

Chapter Five

Preparing for Sprint Events

Prepared by Stan Lewis, Captain of the Hughes Aircraft Track Team, with contributions from his merry band of incredibly fast sprinters.

To the sprinter, nothing beats the sensation of exploding from the blocks; churning down the

track with powerful, graceful strides; then diving for the tape in victory! If this is the stuff of your dreams, then you were born to be a sprinter. But how do you prepare yourself, or, even more challenging, a sprint team so that you can all feel the thrill of victory without the agony of “de feet” (and “de knees,” and, well, you get the picture)?

Sprinting at any level takes lots of the right kind of training. This is especially true for the corporate athlete, who may have never competed at the collegiate level, and who can ill afford being laid up for weeks with an injury. In this chapter, we will present some information useful for anyone who is trying to organize a training program for a corporate sprint team.

The Role of the Sprint Captain

The first step in training your corporate sprint team should be the establishment of a focal point to coordinate all sprint-related activities (i.e., a sprint captain). The sprint captain’s responsibilities need to include:

- Establishment of a practice site for team workouts
- Preparation of planned workout session formats
- Documentation of the progress of each runner
- Selection of participants for sprint relay teams.

Track knowledge should be the primary criteria exercised in selecting a sprint captain. However, a highly motivated person willing to learn about sprint techniques and training can prove to be just as worthy a candidate.

The sprint captain should emphasize that sprinting (and running in general, for that matter) is a

very social sport. Training should be done in groups with a lot of fellowship and with head-to-head competition in practice being discouraged. Unwarranted competition increases the likelihood of inducing injury, which is counterproductive to the training goals of your sprint team.

The Importance of Proper Stretching

Because your corporate team is comprised of persons at various stages of fitness and age, it is imperative that team members employ a good stretching routine both before and after workouts to reduce the likelihood of injuries. Stretching also helps an athlete to achieve a greater range of motion, which will help achieve maximal stride length. Because athletes come in all sizes and shapes, stretching can become one of the great equalizers. Stretching allows the tighter, more heavily muscled athlete to gain greater flexibility and, thus, greater leg speed. Some athletes are naturally more flexible than others, so they may need less time to limber up during a stretching session. The captain can help each runner find the optimal amount of stretching.

Basic Biomechanics of Sprinting

Active people have been running all of their lives in various sports, but it is always surprising to find out how many people don’t really have good running mechanics. Nevertheless, nearly everyone can recognize someone who does have good running mechanics, because that person looks smooth. This smoothness is our intuitive perception of one of the most important components of good running mechanics: elimination of wasted motion. Side-to-side motions don’t contribute to your progress down the track, but they do take energy. These motions are

Ten Commandments of Training and Competition for Sprinters

1. Minimize sprinting at full speed during practice, except during starts and wind sprints. Save your best performance for competition!
2. Limit your number of races and make each race better, in some way, than the last.
3. Whether in practice or in a meet, always warm up and warm down.
4. Do only steady, static stretching.
5. Strive to maintain good form when running.
6. Study your week and race plan, and plan your workouts accordingly in preparation for your next meet.
7. Work on your sprint skills each week, making sure you work on form, drills, starts, baton-passing, and other skills pertaining to running fast in your event.
8. Do your weight training, even during the competitive season, but adjust the intensity so that the overall workload will not lead to exhaustion.
9. Keep your practice sessions fun!
10. Always run relaxed, with a big smile.

often difficult for runners themselves to detect, so sprinters must help each other to detect and eliminate wasted motions.

Sprinting speed comes from stride length and turnover rate—that is, the distance covered in each stride times the number of strides per second. However, it is important for sprinters, especially beginning sprinters, to find their own natural sprinting rhythm. Stride length and turnover can both be improved, but if this is done at the expense of balance, the net result will be a loss of speed and possible injury. Sprinters must learn to run within themselves, and strive to find a rhythm at which they feel both fast and smooth. This rhythm is a moving target, because it will change as conditioning and technique improve.

