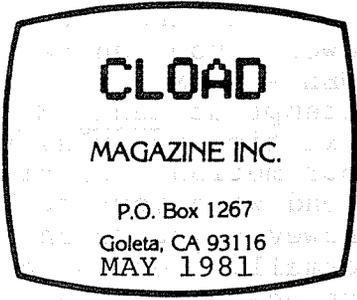Post No Bills (send money instead!)...

     'Printer Cable' (with arrows), 'Hi Clyde',
'We deliver minks to Malibu', 'This tape won't
load' (taped to a cassette that was run over by
a truck), 'First Class', 'Doctor Who' insignia,
'Thank You', 'A woman's place is in the House &
Senate', cassette label daisy, Xeroxed face with
fangs, giant sun with CLOAD Man flying toward
it, half-a-dozen 1981 calendars, and in large
red letters - 'BULL'. When I'm out of ideas, I
read the walls. I'm out of ideas...

```
*******************************************************************************
*                                                                             *
*     Side            Title                         Turns Count               *
*                                                                             *
*                                               CTR-41         CTR-80         *
*                                                                             *
*    ****         Symmetry Cover                17 & 259      10 & 152        *
*   **   **       Inflation Projection          54 & 288      31 & 169        *
*   **   **       Checkers Document            101 & 325      59 & 191        *
*   **   **       Checkers                     148 & 363      86 & 214        *
*    ****                                                                     *
*                                                                             *
*                                                                             *
*     **          Lunar Explorer                10 & 254       6 & 149        *
*    ***          Financial Ratio              101 & 323      59 & 191        *
*     **          Story Builder                169 & 374      99 & 220        *
*     **          Print @ (Model I only -                                    *
*    ****             Mem 32649 Sys. PRINT /)  233 & 427     137 & 251        *
*                                                                             *
*                                                                             *
* CLOADing Notes - This tape may load at an ODD RECORDER VOLUME.  Set the volume LOWER than normal for your first attempt, then *
*   increase it slightly until the tape loads.  If the first copy of a program won't load, try the second.  That is why it is   *
*  there.  Model I only: Put an AM radio very close to the keyboard, tune it to a non-station, and you can listen to the tape   *
*  loading in.  Adjust the recorder volume so the hash from the computer sounds 'cleanest' during a load.                      *
*                                                                             *
* Model III notes - Load the tapes at the LOW speed (POKE 16913,0).  An occasional program will NOT run.  There may be upper and *
*  lower case goofs in some programs.  Arrow keys often are translated as follows: (↑, ↓, ←, →) = ([, \, ], ^).              *
*                                                                             *
*******************************************************************************
```

     Another 'draw four lines in opposing directions' cover!! So, what is
different about Symmetry Cover? It's in this issue, and the other ones
were in other issues. Maybe this version 'dances' more. Maybe not...

     A dollar isn't worth a dime any more! See what inflation does to
prices (and what it should do to your income) with Inflation Projection.
Now, with 12% inflation, 16K of RAM has gone from $199 a couple of years
ago to $24.95. What? Oh, I forgot the word, 'ideally' (as in 'See what
inflation ideally does to prices...').

     Checkers, anyone? Pull up a rocking chair and an ol' pickle barrel and
set yourself down in front of your TRS-80. There are four levels of play,
and if you find that the highest level of play is no challenge, you can
play with invisible pieces. The computer will tell you when you've made a
wrong move. Also, you can have the computer play itself (the easy way out
when you find yourself losing) or switch sides with the computer (good for
the ego when you find yourself losing badly). Finally, at any time during
your turn you can type an '*' to review the various commands. That should
be all you need to know to have a good game of Checkers.

Clear that mountain - thrust a bit to slow your descent - gently drop lower - you can see detail on the moon's surface now - almost down - OUT OF FUEL - BOOM - you're tinfoil confetti. You have just failed your first attempt at Lunar Explorer. That's alright, just try to do it right the next time you play this real-time game with sound. The arrow keys affect your motion (inertia and gravity are always present) and there is a ticking sound when your fuel gets low or when you reach the surface of the moon (however you reach it!). To get the sounds, plug the large grey plug (that normally goes to the recorder) into an amplifier or press the play-record buttons and listen through an earphone plugged into the earphone jack on the recorder.

