

SPEED MACHINE
OWNER'S MANUAL



NOTICE

BEFORE INSERTING YOUR SPEED MACHINE II MODULE IN THE HP-41, DO A "MASTER CLEAR".

WHILE DEPRESSING THE CLEAR KEY, TURN ON THE HP-41: THEN RELEASE THE CLEAR KEY.

THE DISPLAY SHOULD READ, "MEMORY LOST".

TURN THE HP-412 OFF AND INSERT THE SPEED MACHINE II MODULE.

TURN THE HP-41 ON AGAIN AND YOU ARE READY TO START.

SHOULD YOU HAVE ANY PROBLEM WITH THIS PROCEDURE, REFER TO THE HP-41 OWNER'S MANUAL.



SPEED MACHINE
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To thoroughly familiarize yourself with your SPEED MACHINE, please proceed step by step through each section of this manual.

SPEED MACHINE
TRACKS

Track	#	Variant
AC	(Agua) Caliente	2
Aks	Ak-Sar-Ben	1 (-5.3)
Alb	Albuquerque	1
AF	Arlington Park	14 (-4.3)
Aqu	Aqueduct	15 (-1)
Aqu [X]	Aqueduct [X]	11 (4.7)
Atl	Atlantic City	23 (-12)
Bel	Belmont	17 (1)
BM	Bay Meadows	2 (-8.7)
Bow	Bowie	3 (-8.7)
CD	Churchill Downs	13 (-.3)
Cen	Centennial	2
Cls	Columbus	21
Crc	Calder	27 (7.3)
Dar	Darby Downs (Beulah)	25
Del	Delaware Park	2 (-2.3)
Det	Detroit	2 (-11)
Dmr	Del Mar	6 (-6.7)
EIF	Ellis Park	16
FE	Fort Erie	3 (-3.7)
FG	Fair Grounds	7 (1)
FL	Finger Lakes	2 (0)
Fno	Fresno	16 #1 for Routes
FP	Fairmount Park	2
GG	Golden Gate Fields	5 (-11.3)
GP	Gulfstream Park	8 (-5)
Grd	Greenwood	20 (5.8)
GS	Garden State Park	2
Haw	Hawthorne	9 (-4.3)
Hia	Hialeah	28 (-1.7)
Hol	Hollywood Park	1 (-7)
HP	Hazel Park	21 (11.3)
Kee	Keeneland	22 (0) 7 1/2F = Beard Cs.
Key	Keystone	8 (-3)
LA	Los Alamitos	21 (-3.7)
LaD	Louisiana Downs	8 (4.7)
Lat	Latonia	2
Lga	Longacres	2 (-14.7)
Lrl	Laurel	18 (.3) #33 for 1 1/16 ch.
Med	Meadowlands	2 (3)
Mth	Monmouth Park	10 (-3.7)
OP	Oaklawn Park	2 (3.7)
Pen	Penn National	2 (-7)
Pim	Pimlico	4 (.7)
Pla	Playfair	25
PM	Portland Meadows	6
Pom	Pomona	2 (-6)
FR	Puerto Rico	2
RD	River Downs	2
Rkm	Rockingham Park	2

(X) = Variant equal to Variant of 20 in Daily Racing Form (tm)

(cont.)			
Track		#	Variant
SA	Santa Anita	2	(-6)
Sac	Sacramento	2	
Sar	Saratoga	24	(.3)
SFe	Santa Fe	1	
Spt	Sportman's Park	25	(9)
Stk	Stockton	11	
Suf	Suffolk Downs	12	(-8)
Sun	Sunland Park	2	
Tam	Tampa Bay Downs	11	(-3)
Tdn	Thistledown	10	(-5.7)
Tim	Timonium	19	(.6) 6 1/2F = "about"
TuP	Turf Paradise	2	
Was	Washington Park	11	
WO	Woodbine	5	(-1.3)
YM	Yamika Meadows	8	

