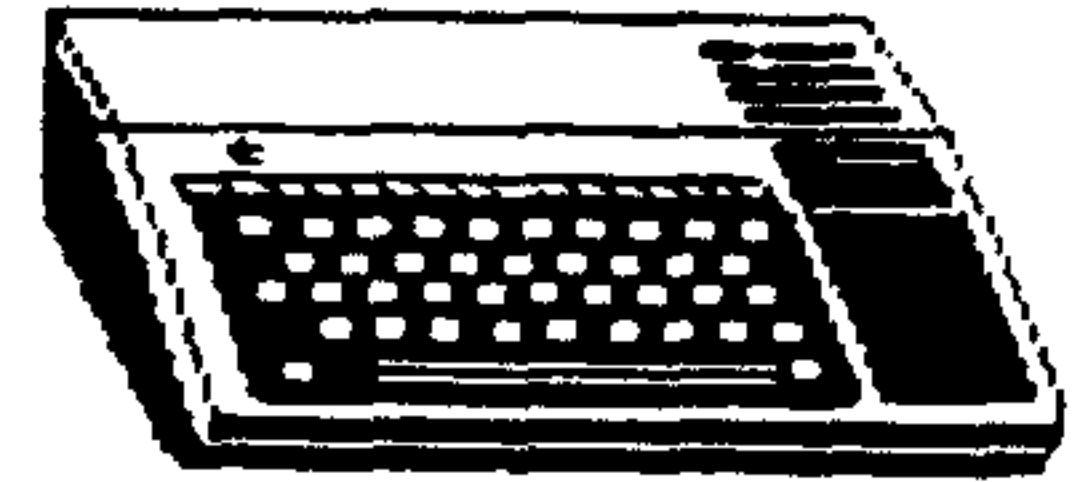


Spirit of 99

CENTRAL OHIO



NINETY NINERS INC.

THE OFFICIAL NEWSLETTER OF THE CENTRAL OHIO NINETY-NINERS INC.

PUBLISHED MONTHLY IN COLUMBUS OHIO

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JAMES WARREN PETERSON

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Thanks to Jack Montag for
 the picture of Jim on the
 front cover.

DOM SUBSCRIBERS - PLEASE NOTE!!!

As of this publication, Feb 1994, CONNI will not be accepting any new subscriptions to the DOM due to the lack of new material being released in the TI world. More information will appear in next month's newsletter.

JIM PETERSON, a great contributor to the TI world.

The CONNI user group was very privileged to have had Jim in our group. He was very generous in giving of his time and expertise to help other TI'ers who had a problem to be solved or a question to be answered. He shared his knowledge of the TI in many ways. A few are listed here along with some of his likes and dislikes: his 72 Tigercub Tips; (see Pages 13 and 14 for a rerun of #1 & #72); Nuts and Bolts; his programs, like brain, educational, musical, etc -to numerous to mention here; his articles on everything related to the TI (see samples of some of these in this newsletter); the XB classes he taught to members of the CONNI UG; he loved cryptograms; he disliked the formatter and finally wrote a program to take back those extra lines that the formatter insists on printing at the top of the page; genealogy was one of his most recent uses of TI-Writer; through his efforts he made hundreds of Public Domain programs available to the TI world; he enjoyed Chainlink Solitaire; etc. CONNI members will miss him as our friend and TI buddy.

Editors-SPIRIT OF 99 newsletter

THE PASSING OF THE TIGERCUB
by Alan Peterson

Many of you knew, or had heard of, Jim Peterson of Tigercub Software. He passed away peacefully in his home on January 12 of this year. As of that date, Tigercub Software has discontinued business. As his son, I have been asked to write a few words about my father, however I and my family knew him better as a loving father or husband than as a businessman or programmer. My sister Mariann, has written the following which best depicts our memories of him:

A MOMENT WITH MY FATHER
by Mariann Ball

I tiptoe quietly into my father's office
And hear the gentle tap of his fingers on the keyboard.
His soft humming tells me he is deep in thought.
I see only numbers and letters, dots and dashes.
I hear only the sounds of the room.
But my father sees light and color, shapes and movement.
And his mind hears a symphony.
Suddenly he is aware of my presence and smiles.
"Hi girl! Look what I've done!"
He taps a key and the screen is alive with images.
And the room is filled with music.
This is the magic that my father created.
This is the memory that will last forever.

MY FRIEND, JIM PETERSON

by Dick Beery

My first glimpse of Jim Peterson, the Tigercub, was at one of the first C.D.N.N.I. meetings I ever attended. He had brought his equipment and was demonstrating several games he had invented for the 99/4A. One was his Haunted Graveyard, and the other, I believe, Whitewater Run. What attracted me most was not the undeniable quality and compelling interest of the games but rather his own joy in play and contagious enthusiasm for both this computer and the ideas one could create with it. That would have been in 1983. Over the years that eager involvement in the quest for learning and problem-solving remained constant or perhaps even increased slightly.

Jim had never attended the prestigious Chicago TI Faire until he decided to do so six or seven years ago. He rented table space for his Tigercub Software business. Since he was suffering from a terrible head cold, and inasmuch as he had invited me to drive up with him and share hotel expenses, I volunteered to help him from time to time during the day at the table. Great was my surprise to see other gifted programmers, some already renowned themselves, stop by the table and greet Jim with an awe and reverence that startled me. He was, after all, although a prodigious and renowned programmer in Basic and Extended Basic, just "my friend, Jim". "It's a real honor to meet you, Mr. Peterson" was the standard opening. Jim's eyes twinkled when I reported these encounters at a later C.D.N.N.I. meeting. He corresponded and exchanged programs and programming ideas with a variety of greater and lesser programmers all around the T.I. world. His column "Tips from the Tigercub" appeared in a great number of user-group newsletters, including C.D.N.N.I.'s own Spirit of '99. He maintained a vast correspondence with programmers and user groups all over the world and produced a newsletter of his own that he sent to other groups in exchange for their newsletters. This enabled him not only to distribute his own writings but also to stay informed about advances and changes in the TI world. His several volumes of Nuts and Bolts (programming helps) sold widely. His business flourished. Yet, in recent years he switched from Tigercub software-- advertising and selling his own products--to making available his extensive collection of public-domain and shareware programs (the latter always with permission in writing from the programmer if he/she could be located) to the public. He charged next to nothing for these and produced a comprehensive catalog for which he charged a fee that was refunded with the first purchase.

For me, personally, the best thing about Jim was that we were friends. We talked on the phone frequently. I could expect to pick up the phone and hear, in his familiar voice, "Got a minute?" With few exceptions, I always had one. We would go on about almost anything, ranging from what investments were best, dwindling interest rates, the current state of his emphysema (he was on disability retirement from his government job as quality-control inspector before I even knew him), difficulties or triumphs with a program he was then writing (often he would say "want me to send it over the modem so you can see what you think?--you had better believe that I did), to his involvement with his notable collection of cacti (he has a greenhouse back of his home in Whitehall, OH), or his rather extensive collection of military medals. Sometimes the conversation would be about his family or mine. "M'boy (Alan--nearly always referred to in that manner) is over backpacking in Asia. Or M'grandsons enjoy doing such-and-such with the computer. Or M'daughter and her family were over last night--or went to such-and-such a place, or whatever. He loved the aroma and taste of home-baked bread, and bought his wife one of the home breadmakers before they became as common as is now the case. He did not forget his roots in northern Minnesota, and delighted in a yearly trip back home (sometimes accompanied by his wife Midori, and at least once by his son--"M'boy and I are going up together." These were fishing trips that also incorporated visits with family members in the vicinity.

Often I would be the caller. "Do you know of a program that will do such-and-such?" Many times he would say, "Let me see...yep, I think I have one here somewhere. Let me call you back in a little while." In an hour or so, he would phone and ask whether I was near the computer, as he wanted to send what he had found over the modem. If he didn't have what I was looking for he would muse over it as we talked, sort of thinking out loud.. "Yup, I think that could be done...maybe I could..." and then "Let me get back to you, ok?" Sure enough, in an hour or two, or sometimes the next day, he would call and send me the finished product by modem.

