

**NEW JUG 99ER'S NEWS**

**MAY/JUNE 1993**

DUPLICATE COPY TO BE SENT TO THE EDITOR




**GRADUATION DAY**

Highlights:

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NEW JUG 99ER'S UG  
P.O. BOX 1463  
SAVREVILLE, N.J.  
08871-1463

FROM:

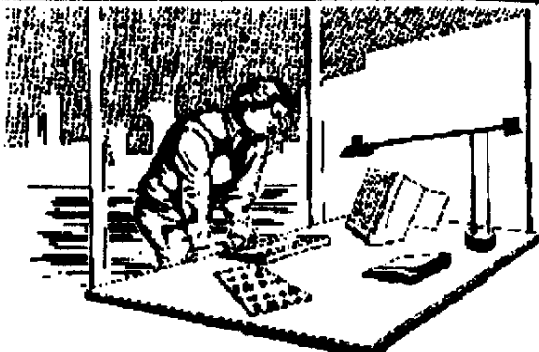
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POSTAGE  
GOES  
HERE

TO:

AFFIX MAILING LABEL  
HERE

**ALEXANDER  
HULPKE  
CONFERENCE**



JHWHITE	JeffW
COQUEST	Alexander
KREECH	J W Krych
TIRUGED	
KARLO	Karl (Trissl)
EICHER	Dano
JERRYC	
BRADSNYDER	Brad
JCARVER	John
CAL47	
VPSILON	(Sylvain Paquette)
DUNNELLS	
9640NEWS	
MICRO	
JSVZDEK	Joe

[ unedited chatter before our guest returned after Internet bump off ]

.J W Krych> is there going to be a delay for Alexander?  
 .J W Krych> because of the distance?  
 .JeffW> There could be, Jim.  
 .JeffW> Internet is known for delays.  
 .J W Krych> about a sec  
 .Karl> Yesterday evening I phoned Alexander and he told me that there is a huge delay on his Internet connection...  
 JERRYVC> Karl, Are you logged in through Internet?  
 .Karl> It's not the distance, as I'm on the same distance. But I don't use Internet. I use the public DATEX-P.  
 .Dano> The Delay with Australia didn't seem to bad...  
 .Dano> Jerry, While we are waiting, any comments on the ndos psystem?  
 .Karl> The delay I usually have to DELPHI is below 2 seconds.  
 .JeffW> Alexander, we normally start a few minutes late. I'll officially open the conference in a few minutes.

.Dano> Jeff, Traveling at the speed of sound, how long would it take Karl's message to reach you?  
 .Alexander> - signed off -  
 .Karl> Jeff, Alexander told me the Internet system he uses is that slow, that sometimes he is automatically logged off because the DELPHI timeout is over. How much is this timeout?  
 .JeffW> not sure, Karl.  
 JERRYVC> Dan - I stepped away for a minute - RE: Psys, I think Clint's clear screen key may be messing up some of the utilities...  
 .JeffW> We are waiting for Alexander to get back before we start.  
 .JeffW> Did everyone read his intro message I left in the Forum?  
 JERRYVC> I am getting screen clearing in response to some of the key combinations used in the Psys...  
 .Karl> Yes, I did. And I translated the Mann quote....  
 .JeffW> I have his message in 4 chunks that I can display here if anyone missed it.  
 JERRYVC> I think I will try an older version of MDCS before this bug (aka "fix") was introduced.  
 .JeffW> Thanks for the translation, Karl. It made sense in English.  
 .Dano> it did?  
 .Dano> :)  
 .Dano> Jerry do you have a gennod?  
 .Dano> Just wondering if psode can run at zero wait states....  
 JERRYVC> No Dan - just the S12 MEMEX  
 .JeffW> I almost took my modem cable apart this morning to change it around some. I decided against that.  
 .JeffW> BTW, I have only been up 23 hours or so.  
 .Dano> How long do you think it will be before Rick Rosean gets a chance to look at the personality card. I know of at least 3 people that would like to know how to make one run with a genseue.  
 JERRYVC> Dan - At least Richard has his 9640 running for a change.  
 .Dano> Is that to imply, it may be a while?  
 .Karl> I'm the 4th people who has interest in getting a personality card work or the GENEVE III  
 .Dano> Jerry, I know of at least 4 people that....

.JeffW> I saw an interesting message on GENie from Beery Miller this morning. Seems Don Walden has worked out some agreement with Lou Phillips regarding Geneva motherboards.

.J W Krych> yes he did, finally -- even got some old motherboards

.JeffW> Not sure what that means though.

.Dano> When I talked with Don this week, the bad news is, SMC is discontinuing all MFM controller chips, including, but not limited to the 9216b's.....

.JeffW> Does DonW plan to produce Geneva motherboards?

.J W Krych> 9640's that were rejects for one or two parts

.Dano> Jim, Lou told don to expect even more non-working equipment shipments from him ...

.JeffW> That's okay, Dan. Western Digital second sources the 9216(b).

.Dano> Jeff, don told me that western digital did NOT make the 16'b version...

.Karl> (-/send KREECH Bist Du Deutscher von Abstammung (-oder hast Du anderswo so gut deutsch gelernt ?

.JeffW> I think the WD part is rated the same as the SMC b-version.

.Karl> (- <- sorry for these garbage, that's always made by my phone link to the PAD.

.JeffW> Discontinuing the parts means there will be a good deal out there, though.

