CLOAD
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Not just an infant...

A six year old human is just a kid. A six year old dog is really 42. But a six year old micro-computer software firm is a doddering old man! There are a few older than us (like Microsoft), but none still selling software at bargain basement prices. We must be crazy! And reading over the yellow sheets of the past years proves it. I guess the appropriate thing to do would be to rig up a blower on the ol' Model I 4k and have the ol' boy blow out the candles on his video screen...

March 1984

Side	Title	Filename	Turns Count CTR-41	Turns Count CTR-80	Turns Count CCR-81
****	Kaleidoscope Cover	A	8/251	5/148	3/125
** **	The Coupon Shopper	B	56/286	33/169	22/148
** **	Disassembler	C	160/357	94/210	71/203
****	Beasts	D	212/399	125/235	101/241
**	Baseball Rules	A	16/259	9/152	6/130
***	Baseball (see notes)	B	126/342	74/201	54/190
**	AL34 (data for Baseball)	C	231/425	136/251	112/267
****	NL34 (data for Baseball)	D	245/437	145/257	121/279

Tape 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 only: Load the tapes at the LOW speed (POKE 16913,0).

Subscribers - The month on the mail label is the last month of your subscription. If you have a cassette subscription, the number next to the month is the amount it would cost to convert the rest of your subscription to the disk version ($4.20 per issue for 6 or less months, $3.75 per issue if more than 6 months).

Mirror, mirror on the screen - **Kaleidoscope Cover** (pieced together by Grady) creates different doilies as fast as you can say 'snowflake.' Note: The machine language routine used to make the patterns is Public Domain.

Save a nickel... **The Coupon Shopper** (permission for use courtesy Softbyte Computing) can help you keep track of all your coupons, matching them with your shopping list so you never have to miss a savings! Here's what you can do:

1) Enter Coupons on Hand - For each coupon you must first enter the coupon type (this should match one of the 160 or so items in the DATA - more on that later). Then you'll enter the brand name, coupon value, and expiry date.

2) Display Coupons - Lists all of your coupons ten at a time. You can also delete coupons from this routine.

3) Prepare Shopping List - The items in the DATA are listed under broad grocery categories. If there are one or more coupons for a particular item, an asterisk will be displayed by the item. If you want an item on your shopping list, enter the number of the item. If there are coupons for that item, the coupons will be displayed, and you may select one or hit <enter> to select none.

4) Display Shopping List - Lists the items chosen from Prepare Shopping List, along with the coupons and their values. The list can be sent to the screen or to a printer.

5) Erase Shopping List - Clears the shopping list for another market junket.

6) Load Disk/Tape File - Loads in a previously save coupon file.

7) Save Disk/Tape File - Saves the current coupon file.

Coupon notes: You can change the number of allowable General Categories and the allowable Number of Items by changing the **MA=10** (Maximum Categories) and the **MB=180** (Maximum Items) in line 5 to other numbers. You may add new General Categories to the DATA by adding new DATA lines after line 1120 in the form: **DATA NEXT,category name** (ie: 1125 DATA NEXT,MAGAZINES). You may add other items that you shop for by just adding their names to the DATA lists under the General Categories DATA lines. For instance, to add COTTAGE CHEESE under the BEVERAGE-DAIRY-STARCHES category, edit line 1010 and insert COTTAGE CHEESE (with a comma) after COFFEE (to keep things alphabetical for your convenience). If there isn't enough room to add an item to an existing DATA line, you can always add another DATA line (ie: DATA 1015 COTTAGE CHEESE). However, unless you juggle the items a bit, it might be hard to keep things alphabetical. **Important** - The last DATA line, and only the last DATA line, must be **DATA NEXT,END.**

Coming apart - **Disassembler** (by John Charles Taylor) will create assembly language code out of the machine language numbers in your computer's memory. There was an instruction file that went with the program, but we ran out of room on the tape so I'll print it here:

1) You will be asked to select desired Method of Listing. Press **<V>** for Video Screen or **<L>** for Line Printer. Line 0 contains a 'USR' routine which converts all PRINT tokens to LPRINT tokens or vice versa.

2) Upon selecting desired listing you will be asked to enter disassembly Start Address. You may enter address in either decimal (0 - 65535) or hexidecimal (0H - FFFFH). Note: If you selected Line Printer listing then the program will test to see if Line Printer is ready. If printer is not ready, you will be asked if you wish to try again (**<N>** restarts program).

3) You may pause the disassembly at any time by pressing **<@>**. Press any key (except **<*>** or **<clear>**) to continue listing.

4) To start disassembling at a DIFFERENT ADDRESS at any time, press the **<clear>** key. You will then be asked to enter a new START address (hit **<enter>** to continue where you left off).

