The athletes are forced to contract their lower body muscles quicker and more often in a short period of time. They may initially feel uneasy running this way, but they will adjust in time. Athletes get to enjoy this kind of running because it enables them to run faster than ever before.

The three most basic variations of overspeed running include downhill running, running with a speed harness, and running with a running chute.

Downhill Running has been used for a long time but not always correctly. Many athletes err in running down hills that have an extremely steep slope.

A good slope for overspeed running is 3° to 5°. Steeper slopes will make the athletes go down too fast and out of control, forcing them to brake on each step to avoid falling.

The runners must be able to run easily down the hill without fear of falling. The right slope will help the athlete run faster than on level ground while maintaining good form.

Speed Harness: The runner wears a harness that a partner stretches to the desired length. When the athlete starts running, the tubing will contract, pulling the runner and forcing him to run harder than he would without a harness.

Again, the key is to run fast but relaxed and with good form. If the tubing is stretched too much, it will pull the athlete too hard, forcing him to run out of control. The right tension on the tubing is the key element.

The athletes should start off easy with a moderate stretch of the tubing. As they gain confidence and experience, the tubing can be stretched further, making the athletes run faster.

Running Chute: This is a relatively new speed-training device. During the first part of the run, the athletes run with the chute attached. As the chute inflates, it creates resistance that forces the athletes to pump their legs more forcefully.

The chute is released at some point in the run, and the athlete will react as if shot out of a cannon.

The chute is the only kind of device that combines resistance running and overspeed running in the same run. As the athletes get used to running with a chute, they will begin reaping the benefits.

A good speed-training program (for any sport) will be diverse, including different kinds of devices. Each will create a different effect and the variety will keep the athlete motivated from one workout to the next.

If your budget permits you to purchase them all, great. If your budget permits only one or two, you will still be in good shape. You will have to design your program around what you have. The keys always remain the same: good technique, good effort, and running fast.

Remember, with proper training, athletes can be made to run faster!
COACHES WHO WOULD LIKE TO improve their athletes’ speed must get them to run all out in their speed workouts.

To some athletes, “all out” might mean 80 to 90% effort, and that’s not good enough. The athletes have got to push themselves to the max.

Over my many years of coaching, I have had to use special devices to get that extra 10% effort. But I have discovered that such speed-training does work: It makes the workouts both useful and enjoyable.

The various speed-training devices fall into two main categories: resistance running and overspeed running.

**Resistance Running**

By running against resistance, the athletes are forced to pump their legs and lower-body muscles very forcefully. But they must be careful about how much resistance to apply. An overload may constrict their freedom and/or force them to change their running form.

The resistance must be just enough to force the runner to work harder; that is, to run quite fast without losing form.

The three basic forms of resistance training include uphill running, running while pulling a sled, and running while using a resistance harness.

**Uphill Running** is the most economical form of resistance running, as it involves no equipment. The hill slope must be right (with a 3° to 5° incline) and long enough for the run. Overly steep hills are not recommended as they will force the athletes to change running form in order to get to the top. The steepness will also slow them down, making the exercise more of a strength builder than a speed builder.

The runner must have just enough resistance (° of slope) to work hard and still run fast.

**Running With a Sled** has been a popular resistance device for years. The athletes run while pulling a sled that carries a varying weight. The important factor is for the sled to carry the right amount of load — a weight that will not force the athlete to slow down or struggle during the run.

The amount of weight should vary with the athlete, depending on his or her size, speed, and physical maturity.

Coaching point: The athlete must be able to run freely while pulling the