Grass Tracks

AP	Arlington Park (I)	29	
AP	Arlington Park	30	
Aqu	Aqueduct	31	
Atl	Atlantic City	32	
Bel	Belmont (I)	54	
Bel	Belmont	33	
BM	Bay Meadows	46	
Crc	Calder	35	1 1/8 = "about"
Dar	Darby Downs (Beulah)	34	
Del	Delaware Park	36	
Dmr	Del Mar	37	
FE	Fort Erie	38	
FG	Fair Grounds	40	
GG	Golden Gate Fields	51	
GP	Gulfstream Park	39	
GS	Garden State Park	53	
Haw	Hawthorne	40	
Hia	Hialeah	41	
Hol	Hollywood Park	32	
LaD	Louisiana Downs	39	
Lrl	Laurel	43	
Med	Meadowlands	46	
Mth	Monmouth Park	44	
Pen	Penn National	46	
Pim	Pimlico	45	
RD	River Downs	46	
SA	Santa Anita	47	
Sar	Saratoga (I)	55	
Sar	Saratoga	48	
Suf	Suffolk Downs	49	
TuP	Turf Paradise	46	
Wat	Waterford Park	50	
WO	Woodbine (I)	51	
WO	Woodbine	52	

(X) = Variant equal to Variant of 20 in Daily Racing Form (tm)

SPEED MACHINE
 CUSTOM KEYBOARD

1 1/2 4 1/2 ADD	1 1/2 5F	1 3/4 5 1/2 CHANGE	1 1/4 6F	1 5/8 6 1/2	Row 1	
1 3/8 7F	1 1/2 7 1/2	1 1/2 1M	1 1/4 14°	2M 1 1/2	Row 2	
SHIFT	RACE PRGM	RANK HORSES	UPDATE HORSES	HORSES SCORED	Row 3	
	SPLITS NO	NEG OFFTRM		T ENY CLEAR	Row 4	
S MGMT	S P E E D	WIN 7 REMOVE	PLACE 8	M R C H I N E	SHOW 9	Row 5
SEE		D DBL 4	EXACTA 5	TRI 6 EXCUSE	Row 6	
VIEW YES		PIC 6 1 BK STP	MISC S 2 SKIP		3	Row 7
TIME	0 OMIT				ENTER	Row 8

INTRODUCTION

SPEED MACHINE used with the HP-41 is a thoroughbred handicapping method that utilizes final and fractional race times and adjusts ratings for each horse based on distances raced, weight carried, and post position.

This manual describes the operation of your **SPEED MACHINE** Module. For information concerning the operation of the HP-41 please refer to the HP-41 Owner's Manual.

Installing and Removing the **SPEED MACHINE** Module:

CAUTION: Be sure that the HP-41 is turned off before inserting or removing the **SPEED MACHINE** Module. Otherwise, the HP-41 may be damaged or its operation disrupted.

The **SPEED MACHINE** Module can be plugged into any HP-41 port. If the HP-X Function Module and Time Module are used with the **SPEED MACHINE** Module, please refer the Time Module Owner's Manual for inserting instructions.

The **SPEED MACHINE** Custom Keyboard or Custom Overlay should be placed over the HP-41 keyboard.

SPEED MACHINE is designed for simplicity of use and the following sections will take you step by step through each operation, all of which are prompted by direct questions for which you will give direct answers. The information you will enter is contained in the Daily Racing Form (tm). If you are unfamiliar with the Daily Racing Form (tm), complete instructions for reading it are available in the publication or in separate instructional pamphlets.

SPEED MACHINE is capable of storing information on 120 horses, all money bet and collected, and race times and contains statistical information on over 95 tracks in the U.S.A., Canada, Mexico and Puerto Rico. Tracks in South and Central America may also be used.

Remember, whatever information you put into **SPEED MACHINE** will stay there until you take it out. Turning **SPEED MACHINE** on and off will not affect the information already stored.

In order to obtain the best possible results from **SPEED MACHINE** you should save the Official Racing Charts from your track. **SPEED MACHINE** will sometimes ask you for information not available on the past performances of a horse. It is possible to skip this information or interpolate it, however, doing so will produce inferior results in the long run. Also, comments on trouble that a horse may have encountered during the running of a race may help you to decide whether or not its performance in that race should be excused and another race used in its place.

