

# BITS, BYTES & PIXELS

LIMA 99/4A USERS GROUP



January 1993

Volume 9, #1

\*\*\*\* TI-101 \*\*\*\*  
OUR 4/A UNIVERSITY

by Jack Sughrue  
Box 459  
E. Douglas MA 01516

#8 EUNICE AND THE KIDS  
or  
LIFE AMONG THE LOGOPHILES

In this last session, Class, I wanted to spend some time explaining why the TI is still the best educational tool you can have in your homes or classrooms for young and old children. And everyone in between. By old, I mean in the 90's. Sister Pat Taylor's learners even include Centenarians! To learn more about this extraordinary woman and her extraordinary group of elderly computer buffs, write to her at 1050 Carmel Drive #456, Dubuque, Iowa, 52001. I don't know if Sister Pat calls her very active TI devotees an official user group, but they are. And they are probably the only All Nun User Group in America (The ANUGA Group of Iowa?).

And, yes, Class, I checked our map here at the university and there really is a place called Iowa.

Sister Pat is one of the two most active TIers with whom I have ever had the opportunity to correspond.

The other does officially operate the only All Kids TI User Group in America. No, not AKTIUGA, Mr. Shakespeare. It is the Oakland UG from Maine. And the energetic and ingenious leader is Eunice Spooner (Webb Road, Box 3720, Waterville ME 04901). Though the group puts out a newsletter that includes delightful programs written by the students and though the kids take field trips to the Computer Museum in Boston and though there is a highly developed TI computing program in the schools as well, I am not going to discuss any of those achievements by Mrs. Spooner. Except to say they and others are considerable.

Instead, I want to focus this particular class on a particular specialty of that remarkable woman: LOGO.

Now, don't shake your heads and shut down, as if LOGO were beneath you. Especially you, Ms. Bronte, who keep pestering me about adult stuff. I can guarantee all of you - those with little kids somewhere, including inside of you, and those who were born elderly - that LOGO can fit everybody's need to learn, to discover, to create, to explore, to develop the intellectual discipline of logical reasoning. There just is not another tool like it.

The computer is the perfect tool for the learning that only LOGO can provide. The TI LOGO II, as you will see, is our perfect educational tool.

I'd like to begin our last session together by reading a

recent review (ah, nice alliteration there) from NEW-AGE/99 about Eunice's video tape package:

"There is a great video now available to TI owners: the full-length LOGO video done by Eunice Spooner (RFD 1, Box 3720, Webb Road, Waterville, ME 04901). It is wonderful! It also comes with a disk full of lots of the items she demos and a hardcopy listing of the items and footage for easy tape locations.

"Eunice is a certified elementary teacher and it is obvious on this tape. She's terrific: kind, patient, step-by-step logical, no panic; and she makes everything seem easy and fun. Which it is, if you do the things she suggests.

"I always liked LOGO. Then I put it away for a long time. After viewing this tape and trying her programs, I discovered I LOGO.

"If you own LOGO, get this package instantly. At \$10 it is a total steal. And it is used as a fundraiser to support the only ALL KIDS TI USER GROUP IN THE WORLD! If you don't own LOGO, buy it instantly. (It's on sale everywhere CHEAP! Years ago I paid \$119 for my first, and recently bought an unopened boxed one for \$15.) But, new or used, pick one up for this video/disk set alone. You'll rediscover the joys of computing and the real fun (and learning, which is why it is fun) of your remarkable 4A. Don't delay."

But before I discuss Mrs. Spooner's extraordinary LOGO adventures, I'd like to give you a bit of LOGO's history.

A few years before the 4A was born, MIT Professor Seymour Papert formed a team to create a powerful, high-level computer language specifically designed for educational purposes involving some of the ideas from the field of Artificial Intelligence. Papert was a disciple of (and worked with) noted Swiss psychologist Jean Piaget, the Father of Developmental Learning (creating learning environments in which learners learn naturally in the same way we all learned to walk and talk). Papert's classic book, MINDSTORMS, defines these ideas and explains the computer/learner relationship that led to his creating LOGO, still the most effective educational language - tool, if you will - that has ever been created. The book is still in paperback print. It should be in every computer buff's library, along with THE SECRET GUIDE TO COMPUTERS, which we mentioned a few sessions ago.

When TI asked Papert to create an enhanced version (with music, sprites, and the like, peculiar to the TI), the field testing and the results thereof made TI history. It is a singular module in that it, in effect, allows each user to create his/her own PERSONALIZED computer language.

What can LOGO do?

Well, you can write programs with it. You can write text with it that can rewrite itself in poetic ways. You can draw

NEXT PAGE

with it, including making animated films. You can use it for math activities, for problem-solving, for puzzles, games, logic activities, for creating musical scores. It does use all the various built-ins we take for granted on our TI's. For example, you can create a unique design in the turtle drawing mode and animate it; then create a pile of new sprites (beyond the few that are built in); then create bigger piles of new "tiles" which make up the character sets. Now, with your newly created animated design as background (with instant colors of your choice for back and foreground), you may now set those sprites you created loose. Each of the 32 sprites can be set in motion at different speeds, in four different directions at the same time (using word terms like "EAST" or directional numbers), and each can be color defined from the TI's 16 color palette. All this, Class, can be done easier than in any other computer language. As a matter of fact, the learner takes him/herself through the stages needed to achieve these very complex routines. According to the philosophy of the LOGO developers, "LOGO has no threshold, no ceiling." The beginner can immediately do meaningful, exciting things with the program, while the most adept can do some very advanced things.

And now we come back to Mrs. Spooner's tapes. There are two: the one described earlier in the NEW-AGE/99 review and a second done at the recent Lima faire and part of Tape #2 (which can be ordered from Charles Good, Box 647, Venedocia OH 45894 for only \$5). This latter tape is a gem. Mrs. Spooner teaches Dr. Good's first-grade daughter how to experience LOGO. Meaghan had never dealt with LOGO before, but she sits down confidently at the console, while Mrs. Spooner, in her wheelchair behind her, begins the lesson.

