



DALLAS TI HOME COMPUTER GROUP

DALLAS 99 INTERFACE

Volume 7, Number 6

June 5, 1987

This newsletter is the official publication of the DALLAS TI HOME COMPUTER GROUP, a non-profit organization serving member/users of the Texas Instruments 99/4A HOME COMPUTER. For more information you are invited to attend our next meeting or send a SASE to: DALLAS TI HOME COMPUTER GROUP, PO Box 29863, Dallas, Texas 75229

>>> NEXT MEETING < < <

99er Connection BBS

Saturday, 13 June, 1987

24 Hours, 300/1200 Baud

The Dallas Infomart

214-272-2786

JUNE HIGHLIGHTS

Meeting Day:

Main Program: Hardware SIG Software SIG Programming SIG Guest/New Member Meeting

NEXT-STEP Workshop June 26

Inside the DALLAS 99 INTERFACE:
Calendar of Events - 2
Meeting Schedule - 3
From the Oval Officer - 4
The Program Director - 6
The Gamemaster Speaks - 7
Next Step Report - 9
Mini-Sig Report - 9
The Library Corner - 10
Volunteer Column - 10
Funnyweb Farm - 11
Stanfill's Stall - 14
The Trading Post - 16
DTIHCG Resource Recap - 18

SCHEDULE OF COMING EVENTS

EVENT	DATE	TIME
Infomart Meeting Software SIG Main Meeting Programming SIG Executive Committee Committee Chairmen Surge Protection MiniSiG \$+# Newsletter Deadline NEXT-STEP WorkShop #	6/13/87 " " " 6/20/87 6/21/87 6/26/87	9:00 an 10:00 am 1:00 pm 1:00 pm 2:30 pm 2:00 pm Midnight 5:15 pm
Infomart Meeting Programming SIG Main Meeting Hardware SIG Executive Committee Committee Chairmen TI-Artist MiniSiG +# Newsletter Deadline NEXT-STEP WorkShop # NOTES: \$ = Attendance Fee	7/11/87 " " " 7/18/87 7/19/87 7/24/87	9:00 am 10:00 am 1:00 pm 1:00 pm 2:30 pm 2:30 pm Midnight 5:15 pm
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+ = Reservations Required (IG = (S)necial (I)nterest (G)ne

SIG = (S)pecial (I)nterest (G)roup TBD = (T)o (B)e (D)etermined

CEOTICS5

The Cutting Edge Of Technology In Computer Science by Jim Lesher

NEW BREAKTHROUGHS IN COMPUTER TECHNOLOGY ARE COMING AT A DIZZYING RATE. AS MENTIONED IN THE LAST ISSUE, OPTICAL OR (COMPACT DISC) CAN STORE A HUNDRED TIMES MORE INFORMATION THAN A MAGNETIC DISK. ONE DRAWBACK THOUGH THEY ARE READ ONLY DEVICES, YOU ARE STUCK WITH WHAT EVER IS ON THE DISK AND NOTHING ELSE COULD BE WRITTEN TO IT. NOW THE NEWEST GENERATION OF (OFTICAL DISCS) AS THEY CALL THEM NOW ARE ERASABLE. THE KEY TO THIS 500 MEGABYTE 5 1/4" DISC IS A RARE EARTH CALLED TERBIUM WITH COBALT AND IRON ON A GLASS BASE, IN ITS NATURAL STATE THE RARE EARTH MIXTURE IS CRYSTYLINE, WHEN IT IS STRUCK BY A 12MW LASER BEAM IT TURNS TO AN AMORPHOUS STATE. WHICH MEANS WE HAVE A BINARY O AND 1 AND THAT IS WHAT COMPUTERS LIKE BEST.

Dallas TI Home Computer Group Frogram Schedule - Infomart June 13, 1987

9:00 - 9:55 Software SIG

10:00 - 11:55 Main Meeting

10:00 - 10:30 Business Meeting

10:30 - 11:30 Main Program: Hardware SIG

11:30 - 11:55 Guest/New Member Orientation Meeting

12:00 - 12:55 LUNCH BREAK

1:00 - 2:55 Programming SIG

Meeting room numbers can be obtained at our booth, or check the master list posted on the two overhead projectors, located just past the Registration booths. Children under age 16 MUST remain with their parents at all times, in accordance with Infomart regulations!

All meetings will begin promptly on the hour, since other groups may be scheduled to use the room after us. Please be on time.

A Touchy But Urgent Matter: Greg Justice

It has been brought to my attention several times in the past few weeks that on several occasions various inanimate objects (both club owned and member owned) have by some miracle of nature grown legs (or at least some organ of mobility), a brain (or some form of thought, anyway!) and decided they wanted to live somewhere else. I want to keep this light BUT...

IT IS TIME FOR THIS STUFF TO STOP!