SPEED MACHINE Keyboard and Overlay
(Top to Bottom / Left to Right)

Rows 1 and 2: Direct entry race distances from 4 1/2 furlongs to 2 miles.

ADD- Used in UPDATE to add a horse to an existing field.

CHANGE- Used in UPDATE to change a horse's scores.

Row 3: SHIFT- Used to enter functions labeled in Gold and Green.

RACE PROGRAM- Main program for entering each horse's data.

RANK HORSES- Ranks the field and displays the top 4 horses.

UPDATE HORSES- Used to add, change or remove a horse's scores because of scratches, overweights, or post position changes.

HORSES SCORES- Used to see scores of an individual horse or an entire race field.

Row 4: SPLITS- Used to enter fractional times with the Time Module.

NO- Answer to displayed questions.

NEGATIVE- Changes numbers to negative values.

OFF TRACK- Answer to displayed question.

Row 5: \$ MANAGEMENT- Direct entry into Money Management Mode.

WIN- Direct entry for WIN bets.

7- Number SEVEN.

REMOVE- Used in update to remove a horse from an existing race field.

PLACE- Direct entry for PLACE bets.

8- Number EIGHT.

SHOW- Direct entry for SHOW bets.

9- Number NINE.

Row 6: SEE \$- Used to see information stored in Money Management.

DAILY DOUBLE- Direct entry for DAILY DOUBLE bets.

4- Number FOUR.

EXACTA- Direct entry for EXACTA bets.

5- Number FIVE.

TRIFECTA- Direct entry for TRIFECTA bets.

6- Number SIX.

EXCUSE- Answer to displayed question.

Row 7: VIEW- Used to see times stored with Time Module.

YES- Answer to displayed question.

PICK 6- Direct entry for multiple race bets.

1- NUMBER ONE.

BACK STEP- Used in RACE PROGRAM and UPDATE to re-enter data. (Must press <NEGATIVE> - <ENTER>)

SPEED MACHINE Keyboard and Overlay

- Row 7:
(cont.)
- MISCELLANEOUS \$**- Direct entry for MISCELLANEOUS bets.
2- NUMBER TWO
SKIP- Used to skip over entry of fractional times in RACE PROGRAM and UPDATE.
(Must press <NEGATIVE> - <ENTER>)
3- Number THREE.
- Row 8:
- TIME**- Direct entry into Time Module.
0- Number ZERO.
OMIT- Used to omit a horse in RACE PROGRAM or UPDATE.
. - DECIMAL POINT.
ENTER- Used to enter all information other than direct entries.

NOTE: Functions labeled in Gold and Green are entered by first pressing the SHIFT key, which is also colored in Gold and Green. These functions are race distances from 1 1/16 to 2 miles, all Money Management functions, and Time Module EXIT.

Direct entry keys (it is not necessary to press the ENTER key after pressing a function key) are all race distances, all Money Management functions, all Time Module functions, RACE PROGRAM, RANK HORSES, UPDATE HORSES, and HORSES SCORES.

MISTAKES: Use BACKSTEP to step back through the RACE PROGRAM and UPDATE HORSES to reenter data.
If you press the wrong function key just press the correct function key to get to where you want to be or turn **SPEED MACHINE** off and then back on.

OMITTING A HORSE: To omit a horse press OMIT - ENTER when you are asked in RACE PROGRAM or UPDATE for TODAY'S WT.?. Zeros will then be stored for that particular post position. Examples of when you would use this function are for first starters, a grass race where a horse has not run on the grass before, or a horse that has not run a race in this country. If for any reason you decide to eliminate a horse use OMIT.

SECTION I
RACE PROGRAM

After inserting the **SPEED MACHINE** Module and placing the Custom Keyboard or Custom Overlay over the HP-41 keyboard you are ready to start by pressing the ON button (you will also use the ON button to turn the HP-41 off). You will then see displayed:

WORKING - SPEED MACHINE - SELECT

When **SELECT** is displayed you may select any **SPEED MACHINE** function.

