



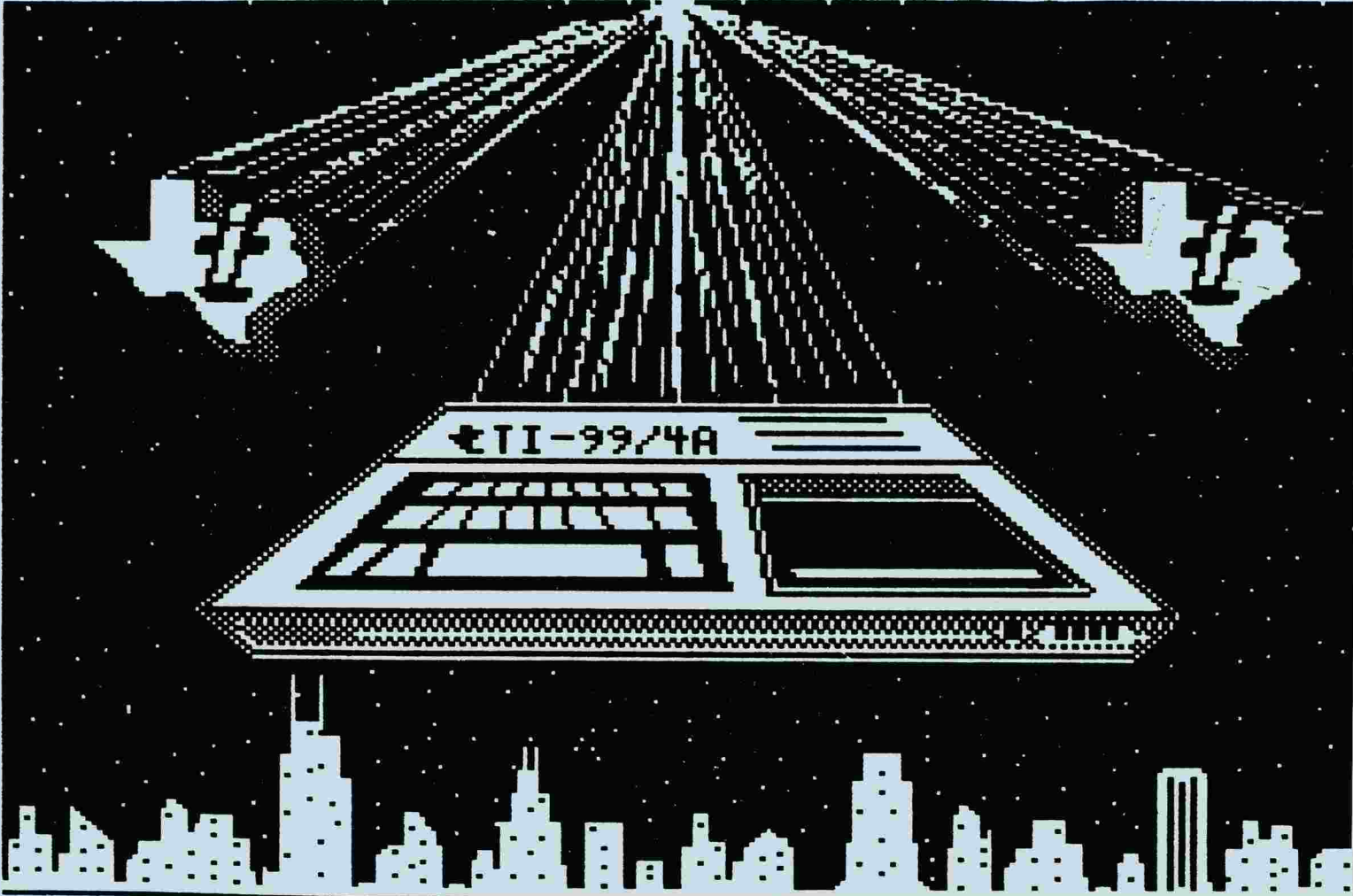
PRESENTS

CHICAGO TIMES

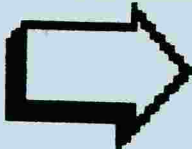
NEWSLETTER OF THE CHICAGO TI-99/4A USERS GROUP

WELCOME TO
THE
5TH ANNUAL CHICAGO TI FAIRE

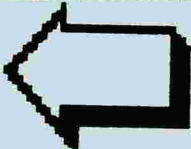
OCT. 31, NOV. 7 1987
EDITOR: Carole Goldstein



THE FIFTH ANNUAL CHICAGO TI FAIRE...
will be held on Saturday NOV. 7, 1987 from 9:00am to 6:00pm in the
Ironwood Room at Triton College.

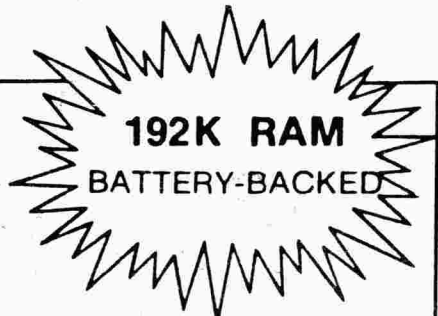


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- > Comes with complete DSR SOURCE CODE. Explains how to write A/L CALL routines to enhance TI BASIC.

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COVER ARTWORK BY DAN GRONOWSKI

Contributing artists: Buzz Krantz, Dan Gronowski, Danny Goldstein and Anne Dhein**BULLETINS****UG HOT LINE NUMBER IS (312)657-1093.**

THE NEXT REGULAR MEETING OF THE CHICAGO TI USERS GROUP IS DEC 5.

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GREETINGS FROM THE FAIRE CHAIRMAN

Don Jones...

GREETINGS!!!

Greetings and salutations to all attendees and exhibitors at the fifth annual Chicago Area II-99/4A Users' Group's Faire. Welcome to our celebration of life.

For the fifth consecutive year, we are putting on our Faire for the entire II community. I am convinced that this year's event will be even bigger and grander than any of our previous events. Already, it has become "THE" event for many of the 4A loyalists, who have continued to support a machine that has been often referred to as either a dinosaur or a dodo; our machine, too, has been repeatedly declared to also be extinct. Alas, this has not been the case. Rather, instead of extinction, we have experienced, only, re-birth, renewal, and growth.

It is also clear that the strength of the II community is directly related to the withdrawal of Texas Instruments from the home computer market. It was Texas Instruments's withdrawal of support from the 99/4A which forced the evolution of the II underground community, with its extensive networking channels. Our own group's growth was a response to Texas Instruments's life or death threat, which came in the form of thier withdrawal of support. Clearly, our community faced the challenged; we chose LIFE. Today, the II-99/4A is a much more useful and powerful instrument than the same machine of five years ago, and today, our community is more viable than ever; this yearly Faire is a testament of that fact.

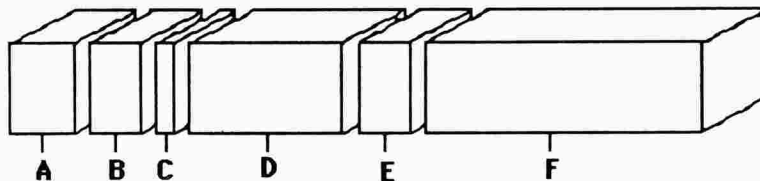
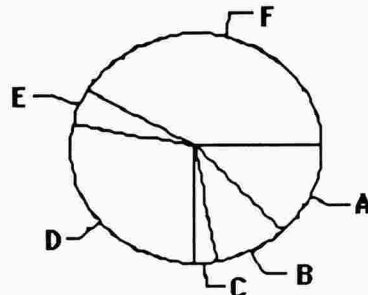
The lack of respect which II owners/users experience in most computer stores has become a running joke within the II underground community. In the case of a P.C. or clone owner, whenever he/she enters a computer store, his/her biggest problem is the choice of what to buy, his/her pocketbook being the only limitation. How often have we secretly envied the P.C. owners, in spite of the high software costs, which they were forced to pay? I think that what we have most envied was the respect which they are accorded and the fact that their computing needs were generally addressed. Because of the nature of our community, usually, whenever a II owner/user seeks out additional or new hardware or software, he/she does not have the wide choices which a P.C. or clone owner has. (On the positive side of the coin, the II owner/user doesn't have the high software or hardware costs of the P.C. owner/user, and compatibility has not become the major problem that it has been in the P.C. market.) If you have ever wanted to be in the same position as the owner of a P.C. or clone, the Faire is a place where that dream can come true. There will be all sorts of new and useful software and hardware, a veritable embarassment of riches (spelled, C-H-O-I-C-E-S). Both the size of your bank account and the large number of choices will be your only problems at

this year's Faire. This will be the one day out of the year that you can see what it feels like to have a computer that is being fully supported.

Speaking of support, I wish to personally thank all of the fine individuals and companies, who constitute the vendors/exhibitors, who have continued to support our beloved machine, after Texas Instrument's withdrawal from the home computer market. It is clear that without their continuous support, this year's Faire would not be possible. I therefore hope that the many loyalists in the TI community will continue to support those individuals and companies who have continued to support us.

Let us all look forward to another year of life for our beloved "orphan." Again, both greetings and welcome to a celebration of "THE COMPUTER THAT REFUSED TO DIE!"

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WELCOME

Marcy Brun...



November 7, 1987

WELCOME TO THE 1987 TI FAIRE:

Thank you for coming to the 1987 TI FAIRE produced by the Chicago Area TI-99/4a users' Group. We have a wonderful weekend planned for you.

First you are invited to the Friday Night Social Mixer at the O'Hare/Kennedy Holiday Inn starting at 8:00. This event will "break the ice" for all our members, families and guests from around the world. By the time the mixer is over everyone will be such good friends.


We have a full and exciting Saturday planned for you at Triton College from 9:00am to 6:00pm. Approximately fifty tables will be manned with exhibitors ready to help you with all your computer needs. I'm sure you will find everything and anything you are looking for, from computer services, to disks and storage boxes, to software and hardware. Throughout the day, special announcements will be made for door prizes, raffles and give-aways. We have scheduled seminars with various subjects which will be an interest to all.

We would like you to continue your fun filled weekend, by inviting you to attend the TI FAIRE in Milwaukee, Wisc. being held Sunday from 9:00am to 4:00pm. The Wisconsin TI FAIRE is produced by The Milwaukee Area 99/4(a) Users' Group and The Wisconsin 99er Computer Council. They will have a show filled with all new exhibitors.

Once again, thank you for joining us at the 1987 TI FAIRE. We are sure you will have an enlightening and enjoyable experience.

Cordially,

Marcy Brun
Faire Manager



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FAIRE HISTORY

Dave Wakely...

The History of the Chicago TI-Faire:

In the Spring of 1983 things looked great for the TI-99/4A world. Near the end of 1982 Texas Instruments was selling every console it could put together. The computer press was touting the 4A as the hottest selling home computer; prices were beginning to drop; the Editor/Assembler had come out and was in distribution; TI was beginning to "open up" the secrets of the machine; third party vendors such as Imagic and Atari were interested in producing software for it; and Bill Cosby was beginning a series of "rebate" offers to spur sales even higher.

In the midst of all this, the Chicago TI-99/4A User's Group was adding members faster than we could count them. From the beginning of 1982 until early 1983 membership had more than doubled. Home Computer Magazine had gone monthly and was even beginning to come out on time. They had put on a "TI-Fest" in San Francisco near the end of 1982 which featured products and demonstrations dealing only with the 99/4A, but it primarily featured their own line of products, and rumor was that TI itself had helped finance it.

There were a small group of us who probably could take some degree of credit for the establishment of the TI Faire(s). At an executive board meeting of the Chicago User's Group in that spring of 1983, I suggested that the group sponsor an "all-TI" show, and that vendors of 99/4A software and hardware be invited to set up sales tables to show their wares. I had taken this idea from announcements I had seen for shows of this type for other machines, such as "Applefest", which was sponsored by Apple Computer. Our show, in contrast, would be sponsored by a users group and would invite anyone who offered products connected with the TI Home Computer. The group quickly endorsed this idea and several individuals functioned as a Faire committee to set it up. Among those who were most active in getting that first Faire going were Sam Pincus, Carole Goldstein, Bruce Barnes, Grant Schmalgemeier, and Ken Czerwinski. While I focused on sending out invitations to vendors whose names I had obtained from ads in the pages of Home Computer Magazine and from other sources, the others did most of the work in preparation and organization.

The meeting just prior to that first Faire was held the first weekend in October. It just happened to be our turn to host Ed Weist, who was the TI Users Group coordinator for Texas Instruments. TI had an odd relationship with User Groups back then, sometimes ignoring us, and other times counting on us to spread the word about the machine. We never knew exactly where we stood with them. Ed Weist, to appearances at the time, seemed determined to change this and to establish a good, consistent rapport with the groups. He instituted a "road show" whereby User Groups were invited to "sponsor" presentations by him and

a travelling team from the Home Computer Division of TI. They would bring around the latest in hardware and software to show the users, and answer questions about future TI plans.

By mid-1983 the news was beginning to change. There were rumors of losses for Texas Instruments, and big ones. Depending on which sources you listened to, they were either going to get out of the rapidly collapsing home computer market, or they were going to market a new, fabulous machine which would blow away the Commodore 64 and again take over the market. The rumors proliferated and grew wilder as the year went on. By October it was clear that something was up. The computer press was reporting massive corporate losses for TI, most of which was directly attributable to the 99/4A. It came out that they had been selling the machines at a loss to establish market share, hoping to make it up on peripherals and software. Observers felt that this was what was behind the rigid, closed architecture system and refusal to license to third party vendors.

At that October, 1983 meeting, Weist stated that TI had no intention of leaving the home computer market, and that we could all look forward to the introduction of new and better software for the 4A as well as the introduction of "other" home computers in the future. Of course, it was three weeks later, on October 28, that TI announced that it was leaving the home computer market, orphaning the 99/4A community. Our first TI Faire was two weeks later.

Fourteen vendors signed up for that first show, and we expected that most of our members (about 250 at that time) would show up. Instead, panic had struck, galvanizing the TI community. Where would users get software and support now that Texas Instruments was no longer involved? Half an hour before the doors opened, the line to get in to the Fireside Lounge at Triton College was snaking out the hall and down the stairs. A large number of people we had never seen before were coming to our Faire. Several told us that they had heard about the Faire when someone called in to the Wally Phillips show on WGN radio in Chicago during a discussion of home computers and mentioned that our Faire was to take place that day. Others had been driving by the college and had just happened to see the announcement of the show on the college events board by the road. I recall that we pressed Nick Iacovelli and a few other group members into service at the front desk just to get everyone in the door.

Almost as an afterthought, it occurred to us that the attendees would need something to do when they weren't at the tables buying products. The Faire was replacing one of our regular meetings, and our members counted on us for information and rumor control. It turned out that the much smaller Maple Room, just down the hall, was available, and we threw together a few panel discussions, one of which ("What do we do now?") was an obvious reference to the TI announcement. The Maple Room, as well as the vendors area in the Fireside Lounge, was packed all day. We never did get an accurate count, but the estimate was that between 600 and 700 people showed up. Several vendors ran completely out of software within two hours and had to close up. As far as we could tell, that may have been the largest gathering of TI owners in one place up to that time. And the Chicago TI Faire was born.

It's ironic that the announcement by TI that they were getting out was

probably the spur that has made the Chicago II Faires such a success. When the day was over there was no question that there would be more II Faires in the following years. Who knows, had II remained in the game, perhaps that would have been a small gathering whose merits, considering all the work involved, we would have debated. Instead it permanently changed the way the Chicago II User's Group operates.

Realizing that what we had was very popular with II owners, the second Faire was moved to the larger Ironwood room at Triton College. Sam Pincus and I co-chaired this one, and we more aggressively marketed it, sending notices to over 70 different II vendors. There were actually more vendors selling II products in 1984 than there had been in 1983. We also sent notices about the Faire to around 50 different II user's groups around the country, speculating that perhaps some users would want to travel to Chicago for the chance to purchase software and hardware which might be difficult to obtain in their area. We also lengthened the Faire from six hours to seven.

When we showed up at 8AM to set up the room, we received our first surprise of the day. Overnight, Triton College had set up a large stage along one wall of the room for a college ceremony which was to take place there the next day, and which took up a significant amount of floor space. Sam and I somehow managed to keep each other from a nervous breakdown and quickly shuffled around the floor arrangement Sam had carefully worked out. Up until 10 minutes before opening we had 24 vendor tables arranged. Then a young man looking no more than about 17 came up to us and wanted to know where he could set up his table. It turned out he had heard about the Faire and just showed up assuming he could get a table if he asked for one. He was selling industrial strength twist-ties and other devices for neatly arranging various computer cables. We looked over our already crowded floor, and, after he paid us the \$50 vendor fee, we found him a spot off a corner of the stage. We later heard he even made a few dollars.

The front door was once again besieged, to such an extent that we had to open the doors about 20 minutes earlier than planned to keep the crowd under control. This left some of the vendors scrambling to get everything set up on time. It was then that we realized that something else was happening. I kept running into people from all over the country. Users identified themselves from places like Coriopolis, PA, Washington, DC, and even Arizona, and in most cases a group of users from an area had come to the Faire together. Some had gotten our mailing to their groups, but many had heard about the Faire from some announcements we had posted on The Source and Compuserve. The word had spread that Chicago had a II Faire, and the hackers and users wanted in, just as we had hoped.

We also more formally organized the presentations. Since the vendor area was in the Ironwood room, the Fireside Lounge was available for other purposes. As a user of The Source I had seen the name of Don Bynum mentioned there since he had taken over as Sysop of the II section. That name was familiar to II users since Don had been the head of the II Home Computer Division, and he was the person responsible for turning the old 99/4 into the reborn 99/4A. It was now one year since we had been orphaned, and who would know more about what exactly had happened than the guy who had been at the helm? Well before the Faire I had left a short message to Don, asking if he would consider being our "featured speaker" at the second Chicago II Faire.