There is no reason for anyone attending a club function to steal either from the club or your fellow club members. If any of these wayward creatures has found its way into your posession, please see that it finds its way back home. No questions will be asked as the only thing we want is for all the little animals to find their way back home. Nuff said!

Thanks on behalf of all the membership!



FROM THE OVAL OFFICER

Louis Guion

FOUR YEARS AGO THE TI-99/4A WAS IN ITS HEYDAY. IT? Back then you could so into any Target or K-Mart and buy a new computer for about \$150, with some varying amount of rebate from TI to be mailed back to you in a month or two. You could get a "free" speech synthesizer if you'd send in proof-of-purchase from six not-so-free cartridges. Diskettes were edging ever closer to \$1.50 each, and the P-Box had dropped to less than \$300 in a special promotion deal. The standalone disk drive was still at a stratospheric price, but nothing like the \$225 it had been in 1982. Joysticks were holding steady at about \$30 a set, the TI Color monitor was still over \$300, and a 300 baud modem could be had from Hayes for only about \$400. Don't forget that our own TI acoustic modem had been on the market at \$225 only a year earlier. It was still about six months to go until TI would announce the discontinuance of our machine, pull up stakes, and proceed to "nove on down the road" with the TI-Professional. Times were good. The 99/4A was in its heyday. Or was it?

Today, you can get a new 99/4A from Tex-Comp for \$79.95. A TI joystick set comes in at \$8.95 from Tenex. You can get a standalone drive (SSSD), new, for \$130. The Hayes modem continues to sell its name, and its quality, for a sky-high price, but you can get a Volksmodem 300-baud for \$39.95 and an Avatex 1200-baud for \$109. The Captain's Wheel peripheral is filling in for some of the P-Box functions, and Myarc and Corcomp have us supplied with the controllers and RS-232 cards for the expansion systems. Ho-hum, you say, "Just the same old stuff". Well, you are right, of course.

But, look what else has come down the pike. We have the Horizon RAM-disk, the up-to-512K RAM-disks from the two previously mentioned manufacturers. The Triton Turbo-XT has provided a bridge, of sorts, to the MS-DOS world. The Geneve 964O has finally taken its first toddling steps away from vaporware. RAVE has a PC-like keyboard available for the cld 99/4A consoles. Your club sells you a diskette for 40-cents, and TURBO Pascal has been released for our machines. A group is starting up in South Dakota, that will specifically cater to the hardware junkies among us. We have FAST-TERM, MASS-TRANSFER, X-Modem, TIBBS, Techie and numerous other aids to communications that we did not have in the golden year. I know of several 99/4A-run boards that support 2400-baud. The speech synthesizer and the 32K have moved into the console.

Instead of about \$100 a pop, we can get new TI-Writer, Multiplan, and Editor-Assembler packages for about \$30.

Extended basic sells for \$30 in the original package and in the \$50 range for one of the improved versions. We face the imminent introduction of a Myarc disk controller that will handle 4 5 1/4" floopies, multiple hard disks, and 3 1/2" drives as well. There are GramKartes, E-Prommers, Triple-Tech cards, TI-Artist, CS&GD, Graphx II, DM-1000, DIJIT's RGB modification, Max-RLE pictures, and as many more as you can list.

Yes, since our heyday past we have had a lot of hardware and software come our way at excellent prices. How about the John Johnson "MENU" for the Horizon RAM-disk? Johnson says it is free. Not freeware, but free! Thanks, John!! Thanks also to all of the other authors and designers that have supported us. We appreciate it!

Oh, yes, there is another development that has really supported you and your system. THE USER GROUP. That band of you, thousands strong across the land. That band of you, a hundred and more strong that comprise the DTIHCG. That band of roughly 10% of your membership that runs your club, prints your newsletter, maintains the library, provides meeting places for the club functions, staffs the NEXT-STEP Workshop, plan, cook and serve the meals you have enjoyed, creates your Disk-Of-the-Month, presents the INFOMART SIGS, catalogs exchange newsletters, handles the Infocom game library, call the members, solicits new members, runs the TIBBS, puts on MiniSiGs, and all the other of a hundred tasks to run the modern user group.

The User Group. THE PLACE for you to be if you are at all serious about your use of the 97/4A. THE PLACE to learn what is new. THE PLACE to come for advice when contemplating a purchase or a disposal. THE PLACE for help when something breaks. THE PLACE for demonstrations and SIGS covering all the things close to your needs and vital to your enjoyment of the TI-99/cA. THE PLACE where you, as a volunteer, can return something to the people that support YOU. Nowhere else can you find such support at such a reasonable price. Nowhere else can you help as many 4/A people as you can by volunteering to assist in the operations of your user group. Last month you were offered a nickle for reading part of this newsletter. This month, I offer you a job! Stop me at any meeting you attend and tell me that you want to help the group. I assure you that we can find a job that will utilize your skills. Something from giving a program all the way to typing up news columns for the TIBBS—and anything in between!