Visual feedback is one of the most direct and effective methods for correcting mechanical problems: runners can't fix problems that they can't perceive. With the wide availability of video camcorders, this feedback is easily accessible. Nothing elaborate is required: just shoot some footage of your runners at various paces, and study areas in which their running form breaks down.

Finally, observe the masters at work. Encourage your sprinters to watch top sprinters in competition, live and on videotape. Instructional videotapes are available providing slow-motion sequences, so that you and your team can pick up the subtleties of the masters. *Track and Field News* is an excellent source for books and tapes for these form studies.

Strength Training for the Sprints

Because strength develops power, which is essential to the successful sprinter, a weight training program is suggested for corporate sprinters. Done properly, weight training can help develop power, aerobic strength, resistance to injury and, to some extent, speed.

To institute a sound weight training program, one should first be familiar with basic anatomy and physiology, or seek the help of a knowledgeable source. One of the mistakes often made in strength training is that the program is incomplete—it does not work all the major muscle groups in opposition to each other. For example, if you do leg extensions to work the quadriceps muscles in the front of your thighs, you must also be sure to work the hamstrings, which work in opposition to the quadriceps, with leg curls. By doing so you can prevent, and in some cases take care of, muscle imbalance.

The team sprint captain can research and publish a complete assortment of strength training exercises for each sprint team member.

Early-Season Training

Early-season conditioning can contribute greatly to the athletes' mental and physical preparation for the competitive season. The three key goals to early season training are to: (1) build cardiovascular conditioning sufficient to sustain interval training on the track during the competitive season, (2) build strength in the muscular and connective tissue to prevent injury and exhaustion when sprinting starts, and (3) build the mental toughness to endure the pain of training without getting burned out before the season starts. The third goal may be the most important, but the most difficult to achieve. The key here is to find some way to put some fun into the chosen activity.

In the early season, focus on leg strength and overall flexibility rather than leg speed. Leg speed should be developed on the track or on some other surface that is better controlled than a street surface. Quickness developed in court games may not be directly transferable to sprinting speed, because much of this motion is lateral. Again, don't worry, have fun.

For those in the colder climes, early-season training may consist of volleyball or wallyball. For the diehards, bundling up and taking some long runs through hilly terrain may be in order. For those in flat areas or the urban canyons, a route intermixed with stairs may be the ticket. The key points are, pick an activity that requires a prolonged aerobic level of

effort, watch your step to avoid ankle and knee injuries, and have fun!

If the terrain and your tolerance for the winter climate in your area allow, include some hill running in your early-season preparation. Running hills is a natural resistance-training method that has withstood the test of time. Sprint up the hill, but coast down the hills, being very careful to watch your step. Avoid ankle weights: these will increase the forces on joints and connecting tissue, which can lead to injury. If you don't think you're getting a good enough workout on your hill, find a steeper or longer hill. Or stadium steps (but watch your footing!).

Training in the Competitive Season

During prehistoric times, the faster runner caught small animals for his food and ran away from large animals to live. The swifter he was, the longer he lived (needless to say, there was great incentive to be fleet of foot), with the primary motivation being self preservation. Well, times have changed, yet people still display an uncanny urge for competition, corporate runners being no exception to this rule.

Sprint Training for Masters

When searching through the company ranks for those old-timers who used to burn up the tracks during their youth, one must keep in mind that those accomplishments occurred several decades ago. Unless a runner has maintained conditioning and has competed in sprinting events on a regular basis for the past few years, the potential for sustaining injuries is a problem that must be reckoned with. The thrill and excitement of the competition can encourage the mind to push the body faster and farther than it is conditioned to go.