In a matter of a few days he had left me a message, graciously accepting. The only problem: Where would he park the camper van he and his father Doyle would be driving up in?

We also added presentations on productivity packages such as II-Writer and Microsoft Multiplan, run by some of our members. Bynum gave an interesting "insiders" look at what had happened to and at Texas Instruments. He was able to be quite candid since he was no longer an employee of II. We also added other activities such as door prize drawings, a color monitor raffle, and an arcade game contest. We came closer to an accurate count, but probably never quite got it right. Everyone who came in was given a numbered ticket, but tickets weren't given to spouses and children who came with users. A little over 900 tickets were gone by the end of the day. I did a little extrapolating for an article I wrote for MICROpendium about the Faire, guesstimating that about 1,500 had attended.

Strangely enough, one of the main attractions of that show was the appearance of the II-99/8, the "Machine That Never Was". Don Bynum had one and brought it along, showing what might, or perhaps should have been II's upgrade to the 4A. We all marveled, and cried, a little. A representative of CorComp brought along the brand new 9900 Micro Expansion Box, and it promptly blew out shortly after the show opened. Dragonslayer software set up a large exhibit touting their new Spelling Checker, and there was even a table where you could buy insurance for your computer. I don't think my feet stopped moving for seven hours. The answer to the popular question of that summer, "Where's the beef?", was clear. It was all at the Chicago II Faire. We were even amazed when, long after the show, orders were still coming in for a videotape we had done of the day's activities. It appeared that other users were interested in what we were doing.

By 1985, in good part because of the exposure the Faires had brought us, the Chicago II User's Group was about 500 strong. Also by this time I was becoming burned out on organizing these events. Group secretary Sandy Bartels had offered to take over as Faire coordinator, if I would assist, and I was only too glad to do it. The user groups had solidified all over the country, and it was clear that this was the only way to go if you wanted continued support for the 99/4A. The hackers were rapidly peeling away the layers of "user friendliness" II had built in, and the machine was doing things it couldn't do before, so what could be next?

News had begun trickling out early in that year that someone had plans to come out with a new machine which would both be compatible with existing II hardware and software, and extend it's capabilities into unimagined realms. This all started as an announcement by RYTE Data in Canada that they were acting as a sort of "clearinghouse" of information about this computer, to be produced by an unnamed company. About five minutes later everyone seems to have figured out that it was Myarc, a manufacturer of disk controllers and RAM cards for the II. Later in the year they did not deny that it was them. As a result, they, or rather founder Lou Phillips, was our featured speaker at the third II Faire. This was supposedly going to be the first public showing of the new machine.

There was a carnival-like atmosphere which surrounded that event, as Phillips treated those in attendance to a long history of his company

and their progress, eventually holding up an empty keyboard case and announcing that this would be the new computer once the insides were finished. Deliveries could be expected in early 1986. As the case was held up, flash bulbs went off as if Reagan had just mounted the podium to deliver a major address.

Word had also apparently gotten out to the vendors that the users who came to the Faire were buyers. Thirty one different vendors set up tables at that show, and for the first time, we stopped looking for vendors up until the last minute. Besides Myarc, at that same show Craig Miller of Miller's Graphics in California had come to show a new product called the "GRAM Kracker", and several people from the Horizon Users Group in Ohio came and demonstrated a RAM disk they had just perfected. It seemed that if there was TI news, it happened in Chicago at the Faire.

By Faire III it also seemed we had the formula down about right. 1) Find vendors. 2) Send notices to user groups and other places where it will be seen by TI owners. 3) Get some newsworthy person or product to show off. 4) Work like crazy to get it to all happen. By the time of this show we didn't really care exactly how many people showed up, we figured it would be a lot, and we were right. There may well have been a few more in '85 than in '84, but this Faire was probably famous for the amount of news which came out of it. I should note that in 1985 most of the legwork (phonework?) in obtaining the various speakers was done by Butch Goldstein. In all, Sandy Bartels brought a more organized, and probably more professional approach to this Faire, and this time the editor of MICROpendium came to cover it himself. Other users came from Los Angeles and New Jersey, many of whom we put up with a discount rate at the nearby Country Club Motel. We had gone continental.

Between Faires II and III we began to see occasional announcements that other groups were doing Faires, which usually seemed to follow the "Chicago formula". Most notably, Terry Masters of the LA group came to Faire III and wanted info on how we had done it. They subsequently put on an excellent show of their own. It appeared that this kind of thing was what TI owners wanted: A place they could gather to buy, but even more, a place they could meet names they had heard or programmers whose products they were using. The social aspects of the Faire began to become almost as important as the economic.

By almost universal acclamation, Sandy Bartels was again chosen to head up our Faire of 1986. By now, vendors were asking US if they could come to this show. We took a long look at the Ironwood Room at Triton College and decided we could get more tables in there if we tried. The modified floor plan let us squeeze in 37 or 38 (I forget which) different vendors in 1986. Their faith in us proved to be justified. This Faire was known for the amount of TI products which moved off the tables and into users hands. After a few year's experience, most of our faithful vendors know to bring practically everything they can to the Chicago Faire. I ran into several people at this show who ran out of checks!

The number of out-of-town visitors to this Faire was probably our highest yet, and I'm sure many of them have memories of the amazingly crowded social gatherings at the Country Club Motel, which we

essentially took over for the weekend. By the end of the '86 show it was clear that we had outgrown it. For all I know they are still talking about us, too.

Early in 1986 the news making the rounds was that a programmer in Canada was working on a version of the "C" programming language for the TI. He also happened to be a Source user, and, remembering my success with obtaining Don Bynum several years before, I left a message for him there asking him to be our featured speaker. Clint Pulley did an excellent job outlining the history of his efforts to bring C to the TI, as well as it's current and possibly future capabilities. Of course, by this time, no Faire would be complete without Lou Phillips and Myarc, and he was there again to demonstrate the new PE Box card version of the newly dubbed "Geneve" computer. It appeared to be further along than the stand-alone version in that there was actually something on the screen to see.

Also by Faire IV there had been a tremendous increase in the number of groups "doing Faires". Indeed, the slight fall-off in attendance at our '86 Faire is perhaps attributable to the choice users now have. It seems that every group wants one, and many have had one. It is probably possible for a vendor to make a living going from Faire to Faire selling goods, or at least it seems that way. MICROpendium occasionally runs a half page of news, listing all the various shows around the country. If we in Chicago had anything to do with that, all the better. We're all in this together, wherever we may be, and the various TI Faires are a delightful way for Texas Instruments (and Geneve) owners not to mourn what was, but to celebrate what is. This year, as you have seen in these pages, Don Jones has organized one heck of a celebration.

It is not possible for me to list all of those who have worked on the first five Chicago TI Faires. Each of the Executive Board members during that time has given uncounted hours of unpaid work so that the Faires could work. Our librarians alone have copied and sold literally thousands of disks of programs at the Faires; for several years Buzz Krantz and the Set-Up Crew (sounds like a bad rock group) have wrestled tables into position; each year Ken Czerwinski probably wonders if he has still has a job at Triton College after it is over; and the Goldsteins will probably do anything the group needs them to do. And of course, much of the "drudge work" of the Faires over the years has been handled by Grant Schmalgemeier. We kid him, but we love him. Recently he has had to cut back on group activities due to poor health, but he had better be at Faire V (or else, Grant). So, enjoy yourself at the upcoming Faire, but stop to say hello. I'll be wearing my usual "Texas Instruments Orphan" shirt, and celebrating along with the rest of you.



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Greetings to attendees of the 1987
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Fifth annual
TI FAIRE

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LETTERS

October 12, 1987

Ronald G. Albright, Jr., M.D.
3434 Flint Drive
Columbus, GA 31907

Ms. Carole Goldstein
Editor, Chicago Times
P.O. Box 578341
Chicago, Il 60657

Dear Ms. Goldstein,

I wanted to drop you a quick line of appreciation for putting the "TI Forum" on your user group's mailing list to receive the "Chicago Times." The Chicago group is, certainly, an "institution" in the TI community and to be able to see your fine publication monthly will be of immense benefit in our goal at the TI Forum of keeping our finger on the pulse of the 99/4A user base. Your group is, undoubtedly, the largest and most influential of the many remaining TI groups and your newsletter is, arguably, the best there is. Jonathan and I are honored to be on your mailing list.

We are also happy to have the information about the 5th Annual TI Faire. Unfortunately, due to the limited budget of the Computer Shopper (at least in its support of orphaned machines) the staff will not be able to sponsor one of us in attending the Fair. It is our loss. Nevertheless, I am sure the Fair will be another success story for your organization. After all, it always has been the best of the Fairs and the father (or mother, depending on your point of view) of all the Fairs. It was only after the success of your second soiree that others began sponsoring similar events. "Often imitated - never duplicated" should be the secret motto for each of your events. I wish you every success for what promises to be a grand reaffirmation of the "life after death" of the 99/4A. I look forward to hearing and reading of your success. With the publication deadlines of the Computer Shopper, my second-hand reporting of the Fair will not appear until the February issue (which will be written the last week of November), but I hope to have some information by then, at least from the various networks.

I am saddened to hear of the fate of Jack Topham. I, for one, will miss his columns as well. We can only hope that he return to the fold. The remaining authors (you, Irwin, JB, Dave, Rich, and, of course, Texincia [WHO is she??] and the others) continue to entertain and inform. I congratulate you all.

Again, thank you for your kindness.

Sincerely,

Ron Albright

Letter to the Editor.

In the past few months, I have read of members who have been forced to dismantle their system, because the cartridge connector was corroded.

This corrosion of the contacts is, I believe, being caused by the user inserting and/or removing cartridges while the console is powered up (which is the method described in the TI documentation).

Whenever a cartridge is inserted, there is an inrush of current into the module. It is impossible to insert a cartridge so that contact bounce does not occur, therefore arcing takes place between the connector and the cartridge pins, resulting in damage to the precious metal plating. Eventually the base metal is exposed, and it is only a matter of time before this becomes corroded.

The answer to this problem is to turn OFF the console power before inserting or removing a cartridge, as I do. Needless to say, I have had no corrosion problems.

D.Hathaway.

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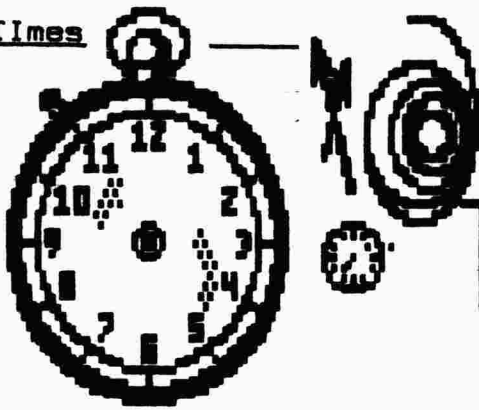
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THE DISASSEMBLY

Dave Wakeley

All's Faire; The last meeting; New directions; Library lament; Geneve(a) conventions; Moving experiences; The adventures continue;

Other Things:

Your task this month is to find pages of this newsletter which do NOT mention the Fifth Chicago II Faire. There aren't many. In terms of the number of vendors and pre-Faire planning, Don Jones has put together what will no doubt be our biggest show yet. If you come to no other meetings during the year, or even if you are a "non-attending" member, this is the one time you definitely want to come to Triton College. We have even obtained discount room rates at a nearby motel (look for the phone number elsewhere in this issue) and there is a free shuttle between O'Hare Field and the hotel. There is also a free shuttle between the hotel and the Faire, so you have no excuse not to attend.

And what exactly will you do when you get there? First, you will check out the day's activities outlined in the schedule. Next, you will look over the list of vendors. To really take advantage of what will be here, I suggest that you start now by taking a close look at what you want for your 99/4A. Chances are excellent that it will be at this Faire. Go over your "wish list" carefully. Pull out the Chicago II Users Group library list and jot down those programs you want. Read reviews of products for the II. We have run many reviews in these pages over the past several years, and MICROpendium is an excellent source of information about new products. Add these items to your list and carry it with you to the Faire. That way, you won't go home wondering how you forgot to purchase that piece of software or hardware you have been looking for. Of course, this will require some budgeting, and many of the vendors will accept VISA and Mastercard, but DON'T forget your checkbook.

By planning ahead you will be certain to get what you came for. Also, you might want to work out a "personal" schedule of your own, deciding in advance which presentations are of interest to you so that you can get yourself from the vending area to the presentation room on time. Also, don't forget to stop and chat with other II users. When you bought your II you didn't just get a computer, you also got the support of your users group and a community of II owners everywhere, even if it doesn't say so in the manual. Above all, enjoy yourself.

LAST: Attendance was way down at the October meeting, perhaps due in part to our scheduling the meeting, for the second year in a row, on the same Jewish holiday. Don Jones has made the intelligent suggestion that we obtain one of those interdenominational calendars and in the future avoid holidays of all faiths. We will.

At the meeting, Oscar Bretana led off with a thorough review of the RYTE Data Compiler. Long-time readers of this column will recall that I have this thing about BASIC compilers, namely, that none of the previous ones really worked well. I first saw the RD compiler at the last Faire, and promptly purchased it. Yes, it works, sort of. You can turn a BASIC or EXT BASIC program (up to about 25 sectors in length) into a compiled version which runs significantly faster than the original version. Some games, when compiled, run so fast they are unplayable. Some of you may have the old graphics demo named "Visions", which takes 40 minutes to run through a series of changing screens. I once compiled this with the RD compiler and watched it take just six minutes to finish. Not all commands are acceptable; only one file at a time can be open; you must use the loader which comes with the program; and there must be an "END" statement at the physical end of the program, but all in all it is better than anything else out there right now. Version 1 used to sell for about \$20. Here's hoping RYTE Data will have a new, improved version at this Faire.

This columnist then followed with a review of Spad XIII, Mark 2. Those in attendance got to see what I have been talking about in this and the Spadventures columns. I want to personally thank group member Mike Polonsky for his "thoughtful" comments and "helpful" suggestions during the presentation.

Chuck Leavitt, our temporary Events Chairperson, then did a retrospective review (we reviewed it once before, long ago) of Dragonslayer Software's Spelling Checker. Chuck ran through an actual session with the program, showing each step in correcting a document for spelling errors. I should probably do that with this column as well.

Don Jones then concluded the meeting by picking up where he left off last month with the Myarc RAM disk. This time, though, he used most of the time to demo Funlweb version 3.4 (or was it .5?). Whichever it was, Don gave those in attendance an in-depth view, showing off each of its functions. This is one of the best-supported Freeware products ever released for the 99/4A, and if you use it, you owe it to those clever Australians who developed it to send in the suggested contribution.

My humble apologies to Al Stump. Sometimes during a meeting I am distracted or have to leave the room temporarily. I completely missed his presentation at the September meeting. Al is our official "Hardware Guy" and can do some amazing things to the inside of a 99/4A console. I'm sure he will be doing some interesting presentations in the future.

MAILMAN SUFFERS HERNIA, II USER GROUP BLAMED: It was some time after the September meeting that I finally finished reading the "Super Summer Issue" of this newsletter. I think I am going to propose to Carole that it be renamed the "Super Monster Summer Issue". Lots of interesting stuff in what has become a truly nation-wide effort of our authors. In looking over that issue and previous issues in my continuing effort to finish the index of past newsletters, I have decided to modify the policy of this column. For several years now I have been driving myself and the editor crazy by trying to make deadlines before the 15th of each month. This can be difficult when the meeting takes place on the 12th, for example.

At one time, what went on in our meetings was of some importance due to the rapidly changing nature of the II-99 world. This was back in late

1983 and 1984, when TI had just ceased production and at the same time the largest flood of new TI products was being released by them and others. Every month seemed to bring a new flock of rumors and announcements of new products. In fact, that was the primary impetus for this column.

While the viability of the TI-99 is as strong as ever, the rate of news has slowed. Also, most members of this group do not live in the Chicago area, and do not attend our meetings. Consequently, I will only be reviewing the meetings of the group in the next newsletter either when time permits or when the news is truly important. This will allow me to get the column to Carole in enough time for her to avoid late-night, last-minute formatting so she can get this to the printer. The really important news is going to make its way to users via the bulletin boards and word of mouth anyway, and this also gives me more time to reflect on what is important and what is merely just a few sentences on some new program in our library that may be of limited interest to you. There will be important exceptions to this, such as next month when there will be a review of the Faire.

THE DOG ATE YOUR DISK: We have just three things to say to those of you who have been patiently waiting, sometimes for months, for your programs from our library. We apologize. We apologize. We apologize. Like all TI user groups that I know of, we are an organization whose every function is carried out by volunteers. No one here gets paid for any of this. Volunteers have regular jobs and families to support, and can easily get burned-out by group demands. Still, you sent us money for programs, and you deserve an answer as to what is going on. The library has added several new volunteers and every order that we know about is being processed now. If you don't have your order yet, you will soon. If it still doesn't arrive, send us a copy of your cancelled check and tell us which disks you ordered and it WILL get to you this time. For your patience we will have some surprises for those of you who have waited the longest. You should also know that this has shaken up the Executive board of this group to the extent that we are pulling our ad from MICROpendium magazine until we can adequately serve our current members. When we have the resources to get things done we will once again push for new members.

THE GOOD, THE BAD, AND THE INOPERABLE: Those were some interesting articles in the Super Issue about the new (wink) 9640 computer from Myarc. On the one hand, there were the wildly proclaimed opinions of Chris Bobbitt about IBM and Geneve, and on the other was the agonized revelations from Carole Goldstein on her attempts to put the issue together using the Myarc machine. Both of these people can't be right, so which is it? I find myself, at this point, agreeing with Goldstein, for several reasons. First, it is probably not a good idea to start a major disagreement with the editor who is responsible for these words getting into print. Beyond that, I found myself wondering if Bobbitt has ever actually used a Myarc 9640.

