio systems work for you and your club in other ways as well as talking to the crew.

Many clubs have installed phones on the course in case of medical emergencies and to prevent long delays between nines as players stop for food and drink. Conventional phone lines require costly installation and often ditching across the golf course.

FM radio call boxes are used on many state highways to aid stranded motorists. Similar units can now be installed on the golf course in various locations, powered either by conventional means or by solar cells, which, of course, eliminate the need to install costly wiring. Access to the call box can be limited by a combination or key lock if necessary.

Many industries use FM voice reporter units to monitor and report on the function of specialized equipment. These units are triggered by an event such as low pressure, high temperature, etc., and a call is made to the portable base station or even a pocket pager. A recorded message is then played announcing the event.

There are many uses for such a system on the golf course — particularly regard-



(Left) The base station is equipped with a desk microphone. Usually it is installed in the mechanics' work area.

(Below left) Portable units let the superintendent almost be in two places at once.

(Below right) The external antenna for an FM system is small, yet it is capable of receiving and transmitting over a large area.





ing the irrigation system. Imagine the savings of water and electricity (as well as turfgrass) that could be realized if the monitor detected power lost from the pumping station. The superintendent would be notified by the voice reporter unit with a message such as "pump station power off."

Since many events can be monitored (each with a specific message), the superintendent could be notified when a lowpressure condition exists (a bad leak), when the irrigation system is activated, or when lightning has knocked the irrigation computer into the twilight zone. Awarning that temperatures have dropped below freezing would allow the superintendent to shut down a planned irrigation cycle and prevent large-scale damage to the course. Intrusion alarms for the maintenance building can also be linked to these units.

I mentioned that two-way FM communication systems are now affordable. Although the prices will vary according to the system you choose and your dealer, listed below are some rough estimates of what you will currently need to spend.

Base station \$1,000 - \$1,200 (including antenna and desk microphone)

Superintendent's portable \$600 - \$700 (with telephone option)

Crew's portables (each) \$500 - \$600 Repeater service \$20 - \$25 (if necessary, per unit per month)

At first glance, the cost may seem high even though these numbers are significantly lower than they were one or two years ago. Actually, most courses would recover the cost of the system quickly as man-hours are saved and work is carried out more efficiently.

For most golf courses, the year's capital equipment purchases are just around the corner. Give strong consideration to acquiring a two-way FM radio system. It is a purchase you will find well worth the cost.