Well, yes, in some ways the 4/A was in its heyday four years ago. But, the User Group is in its heyday NOW. And so are you, lucky member of this user group. You have the helt of all that has been for our machine, and can see even more hardware and software developments coming over the Horizon.* Stay with us. Renew your membership. Volunteer yourself to help us help you. And enjoy what is REALLY the HEYDAY of the TI-99/4A.

I expect a few of you to tap me on the shoulder at the next few meetings. And I expect you to be taken up on your

offer! Thank you for supporting the group, its officers, and the TI-99/4A! \star pun intended!



FROM THE PROGRAM DIRECTOR

Jackie Guion

Jon Hodges led off the SIGs last month when he showed us how to modify the alpha lock key so that joysticks could be used even with this key down. With the recent interest shown in using graphics programs such as TI Artist, you should have found this information helpful. (Joysticks just won't move anything upwards with the alpha lock down, unless this modification has been made.) I know that at least one person who didn't want to tackle this modification attended the "Speech-in-Console" MiniSiG just to have this done. If you missed this meeting, I'm sure Jon will be glad to give you the information if you want to make the modification yourself.

This month the 9:00 am SIG will be a demonstration and discussion of several of the labeling programs available for the TI 99/dA, including using the program with which your newsletter labels are made. The range of programs covered will be quite wide, ranging from the "Tinylabel" program through labels complete with graphics. I was surprised at the variety of programs available and I think you will be too. The presentation will include handout sheets so that you can make notes about which programs you would find useful for your purposes and so that you will able to see what type labels the different programs produce. Louis Guion will be giving the presentation as he has the largest collection of label programs that exist in the group, at least to the best of my knowledge. Some of the demonstrated software will be available for sale through the club. Special disks have been prepared so that you can go home and immediately use some of what you have seen.

Mike Stanfill's "Fontastic" was shown at our May Main Meeting. I found this to be a most interesting program and am looking forward to using it. Mike always amazes me with his ability to do graphics work as this is one of my weakest areas. Remember, John Creviston will have a few more of the DOM's containing "Fontastic" at the June meeting if you missed the May one.

Jon Hodges will be presenting the main meeting program this month so be sure to read his "Hardware SIG" column to discover what he will be doing. This time his SIG will be your introduction to a subject covered by a MiniSiG on surge protection on June 21.

(ed note. Due to circumstances beyond our control.

there is no Hardware SIG column this month.)

"Loaders" and "How Do I Run This Program?" will be the topics for the 1:00 p.m. Programming SIG. Although you may not consider them to be programming topics, you will probably find them helpful when you try to run programs with which you are unfamiliar. This SIG too will have handouts in an effort to make it easier for you to trouble-shoot any problems you have in this area. If you have been having trouble running a particular program, you might want to print a catalog of that disk and bring it, as well as the disk itself, with you since there will be a question and answer session following this presentation. This meeting should be a help to those of you work schedules.

Since we are considering having a SIG meeting discussing the various things that can go wrong when you are using a Horizon RAMdisk. I would appreciate your letting us know if you are having any problems with your HRD and what type problems you are experiencing. The more specific you can be, the better we will be able to plan a program to help you-Very few of us have had these problems, but we may be able to offer some help if we know what is happening to you. Perhaps your problem has been solved by more recent software or perhaps someone has discovered a way around your problem. Please give us a phone call or talk to us so we will know what you need.

THE GAMEMASTER SPEAKS: David Moore

WELCOME TO THE TI-99/4A GAME REVIEW. HERE IN THIS SECTION WE WILL BE TAKING AN INDEPTH LOOK AT ALL THE GAMES FOR OUR (ORPHANED COMPUTER)-DID YOU KNOW THERE ARE OVER 2000 GAMES AVAILABLE FOR THE TI? SOME ARE NOT SO GOOD AND SOME WILL FLAT KNOCK YOUR SOCKS OFF! I WILL RATE THE GAMES FOR GRAPHICS, PLAYABILITY, FUN.I WILL ALSO TRY TO KEEF YOU INFORMED OF THE NEW GAMES THAT COME OUT. IF YOU HAVE A CERTAIN GAME YOU WOULD LIKE TO SEE HERE, JUST LET ME KNOW. I WILL TRY TO GIVE EVERYBODY A FIRST HAND LOOK AT THE GAMES AT THE REGULAR INFOMART MEETINGS. IF YOU HAVE A HIGH SCORE ON A GAME, SEND IT IN AND I WILL INCLUDE IT IN THIS COLUMN. SO GRAB YOUR JOYSTICKS AND HOLD ON......