.JeffW> Hi, Cal.

.J W Krych> hi Cal.

CAL47> mornin' Jeff.

.Dano> When is Fest West?

.Karl> send KREECH Bist Du ein TI oder GENEVE user ? Habe Dich noch nie hier gesehen bzw. gelesen.

.Karl> Hi Cal.

.JeffW> Fest West is next Saturday and the following Sunday.

CAL47> Hello Karl.

.Dano> It will be interesting to see if anyone introduces any new hardware/software....

.JeffW> Does DonW have enough 9216B's to repair HFDC's?

.Dano> yep.

.JeffW> That's good. Beery also said that IM Direct and Rhein's would be getting some HFDC's from Lou soon. The source codes to MDMS and MV-Word are also being obtained.

.Dano> ( yes, those are the ones don has just spent the past 4 weeks repairing ).

.JeffW> Does port 3 work on them, Dan?

.Dano> I don't think so.

.JeffW> Does port 2?

.Dano> Yes, would be my guess.

CAL47> Jeff, get a chance to check out video PAL situation?

.JeffW> Not yet, Cal.

.Karl> (-HDS3 is a very strange software bug I think.

.Dano> Jeff, in the original MDOS docs their was a command to switch the display left and right... probably by modifying the frequency rate.... Do you know if that is possible with a 9938/58?

.JeffW> Karl, I think the HDS3 port has a hardware (not software) problem. I have devised a possible fix.

.Dano> I have been studying the PC BIOS's.... Been sending Beery messages once a day.....

.JeffW> However, I am reluctant to try a fix when I only need the HDS1 port. The fix would require modification to the DSR.

.JeffW> You can adjust center on a 9938/58, but it is not by modifying the frequency rate (whatever that is).

KARLO> Don't know what happened, was signed off the conference. But I'm back.

.JeffW> Probably a spurious ^Z got mixed in your roise, Karl. Wonder if Alexander is having any luck getting back on Internet. Cal, I need to install the video PAL on another Geneva to test.

KARLO> I did a lot of hardware test with the HFDC (see my forum msg about that). Found no hardware bug. Would be interested what you found.

.JeffW> Well, it is most likely a "firmware" bug that resides inside the 9239 chip.

KARLO> Or in the EPROM ???

.JeffW> Very unlikely is it in the EPROM.

KARLO> Guess, we should discuss this in the forum.

.JeffW> There is not much difference in the way HDS1 and HDS3 would be set. Just changing a single register.

.JeffW> Well, the conference will be pretty boring if we just sit and stare at the screen.

KARLO> I know that, that makes it that strange.

KARLO> By the way: Now I know why I have to pay much more for my DATEX-P link: It's reliable !!!

.Dano> Karlo, can you give alexander a call and see whats up?

.JeffW> But the "firmware" inside the 9234 could be the culprit. It requires much technical speculation that would best be put off.

KARLO> Alexander told me he has delays of up to 5 (1) minutes over INTERNET from his university.

.JeffW> Alexander is at the university, not at home, Dan. Alexander does not have a modem at home, and he says the postal service requires some sort of registration of modems.

KARLO> Actually it is not the modem that requires a registration, but the access to the public DATEX-P does. And it is expensive. When I applied for the postal access to DATEX-P, nobody asked me about my modem. I use a LIGHTSPEED 1200, which is not officially permitted in this country.

.JeffW> Yes, I hear that only 300bps acoustic couplers are sanctified.

.JeffW> We got a nice crowd for the conference.

.J W Krych> yes

.JeffW> Too bad our featured guest is having trouble.

.J W Krych> when ISDN comes-no trouble!

KARLO> -No, it's not a question of 1200 baud or not (I use the 1200 baud service). It's the German bureaucracy that only permits what is tested.

.Dano> According to the Bill/Al combo, they are going to work hard to create a national electronic data interchange infrastructure....

JERRYC> An "import barrier"?

.J W Krych> Karlo, is the 50 Hz power freq a problem for most hardware?

.Dano> humorous image, Bill Clinton with a pizza and coke, hacking away....

.J W Krych> ole slick willie

.Dano> into the use hours of the night, as secret S&P agents look on....

.J W Krych> thinking.....who can I tax next!

.JeffW> Wasn't coke, Dan. It was weed.

.Dano> Jim, this is not a political forum, your remarks may tend to upset others.

KARLO> No import barrier, because the permitted modems are not German either.

JERRYC> When he came over to our shop last week eh was complaining about the White House telephones.

.Dano> Tell him you have to dial, 9 to get out!

.J W Krych> hahaha

.JeffW> And it wasn't pizza...

JERRYC> He doesn't want to get out just yet.

KARLO> It doesn't matter for the rectifiers in the power supply what line frequency it is ...

JERRYC> He couldn't set up a conference call from his office, and people kept picking up extensions during his calls!

.Dano> Jerry, isn't their suppose to be someone come in and brief the new president on how to use a phone?

.J W Krych> they partied too much

JERRYC> There is an old-style switchboard, but they haven't named an operator yet <joke guys>.

.J W Krych> hahaha

.JeffW> Dan, in Arkansas they only have tin cans and string.

.J W Krych> hahahahahahahahahah!!!!

.Brad.> Dano, maybe the president could ask Mr. Clinton how to use the phones. :)

.Dano> I voted for Bill, but, I don't remember voting for Hillary! :)

.J W Krych> that is good Brad

.JeffW> send KREECH Schreibst Du Software fuer ASGARD ?

