

STREAK

ANNAPOLIS
STRIDERS

Volume XX Number 1

February 1998

The Chip

by Brian Tresp

MANY WORDS HAVE APPEARED in this and other publications regarding the ChampionChip, also known as simply "the chip," the latest race scoring technology.

ChampionChip Technology - How It Works

More often than not, these typically opinionated ramblings came from the hand of yours truly. Well today I'm offering up something refreshing - just the facts. Here's how it works:

The ChampionChip is based on a simple, time-tested technology known as Radio Frequency (RF) Identification. Other applications that have benefited from RF ID technology are remote-control security locks on cars and building admission control systems. Use of primitive forms of

See THE CHIP, page 4

If you think

YOU WON A PRIZE

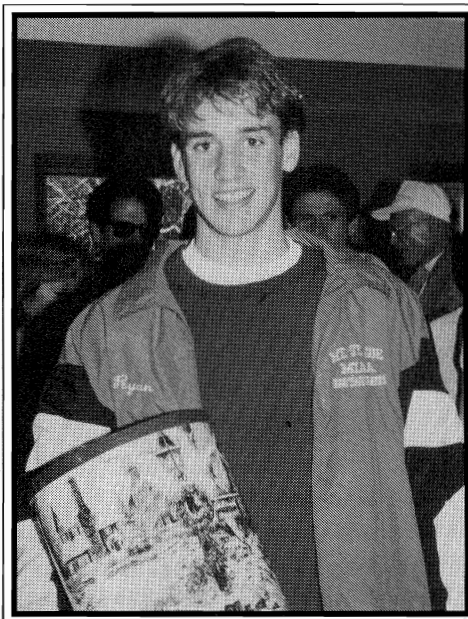
make sure you attend the

AWARDS BANQUET

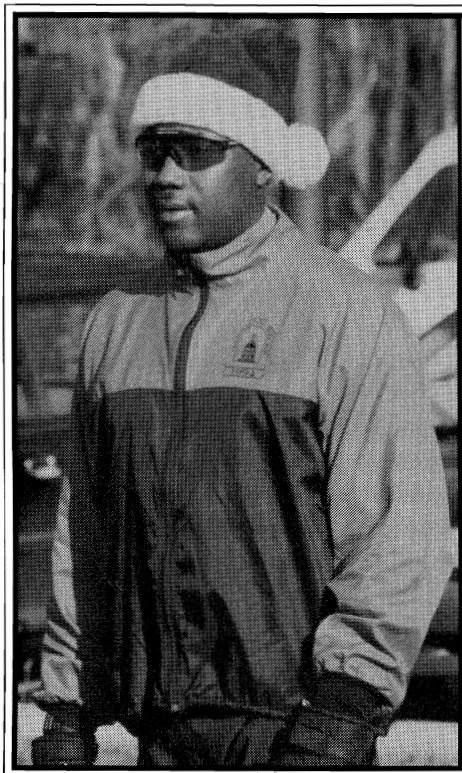
at St. John's College

Saturday February 28, 1998

See if you can identify everyone in their non-running clothes!
Your reservation form is on page 19.



Above, Ryan Kellish finished 1st in his 14-19 age group. Right, Clint Henderson arrived in proper attire and was the 100th runner to cross the finish line! Bottom right, Laura Nye(l) and Jennifer Sullivan(r) enjoy a warm conversation after finishing the December 14th Anniversary 15K Run.