It's the perfect teacher doing a perfect job (with a perfect student, I might add). Step by step she works Meaghan from the opening "TELL TURTLE" through some very sophisticated LOGO-ing that I wouldn't have believed a six-year-old was capable of handling. And each mini-lesson builds upon the previous in such a way that Meaghan anticipates most of what would be happening after a very short time.

For all of you teachers in the room here, I can only say that watching such a pro at work is certainly inspirational. I only wish the people who made the tape had been able to keep the room noises down and had been able to get the camera closer and in better light. In spite of these preventable problems (which I hope they cure next year by finding a small, quiet room to tape Mrs. Spooner's teaching activities), the tape is one you'll watch again and again.

The tutorial tape and software Mrs. Spooner made for her club's release, however, is easy on the eyes and ears. Everything about the package is exceptional, including the price. I can't even begin to imagine anyone not leaping into LOGO after watching just a few minutes of it.

Don't worry, Ms. Bronte, you'll have a chance to see both of these tapes at the end of class. Then we'll all head for the lab, where we will all have more than enough time to get onto LOGO and play with some of the ideas we've learned.

That's why I save LOGO for our last class. One third of your mark will be based on how well you can program your turtle to create a flower.

Mrs. Spooner, by the way, begins her lesson with Meaghan and her tape tutorial by introducing the turtle and explaining how it has to take steps forward or back, how it needs to be told to move its head in the direction it is about to go, how it can be made to repeat its little learned activities in such a way that its expertise allows it to perform like no other turtle has ever performed.

Other LOGOphiles, however, think it's best to introduce this educational program through its Sprites and its Makeshape options. Still others feel its safest to start with the text and math PRINT options. Musically oriented types would probably feel the music learning should come first.

Having watched many teachers introduce LOGO in many different ways, including the ultimate mind-killer of learning all the terms first, I have to concur with Mrs. Spooner. The turtle seems the most logical, the easiest, the most fun. The turtle immediately allows the learner control of his/her environment with minimum instruction.

There is so much written about LOGO, so many manuals, so many tutorials.

After watching the tapes, look through the manuals which come with LOGO II and, after playing with the program a bit, load some of the samples that come with LOGO (disk and cassette come with the package, which, by the way, can still be purchased from TEXCOMP, at fairs, from clubs, and from vendors listed in newsletters and MICROpendium) and just enjoy and marvel. Call up the program and admire its efficiency. Then modify it and play some more.

For the TI? Yes, Mr. Shakespeare, there's a lot written on LOGO for the TI. The BEST OF 99er has some good articles, but they're a bit techie and are best read after you've used LOGO for a long time.

Look over your book list from your notes a couple sessions ago. In there I mentioned THE LAST WHOLE TI99/4A BOOK by Paul Garrison, ACADEMIC TI by Mowe and Munnaw, and Russ Walter's immense SECRET GUIDE. These are all excellent sources for LOGO-ing and lots of other educational and informational items. Don't confuse Garrison LAST book with THE LAST WORD ON THE TI-99/4A by Linda and Allen Schreiber, which is really lousy.

There are many, many other good LOGO books, though, some of which devote the entire book to LOGO.

But there are four LOGO books you should beg, borrow, or steal for, if you come across them:

TI's PROGRAMMING DISCOVERY IN TI LOGO STUDENT GUIDE. This was part of Texas Instruments Computer Advantage Club program. This 32-page 8X11 workbook is a quick tutorial and extremely handy quick reference guide, along with a presentation of all kinds of neat and peachy-keen Procedures (the term LOGO uses for Programs).

Scholastic's LOGO FUN by Pat Parker and Teresa Kennedy first shows you how one can easily convert Apple, Atari,



<u>NAME</u>	<u>NUMBER</u>	<u>MANUFACTURER</u>	<u>RETAIL</u>	<u>RELEA</u>
4A FLYER	TRI-BDAF	Triton	19.95	1Q/86
A-MAZE-ING	PHM 3030	TI	24.95	1Q/81
ACCOUNTING ASSISTANT	SF 30429	Scott,Foresman	??.??	1Q/82
ACS PROTECTION	PHM 3063	TI	??.??	?????
ACTIVITY ASSISTANT	SF 30428	Scott,Foresman	???.??	1Q/82
ADDITION	PHM 3090	Milliken	39.95	4Q/82
ADDITION AND SUBTRACTION 1	PHM 3027	Scott,Foresman	39.95	2Q/81
ADDITION AND SUBTRACTION 2	PHM 3028	Scott,Foresman	39.95	2Q/81
ADDITION AND SUBTRACTION 3	SF 30225	Scott,Foresman	22.95	1Q/84
ADVENTURE W/PIRATE ADVENTURE D/T	PHM 3041	Scott Adams	49.95	4Q/81
ADVENTURES IN ADDITION & SUBTRACT	PHM ????	Scott,Foresman	??.??	N/A
ALIEN ADDITION	PHM 3115	DLM Arcademics	39.95	1Q/83
ALLIGATOR MIX	PHM 3114	DLM Arcademics	39.95	1Q/83
ALPINE	PHM 3056	TI	39.95	4Q/82
AMBULANCE	TRI-BDAB	Funware	39.95	2Q/83
ANGLER DANGLER	PHM 3167	Data East	39.95	N/A
ANT COLONY		Funware		N/A
ANTEATER	ROM02025	Romox	39.95	4Q/83
ARCTURUS	STA 103	Exceltec	54.95	1Q/85
ASTROBLITZ		Funware		N/A
ATTENDANCE RECORDER	SF 30420	Scott,Foresman		1Q/82
BACH MUSIC	PHM ????	TI		N/A
BARRAGE	TRI-BAAX	Softmachine	19.95	3Q/87
BATTLESTAR	PHM 3124	TI		N/A
BEGINNING GRAMMAR	PHM 3003	TI	29.95	2Q/79
BEYOND PARSEC	TRI-BDAP	J.Phillips	19.95	3Q/88
BEYOND SPACE		Exceltec	29.95	1Q/85
BEYOND WORDWRITER	TRI-2017	DataBiotics	39.95	3Q/89
BIGFOOT	PHM 3151	Milton Bradley	49.95	4Q/83
BLACKHOLE	TRI-BABD	DataBiotics	19.95	3Q/87
BLACKJACK & POKER	PHM 3033	Milton Bradley	24.95	1Q/81
BLASTO	PHM 3032	Milton Bradley	24.95	1Q/81
BOXER		Exceltec	29.95	1Q/85
BOXER	TRI-2007	DataBiotics	19.95	3Q/89
BREAKOUT	PHM ????	TI		N/A
BREAKTHROUGH (aka TILE BREAKER)	TRI-2006	DataBiotics	19.95	3Q/89
BUCK ROGERS: PLANET OF ZOOM	PHM 3236	Sega	39.95	3Q/83
BURGER BUILDER	TRI-BAAY	Software Spec	19.95	3Q/87
BURGERTIME	PHM 3233	TI	15.95	1Q/84
CAR WARS	PHM 3054	TI	39.95	4Q/81
CARD SHARK	PHM ????	Milton Bradley		N/A
CAVE CREATURES	ROM08185	Funware/Romox	39.95	2Q/83
CENTIPEDE	RX8503	Atarisoft	44.95	4Q/83
CHAMPIONSHIP BASEBALL	PHM 3148	Milton Bradley	59.95	4Q/83
CHANGES	7-013-99	Tigervision		N/A
CHARACTER CRAYONS	ROM07025	Romox	24.95	1Q/84
CHICKEN COOP (aka HEN PECKED)	TRI-BAAH	Navarone	14.95	1Q/86
CHISOLM TRAIL	PHM 3110	TI	39.95	3Q/82
CHOPLIFTER		Broderbund		N/A