THIS MONTH

MBX

FROM MILTON BRADLEY

THE MOST ASTONISHING THING ABOUT THE MBX IS TWOFOLD, FIRST; PLAYABILITY AND GRAPHICS ARE REALLY GOOD CONSIDERING IT DOESN'T USE THE PE-BOX, DISK DRIVES, ETC. SECOND; THE USE OF SPEECH RECOGNITION, YES YOU HEARD RIGHT. IT RECOGNIZES YOUR VOICE. SHADES OF STAR TREK? WELL CLOSE. IT DOES ALLOW YOU TO BE ABLE TO PLAY HANDS FREE. HOWEVER, VOICE RECOGNITION AS FAR AS THE MBX GOES IS STILL IN ITS INFANTCY AND ITS A SHAME THEY DIDN'T ALLOW THIS YOUNGSTER TO GROW UP. FOR EXAMPLE: WHEN CHOOSING THE VOICE

OPTION OF THE PERTICULAR GAME YOUR PLAYING, IT WILL ASK YOU TO SPEAK INTO THE CONTROL TOWER TYPE HEADPHONES) MICROPHONE THE COMMANDS RELATING TO THE GAME YOU ARE FIXING TO FLAY (I.E. LEFT, RIGHT, UP, DOWN, FAST, SLOW, STOP, GO, ETC.)TWICE. HOWEVER DUR! PLAY IF YOU GET EXCITED AND SAY IT DIFFERENTLY THAN BEFORE THEN NOTHING HAPPENS, RESULTING IN LOSS OF MEN, LIFE AND THE PURSUIT OF HAPPINESS.IT TAKE PRACTICE AND CONTROL TO USE VOICE OPTION. BUT DON'T WORRY CAUSE YOU STILL HAVE THE OLD JOYSTICK TO USE. THE JOYSTICK FOR THE MBX IN ITSELF MAY BE UNIQUE. IT HAS MORE BUTTONS THAN AN F-14 FLIGHT STICK. COMPICATED, NAAH!

ALL YOU NEED TO PLAY THE MBX IS

1. THE MBX ITSELF

2-MONITOR/TV

3.TI-99/4,4A COMPUTER

4. ONE OF THE 10 GAMES (MBX)

YES THERE ARE ONLY 10 GAMES THAT WERE EVER MADE FOR THIS SYSTEM.FIVE ARE (ARCADE TYPE GAMES) AND FIVE ARE (<IDDY TYPE GAMES).BE PROUD THOUGH CAUSE ALL OTHER (HOME) COMPUTERS, IBM, COMMADORE, A TARI, APPLE, ETC. DO NOT HAVE THIS. ONLY OUR LITTLE OL'TI IS THE FIRST AND ONLY ONE TO HAVE IT. THOSE WHO DON'T HAVE THE MBX, THERE IS ONLY ONE PLACE IN DALLAS THAT I KNOW THAT HAVE 3 LEFT, THAT IS JOY ELECTRONICS OFF OF GOODNIGHT LANE. MILTON BRADLEY NOLONGER MAKES THE MBX SO WHEN THEY ARE GONE THATS IT. YOU ALSO GET ONE GAME TO GO WITH IT. THE PRICE OF THE MBX IS 74.00 - 79.00. THOSE OF US LUCKY ENOUGH TO OWN ONE TAKE HEART, I CALLED MB AND THEY ASSURED ME THAT THEY WOULD WARRANTY IT FOR AS LONG AS YOU OWN IT. EVEN LEE IOCOCA CANT TOP THAT ONE. YOU CAN GET GAMES FROM TRITON, TEX-COMP, JOY ELECTRONICS, AND OUR OWN JIM LESHER MIGHT HAVE SOME LEFT, GIVE HIM A HOLLER TO FIND OUT.

MBX RATING: 1.GRAPHICS----A 2.PLAYABILITY--A 3.FUN-----B+

WELL THATS IT FOR THIS MONTHS ADDITION OF 99ER GAME REVIEW-DONT FORGET TO SEND ME YOUR HIGH SCORES OF YOUR FAVORITE GAME!

=GAMEMASTER=



THE NEXT-STEP WORKSHOP REPORT Tom Hall

The April 24th meeting was a lot of fun and fellowship. We have a terrific meeting place at TDIndustries, thanks to Greg Justice and his employer. Attendance at NEXT-STEP varies from 20 to 30 people. I don't understand why we don't have more members attending.

The NEXT-STEP is informal, unstructured and there is always a lot to talk about or to observe. The things that go on can be considered more basic or fundamental than at the regular meeting. If a member thinks he isn't getting what he needs from his computer, the NEXT-STEP is the place to go to talk about application packages and hardware.

Questions like "do I need a new Horizon Ram Disk" or "do I need a second disk drive ". If you are looking for a Data Base Program or a program to print Name and Address labels for your wife's club, this is the place to come to discuss these topics.

Perhaps, one reason that members don't attend the special meetings, is that the special meetings sound too complex or specialized. Well the NEXT-STEP is not complex and the speciality is helping members to get the most from their computer. As a mater of fact, at the next few meetings we are going to have a system set up in the corner to help the unsophisticated computer owners. Look for me, I'll be there. For Hot Topics, give me a call before hand, so I can match an expert with the problem.

