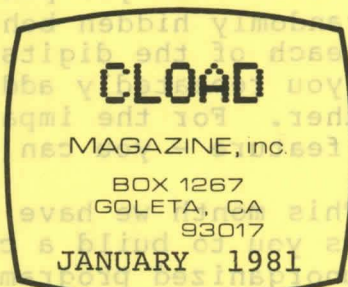


"Take me out to the ball game..."

Hup one, hup two, hike! Hey, isn't it time for baseball practice to start? I just can't wait for the hockey season, oops, I mean the hockey playoffs, to begin. Get out your skis, there are two inches of man-made snow on a base of rocks and mud on the western slopes. Well, the basketball season is about over. Well, the basketball season is about to begin. Isn't it wonderful to have your video dedicated to something worthwhile, like Adventure....



Side		Title	Turns		Count		
			CTR-41		CTR-80		
****		Mirror Cover	19 & 264		11 & 155		
** **		Speed	58 & 292		35 & 172		
** **		Hidden Number	120 & 339		70 & 199		
****		Filemaster (Disk only)	178 & 380		105 & 224		
**		Geometry	11 & 254		7 & 149		
***		Subs	145 & 354		85 & 209		
***		Heart Talk	221 & 414		129 & 243		

Take a look at our cover in our cover. That's what Mirror Cover gives you. Those of you who are more adventurous will list the program to see how it works. "Hey, there is something funny about the way the remark statement is displayed by itself for a few seconds before the rest of the program is listed", you cry. That nifty little trick is done by putting a whole bunch of clear-to-end-of-frame characters (CHR\$(31)) after the remark statement. Of course, something neat like that is neat ONCE, and becomes sort of a pain afterwards.

I had never seen a program list like Mirror Cover listed, so I wrote a one line RAM dump routine to see what the program looked like after it was loaded. Line 10000 in the program is the dump routine. I'd like to say that I left it in the program on purpose for you to run for fun (RUN 10000 will do it), but I can't. Well, I could, but I'd be lying. But I don't want you to think that I make mistakes, so maybe I will just 'stretch the truth' a little....

Speed is a common card game with one twist - you play against the computer. The game requires quick recognition of the current face-up cards, and quick reflexes to get the right card on one of the 'piles' first. Since your TRS-80 operates in nanoseconds, Speed can be extremely challenging or frustrating, depending on your mental state.

Excercise your deductive abilities while practicing simple math

operations when you play Hidden Number. The game starts with the numbers 0-9 randomly hidden behind 10 'doors'. The object is to figure out which door each of the digits is behind. Your clues are the answers you get when you repeatedly add, subtract, or multiply any of the 'doors' together. For the impatient, curious, or editors among you, there is a nice feature - you can peek at the solution at any time.

This month we have one for you disk users out there. Filemaster allows you to build a catalogue containing info on all of the precious but unorganized programs you have on disks. Also, if you would like to use the program to create a running record of something else, brief instructions are given in the program on how you can alter the program to suit your wants.

While Hidden Number makes you use your basic arithmetic operations, Geometry gives you a quickie review course on the first class that you ever took that made you PROVE that some statement was true (or false). In this program, only the figures that you looked at in geometry (plane, triangle, cylinder, etc.) are reviewed, and you really only succeed in proving how much of that stuff you've forgotten.

Subs is another idea borrowed from those quarter (Quarter? Gad, some are half a Susan B. Anthony now!) siphons found at the local pizza pub. If you haven't contributed to this particular uncharitable device before, Subs involves a ship that you control and a multitude of submarines at varying depths below the ship. The ship is equipped with depth charges and the subs carry floating mines. The object is to write as many peace treaties as you can in 10 seconds. When that fails, destroy as many subs as you can without one of them mining the ship. The deeper the sub that is destroyed, the greater the point value, and the greater your bargaining power is at the next disarmament conference 12 years from now.

Now we come to my favorite program this month. It may seem a little premature, since Valentine's Day is February 14th, but the way that we make publishing deadlines (never!), Heart Talk comes to you in late January. What the program does is rather simple but... Wait! I don't want to spoil it for you. I'll just reprint the cover letter that came with this program:

Dear Sir:

Please find enclosed a sample program executed in a new interpretive language that I am developing.

Line 20 of the program highlights two outstanding features of this language.

1. The spelling of key words does not need to be absolutely correct as evidenced by the misspelling of the word "vertical".
2. Extremely powerful editing features. Notice how in line 20 I had forgotten to include a key statement at the beginning of the line, but was able to simply add it as an afterthought at the end.

Please run the program first and see what it does. It's just a simple program that draws a heart and then stops.

Now when you "BREAK" and "LIST", you can follow the listing more

easily as you have in mind what the program just did.

I have not included the full interpreter in this sample as it requires many gigabytes of core storage. If anyone is into drawing hearts, this may be all they need.