<u>NAME</u>	<u>NUMBER</u>	<u>MANUFACTURER</u>	<u>RETAIL</u>	<u>RELEA</u>
CLASS DATA RECORDER	SF 30421	Scott,Foresman		1Q/82
COMPUTER MATH GAMES I	PHM 3084	Addison-Wesley	39.95	2Q/83
COMPUTER MATH GAMES II	PHM 3083	Addison-Wesley	39.95	3Q/82
COMPUTER MATH GAMES III	PHM 3085	Addison-Wesley	39.95	2Q/83
COMPUTER MATH GAMES IV	PHM 3086	Addison-Wesley	39.95	2Q/83
COMPUTER MATH GAMES V	PHM 3087	Addison-Wesley		N/A
COMPUTER MATH GAMES VI	PHM 3088	Addison-Wesley	39.95	3Q/82
COMPUTER TUTOR	PHM 3170	TI		N/A
COMPUTER WAR		Thorn-EMI		N/A
COMPUTER WAR	TRI-BAAK	MICROpal	24.95	3Q/86
CONGO BONGO	PHM 3227	Sega	39.95	3Q/83
CONNECT FOUR	PHM 3038	Milton Bradley	29.95	2Q/80
CONSOLE CALC	TRI-BJBS	DataBiotics	39.95	2Q/87
CONSOLE CALC+	TRI-BJBT	DataBiotics	69.95	2Q/87
CONSOLE WRITER	TRI-BBCA	Navarone	49.95	4Q/84
CORCOMP '83 MODULE ADAPTER	TRI-YKAK	Corcomp	29.95	3Q/87
COURSE MANAGER	SF 30448	Scott,Foresman		1Q/82
CRISIS MOUNTAIN		Funware		N/A
CROSSFIRE	PHM 3207	TI		N/A
CUBIT (module version)		Artius/IUG		N/A
D STATION		IUG	24.95	4Q/83
D STATION		Exceltec	29.95	1Q/85
D STATION	TRI-BDAS	Triton	19.95	3Q/88
D STATION 2		Exceltec	29.95	1Q/85
D STATION 2	TRI-BDAT	Triton	19.95	3Q/88
DATA BASE MANAGEMENT		Navarone	59.95	4Q/84
DAVID'S MIDNIGHT MAGIC		Broderbund		N/A
DECIMAL DELI 2		Scott,Foresman		N/A
DECIMALS	PHM 3096	Milliken	39.95	4Q/82
DEFENDER	RX8506	Atarisoft	44.95	4Q/83
DEMOLITION DIVISION	PHM 3116	DLM	39.95	1Q/83
DEMON ATTACK	PHM ????	Imagic		N/A
DEMONSTRATION	PHM 3001	TI	69.95	2Q/79
DESKTOP PUBLISHING	TRI-BAAR	DataBiotics	59.95	3Q/87
DIAGNOSTIC	PHM 3000	TI	29.95	2Q/79
DIG-DUG	RX8509	Atarisoft	44.95	4Q/83
DISK FIXER		Navarone	29.95	1Q/82
DISK MANAGER	PHM 3019	TI	49.95	1Q/80
DISK MANAGER 2	PHM 3089	TI	39.95	4Q/82
DISK MANAGER 3 (aka Super DM)	PHM ????	TI		N/A
DIVISION	PHM 3093	Milliken	39.95	4Q/82
DIVISION I	PHM 3049	Scott,Foresman	39.95	2Q/82
DONKEY KONG	RX8512	Atarisoft	44.95	1Q/83
DRAGONFLYER (aka SPOT-SHOT)	TRI-BAAW	Sofmachine	19.95	2Q/88
DRAGON MIX	PHM 3117	DLM	39.95	1Q/83
DRIVING DEMON	ROM06185	Funware/Romox	32.95	2Q/83
E.T. AND HIS ADVENTURES AT SEA		Looking Glass		N/A
E.T. AND HIS ADVENTURES IN AIR		Looking Glass		N/A
E.T. AND HIS ADVENTURES ON LAND		Looking Glass		N/A