The argument seems to go something like this: The IBM and clones are the worst pieces of dreck to arrive in the history of microcomputing, but don't despair, because the Myarc 9640 is the most wondrous invention since at least the introduction of sliced white bread, and possibly eclipses the printing press in furthering civilization as we know it. Actually, a better argument would have been that IBM IS white bread, and the 9640 is dark rye. Maybe a lot of people don't like it, but those who

do are passionate about it, and besides, it's better for you.

I find it easier to accept the comments of someone who says "Look, here's what happened to me", over those of someone who proclaims from the mountain top, "Here's how it is, oh ignorant masses". I'll give him this, though, the guy is a true believer, I guess. It does strike me as a little odd that it was apparently necessary to put down the IBM so that the 9640 could look like salvation in comparison. Why can't that machine just stand on its own merits? Could it have something to do with the comments that Carole made in her article? Is it possible that sometimes half a machine is worse than none?

I am beginning to suspect that what we have at this point is "The Wondrous Machine That Doesn't Work". Sort of like a trillion dollar economy that produces a deficit. Or going to watch NFL football and getting the Spare Bears instead. This is really no put down of Myarc or the 9640. I sense that Lou Phillips and Myarc have struggled mightily to get this thing off the ground, with very little return on their investment so far. I also sense that II owners REALLY WANT this thing to work. Besides, for a guy from New Jersey, Phillips sure gets a lot of ink. If they ever get it working I will be in line to purchase one. I once stated in this column "use what works for you". When something comes along which works better than that, I'll get it, or would you prefer to be an M-DOS beta tester (cost = \$449 or more)?

This is also no put down of Chris, either. Mr. Bobbitt has made some valuable contributions to the II world. Those two articles just weren't some of them. I chalk it all up to unbridled optimism. Maybe Bobbitt writes Assembly language patches to native M-DOS code to get it to work, but some of us can't do that. And that IBM hatchet job was probably unfounded fear of defections. No one of importance is leaving, Chris. This group, just one of many around the country, has over 700 members for what must be some sort of valid reasons. Don't panic. Someday the 9640 may just live up to it's promise, and then the rest of us will catch up with you. Until then, Carole and the "hundreds" who have purchased a 9640 will have our sympathies.

BACK UP THE TRUCK: Our site manager at Triton College, Ken Czerwinski, tells us that beginning in April, 1988, the college is going to close the College Center Building for approximately one year for extensive remodeling. We have used this site for our group meetings and the Faire for the past five years, but we will soon be looking for a new location. Several group members are looking into the availability of other community colleges to sponsor us, and we are checking to see if we can fall back on the meeting room at the Brickyard Mall, where we once met a few years ago when Triton was unavailable. We will have this worked out within the six months remaining and it will be announced here. Please note that this change will NOT affect this year's Faire plans.

THE BARK IS WORSE THAN THE FLIGHT: Installment #2 of the "Spadventures" series appears in this newsletter, where this month we get you out of the clouds and up a tree, so to speak. I wasn't going to run one this month what with all the Faire news in this issue, but the editor informed me, "Oh yes, you are." What I am finding so far is that the column is one heck of a lot of work. If you like it, don't like it, don't understand it, etc., write to me at the group address and I will take appropriate action. The column takes up a lot of space in this newsletter, but is really only of interest to Spad owners, however many of those there are,

take appropriate action. The column takes up a lot of space in this newsletter, but is really only of interest to Spad owners, however many of those there are, so speak up. Meanwhile, the folks at Not-Polyoptics have informed me how to upgrade to the new, Mark 2 version (highly recommended). Send \$7.95 (which includes the return postage) to Not-Polyoptics, 13721 Lynn Street, Suite 15, Woodbridge VA 22191. N-P notes that this upgrade is only available to those Spad owners who have sent in the registration card supplied in the Spad package. No matter when you purchased it, it is not too late to do this; they will accept old registration cards as long as the correct date of purchase is included. Alternatively, they will accept the purchase receipt as proof of purchase. There is NO excuse not to upgrade to the Mark 2 version.

SubrouTines: It turns out that Rich Klein didn't mind being named the new head of the Beginners SIG that meets at the end of most meetings. If you are lost using your machine, look for the group that usually meets in the back of the room at 3PM. While Rich couldn't be at the September meeting, veteran TIER Jim DiNovo successfully pinch hit. Jim is one of many older TI users in our group, in case you hadn't noticed them, and knows his business. And here you thought all knowledgeable users were under 20 and program only in Assembly...Is it just me, or are others beginning to dislike that piece of scotch tape which is on the end of the newsletter when it arrives? It is devilishly difficult to remove, I usually end up tearing the cover, and the pages still stick together anyway. Why can't we use those round dots I get on other things to keep the pages closed? They come off easy and can't cost that much...There could be some interesting news about original TI cartridges coming soon. More next month...Bring those election ballots from the last issue with you to the Faire. There will be a ballot box on the group table. Mail-in deadline is also Faire Day, 11/7. Results will be announced in December...I counted nine different ads in the Super Monster Summer Issue. At this rate maybe we ought to have a short "index to advertisers" in each issue. Maybe someday the advertisers can actually pay for the newsletter. And wouldn't that be special?...

If you are planning on attending the Faire, and, you think you may have some time to spare, we need you. As of this date, I have only 4 volunteers to work at the library table. If you could donate 1/2 hr. or your time, I would appreciate it. I will have about 1000 premade disks. All you'll have to do is sell them. We all know what most of the programs in the library do. So, questions shouldn't be too hard to answer. I will have catalogs there that give short descriptions of the regular library disks. There will also be Fairware listings with descriptions hanging on the walls. I can't make things much easier. Please think about it and volunteer now. Besides, the library table is the table that has the most fun. Hope to see your smiling face on my side of the table. Thanks in advance.

Bob Demeter

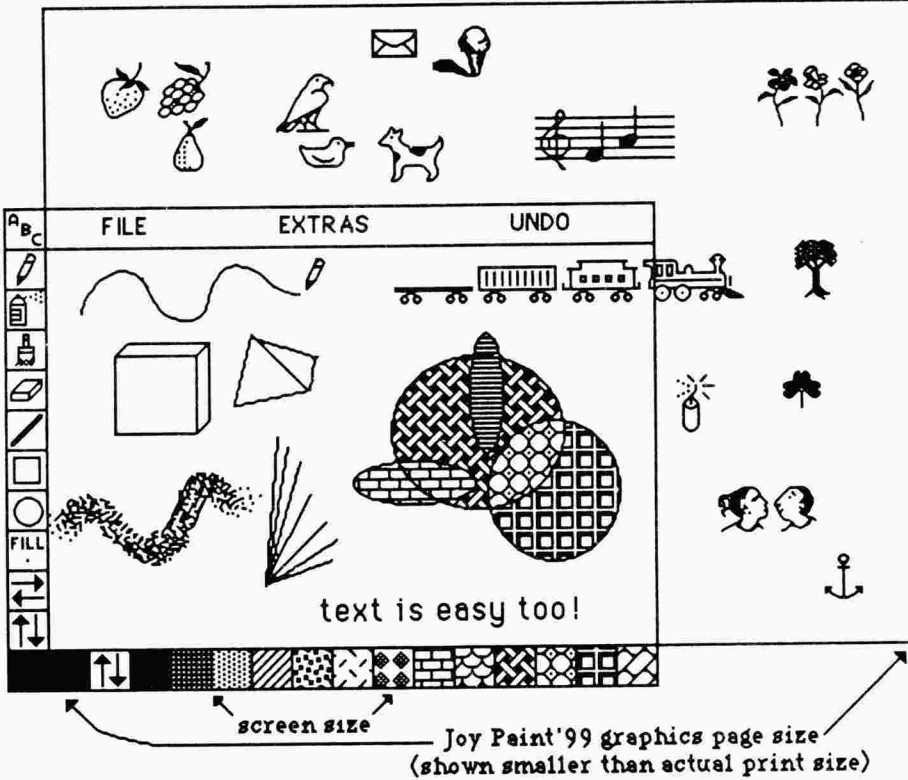
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MEMBERSHIP CHAIRMAN SPEAKS

Don Jones

THE MEMBERSHIP CHAIRMAN SPEAKS!!!

Well, Sports Fans, this article, if you can believe it, will be rather short, because of my activities as the chairman of this year's Faire.

The membership table will be manned, during this Faire by a great crew of volunteers. The chairman of the crew is Nancy Rauch. They will be renewing memberships all during the Faire. Also, at the membership table, Harold Shanafield will be selling back issues of our great newsletter. All of those, that we have available, will be at the table and available for purchase on a first come-first served basis. Get yours, while the selection is good.

Just a quick reminder: After December 31, the cost of your renewal will be \$18.00 for a regular renewal and \$21.00 for an on-going non-attending renewal. Also, no back issues will be sent out to those who renew late. If they want back issues, they will have to buy them or re-join as a new member. Relative to that, the cost of all new memberships will be \$21.00; we are dropping the so-called "attending" status.

If you renew now, the cost of your renewal is only \$15.00. For an on-going non-attending renewal, the cost is \$18.00. Overseas members should add \$3.00 to cover the cost of the extra postage. When you make out your checks, please do not make them out to me; it causes me to do an extra job. Rather, make all checks out to the group, at our post office box number, and don't forget to place your membership number on your check. Membership cards for 1988 will be stapled inside your January 31, 1988 issue. I think that that pretty much covers the membership stuff.

Please come to our Faire. Please attend our Saturday Night Social Mixer. Please support this event. Also, please support the vendors/exhibitors who support US.

Well, Sports Fans, that's it! (Can you believe it???) I am pretty tired, and I have to mosey on down the road into the setting sun. Incidentally, I hope that old Flybreath Texincia doesn't confuse my head with the sun!!! Anyway,

SEE YOU AT THE FAIRE!!!!

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(TI software)
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Owner of Genial
Peter Hoddie

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Scott Darling

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Ernest E. Chandler, III
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(service)
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Liscomb, IA 50148
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(membership information)
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Romeoville, IL. 60441
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1987 CHIGAGO FAIRE FLOOR PLAN

112	114	116	118	120	122
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1 1 0						1 2 4	
1 0 8		115	117	119		1 2 6	
1 0 6	1 0 7			1 2 7			
1 0 4	1 0 5			1 2 9		1 2 8	
1 0 2	1 0 3			1 3 1		1 3 0	
100				1 3 3		1 3 2	
FAIRE ENTRANCE/EXIT	1 0 1			1 3 3		1 3 4	
156		147	145	143	1 3 5		
1 5 4						1 3 6	
1 5 2	150	148	146	144	142	140	1 3 8

BASICALLY YOURS

Rich Klein

BASICALLY YOURS: Rich Klein

Letter, letter, I got a letter. Well, actually Don Jones got it and forwarded it to me. This is a good thing, since I couldn't think of much to write about this month. As a matter of fact, I think its time to expand the scope of this column to generate more incoming mail. I think maybe we'll follow the guidelines of the Beginner's SIG. and cover Basic information about a variety of computer uses, and not just Basic programming. This doesn't mean that there won't be Basic ideas in here. It just menas there will be other things as well.

I found out over the course of time that people are more willing to write in and ask about applications they are trying to master, such as Multiplan, TI Writer, and others, than programming in basic. It's time to evolve. We've grown beyond the original scope of this column and now consider other areas of computing along with our original interests.

When I first started with the 99/4A, I had a console. That's it, just a console. With a console and nothing else I was rather limited in what I could do with this thing. I had TI Basic or I could turn it off and do other things around the house. You know the choice that was made as the house fell to neglect (just kidding!). At that time, there was little else available for the TI and that was hard to get and not easy to afford. A game cartridge like Hunt the Wumpus cost \$40 or so and anything good was considerably higher. There was no Expansion system, just the sidecars a 32K, RS232 with no PIO, a single sided only disk controller and some other things that did not go over well like a VCR controller that no one could afford to be with.

At that time, TI user's scope was naturally limited. That was a time when we were genuinely awed by Sam Pincus' Starship Concord program written entirely in Extended Basic. This utilized programming concepts most of us could only dream of and what most of us could not do. Now, most serious programmers, Sam included (when he uses his TI), don't even use XB unless its to load and run Assembly routines. We've all become more sophisticated, so its time for this column to also.

The letter I received came from Florida, Palm Bay, to be exact. Don Jones forwarded it to me and I'll attempt an answer.

Q: (2nd Paragraph) Though we do not communicate often we really look forward to receiving the Chicago Times (Times) and its timely articles. Unfortunately, we have not progressed very quickly in learning computing but we are working at it. I am a foreign language teacher and most of my computer time is spent with my Grade Teacher program: Teacher's Aide by JSTI Software. It is one of the best I have seen and does what I want it to do. I have run into some

problems with it but the people in our local user's group have been super in helping me out. They helped me to put it into my Ramdisk. I also have DM in there, too. I also have a Gram Kracker which I find totally frustrating since it keeps nothing in memory overnight. Several members of our club have tried to help me with this but every time I sit at my computer I have to reload the Gram Kracker. Even using the TIW MOVER doesn't help keep anything in it. Has someone in your group been successful with keeping programs in the Gram Kracker memory for any length of time?

Once again, I want to state that these on-going non-attending members from Florida look forward to our "printed meetings" with you.

Sincerely yours, M-C & J A

P.S. As you can see, I haven't mastered the TIW yet, so I write on my trusty old typewriter! Some day I will be able to produce TIW documents! I know I will!

A: Send me plane fare and expenses, and I'll be glad to help you out personally. I happen to own a Gram Kracker and I haven't had too many problems with data loss. The obvious thing to do is to try a new battery in it. If you are not too handy, have someone do this for you. You will have to disassemble the case of the GK, and there are many little "prongs" which form circuit paths between the two circuit boards. It is extremely important that these not be bent or reinserted improperly on reassembly or the GK will not perform properly, if at all. If that has been done and it still doesn't work, then there is a definite hardware problem with it. Then you should consult MG (formerly Miller's Graphics) for a service location, or maybe someone knows someone who can repair it. If you haven't tried replacing the battery, do that first. The computer powers the GK while it is turned on. The battery keeps the GK's RAM alive while the console's off.

Once you get the GK going again you may want to try a few of the examples in the GK book. They're fun and you might learn something new.

As far as II Writer is concerned, there is an excellent tutorial in the manual that takes you step-by-step through sample documents that will help you familiarize yourself with the word processor. There are a lot of imitators, but no one has come up with a better word processor for the 99/4A.

After the meeting last month I had the opportunity to work with Mike Maksimik of Pascal fame on a problem. The problem was to find a way to prepare a BBS for Autoload on powerup. The snag here was that a PERSON must type:

```
CALL INIT  
CALL FILES(7)
```

before loading the bbs program. As far as we knew, there was no way to bypass this and no way to accomplish any equivalent in a program. This meant that the bbs could not powerup after a power failure unless some one was there to type those lines. The CALL INIT is O.K. in a program, but the CALL FILES() could not be done.

We used Explorer and traced out the computer's execution of that command for several hours hoping to come up with an equivalent assembly routine which could be executed in its place. What we found was interesting. While the computer goes through thousands of steps, it is "reading" its environment. It then changes only a few locations and only ONE of those is really necessary to accomplish the task. The only drawback to this method is that you MUST do some sort of I/O to a Drive or Communications port for the UDP to be set up properly. This can be a legal command or an erroneous one as the peripheral access block will be set up in any case.

This memory address is the UDP highest free address pointer in scratchpad RAM and can be changed like this:

```
CALL INIT
CALL LOAD(-31888,A,B)
RUN "DSKX.X"
```

Quite simple, and it can be done from a running XB program. to find the values to place in there, do a CALL FILES(n), where n is the number of files you wish space for, then do a NEW and then a CALL PEEK(-31888,A,B). this will give you values to place in the CALL LOAD(). Make sure they are in the same order you read them and make sure you reset the computer after you peek these values.

```
SIZE
CALL FILES(n)
NEW
```

```
SIZE
CALL INIT
CALL PEEK(-31888,A,B)
PRINT A,B
```

(write values down, reset computer)

```
SIZE
CALL INIT
CALL LOAD(-31888,A,B)
SIZE
RUN "DSKX.X"
SIZE
```

Try the above example. The size command tells you how much available memory there is and the first tells you how much UDP memory is available. You will see this value change after each command is executed. What you should see are the same values in either routine.

This is probably not going to work in every case. Some of you have different versions of the 99/4A and there are different controllers out. This may not always work in every case or application.

'Nuff Said! Hope to see you at the Faire!



PROCESSED DATA

BY Sandy Bartels

IMPACT! Yes Impact. That's what the Chicago II Faire means to the II community. That is the one word that comes to my mind when I think of the Faire and the effect it has on me and the people that I know that come to it. Just imagine, strolling past all of those new gadgets that will be available for my beloved II-99/4A. It boggles the mind. Most of the attending vendors have introductory or Faire sale prices on the goods that they have brought. That encourages me to become less restrained in my purchasing, because my money will stretch farther on the day of the Faire. The guest speakers that will be making presentations will leave everyone a little more knowledgeable about their II's than when they came to Triton College.

Can it be that this is the fifth year our group has put on the Faire? Well, it seems one success breeds another. This year the Faire is organized by the work-aholic Membership Chairman, Don Jones. A known stickler for detail, and the creator of many new ideas for this year's Faire that should make it THE premier computer Faire in the nation. Marcy Brun is this year's Faire Manager, and is rightfully so, having come to us from having organized successful commercial trade shows for a living. This all-pro team should make this the best Faire the group has had to date.