Don't miss out on a good thing, come to a **NEXT-STEP WORKSHOP**, you will be glad you dic.

The June NEXT-STEP WORKSHOP is Fricay the 26th at TDIndustries. See you there!

MINISIG MADNESS: Tom Hall

If you were one of the 'no-shows" at the SECTOR EDITOR MINISIG, shame on you! For those who signed up and did attend, aren't you glad you did? I know I increased my knowledge three fold on how to understand and change data on a disk with DISK + AID. Greg Justice and John Craviston are to be commended for their contribution to the Club for leading this MiniSig.

SPEECH IN THE CONSOLE and ALPHA LOCK key fix were the subjects of the May 31st MiniSig. Mike Stanfill was the Sig Leader and Jim Stewart was the host. Many thanks to Mike and

Jim.

The June MIniSig will be Surge and Noise suppression in your power strip. Jon Hodges is the Sig Leader. If you bring your Power Strip to this Sig, you can get power line surge protection and noise suppression installed for only \$2 for each Power Strip. June 21st is the date of the MiniSig. You can sign up and pay your \$2 fee at the June 13th INFOMART meeting. Location will be announced then.

For those members who have TI-ARTIST or are interested in TI-ARTIST, Sunday July 19th 2pm, at RIP DOWLING's home is the time and place of the July MiniSig. Rip lives in South Arlington, North of I2O and a little fast of Collirs. A sign up sheet will be available at the next 2 INFOMART meetings. We need a Sig Leader for this one. Please contact me if you would like to volunteer.



FROM THE LIBRARY CORNER

Charlice Althar

By the time you read this our second combination Library Swap SIG and Sit-town dinner will be history! This is by far one of the most sucessful club activities we have ever come up with. I hope everyone who participated got plenty of disks copied and even more, got a good meal in the deal too! The dinner was terrific. Due to the way the calendar falls we most likely will change from a quarterly library swap/dinner to just three times a year. This puts the tentative date for the next one sometime after school starts in the fall, a little closer to Christmas. Stay tuned for details as they develop.

Until next month, happy disking!



THE VOLUNTEER CONNECTION

Imagene Osbarn

Hi Ya'll,

I can't believe it is going to be June already! But never fear we, the VOLJNTEERS are ready! My, time does fly when you're havin' fun and I really do have fun with my TI-99

and enjoy the camaraderic with my fellow DTIHCG club members. I really hope all you new members will become involved at every opportunity, ther you will enjoy all aspects of our club.

We couldn't have a meeting without: Richard Roberts, Chuck Long, and Jackie Guion at our Booth or without those who are so dedicated, that they always bring the much needed monitors. Louis, Jackie and John Guion, Jim Lesher, Robert Jones, Tom Hall, and Earl Bullock. A big thanks to Brian McIntosh for bringing his monitor all the way from Tyler, Brian also trought his "Tyler Ton" to the May 22nd Next Step Workshop, along with Jim Stewart, Louis Guion, Tom Hall, Jim Lesher and Virgil Bodensteiner. Thanks to Rip Dowling, he loaded his system up, ready to go, but due to unforseen circumstances, Rip was detained, he alerted is ASAP. and the effort is appreciated.

A BIG "RAH! RAH!, WE APPRECIATE, WE APPRECIATE"!!!

Come visit at the back of the room, where the YELLOW SIGN UP SHEETS reside...see you June 13th. at INFOMART.



FUNNYWEB FARMS

Mike

"Sierra-Clubbed"

Stanfill

It's now May 27 and I don't have any idea how the speech-in-console mini-sig progressed but I'll assume that any injuries were minor and that everything will eventually be settled out of court!

last month in this here column was listed a nasty little handful of ABCII characters that made up a program I referred to as 'Ballpark'. This X-BASIC program LOADed the first stanzas of "Take me out to the ballpark" into low expanded memory, and could be coaxed into existence with a CALL LINK or two. I thought it was a nifty little program but some of you may be wondering what was involved with the involving little beast. So I'll enlighten you on that and on how to write a similar program yourself, if you have the stomach for it!

First, I grabbed a newsletter ("A-HA!" I hear you cry, "I knew he'd work the newsletter library into this somehow!") namely the WEST JAX 99'er NEWS out of West Jacksonville Florica and turned to Steven Peacocks 'BASIC ASSEMBLER' column. Steve's been doing this for quite a while and one month he decided to brighten our days and explain how simple music can be handled using ASSEMBLY. So the credit for the following goes to Stevie-poo.

June 1987

E/AFREQ=INT((111860.8/BASICFREQ)+.5)

First the technical stuff: A SOUND TABLE needs to be located in VDP RAM, usually at location $>\!1000$. Load $>\!83CC$ with the location of the sound table and set the the rightmost bit of $>\!83FD$ to 1. Start the sound by placing the value of $>\!01$ at address $>\!83CE$ and enable and disable the VDP interrupts with the LIMI O and LIMI 2 instructions.

