PLANNING ROAD RACES FOR THE COMPETITIVE RUNNER

by

BEN BUCKNER, Ph.D.
Registered Engineer, Surveyor, Planner
and Competitive Runner

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A race director or planner has an immense responsibility to the runners. Many have trained for weeks or months, perhaps pointing toward a particular race. When the collective time, mileage, and sacrifices of hundreds of runners are considered, the organizers' responsibility cannot be overemphasized. What the guy with the starting gun sees is only a mass of bodies shuffling away. Their prior sacrifice and their hopes and expectations is not apparent to the casual observer. Consideration for this and their need for safety and direction requires a responsible person with rare qualities. This person must be sensitive, a good listener, a person of detail and organization qualities, unselfish in his own motives, and take pride in perfection. Only such a person will successfully execute a race for the needs of a competitive runner.

Foreword

The recent popularity of running has caused an increase in the number of road running events. Often the planning of such events is done by inexperienced individuals, many who are not competitive runners themselves. This handbook is written so that such planners can consider the common concerns of competitors.

The twelve planning considerations outlined herein are the main concerns of competitive runners, as viewed by one of ten years racing experience, who has experienced both the joy resulting from well-planned races, as well as the disappointments resulting from inadequately planned events. It is hoped that the time spent to outline these details will help race organizers provide every competitor with a fulfilling race experience, and prevent disappointments.

This second draft was prepared after having received feedback from runners throughout the country on the original writing. These runners included a running magazine editor, the editor of the RRCA news (Footnotes), an editor of a state running newsletter, and several others experienced in both racing and planning races. The collective suggestions of these dedicated people were invaluable in making this version more useful. Some sections have been rewritten. In other places, differences in opinion are shown in footnotes.

The most difficult portions to prepare were the sections on awards and entry fees. The number, type, and percentage of runners receiving awards is a variable which is difficult to standardize because of varying preferences, budgets, and character of events. The entry fee issue is a very complex one which can't be discussed without considering many other related issues as well as the motives of race promoters for organizing races. This issue of motives becomes especially difficult to handle objectively in a manual such as this. The answer to whether race entry fees should be used for profit of the promoters or for charity seems clear to many of us who have been involved in racing for several years. The place of commercialism in pure sport seems equally obvious. However, the proliferation of high entry fee - low award events with "proceeds to go to -----", indicates that the purpose of road racing is not so obvious to many promoters. It is not the purpose here to judge, but rather to offer various qualities of race events for consideration. If these qualities and runners' goals are considered, the result should be higher standards for the competitive runner. Read on.

"They that wait upon the Lord...shall mount up with wings as eagles and they shall run and not be weary..." Isaiah 40:31

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ACKNOWLEDGEMENTS

Thanks to Sandy Smith, runner and full-fledged member of the human race, who typed this thing twice.

Goals and Expectations of Runners

Goals of runners vary. A fitness runner may never enter a race. The transition to racing is one which is usually made with the anticipation of fulfilling some goal other than fitness, recreation, or socializing. It is true that many novice runners participate for the sheer satisfaction of running with a larger crowd, the thrill that wearing a number for the first time might bring, or for a souvenir T-shirt. Even veteran runners may, in part, enjoy these things. However, at the other extreme is the dedicated and intent competitor who cares little about crowds, material souvenirs or anything else but running as well as possible, competing against others in the same age bracket or against the clock. There are many gradations and levels between the participating runner, and the highly goal oriented and intent competitor. Seeing to all of their needs is the challenge of any race promoter.

The Competitive Runner

For purposes of clarification a "competitive runner" is one who intends to race, the thrill of competition being the primary incentive. "Competition" takes many forms and it should be emphasized that few competitors expect to win, or even to finish in the top 20%. Competitive goals vary. A competitor may want to compete against only a few people in a particular age division and may consider the rest of the crowd as simply obstacles blocking the view of the competition. A runner may be involved in self-competition, testing his or her body and will to set a personal record, or keep some pre-planned pacing strategy. Or, a specific award or place in the race may be a goal for someone else. These variations in goals demand that race organizers consider many needs and not just the simple win-related goal. In many of today's mass "races", the competitor is hardly considered at all, the events being seemingly held for other reasons.

The Running Boom and the "Fun-Run"

The popularity of running has created more races and larger fields. Prior to this popularity, races were fewer in number. Races with over a hundred entries were unusual in most areas. Everything was low-keyed and manageable and runners themselves usually organized and staged the events. They saw to their own needs fairly well, although they, too, made a few mistakes. Just as improvements were starting to be made in race quality, the boom hit. A relatively new phenomenon in the form of charity and/or fun runs has tended to thwart efforts to upgrade quality simply because the new organizers are inexperienced or because motives are other than serving the runner. There is a lot of misunderstanding

and habits being formed which follow this misunderstanding. What should be understood is that nearly everyone who pays an entry fee is a competitor to some degree. The "fun-run" concept is contrived and probably primarily in the mind of the promoters. Although many -- perhaps even most -- novice runners aren't as competitive as the veterans, they will grow more so if they stay involved. Competitiveness comes in degrees as well as in various forms and these levels of intensity must also be considered. When a race director provides for the more intent competitor's needs -- in all ages and both sexes -- the needs of the "fun runner" will automatically be provided. Sloppiness in race organization (lack of attention to the twelve planning steps and considerations herein) cannot be justified by declaring the event to be "only a fun run." Cheating runners out of the possibility of a good competitive experience cannot be justified for any cause, no matter how charitable. In other words, runners should not be used for profit without returning the tangible and intangible qualities which are consistent with their aspirations and good sportsmanship. Once an entry fee is charged and the word "race" is used in the promotion, many runners will begin to plan, point, and hope for a quality racing experience regardless of how the promoter may envision the event. The collective weeks of individual training, the personal sacrifices made to train, and the private hopes are not readily apparent to the casual race director, but these preparations, sacrifices, and expectations are very real and deserve consideration.

There is no truly successful event between a race and a fun run. On one extreme are fun runs with no awards or entry fees and there are quality races with all the details. Poorly planned races are no "fun" for anybody and cannot be somehow rationalized as events to serve the runners. They only serve to satisfy the whims and misunderstanding of their promoters and unfortunately serve to further ingrain misunderstood concepts into the minds of other promoters, as well as some runners.

Race organizers -- please, if you do not intend to follow these or similar guidelines, do not promote your event as a race. Leave that word out completely, drop all awards, and charge no fee. Your concerns for "fun runs" are an accurate and safe course, accurate times, and general logistics. The transition to a bona fide race requires much more detail.

Who is the Race for?

It should be clear that the race is primarily for the competitors. The comforts and convenience of the promoters and sponsors should not govern plans for the race. The interests of the spectators should be secondary to those of the runner. Timing to coincide with some special celebration should not cause the runners discomfort or inconvenience. Fund-raising, profit, or commercialism must be low priority if present at all. The needs and fulfillment of the runners should govern decisions. Sorting this out when sponsors make demands is often very difficult, but

it must be done. The fully successful race director will be a good listener and a good organizer and will never lose perspective of the main objective. His attitude must be one of unselfishness and a genuine desire to serve others (the runners). A deep sense of responsibility and willingness to thoroughly plan details in advance must be present. The proper attitude might be comparable to that of an airline pilot -- fully professional and not satisfied with only 90% success. The race director is responsible for the welfare of every runner in the race. This responsibility takes many forms. Runners cannot take care of their own needs during a race as they can in training. Furthermore, they have needs which aren't present in training. The ultimate responsibility for these needs rests with the head of the organization planning and directing the event. The right attitude of this individual should be to provide a highly fulfilling racing experience for the competitors.

Getting Your Act Together

Common sense and thorough planning take care of many of the needs of the runner. The time of year, hour of the day, location of the course, recruiting adequate help, arranging for course marking and measurement, advance promotion, a cost analysis, consideration of awards and other details are all things which must be planned well in advance. Overlooking details or forgetting them in the rush because planning is started too late can cause many problems for the runner and embarrassment for the race director. So, get your act together early, consult with experienced competitors (or all ages and abilities, male and female), recruit an adequate staff, and use common sense in planning. Don't merely copy what others are doing. To do so is probably copying many misunderstood concepts and mistakes. Race planning involves many details. Inclusion of all considerations and complete attention to detail spells success. Key people must be able to appreciate this.

THE 12 CONSIDERATIONS

1. ENVIRONMENTAL CONDITIONS

Although we cannot alter the weather or the macro-climate to program optimum conditions on race day, we can control the micro-climate to some extent through providing shade, protection from the wind (or provision of gentle cooling breezes), or a sun that is low on the horizon rather than directly overhead. Route planning can alter conditions to some extent. In particular, race planners can avoid most adverse environmental conditions by proper prior planning.

Experts in sports medicine and health, as well as experienced competitors of all ability levels have repeatedly stressed that the ideal conditions for most distance races is around 45-50°F and overcast. This is, of course, not the most comfortable temperature for the spectators and helpers, and the runners themselves may be chilly at the starting line; but, because of build-up of body heat which slows the runner, dehydration effects in long races which cause cramps and other problems, possibility of heat stroke or death, and the need for large volumes of fluids and hoses to serve the runners, warm seasons should be avoided. World record holder Derek Clayton has stated that his times are slower in the heat. Bill Rodgers, consistent winner of distance races, has stated he won't enter a marathon if the temperature is expected to rise above 70°F. Many runners will race in the heat, but most would much rather not. Therefore, it would seem that the distance running "season" is between about September and May in most parts of the U.S., rather than June - August. As a general guideline in this regard, no race of more than about 2-5 miles length should be planned at a time of year and hour of day when the temperature is likely to be above 70°F when the last runner finishes. That maximum should be lower, perhaps 60-65° if the race is a marathon, and hopefully most of the distance could be completed with the temperature in the 50's or below.[1] Don't take a chance on this. It is unfair to force the runner into the decision of running or not running in the heat. A race that was never planned at all will not be missed. If warm months are to be used, very early start times (i.e., at the crack of dawn) are best. It is nearly always 10-20° cooler between 6:00 - 9:00 AM (a 3 hour marathon) than 9:00 - 12:00. Furthermore, the intense direct radiation from the sun is diminished when it is earlier.[2]

Some runners feel that, since everybody is subjected to the same conditions, heat doesn't matter for competitive purposes. The author's purpose here is to save all runners from perils of heat and to enhance their individual fulfillment. Many runners, due to no fault of their own, build up more body heat than others and do suffer more. This is caused by variations in sweating and probably can be blamed on heredity more than training. Should this be a variable in the same category as hills

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[1] Opinions of others indicate these maximums could be raised as much as 10°F, although most reviewers seemed to agree with the above numbers.