Also I wanted to keep the memory requirements to a minimum for this sample in case you would like to include it in one of your CLOAD issues for evaluation purposes.

I'm interested if any of your readers might think there is a market out there for this.

Thank you for reviewing my tape.

Sincerely,

Bill Burnham

All I recieved was that letter and the tape. Now you have the same. Enjoy!

Excuses, excuses...

Why is this month's issue out late? Because we did an overhaul on the duplicating system. Boy, did we ever! We normally have 20 decks that record both sides at double speed doing our duplication. As a deck gets unreliable from overuse or whatever, we stop using it. We were down to just 10 decks before Christmas, so we bought some new parts (including special digital heads) and proceeded to do battle. We lost. None, I repeat, none of the decks would load AFTER we finished overhauling them. Stan (the man behind the soldering gun) was not pleased.

The 2-or-3 day job became a two-week, twelve-hour-a-day headache. We learned more than we ever wanted to know about digital recording for the TRS-80. We discovered that tweaking on the pulse that we send to the tapes makes very little difference. We learned that the adjustment of a tape head's position is not all that critical. We improved our swearing. Stan even remade the pulse generating circuitry - 3 times!

Now the decks are working. The special digital heads are back in their package and some new audio heads are doing the duplication chores. The tapes are loading better than ever, although a few of you will completely disagree when your January tape fails to cooperate. If you get a bad tape, send it back for a prompt replacement, and be gentle with your comments. It was a rough vacation...

The Answer Man...

A few of you are planning to acquire the new Model III that R/S has out. Or you may know of someone who is thinking of buying one (production of the Model I was terminated as of January 1st). And the question foremost in your mind is, "Will CLOAD run on my new Model III?" The answer - I don't know! All of the strictly BASIC programs should run, although some characters that always appeared as upper case in the Model I may be lower case in the Model III. But CLOAD has always been fond of publishing little programs that do tricky little things. And

these tricky little things are often done with machine code subroutines and/or PEEKS/POKES to dark corners of the ROM. These ditties probably will not run on the Model III. We are in the process of finding out just which programs will run, and we should have some information for those who request it in the near future.

Announcement...

To complement our usual 1/2 and full page advertisements in these yellow sheets, CLOAD Magazine has decided to start selling 1/8 and 1/4 page advertising spots at outrageous prices for the express purposes of fattening our wallets and giving me less space to fill. Write for rates.

Helpful hints...

From the desk of Michael Garry comes this little tidbit. If you have inadvertently typed 'NEW' on a BASIC program that you wanted to save, you can recover the program if you do the following immediately:

- 1) Type 'POKE 17130,1'
- 2) Type 'SYSTEM'
- 3) Answer the *? with '/11395'
- 4) 'LIST' the program to be sure it's there (DO NOT 'RUN'!)
- 5) Save the program to disk or cassette

R. S. Johnson of Victoria, British Columbia, thought that last month's LTC-21 program was hard enough without having the rudder control keys backwards. In the original program, the 'T' key turned the plane to the right, and the 'Y' key turned the plane to the left. To make the 'T' key a left turn and the 'Y' key a right, he suggests switching lines 191 and 192. Now if I could only remember which hand is my right...

Hide my head in the sand...

Vince Arcuri of Hoffman Estates, Illinois, wrote to say that the high score routine in last month's Star Fighter program didn't work. He gave the following correction for the problem:

```
1410 C1=SC
```

When the program was tested with this fix, a lot of other bugs became apparent. Oops! I confess, a gremlin did it. Not good enough? How about this excuse then -

When Star Fighter was submitted, it was set up for a TRS-80 with a numeric keypad only. I had a lot of fun modifying it so that it would also run on plain old TRS-80's. But I got a bit carried away... and some un-nice things passed inspection. Below are four cosmetic changes and two bug fixes that can be made to make the program 'nicer':

In line 2130, replace the 16 characters 'NUMERIC KEYPAD.' (note the space after the '.') with 'KEYS SHOWN HERE.'.

In line 2150, change the space after 'INDICATED' to a '.'.

In line 2190, replace '"5' with 'K\$(5)'" (note the double quotation marks).

In line 2200, delete the space between 'RECOMMENDED' and '.'. Change the 'RP<>RDTHEN5' in line 10060 to 'RP<RD THEN 5 ELSE RP=0'. Replace the 'THEN1' in line 10110 with 'THEN 2 ELSE END'. Not a moment too soon....

Bob Albrecht, Don Inman, and Ramon Zamora have written a Level II BASIC manual that should have come with the TRS-80 in the first place. It is called, appropriately, 'Level II BASIC - A Self Teaching Guide'. If you are just learning BASIC, or know of someone who is, this is the book. It is quite large (over 350 pages), but by the time you have walked through the numerous examples and humorous drawings and comments, you will be comfortable with the basic Level II BASIC. And if you are feeling slightly embarrassed because you don't know how to hook your new TRS-80 up, there is even a section on setting up the machine to help you out.