Jim was always keenly interested in, and supportive of, happenings in the C.D.N.N.I. group. When, as president or later as

program chairman, I would find myself in a bind close to a meeting date when a scheduled demo had been cancelled or maybe none had yet been acquired, would call and say "Hey, you got anything you could demo at the meeting?", he would think for a second or two and then inevitably say "Yup, think I can bring a couple of things. I'll bring 'em along". And he always did. When C.O.N.N.I. was invited by the officers' group at the Lima Fair several years ago to convert our Spirit of '99 BBS into a National Clearinghouse to make text files from one group available to all other participating groups via modem, Jim was enthusiastic, and though normally cautious with money, he made a very generous donation to get the changeover started. He continued to support the effort, uploading many files that he received from his many outside contacts. One thing he refused to do until about three years before his death: accept nomination for an office in the club. He claimed it represented a conflict of interests, as he was a licensed vendor. This presented me with a challenge of my own, as I was frequently on the nominating committee. Finally, during a meeting, I urged him to split the duties of Secretary with me. He would not be accepting an office, just half of one! He appreciated the humorous aspects, and agreed to serve. He has done so ever since. In a phone conversation I had with him approximately a week before his death, I reminded him of that day, and we both had a good laugh over it.

Jim loved music, and had programmed it for the 4A almost from the first. When I first knew him he programmed exclusively in console Basic, as did many in those years. Soon, though, he exhausted the capabilities of that medium and moved into Extended Basic, and finally into the latter combined with links to Assembly routines. He loved to observe how other programmers, our own Harold Timmons included, produced the musical effects that they programmed. He was constantly seeking ways to improve his own music programming, like all of his other endeavors. When Mike Maksimik, of the Chicago users' group, came out with MidiMaster99, Jim purchased one and then acquired an inexpensive Casio keyboard to display what he and others had written using it. Mike's system incorporates SNF files, which are in DV80 form. Luckily Jim could read music, so he began typing in songs, experimenting with rhythmic patterns, and having a lot of fun doing it. His avid curiosity once again asserted itself when he discovered that his keyboard claimed to have a tone bank of 240 or so sounds and he discovered that many of those could not be accessed by using the buttons provided on the instrument. He soon devised ways of producing those out of Midi files. Another challenge he sought was the ability to convert music written in Extended Basic to Midi, with the computer doing the work. He felt it would be a shame to leave all that music unavailable in the new format, and wasteful to convert each composition by hand. He managed to accomplish this, though he did discover that the works of some programmers converted much more easily than did that of others, owing to differences in approach. He fussed because the SNP format did not allow for the use of loops to repeat certain elements such as refrains. I believe he wrote to Mike asking whether the latter thought that could be incorporated into MidiMaster99. So eager were both Jim and Dolores Werths of Harrison Software to see Midi on the TI grow and prosper that they formed a group to collect and disseminate information and programs about these to users of the 4A. The group is still in existence.

Jim's knowledge was encyclopedic and his thought processes marvelous to behold. He adored problem-solving, the challenge of unravelling what to me seemed to be problems of unbelievable intricacy. It seemed he could not learn enough, nor stop confronting fiendish challenges. In the past two years or so he decided to devote himself to genealogy, tracing his own family lines. This can be a frustrating hobby, as I can well attest, but Jim wrote voluminously to various relatives, some of whom he had never heard of but was directed to by others. They showered him with data--so much so that he told me he was having great difficulty getting one batch typed in before another arrived. Most genealogists would kill to have such a problem. True to form, he found the genealogy programs created by others to be unsuited to his needs, so decided to type the data into a specialized format he devised for TI Writer in which he typed side-by-side versions into two related files, merged them and printed them in elite type. Shortly before the end, though, he reluctantly decided to explore a couple of highly-regarded programs by other authors. He had still not decided whether to go with one or the other or to stick with his old standby when he died. A distant relative in Sweden had provided Jim with extensive data on that branch of the family. Jim had to have a friend run the information off to printer so he could read it. Soon realizing that this was going to be awkward at best, he reluctantly purchased a PC-clone, got the original program from his relative and could then manipulate the data himself. He had finally gotten it unpacked and installed on the hard drive, but then confided to me that, since Swedish was not one of the languages with which he was familiar, he was having difficulty figuring out the prompts. His family reports that the morning of his death they found next to the body an open Swedish-English dictionary and some notes. It seems he was doing problem-solving right up to the final instant.

Alan related to me that the day before he died Jim complained that his elbow hurt. On the morning of January 12, 1994, Alan saw his father on the couch covered with a quilt, apparently sleeping, and surmised he had gotten up earlier, brought in the newspaper (it was close by him) and decided to catch a few more winks before facing the day. Alan then left for work. At about ten a.m. Midori came in to awaken Jim and was distressed when he didn't respond. She called their daughter Mariann

who then dialed 911. By the time Mariann and husband Dan arrived at the family home, two emergency squads were working on Jim, but to no avail. Perhaps, they feel, Jim would have wanted to go in this manner. (I agree) He, like many of us in that age range, had greatly feared the loss of physical control through stroke, emphysema, or other lingering illnesses, but particularly dreaded the thought of diminished mental capacity and awareness through Alzheimer's disease. It may have been a good trade-off. I guess we will never know.

I, along with others who still use and admire the 4A, will sadly miss Jim the programmer, who was never too busy to write something he, or others, felt was needed. But most of all, I will miss my friend. I already do. A lot.

MR. TI

by Jack Sughrue

As he was to so many people throughout the world, Jim Peterson was very special to me.

He had the ability to focus on one individual and make that individual feel important. In my case, he made my serious incompetencies seem trivial. Jim's self-deprecating sense of humor made me feel as if I weren't the computer goof I actually was. He made a lot of us feel his technological equal, though very few of us were. In an article I wrote about Jim over 10 years ago, I referred to him as "Mr. TI." Nothing since has caused me to revise that appellation.

Jim knew the workings - the practical, logical, everyday workings - of the TI better than anyone I knew; could make our computer behave in BASIC and XB better than all of us dreamed possible. He was a discoverer, an explorer of those inner reaches. He was the Jean Henri Fabre of the 99/4a.

For him, the TI was always a toy. Though he created tools with it and used it in very practical (or esoterically mathematical) ways, the TI never ceased to be a toy first. The playfulness of computing, which he and I often talked about, was the most important aspect of his TIing, except for the development of his worldwide network of other toy-loving and tool-loving friends. (Among whom were many geniuses, something he wrongly never considered himself to be.)

He was old-fashioned in so many ways. The loving talk about his family and the things he valued; about Japan, where he'd spent so many years and where he met his wife; about the wonderful work being done by other Tiers; about the expectations he had of others; about the sense of duty he took upon himself: these were all part of Gentleman Jim. He was a gentle man and a gentleman; extremely rare qualities today.

Jim Peterson and Tigercub were the subject of over two dozen essays I wrote for newsletters and magazines for well over a decade. He constantly remained the center - the focus - of all that was happening in our computer's world community. There are no Jim Peterson's in any other computer community, and it is their great loss.

Annually, at the New England Fair, I demoed software he created. The sessions were always full - always full of his admirers. His NUTS 'N BOLTS is still an unequalled masterpiece.

At times, in a small community like our TI World, there has been such in-fighting, such envy, such duplicity as people struggled for their little power pockets or to become King or Queen of the Kingdom of TI. But in all the unkind words slung about, in all the nastiness I heard and read year after year, I never came across an unkind word about TIGERCUB or Jim. Everybody loved the guy.

How could you not?

I had a very long-term correspondence with Jim. He was my favorite penpal, and I always wondered how he put up with my dumbness. What a patient man! And kind. And generous. Once he discovered I was an elementary school teacher, I began to receive from him periodic "CARE" packages of tapes and for my class, which I continue to use to this day.

He was a natural teacher: in the mail, through his programs, in his articles, on the phone, and in person. I learned more about the TI from Jim Peterson than I did from all other people and sources combined.

When I first purchased programs from Tigercub, I would list them and take them apart and try to emulate them and adapt them. Every adaptation I ever sent him would be returned with lots of thanks (as if I had done something he couldn't) and with some "additional changes and debugs" that turned my simple efforts into terrific, finished products. He always gave credit to everybody for anything he corrected or enhanced or for any idea that he turned into reality.

His TIGERCUB TIPS became my programmer's bible. They are, undisputably, the way everyone should learn about this wonderful machine. I learned programming by typing in his little programs and following his superb advice.

A few years ago I told Charlie Good I was finally going to fly out to the Lima Fair and asked him if he could set up a table for my MUNCH Club next to the TIGERCUB table. He said he would. For weeks and weeks I could hardly contain myself. My wife thought I was more of a basket case than usual. I couldn't wait to meet Jim Peterson.

I was in awe of the man. Still am.

But he came over to me, introduced himself, said how he had been looking forward to meeting me, and so on. While I was just speechless. Only for a minute, though. Then I started to pour out how much of a mentor he was to me, how much I admired him. He just laughed in that big, teddybear laugh of his and said, "You are a gushy one, Jack." And I laughed, too. And continued to have one of the very best days of my life.