Why you ask should I travel clear across the (State, Country, or even the World) to see things that can be mailed to me out of catalogs? This is a fair (Faire?) question. The things that go on at the Faire you just can't get from a catalog. The personal conversation with the II computer hardware or software developer that is just as anxious to talk to you about his/her product, as you are to enhance your system, increase your productivity, or blast more aliens with your joystick. You also have the opportunity to meet and talk to fellow II-Bulletin Board System users that come together here in this celebration of the immortal orphan. Meet and get to know fellow programmers of your currently favorite language. Listen to seminars and presentations all day long, on new ways to enjoy your machine. This has got to be some of the main reasons why this Faire and all II-Faires are important. Because they pull all of us together in a common cause. Without this aspect of the relationship we share with our II fellows, our machine would surely die.

I decided that I would share with you, some of my thoughts on why you will be able to find me at this year's Chicago II-Faire. I pity the poor soul that would get in my way of attending, or try to stop me from trying to be the first in line at the door.

Asgard Software
P.O. Box 10306
Rockville, MD 20850



\$27.95

Legends

FAIRE SCHEDULE

09:00 - THE FAIRE OFFICIALLY OPENS

09:30 - Don Walden, the president of the Milwaukee Users' Group and the Wisconsin TI Council, and Don Schroeder, give a demonstration on the use and application of the 9640. Modified and original software programs will be available at that time.

10:15 - Franz Wagenbach of Mechatronics (T.A.P.E., Ltd.), gives a presentation on the Mechatronics 80 column card and their 512K card.

11:00 - Dave Wakely, of the CTIUG, will give a demonstration and a presentation on the Triton Turbo XT T.I./I.B.M. compatible computer.

11:45 - Donn Granros of Asgard will be demonstrating his new game program Legends.

12:15 Sandy Bartels, the president of the CTIUG, and Carole Goldstein, the editor of the Chicago Times, will give a presentation and discussion of techniques to strengthen and develop other TI users' groups.

01:00 - Barb Wiederhold, the owner of the Queen Anne Computer Shoppe, will give a presentation on the TI Market, the TI Community, and the 9640. Time permitting, she will answer questions and try to solve problems related to the use of the Myarc 9640 (Geneve) Computer.

02:00 - Mr. Lou Phillips, the president of Myarc, Inc., and Mr. Jack Riley, the marketing manager, at Myarc, Inc., will give a demonstration and a presentation of the Myarc 9640 (Geneve) Computer, the new Myarc hard/floppy disk controller card, and other Myarc products.

03:00 - Mr. J. Peter Hoddie, of Genial Computerware and The Boston Computer Society, will give a presentation/demonstration.

04:00 - Mike ("The Frogman") Maksimik, the chairman of the CTIUG's Pascal Special Interest Group, will give a presentation on p-Code for the TI computer.

04:30 - Chris Faherty, the creator of TI Artist, will give a TI art and graphics programs demonstration, using TI Artist. He will also answer questions regarding his program, TI Aritst.

05:30 - Jim Horn, the SYSOP of Compuserve's TI Forum will discuss Compuserve's information services for users of the TI-99/4A and Geneve 9640.

06:00 - THE FAIRE OFFICALLY CLOSES

Library Shelf

— Bob Deneter —

Within these pages, you will find lots of library news this month. This is our Faire issue and we have lots of things to discuss. As promised I am providing a complete up to date list of the fairware library. This issue will also include listings of any new disks added to the regular library. And, also as promised, I will be providing a list of software in our new 9640 Support library.

Before I get started with all the neat library stuff, let me say this. The library table will be set up and have premade disks available for the Faire. Disks from all 3 libraries will be available. Our courteous staff will be standing by and ready to serve you. If you have any questions, comments or complaints about the library, please stop by and see. Someone will be happy to help you. If you are reading this the day of the Faire, WELCOME. Hope you enjoy the show. Stop by and see us. If for nothing else, just come by and say Hi. I hope you enjoy the Faire just as much as the Chicago TI User Group enjoys having you with us today. If you're reading this before the Faire, please plan on attending our 5th annual Faire on Sat. Nov. 7th from 9am to 6pm at TRITON COLLEGE in River Grove, Ill. For more information call our BBS at 312 966-2342 or the Hotline at 312-657-1093 or Grant at 312 477-0690 10:30 pm to 11:30pm. Remember, all roads lead to Triton College, home of the Chicago TI User Group.

Ok, now for the news and reviews. Here's our Lobotomy Library man, LaBomba Bob. Hey, Como esta usted? Boy am I having fun. Today's the 8th. Don't ask me how I started writing this a week before it's due. I got 2000 disks staring me in the face and lots to do before the Faire. But I sure am having fun at it. Let's get started.

I got 2 surprises from Barry Boone this week. He has a new Archiver program out. It's version 2.21. Added feature to this one is the ability to return to Funlwriter. So, now you can Pack, Unpack, Catalog a disk, View the files in an archived program, or return to Funlwriter. Another feature of 2.21 is a DSR change. It now accepts drives 1-9. It also lets you pack and unpack to a RAM disk. This is heaven. Thanks Barry! Also included with ARCHIVER 2.21 is XBOPTS 3.1. This is Barry's Xbasic loader for program image files (E/A option 5). Barry says version 3.1 works better with his new Archiver program. XBOPTS can also be modified to load your other E/A 5 programs. Get it from the library. 1 SS/SD \$2.00

Please try to remember, all disks in the library are Single Sided Single Density. I do have a few that only come DS/SD. These are clearly marked on the label.

TICKLER is by Tom Moran. This program is a calendar, memo pad and phone directory all in one. The calendar part displays an actual calendar. Just enter the month and year you want displayed. Wala, it's there. The memo pad is pretty neat. You enter a memo to yourself. The program then asks what date it's for. Enter the info and save to disk. If you save the info as month names, you can bring up your monthly memos. The

phone book works pretty much the same. Enter names and numbers. The pgm. asks if you want them sorted. Save the file. Next time you need someones number, pull up your phone file. Searching thru the names you'll find that persons number. Pretty neat. I like it. TICKLER XB load. \$2.00

TIKEYS is by Wes Johnson. This one is really great. It will automatically re-define your keys. Or, you can make up your own. This pgm. will let you assign words or functions to all 26 alphabet key and keys 0-9. A total of 36 perdefined keys. Docs. are included by the author. Once the keys are defined and saved, all you have to do is run the pgm. It loads in and looks natural. But, pressing CTRL and 1 for instance may just print out RUN"DSK1.LOAD". This is great for not only running programs but for typing programs too. A single key stroke will type in all sorts of commands. Think of the time and wear on the keyboard you'll save by using these 36 control functions. If you're typing in a program where you'll need to use control codes, no problem. There's a control key to deactivate the assigned keys. You can trun this program off and on at will. Check it out. It's really sharp. TIKEYS \$2.00

DM 1000 version 3.6, 3.7 and 3.8 are all out. The OTTAWA TI UG keeps trying to outdo itself. The program just keeps getting better all the time. Improvements have been flying since the 9640 arrived. The 3.8 is a 9640 version. 3.7 has a TI and 9640 version. The folks from Ottawa were kind enough to provide a list as to what fixes what. I think I can get all 3 version with docs and fix list on one disk. That way you can choose the DM1000 of you choice. Find it in the library. Dm 1000 \$2.00

MASSTRANSFER 4.3 by Sut Olson is another great improvement to an already GREAT terminal program. As some of you may know, 4.2 had a new transfer feature called YMODEM. This will allow you to make faster transfers from MXT Bulletin Boards (602 848-6200 Stu 312 395-4618 Gary). Stu has been thinking about us RAMdisk owners. 4.3 now lets you use multiple RAMdisks. Everything else is the same as 4.2. Auto phone dialer that works on regular and PC Pursuit, the works. I understand that Stu's version 3.9 works with the Geneve 9640. I just sold my 9640 to a needy customer, so I haven't tried it. But, the source of this info. is very reliable. I'm keeping both versions in the library. MXT 3.9 or 4.3 \$2.00

What do RLE and Omega terminal emulator have in common? They were both written by Travis Watford. What is OMEGA? It's a very nice Terminal Emulator with a bonus. This program is loaded with all the features. It has changable baud rate, screen and text color changes, and Xmodem pgm. transfers. So what, you say. I got that now. Yes you do. But, can you view an RLE picture with it? With OMEGA you can. My BBS uses a feature incorporated into TE II. The ability to transmit sound and graphics. TE II is all but dead now. Everyone uses Xmodem. But, thanks to Travis, we can again view graphic pictures while on line. All the sysop has to do is upload the RLE's via ASCII mode. The picture can now be viewed by the caller. It's a great way to check out RLE's before downloading them. I think OMEGA is a great piece of work. Try it for yourself. OMEGA \$2.00

As long as we're on the sibject of RLE, have you heard of REVERSE RLE? This is a real nice addition to Travis Watford's RLE program. This program was written by a guy from New York named Stephen J. Tuorto. Here is what it does. It will take any RLE picture and reverse the foreground and background. This is a great improvement to some RLE pictures. The dark background now becomes light and the foreground becomes dark. I like it because it eliminates the dark background with all those lines

through it. REVERSE RLE also includes a program that will go through a disk looking for GRAPHX pictures. When it finds one it will display it. Hit the key again and it will find and display the next one. You've given us a really nice pgm., Stephen. Thanks. REVERSE RLE \$2.00

Marty Knoll has been hard at work. His CATLIB program is now at version 1.5. Believe me it's a winner. Marty has made it a program image file. That means it will load faster and take up less room on the disk. It also has an Xbasic loader. CATLIB now offers a Global String Search for disks and filenames. Another new feature is the ability to assign a replacement name to disks that already exists in database. 2 or more small data files can now be merged. Also, Marty has given us the choice of 6 or 8 lines/incn when printing out. I still think this is one of the best library cataloging programs around. Check it out. CATLIB 1.5 \$2.00

I've received a program without an author's name on it. Stephen Shaw from England was nice enough to type in a D/V 80 file. There is no documentation for this program. Mr. Shaw was nice enough to include some information as to what he figured out about it. This is a graphic drawing program written entirely in French. There are some demos included so it's not totally impossible to figure out. If you know some French you should be on easy street. My limited French will only get me a slap in the face. Or a golly good time depending who you say it to. The demos I ran were pretty sharp. Someone put a lot of hard work into this. Too bad they didn't leave their name. Try to check this one out. I think it could prove to be very interesting. Fun too. FRENCH PAK \$2.00

Here's a real nice program. And it was written just for you Myarc XBII owners. The program is called PCB/LABELS. It's from PCB Software and was written by Phil Bridgeford. PCB/LABELS is not your normal every day labelmaker. It has a few features others lack. One real nice feature is the ability to catalog floppy or RAM disks. How about individual line darknesses? Now you can accent certain lines. You want auto centering? You got it. Labels can be up to 23 lines long. This means you can print out labels for your cassettes. Not only that. PCB/LABELS lets you put 37 characters on a line. How many of you use label paper with 3 or 4 labels across it? Do you have a program that will print across all 3 or 4? Now you do. Yep, PCB/LABELS lets you adjust the horizontal tab settings. Now add to all that the ability to make 999 copies and you have a total package. What would you be willing to pay for all that? How 'bout if we throw in a save feature? Yes, that's right, a save feature. Now when your label is looking just the way you want it, you can save it for future use. Come check it out in the library. Just remember, PCB/LABELS is fairware and Phil would appreciate any donations. We got 'em. Come and get 'em. PCB/LABELS 1 SS/SD disk \$2.00

The 9640 SUPPORT LIBRARY

The library is getting off to a very slow start. Not because we don't have programs. By all means, we have a lot. However, I am still waiting on written permission from Myarc and TI to add their copyrighted material to the library. Everything sounded fine on the phone. I sent Myarc and TI an agreement to sign. This way we would be covered by any legalities. TI sent me a note. In it I was told to go through their Legal Dept. This I will do. Myarc still hasn't responded. Beings it's so close to their Oct. deadline, they may not. At last chat, Lou was planning on a complete mailing of programs to all registered owners. If he does this, there will be no need to put his stuff in the library. No need to worry

though. As stated last month, this library will contain anything related to the 9640. We now have not 1 but 2 working terminal emulator programs.

FASTERM by Paul Charlton was the first to be re-written. It still has a few bugs in it. But, for the most part, it does what it should. It will get you on line, let you transfer programs, and use the capture buffer. There seems to be a bug when trying to print spool. The program comes with limited docs. These docs. explain the new key strokes required w/o the function key. The clock program is really nice. It used to be a timer. Very nice for keeping track of your on-line time. Now, a working clock is displayed. It displays the time and clicks off the minutes of your access time. HINT: Always set the 9640's clock. It has been found that some programs will not run if the clock has not been set. One more thing. FASTERM has the ability to switch from 40 to 80 column mode. You can find FASTERM in the 9640 SUPPORT LIBRARY for only \$2.00 Fairware!

Want to see some of the great graphics the 9640 can do? Check out the 9640 DEMO disk. We have lines and boxes and shapes and colors of all kinds on this disk. For those that have an 80 col. RGB monitor, watch a thousand boxes come flying at you in all 256 colors. There are 16 to 18 different demos on this disk. Some work out of Myarc's basic some out of E/A. They're great to watch and even better to learn programming from. The 9640 DEMO disk is now in the 9640 Support Library for only \$4.00. PD

MASSTRANSFER 3.9 by Stu Olson has been found to work quite well with the Geneve. As stated earlier, I am putting it in the library. But now, thanks to Barb Wiederhold and Bill Erndt, we have version 3.9 in 80 col. That's right, 80 columns. This program has all the features of the normal version 3.9. Its just in 80 columns. 1 little change is that it works out of E/A option 3. I have only 1 complaint and have found only 1 bug which doesn't seem to hurt anything. The screen color is white on black. I've grown to like white on dark blue. But that can be changed. The small bug is in the transfer section. Sectors count from 1 to 39. Then they drop back to 10 and count to 39 again. I also found that it counts 31, 32 then 31 and 32 again. BUT, this in no way effects the transfer. I got a good transfer every time. I've taken the original 3.9 disk and've removed MASS and MAST. I've added the new DF 80 MASS. So, you get docs and all. Just like MXT 3.9. You can find MASS80 in the library. \$2.00 Fairware

PRBASE by William Warren has been modified to run on the Geneve. The entire disk with docs. is in the library now. I also understand it will work on your 4A. I was told that you loose a few sectors with the new version. I guess the Geneve didn't like the disk format of the original version. So, now the disk is formatted normally. We loose a few sectors for the bit map stuff but get a great program for our 9640's. This is still a fairware program. Don't forget your donation. PRBASE/GEN \$2.00

DM1000 by the Ottawa TI User Group works with Geneve. Versions 3.6, 3.7 and 8 are all in the new 9640 Support Library. This is by far one of the best disk managers around. Check this disk out and see which one suits your needs. DM1000 is fairware. Buy it for only \$2.00

MISC/GEN is a collection of much needed routines for the 9640. On it I have included a SET program that will kill the color burst signal. This makes using the 9640 on a B&W or low res. color tv much much easier to see. With the color burst turned off, there is no bleed over of colors. This is especially useful with the 80 col. word processor. The disk also contains some clock programs. These can be used to set Geneve's clock.

They are by Peter Hoddie. One even displays the words to a Pink Floyd song with mirror image running across the screen. There's a nicely done article on making a cable for your new RGB Analog monitor. I've also included a file for loading MYWORD from the GPL loader and a neat version of TI's DMIII. DMIII looks just like DMII. It works quite well with the 9640. 3 differences I've found are: 1) It has single stroke commands. 2) Default is double sided and 3) Double density when initializing. I think you'll find this disk of great value to you and your new Geneve. Look and ask for MISC/Gen at the library. \$4.00 Well, that about does it for me. Gee, Oct. 12th and I'm done. Some- thing must be wrong. Is there a Doctor in the house??? I'd like to thank my wife and family for putting up with me while I went into seclusion this month. Hope everyone had a great Holloween. Speaking of that. Does anyone know why witches can't have babies? This being a family newsletter I can't tell you. See you all at our GREAT FAIRE on Sat. Nov. 7th. Bring lots of money. Rob a bank if you have to. I found out the Brinks truck stops at 4th and Devon every day at 2:15. The guard Barney only carries 1 bullet. Hmmm, 1 meg. RAM disk here I come. Don't forget the FAIRWARE LIBRARY PULL OUT. Add it and the 9640 SUPPORT LIBRARY list to your REGULAR LIBRARY catalog. Till next time. Keep on TIing..... Bob

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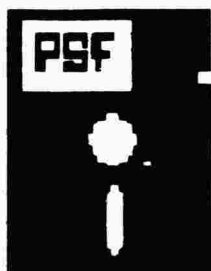


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software reviews PAUL PARBER

This month I'm going to concentrate on reviewing software that will be making an appearance at the Faire in November. Thanks to some of the vendors who were kind enough to send me some of their choicest offerings this will be a full column.

TEXAMENTS (53 Center St., Patchogue New York 11772) the folks who brought the II world CSGD has several new offerings for sale at the Faire. First, we have CSGD Users Disks 5 and 6. Disk 5 (actually 2 SSSD disks) has 18 fonts (/CH) and 54 graphics (/GR) plus other items to use with CSGD disks. User Disk 6 has another 50 graphics and again more than a dozen other fonts to whet your appetite. the suggested list price for these disks wasn't given to me but, based on the price of User Disks 2, 3, and 4 I would expect them to be about \$10.95 each. I tried out both of these disks using my copy of CSGD III which will also be available for your purchase at the Faire. This addition to the CSGD family has been out for a while but perhaps may need a review for some of you who aren't familiar with the set of disks. This 3 disk set now will let you create custom designed letterheads, stationary, and signs with either the 25 fonts and 40 graphics in the set or one of the many User Disks available. Also remember that if you can get a "transfer" ribbon for your printer then the sign option will let you create your own t-shirt iron-ons with only your imagination (and the laws of the state of Illinois) as your limit. The suggested list price for CSGD III is \$17.95.