[2] One southern state now has a federation which will not sanction races during summer months.

and distance? This author says "no" since one can train for hills and distance, but offsetting heat effects can only be partially accomplished through training. Some runners prefer warmer races (Frank Shorter, for example). But, in a range between perhaps 40°-70°, the majority will have the lowest probability of suffering, there is low risk of death or strokes, and overall goal achievement will be optimized for 95% of the competitors. Even at 60°-75° F, fluid losses during a marathon become appreciably high and difficult to replace during the race do to logistics and other factors. And, once a runner has lost about 3% of body weight, problems due to dehydration usually develop.

Some runners feel that the inconvenience of arising early to get to an early morning race is worse than having it a little later. These opinions should be considered, along with the nature of the race as between a local, home-town event or international. Certainly, serious runners will travel the night before if the race is important enough. The fact is, all will not be satisfied and some compromise is in order. This runner leans in the direction of safety, comfort, and optimizing conditions during the race, not before.

Humidity and air quality are other variables. Generally, warmer temperatures can be tolerated if humidity is low. Also, the other extreme of low temperatures must be considered. Generally, runners can dress comfortably down to perhaps 20-25° F with no wind. But, lower temperatures or wind create the possibility of frostbite and general discomfort. Obviously, winter races should be planned for the warmest part of the day, but not so late that slow runners must finish in the dark.

The main point of this section is to encourage planning the time and date when the probability is lowest for adverse conditions. Weather records and/or common sense should be used, the author's philosophy being that it is far better to avoid a situation rather than attempt to remedy it later. Some areas of the country are blessed with near ideal environmental conditions year-round and respondents to the first draft seem to reveal a lack of appreciation of the extremes that can occur in some areas. It is recognized that this section has more significance in Hawaii, Florida, Ohio, or Alaska than in Eugene or Palo Alto.

A few more comments will be made on environmental aesthetics under the course planning heading.

2. ACCURATE DISTANCES

The Reasons for Overall Accuracy

Remember the definition of a race and of a competitor? If runners were merely competing against each other and purely for the win, distances could be approximate and arbitrary. But, because of all of the other forms of individual competition, distances must be accurate. Personal and other

records have been lost due to long courses. A false sense of ability arises when the course was short and the runner doesn't realize it. An inaccurate course doesn't provide the main controlled condition to validate the experiment which most runners are making. They know what they've done in training and they know what they've done at other accurate distances. Most probably have a time goal in mind for a particular race, the exception to this being a few win-at-all-costs runners. But, even they usually have a time as a secondary goal.

An undetected extra length in a course has the effect of disappointing the runner, even if a personal or other record time was not being sought. An undetected shortage gives a false indication of ability. The runner is apt to try for months or even years to match the time and become more and more discouraged in the attempt. Even when it is discovered that the course was long or short, it is seldom known how much; therefore, runners can't accurately adjust their times. And, as Derek Clayton has said, a marathon that is short is a "non-race" -- nobody really completed the distance. Long or short courses cheat the runner.

The Reasons for Intermediate Accuracy

Note that the word was made plural in the principle. There are several distances in a race other than the final one. It is useless to mark intermediate distances or give split times if the distances are not accurate. Most racers are also pacers, meaning that their intermediate "splits" are important. A short first mile may cause enough concern for an individual runner to slow the pace, being worried about possibly having started too fast. A long first mile can have the opposite effect -- the runner may pick up the pace, and, if not in shape to handle the acceleration, the price will be paid in the later miles. Another value for accurate intermediate distances is that the data on splits and pacing can be used by the runner to judge whether he or she started too fast or too slow and thus be able to run a smarter race next time. But, if the distances were inaccurate, the data is next to useless. Runners often relive each mile of a race, particularly long runs like a marathon. They like to talk about where they were at 5, 10, etc., and how they ran the last 6.2 miles. Accurate distances keep these discussions honest and worthwhile, all of which is ultimately more reinforcing and psychologically fulfilling to the individual.

Even during the race, accurate intermediate distances give a runner something on which to focus and provide a good distraction. In a marathon, for example, if a runner can start breaking it down into individual miles when fatigue sets in, it helps immensely to keep going. But, if the miles aren't marked or if they're wrong, a rather lost and depressed feeling can quickly take over and the runner may become too discouraged to maintain goals. Providing the necessary accuracy, for the above reasons, elevates your race toward more a total "experience" to be long remembered, rather than a useless "happening" to be forgotten (or resented).

How Accurate?

An accurate course means accuracy in the total distance and accuracy in any intermediate miles. A runner at 6 minutes per mile covers about 5 yards per second. Hills, wind, and other factors cause variations, but runners can usually account for these effects. They seem to fit into a logical pattern, but not so if the distances are inaccurate. To keep the runner feeling confident of pace, each intermediate distance should have a maximum error of ± 20 yards (say 4 seconds times 5 yards per second) with respect to the previous and next mark, or the runner may start to erroneously adjust pace. For the total distance, even for a marathon, maximum ± 30 yards error is appropriate. These are maximum tolerances.

Course Measurement ** This section updated 1988

Accuracy better than this can easily be achieved by the calibrated bicycle method. It involves use of a "Jones Counter" which is mounted to the front wheel, and which keeps track of the revolutions.

~~Course Measurement Procedures is a good publication describing how modern race courses are laid out. It is available from: TAC/USA - Book Order Dept - PO Box 120 - Indianapolis, IN 46206 - $4.00 postpaid.~~ OUTDATED SEE WWW.RRTC.NET

If the methods in the above book are followed, the course may be certified as accurate by the Road Running Technical Committee of The Athletics Congress. Many runners prefer a certified course, since this gives them confidence that the course is accurate. A course may be accurate without being certified, but it may be hard to convince the runners of this. Information regarding certification procedure may be obtained from:

~~Pete Riegel - 3354 Kirkham Road - Columbus, OH 43221~~

An auto odometer, calibrated with interstate mile signs and read to the hundredth of a mile can achieve +/- 20 yards accuracy with care and experience. A U.S.G.S. topographic map can sometimes yield similar accuracy. The secret to accuracy is to use one method to check another.

Distance accuracy calls for much attention to details, often beyond the expertise or temperament of the planner. Experts should be consulted in most cases, unless the concepts of measurement are understood.

The First Unforgiveable

Unless they are very small, inaccuracies cannot be hidden. Every experienced runner will detect them through pacing and final times. Runners can become very upset when inaccuracies are discovered. Do not neglect this aspect for their sake as well as your own. The race organizer may get by with faulty planning of many aspects of a race, but distance inaccuracy is one of the unforgiveable blunders which is certain to be discovered.

3. ACCURATE TIMES

Avoiding Mistakes

It is said that runners deserve two things in a race -- an accurate distance and an accurate time. Distance and time are the two primary measurable variables in a race. Together, they determine pace and yield the results. Runners judge themselves and others by times over known distances. With recent developments in electronic watches and other timing methods, there is absolutely no excuse for mistakes in timing, but they continue to occur in nearly every event.

As with any measurement, there is such a thing as precision without accuracy. Precision means how close you read the watch. It might be read to the second, but if it gained 20 seconds or you made a mistake in reading, the time is inaccurate. One thing that can be done to eliminate small inaccuracies is to check timepieces against electric clocks, discarding watches that gain or lose more than 1-2 seconds in 3 hours.

The most important concern, however, is elimination of the big inaccuracies caused by mistakes in reading. A basic principle is: use only uncomplicated watches which are easily read while the timepiece is running. Many watches, especially those that have a 30-second (or 10 second) sweep of the dial are unsuitable. They are designed for track events where they are stopped, then read, when the reader can pause to figure out the exact minute or half-minute. When used for split or finish times in a distance race with the watch running continuously, mistakes of the 30-second variety are made nearly as often as correct times are read. A very important principle of timing then, is NEVER USE THE 30-SECOND STYLE OF STOPWATCHES, or any other type than those with a 60-second sweep and unmistakable minute reading systems. The best choice is electronic devices which display the times digitally. Inexperienced people should be able to read those correctly and they run more accurately than spring wound watches.[3] But, make sure batteries are fresh and use conventional watches or time signals for back-up. For finish times, there are electronic devices which include a tape read-out of places and times. These should be considered.

Techniques in Timing

Times, both at intermediate miles or at the finish, should be called LOUDLY and CONTINUOUSLY as runners approach and pass by the marker.[4] Often, timers at the finish mumble the times to a recorder and disregard the interest the runner has in knowing the time immediately. The timer must call them extra loud because crowd noises and concentration cause the runner to have a hearing problem. A loud speaker is very useful at

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[3]"Sometimes I wonder," said one race director.

[4]One reviewer mentioned that runners are not being timed to the particular point or marker, but rather are being given a time as they pass by the point. Thus, continuous reading of the timer is more appropriate than giving a time after the runner has passed.

the finish line for broadcasting times. Both minutes and seconds should be called, perhaps the minutes only every five seconds or so. Sometimes, large clocks are used at the finish, but again, these probably will be missed by the runner, due to concentration on other things. The best way to give finish times is to shout them into the runners' ears.

Reasons for Careful Finish Timing

If the runner can hear the times when approaching the finish it can mean the difference between being under some personal record or other meaningful time (i.e., 3:00:00 marathon, etc.). Also, if times can be heard by the runners, they won't bother the timers a few seconds later by asking the time. Also, loud and clear times give a check on mistakes since there is a means to immediately correct it if everyone can hear the times. Correcting such messes later can be a nightmare. And worse yet for the runners, they may never know their times for sure unless heard at the finish. There is also something psychologically reassuring if the finisher can hear the time. The race is over and the runner can walk away immediately reflecting on the total experience. Having to wait until later ruins this small part of the experience.

Split Times

As with distance, intermediate times are also important. If given in error, they are wasted effort. Mistakes in split times have the same effect on the runner as distance mistakes. They may cause unnecessary adjustments to pace, simply cause confusion, and generally reduce the value of the race as a total experience. Responsible and mature people should be used to give split times. They should be given thorough instructions. As trite as it may seem, they should also be given a brief session of supervised practice with the timepiece they'll be using. Their instructions should be as follows:

"(1) Stand exactly at the mile (or kilometer) marking (not more than 1-2 yards from it),

(2) Face the runners in a location where they can clearly see you as they approach,

(3) As a runner approaches and when approximately 25 yards (about 5 seconds) from you, start calling times, LOUDLY -- minute first, then seconds, calling each second until the runner is about 1-2 seconds beyond -- then give the minutes again,

(4) Check the minute well in advance so that you are certain of it when you start calling and don't make the common mistake of reading the next minute when the seconds are approaching 50-55, etc.,

(5) Don't allow bystanders to distract you when runners are approaching."

How frequently split times should be given depends almost purely on how many timing devices and reliable people are available and how frequently the distances are marked. A minimum is the first mile (or kilometer) in any race. Every 5 miles (plus the first and the 25th) is acceptable in a marathon.