Now lets examine this information in a program. This is the original source code for 'Ballpark':

	DEF B	SOUND *R11	*This is the name you will LINK to. *This sends you back to BASIC.
			*The program starts here and we tell
SOUND	LI	RO,>1000	*the program the sound list is to be
		C4 CDATA	*found at >1000.
	ĻΪ	R1,SDATA	*Our sound_data is found at SDATA.
	LI	R2,70 @>2024	*And it's 70 bytes long (count 'em)
	BLML	@>2024	*We now Branch and Link to the VDP
			*MULTIPLE BYTE WRITE utility which
	.451	50 010760	*loads the SEATA into the sound table
	MOV	RO,@>8300	*We load the position of our sound
	MOUR	66 610765	*table >1000, into location >83CC.
	MOAR	@C,@>83CE	*Start sound by loading the value
	COCT	AC ALOTEN	*at label C ,>0100,into >83CE.
	DUCB	@C,@>83FD	*And set the rightmost bit, bit 7, of
	I TM	-	*byte >83FD to I.
	LIMI		*LIMI 2 and LIMI 0 let the music play
	LIMI B	*R11	*w/o disturbing other CPU chores!
С	_		*Branch back to basic.
	DATA	>0100 >0390 \u000	
SURIA	DATA	70300,71870. NOTOC NOCON	,>2403,>860D,>9012
	DATA	7030E,70F70	,>1203,>8D11,>9012 + + ,>1203,>8D11,>9036 + SOUND DATA +
	DATA	30303,71370 30390 31790	,>1203,>8D11,>9036
	DATA	1030D, 71770	,>1203,>8E0F,>9012 * 70 BYTES *
	DATA	>0380,70D70	,>1203,>8315,>9012 * 70 B; 128 *
	DATA		,>3603,>9FBF,>DF00
	END	7000D; 71170	1/0000 1/2/DI 1/2DI OO TARARARARARARA
	F147		

Not so hard, right? But how does that sound data translate? Pay attention:

In its simplest form sound data consists os five bytes. For demonstration purposes lets use the first five bytes in SDATA: >03, >8C, >1A, >90, >24. The first byte >03 tells the sound generator how many bytes are to be loaded into it. We dont count the first or last byte, for reasons I'll explain later. So even though there are 5 TOTAL bytes ,only three are loaded.

The next two bytes are ,>8C and >1A refer to the sound generator to be used the frequency to be played. There are four generators, 3 music and 1 noise, labeled 8,A,C nd E. See where the '8' comes in? As for the actual frequency to be played I now refer you to page 318 of the E/A manual. You'll find a list of all the notes you'd find in the BASIC manual but the information will also in—clude the hexadecimal code for the frequency. It also adds generator '8' to the code but you can change that to A or C as you please. Use this formula to convert a BASIC frequency for ASSEMBLY usage:

Then change it to hexdecianl form and add 8,A or C.

Each sound generator has an associated volume controller. They're named, 9,8, D and F. In our case >90 is the volume controller for generator 8. There are fifteen volumes O-F (hexadecimal) from loud to soft. Loading >90 plays a note at its loudes while >9F turns it completely off. To turn off all the generators, and you have to or they'll keep playing, your last bytes of DATA should be:

>039F,>BFDF

which you'll see at the end of the SDATA list. Notice that I've added to extra zeros to the end of the SDATA data. You must always fill a word (2 bytes=1 word) out completely! ALWAYS >DF00 NOT JUST >DF!

The final byte is the duration byte and is not counted in the total bytes. It can describe a tone to be anywhere from >00 to >FF which is from 0 seconds to approximately 4.25 seconds. Use the formula:

E/ADURATION=INT((BASICDURATION5)/4250)

to convert a BASIC duration to an ASSEMBLY duration. Don't forget to change the result E/ADURATION to hexadecimal.

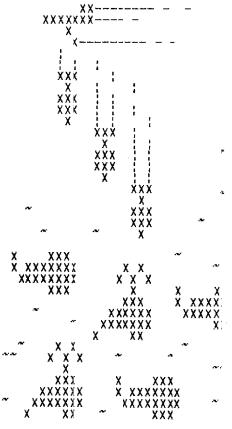
The last thing I did with the assembled object code was to run it through a utility called ACE which converted it to a series of CALL LCAD's. Fascinating program I might add!

Well, thats the basics of it. This doesn't include multiple tones or noises but if theres enough interest (or confusion).....