I like to remind you every now and again, by the way, that if some of the prices for the software being offered by the vendors of II programs seem high to you try comparing what you're getting for your money against what you would pay for the same type of software for some of the "bigger" machines. I think you will find that you'll have to move the decimal point one over to the right, and that II software is a good deal. But I'm not finished with Texaments yet for there are two more programs to tell you about, one that I've tried and one I merely have read about. The first is a pretty neat little program called the "CSGD Cataloger." Like the disk dump option that is available on the FONTWRITER II program you can print out a copy of your CSGD fonts and graphics (it is quite a bit faster on the printout than FONTWRITER II is) so you'll have a record of what they all look like. But that is not the total capability of the CSGD Cataloger since it is a true catalog program. It will catalog your II Artist and CSGD disks and keep track of all of your fonts and graphics. Like most catalog programs you feed in all of your disks and a record is built up. When you are finished the files are sorted (rather quickly) and a sorted file can be printed out, either to printer or to disk. The only complaint I have is that the file you send to disk cannot be updated so if you acquire (or create) more fonts and graphics and want a complete catalog you'll have to run everything through again. Other than this minor quibble (Has anyone ever seen a major quibble?) CSGD Cataloger is an excellent program to add to you collection.

Now, on to the program I haven't tried "TURBO-PASC 99." I am not a Pascal programmer having enough of a problem with Basic and C (which I'm learning) but there are many of you out there (Right Frogman?) who will appreciate what this can do. The first advantage that the turbo Pascal package offers is that it works off of the Editor/Assembler cartridge, with 32K memory and a disk drive. I didn't mention a P-Card did I? IF I am reading the package properly you don't need the P-Card to do Pascal programming with this new package. It features a full implementaion of Pascal with the editor and compiler residing in memory during a programming session. Keywords are automatically detected and converted to all capitals, and the compiler will generate machine code at abut 80 lines per second. In addition to this the package comes with Windows 99, a window management program. Allowing you to use existing Pascal programs or write your own, the suggested list price is \$79.95.

GREAT LAKES SOFTWARE (804 East Grand River Avenue, Howell MI 48843) has continued on from their successful drawing program (JOYPAIN) with a very nice followup called, "CERTIFICATE MAKER." One of the things that I like about CERTIFICATE MAKER, by the way, is that it is compatible with Great Lakes' JOYPAL program and, through that, with II ARTIST and most of the other graphics packages. CERTIFICATE MAKER does just what its name implies; it lets you make certificates, diplomas, or posters as you need them. Ever regreted never having gotten that PhD from the University of Mongolia, or make up some rather nice certificates of award for the local Cub Scout Pack, well now you can. In its' package (the program itself comes on a "flippy" diskette) you receive a dozen sheets of parchment paper and two sheets of stick-on gold seals, plus a very nice instruction manual. The instructions are pretty straight forward and he program will load with XB, Editor/Assembler, or MiniMem. Once into the program a menu will appear allowing you to select the font to use in creating your certificate. Again, picking nits where I can, it would be nice to be able to change fonts "halfway" through the certificate so as to give you one font for the heading and another for the body of the certificate. Perhaps Ernest Chandler, the author of CERTIFICATE MAKER, could consider this in a future revision? Anyhow, after selecting a font you are brought to the border screen ad can choose from twelve different borders (13 if you count no border as a border) and then onto the graphic selection. This menu gives you 24 graphics to choose from, two of which can be used to help locate where you want to place your gold seals.

No certificate (or diploma) is complete without a signiture to make it look official and CERTIFICATE MAKER lets you choose the one you want. The choice of a blank line will let you write in your own or have someone else (like a contest judge) sign it or, for a touch of class(?) take Lee Iacocca's or President Reagan. After the signiture is chosen the text section of the program comes into play allowing you to tell everyone what this certficate is all about and what wonderful event it is to remember. Once you've done that then you merely specify the printer and in about a minute your certificate is complete. One little note here, the program will save on the disk the last certficate you worked on so that you can come back and modify it or print it again. This is nice but I'd rather have the option to save and recall from disk as an initial choice in the event that I want to create and file a whole bunch of certificates for future use. If you are an owner of JOYPAL you can modify the graphics that the program uses by loading (and then altering) two files that are on the program disk. This is handy and I am sure that if you use JOYPAL along with some of your II ARTIST or CSGD or GRAPHX files you can produce some rather interesting graphics to include with your work. At a price

of \$19.95 from Great Lakes Software you should stop by their table at the Faire (besides you save the \$1.00 shipping by buying at the Faire).

RYTE DATA (210 Mountain Street, Haliburton Ontario K0M 1S0 Canada) has developed a version of DOS similar to that of MS-DOS for an IBM. Command DOS is set up to be loaded into a RAM memory device such as a SUPERCART, MAXIMEM, GRAMKRAKER, SUPERSPACE, or equal. With COMMAND DOS loaded you will have a variety of commands at your finger tips including the ability to call up and execute a batch file. For those of you not familiar with batch files let me explain that these are text (D/V 80) files that can execute a series of commands or instructions. As an example, on the computer I use at work I have an AUTOEXEC.BAT file (just like LOAD in XB) that boots up DOS, sets my clock card and my print spooler, and loads a RAM resident program into memory whenever I power up. Other options that you have through COMMAND DOS are filecopy (either to another drive or as another name to the same drive), directory, erasing unneeded files, load and run either a D/F 80 (E/A Option 3) or Program Image (E/A Option 5), type a file to the screen or print it to a printer, change file names and file (read only) protection and, if you have the Mechatronics 80 Column Card in your system, switch to 80 Column mode. This is quite an array of abilities to have at your finger tips, and all for \$29.95. If there is sufficient demand for it Ryte Data plans to produce a cartridge version of COMMAND DOS for those of you without the RAM memory devices I've listed above. Stop by their table and check out COMMAND DOS as well as some of RYTE DATA's other offerings such as the Basic Compiler and the 80 Track EPROM Set for your II Disk Controller. This later item is interesting since for \$45.00 US and a little dexterity with a soldering iron you can double the capacity of your drives by altering the II Disk Controller Card. That's a lot cheaper than buying an entire new controller card.

ASGARD SOFTWARE (P.O. Box 10306, Rockville, MD 20850) has rewritten RECIPE WRITER as Version 2.0. I haven't really tried version 1 of RECIPE WRITER so I can't tell you about any differences between the two versions except for one. Version 1 was written in FORTH and Version 2.0 is in compiled C99. Consequently, Version 2.0 runs a bit faster than the older version. What RECIPE WRITER is is a data base for the cook (chef?) in the family to store recipes along with some appropriate keywords. These keywords, depending upon how you select them, can be used to locate a recipe you want to prepare, or to find some dishes to accompany your meals' entree. Due to the length required for each recipe (about 2 sectors each) you can fit 126 on each SSSD disk. The documentation (which is very clear on how the program is to run) suggests that you have separate disks for areas such as main dishes, side dishes, soups, etc. and I am sure that you can come up with your own categories. The normal database functions exist so you can enter information, modify an existing file, delete a file, and either view (on the screen) or print a recipe of your choosing. A handy search function (new with Version 2.0) allows you to search te keywords and display all of the recipes that have chocolate (as an example) in the key word file. In this way you can prepare a meal for that chocoholic in your family. A directory feature will let you scan the titles of all of the recipes you have stored on the data disk although, since this is operating in the file structure of RECIPE WRITER, the list will be in the order that the recipes have been entered rather than in alphabetical order. Another nice little option with the program is the ability to print out a master list of all of the recipes you have on the data disk. This could be quite handy if you start to compile great lists of recipes that you need to keep track of. In addition,

there is a Convert Recipe function which will take any recipe you have on file and (after you input the appropriate multiplier) convert it up or down in size for the amount of people you'll be cooking for. All in all, if you have a lot of recipes and want a nice little database to help you work with them then RECIPE WRITER may be just what you're looking for to help manage you kitchen.

This is the end of the software reviews for this month and I just want to leave you with some thoughts. (1)If you can try to get to the FAIRE and check out the programs I've described in this article. Don't forget to also look at all of the other great programs available for the TI-99 from the many vendors exhibiting at the FAIRE. (2)If you can't get to the FAIRE but I've whetted your appetite for some of software here then contact your local distributor or the manufacturer directly (the addresses are above in the article) and buy the program. Only by supporting the people who write and manufacture the fine programs that are available for the TI-99 can the machine stay viable. Check ou the prices of software for some of the "more powerful" systems out there and see what the same program you would pay \$19.95 for a TI would cost you for that other machine. (3)Don't forget to visit the Users Group Library table and buy some good FAIRWARE programs. After you've used them remember to send the author the piddling \$5 or \$10 that they might ask as recompense. Finally, if there are companies or individuals who have software that they would like me to evaluate and report on in this column I would appreciate receiving a copy. Send them to; Paul Farber, 7619 Virginia Court, Willowbrook, IL 60514 or leave me a message on the UG BBS(966-2342) to member #251. So, until next month....

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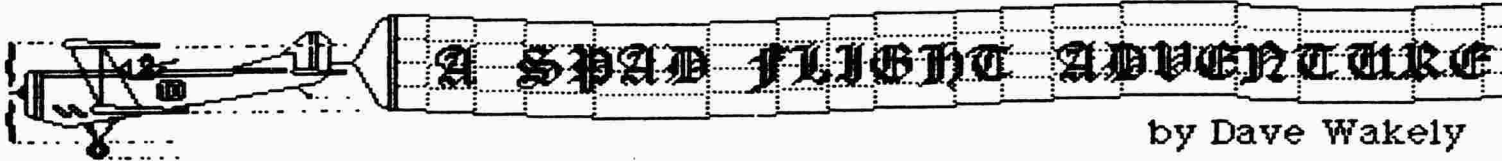
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Because of it's true macros, EZ-Keys is for both the programmer and the user of business programs. There is nothing else like it for the 99/4A, and little as versatile in the rest of the computer world. Because it is unprotected, custom versions are very simple to create for nay application. EZ-Keys requires 32K, Extended BASIC, one disk drive and a TI-99/4A, or a Myarc Geneve and one disk drive. It includes a substantial manual and tutorial.

Suggested Retail
\$14.95

Available form all Asgard Software dealers and distributors or directly from Asgard Software (please add \$.75 shipping and handling). Write for information or send orders to:

Asgard Software, P.O. Box 10306, Rockville, MD 20850



Spadventure #2: The Case of the Walking Willow

By now most Spad owners have probably taken off and fought the good fight in the skies. For many, as soon as the package was opened, you chased the "observation planes" and tried to shoot them down, or, if you have the Mark 2 version, taken on the Red Baron, with possibly disastrous results. It is after some of this, however, that you may find yourself tiring of the "game" aspects of Spad XIII.

There will probably come a time when some combat techniques will find their way into this series, but it's real purpose is to explore the limits of the simulation, to find the undocumented and unknown, and in general to increase your enjoyment of this program. Last time, we took a long initial flight to see some of what there is to see from the air, and to demonstrate some very basic techniques. This time we are going to stick closer to home while learning other basic maneuvers. As you may have figured out, this series is not meant to be read away from the computer. The best way to use it is in conjunction with the program itself. By booting up Spad XIII and keeping this page next to the keyboard, you will be able to follow along as we take each flight.

Those of you with the Mark 2 version will have an easier time of this since there is a way to "pause" during a flight. If you press the "M" key all action will stop and a menu of locations will appear at the top of the screen. This is an added feature of Mark 2 which allows you to travel to different places instantly. You can also use it when the phone rings or to stop to catch up with the instructions here. When you pause with this key, however, don't play around with number keys 1-4 on the menu, since they no longer are "view" keys, but will now move you to a different place on the map, which you don't want to do, because you cannot return to the same place you were when you pressed the key unless you were at one of the designated spots. To resume the flight, press "5", the menu will disappear, and the action will pick up where you left off.

Thanks to some help from Not-Polyoptics, I now have a copy of Version 1 of Spad XIII. This has let me discover that some of the directions I gave last month were incorrect, as you probably already know. I assume that most readers of this column have Version 1, but to get the most from the series, and the program, you will want to upgrade to Mark 2. For example, I hope some of you aren't still up there circling around trying to find the "lines" on the ground I mentioned last time. There are no perspective lines in Version 1, but they definitely add an important dimension to Mark 2. Also, the plane itself is "smaller" in Mark 2. In both versions the instrument view shows the wings of the plane on the screen. In Version 1 the top wing is fairly large and near the top of the screen. By contrast, in Mark 2 the upper wing is smaller and lower

on the screen, giving more viewing area. In general, Mark 2 is also significantly faster than Version 1, especially when it comes to updating the graphics. Version 1's scenery, and even the sound, tend to be "jerky", but in Mark 2 things move more "smoothly", adding to the overall effect. I also know more about the control differences I was only guessing at last time. In Version 1, when the appropriate key is pressed to move the stick, it recenters when you let up, but the plane remains "banked" until you level off by pressing the opposite key. In Mark 2 the key recenters when you let up, and the plane also recenters, automatically. This makes more intuitive, if not aerodynamic, sense. If the stick has been returned to center, the ailerons are level, and the plane should begin straightening out. In the future, all Spadventures will be run on both versions, and important differences will be noted here. Meanwhile, on to this month's spadventure.

Start up this flight by going through the pre-flight check-out outlined in the last installment. Strangely enough, it's another beautiful day out there, and it's also a good time to explore and learn. On our last take-off I asked you to throttle up in increments by repeatedly pressing the "8" key until the top RPM setting was reached. But the keyboard template clearly reveals that by pressing "9" the throttle will be immediately put on full, so why not use that? First, it is probably not good for the engine, especially from a cold start. Those early Spring mornings in France can cause condensation to form inside the engine, and it will take some time for engine heat to dissipate it. Second, it was necessary to show you the relationship between engine RPM and speed. This morning, however, the crew has had your Spad out on the tarmac for some time, warming up, and if you want to go to full throttle, use the "9" key.

As usual, when speed \rightarrow 100 MPH, pull back on the stick until the nose rises (or the scenery "drops"). In Mark 2 you will hear a beep which sounds at take-off speed. Watch the altitude gauge. This is a steep climb, and the indicator may "jump" right to 100 feet. When it does, take off two clicks of RPM by pressing "7" twice. This is a slower climb, and the alt. gauge will show 150 feet, then 200. When it does, drop two more clicks. You are now at 800 RPM, which you will recall puts you in level flight. This is one of the significant numbers you want to remember.

As you look around, you will see the field receding in the distance behind you. Something else you may or may not see is one of the German observation planes. These planes tend to hang around in what the map calls the "Combat Area". For the most part, if you don't bother them, they won't bother you, but there are some important exceptions to this. Recall that the manual notes that these planes have guns which can fire in any direction. On their random circles, if an observation plane comes fairly close to you it will fire at you, and can destroy your aircraft, which will considerably shorten this flight. This is a random occurrence, but one you should be aware of. To minimize this possibility, we are going to stay on our present heading until the home airfield completely disappears from sight. Look back with the "4" key. Is the field gone yet?

Now look out the front with an unobstructed view ("U" key). What else can you see out there? Besides the horizon line, clouds (in Version 1 there is a solid white line of "distant clouds" above the horizon line, in Mark 2 there is a line of dots which more closely resemble

clouds above the horizon), the sun, and your shadow, what else is there? Well, for one thing, those small dots on the ground in front of you are trees. In the Microsoft Flight simulator, there are no trees, only green patches. From this height you can see them reasonably well, so watch them slide by under you, observing them off your left or right wing, and then behind you. They will appear to arrive in equal intervals. Very tidy, these French people, they even have all their trees lined up.

As one tree gets fairly close, another will pop into view. Pick out one of the distant ones and then let's head down for a closer look. Use left or right aileron to get one centered on the screen while it is still some distance away. Now put on full instrument view ("1" key) and use three or four down clicks of power to reduce altitude. Push the stick forward to get the tree lined up in your crosshairs, then, watching your speed and altitude (keep that nose up), land some good distance in front of a tree, then press the "0" key to kill power, and you will roll to a stop.

Okay, so it didn't end up dead center, the tree is slightly to the left or right of center. No matter. Let's get rolling again by putting on some power. Use the "8" key to step up five (5) clicks, to 500 RPM. Your airspeed will still read "0"! Not enough torque to move the mass of the plane, I guess. Add one more click (600 RPM) and you will begin rolling. Eventually, the air speed indicator should tell you that you are moving at a steady 30 MPH. Now to zero in on that tree. Use left or right aileron to move the tree back to the center of the screen. Go ahead, I'm waiting.

Yes, the horizon line "moves", indicating a bank, but the scenery doesn't move, and the tree will stay to the left or right of center. Time to kill the engine ("0") and think this one out. What could be wrong? Let's see, when you move the stick left, the right ailerons (yes, there are two, this a biplane, remember?) go up, and the left ailerons go down, producing a differential effect on the wings, and the plane turns, doesn't it? No, in this case it doesn't. It looks at this point like whatever direction we are pointing in when we land is the direction we are stuck with, and we are never going to nose up to that tree at this rate. Hmm. Perhaps it is a matter of degree. What if you press the "A" or "F" key for hard left or right bank? I wouldn't do that if I were you. At 30 MPH you can probably get away with it, although the plane still won't turn, but at higher speeds what happens is that your left or right wing will slam into the ground, producing the "crash" screen.

Still, you should be close enough to the tree to get a good look at it as it goes by. You should see it grow in definition as it gets closer, then off the left or right wing, and then behind you. What exactly is it, an elm, an oak? Hard to tell with no leaves on it. Maybe it's a telephone pole, and that's why they are all lined up like that. They did have telephone poles in 1917, didn't they?