There are many other duties at a race that have priority over split times at every mile. Don't use a person for that instead of giving directions, controlling traffic, or handing out water cups, for example. It is more important for a runner to stay on course than to enjoy the luxury of a time every mile. Most runners who are interested in this data carry their own watch anyway and trust their own reading more than the course timer. Split times are actually a carry-over habit from track races. Certainly, the intermediate distances must be identified so that runners can time themselves, but having an "official" timer at each such mark is a luxury that often causes more harm than good when the least experienced people are given the job.

The Second Unforgiveable

A mistake in the finish times is the second unforgiveable. As was said at the beginning of this section, runners deserve an accurate distance and time. If nothing else is done, these two variables are the combination which primarily determine the success of the race from the runner's viewpoint. Assuring that mistakes do not occur involves care at the finish line as well as compiling and checking printed results.

4. SAFE AND SENSIBLE COURSE

Keep it Simple

For reasons of minimizing confusion for the runner, ease of measurement, and minimizing logistical problems during the race, there is one basic principle in planning the course - Keep it SIMPLE. The more urban and congested the streets, the more traffic control you'll need and the more chance for accidents or interruption of pacing for the runner. Also, a complicated course with many turns adds the chance that a runner will go astray and increases the personnel needed for directing runners and making signs and road markings. The best course for all concerned is one without auto traffic and with the fewest turns or corners possible.

The Variables

There are about five main features of the route which affect the safety and welfare of the runner as well as the planning and layout. These are: (1) general configuration, including number of turns or corners, (2) surface condition, (3) hills, (4) environmental factors, and (5) amount of traffic (auto, etc.) and traffic control. Other

considerations are the start and finish locations, the possible crunch and associated hazards after the start until runners are dispersed, the difference in elevation between start and finish, and other special considerations.

Configuration

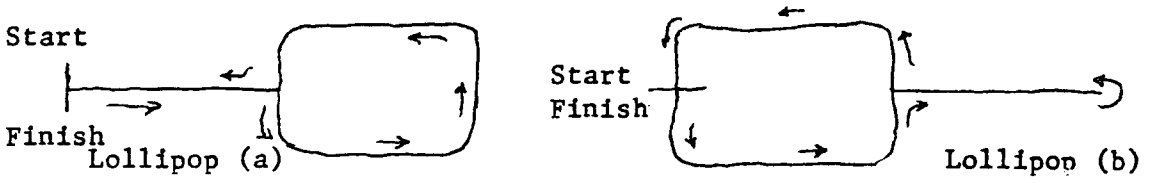
Experience has shown that a simple "out-and-back" course in a park or on a country road is about the most sensible solution. Runners can't get lost easily, vehicle traffic and associated congestion is minimized, runners will be more relaxed, the course measurement out is used to check the one coming back, the mile marks out coincide with mile marks back, (for races in mile units) the number of stations for giving split times and providing aid is cut in half as compared with most other configurations, and the runners enjoy the added feature of being able to count their place and time ahead of or behind their competition at the turn-around. This point adds interest as they see all other runners and become participant/spectator for a few minutes. Furthermore, with an out-and-back, there is a certain symmetry which aids in evaluating and planning pacing. For example, if runners know the "out" portion is uphill, they will not be discouraged with their turn-around time because they know they should make up time on the return. Many runners say they like such courses because, once turned around, they know that every step is bringing them closer to the finish -- a feeling that is a big help for some. Another advantage of such a route over some others is that by starting and finishing at the same place, runners have no transportation problems between start and finish and the race headquarters is all in one place. Such a configuration also assures that the course will be valid for records, since routes with "assistance" (i.e. finish at lower elevation than start) often are not counted when best times are compiled.

In long races where it is sometimes difficult to find a route with sufficient length, repeat out-and-back loops can be used. Two or more repeats of the same course are often employed in a marathon, for example.

There are numerous other configurations which are nearly as simple as the out-and-back. A loop course can be successful, provided the loop is approximately the desired distance. Repeat loops are quite advantageous logistically, particularly for long races like a marathon. Aid stations are reduced with repeat loops and after the first loop, a runner becomes familiar with the route and isn't likely to go astray. Contrary to some beliefs, runners rarely get "bored" by repeat loops when they are intent on competing.

Loop courses never magically measure to be an exact desired distance. Even when a loop is found which is approximately the right distance, something must be added or subtracted to get the desired distance. A strange and unforgiveable act by some race directors is to place the start/finish at the same line and advertise the distance as exact when

actual measurement may reveal several tenths of a mile difference. Often in such instances, each mile was measured and marked carefully and then when the last one to end the loop doesn't come out right, they just close their eyes and hope no one will notice. This is foolish and will be discovered. There is nothing wrong with a gap or overlap in the loop, having the start and finish in slightly different places. If there is a small gap, this is called a "horseshoe" loop. If the overlap is too much, a combination loop with out-and-back can be used. This is commonly called the "lollipop". This comes in two forms, one with an out-and-back "stick" at the beginning with the lollipop in the middle and the other with the start in the loop (lollipop) portion and a stick (also, called "dog leg") in the middle.



This is used to add distance when a loop is desired which isn't long enough in itself and an overlap is too much. This configuration has many of the same advantages as the out-and-back. Lollipop (a) has the added advantage of no runner and traffic congestion at the abrupt turn around. Lollipop (b) has the same advantage of any out-and-back in that runners get to see their competitors in the turn-around portion (depending, of course in where it occurs). In planning the location of the dogleg, it should be somewhere near the middle so as to avoid congestion early in the race, and so as not to add an unexpected leg near the end when runners may sense they are in the home stretch.

Probably the worst configuration for all concerned is the "point-to-point". These generally are used only when someone wishes to glamorize some specific historical or other happening or when some unwisely copy Boston marathon features. Logistics, transportation, communications all become complicated. Runners have special problems in where to leave their vehicles. Usually, busses must be provided. Added time for check-in and movement to the start is a problem. Getting to a toilet just prior to the race is another problem for the runner. Any runner who wants to drive the course or place aid bottles along the way has real problems. And, such routes are generally more "lonely" than others. Getting injured or "hitting the wall" in the middle of such a marathon can be serious. For small race fields, and with enough official patrolling of the course, point-to-point marathons can sometimes be successful, but other configurations are recommended.

There are many variations to the above. The desired general location of the start/finish and available roads often dictate the type of course. If a safe and sensible route cannot be planned in one location, consider a different location entirely.

Surface Condition and Hills

The surface condition should be considered. Road races over long distances demand consideration of strain on lower extremities. Ruts, holes, roots, rocks, gravel, brick, cobblestone, open field or rough sod, or extremely coarse road surfaces should generally be avoided in most races unless the runners are clearly forewarned of the specific "challenge" on the advance entry information. New asphalt is generally best. Concrete or smooth macadam type surfaces are also acceptable. Grass and creeks should be left for cross-country races.

Many runners hate hills and will complain, especially if they are ridiculously steep or numerous, and when flatter terrain exists nearby. A general policy which seems to spell success is to keep courses flat to gently rolling in nature. Most runners do, however, accept hills as part of the challenge, but they like to know about them beforehand. This helps them not only to train properly, but the "psyching" process for especially challenging courses can be enjoyable. Many of us "flat-landers" can't ordinarily train on hills and we must go out of the way to do so. Knowing about the course several weeks prior adds the necessary lead time. The number of hills and their length and percent grade or elevations should be cited on the entry information a runner would receive before coming to the race. Plotting a profile using USGS topographic maps is a good way to depict grades. Terminology like "rolling" or "flat" can often be misleading. As one runner said, "Some race directors would describe the Alps as rolling to moderately hilly." Be accurate in statements, using elevations, lengths of hills, percent grades or the profile plot with appropriate data.

Environment and Traffic

Environmental factors are often overlooked in race course planning. At least three of the runners' senses need to be considered here -- sight, smell, sound. A run-down or depressed area tends to depress the runner. A route lacking positive aesthetic qualities should be avoided. Routes with odors or contaminating fumes from factories or excess auto exhausts should likewise be avoided. Routes with high noise factors from traffic, industry, or urban life should be avoided. The environment of the runner is affected by wind and temperature. Routes with trees and other natural obstacles help block the wind. Such routes also provide shade, an important consideration in summer. They are generally more pleasing all around. Runners like to feel in tune with their bodies and nature, hearing and feeling only their own footsteps and breathing. They are at home when relating to nature. Hopefully, race course planners can see the merits of planning a race in a traffic-free park area. Highways or city streets with no trees, the roar and wind blast from passing trucks, honking horns, the hot exhaust fumes, the distasteful billboards and signs, and many traffic hazards are not conducive to concentrating on a race. In particular, streets passing shopping centers, service stations,

and similar commercial areas should be avoided. Not only are they cluttered and unpleasant, but it is impossible to control the constantly shifting auto traffic. The busiest intersections should likewise be avoided unless it is absolutely guaranteed that all runners will have the right-of-way. If routes are along highways, they should be planned for runners facing traffic and there must be a smooth, flat shoulder at least three feet wide which will place the runner at least five to six feet from oncoming traffic. Long stretches near traffic should be avoided. The constant interruptions to pace and din of passing vehicles can become wearing and quite annoying. Gravel or deteriorated shoulders are unsuitable as the runner must constantly break pace.

Many details must be considered. They vary with each situation. It is impossible to discuss all of them. The planner must use common sense and remember that the welfare of the runner is paramount.

Other Considerations

The start and finish location should be given attention. In particular, there are usually many hazards just after the gun, even when everybody is courteous. Remember, they're in a race though, and not waiting to get on a bus. The road should be wide for as long as necessary. Also, there should be no curbs, holes, posts, or other hazards which runners can't see because of the crowd. Starting a race or funneling the runners onto narrow paths too soon is dangerous and annoying. These concerns are purely a function of the size of the starting field. Experience and a few calculations using the fastest and slowest paces will reveal at what distances various sized fields will be "single file" with a view of the road.

Avoid planning courses along roads under construction. Also, avoid railroad crossings for obvious reasons -- racing trains to the crossing is not part of the sport. Cemetery entrances and funeral homes should also be avoided. Who has the right-of-way if a funeral procession is crossing the runners' path? Check the route for any and all such potential problems.

5. DIRECTING RUNNERS AND TRAFFIC

Necessity of Control

This consideration is related to the previous one. A safe and sensible course depends on markings, directions, and traffic control. The best course at dawn on Sunday may be a nightmare at noon because of build-up of auto traffic. A very interesting and esthetically pleasing course may turn out to be a confusing maze of paths and turns without adequate directions.