.Dano> In Montana we use smoke signals for communication!

JERRYC> Actually the White House system is pretty old.

.JeffW> Bill Clinton was quoted as saying today - "Yes nana, your the boss"!

.JeffW> I've been awake nearly 24 hours, and I am still as lucid as all of you. Think about it.

.Brad.> Could I sneak a TI question in here while we're waiting?

.Dano> Why Sure.

.JeffW> Of course, Brad.

JERRYVC> During my grad school exams i was 44 hours up - 4 hours asleep for a week <never again>.

.Brad.> In doing file access in assembly, is it "cool" to just check the file status....

.JeffW> I'm taking questions about 4A Memex, too, if anyone has any. <g>

.Brad.> byte for the end of file error, or should you always make the separate DSR...

.Brad.> call to check the file's status?

.JeffW> Probably depends on controller, Brad.

.J W Krych> I will take questions about AMS/AEMS.

.JeffW> I recommend you make the separate DSR call to check status. What does the E/A manual say to do?

.J W Krych> or shall we just concentrate on other stuff.

.Brad.> I wonder how much time the separate call uses, but right now I am using the separate call.

.Dano> I am reading a good book called the zen of assembly....

.JeffW> Jim, that <g> at the end of my sentence was meant to indicate I was sort of joking.

.Brad.> It just seems that the info I am looking for is already in the error flags byte.

.JeffW> But any questions are welcome.

.Dano> what we need is a routine that we can call that will set the 9901 timer to zero, and start it ticking.

.JeffW> Unt.l our guest returns.

.Dano> Then we could do some assembler code of our own....

.Dano> Then call another routine that would turn off the timer a stask the number of cycles that had be used.....

.Dano> So we can tell how fast a routine actually runs.

.JeffW> Why not just add the cycles?

.JeffW> Hi, Sylvain.

VPSILON> Hi, all...

.Brad.> Dan, Bruce Harrison already did something like that to tell you how fast the computer you are running it on is.

.JeffW> Our guest was booted by Internet before we could start. We are anticipating his return any moment.

JERRYVC> Bonjour Silvain

.JeffW> <the English spelling>

VPSILON> Bonjour? Vous parlez francais!!

JERRYVC> Un petit peu

VPSILON> ? Alex? Do you have any plan to release a new version of Vapp??

.Dano> Coutining Cycles means nothing in a pipeline archetecture.

.JeffW> What, Dan?

.J W Krych> in the 68689 it would.

JERRYVC> Silvain - we lost Alex to an Internet burp.

.Dano> In fact, we have need since the inception of the geneve an optimizing compiler, that will take advantage of the pipeline archetecture....

VPSILON> OH... nol What a mess!

.J W Krych> Sullivan, I was sending you a message in German. Sorry.

.JeffW> Counting cycles does work, Dan.

VPSILON> Okay, Did anyone catch a ref to Vapp updates?

.J W Krych> on the 68689 the cycles are nearly the same as the 9900 just the clock speed is much greater

.JeffW> Sylvain, Alexander got kicked off by Internet before we could begin.

VPSILON> Oopps... Well it will be for a next time, then!

.Dano> Jeff, I will send you latter (when I dig out my reference material), more detailed instructions of what I am talking about.

.JeffW> We are waiting for Alexander to return, Sylvain.

.John> - signed off -

.JeffW> Dan, I understand what you are talking about.

.JeffW> However, it does not apply to the 9995 or 99105.  
 /PSILDN> Well, I'll come back later, then, Bye all!  
 /PSILDN> - signed off -  
 .J W Krych> take care  
 .JeffW> Which processor(s) does "Zen of Assembly" discuss?  
 .Dano> jeff did your order a prom burner?  
 .J W Krych> jeff do you know about the 68689?  
 .Dano> 80x86  
 .J W Krych> I have started the first volume to "ON  
 ASSEMBLY"  
 .Dano> Jim, have you tried talking to a jerk at TI by the  
 name of Charles Brickly?  
 .JeffW> Maybe we'll have you discuss that at a conference  
 someday, Jim.  
 .J W Krych> I am still taking code examples from you  
 masters out there!  
 .Dano> He is the man they refer all 9900 questions to, and  
 all he says is, "that processor is really not  
 supported.."  
 .J W Krych> Dan, no.  
 .Karl> yes, I know, Jerry, but this funny "(\_" that's  
 always made by my telephone line, makes the "/"  
 unvisibile for the system.  
 .J W Krych> I have only talked with the missiles systems!  
 and TI legal  
 .JeffW> Non-optimal architectures require optimizing  
 assemblers/compiler. You can quote me on that.  
 .Dano> I still think the '105 is the best of breed.  
 JERRYVC> Right Karl -- the \ must be the first byte of the  
 line.  
 .Dano> maybe since the 68689 is an asic chip you could get  
 them to port the '105....  
 .J W Krych> yes. But since it is discontinued and the 68689  
 is going to be around for at least 10 more  
 years!  
 .Dano> I wonder what the actual production cost is on a  
 68689 and '105.....  
 .JeffW> Karl, use control-U to clear your buffer before  
 typing.