Last year I went to Lima again and renewed the friendship. When I went up to his table, he said, "I heard you were coming and ran this up for you." He handed me a disk full of educational programs for my third graders which he had written.

I didn't realize when I said goodbye to Mr. TI at the end of the fair that day, that it would be goodbye forever.

When Jean Hall called today (January 15) to tell me that Jim had died, I didn't want to believe it.

As the day wore on, I was so angry I wanted to smash all my TI equipment as a way, I guess, of venting my grief. I didn't want to be a Tler any more. Period.

Instead, I took out my boxes and boxes of stuff from Jim: - TC-PD and TIGERCUB software and textware and tapes and catalogs and disks and TIGERCUB TIPS and personal letters -, spread them out across the desks and floor of my computer room, and journeyed through the memories: his music programs that ran through his automatic juke box, his ANTONYMY, SYNONYMY and HOMONYMY, his HANDY DANDIES, his SQUINCH and BAZOO and CASTING OUT NINES and SNERK and COLUMBUS PINBALL and CHANGERDD and, my favorite, his ingenious MECHANICAL APTITUDE TEST and, of course, his great QUIZWRITER and all his wonderful CRYPTOGRAMS.

It is now 3:11 A.M. I've read and played some things from each of the boxes. I'm exhausted from my meagre attempt to go through just a small part of Jim's legacy to me and to all Tlers throughout the world. But I realize, finally, that, though Jim Peterson is dead and his loss will be mourned by thousands for a very long time, as long as there is one Tler left on Earth, a part of Mr. TI will always be with us.

God, how I miss him already.

A Visit with the Tigercub
by Walter Ward
Bluegrass 99'ers
(appeared in an earlier edition of the Spirit of 99)

We are driving through a quiet residential street in the section of Columbus known as Whitehall. We see a small brick house with a large maple in the front shade and a somewhat overgrown evergreen hedge.

The man who answers the door is about 6'2", medium build, medium complexion with a full head of hair which is mostly gray. His manner and everything about him suggest gentleman in old fashioned sense. We are taken to his computer room which is small and dominated by an 8x33 table which occupies almost a quarter of the room. Piled all over the table are disks in boxes and other computer paraphernalia. They are also piled under the table and on the floor. Shelves extend to the ceiling all around the room. They are filled with computer books, magazines and old boxed newsletters, etc. Several filing cabinets are similarly loaded. Sitting in the window sill are his wife's African violets which she has difficulty squeezing through to water due to the clutter.

Our brown eyed host and his charming Japanese wife make us welcome.

"My biography? Let's see. I was born in Minnesota in 1923. I wound up in the Army in World War II. I ended up in Japan in 1945, just after the surrender, in the 27th Army Division. I transferred to Gen. MacArthur's Honor Guard Company. I took my discharge in Japan in 1946 in order to go to work for the Army as a Civil Service employee. I married a Japanese girl in 1957. I returned to the U.S. with my wife and baby daughter in 1959. My daughter is now married, a registered nurse and has two sons. I also have a son who graduated from The Ohio State University and who now works in the insurance business.

My hobbies? I like to fish and my annual fishing trip to Minnesota is coming up in July. It will also be the fiftieth reunion of my high school class. I like to garden but ailments are making that more and more difficult. I have a greenhouse full of cactus plants. I like country music. I used to collect military medals and decorations but that became too expensive. I used to play the harmonica.

When my son was sixteen he decided he wanted to be an engineer. He ended up with a degree in advertising and now works as an insurance adjustor. I decided if he was going to be an engineer he should know something about computers; we went shopping. He picked the TI-99/4A because he liked the feel of the keyboard. I have never regretted that decision. It turned out that my son was too interested in sports and girls, cars and girls, and girls and girls, to take an interest in the computer but I became fascinated by it.

I taught myself to program by starting with the "blue book" and other books that came with the computer and by translating the Microsoft Basic in David H. Ahl's books of computer games to TI basic. Within a year I had written about ninety programs. At that time the computer world seemed to be engaged in a conspiracy to ignore the TI-99/4A. I scanned every computer magazine on the newsstands and never found a mention of the TI or an advertisement for any TI product. Finally I did find one small ad and sent for the catalog. The company promptly went out of business! But their catalog had contained a small ad from the old International Users Group; which had started out as the first TI user group and had been converted by La Fara into a business, selling public domain programs for three dollars each. I began buying and swapping programs from the IUG.

About that time I made contact with a few local users and we started a user group in Columbus. This also brought me into contact with some wheeler-dealers who wanted me to go into partnership with my ninety programs and their one or two programs. It was mainly to get them off my back that I decided to start Tigercub Software on my own.

Since I thought my programs were no better than the best of the public domain being peddled by the IUG, I set my price at \$3.00, others were charging three or four times as much, and at the time I didn't know how poor some of their programs were. At that price I couldn't afford the advertising rates of 99'er magazine (I didn't know that most of their ads were run on credit, and the 99'er never got paid!) so I started mailing my Tips from the Tigercub to about two hundred user groups as a promotion idea.

Texas Instruments was being hurt, in the advertising wars, by allegations that few programs were available for their computer (because they had discouraged third-party competition). So they had published a deluxe quality catalog listing of every TI program they knew of (which was mostly everything in the IUG public domain library) and mailed it to every registered user.

Texas Instruments was also actively promoting user groups and had appointed a user group coordinator. I think his name was Ed Weiss (author's note: Ed Weist). He visited our user group, along with programmer John Phillips and demonstrated the newest TI software- Hopper, and an unfinished FORTH. I cornered him after the meeting and asked if they intended to republish that software catalog. He said they were planing to and definitely wanted to list all my programs. The next day,

I mailed him a copy of my catalog and copies of all my programs. A week later the ax fell, Texas Instruments announced that they were abandoning the TI-99/4A! I had missed the chance to have my advertising mailed, at no cost, to a million users at a time when programs were still scarce and I was offering ten times as many as anyone else, at by far the lowest price! Such is life.

The above is taken practically verbatim from a personal letter from Jim Peterson to the author.

RANDOM QUESTION QUOTES

Why Tigercub?

"Tiger because I was writing for the TI and cub because I was writing small programs."

How many programs have you written?

"250 plus the Nuts 'n Bolts. I have never owned or written for any other computer except the TI. Pet peeves? Too many to mention. The biggest faults of the 99/4A? The twenty-eight column screen. They could just as easily have given us forty and the fact that strings can only be sorted in the 12K of console ram. This is a little known weakness but a big one!"

"My wife who is sixty-four years of age somehow does not look nearly that old. She speaks a language she sincerely believes is English. After thirty-five years I have learned to understand some of it."

"I like brain games and I think programming is fun! Hard work? Sure but fun! I freely admit that I am a technoklutz."

Irwin Hott says that on several occasions he has been able to help Jim by changing disk drives and performing other maintenance chores. To appreciate this you must realize that Irwin is blind.

What is Jim Peterson's outstanding personality trait? Everyone seems to agree that he goes out of his way to help out. That he is a hard worker. Jim told Irwin Hott that he was going to take 1500 disks to Lima. That boggled Irwin's mind. Irwin said he could not conceive of the amount of work involved in copying 1500 disks to sell in two days.

THE HOME COMPUTER

by Jim Peterson

(ED note: appeared in the Nov 1990 issue of the Spirit of 99 CONNI newsletter

Can you stand a few more words from the last surviving advocate of the HOME computer?

And what is a HOME computer? It is a computer designed to be used in the home, to do whatever someone might do in the home that can be done better with the aid of a computer.

AND - the HOME computer is designed to be used by a person who has no particular interest in computers, who regards them as just another electronic tool to be used to make life easier or more enjoyable. Also, that person is probably just a bit intimidated by computers.

A person who is not interested in computers? Well, that eliminates everyone who is reading this, but read on anyway.

Now, what percentage of VCR owners have never learned to program their VCR? How many don't know what some of the buttons on their cable TV remote unit do? How many housewives are failing to take advantage of half the pushbuttons on their microwave, or their washing machine? I don't think anyone has the answer to those questions, but I am sure that the percentages are very large!

Many people who buy a new appliance NEVER read the manual. They learn some of its features by experimenting, and never use the rest. Most other people read the manual one time, file it away with the warranty or lose it, and operate the appliance based on what they remember from that one reading. Of course, there are an increasing number of people who are incapable of reading the manual at all, and very few people who are capable of writing a manual that anyone can understand!

The average home computer buyer, knowing nothing about computers, can easily be convinced that he needs 640k a RAM, a hard drive, a mouse, and who knows what else. He needs all those things like he needs a hole in the head, and he is completely baffled by the technical jargon in the manuals that come with the machine.