Course Marking

The same principles used in street traffic and transportation planning for autos also apply to directing runners in a race, with a couple of exceptions -- runners aren't going as fast as cars, but they are generally concentrating more than motorists. This means markings can be smaller but they also need to be where runners are generally looking -- straight ahead. Runners won't see signs tacked to posts and they'll probably miss signs more than 3-4 feet off the path they are running since they usually don't look from side to side. Their peripheral vision is limited due to concentrating on the competitors ahead or their pace. Furthermore, there is a good chance that signs or traffic cones will be stolen or blown over. This happens very often.

The best direction markings are arrows painted on the road in the path of the runner. One or two warning arrows 50 or more yards ahead of a turn prepares the runners, in case they want to shift to the other side of the road. At the turn, arrows going into it should be painted, as well as one or two after the turn to assure the runners they are still on course. Arrows should be at least 2 inches wide and 2 feet long. A total of at least 6 should appear between warning and follow-through. The color should be bright so as to contrast with the road surface. White, yellow, or flourescent is best. Red and dark green usually are poor. Ordinary household flour or similar substance can be used for marking turns. Surveyor's keel (lumber crayon) can also be used if applied profusely. The advantage of this material is that it washes away later and doesn't deface the surface for months. The same specifications apply to mile markings. Paint or lumber crayon on the pavement is better than signs. It should be on the side of the road where runners are to be running and not in a spot to be covered later by parked cars.

People are Better than Paint - Usually

The best directional control is a person who knows what to do. These qualifications are emphasized because it is often that people assigned to direct runners simply don't do their job. Often, they can't seem to get involved and merely become another spectator, watching runners pass by, wrong turns included. Just as with giving times, direction control people must be aggressive. They must be told by the race director to stand where the runners can see them, (but not in their path as they turn) and give vigorous and definite arm and voice signals as each runner approaches. Unless they act their part, they look like any casual bystander to the runner. They must not assume the runners know the course and correct them after they turn wrong! Try to use experienced and conscientious people, retain the same ones each year, and even train new ones by holding "practice races". Runners won't easily forgive oversights and incompetence in this function.

Don't try to use one person to give both split times and directions. Each job is a separate responsibility and the exact mile mark probably doesn't appear at the turn anyway, so it is difficult to combine the duties.

Direction warning arrows 50 yards in advance are also useful even when people are used at the turns. It is best to use both people and paint. Sometimes people don't do their job or don't show up on race day. If the course has been planned sensibly, the number of turns, markings, and personnel will be minimized.

The Runner Has the Right-of-Way

One thing is certain -- the runner always has the right-of-way at intersections. Policemen or others controlling traffic must clearly understand this. One runner tells a story of a race where the police officer halted him and motioned the motorists to come through! This writer was nearly wiped out at the 22 mile point of a marathon when a policeman assigned to control the intersection stood at the corner watching me and the cars go by (me east -- the cars north-south!) Runners hate to break pace for anything. They lack judgement when racing, particularly in the latter miles of a marathon. There, in particular, their minds aren't working very well. They will probably respond too late because of a sort of hypnotic semi-trance, simple depression, intense concentration, pure stubbornness, or the carelessness of not looking from side to side and trusting that someone is taking care of the situation. Policemen and others directing traffic must be given absolutely clear instructions and warned of the runners' mental condition. Traffic controllers should be people of authority. Uniformed policemen are best in crowded situations with a lot of traffic. Their image is enough to get the attention and respect of disagreeable motorists. In less congested situations other authoritative individuals (big guys) should be used. Bright colored vests or other symbolic "official" uniforms help everybody to recognize them as someone of some authority and purpose.

Whose Responsibility?

It is said that it is every runner's responsibility to know the course. This may be true and if some take a wrong turn, a very simple rule ought to be that they are disqualified unless they double back and re-enter the course at the exact point where they left it. But, even a genius, unfamiliar with your neighborhood will miss turns. Runners, especially those totally unfamiliar with the area, can't remember more than one or two street names or specific directions when explained at the start line. They are too keyed-up to listen and those in the rear can't hear because of the nervous chatter of runners up front. Such "last minute instructions" are all but a waste of time. It is better to have complete markings and personnel available on the course.

Course Maps

But, the best additional provision would be a course map. This should have street names, mile points, and be approximately to scale, and large enough to show required detail. Also, course maps should show clear details of location of start and finish and details or comments explaining routing where confusion might occur. Desirably, it should be mailed as part of the entry information for the benefit of those who want to run or simply look at the course beforehand. As a minimum, a large map should be displayed at least a couple of hours before the race so that runners who wish to do so can drive the course to become familiar with it. For many, this adds an important element of the "psyching up" process. Give them a map and time to do this leisurely. It will benefit them, save the wrath of some runners taking wrong turns, and save the race directors the hassle of many questions from runners asking about the course an hour before the race.

The Third Unforgiveable

The third unforgiveable is allowing runners to go off course due to poor course markings and directions. The best planned race can be a disaster if runners miss turns. Also, the race is less than completely fulfilling for those keeping track of pace if the mileage markers are missed or if one must slow down and study the situation at every turn.

Adequate markings, direction, and control is an important aspect in a road race. Unlike track racing, each route is different, it must be marked each time the event is held, and is apt to be confusing to anyone who hasn't been over it before.

6. AWARDS AND DIVISIONS

Basis of Awards

Should only the top overall finishers receive awards, or should they be distributed with consideration of age, sex, or other handicap? One argument is that a pure race would recognize nobody but the leaders. One runner stated that "just because someone is older is no reason he deserves an award - not in a race. Awards should go to the top finishers, period -- in a pure race." However, if age and sex do cause differences in average ability, and we wish to encourage older and younger runners to compete, is there any incentive other than separate divisions with their individual awards? One need only ask any 60 year old how he or she feels about "over 40 divisions" in races. This person either doesn't enter, or resigns himself or herself to the fact that what remains is a life of "participation" in races, not competition, if that is the only breakdown in divisions.

The recommendations to follow assume that there is justification for separate divisions in most races, as a means to encourage competition at all ages, and for both men and women. How to decide the divisions is the central focus.

Relative Achievement

That the best runners should receive awards seems obvious but it doesn't always happen. Certainly the winner of a race should receive top recognition, but, if the age and male/female differences are considered, there are other runners who deserve awards. A graph on page 19 shows 5-mile race times for a hypothetical runner passing through a life cycle. This plot is based on averages from large samples of runners and is felt to be reasonably accurate. A different person may plot at a higher or lower location on the graph since individual ability varies. The curve for women would plot lower. Also, any given individual wouldn't necessarily follow this same curve or even the shape of it, since this is an average from a lot of data. Similar curves could be prepared for other distances. The guidelines provided by this graph are probably valid for most distances encountered in road racing. The rate of change should be about the same for women as men. However, women should have their own separate divisions since any point on their curve plots lower than the men at any given age.

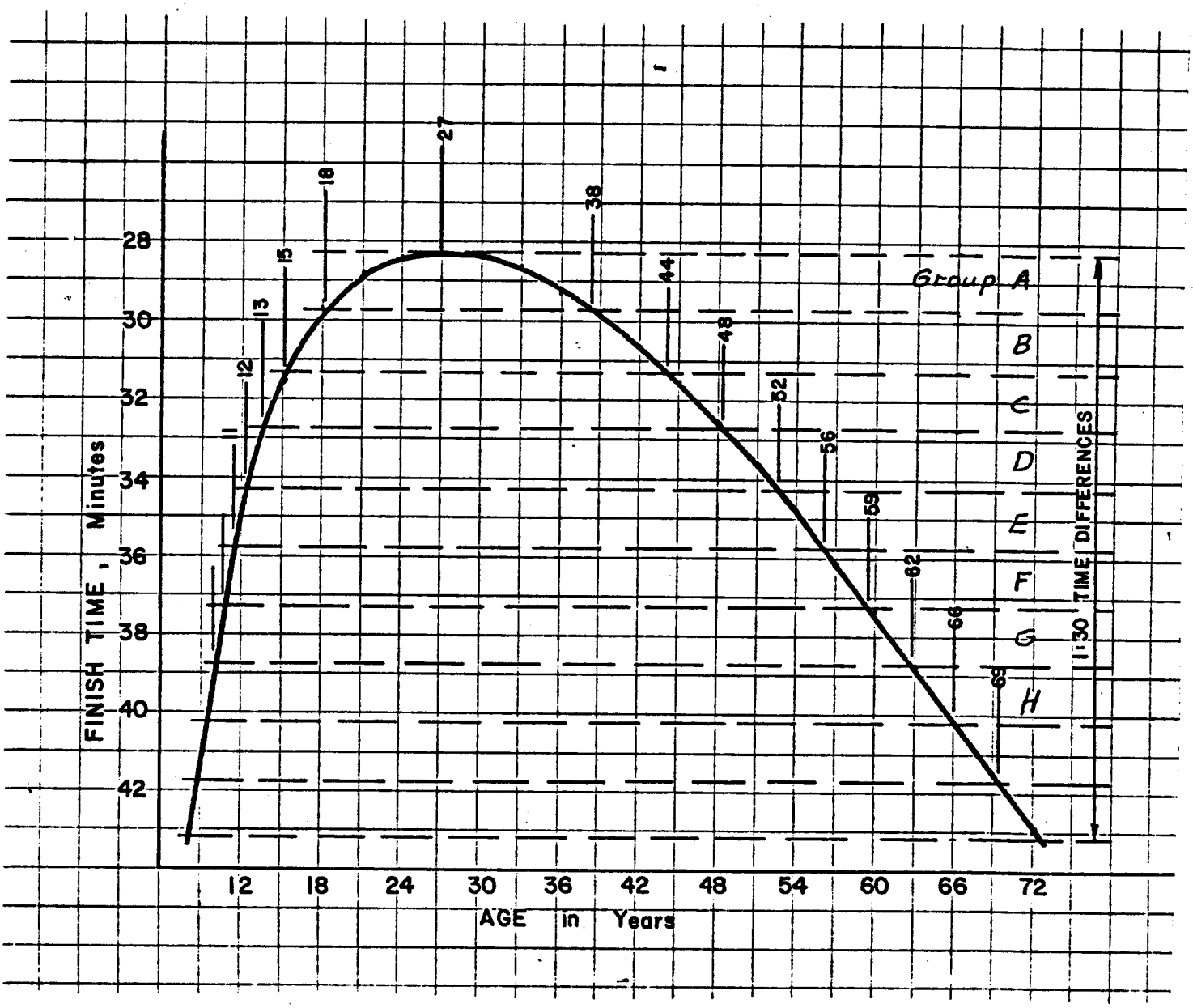
Actual time differences for five miles or any distance aren't as important to note as the changes that take place and when the rate of change creates significant differences in race times for various ages. It is noted that there isn't a significant difference in time handicap within a few years of peak age 27, but the differences change rapidly several years above or below this, and the farther from peak age 27, the faster the change. What this means in terms of deciding divisions is that they need not be narrow around peak years where the curve is flatter, but they need to become increasingly more narrow as age becomes farther from peak age.