5) You can view a 256-byte block of memory at any time by hitting **<*>**. Each screen line will display the HEXADECIMAL START ADDRESS of a 16-byte block of memory, the HEXADECIMAL CONTENTS of the 16-byte block and the ASCII TRANSLATION of the 16-byte block. Nontranslatable values will be represented by a PERIOD (.). The first display will be the block currently being disassembled. To move around memory (hold the key for auto-repeat):

<right arrow) - advance 1 line **<left arrow>** - backup 1 line
<up arrow> - advance 1 block **<down arrow>** - backup 1 block
<enter> - advance 8 blocks **<clear>** - backup 8 blocks
<spacebar> - return to disassembling.

Disassembler will display up to 15 lines at a time to the screen, each line consisting of the assembly-language Instruction Start Address (decimal and hex), the Hexidecimal Machine Code, the assembly-language Instruction, and any Operands (all numeric operands will be in decimal).

The program may be loaded anywhere in high RAM as long as enough space is allowed above the top of program to provide for BASIC operations such as string, stack and variable storage. This is especially convienent when disassembling a program which loads into the BASIC program storage area or occupies most of the computer memory. For example, say you have a 16K Model I and you wish to disassemble a program which occupies memory locations 20000 to 30000. You will not be able to load **Disassembler** into the normal BASIC storage area without overlaying (wiping out) the first section of the machine language program nor will you be able to load **Disassembler** high enough to avoid overlaying the last section of the machine language program. But by first loading **Disassembler** into HIGH memory and disassembling the FIRST half of the machine language program and then loading **Disassembler** into LOW memory and disassembling the LAST half of the machine language program you will be able to disassemble the COMPLETE program. To actually do this in a 16K Model I:

1) START computer and LOAD machine-language program into memory.

2) Press **<break>** to return to BASIC and type the following line:
POKE 27380,0:POKE16548,245:POKE16549,106:NEW<enter>

3) CLOAD **Disassembler** into memory and begin the disassembly of the FIRST half of program starting at 20000 and stopping at about 25000.

4) Turn the computer off and then on. Set the memory size to protect the SECOND half of the machine language program.

5) LOAD machine language program in memory.

6) CLOAD **Disassembler** normally.

7) Disassemble the SECOND half of the machine language program.

You may use this same technique for 32K and 48K computers by simply replacing the POKE routine in step 2 with the following:

For 32K systems: **POKE-21772,0:POKE16548,245:POKE16549,170:NEW**<enter>
For 48K systems: **POKE-5388,0:POKE16548,245:POKE16549,234:NEW**<enter>

Printer Note: In line 95 of **Disassembler**, the author checks for printer on with **PEEK(14312)=63.** This may not work with your printer and/or computer. If the printer is READY (printer on), the value of 14312 will be 127 or less. If the printer is BUSY (printer off), the value of 14312 will be greater than 127. So the check should be **PEEK(14312)<128.** You could also apply this fix to line 402 of September's **Screen Writer II.**

The one that didn't get away... The object of **Beasts** (by Joe Melville) is to push the blocks to trap the beasts that are trying to get you. One nice feature of the game is the ability to change the keys he uses to move his man to other keys you might be more comfortable with. Note: If the game seems a bit slow to you or you are just a speed freak, you can delete **REM** in line 5.

Take me out to the Radio Shack computer. **Baseball** (by Patrick Walker, 8009 N.W. 12th Ave., Vancouver, WA 98665) is a sophisticated program that comes close to simulating a game between any two baseball teams. Using the statistics of the individual players, the teams, and the leagues as a whole, the computer 'plays' the game while you and a friend 'manage' the teams. It comes with the DATA files for the 1934 All-Star game (the disk version also has the files for the 1960 World Series - PIRA60/TXT and YANK60/TXT), but you can create the files for any teams (more later). **BEFORE** you run **Baseball**, you must merge the DATA files on the teams to the program. Once you have merged the DATA files, you can CSAVE or SAVE the game for playing later. However, if you wish to play with new teams, you must load the original **Baseball** and merge the new teams' DATA files. Here's how to merge (I will use the 1934 All-Star files for this example:

If the files are on disk:

1) Go to BASIC and load **Baseball.**
2) Type **MERGE"AL34/TXT"**<enter>.
3) Type **MERGE"NL34/TXT"**<enter>.
4) Type **RUN**<enter> to play.

If the files are on tape:

1) CLOAD **Baseball** and type **RUN**<enter>.
2) When prompted, get the first DATA file ready to load and hit <enter>.
3) When finished, type **RUN**<enter>.
4) When prompted, get the second DATA file ready to load and hit <enter>.
5) When finished, type **RUN**<enter>.
6) In answer to the prompt, type **RUN**<enter> to play.