<u>NAME</u>	<u>NUMBER</u>	<u>MANUFACTURER</u>	<u>RETAIL</u>	<u>RELEA</u>
E.T. THE EXTRA-TERRESTRIAL	PHM 3125	TI		N/A
EARLY LEARNING FUN	PHM 3002	TI	29.95	2Q/79
EARLY LOGO LEARNING FUN	PHM 3144	TI	39.95	3Q/83
EARLY READING	PHM 3015	Scott,Foresman	54.95	4Q/79
EDITOR/ASSEMBLER	PHM 3055	TI	99.95	1Q/82
EDU-PACK	AS-ED01b	Asgard	24.95	1Q/90
ELECTRIFYING FRACTIONS 2		Scott,Foresman		N/A
EQUATIONS	PHM 3100	Milliken	39.95	1Q/83
ESCAPE	TRI-2005	DataBiotics	19.95	3Q/89
ESPIAL	7-012-99	Tigervision	19.95	3Q/84
EXTENDED BASIC (v100)	PHM 3026	TI	99.95	1Q/81
EXTENDED BASIC (v110)	PHM 3026	TI	99.95	3Q/82
EXTENDED BASIC		Exceltec	69.95	1Q/85
EXTENDED BASIC		Tenex/MICROpal	69.95	1Q/85
EXTENDED BASIC+ (Mechatronics)		Mechatronics	98.00	4Q/85
FACE CHASE	STA 110	Exceltec	29.95	1Q/85
FACEMAKER	PHM 3177	Spinnaker	39.95	4Q/83
FANTASTIC FRACTIONS 1		Scott,Foresman		N/A
FANTASY		TI		N/A
FATHOM	PHM 3222	Imagic	39.95	3Q/83
FLAP		Imagic		N/A
FOOTBALL	PHM 3009	TI	29.95	2Q/79
FRACTIONAL NUMBERS	PHM 3095	Milliken	39.95	4Q/82
FRACTIONS 1	SF 30219	Scott,Foresman	39.95	4Q/83
FROG JUMP	SF 31176	Scott,Foresman	39.95	4Q/83
FROG STICKERS	TRI-BAAG	Navarone	14.95	1Q/86
FROGGER	TRI-GAAV	Parker Brother	19.95	2Q/84
GALACTIC BARRIER		Funware		N/A
GASTION PRIVEE (French vn of HBM)	PHM ????	TI		
GERM PATROL		TI		N/A
GROM BUSTER		Navarone	39.95	2Q/84
HANGMAN	PHM 3037	Milton Bradley	29.95	2Q/80
HEN PECKED (aka CHICKEN COOP)	ROM03025	Navarone/Romox	37.50	2Q/83
HENHOUSE	ROM07185	Funware	32.95	2Q/83
HOME FINANCIAL DECISIONS	PHM 3006	TI	29.95	2Q/80
HOMEWORK HELPER		Navarone	49.95	4Q/84
HOMEWORK HELPER+	TRI-BAAC	Navarone	49.95	1Q/85
HONEY HUNT	PHM 3156	Milton Bradley	49.95	4Q/83
HOPPER	PHM 3229	TI	39.95	2Q/83
HOUSEHOLD BUDGET MANAGEMENT	PHM 3007	TI	44.95	2Q/79
HUNT THE WUMPUS	PHM 3023	TI	24.95	2Q/81
HUSTLE	PHM 3034	Milton Bradley	24.95	1Q/81
FM HIDING	PHM 3155	Milton Bradley	59.95	4Q/83
INDOOR SOCCER	PHM 3024	TI	29.95	2Q/81
INTEGERS	PHM 3094	Milliken	39.95	4Q/82
INVESTMENT ANALYSIS	PHM 3012	TI		
JAWBREAKER	PHM ????	Sierra On-Line		
JAWBREAKER II	PHM 3194	Sierra On-Line	39.95	3Q/83
JOUST	RX	Atarisoft		N/A

