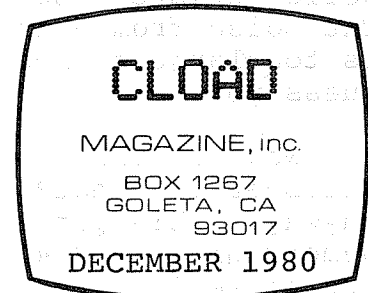


Without a very shiny nose....

An animal of another type has been observed at the shop lately. He has probably been here a while, but his mannerisms were so similar to our own (sleeping, craving attention, begging for food, etc.), that nobody noticed him until recently. We got suspicious because he never frowned. Closer inspections revealed a furry skin and a looong nose. Grabbing "Clyde's Guide to Fuzzies", we read: 'Jed - cocker spaniel mix dog commonly found underfoot'. Yep....



*				*
*	Side	Title	Turns Count	
*				*
*			CTR-41	CTR-80
*				*
*	****	LTC-21 Instructions	13 & 261	7 & 152
*	** **	LTC-21	115 & 336	67 & 198
*	** **	Alpha	232 & 426	136 & 251
*	****			*
*				*
*	**	Chessman Cover	11 & 254	7 & 149
*	***	Bubble Sort Simulation	70 & 297	42 & 175
*	**	Star Fighter (Mem Size 32000)	121 & 333	71 & 196
*	**	Billboard Demo (Mem 27412)	188 & 388	111 & 229
*	****	Billboard (Mem Size 27412	218 & 412	128 & 243
*		System LTRS /)		*
*				*

Chessman Cover demonstrates that detailed drawings can be done with low resolution graphics. It also demonstrates that we don't know our side 1's from our side 0's. That is why you have to rewind the tape to start with the cover program. And that is also why I'm writing about side 1 first....?

The Bubble Sort Simulation graphically demonstrates the bubble sorting algorithm in mid-bubble. As you watch it sort, you might see places where it seems extremely inefficient (ie: all of the numbers in order except one at the top, and it takes a dozen moves to put that number in place). The algorithm is slow compared to other sorting algorithms, especially when the number of elements is great. There are two advantages to it, however. One, it is fairly easy to write (my kind of sort!). Two, it doesn't take a lot of extra memory. The space for one extra record is all that is needed (just enough to switch two records).

Now that you've got yourself sorted out, step into your Star Fighter, strap yourself into the seat, wire your machine for sound, and *Pow, Pop, Sputter, Cough, Choke, Fizzle* ... Oh, you didn't set the Memory Size to 32000 first. Well, nuttin' to do but start over. Set the Memory Size to 32000, connect the auxillary plug to an amplifier (or put your tape recorder in the record mode - without a tape in it - and listen through

the earphone jack), and blast into space for this shoot-em-up with sound. Hello purists - sound in space is a no-no? I'm sorry, I can't hear you. The noise from Star Fighter is too loud. Note to disk users: the program is too large to load in DOS BASIC with the memory size set to 32000, so I guess you're outta luck. You must run it in Level II BASIC.

Now for the program that you have all been waiting for! Another Billboard!! What? You haven't been waiting for it? You'll like it anyway. This particular program comes in two parts. First, set the Memory Size to 27412. Next, load the BASIC part, Billboard Demo. Do not run it yet! After it is through loading, type 'SYSTEM'. Answer the '*' with 'LTRS' and load in the system part, Billboard. When the system part is done loading, hit the <break> key, then type 'RUN' to see the billboard in action.

To put your own messages on the screen, simply replace the DATA statements in lines 400 - 500 with your own, following the guidelines listed below:

1) Use the shift key for all capital letters. If you have the lower case mod on your system, you may have to use the shift key for all lower case letters. Give it a whirl to see what happens.

2) The first character in each string in the DATA statements is not displayed and instructs the computer as to the display mode for that particular string. The control characters are as follows:

- "0" - The string scrolls sideways across the screen.
- "1" - Displays one character at a time.
- "2" - The lines of text scroll vertically.
- "3" - Instantly changes the entire character set from white-on-black to black-on-white, or vice-versa. Note that this is the only control character that is used by itself (not included in a longer string).
- "4" - Puts the string (in normal TRS-80 characters) on the bottom line of the screen.

3) The last DATA statement must be 'DATA###' to mark the end of the list.