Rules: (1) Use only the horses last 3 races.
 (2) Use the most recent race over the same race surface (dirt or grass).
 (3) Disregard the length of time since the horse's last race.

Thus: (1) If the horse's last 3 races were on the dirt and today's race is on the grass, or vice versa, pass the horse.
 (2) Dirt and grass races are not interchangeable.
 (3) As long as the race being used is one of the horse's last 3 races and over the same surface it is acceptable, regardless of how long ago it was run.

Off track: Any dirt track not listed as fast or good.
 Any grass track not listed as firm, good, or hard.

You may use any race over an off track if it is the horse's first or second lifetime start or first race with blinkers on or off.

The procedures that follow are used for races over dirt or grass tracks, regardless of whether or not today's races are over an off track.

Note: Before entering today's track when in the Race Program you may exit the race by turning the HP-41 off or by pressing another function key and return to the same race when necessary.

<u>Press</u>	<u>Display</u>	<u>Explanation</u>
RACE PRGM	RACE	Momentary Display that lets you know that the correct key was pressed.
	NEW CARD?	Are you starting a new day (yes) or continuing entries for a day already begun (no). For this example:
YES - ENTER	RACE 1.	SPEED MACHINE clears all previous race information from its memory and momentarily displays the race

(cont.)

Press	Display	Explanation
		number for which you will be entering the new information. Had you answered <NO>, SPEED MACHINE would have gone directly to the next race number.
	NO. HORSES	How many horses will be in the race? Be careful to enter the correct number because you cannot add a horse to an established field. Also watch for grass races run at "about" distances. These races are sometimes limited to less than the normal 12 entries because a temporary rail is installed well out from the inner hedge, therefore limiting the size of the field for safety reasons. However, if for any reason the grass race is moved to the main track, more horses may be allowed to run than were originally anticipated. When this situation is a possibility, you should enter the maximum number of horses that could run under any circumstances to reserve space that may be required. For this example:
4 - ENTER	TODAYS TRACK	At what track will the race be run today? Enter the track number from the list furnished. For this example:
1 - ENTER	TODAYS DIS.?	What is the distance to be run today for this race? For this example:
6F	PP.1.	Momentary display that lets you know that you will be entering information on the correct horse.
	TODAYS WT.?	What weight will the horse carry for this race? For this example:
116 - ENTER	LAST TRACK?	Where did the horse run its last race? ("Last" always stands for the race being rated.) Enter the track number from the list furnished. For this example:
1 - ENTER	LAST DIS.?	At what distance did the horse run its last race? For this example:
6F	LAST PP.?	From what post position did the horse run its last race? For this example:
1 - ENTER	LAST WT.?	What weight did the horse carry

(cont.)

Press	Display	Explanation
		in its last race? For this example:
116 - ENTER	TRACK VAR.?	What was the track variant for the day of the horse's last race? Enter the correct SPEED MACHINE COMPUTERIZED DAILY VARIANT if you are a subscriber (See Pg. 18). Otherwise use the daily variant in the Daily Racing Form (tm), your own variant, or a variant from another daily variant service. For this example:
6 - ENTER	FINAL TIME?	What was the final time of the horse's last race? It is not necessary to enter the minute, which SPEED MACHINE assumes. enter the seconds and fifths separated by a decimal. The only exceptions to this are races of 5 furlongs and 1 1/4 miles where a 6 must be entered in front of the seconds and fifths (i.e., 1:01 2/5 would be entered as 61.2 for a 5 furlong race and 2:05 1/5 would be entered as 65.1 for a 1 1/4 mile race). For this example:
12.2 - ENTER	BEAT LENGTHS	How many lengths was the horse behind the leader at the finish of the race? For this example:
0 - ENTER	4F TIME?	What was the 4 furlong (1/2 mile) time the horses last race? For this example:
46 - ENTER	BEAT LENGTHS	How many lengths was the horse behind the leader at the 4 furlong call? For this example:
2 - ENTER	2F TIME?	What was the 2 furlong (1/4 mile) time in the horse's last race? For this example:
22.3 - ENTER	BEAT LENGTHS	How many lengths was the horse behind the leader at the 2 furlong call? For this example:
3 - ENTER	E I F	Momentary display which indicates that reading reading from left to right the next numbers in the display will represent a speed rating for the horse's last race: Early (2 furlong), Intermediate (4 furlong), and Final (6 furlong) times.
	56 64.9 72.7	These numbers will be displayed until you press the ENTER key so

(cont.)