<u>NAME</u>	<u>NUMBER</u>	<u>MANUFACTURER</u>	<u>RETAIL</u>	<u>RELEA</u>
JUMPY (aka QMAZE)	TRI-BAAZ	Sofmachine	19.95	3Q/87
JUNKMAN JR.	TRI-BAAM	DataBiotics	19.95	2Q/87
JUNGLE HUNT	RX8528	Atarisoft	44.95	2Q/84
KILLER CATERPILLAR	TRI-GBAA	Norton Software	29.95	3Q/84
KING OF THE CASTLE	TEN42067	Navarone	17.95	3Q/86
LAWS OF ARITHMETIC	PHM 3099	Milliken	39.95	1Q/83
LEARN TO PROGRAM (for 99/2 only)	PHM 3601	TI	19.95	2Q/83
LEARN TO PROGRAM BASIC (99/2)	PHM 3602	TI	19.95	2Q/83
LINGAPHONE I, II, III, IV (Span)	PHM 3126	TI		
LINK TERMINAL EMULATOR	ASG-U09	Asgard	29.95	4Q/90
LOVE TENNIS		Exceltec	29.95	1Q/85
M*A*S*H	PHM 3158	Fox	39.95	4Q/83
MAGIC MEMORY (aka TI WORKSHOP)	TRI-BAAV	DataBiotics	59.95	2Q/88
MAKE A SENTENCE		TI		N/A
MANCALA	TRI-2002	DataBiotics	19.95	3Q/89
MATCH CATCH	PHM 3161	TI		N/A
MEASUREMENT FORMULAS	PHM 3101	Milliken	39.95	1Q/83
METEOR BELT	PHM 3152	Milton Bradley	49.95	4Q/83
METEOR MULTIPLICATION	PHM 3119	DLM	39.95	4Q/83
MICROSOFT MULTIPLAN	PHM 3113	TI	99.95	4Q/82
MICROSURGEON	PHM 3220	Imagic	39.95	3Q/83
MICRO PINBALL	TRI-BADE	Software Spec	19.95	2Q/87
MICRO TENNIS (aka LOVE TENNIS)	TRI-BDAQ	DataBiotics	19.95	3Q/88
MIDNITE MASON		Exceltec	29.95	1Q/85
MIDNITE MASON	TRI-BADF	Software Spec	19.95	2Q/88
MIGHTY MULTIPLICATION 2		Scott,Foresman		N/A
MILLIKEN MANAGER		Milliken		N/A
MILTON BRADLEY GAME VISION		Milton Bradley		N/A
MINER 2049er	7-008-99	Tigervision	34.95	2Q/84
MINER 2049er	TRI-GAAX	Tigervision	19.95	3Q/84
MIND CHALLENGERS	PHM 3025	TI	24.95	2Q/81
MINI MEMORY	PHM 3058	TI	99.95	1Q/82
MINIWRITER II+	TRI-BJBZ	DataBiotics	39.95	3Q/86
MINIWRITER III+	TRI-BJBY	DataBiotics	79.95	3Q/86
MINUS MISSION	PHM 3118	DLM	39.95	1Q/83
MOON PATROL	RX8531	Atarisoft	44.95	2Q/84
MOONMINE	PHM 3131	TI	39.95	2Q/83
MOONSWEeper	PHM 3224	Imagic	39.95	1Q/84
MOUSKATTACK	PHM 3208	Sierra On-Line		N/A
MS. PAC-MAN	RX8543	Atarisoft	44.95	2Q/84
MULTILINGUAL EARLY LEARNING FUN	PHM 3221	TI		N/A
MULTIPLICATION	PHM 3092	Milliken	39.95	4Q/82
MULTIPLICATION I	PHM 3029	Scott,Foresman	39.95	1Q/81
MULTIPLICATION II	SF ?????	Scott,Foresman		N/A
MUNCHMAN	PHM 3057	TI	39.95	1Q/82
MUNCHMAN II	TRI-BDAG	J.Phillips	19.95	2Q/87
MUNCHMOBILE	PHM 3146	SNK Electronic	39.95	2Q/84
MUSIC MAKER	PHM 3020	TI	39.95	1Q/81
MUSIC SDA		TI		N/A

NAME	NUMBER	MANUFACTURER	RETAIL	RELEA
NAVARONE DBMS		Navarone	59.95	4Q/84
NUMBER BOWLING	SF 31188	Scott,Foresman	39.95	2Q/83
NUMBER MAGIC	PHM 3004	TI	19.95	2Q/79
NUMBER READINESS	PHM 3098	Milliken	4.95	4Q/84
NUMERATION I	PHM 3050	Scott,Foresman	39.95	4Q/83
NUMERATION II	PHM 3051	Scott,Foresman	39.95	4Q/83
NUTRITION ANALYSIS		TI		N/A
OTHELLO	PHM 3067	CBS Video	39.95	1Q/82
P/L MANAGER	PHM 3102	Milliken		N/A
PAC-MAN	RX8500	Atarisoft	44.95	4Q/83
PADDLE BALL		TI		N/A
PAINT 'N PRINT	TRI-BACA	Navarone	39.95	2Q/85
PAINT 'N PRINT	TRI-BACD	Navarone	29.95	3Q/86
PAINT 'N PRINT	TRI-BACE	Navarone	29.95	3Q/86
PARSEC	PHM 3112	TI	39.95	3Q/82
PERCENTS	PHM 3097	Milliken	39.95	1Q/83
PERIPHERAL DIAGNOSTIC MODULE	TRI-YKAL	Corcomp	29.95	1Q/86
PERSONAL REAL ESTATE	PHM 3022	TI	69.95	1Q/81
PERSONAL RECORD KEEPING	PHM 3013	TI	49.95	4Q/79
PERSONAL REPORT GENERATOR	PHM 3044	TI	49.95	3Q/82
PERSONNEL DATA RECORDER	SF 30427	Scott,Foresman		1Q/82
PETER PAN ODYSSEY	PHM 3132	Walt Disney		N/A
PHYSICAL FITNESS	PHM 3010	TI	29.95	2Q/79
PICNIC PARANOIA	RX8517	Atarisoft	44.95	4Q/84
PICTURE PARTS	SF 31179	Scott,Foresman	39.95	4Q/83
PINNOCHIO'S GREAT ESCAPE	PHM 3135	Walt Disney		N/A
PIPES		Funware	39.95	4Q/83
PLANT GENETICS	PHM 3173	TI		N/A
PLATO INTERPRETER	PHM 3122	Control Data	59.95	4Q/83
POLARIS		Tigervision		N/A
POLE POSITION	RX8534	Atarisoft	44.95	2Q/84
POPEYE	TRI-GAAY	Parker Brother	19.95	2Q/84
PRINCESS AND FROG	ROM01025	Romox	39.95	4Q/83
PROGRAM MANAGER 6000+		Pilgrims Pride	69.95	2Q/86
PROPERTY MANAGER	SF 30431	Scott,Foresman		1Q/82
PRO-TYPER	TRI-BABG	DataBiotics	19.95	3Q/87
PROTECTOR II	RX8516	Atarisoft	44.95	4Q/83
PYRAMID PUZZLER	SF 31185	Scott,Foresman	39.95	4Q/83
Q*BERT	TRI-GAAZ	Parker Brother	19.95	2Q/84
QMAZE (aka JUMPY)	TRI-BAAZ	Sofmachine	19.95	2Q/88
QUBIC	STA 104	Sunware		N/A
RABBIT TRAIL	FW 1004	Funware/Romox	34.95	2Q/83
READING ADVENTURES	TRI-AAEK	Scott,Foresman	39.95	4Q/83
READING CHEERS	TRI-AAEJ	Scott,Foresman	39.95	4Q/83
READING FLIGHT	PHM 3082	Scott,Foresman	39.95	3Q/82
READING FUN	PHM 3043	Scott,Foresman	39.95	1Q/82
READING ON	PHM 3046	Scott,Foresman	54.95	3Q/82
READING POWER	SF 30109	Scott,Foresman	54.95	3Q/82
READING RAINBOWS	SF 30101	Scott,Foresman	54.95	3Q/82