His computer probably comes bundled with an assortment of "free" software that is alleged to be worth more than the machine itself. It is probably excellent software - but each program comes with a thick manual, hopefully written in intelligible English, which must be studied before the program can be used.

Big programs like that are fine for the workplace, where a worker becomes familiar with a program and remembers how to use it because he uses it every day. For the typical home computer user, they are totally impractical.

So, what is a HOME computer? It is a computer with no more memory than is needed to do the job, practically automatic in operation (i.e., with built-in disk operating system!), with one disk drive, and with an adequate supply of short simple programs to do what needs to be done at the moment and no more, so simple that they can be operated by reading on-screen instructions and prompts.

I happen to own such a computer. It is called the Texas Instruments TI-99/4A HOME Computer.

I LIKE BRAIN GAMES!

by Jim Peterson

(ED note: appeared in Dec 1990 issue of the Spirit of 99 CONNI newsletter)

I don't much care for those fast-action arcade type games - the dodge-the-pac-man, climb-the-ladder, shoot-the-alien type of thing. My grey-haired reflexes are too slow, and my 8-year old grandson can play rings around me.

And I HATE those adventure games that do nothing but print out responses that "I don't know how to do that" or "you can't go thataway". Sounds too much like the SYNTAX ERROR or BAD VALUE messages that I get when I'm trying to write a program!

But I do like brain games! - the ones that challenge me to exercise the grey cells under my grey hair, and give me plenty of time to do so. I also enjoy programming that type of game - although they have certainly proven to be the least popular of anything I have ever done.

The world's premier brain game, of course, is chess. I can't comment much on that, because I don't know the game - other than the wild Japanese version, where every piece that reaches enemy territory can be promoted and every captured piece can be placed back on the board as your own. I wish that someone would program that game!

Anyway, Western-style chess is available as an old Texas Instruments module and as a public domain program translated by Swiridenko from a version written for some other computer. From reviews, I understand that neither offers much of a challenge to an expert, but that either one is a worthy opponent for an average player.

There are also a couple of TI computer games based on chess. The Queen Board Game, public domain by D. Decker, is a real challenge. Hexapawn is an early computer classic from Ahl's days; the computer starts out by knowing nothing but learns from its mistakes and, after a few games, becomes unbeatable!

The blue-collar, redneck equivalent of chess is checkers. Several versions have been written for the TI, all apparently from scratch. Their programmers deserve credit for tackling a complex subject, but any of their games can be easily beaten by a beginner.

The favorite game of most of Africa, and dating back to 2000 B.C. in the Middle East, is Mancala, also known as Awari or Mawari in other African languages. It is commonly played with pebbles placed in holes dug in the dirt, or gouged out of a slab of wood. Several public domain versions exist, but the best game by far is the assembly version called Mancala, copyrighted in 1982 by Aldebaran and finally released recently by Triton.

Othello is an American board game, based on ancient Oriental games, in which the object is to capture territory by placing markers at both ends of a row. Its weakness is that the player who goes first is at a distinct disadvantage. Several public domain versions have been released for the TI, all quite slow. Dean Cleveland's was the first. I like the version by Rick Mirus, which has a black board. Nguyen Long in France wrote the version which is most difficult to beat but it is also very slow, presumably because the computer researches each move one step farther.

Go or Gomoku is a simpler game in which the object is to get 5 markers in a row before your opponent blocks you. There are several public domain versions, but the best by far is Links by Curtis Alan Provance, a unique variant with many features not found elsewhere.

A variant of this game, popular as a toy several years ago but a really challenging brain game, involves stacking chips to get four in a row either vertically or diagonally. One of the best versions was written in the Netherlands.

Tic-Tac-Toe is a child's game, too simple to be called a brain game, but there are 3-dimensional versions, by various authors, which are much more challenging. I have been planning, for years, to write a version in which, if the first player gets 3 in a row and the second player can counter with 3 in a row, the game continues.

The 15 Puzzle was originally a pocket game, consisting of fifteen tiles numbered 1 to 15, randomly arranged in a 4x4 grid, movable but locked within the grid by a frame. The challenge was to slide the tiles around until the numbers were in sequence. The promoter sold hundreds of thousands by offering a large reward to anyone who could solve the puzzle - but his version was impossible to solve! Some public domain computer versions are also impossible, because the programmer has assumed that any random arrangement of numbers was possible. The Texas Instruments version, sold in the early days on cassette, correctly started out with a properly sequenced grid in memory and then scrambled it by a series of random moves. My version did the same, and also offered the option of having two players take turns solving the same puzzle.

Many puzzle games are based on determining, by a series of educated guesses, the sequence in which the computer has randomly arranged colored squares or what have you. These are most frequently called Master Mind, and the most ambitious was written in assembly, occupying 322 disk sectors (!), by J-L. Bazanegue in France.

Peg Jump was an old favorite board game in which holes on a board, in the form of a cross, were filled with pegs. The object was to jump pegs over each other, removing jumped pegs as in checkers, until only one peg remained in the center hole. Texas Instruments sold a good version of this on cassette; Regena wrote another fine version. Many many years ago I owned one of these puzzles which was accompanied by a little booklet showing about 50 "end games." If I could find that booklet again, it would be fun to program these end games into the TI or Regena versions.

Games of the "fox and geese" type require moving, or blocking moves, along certain pathways. The best of these in the TI world, and very difficult to beat, are Giants and Dwarfs by Barry Traver and Quintus by Sam Pincus.

Another type requires placing geometric figures within a specified area. This is the basis for the L-Game, originally published in Ahl's Creative Computing by Bill Gardner. I have never been able to beat it. Of the same type, but much less difficult, is my Mechanical Aptitude Test, based on the "broken block" problems of S.A.T. tests and other IQ tests.

Many brain games are based on a mathematical theorem or a mathematical progression. These are almost impossible to win until you have puzzled out the secret, and too easy to win thereafter. An example is Pick Up Sticks, in which you and the computer take turns picking up 1 to 3 sticks from a pile of random size, with the player who gets the last stick being the loser. In my version, after the user has lost several games, the computer changes the rules to specify that whoever gets the last stick is the winner - but the computer can still win every time! My Can of Worms lets the user make up all the rules, but he still loses - and Niebo, based on the Fibonacci series of numbers, is almost impossible to win without knowing the secret.

Other mathematical puzzles depend on logical thinking. Barry Traver wrote a series of three, based on the number 31, which appeared in a recent Genial Traveler. I have written several, mostly as "tinygrams" or short programs in my Tips From The Tigercub. Regena recently published in Micropendium her ingenious Magic Boxes which has several skill levels ranging from fairly easy to extremely difficult.

Most card games played against the computer, such as Twenty-One or Blackjack, are based on pure luck rather than skill or brainwork. There are also various poker games, but I doubt that anyone has yet programmed on the TI - perhaps not on any computer? - the true odds on a poker hand. Arcade Action Software has released a cribbage game which has been reviewed highly, but I have not seen it - nor do I know how to play the game.

Most solitaire card games are based on pure luck. Quality 99's QS-Solitaire is a beautifully programmed solitaire game in assembly, but it is the standard Klondike game in which no real skill is involved. However, Walt Howe's Chainlink Solitaire is my favorite of all the brain games ever programmed for the TI-99/4A. In this version of solitaire, all cards are visible, so an intelligent choice of moves is available - and an option is available to replay the hand by a different method, if the first try ends in failure. The later fairware versions of this program, with assembly links, are very fast. The commercial version, with ribbons of cards streaming between piles, is something to be seen!

Regena published in Micropendium a Poker Solitaire game which also lends itself to some intelligent playing.

Word games are still another category which requires some brainwork - although I would consider the mental exercise to be minimal in the popular wordsearch puzzles, the object of which is to find each of a list of words within a grid of letters. Texas Instruments had this on a cassette. My version offers a somewhat more challenging option, to find words of a specified category which are not listed.

Cryptograms are perhaps the most challenging of word games, but as far as I know, no one has programmed a diskfull of them for the TI-99/4A. The simplest word game is Scramble, in which the letters of a word have been reassembled into a random arrangement. I wrote one of those, as did everyone else, but I also wrote a more challenging version called Scrambulation, in which each word of a sentence is scrambled and, optionally, the sequence of words is also rearranged. I also wrote Squinch, which Jack Sughrue described as a fiendish game - two words with their letters randomly intermingled into one. And I wrote Bazoo, in which you must find a word by guessing 5 letters at a time, and Changeroo in which you must change one word into another by changing a letter at a time, making a valid new word each time.

However, I believe that the most unique word game ever written for the TI is Karl Roastedt's Superjot, into which he has programmed every 3-letter word in the English language. You and the computer each select a word, and try to guess each other's word - the computer wins more often than not!