Press	Display	Explanation
ENTER	EX OR OFF TR	<p>that if you are not using a printer they can be written down if so desired.</p> <p>Was the horse's last race over an off track or did the horse have an excuse in its last race? SPEED MACHINE will accept three answers to this question: NO, OFF TRK, or EXCUSE. If you press <NO - ENTER>, SPEED MACHINE will move on to the horse in the next post position. If the answer is <OFF TRK - ENTER>, you will be prompted to enter more information for the same post position. In this case you will be trying to prove the horse's last race as usable, even though it was over an off track. For this purpose, use the horses last race on a fast or good track (firm, good or hard if grass) without an excuse (go back over three races if necessary). A race in which the horse had an excuse but still matched its race over an off track is also acceptable. If the race used is worse than the off track race it will be retained by SPEED MACHINE. If the race used is equal to or better than the off track race, the off track race will be retained as the operable race for that horse. If the answer is <EXCUSE - ENTER>, do the horse's last previous race on oo the same surface (dirt or grass), but do not go further back than the last three races. If the second race done is better than the EXCUSE race it will be retained by SPEED MACHINE, otherwise the first race entered will remain the operable race for that horse. These procedures may be repeated as often as necessary. For this example:</p>
NO - ENTER	PP.2. TODAYS WT.?	<p>Momentary display that lets you know that you will be entering information for Post Position #2. SPEED MACHINE would then begin prompting you for information for</p>

(cont.)

Press	Display	Explanation
		this post position, but since we are not going to complete the race at this time turn your SPEED MACHINE off. Had you completed all of the required steps for all horses in the race, the display would have read:
	CONTINUE NOW	If you enter <YES> you will proceed to the next race. If you wish to stop, enter <NO>.

Special Conditions

Longer Sprint to Shorter Sprint: When Today's Distance is a sprint and the Last Distance was a sprint of longer than 6 furlongs (6F) **SPEED MACHINE** will ask you for the 6F Time and Beaten Lengths from that race after you enter the Beaten Lengths for the Final Time. If the information is not available, press <SKIP - ENTER> and **SPEED MACHINE** will skip that entry and continue the Race Program.

Sprint to Route: When Today's Distance is a route and the Last Distance was a sprint, **SPEED MACHINE** will not ask you for a 2 Furlong (2F) Time. Instead **SPEED MACHINE** will use the 4 Furlong (4F) Score for the Early Rating, the Final Score for the Intermediate Rating, and **SPEED MACHINE** will interpolate a Third Score as the Final Rating.

Route to Sprint: When Today's Distance is a sprint and the Last Distance was a route, **SPEED MACHINE** will ask you for the 2F Time and Beaten Lengths from that race. For proper comparison with other horses in the race you may not skip this entry even if you lack the chart to find the correct information. Instead, divide the 4F Time from the route race in half and use the Beaten Lengths from the 4F call (i.e., if the 4F Time was :48 and the Beaten Lengths were 2, use :24 as the 2F Time and 2 as the Beaten Lengths).

Final Times Only: When Today's Distance is over 1 1/4 miles, **SPEED MACHINE** does not use fractional times and, in some cases, only Final Times will be available for comparison. Examples of this would be races on dirt or grass where fractional times are not given either because the races were run at "about" distances or no tele timer was available to record the times. Do not try to compare horses with Final Times only to horses for which you also have fractional times. They will not mix. Use Final Times only. After entering the Final Time and Beaten Lengths from the horse's Last Race you will be prompted for a 4F or 6F Time. Press <SKIP - NEGATIVE - ENTER>, and a Final Score only will be displayed for that horse.

