

LETTERS

Submarine Seed

I would like to congratulate you on a fine magazine. I have been a reader of another hobby magazine for almost a year and thought I was satisfied with just one — until I picked up a copy of *Kilobaud* at the local computer store. You will find with this letter a check for my subscription.

I would like to suggest a modification to the SR-52 program "Submarine" in Feb-77 *Kilobaud*. A good way to initialize the seed for a random number generator is to have the computer count until the user stops it, then use the count as the starting seed. This way the sequence of numbers is unpredictable as well as pseudo-random. The best way I have found to do this on an SR-52 is with the following:

Address	Instruction
000	SUM rr
003	"73"
004	LBL E
006	1
007	"73"

Where rr is the register where the seed is to be put and "73" is op code 73 (see the *SR-52 Programming Workbook*, p. 90). Using "73" will speed up the loop but if it needs to be placed in some other part of memory a GTO can be used. To use this program press E then wait a few seconds and press HLT. Since Submarine uses seeds between 0 and 1 you should take the sine of the number and then square the result to get the initial seed. Also I would recommend using register 98 or 99 for the seed since they are only cleared when the calculator is turned on.

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