Any other approach ignores the purpose of having divisions and can become unfair and arbitrary. All too often, divisions are established according to expected runners of various ages, and, since there aren't as many older or younger runners, these divisions become wider, rather than narrower. Obviously, this does a poor job at satisfying the purpose of creating divisions, and is actually the inverse of what should be done.

The two principles to follow are: (1) The maximum average time difference between the oldest and youngest runner in any given division should be about the same for all divisions, and (2) The percentage of awards (recipients divided by entries) should be about equal in all divisions. An exception in Principle 1 is that when figuring the division bracketed by age 27, the maximum expected time difference would be figured above and below age 27, rather than between youngest and oldest.

AGE/TIME EFFECTS FOR AGE GROUPING

(Sample is for 5 mile distance - Average for Men)



The graph shows how divisions would divide if maximum average time differences were kept at 1:30 for a 5-mile race. Such a system would create a wide (18-38) "open" division and narrow divisions above and below that. In fact, to keep things entirely fair, the race planner would have subdivisions less than a year apart up to about age 13 and also 3-year divisions over age 50! (One fact about the kids -- they will mature in a few years. Their situation isn't as bad as the older folks).

Well, all right -- now that the point is made, let's offer some practical suggestions. How about an "open" division for age 19-34, a 15-18 division, 3-year divisions younger than that, and 5-year divisions starting at 35 through age 70, with a promise that if people in their 70's, 80's, etc. sign up, additional divisions will be created? Other logical variations are possible. This is only a suggestion. Then, to keep everything fair, estimates would need to be made (preferably using past race data at similar distances) as to expected numbers of entries in each division. Applying principle 2 would involve offering more awards in divisions where more people are expected. Thus everyone is treated fairly and the older people, especially, are encouraged to compete. With present habits, we're forcing many of them to retire to "participant" at age 50 or so.

With this system, there is no need for any more than one "overall" award, if any. Each person is actually competing in a separate race. All too frequently, several "overall" awards are given, followed by age-group awards. The overall awards usually go to a narrow 25-29 group. Since these runners don't receive the age group awards for that division, slower runners move up to receive them. This is the very thing that causes older runners to walk away with nothing when they've actually defeated younger runners. There is no need for several "overall" awards if age groups are viewed as separate races.

The choice of holding separate races for separate divisions or putting them all at the same start line is one to be considered. But, if age, sex, and other divisions are created at all, it should be done to serve the purpose of allowing runners to compete against others of like handicap.

Types of Awards for Competitors

Trophies, plaques, medals, and similar awards should be of good quality. A small, sturdy trophy is better than a large one with cheap plastic parts. Awards are symbolic of quality and achievement, and those subtleties should be recognized. Gaudy awards are an unnecessary expense. They have little or no effect on race quality or attracting runners and probably work to reduce quality if their expense reduces the number of awards for other deserving competitors.

There is a certain mystique and appeal to a trophy, in comparison with other awards. This is probably the best choice for the top several in each division. Plaques, medals, and similar awards are acceptable for the lower percentage in the various categories. Special designs are encouraged, using imagination and emphasizing a specific race theme.

Merchandise and materialistic awards are one of those areas where absolute recommendations seem inappropriate. Some top finishers, with rooms full of trophies seem to like them if the value is high enough. This writer has observed age group winners, however, passing over the shirt, hat, or jacket in favor of a nice little trophy when a choice was given. Most runners are able to buy all of the merchandise they need, so why offer it as a prize? On the same line of thought, runners would feel silly ordering a trophy to symbolize a win after having received merchandise. If material (shoes, watches, etc) are to be given, it may be advisable to add them onto trophy-type awards for the leaders. Under no circumstances should entry fees be used to pay for expensive clothing and other materialistic awards. Nor, should trophies and medals be reduced in number for other recipients in order to pay for expensive items for a few. Merchandise is the type of thing that is appropriately donated by sponsors, sporting goods stores as promotion, or other donors.

Team Awards

Team awards should help to foster friendly competition as well as bring lone runners together into clubs and group running. Team awards are usually categorized into "open" and "masters" (over 40) for men and women, although sometimes they are mixed as to sex and age (more complex, but innovative). Scoring is done by adding the finish places of team members, the lowest score winning. Generally, three to five people can comprise a team but only the top three score. Teams should register as such prior to the race. To avoid a lot of last minute formation of fictitious teams, it may be desirable to require advance registration and not permit post registration.[5] Often, official teams are only those that are AAU registered teams, but bonafide clubs (RRCA, etc.) should be permitted to register members as teams. A separate registration fee may be charged for a team. More than one team from a club should be allowed to enter.

Team members compete for both individual and team awards. Team awards can be a trophy for the team and/or separate trophies or medals for team members. The number of awards should vary with the number of teams just as it does for individual entries.

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[5] There is both agreement (from a director who has experienced the hassle of last-minute teams formed) and disagreement (based on a generally more liberal attitude). No hard and fast recommendation is proposed here.

T-Shirts and Token Awards

All too often, T-shirts are given to all who enter a race whether they finish or even run. They lose much meaning if given merely for the act of registering or participating. For the person whose goal is merely to finish, this is the carrot on the stick to keep going. For the finishers, the T-shirt has much more meaning if they know that it is a mark of accomplishment. They can then wear it in pride; otherwise it may well become a cleaning cloth. Token awards such as medals, ribbons, key rings, and other inexpensive items can be similarly used. Anything that gives a goal to the people who are in the middle or back of the pack adds purpose and interest for that group. In short, it gives them a goal. It is recommended that token awards be given through 50% of the runners and finish ribbons and/or certificates to those who want them. T-shirts, if given at all, should go only to finishers. Many races currently have this policy. In many ways it reflects that the race organizers do comprehend the subtleties of the competitive runner's nature. T-shirts are a somewhat controversial consideration. Unless sponsor money is available, they can create real financial problems. Most runners seem to resent paying for them through high entry fees.

Number of Awards

The old idea of "winner" vs. "loser" still influences the awards structure at many races. The actual number of awards should depend on how many are expected in each division, as has been mentioned previously, about the same percentage being given in each division for a particular race. The percentage of awards relates to costs, entry fees, and other factors. Good "runner races" often give quality trophies to 20-30% of the competitors in each division and add smaller awards through 50% of the runners. A cost analysis of any race with no sponsors and entry fee over $3.00-$4.00 (1980 prices) indicates this is possible when the entry fee income is not spent on non-essential items or services. As a general guideline, approximately 50% of the entry fee should go for awards such as trophies, medals, ribbons, etc.

Awards, both as regards type and number distributed, is a subject where runners have diverse opinions. Some say too many (30% or more) cheapen the event, others like the incentive that the prospect of getting an award (even the last one) brings. One thing for sure -- nobody has ever seen the last award recipient frown! As to trophies, medals, ribbons, bowls, or whatever, there are individual preferences. Everybody seems to agree that quality of the award is important. Certainly the logistics of distributing 30% to 1,000 runners at an award ceremony presents a problem, but it can be done if winners are recognized without individual applause and presentation, or recognizing only the top percentage as practicability and common sense dictate, mentioning the lower percentile of "other" winners as a group.

Added Awards

Even with good planning, age divisions often become unbalanced and the percentage of awards varies considerably. In such cases, it is fair to add awards after the race to take care of the inequities. They can be mailed if necessary.

Even more important is the situation where the old or young runner finished ahead of the runner at peak age or the female ahead of the male of similar age and the "wrong" person got the award. Added awards to the deserving people who come in ahead of others who received awards helps morale and the reputation of the race. A simple analysis of the results will reveal these gaps. Even more refinement can be done using age group time-handicap charts.

Awards for oldest, youngest, first local, or other special recognition adds variety and additional goals for some people.

A rather absurd type of add-on award that has started at some races is one based on random drawings. This type of award can't really be called an "award" and has no place in a competitive event. It is in the category of the T-shirt-for-registering gimmick. This writer would recommend that such awards be incorporated into the competitive prize system, especially if having them has reduced the actual number of awards going to top competitors. It has been said that such awards are used so that "those who never win anything can get something." This can be done using finish ribbons, finish T-shirts, certificates, etc., as suggested.

7. AGE GROUP IDENTIFICATION

Many serious age-group competitors consider those outside of their division as only so many bodies blocking their view of their competitors. For the "open" runners up front, there is no doubt who they are competing against. But, the older or younger runners, often way back in the pack, do not enjoy this aspect of the race and generally don't know how they finished until the awards are announced. Knowing one's place among competitors during the race keeps the competitive urge tuned -- that feeling of excitement and anticipation which lures the competitive runner to the race initially. Runners lose much of that "thrill of competition" when competitors are unidentified. A few years ago when most runners knew each other, this wasn't as much of a problem. But now with so many people running, it is rare to know even half one's competitors in a race.

It is a simple matter to code runners' pin-on numbers using a method identifiable 30-40 yards away. Different colors of numbers is one way. Having a single large category letter or digit as part of the number is another way. It is important that the color or digit be distinctive enough so that runners can identify competitors from a good distance away.

Identification from the back is probably more important than from the front. For "out-and-back" courses, both should be used. This can be accomplished by having numbers on both front and back of each runner. A variation is to have a colored ribbon pinned to the back instead of another number. This is simpler and accomplishes the same thing. This way, runners can count place at the turn-around by observing the front numbers and then later try to move up on competitors using the back identification. The guesswork of deciding whether or not the person ahead is in one's division is discouraging. A tactical competitor may wish to conserve strength for the next race and avoid risking injury if the runner ahead is in another category, but may go "all out" to catch the person if in his or her category.

Also, sign-up sheets should be prepared by age category and posted before the race so that runners who desire to do so can see who and how many are in their division. Runners will appreciate identification of their competitors because it adds much to the thrill of competition and, consequently, their overall experience. Such small things can add a lot of interest and excitement for age-group competitors. They shouldn't be overlooked.

8. AID STATIONS

What and When

"Aid" is interpreted simply as fluids and other means to reduce dehydration and lower body heat. Medical aid is covered later.

On a cool day (less than 50°F) and a short race (less than 5 miles) no aid stations are really needed, but one should be somewhere near the half way mark in any race. Most runners won't partake, but a few will complain if it isn't provided. For longer races on a cool day, every five miles is ordinarily sufficient.

On a warm day (over 70°F), aid stations should be set up about every three miles regardless of distance. If the temperature is over 80°, every two miles is advisable. If the temperature has risen to over 90° and air is humid or stagnant, the race should be cancelled, but if humidity is under 40% and the air is clean, conditioned competitors will survive. Hoses, large wet sponges, and ice should be available every mile or two in such situations. In most areas of the country these conditions are avoidable by selecting date and time wisely.