<u>NAME</u>	<u>NUMBER</u>	<u>MANUFACTURER</u>	<u>RETAIL</u>	<u>RELEA</u>
READING RALLY	PHM 3048	Scott,Foresman	54.95	3Q/82
READING ROUNDUP	PHM 3047	Scott,Foresman	54.95	2Q/82
READING TRAIL	SF 30107	Scott,Foresman	54.95	2Q/82
READING WONDERS	SF 30111	Scott,Foresman	54.95	2Q/82
RED BARON FLIGHT SIMULATOR	TRI-BADH	Not-Polyoptics	27.95	2Q/88
RETURN TO PIRATE'S ISLE	PHM 3189	Scott Adams	39.95	1Q/84
RIVER PATROL		Tigervision		N/A
RIVER RESCUE (cartridge version)		Thorn-EMI		N/A
ROBOTRON:2084		Atarisoft		N/A
ROTOR RAIDERS	ROM06025	Romox	39.95	1Q/84
SALARY PLANNER	SF 30430	Scott,Foresman		1Q/82
SCHOLASTIC SPELLING-LEVEL 3	PHM 3059	Scholastic	59.95	2Q/82
SCHOLASTIC SPELLING-LEVEL 4	PHM 3060	Scholastic	59.95	2Q/82
SCHOLASTIC SPELLING-LEVEL 5	PHM 3061	Scholastic	59.95	2Q/82
SCHOLASTIC SPELLING-LEVEL 6	PHM 3062	Scholastic	59.95	2Q/82
SCHOOL MAILER	SF 30423	Scott,Foresman		1Q/82
SCRAPER CAPER	7-010-99	Tigervision		N/A
SEARCH MASTER	STA 102	Sunware	36.95	1Q/85
SECURITIES ANALYSIS	PHM 3012	TI	54.95	1Q/80
SEWERMANIA	PHM 3150	Milton Bradley	49.95	4Q/83
SHAMUS	RX8518	Atarisoft	44.95	4Q/83
SIMON SAYS		TI		N/A
SKY LANCER	7-014-99	Tigervision		N/A
SLYMOIDS	PHM 3197	TI	39.95	1Q/84
SMU ELECTRICAL ENG LIBRARY	PHM 3045	TI	149.95	2Q/82
SNEGGIT	PHM 3145	TI	39.95	2Q/83
SORGAN II	TRI-BDAU	DataBiotics	19.95	3Q/88
SOUNDTRACK TROLLEY	PHM 3157	Milton Bradley	49.95	4Q/83
SPACE BANDITS	PHM 3149	Milton Bradley	49.95	4Q/83
SPACE CHASE		Exceltec	29.95	1Q/85
SPACE JOURNEY	SF 31191	Scott,Foresman	39.95	1Q/83
SPACE PATROL		Exceltec	29.95	1Q/85
SPACE PATROL	TRI-2002	DataBiotics	19.95	4Q/89
SPEECH EDITOR	PHM 3011	TI	44.95	4Q/79
SPEED READING (Children)	TRI-BABA	Navarone	49.95	4Q/84
SPEED READING (Adults)	TRI-BABB	Navarone	49.95	4Q/84
SPOT-SHOT (aka DRAGONFLYER)	TRI-BAAW	Sofmachine	19.95	3Q/87
SPRINGER	7-006-99	Tigervision		N/A
SPY'S DEMISE	TRI-BABC	CSI Design Grp	19.95	2Q/87
ST.NICK	TRI-BDAC	Funware	34.50	4Q/83
STAR GATE		Atarisoft		N/A
STAR GAZER I	TRI-BBBA	J.Phillips	29.95	3Q/84
STAR GAZER II	TRI-BBBB	J.Phillips	29.95	3Q/84
STAR GAZER III	TRI-BBBC	J.Phillips	29.95	3Q/84
STAR GAZER I, II, III	TRI-BABF	J.Phillips	39.95	4Q/88
STAR MAZE	SF 31182	Scott,Foresman	39.95	4Q/83
STAR RUNNER (aka TI RUNNER)	TRI-BAAP	DataBiotics	19.95	2Q/87
STAR TRAP		Exceltec	29.95	1Q/85
STAR TRAP	TRI-BDAR	J.Phillips	19.95	3Q/88