Some of the characters are included in the character set but can't be used in a DATA statement string (such as '"'). By running the following program after the system part of billboard is loaded in, you can display every character:

```

10 POKE 16526,208
20 POKE 16527,116
30 INPUT A          : REM INPUT A NUMBER FROM 32 TO 122
40 CLS
50 X=USR(A+256*33) : REM DISPLAY CHR$(A) AT SCREEN LOC. 33
60 GOTO 30
```

More comments - The LTRS program loads from 27414 to 30724 to allow you to use the space from 30725 to the end of memory for other utility routines. The entry point is 30633 (in hex the numbers are 6B16-7804, entry 77A9). Once again, it is a Level II only program.

Final comments - If you notice some interference on the screen during

the "side slipping scroll" display, there are two timing loops that can be tweaked on. For fine tuning, just poke a different value into address 30721 (it is currently at 125). For major surgery there is a two byte counter at addresses 30604 (LSB) and 30605 (MSB) that can be toyed with.

Start the left engine... start the right engine... flaps down... increase power... You are the pilot-navigator of the latest jumbo-jet, the LTC-21. This plane is NOT easy to fly! The hunt'n'peck typist may find himself demoted to ground control after a couple dozen mis-flights. Then again, many of you will demote yourself after taking a pass through the instructions.

You start your flight by picking your destination. The clock starts moving toward departure time. Get your plane checked out and begin the takeoff procedure. Once you finally make it into the air, aim your plane toward your destination and set your optimal cruise speed. As you near your destination, then it's time to line up your approach. Finally, you get to land (successfully this time!?). To give you a little help, below is reprinted what the author calls a 'thumbnail review of the controls' (which controls to use when, how to use them, and what they should be set to):

Ground

City Code 1-8

Doors Open I O P Close Q A Z (Close)

Flaps Increase G Decrease H

Rudder Increase T Decrease Y (Set 0)

Runway Conditions On N Off M (On)

Engines On W E R Off X C V Sinc @ (On)

Thrust Increase S D F Decrease J K L (Max 3500)

Ready for Takeoff U Abort @

Brake Release B

Air

Flaps Rudder Engines (Not Off) Thrust

Fuel Times B Autopilot Toggle A Wheels Up N

Runway Direction Indicator C (Distance < 300)

Approach

Flaps Rudder Engines (Not Off) Thrust

Airspeed < 450 Distance < 40 Altitude < 1000

Rnwy Direction, Direction, and Heading within 2 degrees

Enter Approach E

Abort Approach @ (or Rudder <> 0)

Final Approach

Flaps Rudder Engines (Not Off) Thrust

Airspeed < 275 Distance > 1 but < 7 Altitude < 250

Enter Final Approach E

Landing

Brakes B Thrust (Lower) Engines Off X C V

Stop Refueling S (Automatic at 72500 in each tank)

Looks confusing? Read the instructions. They will make all this a lot clearer, but not any easier!

The disk users out there might feel a little left out this month.

But thanks to Darryl Hall of Dayton, Ohio, we have a tidbit for you. Last month's Ledger program can be modified so that the data can be saved and loaded from disk instead of tape. The key was to reactivate the <break> key during I/O. Note this for future reference. The modifications are:

- 1) Change the word 'TAPE' to 'DISK' in lines 25, 27, and 108.
- 2) Retype lines 600, 605, 700, 705, and 710 as follows -

```

600 POKE16396,195:OPEN"I",1,"LEDGER/DAT":INPUT#1,NU,NT:L=NU+NT:
    PRINT:PRINTL"  ITEMS LEFT TO READ"

605 FORI=0TONU-1:INPUT#1,T$(I),N(I):L=L-1:PRINT@256,L;:NEXT:
    FORI=0TONT-1:INPUT#1,D(I),R$(I),T$(I),A(I):L=L-1:
    PRINT@256,L;:NEXT:PRINT:PRINT:CLOSE:POKE16396,207:GOTO10

700 POKE16396,195:OPEN"O",1,"LEDGER/DAT"

705 L=NU+NT:PRINT:PRINT"NUMBER OF ITEMS LEFT TO OUTPUT -";L:
    PRINT#1,NU;NT:FORI=0TONU-1:PRINT#1,T$(I);", ";N(I):L=L-1:
    PRINT@288,L;:NEXT:FORI=0TONT-1:PRINT#1,D(I);", ";R$(I);", ";
    T$(I);A(I):L=L-1:PRINT@288,L;:NEXT

710 CLOSE:POKE16396,207:GOTO10

```

Hold the phone - there are disk mods for Audio and Fox'n'Hounds (of last month's issue) also! Donald Judson of Glendale, California found a way to mickey-mouse the programs so that they run in DOS BASIC. Kinda like fixing a TV with a hammer...