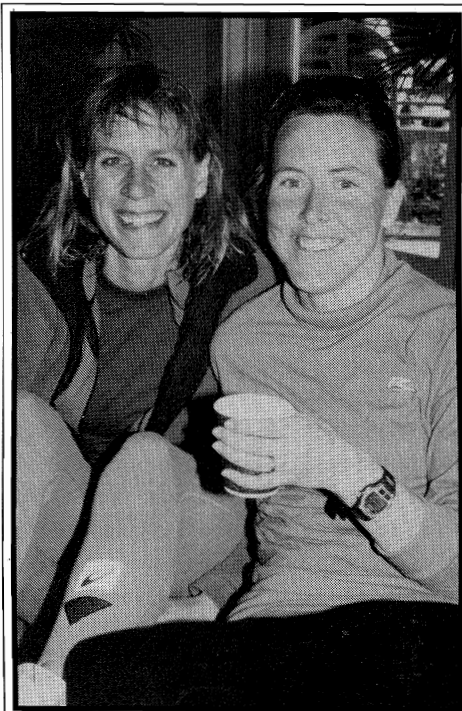
Anniversary Run

by Dave Walser, Race Director

THEY SAY A PERFECT DAY TO RUN IS tough for the spectator. We runners couldn't have drawn a better mid December day - clear and sunny with a cool breeze! In a repeat performance also was the food and delights that Jennifer Sullivan put together for us. The food spread consisted of pizza, bagels, cupcakes, cinnabons, bananas, and of course, an anniversary cake. For the last two years, she has provided us with a great spread - thanks, Jen! I am all ready looking forward to our 20th Anniversary Run next December.

Again we made a couple of small changes to the course based on last year's suggestions.

See ANNIVERSARY RUN, page 5



The Race Director's Perspective

Electronic Timing at the 1997 Annapolis Ten Mile Run

by Ron Bowman, Race Director

DOING ANYTHING FOR THE FIRST TIME is not easy, and bringing electronic timing to the Annapolis 10 Mile Run was no different. I first became interested in electronic timing when it was used in a triathlon in New Jersey that I participated in. It made the transitions (swim to bike, bike to run) very efficient and smooth and I heard glowing comments from the other athletes.

The ChampionChip distributor, Mike Burns, was extremely patient in answering all of our questions about this new scoring system. When he came to Annapolis, Mike was able to demonstrate the simplicity of the system, matching it with our RunScore software quickly. By using our own RunScore system from previous years and our own Finish Line team, we were able to save some of the potential expense that the ChampionChip presents for many races.

Another "savings" was being able to go from approximately 100 Finish Line volunteers to 30. Volunteers not needed for the Finish Line were used elsewhere and those remaining were used to encourage finishers to move forward and remove the computer chip from their shoelaces. Getting the chips back is very important because the race must reimburse ChampionChip for any non-returned chips. Our policy of premiums only to finishers made this simple - no chip, no premium.

Getting all runners used to using the chip as easily as they do race numbers will take exposure in other races and education. Packet Pick-Up workers must be very explicit in their instructions to the entrants - we plan to use a script next year. A ChampionChip demonstration of the system at packet pickup is also invaluable. Our Confirmation Letter carried all the details on the use of the chip and how the race would be scored with the chip (gun time vs. chip time, etc...), so there were relatively few problems. Still, you have to be prepared for those that don't read the directions and be very clear for those that do.

Because of the success of electronic timing and the ChampionChip, we have decided to use the system in the Governor Bay Bridge Run on May 3, 1998 as well as the Annapolis Ten on August 30, 1998.

A 1973 graduate of the US Naval Academy, Ron Bowman has run 18 ultramarathons and 25 marathons. He has been a member of the Annapolis Striders since 1983, serving as a past club vice president.

THE CHIP

continued from page 1

this technology has been attempted to score road races in the past, but with limited success. The ChampionChip works so well because it uses RF ID the right way.

The ChampionChip actually consists of three components: 1) the chips, which attach to each runner's shoe; 2) the mats, over which the runners must pass; and 3) the controllers, the yellow chirping boxes that are the brains of the system.

Each chip has an individual number that is matched up with the runner's bib number in the race database. The mats consist of a thin (1/2") rubber material containing densely woven antennas. The mats are connected to the controllers, which have built-in timers. The controllers are constantly emitting electronic signals through the mats. When a chip passes over the mat, the signal energizes the chip, which then responds to the mat (and therefore the controller) by transmitting its unique code. The signals don't travel far, so the chips **MUST** be worn as close to the mats as possible. The whole signaling procedure takes thousandths of a second, and the mats can detect hundreds of chips per second, so it's almost impossible to miss a chip.

At the start of a chip-timed race, the clock begins just as it does at any other race: the time is initiated by a computer attached to the controllers. All the chip does is tell the controllers how long it took a runner to pass over a mat once the clock was started. If that mat is at the starting line, the time recorded by the controller is the amount of time it took the runner to get to the starting line once the race was started. If the mat is at the finish line, then that controller tells us how long the runner took to get to the finish line from the start of the race (not the starting line). Simple subtraction gives us the net time (also known as chip time).

This article is based on information provided by Mike Burns of ChampionChip North America