The book is not aimed at people who already know BASIC. Many functions and special commands (ie: SIN, POKE, ON ERROR GOTO, etc.) are not even covered. But once this book is devoured, the novice programmer will then be ready to tackle the Radio Shack Level II manual with the necessary degree of understanding. 'Level II BASIC - A Self Teaching Guide' is available at your local Radio Shack.

New toy...

Up until recently, the only stringy floppy I had seen was the shredded disk that is taped to the shop wall. Now I've seen the Exetron Stringy Floppy mass storage subsystem, and I'm impressed!

The storage medium used by the Stringy Floppy is called a 'wafer'. The wafer is about the size of an open matchbook, and it contains a number of feet (5 through 75 feet) of endless loop magnetic tape. The Stringy Floppy itself is a box about half of the size of a CTR-41 or CTR-80. It contains the wafer drive mechanism, bits of circuitry, and its own 2K ROM. It plugs into a standard 110 volt wall socket and is interfaced to the TRS-80 through the computer's card edge.

The device is nearly invisible to the computer since the 2K of ROM is located in an essentially unused portion of the TRS-80's memory (3000H to 3780H). It also uses 4 (a whole four!) bytes of upper memory, but never fear: if there are protected machine language routines at the top of memory, these 4 bytes will be located automatically below the protected area.

But why is it so neat? It is FAST and RELIABLE! It loads and saves programs at 7200 baud, compared to the cassette rate of 500 baud. Therefore, a 16K program can be saved in approximately 24 seconds, verses 4 minutes for the cassette. And no more frustrating bad loads! Even if there is a bad save or load for some odd reason, an error message is given immediately.

I only noticed two drawbacks, and they are pointed out in the manual. One, you must keep track of how many files are stored on each wafer. Each file is numbered, and in order to save another file on the wafer, you must specify the next available number in sequence. But to load a

file from a wafer, you can either specify that file's number (let the computer do the walking), or you can just load the next file that is found on the wafer. Nitpick two - if you are saving a lot of data to a data file, you may coast past the end-of-tape marker and write over the file 1 header if your wafer is too short. Then you're out of luck since all of the data on that wafer is now history. Other than these two kinks, this skeptic could find nothing else to complain about.

Before you run out and buy one, be aware that although the Stringy Floppy resembles a disk system in many ways, it is not a substitute for a disk system. It is a giant step from tape, and at less than 1/2 the cost of the TRS-80 Expansion Interface with 1 disk drive, it is a very sound investment. If you are tired of tapes, or you want to speed up your program development time considerably without floating a bond, contact Exetron at 181 Commercial St., Sunnyvale, CA 94086 for more information on the Stringy Floppy.

It is a new year...

Well, I've avoided it long enough - time to make New Year's resolutions. CLOAD Magazine once again resolves to get an issue out on time. And I resolve to find a large egg, open it, and crawl in.

Regressing a bit,

Dave

Editor

FASTER THAN A SPEEDING TYPIST...

Is it safe to walk the keyboard of your TRS-80 at night? Do you look for Syntax Errors down every dark subroutine? Well, look in your mailbox—It's a bill, it's an ad, it's **CLOAD MAN!** Faster than keying in hardcopy, more fun than an accounts-receivable package, ready to run in a single load...

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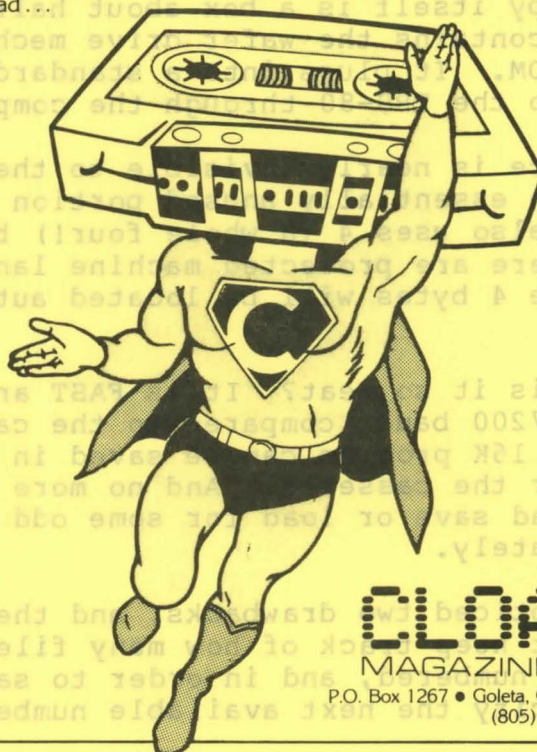
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