Memory games also qualify as brain games, I believe. The most popular is Concentration, originally based on remembering the locations of pairs of cards in a deck scattered face down. Computer versions, such as my Match A Patch, normally use graphics patterns rather than cards.

Other memory games are based on remembering a sequence of numbers or colors, etc. - these are the Simon games. The most viciously difficult of these is one that I wrote several years ago called Nervous Breakdown - it challenges you to simultaneously remember the sequence of three flashing colors, the highest and lowest of three numbers, and the highest and lowest of three tones!

Maze games, if played intelligently rather than by guesswork, are also brain games. The best of these are the "hallways" type which graphically depict your progress through the maze in 3-dimensional graphics.

And there are many other types of brain games - the many versions of the Towers of Hanoi; coin switching puzzles and coin weighing puzzles and liquid measuring puzzles; the classic Nim, and the other classic computer puzzles such as Black Box, Explosion, and others. And I hardly know where to classify some that I have written, such as Reverso and Bassackwards - and Preachers, Lawyers and Salesman.

Most of these I have mentioned are in the public domain, not even fairware. So, if you are tired of trying to zap the invading aliens, if the text adventure has brought you back to the starting point for the umpteenth time, why not try doing something intelligent for a change?

(Published here are two of Jim's TIGERCUB TIPS - #1, his first and #72 the last one he wrote)

TIPS FROM THE TIGERCUB

NO #1



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Any of these may be republished in any non-profit User's Group Newsletter. If you want more of the Tigercub Tips, just send me a copy of your newsletter. If you carry ads, please tell me your rates.

Tigercub Software offers a wide variety of original programs in TI Basic for only \$3.00 each! If you do not have my catalog, please ask.

Here's a tip for beginners- Don't use EDIT!! There are two ways to bring a program line to the screen. You may type EDIT, the line number, and press ENTER...or you may just type the line number and press FCTN together with the Down-arrow or Up-arrow key. But when you graduate to Extended Basic, you will find that you can only use the second method. Then, while you're trying to break the EDIT habit, you are apt to get confused, type the line number, hit ENTER -

UUUUUUUUUUUU

delete the program line entirely!!!

Are you tired of that Blankety Blinking Cursor? This won't work in Basic but if you're in XB try 1 CALL COLOR(0,11,1)

Have you ever spent an hour looking for a bug, and finally found that you had typed an Ø for an o, or vice versa? I'll never understand why Texas Instruments didn't slash the Ø. You can easily do it with this line, 1 CALL CHAR(48,"ØØ3A444e546444BØ"). Trouble is, any redefined character with an ASCII code below 128 will only be re-defined while the program is running, so your Ø's will still be unslashed while you are keying in a program or listing it. However, you can add a temporary line 2 GOTO 2, then key in or list a screenfull of program lines, type RUN, and watch to be sure that all your Ø's become slashed and your O's do not.

And have you ever been typing in a program, and the computer suddenly jumped back to the title screen, and you were sure that you didn't have a finger anywhere near that infernal QUIT key? But maybe you were drinking coffee with one hand and trying to press FCTN and I simultaneously with the other? So, if you don't have anything valuable in the computer right now, try pressing FCTN, space bar, H and N all at the same time. Oops!

Another useless bit of info - try FCTN 5,6, and 7

all together. Break!!

```
100 CALL CLEAR :: PRINT "TIGERCUB CHARACTER ENKLARGER":@
$:@$:"by Jim Peterson":@$:@$
: @$:@$:"SELECT SIZE 1, 2 OR 3":@$:@$
110 CALL KEY(Ø,K,ST):: IF (S
T=Ø)+(K<49)+(K>51)THEN 110 :
: S=K-48
120 DIM HX$(96),c$(16),M$(16
)
130 DATA ØØØØ,ØØØ1,ØØ1Ø,ØØ11
,Ø1ØØ,Ø1Ø1,Ø11Ø,Ø111,1ØØØ,1Ø
Ø1,1Ø1Ø,1Ø11,11ØØ,11Ø1,111Ø,
1111
140 CALL CHAR(33,"FFFFFFFFFF
FFFFFF"):: FOR J=Ø TO 15 ::
READ C$(J):: NEXT J
150 CALL SOUND(1ØØ,8ØØ,Ø)::
PRINT "READY - TYPE CHARACTE
R"
160 CALL KEY(Ø,K,ST):: IF (S
T=Ø)+(K<32)+(K>127)THEN 160
:: CALL CLEAR :: PRINT "WAIT
, PLEASE..." :: CALL CHARPAT
(K,HX$(K-31))
170 FOR J=1 TO LEN(HX$(K-31)
):: A$=SEG$(HX$(K-31),J,1)::
IF ASC(A$)>57 THEN 180 :: B
=ASC(A$)-48 :: GOTO 19Ø
ØØ B=ASC(A$)-55
190 FOR L=1 TO 4 :: X=VAL(SE
G$(C$(B),L,1)):: FOR M=1 TO
5 :: M$(J)=M$(J)&CHR$(32+ABS
(X>Ø)):: NEXT M :: NEXT L ::
NEXT J
200 CALL CLEAR :: FOR J=1 TO
16 STEP 2 :: FOR N=1 TO 5 :
: PRINT TAB(11-S^2);M$(J);M$
(J+1):: NEXT N :: NEXT J
210 PRINT @$:@$ :: FOR J=1 T
Ø 16 :: M$(J)=NUL$ :: NEXT J
:: GOTO 15Ø
```

HAPPY HACKIN'
Jim Peterson



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My three Nuts & Bolts disks, each containing 100 or more subprograms, have been reduced to \$5.00 each. Documentation is supplied on disk.

My TI-PD library now has over 600 disks of fairware (by author's permission only) and public domain, all arranged by category and as full as possible, provided with loaders by full program name rather than filename, Basic programs converted to XBasic, etc. The price is just \$1.50 per disk(!), post paid if at least eight are ordered. TI-PD catalog #6 is available for \$1 which is deductible from the first order.

In Tips #68 I had a little routine to catalog my TI-PD disks which have a menu by full program name prepared with my Catwriter program. I forgot that I had written a new version 1.5 of Catwriter. If you have made any LOAD programs for your disks with Catwriter 1.5, this correction will enable you to catalog them.

```
1 OPEN #1:"DSK1.TI-PD/CAT",A
  APPEND
2 DISPLAY AT(12,1)ERASE ALL:
  "TI-PD ?" :: ACCEPT AT(12,1)
  O:N
20 FOR J=1 TO X-1 :: READ X#
  :: PRINT #1:X#;TAB(30);N ::
  NEXT J :: CLOSE #1 :: STOP
23 REM
```

MICROpendium has published some routines to output TRACE to a printer, by reading the traced numbers from the screen. This is not very practical, because the pro-

gram is apt to clear the screen or erase the trace numbers with text or graphics. The best method to dump TRACE to a printer is to use the Triton Super Extended Basic, which has that capability. If you do not have that module, here is another way. Save the program in MERGE format by DAVE DSKn.program, MERGE and then run this routine.

```
100 DISPLAY AT(17,1)ERASE ALL:
  "Input filename?": "DSK" ::
  DISPLAY AT(19,1): "Output filename?": "DSK"
110 ACCEPT AT(18,4): A# :: ACCEPT AT(20,4): B# :: OPEN #1:
  "DSK"&A#, VARIABLE 163, INPUT
  :: OPEN #2: "DSK"&B#, VARIABLE 163, OUTPUT
120 DISPLAY AT(22,1): "Trace from line to " :: ACCEPT AT(22,17) SIZE(4): A ::
  ACCEPT AT(22,24): B
130 PRINT #2: CHR$(0)&CHR$(0) &CHR$(159)&CHR$(253)&CHR$(200) &CHR$(3)&"100"&CHR$(181)&CHR$(199) &CHR$(3)&"P10"&CHR$(0)
140 LINPUT #1: M# :: IF ASC(M#)=255 THEN 190 :: L=ASC(SEG$(M#,1,1))*256+ASC(SEG$(M#,2,1))
150 IF LEN(M#)>148 THEN DISPLAY AT(12,1)BEEP: "Line "&STR$(L)&" too long to trace" ::
  GOTO 180
160 IF L<A OR L>B OR ASC(SEG$(M#,3,1))=147 THEN 180
170 M#=SEG$(M#,1,2)&CHR$(157) &CHR$(200)&CHR$(1)&"@"&CHR$(183) &CHR$(200)&CHR$(LEN(STR$(L)))&STR$(L)&CHR$(182)&CHR$(130) &SEG$(M#,3,255)
180 PRINT #2: M# :: IF EOF(1) <>1 THEN 140 ELSE CLOSE #1
190 PRINT #2: CHR$(127)&CHR$(240) &CHR$(200)&CHR$(4) &"!@P+ "&CHR$(0)
200 M#=CHR$(127)&CHR$(241) &CHR$(161) &CHR$(200) &CHR$(1) &"@" &CHR$(183) &"X" &CHR$(182)
210 PRINT #2: M# &CHR$(130) &CHR$(132) &"X" &CHR$(190) &"Y" &CHR$(176) &CHR$(167) &CHR$(129) &"Y" &CHR$(190) &"X" &CHR$(0)
220 PRINT #2: CHR$(127) &CHR$(244) &CHR$(156) &CHR$(253) &CHR
```

```
$(200) &CHR$(3) &"100" &CHR$(181) &"X" &CHR$(180) &CHR$(0)
230 PRINT #2: CHR$(127) &CHR$(245) &CHR$(168) &CHR$(0) &CHR$(255) &CHR$(255)
```