All right, forget it. There are other trees. Take off again using the usual procedure, again leveling off at 200 feet. This time, get a tree in the dead center of the crosshairs all the way down to the ground. It may take several tries, but it can be done. When you have it, kill power again. Now when you power up you are going to roll right up to that thing. Get back to 600 RPM and you will be lazily rolling at 30 MPH. It is going to take a while to get to the tree at this rate, so give it one more click to 700 and the speed indicator will stop at 90 MPH. You don't want to move any faster than this while on the ground, because like it or

not, you will take off! Even without pulling back on the stick to increase the "angle of attack", the speed of the air on the wings will cause sufficient lift to take the Spad airborne. Perhaps you could fight this tendency by pushing forward on the stick, but why bother? So 700 RPM = 90 MPH when on the ground. At this rate, the tree is going to whiz past before you know it, so back off a click to 600 and speed will decrease to about 85.

Now wait a minute here, doesn't 600 RPM = 30 MPH like earlier? In a word, no. Once you are rolling there is much less inertia to overcome. Similarly, at 500 RPM, speed = 80; at 400 RPM, speed = about 60; and at 300 speed will finally drop back to 0, but all of the above is true only if you are already rolling. Find a comfortable rolling speed as you approach your dead center tree and watch what happens. During this, put on and take off the instrument view as needed. Since you landed pointing straight at the tree, and you can't possibly turn, you should come right up to it, yes?

Uh, wait another minute here. The tree just moved! That thing hasn't got roots, it's got legs! It's sliding off to the left or right again, and we're going to miss it again. Maybe those are fake trees with German spies behind them who don't want to get run over. I seem to recall something like this in Hamlet. Very strange. Perhaps this is due to some inaccurate ground level perspective mapping. Or something. Anyway, there it goes, off to the side of the plane.

All right, on to the point of this flight. Take off one more time. Same procedure. Find a tree. Line it up. Land in front. You need the landing practice anyway. Now, as you start rolling and the tree starts sliding away, look for the < and > rudder keys. Try one. Aha, movement! The tree is coming back to center. It may try to get away, but we won't let it. With practice, you will be able to get the tree perfectly centered on the crosshairs, but if you are moving too fast you may overshoot it, so go slow. Now, get the tree dead center, a few feet in front of the plane, and stop ("0" key) to ponder. If you like, feel free to hop out of your Spad and stretch your legs a bit. Smoke 'em if you've got 'em. It's not good for your health, but in this war who knows how long you'll be around?

It's kind of ironic, when you think about it, that one of the first things we learn about trees is that they are "lovely" (as in, "I think that I shall never see, A poem lovely as a tree", etc.). That was written by Joyce Kilmer, who, contrary to expectations, was a soldier who died in the trenches of this same WWI. One thing's for sure, though, this must not have been the tree he was looking at. No spies, no telephone wires, just four or five bare branches on a skinny trunk, but it's definitely a tree. They didn't have defollients in 1917, did they? Maybe some of the deadly mustard gas they used in the war drifted here and did a number on the leaves.

Well, time to get on with it. Climb back into the cockpit and power back up to 600 RPM, which from a stop on the ground will yield 30 MPH, and on we go. But, oops, hold on there. The tree is dead ahead and we are pointing right at it and we are soon going to be either eating bark or leaving a pile of toothpicks behind us, and which is it going to be, because here comes that tree. Scotty, beam me up, quick! Drat, I forgot my communicator, too late...

Ah, well! Wasn't THAT strange! Reminds me of an old episode of the Twilight Zone. So, what exactly happened? Hey, fly it and find out, that's the point of all this!

Although the manual states (p.3) not to use the rudder without ailerons, this in fact is the way to taxi on the ground, which is what we have been trying to do. With this technique, you can point the Spad anywhere you want to go. Now that we are up to a good rolling speed, let's try to turn around to head back to the home airfield. Use the left or right rudder until the compass indicates straight South. See, a piece of cake. With this and the ground speed rules above, you should now be able to just about put the Spad on a dime anywhere in the simulator.

While still rolling, power back up to top throttle and take off, once more leveling off at 200 feet. You may be surprised at how far you now are from the home airfield, but keep looking for it, and it will eventually pop up. You should be just about lined up with the North end of the runway when you spot it. If you are slightly off, use aileron and/or rudder to come straight in. When the field goes 3-D, quickly take off four clicks for your approach.

Uh, remember that landing technique from last time? Since you are coming in at a much lower altitude, you will have to modify it a bit. (This is a heck of a time for me to tell you this, isn't it?) This time, keep your crosshairs on the FAR end of the runway all the way or you will land short, and keep powering down. This will produce a much "flatter" approach, and when the altitude indicator says "0", pull up on the stick so you don't nose in too hard. Now, if you still have your wits about you and while you are still rolling, see if you can taxi into the hangar. If you stop moving, the program will reposition you on the runway, facing North. That's still much better than other alternative "landings".

If you want further practice with this scenario, see if you can get close enough to a tree to see some branches with an overhead view. That's REAL close to a tree. Are all the trees in Spad the same? I don't know. Go look. And, if you want to be consistent when landing and still use the steep descent we practiced last time, wait a while after the field goes 3-D and then head down with the crosshairs on the NEAR end of the runway, beginning to pull up at 100 or 50 feet and then landing.

Next time, I'll have some interesting and intriguing comments from the people who produced the Spad XIII. We stayed pretty low on this flight, so before our next you will probably want to get up there and air it out a bit. I'll join you up there next time. Happy flying.

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BASIC ASSEMBLY

Steve Peacock...

THE BASIC ASSEMBLER #12 By Steve Peacock

MUSIC AND OTHER SOUNDS

Creating music with assembly language on the TI-99/4A, is slightly more complicated than when using BASIC. To create a sound a table must be located in VDP RAM. A good place for this table is address >1000. At CPU address >83CC you need to tell the computer where the sound data can be found in the VDP RAM. You then need to set the rightmost bit of byte >83FD to 1. The sound is then activated by placing the value of >01 to address >83CE. Once the sound has started the VDP interrupts must be enabled and disabled with the instructions of LIM1 0 and LIM1 2. These instruction should be put in a frequently used loop.

In creating sounds, there are four generators, three for music, and one for noise. Generators 1,2, and 3 are used to create music and generator 4, is used to create a noise. I will explain how to write a musical note using terms that I have made up to describe the values written into the program. These terms will help explain what you are doing and are not necessarily the correct technical terms. These terms are TOTAL BYTES (TB), GENERATOR #/FREQUENCY (GF), GENERATOR #/VOLUME (GV), and TIME DURATION (TD).

TB==> The total bytes consist of the number of byte that each tone or multi-tone/noise takes to describe it with the exception of the TD byte. A single tone will take 3 bytes, -->TB (not counted) GF (2) and GV (1) and TD (not counted). A two tone cord will take 6 bytes, -->TB (not counted) GF (2) GV (1) GF (2) GV (1) TD (not counted). A noise requires only 2 bytes, TB (not counted) GF (1) GV (1) TD (not counted).

GF==> The four generators are labeled B, A, C, and E. After the generator is specified the frequency is given. This consist of three hex digits, for music and one hex digit for a noise. For example a tone of 220 hertz on generator #1 would be >8C1F. If the same tone is to be produced on generator #2 the code would be >AC1F. Same note, different generator. A noise of -3, would be written >E2.

GV==> Each generator must be given a volume. On the TI computer there are only sixteen volumes to choose from, (I bet you thought there were 31). Zero is the maximum and F is the minimum. Try a program in TI Basic that changes from volume 2 to 3, while doing a 'CALL SOUND', you will not hear a change in the volume. Please note that when GF #1 is used, the GV MUST be for the same generator. When you are through with all sounds, the volume must be turned off. To do this set the volume to the minimum, using the code 'F'.

TD==> The time that a sound will play is written as a two digit hex number. Remember this byte IS NOT counted in the TB at the start of the coding. This time can be any thing from 0 to approximately 4250 miliseconds (>00 to >FF).

A one tone sound would look like this:

TB GF GV TD

....see next page...

||| ||| || (The 00 is a byte of padding)
>0387,>3595,>FF00

A two tone sound would look like this:

TB GF GV GF GUID
||| ||| | | ||||
>0687,>3595,>A72A,>B5FF
GENERATOR #/FREQUENCY (GF)

#1->B #2->A #3->C #4->E

FREQUENCY TABLE:

NOTE	DATA	FREQ	NOTE	DATA	FREQ	NOTE	DATA	FREQ	NOTE	DATA	FREQ	NOTE	DATA	FREQ
A1	93F	110	A2	C1F	220	A3	EOF	440	A4	F07	880	A5	004	1760
A#1	03C	117	A#2	01E	233	A#3	00F	466	A#4	807	932	A#5	C03	1865
B1	A38	123	B2	S1C	247	B3	20E	494	B4	107	988	B5	903	1976
C1	735	131	C2	C1A	262	C3	60D	523	C4	B06	1047	C5	503	2093
C#1	732	139	C#2	419	277	C#3	A0C	554	C#4	506	1109	C#5	203	2217
D1	A2F	147	D2	D17	294	D3	EOB	587	D4	F05	1175	D5	003	2349
D#1	F2C	156	D#2	816	311	D#3	40B	622	D#4	A05	1245	D#5	D02	2489
E1	72A	165	E2	315	330	E3	AOA	659	E4	505	1319	E5	A02	2637
F1	128	175	F2	014	349	F3	00A	698	F4	005	1397	F5	802	2794
F#1	D25	185	F#2	E12	370	F#3	709	740	F#4	C04	1480	F#5	602	2960
G1	B23	196	G2	D11	392	G3	F08	784	G4	704	1568	G5	402	3136
G#1	B21	208	G#2	D10	415	G#3	708	831	G#4	304	1661	G#5	202	3322

GENERATOR #/VOLUME (GV)

Number

#1->9 #2->B #3->D #4->F

Volume

0 (Loudest) to F (Quietest)

TIME DURATION (TD)

M.SEC.	CODE	M.SEC.	CODE	M.SEC.	CODE	M.SEC.	CODE
0	00	250	0F	500	1E	750	2D
1000	3C	1250	4B	1500	5A	1750	69
2000	78	2250	87	2500	96	2750	A5
3000	B4	3250	C3	3500	D2	3750	E1
4000	E0	4250	FF				

The 8 noises are coded like this:

-1	-2	-3	-4	-5	-6	-7	-8
0	1	2	3	4	5	6	7

A -3 noise, with a volume of 5, for 1000 miliseconds would look like this:

TBGF GUID
|||| ||||
>02E2,>F53C

A three note cord with a noise of -5:

>0B87,>3590,>A72A,>BOCB,>23D0,>E4F0,>FF00

```

0B==>TOTAL BYTES (11)
8735=>GENERATOR/FREQUENCY #1, 90=>GENERATOR/VOLUME #1
A72A=>GENERATOR/FREQUENCY #2, B0=>GENERATOR/VOLUME #2
CB23=>GENERATOR/FREQUENCY #3, D0=>GENERATOR/VOLUME #3
E4==>GENERATOR/FREQUENCY #4, F0=>GENERATOR/VOLUME #4
FF==>TIME DURATION
00==>PADDING

```

Padding will be added only if your coding needs it to make it have four digits at the end. If your music has multiple notes it should be strung together.

The above tables give you some of the frequencies and times that are available to you in creating music. If you need some frequencies, or times, that I have not listed, there is a program in our library that will calculate them for you. I have called the program AS/MUS/CAL, for ASsembly MUSic CALculator.

#####

```

100 REM PROGRAM BA12B==>Basic Assembler #12 BASIC Version
110 REM MUSIC
120 REM (C)1986 S. PEACOCK
130 REM YOU MAY WANT A 'CALL CLEAR' HERE
140 CALL SCREEN(4)
150 DEF1$="AA55AA55AA55AA55"
160 DEF2$="3C3C3C3C3C3C3C3C"
170 DEF3$="00000000183C1810"
180 DEF4$="387CFEFEFE7C3810"
190 P1$="aaaaaaaa"
200 P2$="h"
210 P3$="p"
220 CALL MAGNIFY(2)
230 CALL CHAR(128,DEF4$)
240 CALL CHAR(129,DEF4$)
250 CALL CHAR(130,DEF4$)
260 CALL CHAR(131,DEF4$)
270 CALL SPRITE(#1,128,8,100,25,-5,-8,#2,129,5,100,50,-8,-3,#3,130,7,100,128,-8,
5,#4,131,16,100,200,-5,3)
280 CALL COLOR(9,16,15)
290 CALL COLOR(10,7,1)
300 CALL COLOR(11,16,1)
310 CALL CHAR(97,DEF1$)
320 DISPLAY AT(17,13):P1$
330 DISPLAY AT(18,13):P1$
340 DISPLAY AT(19,13):P1$
350 DISPLAY AT(20,13):P1$
360 CALL CHAR(104,DEF2$)
370 DISPLAY AT(13,17):P2$
380 DISPLAY AT(14,17):P2$
390 DISPLAY AT(15,17):P2$
400 DISPLAY AT(16,17):P2$
410 CALL CHAR(112,DEF3$)
420 DISPLAY AT(12,17):P3$
430 REM TO SEE HOW SOUND IS DONE ON THE TI THE CODING BELOW IS ALL THAT IS NEEDED.
440 REM THE ABOVE IS SOME GRAPHICS TO DRESS UP MY CELEBRATION OF ONE YEAR OF THE BASIC ASSEMBLER.
450 DIM T(29),F(29)
460 FOR L=1 TO 29
470 READ F(L),T(L)

```

```

480 NEXT L
490 FOR L=1 TO 29
500 CALL SOUND(T(L),F(L),0)
510 NEXT L
520 GOTO 490
530 DATA 262,250,44000,17
540 DATA 262,118,294,250
550 DATA 262,250,349,250
560 DATA 330,500,262,250
570 DATA 44000,17,262,118
580 DATA 294,250,262,250
590 DATA 392,250,349,500
600 DATA 262,250,44000,17
610 DATA 262,118,523,200
620 DATA 440,200,349,200
630 DATA 330,200,294,1000
640 DATA 466,250,44000,17
650 DATA 466,118,440,250
660 DATA 349,250,392,250
670 DATA 349,1000
680 END

```

```

*****
*****
*
```

```
*PROGRAM BA12A==>Basic Assembler #12 Assembly Version
```

```
*MUSIC
```

```
*(C)1986 S. PEACOCK
```

```
*
```

```
*****
```

```

REF VMBW, VSBW, VWTR
DEF START
DEF1 DATA >AA55, >AA55, >AA55, >AA55 *CHAR 97d, 61h
DEF2 DATA >3C3C, >3C3C, >3C3C, >3C3C *CHAR 104d, 68h
DEF3 DATA >0000, >0000, >183C, >1810 *CHAR 112d, 70h
DEF4 DATA >387C, >FEFE, >FE7C, >3810 *SPRITE DEF
ATT DATA >6419, >8007, >6432, >8104 *SPRITE ATTRIBUTES
DATA >6480, >8206, >64CB, >830F
DATA >D000
MOT DATA >FBFB, >0000, >FBFD, >0000 *SPRITE MOTION
DATA >FB05, >0000, >FB03, >0000
P1 TEXT 'aaaaaaaa' *TEXT TO BE
P2 TEXT 'h' *PRINTED
P3 TEXT 'p' *LATER

```

```
*****PUT FOUR SPRITES ON SCREEN
```

```

START LI R5, >0400 *
MOV B R5, @>837A
LI R0, >01E1 *MAGNIFICATION 2
BLWP @VWTR
LI R0, >0400
CON LI R1, DEF4 *WRITE DEFINITION OF SPRITES
LI R2, 8
BLWP @VMBW
AI R0, 8
CI R0, >0418 *FOUR SPRITES TO BE WRITTEN
JLE CON
LI R0, >0300
LI R1, ATT *WRITE ATTRIBUTES OF SPRITES

```



```

LI R2,17
BLWP @VMBW
LI R0,>0780
LI R1,MOT *WRITE MOTION OF SPRITES
LI R2,16
BLWP @VMBW
*****
LI R0,>038C *WRITE COLOR OF CHAR SET #9
LI R1,>FE00 *WHITE ON GRAY
BLWP @VSBW
LI R0,>038D *WRITE COLOR OF CHAR SET #10
LI R1,>6000 *DARK RED ON TRANSPARENT
BLWP @VSBW
LI R0,>038E *WRITE COLOR OF CHAR SET #11
LI R1,>F000 *WHITE ON TRANSPARENT
BLWP @VSBW
*****
LI R0,>0B08 *WRITE CHAR DEF TO CHAR 97d 61h
LI R1,DEF1
LI R2,8
BLWP @VMBW
LI R0,524 *PRINT NINE 'a's
PP1 LI R1,P1 *
LI R2,9 * (THE CAKE)
BLWP @VMBW *
AI R0,32 *
CI R0,620 *PRINT FOUR ROWS OF THE 'a's
JLE PP1
*****
LI R0,>0B40 *WRITE CHAR DEF OF CHAR 104d 68h
LI R1,DEF2
LI R2,8
BLWP @VMBW
LI R0,400 *PRINT ONE 'h'
PP2 LI R1,P2 *
LI R2,1 * (THE CANDLE)
BLWP @VMBW *
AI R0,32 *
CI R0,496 *PRINT A COLUMN OF 4 'h'
JLE PP2
*****
LI R0,>0B80 *WRITE CHAR DEF OF CHAR 112d 70h
LI R1,DEF3
LI R2,8
BLWP @VMBW
LI R0,368 *PRINT ONE 'p'
LI R1,P3 * (THE FLAME)
LI R2,1
BLWP @VMBW
*****
*
*TO SEE HOW SOUND IS DONE ON THE TI THE
*CODING BELOW IS ALL THAT IS NEEDED.
*THE ABOVE IS SOME GRAPHICS TO DRESS UP
*MY CELEBRATION OF ONE YEAR OF THE
*BASIC ASSEMBLER. IF YOU CHOOSE TO NOT
*TYPE IN THE ABOVE DO NOT FORGET TO
*USE THE REF/DEF ITEMS THAT YOU NEED.