For races more than 10 miles length, runners should be provided with a choice between drinking water and an electrolyte replacement fluid. Nothing except water is really needed in races less than about 10 miles long, even on warm days. ERG or Gatorade (diluted 50% with

water) will serve for electrolyte replacement. Weak fruit juices with a little salt (very little) can be also used. Cups should be clearly identified as to content. It is a bit discouraging to dump a cup of Gatorade or ERG on one's head, thinking it was water. The people dispensing the fluids have the responsibility to keep them separated. The cups should be at least six ounces in size in a long, warm race.

As to quantities, the average runner should take in four ounces of fluid per mile on a 70° day and half this on cool days (less than 50°). On a warm day (over 70°), allow eight more ounces per runner per mile to be thrown over the body. The fourth unforgiveable is to run out of water on a warm day.

Set-Up

Aid stations must be located carefully where runners don't need to stop or go out of their way. Some "don't's" are:

1) Don't set up an aid station at the turn-around. Place it about 200 yards from it. There is too much congestion and confusion at the turn-around itself and runners are interested in getting their "split" time and eye-balling their competitors. They may even miss seeing the station in the confusion. Since runners are going both ways on an out-and-back course, aid tables will generally need to be on both sides of the road to avoid crossing over.

2) Don't set up an aid station exactly at a corner or just after a turn. Give runners a chance to see it ahead of time so they can plan their movements without loss of time.

3) Don't set up an aid station within 50 yards of a mile mark. The runner can't be looking for two things at once and probably will miss seeing the mile marker in the congestion, thus missing a split time.

The best set-up is long, double tables in the center of a road with servers between the tables keeping them full of filled cups, allowing most runners to file by the tables and grab their cup, with a few people handing them out at the end for those who miss it at the tables. The length of the tables depends on the temperature and number of runners passing by per minute. On a warm day with ten runners per minute, a 10-ft. length should suffice.

Usually, auto traffic and other conditions preclude setting up in the middle of the road, so separating the tables, one on each side with servers behind and at the ends of the tables is almost as good.

Instructions to Aid People

Very clear instructions should be given as to set-up locations and orientation of the station. Also, it is important that servers know how to serve. All too often a server will hold a cup out and let go of it a split second before the runner grabs it. That almost always causes it to be dropped. A firm grip on the lip of the cup is required until the runner grabs it. The cup should be held at arms length between waist and chest height. It is important that the servers stay out of the road so that runners wishing to merely grab theirs from the table can do so without interference from servers.

9. A FAIR ENTRY FEE

A "fair" fee is one that considers cost vs. benefits to the runner. Hopefully it would not be so high as to discourage the young or financially poor runner and which allows large families to enter. Race entry fees have risen from as low as 50¢-$1.00 a few years ago to $5.00-$10.00 today. More than normal inflation has caused the increase. It is mainly the over-promoted, profit-seeking or charity events that have caused the average increase. Good "runner" races are still $1.00 to $4.00.

Entry fees, commercialism, profits from races, and what really is desired by the runners are subject to differences in opinion. Some aspects are controversial and there isn't room here to thoroughly cover all aspects. Certainly if a race director is seeking to serve the runner and sees to basic needs, fairness in fees and cost/benefit ratios will be right. Many runners don't mind high fees at all, as it is recognized that quality costs. But, it seems to be unanimous that they expect to have a quality race for the money. This can be translated into awards, accuracy, good markings, safety, refreshments, and other features.

To illustrate some diversity in viewpoints, one runner stated that he does not mind what the fee is or what is offered, as long as there are no lies told. In other words, as a "running consumer" this runner feels he has the choice of entering or not, based on the entry information. There is a philosophical difference in views. This writer would rather keep the standards high and choose from a few quality races than from a larger number whose promoters have self-interests at heart. One runner stated that "the time and energy to prepare for the race is the cost", and he'd rather pay high fees for more award opportunities. The moral here is -- don't trim awards to keep costs down. Economize elsewhere. Adding a dollar to the entry fee for purchase of more awards is certainly better than having a reputation for giving out too few awards. Races can get too cheap, to a point of failing to offer either the incentives for competition or to purchase necessities. These races can fail, too.

Then, there are the problems of police protection, promotion, printing,

mailing, and other costs. Much thought should be given in planning the race so as to simply eliminate or avoid high costs so that the problem of who should pay the costs does not arise. For example, a country road or park area may eliminate all police costs. Ordinarily, there is no need for expensive national advertising for local races. There are many ways to cut costs and still have a high quality event.

Paying the transportation of "name" runners is an area of controversy. Many runners resent paying this through entry fees. If such runners are to have their expenses paid, sources of funds probably ought to be sought other than entry fees. In the same vein, awards or other race qualities should not be reduced to pay such costs. These same principles might apply to other promotional gimmicks (T-shirts, race clinics, and other "frills".) Don't jack up entry fees and cut awards and necessities to pay for such features -- trim off such carnival hoopla and keep it simply focussed on competition, or find other donated money for those extras.

The charity events are one of the most controversial type of "races" being held. Most people are hesitant to speak out against seemingly altruistic motives, but it is a sad fact that most such events simply fail in terms of promoting running as a competitive sport and set poor examples for other profit seekers to follow. Usually, fees are high and awards are low. Many are also very poorly planned as the focus is on participation rather than competitive racing. It is a sign of the times -- the running boom -- that these events exist at all. Novice runners haven't experienced the qualities possible in true competitive events; otherwise such events would probably not be highly supported.

Runners are being used every week-end to earn money for many causes. The "right" or the "wrong" of this will not be decided in this manual or in the near future. Let us simply recommend that if a portion of the "proceeds" are to be used for any cause, however charitable, that (1) entry fees not be raised to earn the profits, and (2) awards and qualities be kept at the same high standards as any race. The charity profits would be earned by either (1) separate, voluntary donations by the runners, (2) contributions by other supporters or sponsors, and/or (3) pledges made by friends of the runners on separate pledge forms.

The central point above is that there is nothing "wrong" with charity races if all of the same standards exist in the race as would be present at any sanctioned road running club race organized for competitive racing, including reasonable mandatory entry fee, awards, age divisions, and attention to the many other details outlined in this manual.

In case there is any misunderstanding, the above recommendations apply to all recognized charities and also such things as scholarship funds, fund-raising by YMCA's, church-organized races, and events designed for private "charities".

All we ask as runners is a good racing experience for the entry fee.

We may even dig a little deeper and give voluntary donations or knock on doors to get pledges. But, please don't raise the fee and cut the awards. The event may be the only one in town that week as nobody else wanted to plan a race to conflict with it! Don't take values worth more than money from one group to benefit another group. Is that altruistic?

As an overall summary, remember, a competitive event ("race", so-called), is for the runner. Remembering the basic rule that entry fees are for the running competitor's necessities and benefits will result in a fair fee.

Sample Race Expenditures
Entry Fee $3.00
200 Runners, Local Race

$300-Awards (Trophies and Medals)
$ 50-Postage and Envelopes
$ 50-Printing
$ 50-Advertisement & Promotion
$ 75-Aid and Drinks
$ 75-Miscellaneous & Profits

10. START AND FINISH LINE PROCEDURES

The Start

As has been mentioned, make sure the start is at a safe location, with enough width to minimize elbowing and risk of stumbling, and so that the runners don't get funnelled into narrow passages or paths too soon.

Children should not be allowed in the front rows (unless they have proven speed). Little people won't be seen from behind and have been known to fall and get trampled.

Consideration should be given to "seeding", meaning placing runners in line according to ability. In very large fields, this can be done formally by collecting time data on entry forms, then assigning numbers according to a code. It usually works well, however, to simply have tall signs, starting at the line, with 5:00, 6:00, 7:00, etc. written on them. Runners then are asked to voluntarily position themselves behind the sign indicating the minute-per-mile pace at which they intend to start. Then a few seconds before the start, runners are instructed to move up to the line. This takes up the slack due to imprecise location

of signs and you're ready for the smoothest start possible. Experience has shown that signs are better than merely announcing "faster runners up front -- slower ones in back" because of the lack of actual marking of positions and the wide differences in meaning of "faster" and "slower".

Runners shouldn't be forced to stand in position more than five minutes. Proper warm-up means that they shouldn't get cold or stiff and this happens quickly. They'll get very impatient if forced to wait too long. Excess time here also means that traffic is often delayed which further irritates the community residents.

Start races on time! It is irritating to warm-up, get mentally ready, make the last toilet stop and then be forced to wait or continue jogging to stay loose. It is every runner's responsibility to know the time of day and be there. But, well, maybe a few minutes late is certainly better than early. This runner was testing a time/tape recorder method at a well-known distance race, and according to National Bureau of Standards Time signals, the race started four minutes early. Runners were still arriving to the start area and some were still in the bathroom!

The start of a race is best preceded by brief "last minute instructions" on the course and finish procedures. Don't take time here to thank the sponsors or the mayor. And, no speeches from anybody! The start should be preceded by the statement -- "You'll receive two commands - Runners to your mark, and then the gun (or go)." Then immediately alert the timers - make sure they're in position, and start it. Any hesitation or sloppy variations in commands will invite false starts.

The Fifth Unforgiveable

Many races go smoothly otherwise but fail at the finish line. The usual cause is too many runners. Even the most sophisticated procedures fail when crowds are too large. Back-ups at the finish are highly likely whenever runners cross the line more frequently than one every 2 or 3 seconds. Multiple chutes, electronics, and other fancy ideas fail as often as not and the chances for failure are just too great when the welfare of the runners is considered. The best advise is to avoid them by (1) limiting entries to manageable numbers, (2) not overpromoting, (3) holding more frequent races. Also, realize that there are maximums, optimums, and quantity doesn't mean quality. Don't get caught in the lure to be the "biggest". For the benefit of competitors deserving to have an accurate time and place, race promotion shouldn't be designed to attract crowds. They'll usually attract enough naturally if the qualities are obvious.

The rest of this discussion assumes a fairly crowded race, with finishers crossing the line every two to three seconds. Less concern and less elaborate procedures are necessary for smaller races.

Frequency and Peak Loads

One can easily estimate frequency of runners crossing the line. For example, nearly all (95%) runners will complete a 5-mile race between 25 and 50 minutes. That's 1500 seconds. If 500 runners enter, one will cross at an average frequency of three seconds. Since there will be surges of runners more frequent than that, this writer advises that the "design load" of a manual system is nearing the fail point beyond that frequency. A marathon will be completed by 95% of the runners in 2:30-4:00. That's 5400 seconds. Thus a marathon finish may accommodate up to 1500 or 2000 runners using conventional finish line procedures.