.J W Krych> the '689 is getting cheaper  
 .Dano> what speed dram would you need to run the '689 at  
 full tilt....?  
 .Karl> Jeff, I use ctrl-U in front of each line, but the  
 noise is faster sometimes!  
 .Dano> also the '689 does not have macro store capability.  
 .J W Krych> the '689 runs at 0Hz to 15Mhz. TI runs theirs  
 at 20Mhz!  
 .J W Krych> no it does not [have macro store].  
 .Dano> macro store is kind of nice. I managed to beat the  
 99110 macro code out of them... ( source for  
 floating point emulation ).  
 .JeffW> The 68689 does have the MID interrupt trap, I  
 think.  
 CARL47> - signed off -  
 .JeffW> But not a terribly good floating point  
 implementation.  
 .J W Krych> the missile systems group needed a replacement  
 for the 9989, the 68689 does take some of the  
 best from the 99000 family missile.  
 .Dano> ah, the 9989 the original processor for the 99/4a  
 .JeffW> Nope, the 9985.  
 .J W Krych> MultiProcessor Interlock.  
 .J W Krych> Extended Instruction Processor Present!  
 .JeffW> The 9989 was a bipolar chip.  
 .Dano> ok, thanks  
 .Karl> It's really a pity! The first conference I take  
 part has no conference guest. All other conference  
 are too late for me (far after midnight).  
 .J W Krych> IIL logic  
 .JeffW> Well, we could have other conference Saturday  
 mornings if that is when people want to attend  
 then.  
 .Dano> works for me.  
 .Dano> (except in the summer)  
 .Dano> Jim, one place the concern me is 9901, they seem to  
 be getting harder to find...  
 JERRYVC> Actually Karl - some of our best stuff happens  
 before and after the conference guest speaker <g>.  
 .Karl> You should not change the schedule just for me. I  
 cannot participate very often due to the costs,

anyway I

.J W Krych> yes they are dan.  
 .Dano> Do you think you could ask your buddies in the missile systems group for the logic diagrams to the 9901 and 9903?  
 .J W Krych> TI didnt say what the 68689 uses. But that they like it!  
 .JeffW> Well, Karl, attendance seems to be better than it was last Sunday.  
 JERRYVC> Karl - do you find ASCII or compressed transcripts cheaper to download?  
 .J W Krych> Super Bowl Sunday  
 .Dano> I would like to try an implement a 9901 on a gal or asic chip....  
 .JeffW> Just that Internet is not cooperating.  
 .J W Krych> would need an FPGA  
 .J W Krych> the 68689 is a nice processor  
 .Dano> I can't even afford a pal programmer though, so a 50K FPGA unit is definately out of the question!  
 .J W Krych> CMOS, low power, sep data and address bus. one phase clock!  
 .JeffW> Maybe an FPGA, Jim. But most of the 9901 could be done in a GAL.  
 .JeffW> (or two)  
 .Dano> I have looked at FPGA by Mitshubishi and Xeltor (SP?).  
 .Karl> Jerry, as I said in the forum a few days ago, I'm not able to download anything what is compressed. ASCII works.  
 .JeffW> Xilinx, maybe, Dan?  
 .Dano> yes, thanks,  
 .J W Krych> TI sent me a demo of their FPG  
 .Dano> D' have you seen the new chips by TI that include built in diagnostics?  
 .J W Krych> yes!  
 .Dano> Ieee standard something or rather... TI has a really nice pc based demp for them also....  
 .Dano> Cool....  
 .J W Krych> the TI FPGA's are impressive

.Dano> I tried to talk don into implementing some of them on the scsi and 4a memex with out success....  
 .J W Krych> only if he were to sell tens of thousands!  
 .Dano> All you would need is to run a couple of extra lines and put some type of connectory to access them....  
 .J W Krych> volume is needed!  
 .J W Krych> But they are nice nonetheless  
 JERRYVC> How about defining FPGA for the record?  
 .J W Krych> Field Programmable Gate Array  
 .Dano> Field programmable gate array.  
 .Dano> Also if someone WAS to come out with a NEW rs232... You could easily implement a dual parallel/IEEE interface....  
 .Dano> TI still supports the 9919 GPIB interface.  
 .J W Krych> yes. But either way a new UART = NEW DSR  
 .J W Krych> replicating the 9902 can be expensive  
 .Dano> TI's IEEE card had built in calls to change between talk/listen and pio access....  
 .JeffW> Er. 9914 GPIB.  
 .J W Krych> for the TI 4A  
 .J W Krych> community  
 .J W Krych> General Purpose Interface Bus  
 .Dano> Unfortunatley, you would have to keep 9902 compatability because ALOT of software is geared for it....  
 .J W Krych> Such is life.....  
 .J W Krych> not to be cruel.  
 .JeffW> Fortunately, there is nothing wrong with the way the 9902 works.  
 .Karl> I'm logging off for the moment to save money. Perhaps I'll check again in one hour or so.  
 .J W Krych> no  
 .J W Krych> take care Karl!!!!!! Auf Wiedersehen!  
 .JeffW> See you later, Karl.  
 JERRYVC> I'll post a log Karl.  
 .Dano> Jim maybe a pal that would sit between the system and a NEW data pump that would interpret the commands to the 9902 and turn them into signals the new data pumps would like.  
 .Karl> Bye everybody.  
 .Karl> - signed off -

graphical environment.