To see how to play the game, read and absorb the instruction file, **Baseball Rules.** A sketch of the instructions are printed below:

Designated Hitter Rule - If you answer **1**, then a pitching change will NOT be forced when the pitcher is removed for a pinch hitter.

Choosing a Pitcher - After choosing the Home team, a list of 10 pitchers (0-9) will be shown. Those preceded with an r were used primarily in relief. Just pick a number from 0 to 9. Note - There weren't 10 pitchers in the 1934 All-Star game, so extra pitchers were added for this game and a + was put by their name.

Changing Lineup - Hit **4** (Bench) in answer to the **Select Play** prompt. Type the players number, then type the replacements number (<enter> cancels action). Be sure there is one player per position! Note: BEFORE the first pitch, any player removed can be brought back in later. Also, the lineup can be changed by hitting <enter> and typing in two numbers in answer to the **Switch** prompt.

Bunt - Random action chosen depending on players on base and position of infield.

Stealing - Based on ST (Stealing rating) of lead runner and base he's trying to steal.

Run & Hit - Forced swing. If pitch is missed, lead runner must steal.

Try for Extra Base - Answer when prompted.

Take Pitch - No swing by batter.

Swing at Pitch - Hit **0** or **<enter>** to swing away (HIT). Pitcher tires when PT (pitches thrown) exceeds PG (ave. pitches per game).

Walk - Intentionally walk a batter.

Infield - Back or up toggle.

Pickoff - To attempt pickoff of runner. Use only once per pitch.

Bullpen - Choose new pitcher. <Enter> cancels action.

Reviewing Stats - Typing **1** lets you see the pitching stats, **2** the batters' stats, and **3** goes back to the game.

Miscellaneous notes: All pitchers bat the same. It is wise to set up some sort of line numbering scheme for the various teams you create to keep them from overlapping. There are 15 hitters on the roster and 10 pitchers.

How to create your own DATA for **Baseball**:

These are actually BASIC DATA statements that are to be combined with the main program. We will look at the 1934 American League file as an example.

For tape DATA files (it won't affect disk files), the first line MUST be **POKE16548,PEEK(16526):POKE16549,PEEK(16527):RUN**

Disk DATA files, when completed, must be saved to disk in ASCII.

Team data - **3481 DATA1934,A.L.,the Polo Grounds,9,11,12,8,7,13,3,4,15,138,970,41,91,236,254**

Year, Team, Place Game Played,

Starting batting order, - nine numbers with any pitcher as number 15.

Double Play Rating, (138) - Usually between 100 and 200 ((1000*#double plays)/((2/3)*#walks+#singles)). #singles is about 72% of hits or #hits-#doubles-#triples-#homeruns.

Fielding Average * 1000, (970)

Stolen Base Rating of League, (41) - (1000*#stolen bases)/(#walks+#singles). Walks include intentional walks.

Innings Per Hit for League, (91) - (100*#innings pitched)/(#hits)

Innings Per Walk for League, (236) - (100*innings pitched)/(#walks)

Innings Per Strikeouts for League (254) - (100*innings pitched)/(#strikeouts)

Batting data for 15 players and one general pitcher - **3482 DATA-,Averill,598,187,48,6,31,99,44,4,...,=,Pitchers,100,15,2,0,1,5,50,0**

Left, Switch, or Right handed, (-) - (-, =, or nothing)

Last Name, - 8 characters

At Bats,Hits,Doubles,Triples,HR,Walks,Strikeouts,Stolen Bases, - 598,187,48,6,31,99,44,4,

Pitching data for 10 pitchers - **3485 DATA,Auker+,15,7,43,205,234,56,86,342,...**

Left, Switch, or Right handed, ( ) - (-, =, or nothing)

Last Name, - 8 characters (ignore the +)

Wins,Lost,Games Pitched,Innings Pitched,Hits Allowed,Walks Allowed,Strikeouts,ERA, - 15,7,43,205,234,56,86,342,

The author mentioned he has a disk-only enhanced version that may be of interest to you, as well as several more team's data. Contact him for prices and info.

Too good to be true...

I said that last month's **Tax83** was bugless. And we checked it over and over to be sure. However, a couple things did slip by that probably didn't affect your return, but could have. If you have an ENERGY CREDIT, FICA ON UNREPORTED TIPS, and/or TAX ON IRA, and then (and only then) answer NO to the ANY OTHER PAYMENTS question, you'll get double the amount you should for each one. Fix them by adding **:EC=0** to the end of line 900 and **:AP=0:TP=0** to the end of line 975.

Time to blow the candles out,

Dave

ed.