NAME	NUMBER	MANUFACTURER	RETAIL	RELEA
STAR TREK	PHM 3225	Sega	39.95	3Q/83
STARSHIP PEGASUS		TI		N/A
STATISTICS	PHM 3014	TI	54.95	4Q/79
STORY MACHINE	PHM 3178	Spinnaker	39.95	4Q/83
STRIKE THREE!	TRI-BADJ	J.Phillips	19.95	2Q/88
SUBMARINE COMMANDER		Thorn-EMI		N/A
SUBTRACTION	PHM 3091	Milliken	39.95	4Q/82
SUPER CRUSH	7-015-99	Tigervision		N/A
SUPER DEMON ATTACK	PHM 3219	Imagic	39.95	3Q/83
SUPER DUPER	TRI-BAAA	Navarone	34.95	3Q/84
SUPER EXTENDED BASIC	TRI-BDAK	Triton/MG	59.95	2Q/87
SUPER FLY	PHM 3153	Milton Bradley	49.95	4Q/83
SUPER SKETCH	TRI-VABA	Personal Perip	59.95	4Q/84
SUPER SPACE (8k)	TRI-BHDV	DataBiotics	49.95	3Q/86
SUPER SPACE II (32k)	TRI-BH DU	DataBiotics	99.95	3Q/86
SUPER STORM	RX	Atarisoft		N/A
TAX/INVESTMENT RECORD KEEPING	PHM 3016	TI	69.95	4Q/79
TERMINAL EMULATOR	PHM 3017	TI	44.95	2Q/79
TERMINAL EMULATOR II	PHM 3035	TI	49.95	1Q/81
TERMINAL EMULATOR II (1200)		TI		N/A
TERRY'S TURTLE ADVENTURE	PHM 3154	Milton Bradley	49.95	4Q/83
THE ATTACK	PHM 3031	Milton Bradley	39.95	1Q/81
THE GREAT WORD RACE	TRI-BDAL	J.Phillips	19.95	3Q/87
TI INVADERS	PHM 3053	TI	39.95	4Q/81
TI LOGO	PHM 3040	TI	199.00	2Q/81
TI LOGO II	PHM 3109	TI	129.95	4Q/82
TI PLANNER (aka CONSOLE CALC)	TRI-BJBS	DataBiotics	29.95	3Q/87
TI TOAD	TRI-BADG	Software Spec	19.95	2Q/88
TI WRITER	PHM 3111	TI	99.95	3Q/82
TI WORKSHOP	TRI-BAAV	DataBiotics	49.95	3Q/87
TI/IBM CONNECTION		Corcomp	29.95	3Q/87
TILE BREAKER (aka BREAKTHROUGH)		Exceltec	29.95	1Q/85
TOMBSTONE CITY:21ST CENTURY	PHM 3052	TI	39.95	4Q/81
TOPPER		Navarone	37.50	3Q983
TOPPER	TRI-BAAF	Navarone	14.95	1Q/86
TOUCH TYPING TUTOR	PHM 3064	TI	39.95	2Q/82
TRASHMAN		Funware		N/A
TREASURE ISLAND	PHM 3168	Data East	39.95	4Q/83
TUNNELS OF DOOM	PHM 3042	TI	59.95	2Q/82
TRIS	ASG-E01a	Asgard	24.95	3Q/89
TYPO II	ROM04025	Romox	39.95	4Q/83
TYPO-MAN	TRI-BAAQ	Navarone	14.95	2Q/87
TYPEWRITER 99	AG-P18b	Asgard	24.95	1Q/89
VAT ACCOUNTING (UK)		TI		N/A
VERB VIPER		TI		N/A
VIDEO CHESS	PHM 3008	TI	69.95	2Q/79
VIDEO GAMES	PHM 3018	TI	29.95	2Q/80
VIDEO GRAPHS I	PHM 3005	TI	19.95	2Q/79
VIDEO VEGAS	ROM02185	Funware/Romox	24.95	4Q/83

NAME	NUMBER	MANUFACTURER	RETAIL	RELEA
VON DRAKE'S MOLECULAR MISSION		Walt Disney		N/A
WEIGHT CONTROL AND NUTRITION	PHM 3021	TI	59.95	1Q/81
WHIZ KID		Romox		N/A
WIN WITH DECIMALS		Addison-Wesley		N/A
WING WAR		Imagic		N/A
WINNIE THE POOH		Walt Disney		N/A
WORD INVASION	PHM 3169	DLM	39.95	4Q/83
WORD RADAR	PHM 3185	DLM	39.95	4Q/83
WORDWRITER	TRI-BJBW	DataBiotics	39.95	2Q/87
WORDWRITER+	TRI-BJBV	DataBiotics	69.95	2Q/87
WORDWRITER XTRA	TRI-BDAV	DataBiotics	34.95	3Q/88
WORDWRITER+	TRI-BDAW	DataBiotics	59.95	3Q/88
X-10 POWERHOUSE SYSTEM	TRI-QGAG	Corcomp	69.95	2Q/86
YAITZEE	PHM 3039	Milton Bradley	29.95	2Q/80
ZAXXON		DataSoft		N/A
ZERO ZAP	PHM 3036	Milton Bradley	29.95	2Q/80

**FOR SALE**

by Edward J. Kelch, 132 Acorn Dr. SCOTIA NY 12302  
518-399-0550

Everything listed below- \$750 (separate asking prices below total more), or separates as follows. Prices include S&H with \$30 minimum purchase.

99/4A CONSOLE- \$25. 99/4A console modified for use with DJIT AVPC card- \$45

PE BOX SYSTEM with AVPC, two DS drives, CorComp RS232, TI controller, docs- \$425

Magnavox BCM515 monitor, like new, for use with AVPC or Geneve- \$100

MODEMS: Avatex 1200 with cables (new)- \$50. Two new GE300 baud acoustic modems- \$10 ea.

SPEECH SYNTHESIZER- \$20

JOYSTICKS: TI pair-\$5. 500XJ Epyx- \$10.

Switching power supplies- 3 at \$3.50 ea.

99/4A keyboards, new- 3 at \$3.50 ea.

GE TXP8100 printer & extra ribbons \$75

AXIOM parallel interface- \$10

BP RF modulator comp-022 \$10

CABLES: WICO command control- \$5. Parallel printer- \$5.

PE box fire hose extension- \$8.

MANUALS, MAGAZINES & BOOKS: Orphan Survival Handbook- \$10. 99/4A console tech manual- \$10. SAMS tech manual for 99/4A- \$10. Spirit of 99 newsletters- make offer. Lima newsletters- make offer. 4 years of Micropendium- \$20. 99ER July Aug Sept & Nov 83- \$4. TI Basic Computer Programs For The Home- \$2. Using & Programming the TI- \$2. TI Favorite Programs Explained- \$2. How To Use The TI99/4A- \$2.

SHARWARE & PD disks. Trade for new 3.5 or 5.25 HD disks or make offer.

COMMERCIAL SOFTWARE \$5 each: PicPro, \$A Talk, Writerease, Advanced Diagnostics, Fontwriter 1&2, Page Pro, TOD Editor, Expanded Graphic Basic, Business Graphs, Market Simulation, TPA, The Scheduler, Pre Scan It, Graphx.