The Audio program is a little too long, so the instructions should be deleted (although this is not necessary if you do not set the Memory Size and do not try to run them). So:

- 1) Delete lines 15000-15210.
- 2) Add line '15000 RETURN'.
- 3) Retype line '9000 DEFUSR=32660'.

The Fox'n'Hounds program only works in TRS-DOS, not in NEWDOS. And I honestly don't know why it works in any DOS! Here goes:

- 1) Do NOT set the Memory Size.
- 2) Retype line '9000 DEFUSR=32660'.
- 3) Do NOT 'RUN' more than once (the data becomes garbage).

Evidently, the data is read before the the machine code routine is loaded over it. Why argue with success?

Extra! Extra! Cload has hit the big time... in our eyes anyway. We turned to the new Home Computer section of the 1980 Whole Earth Catalog (The Next Whole Earth Catalog). And there we are on page 532 in a little listing of Good Small Computer Resources (by Bob Albrecht & the Computer Town, USA! staff). If you have never seen the Whole Earth Catalog, pay a visit to your local bookstore and take a gander at it. It is an incredible compilation of humanity's current productivity and mentality (even without Divine Right's exploits). Next month, Cload Magazine makes the cover of Time....

Out with the old...

We finally heard from our renegade former editor, Ralph McElroy. In spite of the best lobbying efforts of the Redneck Oil and Beef Union, he has set up home in Austin, Texas. It seems that the ROB-U got wind of Ralph's decrying of the "Juicy, Tender, Inch Thick, Medium Rare, 10 oz. Sirloin and Baked Potato" dinners sold at every True Blue Texas Restaurant. Their worst fears were realized as Ralph immediately went out and bought a 'furin' car. Then he rubbed salt in their wounds by setting up a company that put brains before brawn (his ZYX Controls has a couple of heavy machines being run by wimpy TRS Model 2s). If he keeps up this way, there might not be a 'next letter'...

Disclaimer - the ROB-U is not representative of Texas, rednecks, or steak-and-potato restaurants. We, being the standard liberal, hippie-type Californians, do not believe in stereotypes.

In with the new...

Introducing (ta-da) Donna Waggoner, the newest member of this experiment. In her capacity as Production Manager, she has contributed greatly to the diversity of Peyton Place stories that keep life exciting around here. A transplant (read 'runaway') from the East Coast, she dropped into our laps bearing an affinity for yogurt (yogurt and peanut butter don't mix!) and the place hasn't been the same since... was it ever the same? Her ability to organize has kept us all busy trying to create some chaos out of this order. We're losing...

In a traditional vein...

Clyde Claus has given up his sleigh for a 28 cent stamp, but you still may get this issue in time for the holidays. Being optimistic that we got this to you early enough, we would like to wish all of you a Merry Holiday Season and a Happy New Year.



Tom Marazita
Food Processor and
Chief Scape Goat



Donna Waggoner
Production Manager and
East Coast Fugitive



Stanley Reifel
TTL Tweaker
and Fine Guy



Robin Sager
President and
English Car Cultist



David Lagerquist
Editor/Ragwriter
and Critic Critic



Jed
Dog

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IN WITH THE NEW...

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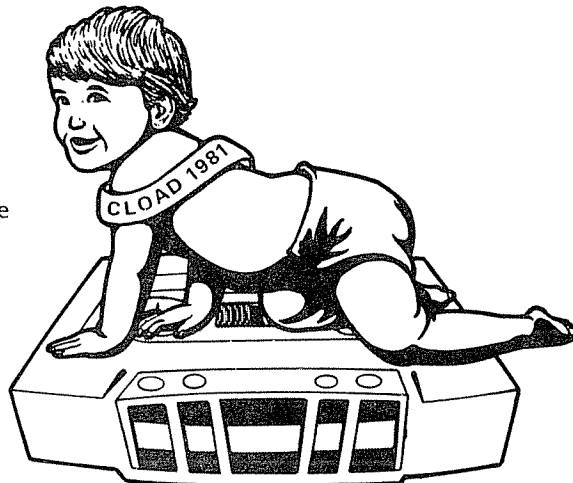
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MAGAZINE INC.
P.O. Box 1267
Goleta, CA 93017
(805) 964-2761