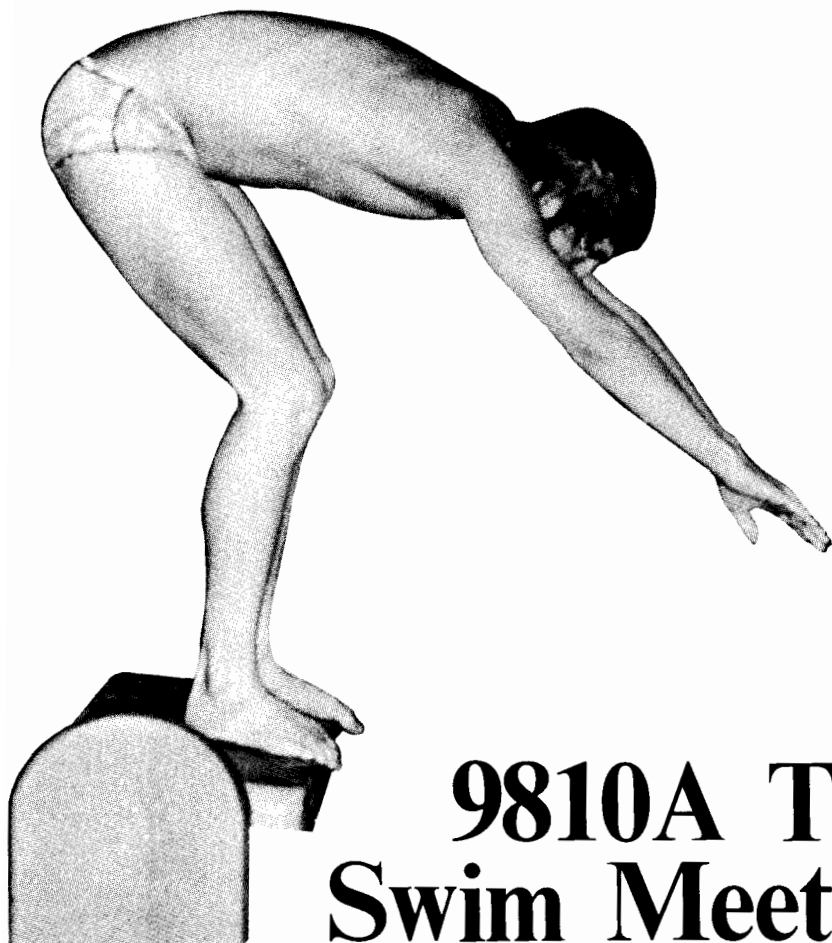


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9810A Takes Over Swim Meet Officiating

by Robert J. Deffeyes

How would you like to go to a swimming meet where your children are participating and have to miss seeing them swim? This unhappy situation occurs at nearly every age group swim meet. Somewhere behind the scenes, there is a group of parents closeted away, sorting through the thousands of time cards and preparing the official meet records. At a recent Dallas area meet there were 1,250 youngsters from several states competing in over 100 different events. They generated over 8,000 time cards from which the meet officials had to:

- select the winners of each event
- rank the remaining swimmers in order of times
- prepare result sheets for posting
- list swimmers who swam faster than the AAU time standards (Class AA)
- list swimmers who did not make the meet entry qualifying standard

- calculate the team points (double the score for relay events, average the points awarded for ties, etc.)
- calculate team standings
- fill out award labels
- type result sheets for the coaches.

This manual paper-shuffling system is fraught with problems:

- parents really want to see the meet, not sort cards
- after a few hundred cards, human error creeps in (following which irate parents stomp in, causing more errors)
- official results lag the meet by hours.

Coach Doug Russell (who set four world swimming records and won two Olympic gold medals by beating Mark Spitz in Mexico City) and Bob Deffeyes used the HP 9810A at the Doug Russell Winter Invitational meet. The program input consists of two steps:



1. Entry of event data

Z = 4 digit code for event
 Y = 'AA' Time Standard
 X = Class 'A' time, (meet entry qualifying time).