Now for some REAL fun! The TINYGRAM below is in bad taste. It's vicious vile, comtemptable, in short everything I stand for. It's called, as you can see with your beady little eyes, NUKE THE WHALES! And it's REEEEAL simple to play. First type it in and RUN it. You'll see a happy little school of blue whales contentedly cruising along in the big, wide, wonderful ocean. Above them is you, Mr. Nuke-First-And-Ask-Questions-Later, zipping along in your super-sonic fighter-bomber: The F-27-1/2 BUDGET-BUSTER! Your mission: Seek out and destroy the krill-mibbling vermin! Thats right! This time it's SPERMICIDE! As you pass over the unsuspecting little darlings just press any key and it's launch time! If you look closely you might even see a little "Hello Sailor" written on the nuke itself. And don't fret about unfriendly atomic particles. These nukes are like the gun Nancy keeps by her bed. It only fires "Little bitty bullets."

See you next month if the ACLU don't get me and the crik don't rise!

"NUKE THE WHALES" ******A TINYGRAM******* ***BY MIKE STANFILL**** ****MEMBER CTIHCUG*****
2 CALL CLEAR :: RANDOMIZE :: J\$(1)="0A15040E3F7F86" :: J \$(2)="00000087BF7F0E" :: CAL L SPRITE(#3,97,2,9,1,0,~22)
3 CALL CHAR(97, "000000003FE10 0800007EFF3C18183C1818")
4 DIM A(24):: FOR T=10 TO 24 :: IF A(T)THEN 5 ELSE IF RN D>.7 THEN CALL SPRITE(#T,96, 5,T*8-7,1,0,4):: A(T)=1
<pre>5 P=110 ::CALL CHAR(96,J\$((~ (T/S=INT(T/5)))+1)): CALL K EY(0,K,S):: IF S THEN CALL P GSITION(#3,C,Y)ELSE 9</pre>
6 G=G+1-(G=O)*2 :: IF G=25 T HEN 8 ELSE CALL SPRITE(#1,42 ,7,G*8-7,Y,-1,0):: CALL COIN C(#1,#G,6,M):: IF M=0 THEN 6 ELSE CALL DELSPRITE(#G)
7 CALL PATTERN(#1,98):: FOR H=1 TO 30 :: CALL SOUND(-P,- 7,H,P,H):: NEXT H :: A(G)=0
8 G=O :: CALL DELSPRITE(#1)
9 NEXT T :: GOTO 4



June 1987



STANFILL'S STALL

Mike Stanfill

Through the gracious donation of ex-member Glen Ashe I have something a bit rare and odd: an October 1983 edition of the DTIHCG newsletter! Even though it is only a one-sheet affair it was full of surprises and irony. For 'example: It opens with an apology for being late in arriving and assurances that the club did, indeed, still exist. The second item was a discussion of spreading the workload of the club among other members as too few were doing too nuch. (The more things change...) There was a note concerning one

president stepping down (Bill Kauth) and one taking his place (Rod Paulson, who still likes to program on his 'I I'm broud to say!) Other high muck-a-mucks at that time were:

Doyle Kelly-Secretary Robert Lee Hoffpauer-Editor Gene Williams-Treasurer Keith Althar-Hospitality Chairman Glem Ashe-Library Chairman

Sort of a blast from the past, eh, guys?

The final paragraph concerns the mythological 99/8. had just announced, for whatever reason, that the project was on hold and rumor had it that TI had enough present inventory to build 3 MILLION 99/4A's(!) and that speculation was that II might be trying to reduce inventory. (If only they knew.) The next issue of the newsletter, November 1983, announced the production dis- continuation of the 99/4A.

Almost 4 years later and the TI community is still going strong and, oddly, is probably stronger for it. Il was secretive, tyrannical, and downright third-party release of merchandical hostile regarding release of merchandise! Hares to brighter tommorrows!

Now that you have your Speech Synthesizer firmly entrenched within your con-sole, (Quit cryin'! You had your chance!) what can you do with it besides harken to Mr. Spock's dulcet tones? Well, you could insert any number of "CALL SAY"'s into your)-Basic programs, but we all know the limitations of this: Your program is humming along beautifully, suddenly it encounters a "CALL SAY"! The program slams to a halt, says its piece, and starts off again. This 'Brick Wall' effect can be downright annoying but theres no way around it, right? Wrong! From an ENGLISH newsletter comes this bit of programming wizard-y. There is a location in memory, -27648, which is the SPEECH WRITE address. LOAD in the correct values and VOILA your word gets spoken. And heres how it works: (This will require the 32K card folks!)

Each phrase accessible through X-BASIC's "CALL SAY" has an associated 4-digit hexadecimal code. (I can feel the eyes glazing over already!) For instance, the phrase "THAT' IS INCORRECT"'s code is 6816. Check your E/A manual for the com- plete list of words/phrases and their codes. Now take that code and reverse it, 6816 becomes 6186. Take each digit and add 64 to it: (6+64) (1+64) (8+64) (6+64)

70 65 72

(BTW, in hexadecimal A=10 B=11 C=12 D=13 E=14 F=15.)