Keep Them Moving

When the number of runners approaches these maximums, it is important to keep them moving through and beyond the finish line area to avoid back-ups. It is exceedingly frustrating for a runner not to be able to cross the line on the run or to plough into a crowd of people. This last second could be important when really competing hard at the line. Two things must be done to keep them moving. One is to have someone aggressively urging runners to move quickly and the other is to have a system of place identification requiring little time. Handing the runner a place card is usually the best way. Requiring them to stop while someone tears off a tag takes too much time when conditions are crowded.

Recording Results

For races approaching the maximums, a good procedure is to have a tag stapled onto the runner's number with name and category already on it. When the runners move out of the finish area with finish place card in hand, they are directed to a compilation area located well beyond the finish area (you don't want two crowds together). The runner tears off the tag and hands it and the finish place card to a compiler who staples the two together and puts it in a box marked with the runner's division. Time can be saved by having someone at each division box. For lower volume of runners, fewer personnel can be used and perhaps the runners can do their own stapling or stop to put their own name and division on the finish card, omitting the tag and stapling. For very low numbers of runners, separate boxes for division results aren't needed and for especially small fields, only one compiler a few yards beyond the finish is needed.

Chute and Finish Line Design

Another common fault is to have a chute too narrow to accommodate close finishes between several runners or too narrow to be seen by the

runner when spectators are crowding close. The opening of a finish chute should be between 15 and 30 feet and not narrow down to less than 15 feet for at least 50 feet beyond the finish line. This latter dimension is to allow the runner to finish hard with a follow-through and not get injured by fences or chains forming chute boundaries. The maximum of 30 feet wide is not an important number, but one that seems likely to contain the finish, help keep spectators out of the area, and keep communications open and clear on both sides of the line. After the 40 feet "kick zone", the chute can gradually narrow to five feet and should not be unnecessarily long. The latter consideration is for runners who may get "cramped up" or nauseous unless they can continue moving. Long chutes cause unnecessary back-up -- not at the line, but in the chute itself.

The finish line should be exactly at the opening of the chute. Whether a chute is used or not, the exact finish line should be clearly marked using paint. With crowds, traffic cones and flags help the runner to "find" the line. Timers and finish judges should stand exactly on the line, thus adding to its identification. Lines often "float around" during a race when poorly marked. Runners who are really pushing after a long race are generally a little confused and disoriented. If in a photo-finish situation, they very much want to know when to lunge. Don't make them guess. Even hand and verbal signals can help guide such runners and they'll appreciate it.

The table on page 32 summarizes finish line procedures.

Keep Spectators Back

To aid runners in seeing the finish line and to avoid accidents and general confusion, spectators must not be permitted to crowd close in the last few yards of a race. Additional fencing or barricades may be necessary in very crowded situations. In general, a clear path at least 40 feet wide should be kept open all the way to the finish line.

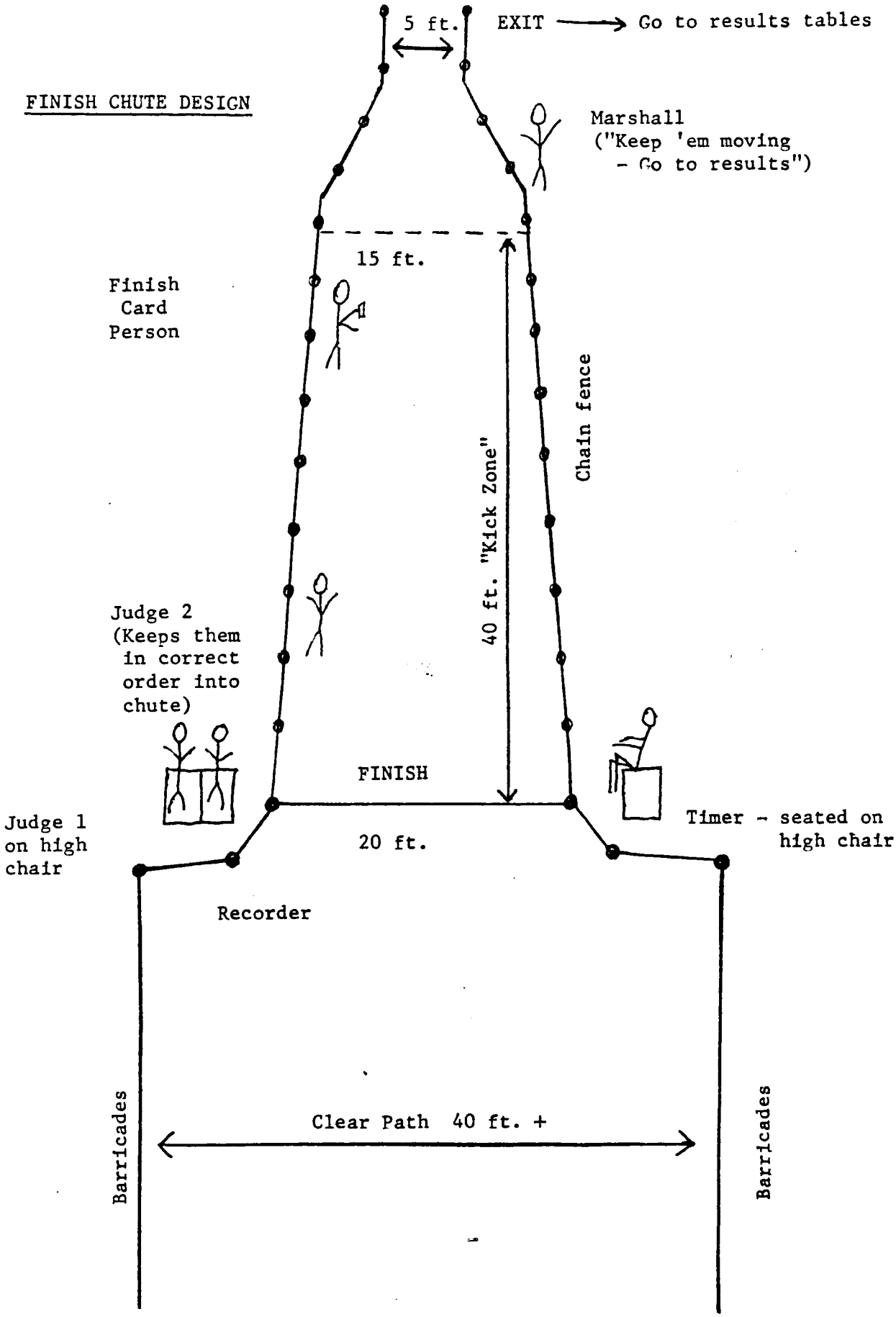
Personnel Needs and Training

For small races, only a timer and a recorder are needed. For those approaching maximum loads, at least six people are needed. One is a timer, standing at the line, calling times loudly, (preferably into a loud speaker). The second person is a recorder who watches runners and listens to the timer, circling the nearest second on the sheets or punching the button of an electronic recorder. The third is a finish judge/recorder assistant who sorts out close finishes and closely looks over the shoulder of the recorder to check for mistakes. The fourth is another judge who separates close finishers, keeps runners in proper order, and directs them to the chute opening. The fifth is the finish

FINISH LINE GUIDELINES

	Frequency 1 Runner Every:	For Example:	Finish Line/ Chute Requirements	Procedures at Finish
Too Sparce	60 sec.	25 in a 5 mile 100 in a Marathon	No chute needed, clearly marked line only.	1 Timer, 1 Recorder, & Results compiler
Low Keyed	30 sec.	50 in a 5 mile 200 in a Marathon	No chute needed, clearly marked line only.	1 Timer, 1 Recorder, 1 Finish card person, 1 Results compiler
Optimum	10 sec.	150 in a 5 mile 500 in a Marathon	Chute with fencing advisable, clearly marked line.	1 Timer, 1 Recorder, 1 Finish card person, 1 Judge/Assistant 1 Results compiler for each division 1 Time compiler
Crowd Threshold	2 sec.	750 in a 5 mile 2500 in a Marathon	Elaborate chute using details shown in sketch- barricades against crowds, clear line painted with flags and cones also. Back-ups are possible. Careful rehearsal necessary.	1 Timer w/loud speaker, 1 Recorder, 1 Finish card person, 1 Judge/ Assistant, 1 Marshall to keep them moving, 1 Assistant Judge, 1 Tape cassette recorder operator, 2 standby assistants, 2 results compilers for each division, 1 time compiler
Tilt	1 sec.	1200 in a 5 mile 3000 in a Marathon	Back-ups and failure highly likely no matter what you do.	Pray a lot. Results almost impossible to compile on race day.
	less than 1 sec.	"Mega race"	Beyond the imagination of this runner.	Can't advise on this.

Note: A standby watch should be carried by the timer in all cases.


FINISH CHUTE DESIGN
5 ft.
EXIT
Go to results tables
Marshall
("Keep 'em moving
- Go to results")
15 ft.
Finish
Card
Person
Chain fence
40 ft. "Kick Zone"
Judge 2
(Keeps them
in correct
order into
chute)
FINISH
Judge 1
on high
chair
20 ft.
Timer - seated on
high chair
Recorder
Barricades
Clear Path 40 ft. +
Barricades

card person who must be skillful in handling cards quickly. The sixth is a marshall who keeps the runners moving beyond their card pick-up point to avoid back-ups. Also, a seventh person with a cassette recorder is advisable in crowded races. This person stands at the line near the person calling times and reads in runner numbers the instant each crosses the line. Such a system provides a reliable record of results, complete with time, and identification. Such a system will resolve mistakes.[6] One or more relief people may be advisable to assist where needed. A sketch shows the position of each person and the finish line and chute design.

The person handing out the place cards should stand almost at the end of the "kick zone" at the opening of the narrow part of the chute. The runner must not be forced to slow down at the finish line to grab the place card. If finish card people stand too close to the finish line, they force this to happen and also risk getting run over. A hard finisher needs at least 30 feet to gain control after crossing the line. It is also advisable that at least one back-up watch be carried by the timer and perhaps the finish line judge could have a polaroid camera to resolve close finishes on-the-spot. All of this can vary a little when more automated time and finish systems are employed. Automation can replace people, speed processes, and add precision. Automation is advantageous, but any system must be nearly "fail-safe" and the farther we move away from simple methods, the more is the risk of total failure due to misunderstanding of the equipment, erroneous beliefs as to what it can do, or failure of the equipment itself. In the opinion of this writer, keeping it simple applies to finish line procedures.

Finish procedures are so important that rehearsals are a must. Don't learn from mistakes made during the performance. It is better for everybody to actually act the role under simulated conditions. Have a few fellow runners run through the chute on an earlier date and check all systems and refine as needed. Practice races can also be held. Things will happen much too fast during the big race to correct oversights at that point. Familiarity through rehearsal is very important!