Section II
UPDATE HORSES

Turn your SPEED MACHINE back on and complete the following steps.

Press	Display	Explanation
UPDATE HORSES	RACE	Which race do you want to update? For this example:
1 - ENTER	UPDATE TYPE	There are three answers to this question: ADD, CHANGE, and REMOVE. ADD is used to add horses to a field after a horse has been scratched. CHANGE is used to change a horse's scores for any reason, such as a jockey overweight, post position change, or because a mistake was made in the original entry. REMOVE is used to scratch a horse when the race is done before the morning scratches have been made. When removing a horse from a race you must remove the <u>highest</u> number post position <u>first</u> , then the next highest, and so forth. For this example:
CHANGE - ENTER	HORSE PP.?	What post position do you wish to change? For this example:
2 - ENTER	TODAYS TRACK	You are now in the Race Program and the same steps will be followed as in Section I. Enter the same information that you used in the Race Program example, answering NO to the OFF TRK or EXCUSE question. When the example has been completed the display should read:
	56 64.9 73.7	The reason for a different Final Score is that SPEED MACHINE had made a post position adjustment in post position one.

Press <UPDATE HORSES> again and enter the information for Post Position #3 and then Post Position #4 as listed below.

Display	P.P.#3	P.P.#4
RACE?	1	1
UPDATE TYPE?	CHANGE	CHANGE
HORSE P.P.?	3	4
TODAYS TRACK	1	1
TODAYS DIS.?	6F	6F
TODAYS WT.?	116	116
LAST TRACK?	2	3
LAST DIS.?	6F	6F
LAST P.P.?	1	1
LAST WT.?	116	116
TRACK VAR.?	6	6
FINAL TIME?	12.2	12.2
BEAT LENGTHS	1	2
4F TIME?	46	46
BEAT LENGTHS	1	2
2F TIME?	22.3	22.3
BEAT LENGTHS	1	2
EX OR OFF TR	NO	NO

When finished with Post Position #3 the display should read:

64 67 72.3

Now press <UPDATE HORSES> again and enter the information for Post Position #4.

When finished with Post Position #4 the display should read:

60 65.4 71

You now have scores for post positions #1 through #4. To look at them using HORSES SCORES, turn to Section III.

Section III
HORSES SCORES

Press	Display	Explanation
HORSES SCORES	RACE?	Which race do you wish to view? For this example:
1 - ENTER	WHOLE RACE?	Do you wish to view the scores for every horse in the race? This question may be answered with YES or NO. For this example:
NO - ENTER	HORSE P.P.?	Which horse's post position do you wish to view? For this example:
1 - ENTER	56 64.9 72.7	These are the scores that were previously calculated for Post Position #1. Now:
ENTER	SELECT	You have exited HORSES SCORES and may select any function. However, instead:
HORSES SCORES	RACE?	Now:
1 - ENTER	WHOLE RACE?	For this example:
YES - ENTER	56 64.9 72.7	Momentarily displayed was P.P.1, then the scores for that post position. Now:
ENTER	56 64.9 73.7	Momentarily displayed was P.P.2, then the scores for that post position. Pressing <ENTER> after each horse's scores are displayed will advance you to the next horse until you have viewed the entire race. Do so until you are returned to "SELECT?".

Now turn to Section IV to rank the race.

Section IV
RANK HORSES

Press	Display	Explanation
RANK HORSES	RACE?	Which race do you wish to rank? For this example:
1 - ENTER	1ST - P.P.2 2ND - P.P.3 3RD - P.P.1 4TH - P.P.4	SPEED MACHINE has ranked the field for the first race and has displayed the results. Had the information warranted, you would have seen displayed:
	NO BET RACE	This means that after comparing all scores entered for all horses in the race, no horse has the proper characteristics to be selected over all of the other horses and no bet should be made.