It will prompt you for the name of the merged program and an output filename, and will give you the option to trace only a selected range of line numbers - otherwise, just select 1 and 99999 or whatever. It will then rewrite the merged program by opening the printer in line 0, and adding a CALL at the beginning of each line, to a subprogram which prints the line number to the printer. If a line is too long to have the CALL added to it, you will be informed.

Then load the rewritten program by MERGE DSKn.altered filename, and RUN.

If you want to trace a program which does its own printer output, RES the rewritten program before running it to change that line 0 to 100 so you can get at it, and change the P10 to DSKn.whatever. After the program has run, enter CLOSE #100 in command mode to close the file, and dump it to the printer.

Now, here is a more useful application. Change line 130 to REM. Delete line 220 and add these lines -

```
220 PRINT #2: CHR$(127) &CHR$(242) &CHR$(162) &CHR$(240) &CHR$(183) &CHR$(200) &CHR$(1) &"1" &CHR$(179) &CHR$(200) &CHR$(1) &"1" &CHR$(182) &CHR$(181) &"X" &CHR$(180) &CHR$(0)
221 PRINT #2: CHR$(127) &CHR$(243) &CHR$(157) &CHR$(200) &CHR$(3) &"KEY" &CHR$(183) &CHR$(200) &CHR$(1) &"O" &CHR$(179) &"K" &CHR$(179) &"S" &CHR$(182) &CHR$(0)
222 PRINT #2: CHR$(127) &CHR$(244) &CHR$(132) &"S" &CHR$(190) &CHR$(200) &CHR$(1) &"O" &CHR$(176) &CHR$(201) &CHR$(127) &CHR
```

```
$(243) &CHR$(0)
```

The rewritten program will now show the line number in the upper left corner of the screen, and wait for a key-press before continuing, so that you can follow the execution line by line against a printout of the program.

I designed a form to be used in my genealogy research, using the TI-Writer .TL transliteration commands to underline, do expanded print, etc. It was 61 lines long, so when I printed it through the formatter it spilled onto a second page. The formatter insists on skipping 5 lines at the top and 3 at the bottom so, even though a page will hold 66 lines in standard spacing, you can only have 58. John Owen came up with a way around this, but it involves letting the formatter have its 5 lines, and then rolling the paper backward. I thought I could do better, so I wrote this routine which reads .TL codes and performs exactly like formatter, but will let you have 66 lines on the page.

```
10 DISPLAY AT(3,5)ERASE ALL:
  "TRANSLITERATOR": "" &"Works exactly like TI-Writer": "Formatter transliteration": "(but slower) and allows 66": "lines per page"
20 OPEN #2: "P10", VARIABLE 254
100 DISPLAY AT(12,1): "Filename? DSK" :: ACCEPT AT(12,14)
  : F# :: DISPLAY AT(14,1): "How many copies? 1" :: ACCEPT AT(14,18) SIZE(-2): H
101 FOR K=1 TO H :: OPEN #1:
  "DSK"&F#, INPUT
110 LINPUT #1: M# :: IF SEG$(M#,1,4) <> ".TL" THEN 500
120 M#=SEG$(M#,5,255) :: P=POS(M#,".") :: X=X+1 :: A#(X) =CHR$(VAL(SEG$(M#,1,P-1))) ::
  M#=SEG$(M#,P+1,255) &" "
130 P=POS(M#,".") :: B#(X) =B#(X) &CHR$(VAL(SEG$(M#,1,P-1
```

```

))):: M#:=SEG$(M#,P+1,255)::
IF LEN(M#)>0 THEN 130 ELSE 1
10
140 LINPUT #1:M# :: IF ASC(M
#)>127 THEN 530
500 FOR J=1 TO X
510 P=POS(M#,A$(J),1):: IF P
<>0 THEN M#:=SEG$(M#,1,P-1)&B
$(J)&SEG$(M#,P+1,255):: GOTO
510
520 NEXT J :: PRINT #2:M# ::
IF EOF(1)<>1 THEN 140
530 CLOSE #1 :: PRINT #2:CHR
$(12):: NEXT K :: GOTO 100

```

I had a project for which I wanted to type lines up to 160 characters long in Funnelweb, and then print them as a single line in elite condensed type. Bruce Harrison suggested this method - put a line feed instead of a carriage return at the end of the line, and open the printer as P10.CR,VARIABLE 160.

So, I typed out the records, hitting Enter at the end of each to get a CR, as usual. Then I moved the cursor to the first line, FCTM 9, RS for Replace String, and /CTRL-U M CTRL-U /CTRL-U J CTRL-U / to replace all the CRs with Lfs, which Funnelweb quickly did - and reformatted all my records into one solid block! So, I wrote this one to do it right.

```

100 DISPLAY AT(12,1)ERASE AL
L:"Input file? DSK" :: ACCEP
T AT(12,16):I#
110 DISPLAY AT(14,1):"OUTPUT
FILE? DSK" :: ACCEPT AT(14,
17):OUT#
120 OPEN #1:"DSK"&I#,INPUT
:: OPEN #2:"DSK"&OUT#,OUTPUT
130 LINPUT #1:M# :: P=POS(M#
,CHR$(13),1):: IF P<>0 THEN
M#:=SEG$(M#,1,P-1)&CHR$(10)
140 PRINT #2:M# :: IF EOF(1)
<>1 THEN 130 ELSE CLOSE #1 :
: CLOSE #2

```

To print out the file, I wrote this little routine.

```

100 DISPLAY AT(12,1)ERASE AL

```

```

L:"Filename? DSK" :: ACCEPT
AT(12,14):F#
110 OPEN #1:"P10.CR",VARIABL
E 160 :: OPEN #2:"DSK"&F#,IN
PUT
120 PRINT #1:CHR$(27)&"x1"&C
HR$(27)&"M"&CHR$(15);
130 LINPUT #2:M# :: PRINT #1
:M# :: IF EOF(2)<>1 THEN 130
ELSE CLOSE #2

```

But, I wanted to sort the file into alphabetic sequence, and Funnelweb won't let me save a DV160 file to disk, so I wrote this routine to convert the DV80 file to DV160.

```

90 DISPLAY AT(12,1)ERASE ALL
:"Input file? DSK" :: ACCEPT
AT(12,16):I#
95 DISPLAY AT(14,1):"Output
file? DSK" :: ACCEPT AT(14,1
7):OUT#
100 OPEN #1:"DSK"&I#,INPUT
:: OPEN #2:"DSK"&OUT#,VARIAB
LE 160,OUTPUT
110 LINPUT #1:M# :: IF ASC(M
#)>127 THEN 140
120 IF POS(M#,CHR$(10),1)=0
THEN LINPUT #1:M2# :: M#:=M#&
" "&M2#
130 PRINT #2:M# :: IF EOF(1)
<>1 THEN 110
140 CLOSE #1 :: CLOSE #2

```

I ran that sorted file through Dennis Faherty's T1-SORT, which will sort a file of any record length. Then I used this routine to print it.

```

100 DISPLAY AT(12,1)ERASE AL
L:"Filename? DSK" :: ACCEPT
AT(12,14):F#
110 OPEN #1:"P10.CR",VARIABL
E 160 :: OPEN #2:"DSK"&F#,IN
PUT
120 PRINT #1:CHR$(27)&"x1"&C
HR$(27)&"M"&CHR$(15);
130 LINPUT #2:M# :: PRINT #1
:M# :: IF EOF(2)<>1 THEN 130
ELSE CLOSE #2