Some pointers to consider when selecting a team are:

- (1) If a runner has spent little or no time recently sprinting or stretching, it is recommended that longer distances such as 400 meters is selected (instead of 200 meters) for early-season workouts and races.
- (2) If possible, use different runners to qualify the team, since tired and tight muscles may not be capable of repeating a previous day's effort.
- (3) Consider placing runners more prone to injury at the end of the relay, giving those runners the option of "easing up" if the race permits.
- (4) It is more important to have fun and stay healthy and injury free than to win at all cost.

Remember, you can't win a race when a runner is hobbling to the finish line with a pulled hamstring.

Make sure your runners are well prepared for the task ahead. Plentiful stretching and gradual accelerations should be part of any training program. Be sure to put emphasis on "gradual." Don't jump into stretching or sprinting all at once. Take many months to allow those muscles to become flexible again and to regain that speed. Masters runners who gradually return to the world of sprinting will be pleasantly surprised that they can recover much of the speed they thought was lost and, in some instances, even better the times they ran 2 decades ago. The key is to stay injury free and to regain the flexibility and stride length needed for sprinting.

Relay Technique

So, now that you have built a highly-trained corps of speed burners, what next? In corporate track the answer is: practice exchange technique for the relays! Because all corporate sprint events are relays, baton exchanges are extremely important to a winning effort in corporate competition.

Although there are many variations, there are two basic types of baton exchange: open and blind. In the open exchange, the outgoing runner stands sideways and looks back to the incoming runner to get the baton. Although this exchange is slower than the blind exchange, it is safer and therefore useful for relay teams that have not had much time to practice together. In the open exchange, it is the responsibility of the outgoing runner to get the baton from the incoming runner.

In the blind exchange, the outgoing runner watches the incoming runner to a certain point, then turns to get a running start. The objective is to match speeds at the point of exchange; this takes lots of practice, especially in the corporate events, because masters, open, and women runners compete on the same team. In the blind exchange, it is the responsibility of the incoming runner to get the baton to the outgoing runner.

It is important that both runners know when the outgoing runner is going to begin to sprint and to know when the baton is going to be passed. The outgoing runner must wait until the incoming runner is sufficiently close before beginning to sprint. The rules allow small pieces of tape to be placed on the track for this purpose. The outgoing runner must practice to develop the discipline to wait until the incoming runner hits the mark, or he or she will run away from the incoming runner. This is particularly

a problem when the race is close, because the outgoing runner wants to get that stick and get moving!

Typically, the incoming runner will shout a command to the outgoing runner when time has come for the exchange. Often this command is, "Hand!" or "Stick!" Consider some other, more unique command, especially if the relay team has not trained together much. It is very easy to mistake the voice of some other team's incoming runner when the race is close and everyone is shouting, "Stick!"

All exchanges must be executed within the exchange zones; however, the outgoing runner may begin his or her sprint prior to the zone. This is known as an international exchange. When combined with the blind exchange and executed well, this is the fastest possible exchange because the outgoing runner can get the baton earlier in the exchange zone, yet already be at top speed.

There are many theories on the order of runners in the relay, and this order is further complicated in corporate track by the relay rules. One strategy for staffing is as follows: lead off with your most consistent starter from the blocks, place your weakest runners next, then use your most fierce competitors in the anchor leg.

Starting from the Blocks

Although less important in relays than in open sprinting events, a team without a strong start immediately has to play catch-up. Therefore, it is important that each sprinter have sufficient familiarity with starting from the blocks to handle a start if need be and not freeze up. The key to starting from the blocks is to achieve a good, stable "Set" position, then react to the gun with explosive, driving strides. Good, pumping arm action is important to getting the legs moving. Remember those video tapes? These are a good source for examples of good starting technique.

On Your Marks...

So, now you've put in your time on the track, done your stick passes, and have recruited enough runners in each category to field a relay team. What next? Well, see you at the blocks...

References

Track and Field News
Box 296
Los Altos, CA 94022

Mel Rosen and Karen Rosen
Sports Illustrated Track, Championship Running
Harper & Row, 1986.