Section V
MONEY MANAGEMENT

Money Management allows you to store and recall at any time all money bet and collected for eight categories which are: WIN, PLACE, SHOW, DAILY DOUBLE, EXACTA (Perfecta - Quinella), TRIFECTA (Triple), PIC 6 (Super 6, etc.), and MISCELLANEOUS. All Money Management functions require you to first press the SHIFT key (Gold and Green) and then the function key.

Press	Display	Explanation
SHIFT - \$ MGMT	FRESH START?	SPEED MACHINE is asking you for permission to clear out all previous information which had been previously stored in Money Management. For this example:
YES - ENTER	SELECT	You may now select any function of SPEED MACHINE and all eight categories of bets have been cleared of all previously stored information. For this example:
SHIFT - WIN	WIN BET \$	How much money did you bet to WIN? For this example:
20 - ENTER	PAYOFF?	How much money did you collect for this bet? For this example:
60 - ENTER	NET \$40.00	Momentarily displayed will be the Net Amount for that bet category and then you will be returned to:
	SELECT	As before, you may now select any function of SPEED MACHINE. For this example:
SHIFT - D DBL	D.DBL BET \$	How much money did you bet on the DAILY DOUBLE? For this example:
20 - ENTER	PAYOFF?	How much money did you collect for this bet? For this example press:
34.40 - ENTER	NET \$14.40	Again the Net Amount was momentarily displayed and then you were returned to:
	SELECT	For this example:
SHIFT - MISC \$	MISC BET \$	How much money did you bet in this category? For this example:
10 - ENTER	PAYOFF?	How much money did you collect for this bet? For this example:
0 - ENTER	NET \$-10.00	Momentarily displayed will be the Net Amount for this bet and then you will be returned to:
	SELECT	In order to see how you stand for the day:
SHIFT - SEE \$	DAYS TOTAL	Momentarily displayed is the
	BET \$50.00	Day's Total Amount bet, col-
	COL \$94.40	lected, and the Net result. The
	NET \$44.40	display then asks you:

(cont.)

Press	Display	Explanation
	SUBTOTALS?	Do you wish to see where you stand for each individual category of bet? Answer <NO> and you will be returned to "SELECT". For this example:
YES - ENTER	WIN	Momentarily displayed are all categories for which you entered a bet and the results for that category. Only the categories for which you entered a bet are listed, therefore had you made bets in other categories, they too would have been displayed.
	BET \$20.00	
	COL \$60.00	
	NET \$40.00	
	DAILY DOUBLE	
	BET \$20.00	
	COL \$34.40	
	NET \$14.40	
	MISC.	
	BET \$10.00	
	COL \$0.00	
	NET \$-10.00	When all categories have been displayed you are returned to:
	SELECT	

NOTE: If your SPEED MACHINE had been connected to a printer when you entered <SHIFT - SEE \$>, the display would have been:

DATE?

You may press <ENTER> and no date will be printed, or you may enter the day's date for your records. Letters may be entered directly, but, as with other Money Management functions, you must first press <SHIFT> before entering each number. Also, in this particular mode of operation, <SHIFT - TIME> = "/" and <OMIT> = SPACE so that a date may be entered:

DEC. 8, 1983
OR
12/8/83

Section VI TIME

The Time Function requires the use of the **SPEED MACHINE** module with an HP-41CX or an HP-41CV with the separate purchase of the HP Time Module and X-Function Module. This function allows you to record, store, and recall fractional (splits) and final race times from races run at "about" distances and other instances where fractional times are not provided by a particular track.

