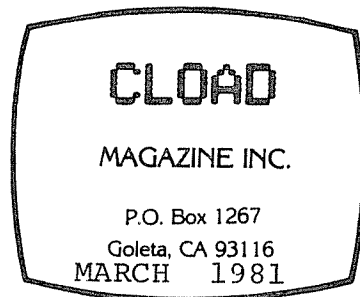


'No more pencils, no more books...'

Years of procrastination are going down the drain this month. Yours truly has managed an honorable discharge from college! And now I'm off to the Gradjeeshun Ceremony. I look like a choir boy with an 8" floppy on his head. Why is this stringy thing hanging in my face? To swat flies? Will they ever turn off the endless tape loop? We ask for a Las Vegas show, and we get the Chancellor. Hey, thanks for the sheepskin! It will make a great shammy. P.S. Ralph, I never took Math 5B.



*****				
*				*
*	Side	Title	Turns Count	
*				*
*			CTR-41	CTR-80
*				*
*	****	Measles Cover	18 & 260	10 & 152
*	** **	XOR	50 & 285	29 & 168
*	** **	Bug Hunt	116 & 335	68 & 197
*	** **	Alien Instructions	173 & 379	102 & 224
*	****	Alien (System Alien /32000)	229 & 423	135 & 249
*				*
*				*
*	**	Home Budget	9 & 253	6 & 149
*	***	Screen Writer	100 & 320	59 & 188
*	**	Page 1	186 & 387	109 & 228
*	**	Page 2	203 & 400	120 & 236
*	**	Page 3	220 & 413	129 & 243
*	****	Page 4	236 & 426	138 & 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: (↑, ↓, ←, →) = ([, \, ], ^).				
*				
*****				

Now even our cover is sick. Little circles drawn all over the place. Wonder if it itches?

XOR is a game in which giving is often better than receiving, especially if you get a point. The game has 4 windows, each window divided into 4 panes. One of the windows is yours, one is your opponent's, one is the TRS-80's, and one is the grab bag. Any of the 4 panes in a window can be lit. The object is to get all 4 panes in your window lit by XORing (eXclusive ORing) the grab bag window with your window.

Do what to the windows?! Ok, if a pane is lit in the grab bag window, and the same pane is off in your window, then the pane in your window is turned on when you XOR your window with the grab bag window. But if the pane had been lit in your window too, then the pane would have been turned off. Get it yet? Just think of it this way - if corresponding panes in both windows are both lit or both off, then XORing the windows results in the pane being turned off. If one of the corresponding panes in the windows is lit and one is off, then the your pane gets switched on after XORing.

The 'giving' comes in when XORing with the grab bag window won't help you light all of your panes. So you just hit the button to XOR the grab bag window with your opponent's window! Nice guy, huh? If both of you just wait it out, then the TRS-80 ORs (not XORs) its window with the grab bag window.

This will definitely NOT be a month with errorless programs. Bug Hunt has errors built in! Your mission, should you choose not to fast-forward, is to find and correct all of them. All of the error messages you get are expanded, and hints are given on how to correct them. But the 'debugging' still has to be done in order to get the program running right. Next month the fixed version will be published.

Have you ever played Space Invaders in an arcade? Or have you played a version on your or your friend's micro? Here is CLOAD Magazine's contribution to your software library. Alien, a machine language space invader type game complete with sound! This program is wonderful! There are a few differences with the arcade version, but it has no effect on the enjoyment of the game.

To run it on a Model I or Model III non-disk system, just type 'SYSTEM'<enter>. Answer the '??' prompt with 'ALIEN'<enter> and the program loads in. When the '??' prompt shows up again, type '/32000'<enter> and you're off to save your planet!

DOS users - the program will not run in DOS, but you can use it from disk by the following method: Save it to disk using TAPEDISK, LMOFFSET, TAPE, or whatever tape-to-disk utility you have (loads from 737D-7DOE, entry at 7D00). Now to run it, LOAD the program from disk into memory (do not run it yet). Hold down the <break> key and hit the <reset> button. Now you should be in regular vanilla-flavored BASIC. Answer the 'MEMORY SIZE' question with <enter>, type 'SYSTEM'<enter>, type '/32000'<enter>, and you are on your way!

Miscellaneous notes - to get sound, plug the larger grey plug that goes to your tape recorder into an amplifier. Your tape recorder can be made into an amp by just holding the record protect lever in (at the back of the cassette pocket) and pressing the play and record buttons. Remember that the arrow keys move your base, and the shift keys fire missiles. The 'Best Score' score is usually trashed on the Model III. The program has locked up on me a couple of times for some unknown reason. If it happens to you, hit the reset button (hold the <break> key if you have disks), answer 'MEMORY SIZE' with <enter>, type 'SYSTEM'<enter>, and type '/32000'<enter> to run Alien again.

Home Budget lets you see just where all that money is going (all what money?). You can then save this information to tape or disk for future reference. Just think, in 20 years you can get out the 'antique computer', run this program, and see that you were able to get by on only \$45,000 a year...