.J W Krych> | that will be interesting|

.Alexander> This can be handled using windows or similar. BUT one window has a frame, using up screen space. The only reason for such a frame could be the use of other windows. This would mean other processes, but I guess the TI is too small for a multi-tasking environment. (I may be spoiled a bit by using large systems at university. However, I always found, that it was better to run just a few jobs, and to avoid multitasking whenever possible, due to the fact, that two jobs will run much faster, if started one AFTER the other).

.J W Krych> Herr Hulpke, has Chris Bobbitt talked to you about work on the AMS/AEMS cards for bigger programs?

.Alexander> I got a letter from Chris, in which he sent me some informations about the AMS card. However, I think, I cannot start programming for this device, due to the fact, that I am using a Geneve. So I will only write programs, that use the larger memory by standardized calls (which will also work on the Geneve). Chris did not tell me much about other projects for this card, but I heard somewhere, that Al Beards c-compiler should be adapted. This would mean a whole world of software adaptable. ga

.J W Krych> yes it is -- (the loader and assembler are finished. Linker soon to be.)

.JeffW> c: I had heard Al planned to port TIC to 4A Memex. Maybe he has plans for AMS as well.

.Dano> What is the state of the TI community in Germany? Any new hardware software projects going on?

.Alexander> Due to work for my diploma thesis, I had not too much contact to other users in the last few months. I have seen several really neat hardware projects (digitizer, Color Lock Up table for the 9938 I remember by now), which were however in a state not ready for any release (and I guess, they were simply some hobby project, not ment for any distribution). Since I tend to write (and to interest) most likely for programs and projects I can use, I did not inform me about these too much. There are several software projects (e.g. (still another) fractal generator), but I am most probably not up-to date.

.Karl> The community in Germany is diminishing, I think.

.Alexander> There are lots of programs to be presented at meetings (I even saw a Exbasic compiler), but

also, lots of the end in the nowhere. YEs, the community is diminishin. Due to the fact, that computer networks are much mor uncommon here (we do not have much like Delphi here) the community is also connected much looser. ga

.Dano> Karl or Alex, do you think there is any chance that TI's will find new homes amongst the poorer east european countries? Maybe even a rebirth of interest amongst new, second or third generation users?

.Alexander> ?

.Dano> c: there are consoles we could send over ( pretty cheap ) but they would need to be modified for the PAL standard ( assuming ) that all east europeans use PAL....

.JeffW> Alexander, since you are our featured guest, you can ask your questions of us at any time.

.Alexander> I understand your suggestion. I think a large problem will be, that the TI is not the only computer, abandoned by its manufacturer, and thus by lots of other people). Even 286 NT's are today "old stuff". I suppose, users across the former iron curtain will also get those systems, and I would guess, they decide similar to the users, that bought the computers some years ago (means: Some will use the TI, but lots of them will start with re-used PC's, CB4, perhaps even some old amigas or Ataris. ga

.Karl> | I'm pessimistic about the chance to(- increase the community by adopting eastern people. Old PCs are more interesting for them I guess.

.Dano> | Can't dance if you don't ask.....

.Joe> Sorry I couldn't get in earlier. Just want to comment on something I'd like to see added to VAPP... I'd like to have the ability to abort a load of a GIF picture without having to wait until it all loads. Would also like to be able to use keys to decrement the colors (rrgb) when adjusting the palette. Other than that, VAPP is a great program. Oh yeah, ... I'd also like to see the ability to save/load color clipart. ga

.Alexander> Let's try it: I thought about breaking the GIF load (you are not the first to ask for it. However, the keyboard routine is awfully slow (and I cannot use direct CRU read, since VAPP must also run on the Geneve). Thus I simply left it out. I would be no problem to add a keyboard loop (perhaps I should add it, to be scanned every LINE or two lines). Decrement keys are no problem at all. They are simply left out, since they were not in Myant (did not think about the need for it), and since I had no idea, which keys to use. Including them



really simply is a matter of adding another two or three lines of assembly.

Saving clipart is not yet possible very elegant, but you might try it this way: clip your picture (using C I think), clear the screen in black, put the clip (with D) on it, then save. for loading, load this picture, re-clip the clipart, load the picture, into which the picture should be inserted, and put it there using D. I guess, the future versions will support some neater way for doing so. Currently, I am thinking about adding (if we have enough memory) another second or third screen, between one could switch, so clipart would be loaded on the second screen, clipped there and then (after switching back) put into the picture. Oh yes! I should add: Always use color number 0 for the background of clipart. Thus you can put them using the TAMP logic, which will result in a really "cut" picture, and not only a rectangle. ga

JeffW> c: Decrement keys in Myant are undocumented. E for Red, F for Green, and V for Blue, I recall.

Joe> Correct, Jeff.

Alexander> Oh, I did not know about it. This will be implemented! ga

JeffW> Alexander, notice that each is the key to the left of the R, G, or B keys.

Joe> It would be neat if you could also input a number 0-7 for RGB values, if desired.

Alexander> Will be put to the wish list (this also is no big deal to implement).

Joe> Thanks, Alexander.

JeffW> Alexander, I sent you text of the NCTIS proposals as a partial response to your "need for more memory" article. Any comments?

Alexander> Yes, I'd like to comment on some things: I don't think, we should prescribe any special kind of hardware to get things done! I would suggest levels, depending on the possibilities. this means: More memory (not depending on the fact, if you are using one of the new cards, a geneve, or even swapping to harddisk). Another level should be GRAM, another 9930 capabilities. It is not so important to obtain a full list of all capabilities (we are not talking about a classification of all possible TI systems), but to set standards, on how to access several things (at least memory is very urgent). this should be done using routines, that will run on every system, e.g. DSR calls.