Get out the annual reports. Is the company sound? How is its oil-to-vinegar ratio? Soap-to-water ratio? With Financial Ratio by your side, you can easily get 14 different statistics used to show the current monetary state of a company or corporation. Just ask for a certain ratio, plug in the numbers, and out comes the result. If you want another ratio that uses some of the same data, you won't be asked to enter the data again. Hmm, what does it mean when our Return-on-Total-Assets is negative?

Actually, we make millions here at CLOAD! And if you like that story, here are a few others. Just run Story Builder. You give it a whole slew of words, and you get your choice of four stories using those words. Some of the stories may be a little off grammatically (especially when it comes to plurals or the a/an syntax), but they will all be off in every other way! Did you hear the one about the...

Model I'ers only - we have a little utility for you. Print @ can easily show you the PRINT @ locations on the screen. First, be sure to set the Memory Size to 32649. To load the program, type 'SYSTEM'<enter> 'PRINT'<enter>. After it is finished loading, type '/'<enter> and the program will run. Then, when you want to see what PRINT @ value a particular place on the screen is, just position the cursor (using the clear, right-left-down arrow keys, and the spacebar) and type 'LINE'<enter>. The value of the position of the cursor will be displayed with the first digit in the space FOLLOWING the cursor location.

Model I DOS users - Print @ will work in Disk BASIC. However, 'LINE INPUT' instructions will not work (the author traps out the partial command 'LINE' in the interpreter) and your usable RAM will be reduced to about 5K.

Durn it!

Can't seem to get an issue out without somebody finding something wrong in one of the programs. Must be Mr. Somebody's fault...

The author of Hidden Number (January 1981) informed me that negative numbers were treated with disdain in his program. To fix:

Change line 2810 to 'X = ABS(L1-L2) : RETURN'.

I modified Medieval Adventure (April 1981) to accept lower case and tested it on the vanilla and DOS Model I and III. However, I did not test the right combinations (6 out of 8 isn't bad, is it?). Line 11000 will not work if you use lower case with non-DOS systems. Why? Because the second part of the line says:

11000 ...: IF X2>96 THEN MID$(X$,X1,1) = CHR$(X2-32)

In non-DOS systems, the 'MID$' command MUST be on the right side of the

'='. If you only used upper case, then you never got past the 'IF X2>96'.
And if you used a DOS system, then 'MID$' can be on the left of an '='. To
fix it, retype the above end of line 11000 as follows:

```
:IFX2>96THENX$=LEFT$(X$,X1-1)+CHR$(X2-32)+RIGHT$(X$,LEN(X$)-X1)
```

Due to the turkey method Radio Shack used to modify their Model I
machines for lower case, the Gomoku game (April 1981) will just fill up
with squares if you have the lower case mod installed in your machine.
When you PEEK a certain location on the screen that contains some
character, you get one value. But POKEing that value back onto the screen
may result in a completely different character on the screen. My
understanding is that this is due to the dropping of the 7th bit and doing
a little dance number to compensate for it.   So here is a cheap fix that I
believe will work, but I was unable to test (no RS lower case mods here):

Change the 'PEEK(V+Q)' towards the end of line 10 to 'PEEK(V+Q)+64'.
Change the 'CHR$(PEEK(V+P))' in line 74 to 'CHR$(PEEK(V+P)+64)'.

Whack! Ok, I deserved that hit. Don't bite the conglomerate hand that
feeds you. Actually, I feel that RS has done a remarkable support job (not
perfect, mind you). And along those lines, I have been informed that those
of you with the early model Model III ROM (you have an early model ROM if
you have to use the 'S' and 'P' keys to dump the screen to a printer) can
exchange it and $20 for the newer (standard?) ROM.

Miscellaneous fun things -

Charles Evans of Sun City, Arizona adds the line below to all of his
programs to allow him to save three copies of his programs to tape, while
leaving some blank tape before the first copy and between subsequent
copies:

```
30000 FOR N=1 TO 3: OUT 255,4: FOR I=1 TO 5000: NEXT:
         PRINT "SAVE #";N: CSAVE"X": NEXT
```

To run the above line, just type 'RUN 30000'. Note: this line will not
work on the Model III. The 'OUT 255,4' will not turn the cassette player
on.