Press	Display	Explanation
TIME	00:00:00.00>R00	You are now in the Stopwatch Mode. To clear the stopwatch:
CLEAR	HH:MM:SS.hh>R00	To start the stopwatch:
ENTER	HH:MM:SS.hh>R00	The stopwatch is now running. To enter fractional times:
SPLITS	HH:MM:SS.hh>R01	You can record and store splits five times per race. Only times entered by pressing <SPLITS> will be stored. To stop the stop-watch:
ENTER	HH:MM:SS.hh>RS	Having recorded the times for a race, to exit:
SHIFT - T EXIT	RACE?	Enter the race number by first pressing <SHIFT> and then the race number. For this example:
SHIFT - 1 - ENTER	SELECT	You have now recorded and stored the times for Race #1. To recall these times:
VIEW	RACE?	For which race do you wish to view the stored times. Since you stored the times under Race #1, now:
SHIFT - 1 - ENTER	RACE 1 HH:MM:SS.hh>R00	Momentarily displayed will be the race number of the race being recalled and then the times that were stored. The display will then read:
	ERASE TIMES?	Do you want to continue to store the times recorded for Race #1 or erase them? Answer:
YES or NO - ENTER	ANOTHER?	Do you wish to recall another race? Since you only have one race stored:
NO - ENTER	SELECT	You may now select any SPEED MACHINE function, including the Time Function to store additional race times.

Section VII
USING THE CHARTS

As noted under Special Conditions (Pg. 8) there are times that **SPEED MACHINE** will ask you for the 6F Time and Beaten Lengths from a sprint longer than 6F. The 6F Time will be listed in the Result Chart for the race and you will have to discern the Beaten Lengths in order to make the entry. Do so in the following manner:

7 Furlongs: The stretch call is always given at the 1/8 mile pole which coincides with the 6F call. Therefore, enter the Beaten Lengths for the stretch call from the horse's Past Performance line and you will have the correct entry.

6 1/2 Furlongs: The stretch call again being given at the 1/8 mile pole, in this case would be at the 5 1/2F point in the race. Therefore, add the Beaten Lengths at the stretch call to the Beaten Lengths at the finish call and divide in half. The result is used as the Beaten Lengths for 6F.

Also noted under Special Conditions, when a horse is going from a route race to a sprint race, **SPEED MACHINE** will ask you for the 2F time and Beaten Lengths from the route race. The 2F Time can be found in the Result Chart for the race. Find the horse's running position in the race at the 2F call, add up the lengths it was behind the leader at that point in the race and enter the total. Remember, the Past Performance line lists the horse's running position and the lengths it was behind the leader at each call in the race. The Result Chart gives you the horse's running position at each call and the lengths it was in front of the next horse. Therefore, if the subject horse was running 4th at the 2F call you would add the lengths ahead shown for the first three horses at that point in the race in order to get the Beaten Lengths for the subject horse.

Section VIII
BEATEN LENGTHS
CHART

<u>Beaten Lengths</u>	<u>Enter</u>
Nose (no)	0 (2 Noses = 1 Head)
Head (hd)	.125 (2 Heads = 1 Neck)
Neck (nk)	.25 (2 Necks = 1/2 Length)
1/4	.25
1/2	.5
3/4	.75
1	1
1 1/4	1.25
1 1/2	1.5
1 3/4	1.75
2	2
etc.	

Section IX DAILY VARIANTS

Listed in parentheses () next to each major track is the track variant that equals a variant of 20 in the Daily Racing Form (tm). Therefore, if the variant in the Daily Racing Form (tm) is higher or lower than 20, the difference would be added or subtracted from the track variant shown in parentheses.

For example: The variant that equals 20 for Aqueduct is -1. If the variant in the Daily Racing Form (tm) were 22, you would add 2 to -1, resulting in a variant of 1 for that day. Conversely, if the variant in the Daily Racing Form (tm) was 17, you would subtract 3 from -1 resulting in a variant for that day of -4.

We recognize that most speed handicappers produce their own Daily Variants or subscribe to any one of several services available, all of which can be used with **SPEED MACHINE**.

For those who have not produced their own Daily Variants before, we recommend the following books:

Winning at the Races

By: William L. Quirin, Ph.D.

William Morrow and Company, Inc., 1979.

Picking Winners

By: Andrew Beyer

Houghton Mifflin Company, 1975.

For those handicappers that play the four Florida tracks-- Calder, Gulfstream, Hialeah, and Tampa Bay --**SPEED MACHINE COMPUTERIZED DAILY VARIANTS** are now available. A subscription form is enclosed. By the Spring of 1984, **SPEED MACHINE COMPUTERIZED DAILY VARIANTS** should also be available for major tracks in the East, Midwest, and West.