For example larger disks (I read the discussion in comp.sys.ti) are a neat thing, but I don't think the software will change much, only because one can use even DD drives. This will result in some disk-jockey work for the user, but not for the software.g

Dano> c: The closest thing I have seen to such a system is the way Gary Bowser handled memory usage on the beta version of digiport.

Dano> c: Garys RAMOS looks like it is getting close to the universal dsr call idea.

Alexander> c: I don't know about RAMOS. If it is possible, to add its capabilities to the geneve, I think it should be used as a starting point.

JERRVC> c: RAMOS was discussed in the OPA CD and again in Joe Delckto's -- both in the NEW library.

J W Krych> Since the fundamental differences of NEMS/AMS and Memex are the access of memory, is it not better to isolate the programmer from the paging? Like in the AMS/AEMS assembler, linker, loader?

Alexander> Yes, I think, the programmer should not do any "hard paging". The call should be: Put memory block number xxx at adress yyyy (which should be 8K offset).

J W Krych> I a page size is very moot with the developmental system!!!

Alexander> Then the DSR will do, what the device is capable of: Banking, but even (for RAMdisks) only copying memory. This may be a bit slower, but at least the program will run on most systems.

Alexander> c: Sorry, don't know the word "moot", and forgot my dictionary.

J W Krych> moot meaning not really important

JERRVC> it means "not worth arguing".

JeffW> A "moot point" is a point which can be argued either way.

Kan> I "moot" = "snittig"

Alexander> Ah, yes. I see. I don't know, what the AMS programs will do, but if the memory is not at an offset, you cannot bank, but must copy (which is always slower than banking). I'm talking from the point of view of the geneve, that uses 8K blocks for banking (and of course, I want the standard to be optimal for my geneve...!-) ). ga

J W Krych> I AMS/AEMS uses memory mapping similar to the

99/8 and GENEVE -- no DSR needed at all

.Alexander> |: Yes, similar to the geneve, but the program should not issue any CRU command for bank switching, but call the standard DSR routine. Same goes for the geneves memory-mapped pager.

.J W Krych> | I would have Joe DeleKto argue that [8K] point with you Alexander -- and Tony Lewis too

JERRVC> But NOT here gentlemen.

.J W Krych> yes, sorry

JERRVC> c: 2K and 4K may have advantages for smaller memory space.

Alexander> 2K have some advantages. However, you will need more memory, if you have lots of data, so I think even 8K could be workable.

.J W Krych> | AMS/AEMS uses 4K with a 24K window for ams and 32K for AEMS

JERRVC> c: I think your point about 9640 (and 99'4a) functionality is the key

.Dano> Alexander, other than XHI and Vapp are there other programs that you have done, that perhaps we do not know so much about?

.Alexander> Of course, I have written lots of programs (among them the BEST TI-Basic programs, which I wrote the Jeeks, after I got my TI 1-), but most of them did not leave my disk box, since I did not want to write any documentation.

.Dano> c: I need to steal yours and Barry Boones disk box!

.J W Krych> haha

Alexander> But honestly, there are several small utilities (converting p-system to TI and vice versa, function keys on the geneve, fixing a geneve bug with upcase keys) not worth mentioning. Of the "large" programs, there are X80 (for 80 column text mode), Tetris (which I wrote, since there was no such program for the TI, and I wanted to have it) and (not much work by me, but usable) a TI port of Soko ban.ga

.J W Krych> Herr Huplke, what is soko ban?

.Alexander> This is a game (probably you know it) in which you have to move some boxes to designated positions. The problem is, that there is not much space, and you have to push, so you will most probably build a wall into your own way.

JERRVC> I have to go soon - one comment and a question.

.J W Krych> | I need to go. I enjoyed conversing with you all, and in GERMAN! Take care and Godd Bless Vaul

JERRVC> There is some discussion of memory systems in several CD transcripts you can download on the COQUEST acct (ascii)...

JERRVC> and my Internet ?

JERRVC> Do you use the UUencode utility and how does it differ from Clint Pulleys encode program?

.Alexander> No I did not yet use it (on th TI). I wrote a small program for this purpose, but most time I decode files on the Unix system and put them on a disk.

JERRVC> OK thanks

.JeffW> Alexander, would you like to join us again next Saturday morning?

JERRVC> I have to go - my daughter is DYING to use the phone - it has been great!

.Alexander> I'd like, but unfortunately, next week end I'm not in Aachen, but in Wuppertal at my parents. So this is impossible. Sorry!

.JeffW> Okay. Maybe we can try again at a later date.

.Alexander> Of course.  
.Alexander> Danke Karl!

.JeffW> If you can stay a bit longer, Alexander, I will try to clear up some confusing points.

.Alexander> I can stay for about 45 minutes.

.JeffW> Jim Krych is head of Fsgard's AMS/AEMS memory card project.

.Alexander> I guessed that after your comments  
.Alexander> Auf Wiedersehnt!

.JeffW> Don O'Neil with assistance from me designed the 4A Menex.

.Karl> Bye everybody !

.JeffW> Bye, Karl.