To this list of numbers we will add a 64 and an 80. The 64 tells the computer that this is the end of the word data, and 80 tells it to speak the word. So now we should have, 70,65,72,70,64 and 80. Now lets load them into memory in this fashion:

100 CALL INIT :: S=-27648

June 1987

110 CALL LOAD(\$,70,"",\$,65,"",\$,72,"",\$,70,"",\$,64,"",\$,80)
120 GOTO 110

(Not sure why the "" is needed, just play along!) Now RUN this and you should hear "That is incorrect!". Need an idea of now much faster this method is. Okay! Add line: 111 CALL SAY(#"THAT IS INCORRECT"#)

Now add a REM marker (!) just in front of the CALL LOAD in line 110. RUN the program awhile, stop it, remove the REM and put it line 111 and RUN the program again. Believe me it's quite a difference!

For those who don't have an E/A manual here are a few words and codes to ex-periment with:

TEXAS INSTRUMENTS6696	THAT IS RIGHT68FE
WHAT WAS THAT77E9	READY TO START 5683
HANDHELD UNIT337F	NICE TRY 49A5
HELLO	PARTNER4EEO
YOU WIN	UNDERSTAND 729D
SUPPOSED TO6489	REMEMBER 5861
DISKETTE242D	COMPLETED1FCD
NEGATIVE48DC	POSITIVE 5183

Okay! Go to it! Experiment! (Just by fooling around I found that codes 6815 and 6814 also say "That is incorrect!". Sure wish I knew why!)

THE TRADING POST: Any DTIHCG Member

FOR SALE: 99/4A with PEBox including: disk controller and single-sided drive, RS232 card, Foundation 128k memory card, complete hardware documentation. Includes following software: Multiplan, Extended BASIC, TI-Writer, A-Mazeing, Munchman, Beginning Grammer, Millikin's Equations, Early Learning Fun, Number Readiness, Laws of Arithmetic.

Make an offer on the complete package (preferred) or on any individual pieces.

CONTACT: Joe Lane days: (214) 659-2852 eves: (817) 282-4776

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P-Code Cand /TY NED with we	
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Contact Louis, John, or Jackie Guion at (214)239-6829, on The 99'er Connection BBS (214)272-2786, or on Startext at our MC 77536, (214)638-4150. Save us a trip to the bank; 10% off for all cash sales!

The TRADING POST is a service provided for any non-commercial entity, to buy, sell, or swap any computer related product. Currently the service is available free of charge, and limited only in size to what is reasonable subject to space limitations. Ads will be printed ONCE per space to the deadline for requesting space is the same as the other newsletter columns, two weeks before the Infomart meeting.

DTIHCG Resource Recap: Dan Johnsen

1. User group meetings.

A. Main meeting. Combination of short business meeting, announcements, 'open forum' and main program; followed by infomal new member orientation and time to purchase hardware or 'Disk-of-the-Month', arrange for library checkout, sign up for activities, etc.

B. Special Interest Group meetings. Hardware, Software and Programming SIGs meet the same day and location as

our main seeting.

C. NEXT-STEP meetings. Designed to answer questions and solve problems, these meetings are neld apart from the main meeting. Bring the hard/software that is giving you problems and let us help out; or, come and give a hand to other 4A owners! A good chance to meet fellow users on a more informal basis, we generally descend on some unsuspecting pizza emporium afterward.

• MiniSiG meetings. These meetings are held to address a specific topic at various locations throughout Dallas and may be attended by any active group member. Topics range from customization of software or modification of hardware to complete, open (FIG-DUT!) access to the software library; there may be a small charge for participation in some MiniSiGs.

E. Social Heetings. These events may be held in conjunction with one of our other meetings and range from Spaghetti Dinners to Family Picnics to heliday

parties!

2. Libraries

- A. Software Library. This collection of public domain and freeware software is available to any active member. Copies of complete disks made on your disk are \$2 or we'll provide the disk for an additional \$1.
- B. Newsletter Library. Checkout newsletters from other groups and organizations on a one month basis.
- C. Adventure Library. A wide variety of these games are available for one month checkout. See the Adventure librarian to sign up for your favorite.
- 3. Disk-of-the-Month. Each month a different selection of new, interesting and useful programs is offered for \$3.
- 4. 99er Connection BBS. Features 24 hour operation at 300 and 1200 baud, an active message exchange and program downloads. No fees, call 214-272-2786. *** CHECK WITH ME FOR OUR FREE LOANER MODEM KIT! ***
- 5. Good buys. The group maintains a small supply of miscellaneous hardware to help keep your 4A up and running; whenever interest warrants, group purchases of major hardware items, software, blank disks, etc. are arranged. Members may buy/sell/swap among themselves during the 'open forum' at main meetings and free ads may be placed in the newsletter. Members may also purchase from vendors present at Infomart.
- 6. Dallas 99 Interface newsletter. Not much to say here! You just finished reading it.

	Club Officers	
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