```

If I need to get it back to DV80 so I can edit it in Funnelweb, this will do the trick.

```

100 DISPLAY AT(12,1)ERASE AL
L:"Input file? DSK" :: ACCEP
T AT(12,16):I#
110 DISPLAY AT(14,1):"Output
file? DSK" :: ACCEPT AT(14,
17):OUT#
120 OPEN #1:"DSK"&I#,VARIAB
LE 160,INPUT :: OPEN #2:"DSK
"&OUT#,OUTPUT
130 IF EOF(1)=1 THEN CLOSE #
1 :: CLOSE #2 :: STOP
140 LINPUT #1:M# :: IF LEN(M
#)=0 THEN 130 ELSE IF LEN(M#
)<81 THEN PRINT #2:M# :: GOT
O 130 ELSE P=80
150 IF SEG$(M#,P,1)=" " THEN
PRINT #2:SEG$(M#,1,P):SEG$(
M#,P+1,255):: GOTO 130 ELSE
P=P-1 :: GOTO 150

```

I have been writing more such DV160 files and merging them into the first one with this little appender.

```

100 DISPLAY AT(12,1)ERASE AL
L:"First file? DSK" :: ACCEP
T AT(12,16):F#
110 DISPLAY AT(14,1):"File t
o be appended?" : "DSK" :: ACC
EPT AT(15,4):A#
120 OPEN #1:"DSK"&F#,VARIABL
E 160,APPEND :: OPEN #2:"DSK
"&A#,VARIABLE 160,INPUT
130 LINPUT #2:M# :: PRINT #1
:M# :: IF EOF(2)<>1 THEN 130
140 CLOSE #1 :: CLOSE #2

```

This is why I am sticking to my T1. I can make it do what I want it to do, rather than being stuck with what some programmer decided I should want!

This one is from the Dark Ages, about 10 years ago. I don't know who wrote it, but it does a lot in a little.

```

100 CALL CLEAR :: CALL SCREE
N(2):: CALL COLOR(1,2,16)::
CALL HCHAR(10,1,33,160):: CA
LL HCHAR(12,15,32,2)
110 CALL CHAR(32,"FOFOFOFOF
OFFOFOFOFOFOFOFOFOFO")
120 CALL CHAR(32,"OFOFOFOFO
FOFOFOFOFOFOFOFOFOFO")
130 GOTO 110

```

This one is easier on the eyes.

```

100 CALL CLEAR :: CALL SCREE
N(2):: FOR CH=40 TO 136 STEP
8 :: CALL CHAR(CH,RPT$("A5"
,8)):: NEXT CH | AURORA by J
im Peterson
110 DATA 7,9,14,10,11,12,15,
16,8,6,5
115 DIM F(12):: FOR J=2 TO 1
2 :: READ F(J):: NEXT J
120 FOR SET=2 TO 12 :: CALL
COLOR(SET,F(SET),2):: NEXT S
ET
130 CH=40 :: FOR R=3 TO 23 S
TEP 2 :: CALL HCHAR(R,1,CH,6
4):: CH=CH+8 :: NEXT R
135 Y$(1)=RPT$("5A",8):: Y$(
2)=RPT$("A5",8):: Y$(3)=RPT$
("A55A",4):: W=1
140 FOR B=INT(5*RND+3)TO INT
(9*RND+8):: FOR SET=INT(4*RND
+2)TO INT(6*RND+7):: CALL C
OLOR(SET,F(SET),B):: NEXT SE
T :: NEXT B
150 FOR J=1 TO INT(5*RND+1):
: FOR CH=INT(6*RND)*8+40 TO
INT(6*RND)*8+96 STEP 8 :: CA
LL CHAR(CH,Y$(W)):: NEXT CH
:: W=W+1+(W=3)*3 :: NEXT J :
: GOTO 140

```

And one more oldie to fill this up.

```

100 CALL CLEAR :: CALL CHARS
ET :: CALL DELSPRITE(ALL)::
CALL SOUND(225,220,0):: PRIN
T "ERROR 4 IN LINE 150" ::
PRINT "BUGS IN PROGRAM"
110 CALL SCREEN(8):: FOR A=1
TO 500 :: NEXT A
120 CALL CHAR(96,"997E3CFF3C
7EBD99"):: RANDOMIZE :: FOR
A=1 TO 20 :: CALL MAGNIFY(2)
130 CALL SPRITE(A,96,2,92,1
24,A*INT(RND*4.5)-2.25+A/2*8
6N(RND-.5),A*INT(RND*4.5)-2.
25*SGN(RND-.5)):: NEXT A ::
GOTO 120

```

MEMORY FULL! Jim Peterson

YOU DON'T HAVE TO HAVE IT ALL!

by Jim Peterson

(Published in Spirit of 99, CONNI newsletter, Feb 1991)

Do the conversations at your user group meeting sound like a coffee break in the Silicon Valley? Are you confused by talk of GROMS and GRAMS, puzzled by references to HFDCs, intimidated by discussions of megabytes and frightened by talk of burning EPROMS? Well, join the crowd, buddy - so am I!

There are basically three types of people interested in computers. First, there are those who use a computer to run programs, or accomplish something useful or just to have fun. I believe that those people are still in the great majority, although we don't hear much from them.

Then there are those who get their kicks out of writing programs, of creating software for others to use. There aren't too many of those left in the TI world.

And finally there are those who like to tinker with the computer, soup it up, plug in doohinkies and thingamajigs, and talk in that strange language I mentioned above. I don't know how many of those folks there are, but they are certainly the most knowledgeable, active and interested, and they tend to dominate the conversations and the printed material in the TI world nowadays.

I presume that those fellows also do actually run programs on their souped up systems. And, some of them must be skilled programmers, because many of their hybrid hardware creations would be useless without specialized software.

I'm very glad that those people are around. Once in a while they invent something that I actually find useful, and they are a lifesaver when my equipment breaks down.

But, don't be intimidated by all that high-tech talk, and don't think that the computer world is passing you by. There are so many things to do with a computer that no one could possibly find time to do all of them. Do your own thing and don't worry about the rest.

I have operated a TI software company for seven years, (ED note: this was written in Feb 1991) and I spend a lot of time writing programs, using the computer as a word processor, etc. I probably spend more time on my TI than 90% of the users. So, what does my equipment consist of?

I have a console with the Extended Basic module plugged in, attached to a P-box which contains a TI disk controller, two double-sided drives, the 32k card, RS232 card, and a Horizon Raedisk. Also plugged into the RS232 card is an old Gemini 10X printer and an Avatex 1200 baud modem.

I also have a Speech Synthesizer, a pair of TI joysticks, a TEII module and an Editor Assembler module, all of which I plug in occasionally when I need them; also, a cassette recorder and cable which hasn't been used in a long time.

I use Triton's Super Extended Basic Module because it has some editing features which are useful when programming. It also has some limited plotting capability which I have never used - and have never heard of anyone who has. If you don't program, it would hardly pay to switch from the old TI Extended Basic. I also have Mechatronics module but never got around to trying it.

I had a Gram Kracker but soon sold it and bought a Raedisk instead. The Gram Kracker has fantastic capabilities if you have the skill and knowledge to take advantage of them, but most users don't seem to have done much beyond personalizing the title screen.

I had a widget, and I guess it is still collecting dust around here some place. It was a nuisance, and since I use Xbasic 99% of the time I didn't need it. There are now widgets or "module expanders" that allow you to access more than one module from within a program. That is, if you have the skill to write such a program. I don't know that anyone has released such programs to the public domain, and I can't think of any practical use except to access TElI speech from XBasic - but you can do that with the Text-To_Speech disk.

The Ramdisk is the one tool that I would not be without. In order to assemble my TI-PD catalog, I screened over 4,000 programs, debugged and modified, merged in help files, conversions to XBasic and loaders, and assembled over 400 disks of programs. It took me hundreds of hours of work - without a ram disk it would have taken thousands of hours and I would not even have attempted it.

The ram disk enables me to switch from one program to another almost instantly, and with John Johnson's boot program I can just as quickly catalog a disk or view a file. Mine has 256k of memory. I could get one with much more memory but I see no reason to do so; I have every program on it that I am apt to use even once a month, and it is only half full. That leaves plenty of room for temporary storage for downloading.

However, if you only use your computer to play games, do a little word processing and a bit of record keeping, a ram disk would be an expensive convenience rather than a necessity.

Since my ram disk is only half full, I would consider a hard drive to be almost as useful as the mammalian appendages on a swine of the masculine persuasion. If I was running a BBS, sure - or if I was doing a lot of work with those memory-gobbling graphics and needed everything quickly accessible.

My old Gemini printer has been a faithful workhorse, although the hood over one sprocket wheel has lost its spring and is being held down by a loop of elastic cord. I will have to give it up soon, because the Gemini printer codes are becoming obsolete and I need to be able to write and test Epson codes. But, I hate to give up these 79-cent typewriter ribbons and start getting ripped off on \$2.50 cartridges! As for a color ribbon, the temperature will have to go way down, down under, before I pay for one of those.