.JeffW> AMS/AEMS page memory in 4K pages. 4A Menex uses 8K pages in its RAMBO compatible mode. There is no plan for a DSR for AMS/AEMS. Programs that use AMS/AEMS memory will require a special assembler/linker package or direct access at the hardware level. The 4A Menex will have a DSR to provide memory management. When you said that memory should be used via standard DSR calls, that caused Jim Krych to start telling features of AMS/AEMS.

.Alexander> I think an DSR will be the only possibility, to stay compatible. Perhaps one could add AMS support to another devices DSR (e.g. Horizon, which should be quite common). CRU switching again is incompatible.

.Alexander> OK, AMS is his "child". I mentioned DSR access also in my letter to Charles Good and thought (from what I know about AMS), that it also would have a DSR. It should not be too expensive to add an Eprom.

.JeffW> Would you like me to send you previous conference transcripts so that you can see what developments are being made in the TI community?

.Alexander> That would be very nice. Especially the transcripts of the conferences concerning AMS and other memory issues.

.JeffW> Chris Bobbitt and Don D'Neil got into some lengthy arguments over AMS and 4A Memex. These transcripts can get quite long. Should I archive them and IIED them and mail them to your Internet address?

.Alexander> I think, we should not argue about the best way, but design a way, that will run on all systems. We must also face the fact, that most programmers (at least I guess so) have a Geneus. For compatibility reasons, a DSR is the only solution

[IED NOTE: the DSR/compatibility issue was resolved by Gary Bowser in the Joe DeleKto CO when neither Jeff nor Alex were present -- see that transcript]

.JeffW> I will try to get permission to post them to comp.sys.ti.

.Alexander> If possible, the best way will be to send them as Unix compressed UUencoded mail to my internet adress. Sometimes I got problems with IIED files.

.JeffW> The problem is I cannot UUencode them.

.JeffW> Does your account have lots of free memory?

.Alexander> I do not care about it, but I don't know, if anyone will charge you money for sending LARGE ascii files. receiving is no problem for me.

.Alexander> What do you mean by lots? I guess I can use up some more 5MB, but 20MB could cause problems.

.JeffW> I can send the files without being charged money.

.JeffW> 5MB? I only get 750KB!

.JeffW> Transcripts are normally around 50KB as plain text.

.Alexander> Well, I do not have a upper bound set, but on the disk (660MB) are also some other users. At some point the disk is full, and we have to arrange how to deal about space. (I should add, that we are using sometimes LARGE amounts of

data. A friend of mine even suggested adding a 1GB disk for short storage of large amounts of data, i.e. 100000x100000 matrices, representing groups).

.Alexander> 50KB is NO problem at all (even 10 times 50KB), go

.JeffW> The transcripts are probably less than 20 pages each. You could print them out and delete the files.

.Alexander> Thats fine.

.JeffW> Do you have any questions about Delphi or anything that was discussed today?

.Alexander> At the moment not. I think, I will write down some afterthoughts and send them to you for posting.

.JeffW> Thanks for joining us, Alexander. Was the conference what you expected?

.Alexander> Yes, It was great (except for the buggy line in the beginning).

.JeffW> There are other ways to connect to Delphi via Internet.

.JeffW> You can Telnet to Kuhub.cc.ukans.edu, and at username type RELAY.

.Alexander> I don't think, this would have helped, since any access to US computers (at least I tried some other to check, where the error was) was impossible during this time.

.JeffW> An option on the menu will be "delphi". Just type "delphi" and you are connected to Delphi just as if you had used Delphi.com.

.JeffW> This is how you would connect to the Kansas City Delphi node rather than to Boston Delphi node.

.JeffW> Back gain, Bill.

DUNNELLS> SORRY got bumped off

.JeffW> <again>

DUNNELLS> many times today

.JeffW> That happens, Bill.

DUNNELLS> call waiting

.JeffW> Disable it.

DUNNELLS> I did

DUNNELLS> ?

.JeffW> Alexander, would you like to see anyone in conference next time we schedule you? Maybe I could round up Chris Bobbitt and Don O'Neil to describe

their memory systems.

.Alexander> I think, there are some things to be cleared up with the ones designing the several memory expansions, but this will be done better by mail.

DUNNELLS> Do you know if a Tandy CM5 RGB monitor will work on a 9640

.JeffW> I don't know, Bill. Maybe Alexander does.

ED NOTE: The CM5 is an analog RGB monitor (not CGA) used on the COCO1

.Alexander> Just can guess (Tandy is not very common here): Ask the dealer, if an Amiga (500 or 1000) will connect. The 9640 has standard RGB output with TV frequencies. Thus a VGA monitor most probably will not work.

.JeffW> Alexander, I use a multisync SuperVGA monitor on my Geneve. 800x600 pixels.

.Alexander> Yes multisync WILL work, but there are also pure VGA monitors. I use a clone of the "old" model, that was used e.g. on the amiga (in fact it is a philips product). You need to have separate connectors for analog R, G, B and Sync.

DUNNELLS> Does it have a low scan rate 15Khz

.JeffW> Alexander, are there any other persons in Germany that have Internet access that might like to be Delphi guests?

.JeffW> Bill, are you asking me about my monitor, or Alexander about his?

DUNNELLS> yours

.Alexander> I think, there are some of them (though you might not have heard much of them). I will look up their addresses and mail them to you.

.JeffW> I am looking for any who might have written software or designed hardware for the 99/4A or Geneve, Alexander. Thanks for any help.