For those nasty-grams you want to write, there is a mini word processor in this month's issue! Screen Writer lets you write a screen full of text, then move all around the screen to edit it. When you are satisfied with the page, you can dump it to tape or to a printer. You can also store up to 5 pages of text in memory while the program is running.

Just run Screen Writer in BASIC (not DOS BASIC - the program contains machine language routines that load at the top of 16K RAM). Soon you will find yourself with an empty screen and a blinking cursor. Hit <shift><down-arrow>'H'. Wow! A menu! Hit <enter> to continue. Those Pages listed on the tape after this program are pages 1-4 of the manual. Hit <shift><down-arrow>'G' to load in and read the first page. When you have finished, do the same to get the second page. And so forth...

Things to know - the manual is in UPPER CASE because the Model I doesn't like the lower case stuff I try to feed it (generated on the Model III). Lower case works fine on the Model III, but lower case on a modified Model I may not - try it. The 'P' (Print) option works great on the Model I, but probably won't on the Model III (we don't have a printer hooked up to ours yet). Model III'ers may just have to use <shift><down-arrow>'\*' or 'SP' (depending on whether your Model III is new or old) to print the screen instead.

More things to know - do not put a character in the lower-right-hand corner of the screen unless you want to lose the top line of the screen forever! Moving the cursor there does not have any effect, however. To quit, you must hit <shift><down-arrow>'Q' (or <reset> if you feel destructive) since the <break> key is disabled by the program.

Excuses, excuses - my forte!

Last month's Empire program was an extremely dense one! There wasn't even room to add our copyright info (that's why the 1st 6 lines had to be deleted). But after playing it for a year, I felt it was thoroughly debugged. WRONG! My style of play never found the 2 errors that some of you (you must play it wrong... even if I never made Emperor) have found.

If you get an 'OV' error (OVerflow) in line 465 while playing, immediately type 'A(Q,5)=32767:CONT'<enter> and the game will continue on normally. If the program won't let you input '0' for the number of soldiers wanted and you find yourself stuck in a loop, hit <break>. Then immediately type 'GOTO255'<enter> and you will be put back in the investment menu.

To fix the above errors permanently, as well as a few cosmetic ones that were found, make the changes below (Model III'ers - you may not have enough memory to make all of these, sorry):

Insert 'IFE2=0THEN255ELSE2=0:' at the begining of line 245. Now you can just hit <enter> when you don't want to add soldiers.

Change 'RND(A(Q,5))' to 'RND(0)\*A(Q,5)' in line 465.

Change 'Of' to 'of' in line 283 (if you have lower case).

Change 'assinated' to 'assassinated' in line 379 (if you spel).

Insert ':A(K,17)=5' after 'CLS' in line 365 (to get credit for winning).

New arrival! It has its father's name, and its mother's BASIC. But look at the color in its eye! What a beauty! The TRS-80 Extended BASIC Color Computer is here! There wasn't a lot of time to play with it before this had to be written, but if first impressions mean anything, we're gonna have a lot of fun. And why do we have one in the shop? Let the rumor mill start up! Hopefully, a new magazine will be available in a few months. It will be cassette-based, and will load directly into the Extended BASIC Color Computer. If there are programs for the Color Computer that are in need of a publisher, they can be sent this way. Our usual submission policies hold (including the 6-week wait for a reply), but please mark clearly that the program is for the Color Computer, and not the Model I or Model III.

Put another candle on the birthday cake...

It's our third birthday! The 'why?' year. Why are we still here? Why are you reading this? Anyway, to celebrate we decided to alphabetically index all of the programs we have published, and give it to you.

This calls for a statistic or two...

It turns out there are 218 different programs (not including instructions, duplications, or data files that go with a program). If you were a charter subscriber, you paid \$24 for the first year (and we lost money), and \$36 for the next two. That amounts to under \$0.45 a program! Such a deal! Now you pay \$42. Is it worth it? At our current rate of about seven programs a month, that amounts to \$0.50 a program. How dare we! Well, it is our birthday...

Another day, another half-dollar,

*Dave*



## HELLFIRE WARRIOR

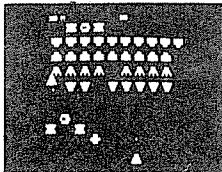
From Automated Simulations

A sequel to the famous "Temple of Apshai", HELLFIRE WARRIOR is expanded to include more command options, more potions, more magical items and more special effects. In addition to an innkeeper, HELLFIRE WARRIOR has an armorer, apothecary and magic shop.

WARNING: not for beginning Dungeonquest players! If you are new to these fascinating games, start out with "Temple of Apshai", "Morloc's Tower" or "Dalestones of Ryn".