MODULES with docs: CorComp TI/IBM Connection- \$4. TI Writer- \$15. EA- \$15. Multiplan- \$15. TI XB- \$15. Mini Mem- \$10. The following are \$5 ea; Tax Investment Record Keeping, Home Financial Decisions, PRK, Household Budget Management, Security Analysis, and TEII. The following are \$2.50 ea; Video Games, Music maker, Early Learning Fun, Number Magic, Addition & Subtraction 1 & 2, Multiplication 1, Division 1, Beginning Grammar, TI Invaders, Connect Four, Munchan, Video Chess, TOD, Adventure, Blasto, Car Wars, A-Maz-ing, Hangman, Chisholm Trail, Indoor Soccer, Hunt The Mumpus, Touch Typing Tutor, Tombstone City, Parsec, and The Attack.

TAPES, all these for \$10: Teach Yourself Basic, Line-By-Line Assembler, Pirate Adventure, TOD.

Two module cases- \$10 ea.

**\*\*\*DONE\*\*\***

**FOR SALE**

TI99/4A system: Beige console; PE box w /32K TI controller & one half height DS drive; speech synthesizer; joysticks; TI 10 inch monitor; sidecar PIO; 200 disks of software; several cartridges; all available documentation; asking \$335 (including S&H) or best offer.

Rights to "sell" and distribute my fairware programs "Phantom of the Opera" and "D/V Manager". Make offer.

Write Andy Frueh, 630 W. North St.  
Lima OH 45801

**\*\*\*DONE\*\*\***

TI Sings (Kind of)  
By: Andy Fruen, Lima UG

First of all, you'll need Terminal Emulator 2, and a Speech Synthesizer. Most of you have heard the TI speak something, and it can be programmed to speak different voices digitally (which reminds me, does anyone know if the TI voice digitizer is still available? I have information on this, and it sounds great), but did you know that the TI can sing?

To clear up a few points on TI speech, you may wonder why the Synthesizer doesn't say every phrase in Extended BASIC or the Speech Editor that it's supposed to. To do this, put a # sign in front of the phrase.

You may also wonder why some units have a flip open lid. Well, originally the speech units were designed to say only what was in the XB and Speech cartridges. However, there were supposed to be some small modules made that fit into these lids. If you have such a unit, open the lid and look inside. You should see a hole a little more than half way in. This is where these modules were to be plugged. Well, the TE2 modules was introduced before the modules. Since TE2 offered an unlimited vocabulary, this project was disbanded.

Reread the TE2 manual (pp 33-42). You should go over the section that deals with using the `_`, `>`, and `^` symbols. These affect where the accents come in various words.

To change the actual pitches and slopes (the length of time the voice raises or lowers to its peak pitch), PRINT to the synthesizer using `"/xx yyy` where xx is a value from 0 to 63. 0 is a ghostly whisper, 1 is the highest pitch, and 63 is the lowest. yyy is a number from 0 to 255. The TE2 manual says that best results are achieved when you multiply the pitch by 3.2 and use that new value as your slope. The defaults are 43 and 128.

You can use changes in pitch, slope, and inflection symbols to have the computer "sing" notes. I have heard such examples, but do not have a list of what pitches, ect. are what notes. If anyone out there has such a list, please send it to me so I can publish it here. However, like I said, I have heard this "singing", and it isn't the greatest. Oh, the notes are accurate, but to me, singing and EMOTION go hand in hand. The computer can't replace the interpretation that singers do. But it is interesting. I can definitely say that I have never heard any other computers singing!

**\*\*DONE\*\***

REASONABLY PRICED MIDI KEYBOARDS  
reported by Bruce Harrison  
Harrison Software (310-277-3467)

Many people in the TI community have expressed interest in getting into MIDI music with Crystal Software's MIDI-Master 99, but complain that they can't find a reasonably priced MIDI instrument. We'd like to suggest a potential source that has stores all over the country, plus an 800 number for mail order. SERVICE MERCHANDISE carries the Casio Model CT-700 (catalog number CT700ECD) at \$277.94 and the Yamaha model PSR500 (catalog number 500YMA) at \$399.97. They also carry the power adapters for these models, under catalog numbers ADSECD for the Casio, and PASYMA for Yamaha, at \$19.97 and \$22.63, respectively. Each of these is a five-octave (61 key) instrument, and each has 100 selectable instrument voices. To find out where the nearest store is (365 stores), or to place an order via VISA, DISCOVER, or MASTER CARD, the company has a toll free phone number at 800-251-1212.

**\*\*DONE\*\***

NO MORE QUICKDISK DRIVES FOR THE CC40 OR TI-74  
reported by Lee Bendick and Charles Good  
Lima Ohio User Group

At the recent 1992 Chicago TI Faire I showed Lee Bendick my Mechatronic Quickdisk drive, my main mass storage device for both my CC40 and TI-74. Lee wanted one. Later Lee told me the bad news. He called T.A.P.E. in Ontario CA, Mechatronic's previous North American distributor for TI related products. All Quickdisk drives had been sold. Next, Lee called Mechatronic in Germany directly. (The company still exists. They make speciality items for the PC market.) The Mechatronic receptionist told Lee that until a few months ago the company had about 50 Quickdisk drives in stock. BUT, since they hadn't sold any in several years, they pitched these last 50 Quickdisk drives into their dumpster!

**\*\*DONE\*\***

## IS THIS THE END OF THE TI/74?

Member Palmer Hanson Jr. sent me the table of contents page from the latest (Winter 93) EduCalc catalog. Until now this company has been the only known commercial source of the TI-74 and its peripherals. Apparently no more! No mention is made of the TI-74 in EduCalc's latest catalog. Based on what happened when TI ceased production of the TI95 programmable calculator a couple of years ago, we may see the TI-74 in discount catalogs such as Dawk and Comb.

The TI-74 is an BK pocket computer whose built in BASIC is nearly identical to TI Extended Basic. It was described in detail in the May 1992 issue of the Lima newsletter.

**\*\*DONE\*\***