```

*

```

SOUND  LI  R0,>1000      *SOUND LIST TO BE WRITTEN TO >0100
        LI  R1,SL        *SOUND LIST FOUND AT LABEL SL
        LI  R2,150       *IT IS 150 BYTES LONG
        BLWP @VMBW
        MOV R0,@>83CC    *LOAD POSITION OF SOUND LIST INTO >83CC
        MOVB @CV,@>83CE *LOAD >01 INTO >83CE, TO START SOUND
        SOCB @CV,@>83FD *SET BIT 7 OF BYTE >83FD
        CLR R7           *CLEAR REG. 7
LP      LIMI 2           *ENABLE VDP INTERRUPTS !NEEDED FOR SOUND
        LIMI 0           *DISABLE VDP INTERRUPTS !AND SPRITES
        CB  R7,@>83CE    *IS >83CE ZERO, IS SOUND LIST FINISHED?
        JNE LP          *IF NOT STAY IN LOOP
        JMP SOUND       *IF IT IS PLAY SONG AGAIN
CV      DATA >0100     *DATA TO PREPARE SOUND GENERATION
SL      DATA >038C,>1A90,>0F03,>8300,>9F01 *
        DATA >038C,>1A90,>0703,>8D17,>900F **
        DATA >038C,>1A90,>0F03,>8014,>900F * *
        DATA >0383,>1590,>1E03,>8C1A,>900F * *
        DATA >0383,>009F,>0103,>8C1A,>9007 * *
        DATA >038D,>1790,>0F03,>8C1A,>900F * *
        DATA >038D,>1190,>0F03,>8014,>901E * *
        DATA >038C,>1A90,>0F03,>8300,>9F01 * *SOUND LIST, 150 BYTES
        DATA >038C,>1A90,>0703,>860D,>9012 * *
        DATA >038E,>0F90,>1203,>8014,>9012 * *
        DATA >0383,>1590,>1203,>8D17,>903C * *
        DATA >0380,>0F90,>0F03,>8300,>9F01 * *
        DATA >0380,>0F90,>0703,>8E0F,>900F * *
        DATA >0380,>1490,>0F03,>8D11,>900F **
        DATA >0380,>1490,>3C03,>9FBF,>DF00 *
        END

```

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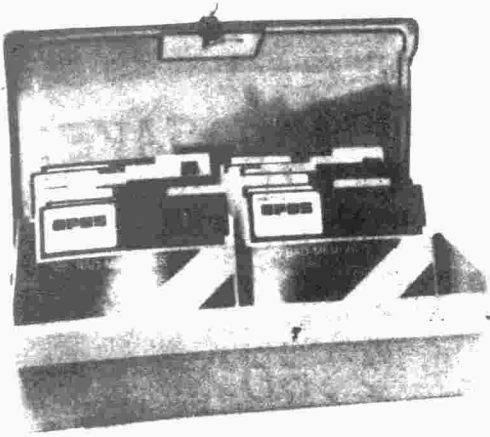
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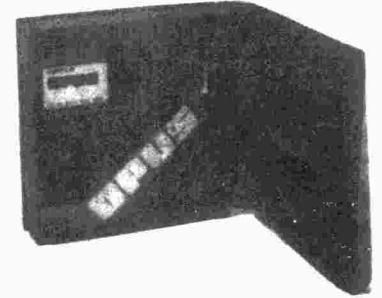
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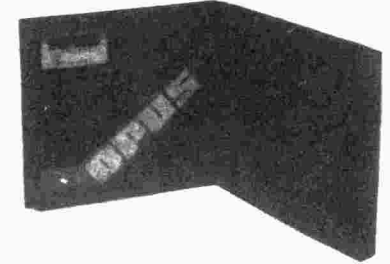
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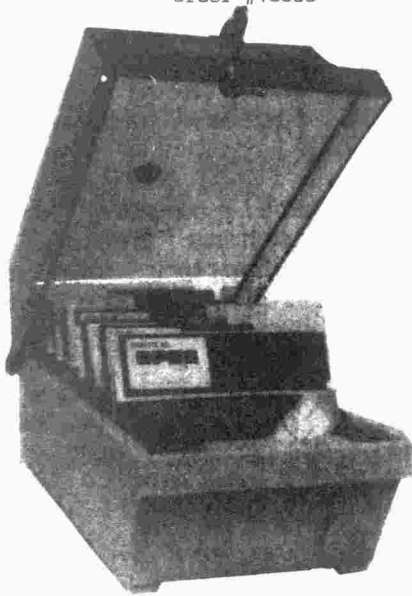
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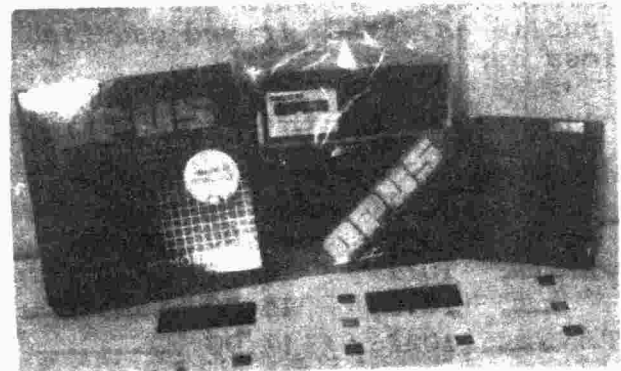
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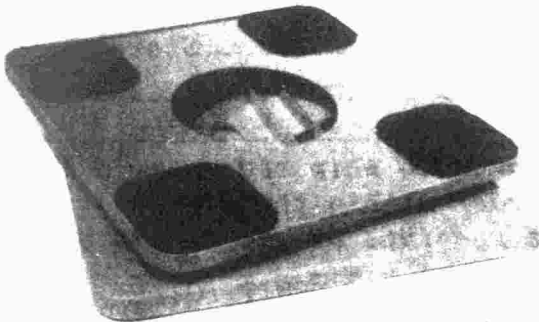
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HIGH RES GRAPHICS AND THE 99/4A

By Anne Dhein



PART
2

The Comparison Chart
Section Two: Getting Down to Details

Let's talk about drawing tools. In these packages the cursor is your "pencil" as well as your "eraser". The pencil can be moved around either by using the keyboard's arrow keys or by using a remote controlled "joystick". Some software requires joystick control. Then the fire button is usually used to turn the drawing tool on or off. To make truly curved lines with just the keyboard is practically impossible - you need the better control that a joystick has. On the other hand, it's harder to draw straight lines with a joystick; the keyboard does a better job there. Luckily, drawing programs can create lines, boxes and circles automatically.

Anywhere a joystick is required, a trackball can be used instead. The phenolic ball offers 360 degree movement for such fine control of the pencil that you can easily write your name in script. (I won't promise how it will look!) However, it is almost impossible to draw a straight line with a trackball. This is where the automatic line function in drawing programs becomes invaluable. If you are using a joystick or trackball be sure the alpha lock is in the UP position.

Cursor Speed Control - In many of the programs the speed of the cursor can be controlled. This is handy because if you are drawing large areas freehand, you can go much faster. When you want to work on painstaking detail then use a slower cursor for more accuracy.

Brush Styles - Instead of leaving a fine line like the single-pixel pencil, a brush applies "paint" for wider or fancier lines. Draw A Bit lets you paint in wide or narrow swatches of color. TI Artist includes angle brushes and brushes that make parallel lines like you would get from painting with a fork. Paint 'N Print, which has 32 brush styles includes circles, squares, and even triangles in a number of sizes.

Automatic Draw Functions - As mentioned earlier, all paint programs listed here will draw lines for you automatically. Select the beginning and end of your line, press a button, and presto - you have a perfectly straight line right where you wanted it. Some programs will also draw circles, ovals, rectangles and rays. A ray is like a line except that you can keep moving the cursor (pencil) around the drawing board, and wherever you choose to press the button, you can have a perfect line between the current cursor position and your original starting point.

Some programs will also draw ellipses and rectangles. For chart purposes, an ellipse includes circles and ovals, and rectangles include squares. Draw A Bit and the Graphics Package draw 90 degree arcs - four arcs make a circle. The various programs handle this function in different manners, but the principal is the same; select the center position and the size, and the figure is drawn automatically.

Filling, Shading, and Adding Depth - In all but two of the programs, closed shapes can be "filled", or "painted", with a specified color or pattern. The Paint 'N Print cartridge limits the filling to a rectangle only. But with the companion disk, any closed shape may be filled with any texture or solid color.

A manual fill requires the cursor to be moved around the shape as it is being filled, in order to get every little part of it. A semi-automatic fill does most of the shape in one pass; the occasional spots missed must be done manually. A fully automatic fill checks to see that every little corner has been filled - even in convex shapes. Sometimes this is called a "smart" fill.

Some programs provide patterns for shading and depth. Super Sketch has one texture pattern. TI Artist has 10 and Joy Paint has 24 from which to choose. Joy Paint also has an airbrush which works like a can of spray paint. It give a misty, sprayed effect in whatever pattern you are using. Because you can control the amount of "paint" that goes on the drawing, it makes an excellent tool for adding shadows and depth. Almost the same effect can be achieved with Paint 'N Print by using one of the larger brush sizes and switching to the texture mode. Bitmac has a feature called "Life" which can be used for getting a shaded effect.

Joy Paint and Paint 'N Print both have routines on their companion disks for creating new texture patterns. Once you have saved these patterns on disk, they can be used over and over.

Reflections - The chief application of this function is to draw symmetrical figures rapidly and easily. The screen is divided into sections and whatever is drawn in one section will be reflected in all the others. In TI Artist this is called the MIRROR function, and the screen is divided into four parts. Other functions such as circle, frame, line, and zoom can be used while the mirror function is in effect. Paint 'N Print calls this function KALEIDESCOPE and gives you a choice of 2 to 8 reflections. Functions such as square, circle or fill may be used but result in only one image.

Picture Manipulation

Move, Copy, Flip, Rotate, Invert, Magnify and Reduce - When you have your picture underway, and more of an idea of what you want, you will appreciate features that let you alter the look of the drawing. Some programs let you copy one part of a picture to another part, move sections of picture around the screen, rotate, invert, or flip them; magnify or reduce parts. Invert means to turn all the "on" pixels off, and all the "off" pixels on - thus swapping black for white and white for black. Flipping a picture gives you a mirror image, either left to right (horizontal) or up side down (vertical) depending on which way you flip.

The only programs that have functions to enlarge or reduce drawings are Bitmac and Joy Paint, which can each double or halve the size of the selected image. For reducing a Joy Paint image, the companion disk, Joy Paint's Pal must be loaded. It can also be used for reducing parts of TI Artist or Graphx pictures. These pictures can then be resaved in the original format or switched to Joy Paint's file structure.

TI Artist drawings can also have parts saved to disk in an enlarged

format by saving the screen when the zoom mode is in effect. This will give you a new picture that is four times the size of the original. For both reducing and enlarging, Joy Paint does the smoothest job.

Text Handling and Special Fonts - The more recent programs all have provisions for text to be used right along with the graphics. The nicest of these are Joy Paint and Bitmac, each with what almost amounts to a mini word processor built right in to the drawing board. With TI Artist, variable sized letters can be easily typed on the screen from the keyboard in 81 different heights and widths, but some of the letters are rather blocky looking. Four of the programs additionally contain special provisions for fancy lettering to be added to the drawings. Paint 'N Print contains a font editor which makes it easy to change the resident lettering. TI Artist provides an alpha numeric load function in the enhancement section of the program. Pre-designed fonts that are stored on the disk may be loaded into the program for an endless variety of lettering. Graphx stores fonts on the clipboard, and again there is an endless variety to choose from among the support disks. The letters to be used are laid out in the clipboard and then transported to the picture where you want them. Joy Paint 99 works much the same way; alphabets are stored in a regular picture file, and the Cut and Paste option is used to add them to your drawing.

Zoom Mode - Four of the programs have the ability to magnify a small part of the picture you are working on so that it temporarily fills the screen. This allows you to work on small details with a high degree of accuracy. Joy Paint calls this mode "fatpixel", Paint 'N Print calls it "magnify". TI Artist and Graphx call it "zoom". Joy Paint also displays a normal sized version of the graphics in the upper right corner of the screen so that you can see what your changes are going to look like as you make them. TI Artist lets you use other drawing functions while in the zoom mode - even to making a zoomed hard copy or saving to disk. While in the zoom mode Graphx provides a marker to show where color boundaries begin and end. If you happen to be using the grey checker board pattern used for marking color boundaries in Graphx, it will still be present in your zoomed in copy.

Paint N Print has a high degree of magnification. Each pixel is shown as a square eight times its original size. Each square is outlined in a fine black line and each block of 64 are outlined in a bold black line. The bold line marks the color boundary for each character block.

When the zoom function is chosen Joy Paint, TI Artist and Graphx all let the user choose which part of the screen will be zoomed by showing a box with which to enclose the desired area. In the Paint 'N Print environment, the place where the cursor is sitting when zoom is chosen becomes the central point of the screen, with the screen then acting as your "window" to a small but highly magnified part of the drawing. All of the drawing is accessible by scrolling it by this point, but the cursor never moves.

Next issue: More about picture storage, color usage, and features that are unique to a particular package.

THE PASCAL ADVANTAGE

MIKE MAKSIMIK

This month, we'll discuss assembly language. Now wait a minute here--the title of this column is 'the pascal advantage'! Be patient, and take the time to learn about the p-system macro assembler and link editor.

In every high-level language, one is limited to statements and commands which only generalize on the more important nuances of the computer, especially sound, speech and graphics on the TI. The solution to this problem of deeper access in the computer brought about assemblers and link editors. An assembler simply hashes the human readable mnemonics of the machine into the hexadecimal representations of the specific instruction. This is a one-to-one correspondence, in which each mnemonic has one equivalent machine instruction. In a high level language, however, you are limited in the way the computer interprets the specific command. In TI BASIC, for example, a PRINT A\$ command would possibly take many instructions at the machine level to execute. This is also true of Pascal in the p-system, since it is also interpreted. TI BASIC is interpreted by the console's GPL interpreter, and Pascal programs are first compiled into p-code (pseudo code) and then the p-code is executed at run time. This is nice, since all machines running the p-interpreter can execute this code. However, all features of a particular machine that are not available on another machine are of course, non useable. There is a way to overcome this problem, and in addition, by the same idea one can 'spice up' a pascal program.

I can clearly demonstrate in two ways. Example one: Suppose computer X was developed and runs the p-system. Computer X also has many interesting features, such as turtle graphics, multicolor graphics, a real-time clock, and a mouse. A really nice program was developed for computer X that makes use of it's mouse, clock card, and graphics capabilities. You were interested as a friend of yours demonstrated the software package. It even excited you more as you found out that the program runs in the p-system version IV. He even offered it to you! Finally, you bring it home. You get out you mechatronics mouse(or whatever mouse you have), and plug it in. You boot up the p-system and run the software. OOPS!! IT DOESN'T WORK!!!! Well, use of a mouse, graphics, and real-time clock are not supported under the p-system. BUT--we can permanently tailor the p-system to accept this and other programs like it. HOW???? Well, that is another part--PART TWO!!

TWO: To get these to work, you read the p-system macro assembler manual. UGH!! It's as bad as the editor/assembler manual. In some ways, it's a copy of it. Who cares, I know 9900 assembly language anyway!! For those of you who are unfamiliar with the 9900 code, I strongly advise you learn it. Even a few small tutorials from THE BASIC ASSEMBLER should help. However, manipulating assembly programs through Pascal is very easy. You may recall that I recently wrote a a set of multicolor mode LIBRARY routines. They allowed you to save the screen, initialize it for multicolor mode, allowed you to plot a color pixel square, and allowed you to toio get a color from a certian location on the screen. In addition, you could have changed the colors on the screen with a single command. I did this entirely through Pascal WITHOUT assembly language, but I now want to take advantage of the speed of the TMS 9900. I can write the routines in assembly language and bind them in the SYSTEM.LIBRARY file, linked to a UNIT. Or I can choose to leave them disk-resident untill I ned them. I can then use the SYSTEM.LINKER to link the

assembly object code to the main routine in a compact, single file. The program is loaded all at once, and you have REAL computing power. Here is an interesting example: I have a FIRST ADE clock card. It gives me real time, and in addition I can use it's analog-to-digital capabilities to drive a mouse or analog joystick. What I wanted to do was correctly date my files. If you wanted to do this normally, you would have to go to the F)iler, and use the D)ate command. you would then be prompted for the date. I didn't want to go through that. With a little patience, I succeeded in finding where the date is stored on disk drive one. In block #2, bytes 21 and 22, the system date is stored. It is read only once upon initialization, so I would need to re-boot to read in that date so all files created or updated would get the new date stamp. The following is a listing of the PASCAL program to do the disk update:

```

Program DATESET(input,output);
var a,b,c,d,e,f,t :integer;
    s:packed array[1..512 of char;

Procedure CLOCK(VAR a,b,c,d,e,f:integer); EXTERNAL;

procedure convert(var t:integer);
begin
    t:=t-6*(t DIV 16);
end;

Procedure BCDtoDEC(VAR a,b,c,d,e,f);
begin
    convert(a);
    convert(b);
    convert(c);
    convert(d);
    convert(e);
    convert(f);
end;

begin (*main program*)
    Clock(a,b,c,d,e,f);
    BCDtoDEC(a,b,c,d,e,f);
    UNITREAD(4,s,512,2);
    if e>15 then
        s[21:=chr(175) else s[21:=chr(174);
        s[22:=chr((e mod 16)+f);
    UNTIWRITE(4,s,512,2);
end.

```

In the procedure declarations above, Clock is defined as an EXTERNAL routine. It can be written in 9900 code, FORTRAN, Cobol, or BASIC. The routine must be compiled/assembled and saved to disk. The link editor provides all necessary variable transfer information, and provides for a smooth return to the main pascal program.