	Tape	Disk
HELLFIRE WARRIOR	\$39.95	\$39.95
TEMPLE OF APSHAI	\$39.95	\$39.95
MORLOC'S TOWER	\$19.95	\$19.95
DALESTONES OF RYN	\$19.95	\$19.95

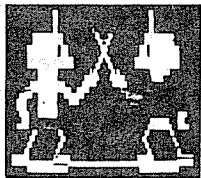
## GALAXY INVASION



By Bill Hague from Big Five

"The rage of the arcades" is now available for TRS 80! Exciting sound effects add to the action as the invaders swoop down to destroy your base. Even while you have your hands full battling the aliens, you have to watch out for the Flagship! Super graphics, super action, super fun!

Level I or II, tape...\$14.95



## DUEL «N» DROIDS

By Leo Christopherson from Acorn  
Your 'droid has already learned NIM, so now it's time to teach it how to wield a laser sword! Leo Christopherson, author of "Android NIM," "Dancing Demon" and other animations, has developed a new type of animation and high quality sound in his latest work.

Your 'droid starts out as a lowly clown. You teach it how to use a laser sword by controlling its movements. After training it to be a "Grand Master," you enter the tournament against the program's skilled 'droid! Entertainment for all ages.

Protected Tape...\$14.95  
Protected Disk...\$20.95

TRS-80 Level II 16K  
unless otherwise noted



## WARGAMES

From Computer Simulations

For the serious war gamer, these three World War II strategic simulations offer incredible historical accuracy. Take command of the U.S. and Allied armies, try various approaches to specific WWII battles. Would you have fared better than the actual result - or worse?

Each war game displays a combat map, with notation of the topography, towns, enemy positions and type. You move your units, manage your supplies, and carry on the fighting day by day. For real challenge, choose from these three games. Available on tape.

BATTLE OF THE BULGE: St. Vith...\$14.95  
BATTLE OF THE BULGE: Bastogne...\$19.95  
D-DAY: The Invasion of France...\$19.95

Unbelievable Realtime 3-D Graphics!



## FLIGHT SIMULATION

From Sub Logic

The wait is over! If 3-D graphics seem impossible on the low resolution TRS 80, you haven't seen this brilliant program. During FLIGHT SIMULATION, you instantly select instrument flight, radar, or a breathtaking pilot's eye view. But be sure to strap yourself in - you're liable to get dizzy!

Once you put in some air time learning to fly your TRS 80, head for enemy territory and try to bomb the fuel depot and airstrip while fighting off five enemy warplanes. Good Luck!

Level I or II Tape...\$25.00

## INVADERS FROM SPACE

By Carl Miller from Acorn

A new and faster machine language approach to this classic (and addictive) space game. As you play, the aliens are dropping bombs, moving from side to side, and trying to overrun your bases. You try to fly shooting at them, and your score grows larger with each hit. But, just as you think you've got the invaders under control, they speed up their action.

INVADERS FROM SPACE offers variable game speed, enemy bomb frequency and accuracy, number of shots on screen and number of your bases. Move your base and simultaneously fire at the invaders - which you can not do in most other similar games. Full sound effects, incredible speed and action!

Protected Tape...\$14.95  
Protected Disk...\$20.95

## ELECTRONIC BASKETBALL HANDICAPPER

By Sothen, Laurence & Gavenda from Acorn  
Basketball is the first of the Electronic Handicapper Series from Acorn. It will introduce you to the benefits of predicting the winners of this season's basketball games. This two-tape package gives you power ratings to get you started, then you keep the data tape informed of game scores as they are played. The program will calculate a projected winner and point spread, based on available data. Last season Handicapper was able to predict 85% of the winners, with 64% point spread accuracy. Requires only 16K.

On Tape...\$99.00



From Org Tex

New machine language disk access/modification program. With Z80ZAP, you will be able to...

...Read, Display and Modify disk sectors  
...Remove Passwords from any disk file  
...Zero Out any disk sector ...Recover killed or lost disk files ...Compare disk sectors, byte by byte ...Find any designated byte in a disk sector ...Apply patches, fixes, etc.

Z80ZAP automatically calculates the Hash Index Code for any file and tells you exactly how to use it when recovering killed files. The flashing cursor acts as a pointer to the byte on which you are working plus its ASCII equivalent, making direct disk editing considerably easier. Designed to outperform SUPERZAP in speed and capabilities, Z80ZAP is a "must" for disk drive owners.

On Disk...\$29.95

## BOSS

By V. Hester from Soft Sector

This utility is the perfect tool for creating and debugging Basic programs. It allows single stepping through the Basic program, setting up to five breakpoints within the program and tracing of program logic using only a small portion of the display screen. With BOSS, you can review selected variables during program execution and return to the program with the display restored. Allows storing programs in high memory for later retrieval. For Level II, TRSDOS, NEWDOS, NEWDOS 80, VTOS.

On tape...\$18.95

## DISASSEMBLER

By Roy Soltoff from MisoSys & Acorn

A two pass disassembler for TRS 80 that converts machine code to Z 80 assembly language listings. DISASSEMBLER produces symbolic labels with output to video, printer or tape. Radio Shack's Editor Assembler will read and load the tapes for easy modification and reassembly. Extend the capabilities of Editor Assembler with this utility. On tape for two different memory locations.

\$14.95

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