How about a universal (dangerous word in computers...) BREAK key
disable/enable routine? One that will work for all the Model I and III
systems?

```
10 B1=PEEK(16396): B2=PEEK(16397) :REM SAVE VALUES TO ENABLE LATER
20 POKE 16396,175: POKE 16397,201 :REM DISABLE BREAK KEY
.
.         (rest of program with BREAK key disabled)
.
10000 POKE 16396,B1: POKE 16397,B2 :REM ENABLE BREAK KEY AGAIN
```

Don't say I didn't tell you... 'cause I probably didn't and I don't
want to be reminded. The above technique works fine for programs like last
month's Level 0. But disabling <break> can have side effects. For
instance, you may not be able to access the disks in a disk system. Once,
after disabling <break>, the program I was running generated an error. And
the computer (Model I) just hung up because it wasn't able to get the error
statement from the disk.

After these ramblings, you will find a table of codes and their
associated reserved words for the Models I and III. These are the words

you see that look like garbage on the Model I in a bad load or in a fast
graphics string. You may notice that some of the values coincide with the
values used for graphics characters. Ah, that's why those funny looking
fast graphic strings print graphic blocks on the screen...

I'm ready to turn this mess over to Robin and Donna for proofreading.
It is thanks to them that these yellow musings resemble English.

Anrgut Mufritsh,

Dave

Dec.	Hex	Key Word	Dec.	Hex	Key Word	Dec.	Hex	Key Word
128	80	END	169	A9	NAME	210	D2	AND
129	81	FOR	170	AA	KILL	211	D3	OR
130	82	RESET	171	AB	LSET	212	D4	>
131	83	SET	172	AC	RSET	213	D5	=
132	84	CLS	173	AD	SAVE	214	D6	<
133	85	CMD	174	AE	SYSTEM	215	D7	SGN
134	86	RANDOM	175	AF	LPRINT	216	D8	INT
135	87	NEXT	176	B0	DEF	217	D9	ABS
136	88	DATA	177	B1	POKE	218	DA	FRE
137	89	INPUT	178	B2	PRINT	219	DB	INP
138	8A	DIM	179	B3	CONT	220	DC	POS
139	8B	READ	180	B4	LIST	221	DD	SQR
140	8C	LET	181	B5	LLIST	222	DE	RND
141	8D	GOTO	182	B6	DELETE	223	DF	LOG
142	8E	RUN	183	B7	AUTO	224	E0	EXP
143	8F	IF	184	B8	CLEAR	225	E1	COS
144	90	RESTORE	185	B9	CLOAD	226	E2	SIN
145	91	GOSUB	186	BA	CSAVE	227	E3	TAN
146	92	RETURN	187	BB	NEW	228	E4	ATN
147	93	REM	188	BC	TAB	229	E5	PEEK
148	94	STOP	189	BD	TO	230	E6	CVI
149	95	ELSE	190	BE	FN	231	E7	CVS
150	96	TRON	191	BF	USING	232	E8	CVD
151	97	TROFF	192	C0	VARPTR	233	E9	EOF
152	98	DEFSTR	193	C1	USR	234	EA	LOC
153	99	DEFINT	194	C2	ERL	235	EB	LOF
154	9A	DEFSNG	195	C3	ERR	236	EC	MKI$
155	9B	DEFDBL	196	C4	STRING$	237	ED	MKS$
156	9C	LINE	197	C5	INSTR	238	EE	MKD$
157	9D	EDIT	198	C6	POINT	239	EF	CINT
158	9E	ERROR	199	C7	TIME$	240	F0	CSNG
159	9F	RESUME	200	C8	MEM	241	F1	CDBL
160	A0	OUT	201	C9	INKEY$	242	F2	FIX
161	A1	ON	202	CA	THEN	243	F3	LEN
162	A2	OPEN	203	CB	NOT	244	F4	STR$
163	A3	FIELD	204	CC	STEP	245	F5	VAL
164	A4	GET	205	CD	+	246	F6	ASC
165	A5	PUT	206	CE	–	247	F7	CHR$
166	A6	CLOSE	207	CF	*	248	F8	LEFT$
167	A7	LOAD	208	D0	/	249	F9	RIGHT$
168	A8	MERGE	209	D1	[or ↑	250	FA	MID$