2. The input data on each swimmer

Z = Club = 13
 Y = Swimmer = 23
 X = Time (one minute, 3.2 sec.) = 1.032

This data is combined so that it occupies a single storage register as:

10320.2313

After data input is complete, the calculator prints out:

1. Number and title of event

2. Place winners, including:

- place
- swimmer number
- space to write in names
- official time
- club affiliation

This meets the needs for results posting

3. Remaining swimmers in order

4. Team standings (for posting)

5. Statistical analysis

6. Award labels to attach to ribbons and medals

7. Second printout of team standings for meet announcer.

The ease of operation of the 9810A proved to be a big asset. Mrs. Deffeyes, with a half hour of training prior to the meet, was able to keep up with the events. With any start-up there are problems. The calculator results did not agree with the team points assigned manually from the first race. After a little searching, we found that the 9810A was correctly scoring the relay events with double points; whereas, the human scorer had awarded points as if it were an individual event.

As written the program allows up to 80 swimmers per event and 14 teams. This general type of program would be applicable to track meets, skiing meets, bicycle racing, and other similar events.

Example:

Event #70

Women, (11 and 12 yrs.) 200 yard Freestyle

AA Time = 2.212

A Time = 2.410

Club	Swimmer	Time	(Place)
14	36	2.355	(13)
3	26	2.509	(20)
1	44	2.390	(16)
11	45	2.320	(10)
6	42	2.356	(13)
1	43	2.412	(19)
2	25	2.411	(18)
3	24	2.403	(17)
12	23	2.301	(9)
4	22	2.361	(15)
3	12	2.333	(11)
1	31	2.263	(7)
6	35	2.351	(12)
9	46	2.201	(6)
11	41	2.282	(8)
7	34	2.200	(5)
12	13	2.177	(2)
10	14	2.185	(3)
13	33	2.185	(3)
1	32	2.120	(1)

DOUG RUSSELL
 SWIM CLUB MEET
 EVENT NO. 70.0000
 Z=CODE
 Y=AA TIME
 X= A TIME
 2231.0000
 2.2120
 2.4100

Z=CLUB NO.
 Y=SWIMMER NO.
 X= TIME
 2.3550
 2.3550
 2.5090
 2.3900
 2.3200
 2.3560
 2.4120
 2.4110
 2.4030
 2.3010
 2.3610
 2.3330
 2.2630
 2.3510
 2.2010
 2.2820
 2.2000
 2.1770
 2.1850
 2.1850
 2.1200

RESULTS OF
 EVENT NO. 70.0000

WOMEN
 11+12
 200
 FREE
 FIRST
 32.0000

2.1200
 MADE 'AA' TIME
 DOUG

.....
 SECOND
 13.0000

2.1770
 MADE 'AA' TIME
 HBAC

THIRD
 14.0000
 2.1850
 MADE 'AA' TIME
 WFAC

.....
 FOURTH
 33.0000

2.1850
 TIE WITH ABOVE
 MADE 'AA' TIME
 DADS

.....
 FIFTH
 34.0000

2.2000
 MADE 'AA' TIME
 TNY

.....
 SIXTH
 46.0000

2.2010
 MADE 'AA' TIME
 SARC



After grade school and high school in Casper, Wyoming, Mr. Deffeyes graduated from Caltech in 1957 with a B.S. in Applied Chemistry. He spent several years at Dow Chemical before moving to Santa Clara, California, to join the Memorex Corporation in 1963. In Santa Clara his daughter Joan became involved in the competitive swimming program. After some time out for chemical engineering graduate studies at Stanford University, Mr. Deffeyes joined Graham Magnetics, Incorporated, in Graham, Texas as vice-president and assistant to the president. In 1971, he was named president of The Cobaloy Company, Graham Magnetics Arlington, Texas Division. ●