11. AFTER-THE-RACE LOGISTICS

Between Finish and Awards

After the race, it is nice to have a comfortable place for runners to congregate. Showers and dressing are highly advisable, especially for long races or when weather conditions are uncomfortable for recovery. Warm drinks after frigid conditions are appreciated as are cold juices and other healthy drinks after most races. Cantaloupe, bananas, and other natural foods high in potassium and other minerals and vitamins are good after long races. Foods and drinks which are low in nutrition or difficult to digest should generally be avoided, cold pop and hot coffee being a couple of possible exceptions.

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[6]Even more valuable is a similar back-up system employing National Bureau of Standards time signals recorded onto the tape with the other verbal information. An explanation of this is available from the author.

Getting the Awards Out

The last challenge on race day is to get results compiled as quickly as possible. Especially if the post-race site is uncomfortable with no shower or entertainment, the runners will become very impatient for awards. Remember, they're tired, probably hungry, sore, and various cramps and blisters start to become more than minor annoyances. After they've finished a shower, had a snack, and bragged about their race for a while, the awards must come quickly, perhaps within about 40 to 60 minutes after most award recipients have finished the race.

Results compiled and made ready for the awards presentation for each award recipient should include (1) overall place, (2) age group place, (3) time, and (4) age. Having overall place and time is important because it adds interest and tells a more complete story of the race. But, most important, these results provide an almost foolproof way of catching mistakes during the award presentation. Without these two variables announced, runners suspecting mistakes would need to have a lot more intimate knowledge of how all competitors finished, which isn't possible in crowded races.

To get all data compiled quickly and efficiently, the compilers should take the first few place cards (starting with the peak runner categories) and time sheets and go to a place where they won't be interrupted. One person makes a list of the finish times by careful compilation from the finish time sheets as they are completed and numbers them 1,2,3, etc. This is a separate one-person job. Others then arrange the finish cards, with name and age group attached, in order of finish for each division, being sure to check later to make sure there were no additional cards dropped into the boxes with lower place than the recipients decided. That's really all there is to it! As soon as most are compiled, someone can start announcing awards.

Awards should be given to overall winners of each male/female race, then the awards for each recipient in their respective categories completed in order. Within any category, awards should be announced in order (first, then second, then third, etc.), not in reverse order. Mistakes are easily resolved when done in order since runners will hear the time and overall place and each will immediately know if they were ahead of that person (assuming, of course, that they know their own time and place), and therefore can immediately protest and correct it. When done in reverse, the runner who should have received an award usually can't know the mistake until they're completed in that category. The shuffling that occurs then is embarrassing for everyone, is a letdown for all who were bumped back a place, and sometimes the guy who got the award handed out first is in his car and gone. Resolving these messes later is troublesome and costly.

When handing out awards, one person reads overall and division place

from the cards. Hearing the overall place, the time compiler reads the time corresponding to that place, then the person's name and age can be given. Example: "In 15th place overall, 3rd in the age group, with a time of 30:03, at 41 years of age, was Johnny Swift." Applause -- and Johnny is handed his award and given a handshake.

After the Awards

Follow-up actions include cleaning up the paper cups and other litter, retrieving signs and other junk, compiling official results, perhaps having a post-race meeting to discuss problem areas while they are fresh in mind, compiling official results, mailing results, and reporting them to local newsletters and runner magazines.

Just as with after-the-race awards, runners look for results within a short time. If personnel are too exhausted to do this mundane chore immediately, hire a secretary to compile results, make copies, and mail them. But, check results before copying. If results are not to be mailed, this should be told before or after the race. Most runners will expect them. "Results", like the award announcements, should include name, age, category, overall place, category place, and time. Distasteful as this chore may seem, results are something nearly all runners seem to want. It provides a record of their standing and serves notice to others of their accomplishments. It is a justifiable and necessary expense for which runners will generally pay willingly. Small "club races" are an exception since club news generally would carry results.

A financial statement summary is becoming common in some areas. Runners are starting to expect to see where their money went. This can be a simple, short list of expenditures, income, profits, and losses, and be added to the bottom of the results sheet.

Now, you're done and can go back to your own training and start planning for next year's race.

12. SOME DETAILS OF PLANNING

Details, Details, Details

Now that the entire race procedure is familiar to the reader, it seems appropriate to list some important details necessary to get started properly. Complete race planning involves a large amount of details. Some, if overlooked cause disaster. Others are relatively unimportant. But, the fully successful race will have organization to plan for everything important. It involves consideration for medical standby aid, parking, toilets, showers, dressing, sign-up, numbers, pins, drinks, watches, gadgets, flags, paint, measuring wheels, chalk, and what to do

if it rains. Then there is publicity, entry forms, sponsors, meetings, getting reliable help, and so on it continues.

Delegate Responsibility

In general, delegate responsibility to reliable and conscientious runner-minded people! A staff of at least seven key people can each cover details in their respective area of responsibility. The director should oversee and handle last minute problems, leaving most details to others who have been trained and briefed. The seven main areas include: (1) course planning, measurement, marking, (2) traffic control, including sentries at turns and protection at intersections, (1 and 2 might be combined as 1 is before, 2 is during the race), (3) aid stations, including purchase of supplies, erecting stations, administration of fluids, (4) split timers, (5) entry forms, registration, and results stations, (6) awards purchase and presentation, (7) finish line including chute layout and overall operations. The director should be in charge of last minute instructions and starting the race or a special assistant can be assigned to this. An assistant might take care of miscellaneous matters such as toilets, parking, coordination with medical aid, police, etc.

For large race fields, especially if warm weather is to be expected, medical aid such as doctors, emergency vehicles should be available.

Entry Forms and Publicity

Entry forms should contain date, time, measured distance to the thousandth of a mile or nearest meter, location of start and registration area, a scaled course map with complete street names, elevations and/or percent slopes, type of running surface, plans for aid stations, age divisions clearly noted, type and number of awards planned for each division, whether "freebies" such as T-shirts or finish ribbons will be awarded, entry fee (pre and post), type of fluids to be given at aid stations, type of after-race refreshments, whether results will be mailed or not, plans to identify division competitors, method of course measurement, address and phone number, and who to make out the check for entry fee. Other notes might include team awards, whether course measurement is certified, RRCA or other sanctioning, last year's total finishers and winners, course records, limit on number of entries, cut-off date for entering, and other notes. Whatever the pre-publicity content, never promise more than you can deliver! (But, be detailed, nevertheless.)

A waiver releasing the club or promoters of all claims arising out of injury connected with the race is standard to include at the bottom of the entry form. The legal validity of such waivers is questionable and a race organizer should still understand that it probably doesn't release him or her, and their sponsors or associates, from liability. The legalities are outside of the expertise of this writer.

The entry blank to be returned should include space for name, address, zip code, age, category, sex. Also T-shirt size should be included if appropriate. A separate form for teams should be used which includes space for team name, individuals on the team, their ages and sex. On the entry form itself, include only what is necessary to process the entries. Don't include any information the runner will want after the form is removed and mailed. This requires attention to what is on back of the form.

Promotional efforts depend on a lot of things. Overpromotion draws crowds and underpromotion may cause financial losses and a lot of left-overs. There are enough of the crowded events that more of them don't need to be planned. Many runners enjoy an occasional crowd (such as Boston Marathon), but prefer a larger number of "low-keyed" events to do their serious competing. Advertisements in running club newsletters, having flyers at other races, mailing to those who ran the race last year, stuffing forms into envelopes with other race results, and similar means will probably draw all the people desirable for a quality race. Remember, quality has very little to do with quantity of runners.

Some people suggest heavy promotion, but limits on entries. Such limits might be based on "first-come, first-serve" or on ability such as is done at the Boston Marathon. Perhaps no favoritism to competitors over recreation runners is an opinion voiced by others. It is probable that the wording and what is offered on the promotional flyer will determine the type and number of runners to a large extent.

It is recommended that serious consideration be given to limiting entries to 500 or less for races of five or six miles and 1500 for marathons with other maximums in between for other intermediate distances. Besides problems at the finish, crowds approaching 1000 cause problems at the start line for any race, regardless of length, and other logistical problems common to any crowd. Lines at sign-up, lines at toilets, lines of cars -- nuts! This runner is in the sport to escape from crowds and lines! Furthermore, it is discouraging to have competed against a friend and never even see him before, during, or after the race. That's too crowded!

Other Considerations

Needed are more good quality club races with smaller starting fields. In many areas, there are not enough races and only one or two huge events available. In particular, more races are needed between November and March in some areas. Also, distances of 10 to 20 miles are rare to find. Many marathoners must race 10 kilo events to get ready for marathons when longer races of about two hours length would better prepare them, both mentally and physically. The 10 K - Marathon rut is prevalent. Needed also are unusual events such as 1 and 2-hour track runs, senior and masters only, kids events, age and sex handicap races, bicycle-runner combined races, distance relays, and really tough hill runs. Before you plan a race, don't just copy what everybody else does. Be different.

SUMMARY COMMENTS

The principal considerations in a competitive race, as viewed by this writer and other competitors, relate to the qualities that enhance and focus on the competitive urge. Many of these qualities have been lacking in events billed as "races". Common oversights are planning races during hot weather, lack of attention to accuracy in distances and times, poor course planning, lack of direction control along the route, inadequate or cheap awards, age grouping that disregards older and younger runners or women, lack of identification of competitors in age divisions, inadequate aid stations, poor analyses of cost/benefits to runners (high fees, few or cheap awards, etc.), poor planning of start and finish procedures, delays in getting results compiled, incomplete information on entry forms, and general poor planning.

In closing, the following thoughts and suggestions are offered: If you are planning a race, do it for the competitive runner along the guidelines herein. If you are wanting to use runners for profit, don't call your event a race. A "run, jog, walk, or crawl" would be more appropriate with no age groups, no awards, and no half-way attempts at competitive flavor. Leave the true races for the competitors to design and sponsor, or use this manual to plan the best race in the area.

The First Unforgiveable -- An inaccurate course.

The Second Unforgiveable -- A mistake in times.

The Third Unforgiveable -- Allowing wrong turns.

The Fourth Unforgiveable -- Running out of water on a hot day.

The Fifth Unforgiveable -- Back-up and confusion at the finish line.

MODEL DISTANCE RACE

Age Divisions, Men & Women		Awards
12-14	45-49	Minimum 1 trophy and 1 medal in
15-18	50-54	each age division, with 20% in each
19-34 (open)	55-59	division receiving trophies and 20%
35-39	60-64	medals, finish ribbons and certi-
40-44	65+	ficates upon request.

(Additional divisions for over 69 and under 12 if participants register.
Entry fee: $3.00 Time/Date - Expected 45°-50° temp.
Course: Out & Back, gently rolling...(map/profile provided)
Markings: Accurate distances marked each mile, certified procedures.
Aid stations: Providing ERG and water at 3-mile intervals.
Proceeds to go to future racing events to benefit local runners.