The procedures CONVERT and BCDtoDEC convert a binary-coded-decimal number to word-length integer format. This is necessary only for routines which use this format for expressing numbers (assembly and UCSD FORTRAN). The main routine simply invokes CLOCK, converts the numbers, and gets the necessary information on the current disk in drive 1. The 21st byte of the buffer string variable s after the read contains the current year and 2 bits of the day of the month. The month is stored in byte 22, along with most of the day of

the month. This is all the system needs to store a date and year, 2 bytes. However, the necessary calculations to store the bytes are needed. This is 1987 fixed, but I will allow a setup routine so you can install the current year, or it will just use the current year. Anyway, it updates the buffer with the current time and saves it back to disk.

Now comes the question, how did I get the date and time? Well, I made use of the pascal system stack used by the system to allow procedures in a program to communicate with other, as well as for use by the programmer. In this case, because I used the VAR statement in the CLOCK declaration, the ADDRESSES of the parameters are pushed on the stack. The stack is simply R10, user register 10. In assembly on the p-system, one may use registers R0 to R7. R10 is the stack pointer, and return to the pascal program is through the return address in R11. R12 can be used as well as the other registers, but their values must be restored upon return to the pascal runtime environment. You can allocate memory for this, or you can use a BLWF instruction, or LWPI instruction to define your own workspace. Moving right along, values or addresses are popped of the stack as follows:

```
MOV *R10+,R1
```

To push a value back on the stack, use these:

```
DECT R10
MOV R1,*R10
```

Pascal pushes all the variable addresses on the stack in opposite order of appearance, that is the last variable is on top of the stack. And since these values are ADDRESSES of the variables, I have to treat them as such.

My clock card is located at CRU base 1E03h. The p-code card is at 1F00h. I had to turn off the p-code card in order to access the clock card. Here is the program header and the code which does this:

```
SE .WORD 0
MI .WORD 0;
HR .WORD 0;
DA .WORD 0;
DT .WORD 0;
MO .WORD 0;

HOUR .EQU 5608H
SECOND .EQU 5604H
MINUTE .EQU 5606H
DAY .EQU 560AH
DATE .EQU 560CH
MONTH .EQU 560EH

MOV R12,R5 ;SAVE THE VALUE OF R12 FOR RETURN
LI R12,1F00H ;P-CODE CARD ADDRESS IN CRU FIELDS
SBZ 0 ;TURN IT OFF
LI R12,1E02H ;ADDRESS OF CLOCK CARD
SBO 0 ;TURN IT ON
```

Next is the code to get the addresses off of the stack. I will need these values so I can assign values from the clock to the variables in pascal.

```

MOV #R10+,@MO
MOV #R10+,@DT
MOV #R10+,@DA
MOV #R10+,@SE
MOV #R10+,@MI
MOV #R10+,@HR

```

Now here is the code to read the respective values from the clock card. My clock card expresses time in byte values. The most significant byte read at the address is the time value, while the least significant value is FFh or 255 decimal. I have to 'mask' this out, and then convert it to least-significant format, which is necessary for pascal to read it as real time. This is the general format for the six passes, but I will only do the one for hours here:

```

CLR R0 ;CLEAR R0
MOVB @HOUR,R1 ; GET THE HOUR VALUE
SWPB R1 ; SWAP THE BYTES, SO HOURS ARE LEAST SIGNIFICANT.
MOV @HR,R2 ; NOW GET THE ADDRESS OF THE PASCAL VARIABLE
MOV R1,*R2 ; PUSH THE VALUE THERE
DECT R10 ; NOW DECREMENT THE STACK POINTER
MOV R2,*R10 ; PUSH THE VALUE ON THE STACK

```

This should be repeated for all the time values needed (5 more) simply substituting the characters HOUR for the correct time location and HR for the correct location of the stack. After all values are read and pushed back on the stack, we must return to pascal. This is done in the following way:

```

SBZ 0 ;TURN OFF THE CLOCK CARD
LI R12,1FOOH ;GET THE CRU ADDRESS OF THE P-CODE CARD
SBO 0 ;TURN IT BACK ON
MOV R5,R12 ;NOW RESTORE THE ORIGINAL VALUE OF R5
B *R11 ;AND RETURN BACK TO PASCAL

```

Now we have completed the program. We have our values for the main program, and we pushed them correctly on the stack. This was only one example of what I could do with assembly language and the p-code card. I can wire a mouse or analog joystick up to the clock card and read the values, and perform some action based on it. Remember, however, that assembly routines are outside the scope of the p-code card, and you can really do what you want when you are in the machine. It is not difficult to destroy the stack, or to overwrite certian code in memory. The p-system, however, protects against accidental overwrites if one uses correct parameter passing conventions. The full explanation of routines can be found in the LINKER manual.

Ok, so I wrote the routine to handle the clock. Now I can substitute this procedure for the one COMPUTER X's program called for, and it will work perfectly. In the same way, I can substitute the routines for graphics and mouse control with the language our computer speaks, 9900! The main pascal file need not be modified, because by writing those

assembly routines, you have just expanded the command set of your computer to include commands found on computer X. The p-system allows you to do this in several ways, and all work fine. To those of you who wish to experiment, please do, but PLEASE USE BACKUP DISKS!!!

Yes, I crashed a few disks. I attempted to read a file given by a bad location in the damaged directory on my workdisk. After several frustrating tries, I gave up and zeroed the disk, using the Filer. I did this because the utilities disk has a dandy program called RECOVER.CODE and it will search for correct file headers and reconstructs the disk directory according to the file header's specifications. This is a nice way, also, to get back a file you accidentally deleted. Be careful, however, for a write-after-delete may overwrite your deleted file. Recall that when a file is deleted, only it's directory entry is deleted, making that space available for future disk access. The original file is still on disk, and RECOVER can really save the day (and night!). The instructions for RECOVER are in the UTILITIES manual.

I wish everybody a great time at the FAIRE!! I hope to see as many of you as possible there. I will be speaking on the p-system in the late morning. I will be doing demonstrations, etc. Meanwhile, keep up the faith!!

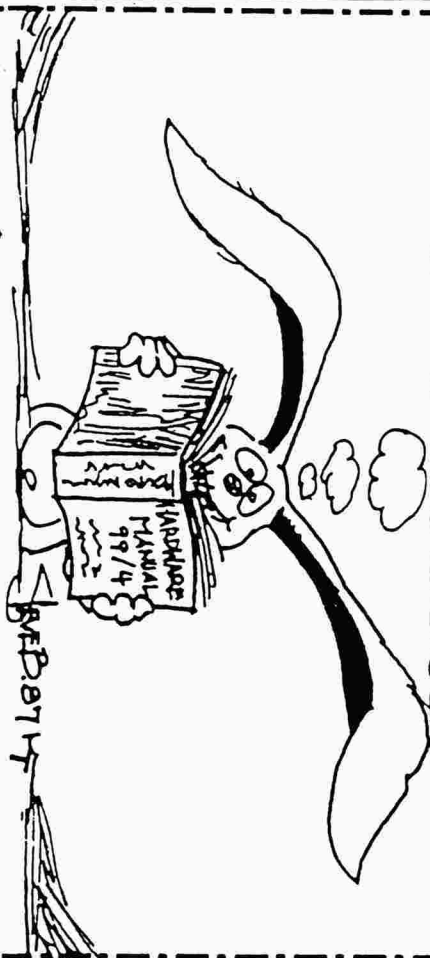
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FOR THE

TI 99/4A

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Whoever it was that decided I should try a "generic" brand of diskettes should have their !#&%"#?*\$ head chopped off! Ever since I started to use the cheapest brand I could find, I've had nothing but problems with this machine. I used to think the 99/4-A was so much more dependable than the GENEVE or the other pieces of garbage so popularly being touted as "computers" these days.

NOW FOR THE SURGE THAT ZAPPED MY CPU - I just lost the entire article I had written for this month. I tried every disk utility known to the CHICAGO TI USER'S GROUP to recover the darned thing to no avail. I even called GOD to ask her to help me and she said I should quit being so cheap and use a better disk! I will now go back to using a NAME BRAND diskette even if it does cost a few more cents.

HMMMPH! Another reason not to pay any more attention to those bargain ads. I used to enjoy waiting for the UPS MAN, but now I guess I'll have to go to ELECK-TEK, thank you, even if I do have to stand in line for three days before it's my turn to pay for my \$8.00 box of diskettes.

Speaking of getting zapped, you won't have to worry about getting too bad at the SOCIAL MIXER (why does that name make me think Dick Gregory or Jessie Jackson is going to be there?) on the night before the FIFTH ANNUAL CHICAGO TI FAIRE as there will be no open bar, only a cash bar available. It should be an interesting opportunity to rub elbows with some of the VIPS who will be here for the FAIRE in an atmosphere that's a little less hectic than the floor of the FAIRE will be on Saturday.

Five years is a long time. I hope it won't be the last FAIRE, but it seems we are in a predicament of sorts. TRITON COLLEGE has decided to completely renovate the STUDENT CENTER BUILDING after the end of this school year. That means no meeting room available and worse yet, no room for next year's FAIRE. Stay tuned to this column for the latest updates as they become available.

I guess I should stop complaining about my problems and get on with some recognition for the people who did the behind-the-scenes work to make this year's FAIRE possible. First, there is MARCY BRUN, responsible for the incredible organization of this year's FAIRE. Then there is SANDY BARTELS who picked up all the pieces from everyone when they became overworked and started to "burn out" (similar to a disk that crashes - see paragraph one of this article).

Of course we can't forget DON JONES, this year's FAIRE CHAIRPERSON who

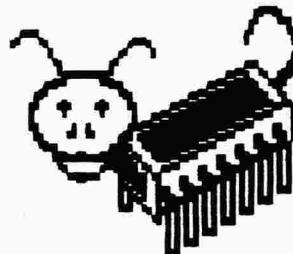
was always so busy burning out (see paragraph one of this article) that he had to have SANDY and whomever else she could garner to do his work for him. (I personally think he devoted too much time to the MIXER and didn't concentrate enough on the FAIRE itself). Finally, there are all the other VOLUNTEERS (you know who your are) without whom this year's FAIRE would never have gotten off the ground. Thank you, all of you wherever you are and whatever you have done and will be doing!

What a contrast to the humble beginnings of the CHICAGO USER'S GROUP ALL TI-FAIRE of five years ago! The first one only took 3 months to plan and had 28 tables. Now, it took DON JONES almost a year to plan and has 50 tables. In addition to the vendors selling their wares to the most gullible (see reference to GENEVE in paragraph one of this column and paragraph 14, "THE GOOD, THE BAD, AND THE INOPERABLE" in DAVE'S COLUMN), there will be several speakers.

They will include DON HALDEN, PRESIDENT, MILWAUKEE USER'S GROUP with DON SCHROEDER (don't forget about MILWAUKEE'S FAIRE on SUNDAY the 8th), FRANZ HAGENBACH of MECHATRONICS, DONN GRANROS of ASGARD, BARB WIEDERHOLD from QUEEN ANNE COMPUTER SHOPPE (home of designer computers), J PETER HODDIE - he's the COMPOSER who gave the WONDERFUL CONCERT at last year's FAIRE, MIKE MAK-SIMIK who will talk about PASCAL and the 99/4-A, CHRIS FAHERTY, the brains behind TI-ARTIST, JIM HORN, the SYSOP of COMPUSERVE'S TI FORUM, and of course LOU PHILLIPS and JACK RILEY from NYARC - the parent company of GENEVE (see related comments in previous paragraph and in paragraph one above).

Speaking of speakers, I would like to bring up a somewhat delicate point, but then I'm never delicate with anything or anyone so here goes. There is a lot of work and an even greater expense that goes into the making of one of these fairs. One of the ways the group covers its expenses is through the sale of video tapes. We would appreciate it if people would not bring their video cameras into the seminars and would purchase a copy of the official tape as taken by the CHICAGO TI USER'S GROUP. Enough said.

And finally, what am I going to do for this year's FAIRE? I've been promised to DON JONES in whatever capacity he requires my services. If I make it through both the MIXER and the FAIRE in one piece, I guess you'll see me in the December Newsletter when I'll announce the long awaited answer to the question posed in last months edition. In the meantime, I've search my closets for something striking to wear, and finding nothing that strikes my fancy, I'm off to MARSHALL FIELD'S, NEIMAN MARCUS, LORD & TAYLOR, BONHIT TELLER, SAKS, and CARSON'S to find a new dress. See you at the FAIRE!



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PLEASE SUPPORT OUR ADVERTISERS

**SORRY, WE CANNOT ALLOW ANY OUTSIDE
VIDEO TAPING AT THE FAIRE.**

A SPECIAL THANKS FOR THE TI FAIRE

I would like to say that it has been a great pleasure to work with everyone to produce the 1987 TI FAIRE. My past work experience has been with a company that produces trade shows. Therefore, helping the Chicago Area TI-99/4a Users' group to produce their faire was a usual, but fun, experience for me.

Thanks to Don Jones, the Faire General Chairman who works in such detail, he had everything covered. And when the time comes, things fall right into place. Sandy Bartels, our President, did much more work this year than she planned to. Since she did last years show, she was such a big help with this years show in contacting exhibitors about various things.

It was so nice to work with such a big group of people. Even though a lot of the persons never helped put a show together and didn't know what was involved with doing a show, with all the different employment backgrounds the committee people were able to do a very professional job. I commend everyone for doing so much work during their personal/family time.

I feel that I must thank everyone publicly for a job well done.

THANK YOU:

Don Jones, Faire General Chairman
 Sandy Bartels, Friday Night Social Mixer Chairman
 Mike Chappell, Faire Publicity and Vice-Chairman
 Ken Czerwinski, Liason with Triton College
 Hank Ellermann, Speaker Reservations
 Paul Farber, Saturday Night Dinner Chairman
 Jon Bartels, Announcements Table Co-Chairman
 Dave Wakely, Announcements Table Co-Chairman
 Jan Joel Janowski, Faire Break-Down Chairman
 Bob Knapik, Assistant to Ken C. and General Support
 Ken Knapp, Transportation Chairman
 Mark Harms, Equipment Chairman
 Sam Pincus, Group Sales Chairman
 Nancy Rauch, Membership Table Chairman
 Len Rovner, Financial Coordination & Front Door Chairman
 Grant Schmalgemeier, Out-of-town Travelers' Information & General Faire Information
 Al Stump, Hotel/Motel Reservations
 Ed Svizzero, Audio/Visual Set-up Chairman
 Tony Zlotorzynski, Faire Set-up Chairman
 And all the other volunteers that helped them.

I hope all of you, the Chicago Area TI-99/4a Users' Group members, will come to the Faire with your family and friends to see what an excellent job your fellow TI users have done. I'm sure you will enjoy and appreciate it.

Marcy Brun
 Faire Manager

P.S. A special thanks to Carole Goldstein for putting out a great Faire Booke.

GUEST
SPEAKERS!
VENDORS!



PRESENTS THE

5TH ANNUAL

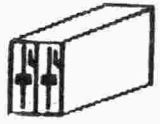
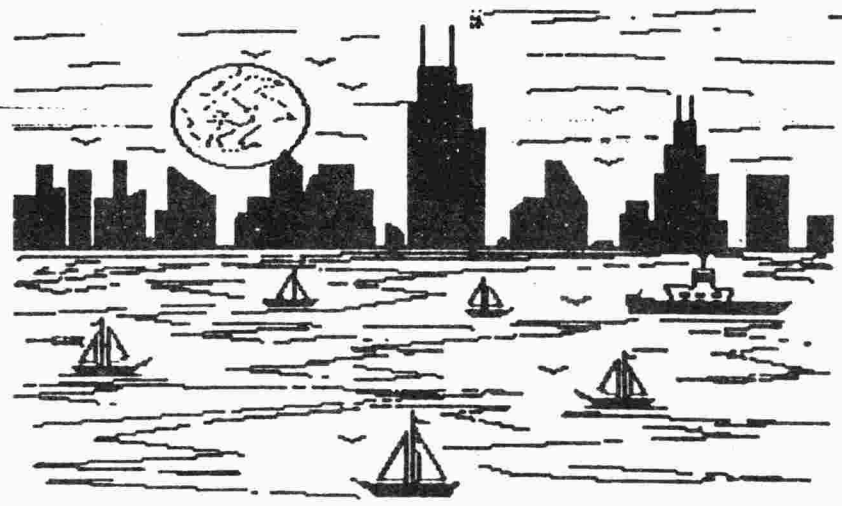
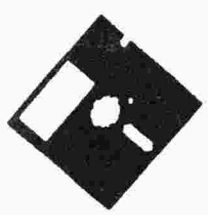
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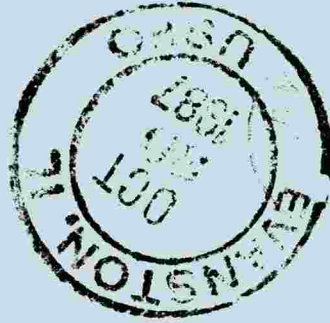


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POSTED MATTER

AIR MAIL

Mr. Stephen Shaw
 Member #738/87

Stockport, Cheshire England

REMARKS

Carole Goldstein

AFTER a full year of planning and a lot of hard work by a lot of good people, the Chicago TI Users Group is proud to present the FIFTH ANNUAL CHICAGO TI FAIRE. Thanks to all those who worked so hard to make this year the best and biggest yet. This years theme is d"THE COMPUTER THAT REFUSES TO DIE". This is evident as we have more vendors and more people expected to attend than in any time in our history.

Thanks also to all those who have worked so hard putting together the last four successful Faire's sponsored by the Chicago TI Users Group. For without all your work there would not have been a precedence for what is about to occur on November 7th.

The Chicago TI Users Group has exsisted on the premise of bringing together the members of the TI community for the purpose of sharing knowledge and education. Our many and varied presentations at this years FAIRE offer just a glimpse of the way we operate throughout the year.

Hope you enjoy the magnitude of this Super Faire Issue. Please don't expect this every month. It would be the death of me.