Once in a while, when someone sends me a double-density diskfull of stuff, I wish I had a CorComp disk controller. Otherwise, with diskettes selling for a quarter or less, it wouldn't pay to change.

If I ever get around to subscribing to GENie or Delphi, it will pay me to get a 2400 baud modem.

I can't think of anything else I need, and I don't want what I don't need. If I really wanted to play joystick games, I would certainly get something better than the TI joystick. And if that MIDI interface cable becomes a reality, I will be sorely tempted. (ED note: it did, and Jim purchased one).

I can't see any advantage in putting the 32k under the hood, or anyplace other than where it is now. If I used speech a great deal, it would be nice to get rid of the synthesizer - but I know only one user who uses speech that much. I don't need a clock built in because I have a watch on my wrist. If I really did a lot of serious writing, an 80-column card would be wonderful. But then I would have to buy a monitor capable of displaying 80 columns. I certainly don't want to give up color, and high-resolution color monitors cost more. I would still want to use my old monitor for programming, because I like to write programs for folks who have basic equipment. I don't have room on my computer desk for two monitors, so I think I'll pass.

I'm a three-finger typist, so a RAVE keyboard wouldn't speed up my typing very much. If I really wanted an IBM keyboard and 80-column capability, I would throw in a few bucks more and get a Geneve.

So, what about the Geneve? If I had an irresistible urge to run run the few great programs that have been written for it, or if I wanted to explore its great programming capabilities, I would get one. But, I like to write programs for other people to use. When so few are interested in programs that I write for a computer that sold in the millions, why would I write programs for a computer purchased by a couple of thousand people?

I am sure that many folks will disagree with what I have written. That's why I wrote it. I hope they will disagree so

strongly that they will immediately boot up funnelweb and compose a blistering reply. But don't send it to me - send it to your newsletter editor. The newsletters are badly in need of more articles by more writers!

In Remembrance of Jim Peterson

by Irwin Hott

I met Jim Peterson in late 1981 or early 1982 at one of my first C.O.N.N.I. meetings.

Over the years we became very close friends.

Jim learned much of his early programming by modifying BASIC programs written for other computers to run on the TI. Then when he started using programs for the TI he found that many would not do exactly what he wanted of them. If he couldn't find a program to do what he wanted, Jim would sit down and write one to do the job. It would almost certainly turn out to be better than the original program. He was always looking for better more efficient ways to program.

As most of you know I am totally blind. I started to learn to program by modifying TI BASIC programs so that I could make them work with speech. Jim was a tremendous help to me in that regard. He not only helped with speech but was able to explain many basic programming concepts to me.

Jim also helped in modifying and testing the BBS when I started re-writing that program. One of the things that drove me crazy was the long wait to look at the list of names to see if there was a duplicate name when someone new logged on. Fortunately at about that time Jim came up with his Binary Search idea which was perfectly suited for use on the BBS. I had to write routines that would alphabetize the Userlist, but the Binary Search took the search for a name from a minute or two to a few seconds. We spent many many hours getting those routines to work properly. I think that is the bit of programming on the BBS that I am the most proud of, and I couldn't have done it without help from Jim.

Jim was always glad to bounce ideas for programs off of others. I remember when he sent me his PRINTSPEAK program which allows you to add speech to a BASIC program automatically. I took a look at it and gave Jim some suggestions for a few improvements. We used an assembly routine from Bud Wright to convert lower case "print" statements to upper case since speech doesn't handle those well. That was a program we were both pleased with.

I was occasionally able to help Jim with hardware problems. I remember helping him to replace the printhead in his Gemini 10X several years ago. I also put in his half-height drives when he went from one drive to three.

I remember how excited Jim was after he got his Ram Disk and he found out what it could do. He found that to be one of the most useful hardware additions he ever made to his TI.

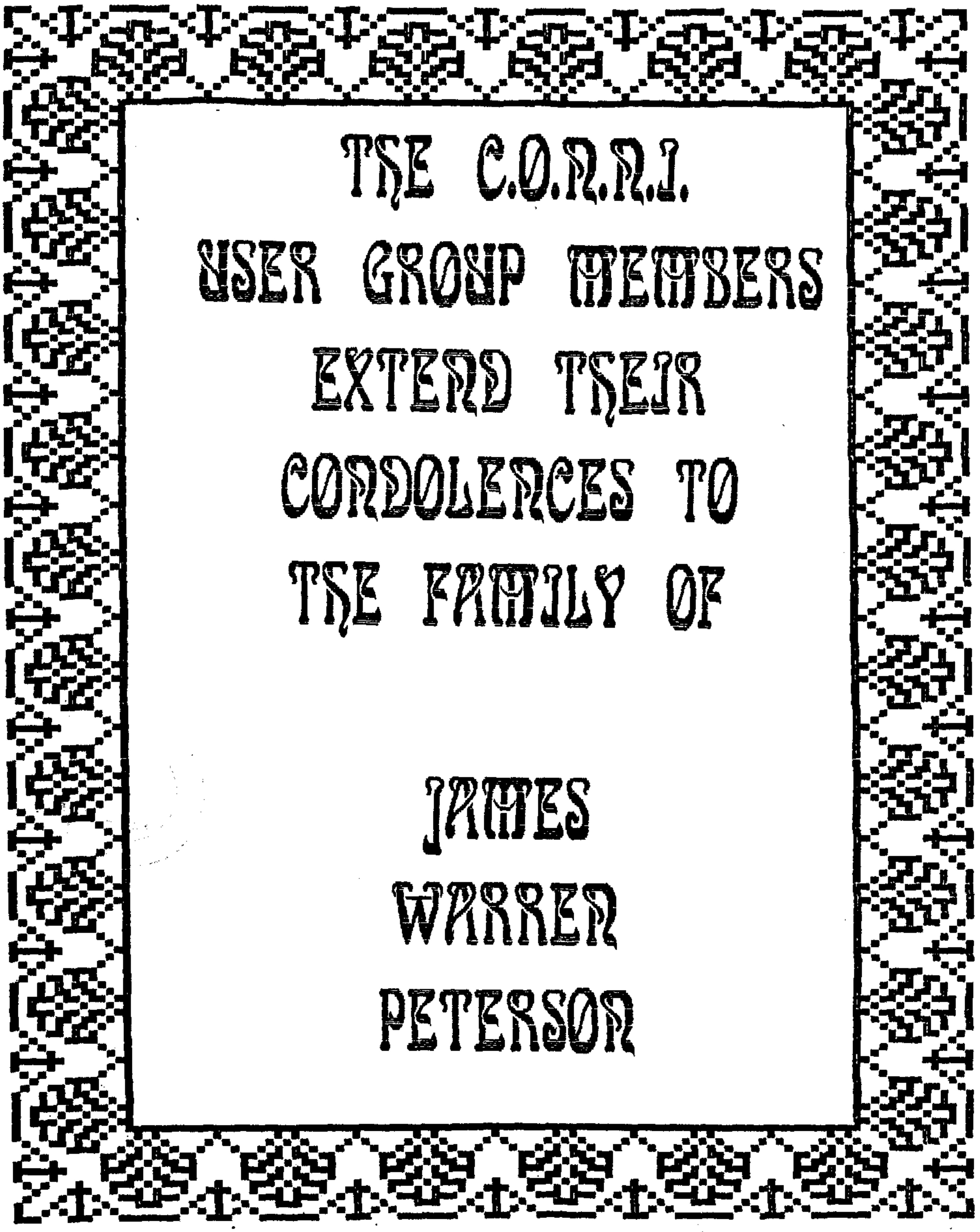
I always hoped that Jim would hold an office in C.O.N.N.I. It was quite a change for him when he agreed to be part-time secretary. Jim felt for years that holding an office would be a conflict of interest with Tigercub Software.

Jim loved the TI from the moment he started using it. Even though he had started using a PC in the last few months for genealogy, his first love was the TI. I don't think he felt he would ever really understand the PC. He loved the TI, and I'm sure he would want people to keep it going for as long as possible. Jim enjoyed writing small but extremely efficient programs. I remember he would have fun trying to fit EXTENDED BASIC programs onto one screen, or see what he could do to write a program in one line.

Jim always said that the small amount of memory available on the TI forced people to program efficiently and he got a lot of satisfaction out of doing so.

Jim will be remembered for his endless curiosity; his hundreds of programs; his new ideas and most of all his willingness to share and help others.

Jim Peterson will be greatly missed, but his legacy will live on in the TI community.



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