.JeffW> My monitor has scan frequencies from 14.75-35.5KHz, I think.

DUNNELLS> So if the CM5 is compatible with the Amiga 500 then it will work on the 9640?

.JeffW> It should, Bill.

.JeffW> Is the CM5 price very good?

.Alexander> If you can connect the RGB output of the Amiga 500 (at least of the model sold here in Germany) to the monitor, you should be able to

connect the 9640 the same way.

DUNNELLS> 49.95

.JeffW> That is very good if it will work.

DUNNELLS> But I must change the video plug

.JeffW> Is it new or used?

DUNNELLS> new display model

.JeffW> Have you seen a user manual?

DUNNELLS> no manual avail.

.JeffW> If you buy it, try it, and it does not work, can you get your money back?

DUNNELLS> only if I dont change the plug!

DUNNELLS> a computer repair shop will change the plug for 10.00

.Alexander> You might try to solder an adapter, so you will not cut the cable of the monitor to change the plug.

.JeffW> Alexander, I will send the transcripts to you as plain text to ahulpke@bert.math.rw-aachen.de.

.Alexander> Thats fine. I think I will leave now. Many thanks for a fine evening.

.JeffW> Thank you, Alexander. I'll try to schedule you again sometime in the future if you would like that.

DUNNELLS> I've enjoyed it!!!

.Alexander> We should consider that via eMail

.Alexander> Goodbye

.JeffW> Goodnight, Alexander. Have a safe trip home.

end at 13:42:49

## Joke Of The Month



A husband was distraught when he caught his wife in bed with another man. In desperation, he sought advice from his rabbi, who counseled forgiveness. "After all," the cleric said, "a man cannot be held responsible for his actions below the waist."

At that, the furious man kicked the rabbi in the shin.



## LIMA MUG REVIEW

BY DAN GARZV

LIMA 93

### Why Go?

Each year (for the past three years), I have made it a point to travel out to LIMA, OH to attend the MUS conference. Some may ask, why travel 650+ miles (one way) to attend an all TI show. If you happen to look at the attendance roster, you'll soon discover that there are others who travel even further. My reasons for going are as follows:

- see the latest products available for the TI community
- communicate with vendors and TI99/4a owners regarding where the current trends are taking us, what software will be written, what needs to be written, etc.
- buy some of the products that strike my fancy
- renew my interest in the TI99/4a

### How to Prepare

Now that I've explained why I go, let's get on with the review. This year, I attended the show with a pencil and paper to go along with my folding money. In past years, I had come back with a hand full of goodies and good intentions on writing a review of the show. When it came time to write the article, my mind tended to become fuzzy on details and lots of things I heard or saw were not relayed in the review. While this review will be far from all encompassing, it will be far more complete, than any other review I have written.

There are three things I've learned to do as soon as I get there. First, sign the log sheet and slap on a name tag. Since there's no paid admissions for the show, the only means the LIMA group has to keep track of attendance is this sheet. The name tags are a convenience for you and your fellow attendees. I find it a courtesy to know with whom I have conversations. The next thing you'll want to do is pick up a schedule of events. On this schedule is the list of available seminars. As luck would have it, there were instances where two vendors were presenting the products simultaneously in two different rooms. The last immediate item is to sign up for copies of the video tapes of the seminars. This is your insurance against missing out on that seminar you wanted to see. The asking price of \$15 (or \$3.75 and 3 OHS tapes) is more than fair. Now all that's left, is to schedule your time between the vendor

table displays and the seminars.

### Who was there

This section is far from the definitive statement of what vendors were there, but more like which vendors I spent time or recognized as being in attendance. As in years past, Bud Mills Services, Western Horizon Technologies and OPA were present offering their latest hardware innovations. For those looking for drives, cables, etc. you had your choice between Dave Connery, L.C. Conner, Secure Electronics, Mudd & Co, Competition Computers and Ramcharge Electronics?. The software vendors in attendance were: Regard, Bruce Harrison, Jim Bodenmiller, Notung Software, M&S Software & Media Ware Software. From the user group community I know the following groups were in attendance: Northcoast 99er's, TI Chips, C.O.N.N.I., Lina UG, and MUNCH (Massachusetts). Before I end this paragraph, let me say that I APOLOGIZE for any vendor or group I may have left off this list.

### What caught my eye

At the vendor area, I picked up a pair of 3.5" Toshiba 1.44Mb drives for \$50 a piece from Dave Connery. While my Myarc 80 track FDC will only take advantage of 720Kb, the price was the best at the show. I spent some time talking with Don Walden concerning the repair of my HFDC. Since I don't fashion myself as an electronics wizard, I opted to make arrangements to send the card to him to repair. Secure Electronics were also selling 3.5" drives at \$55. As in years past, most any table had P-Boxes and complete systems available. I even saw a HFDC for sale at one UG table. In '92, I went to the LIMA show in search of an HFDC and couldn't find one. I saw some really nice labels produced by a product called Graphics Grabber from Media Ware Software. The current version only produces black and white labels, but the version under development puts out some really nice color labels. For those of us who have IBM clones at home, I spent some time watching Mike Wright's PC99 software simulation product run on his 50MH 486 machine. His demo consisted of modifying a MAKE file (commenting and uncommenting lines) before linking and executing a program simulation. While at his table, I saw Tombstone and Persec demoed. Each year I make some software purchases for my kids and myself. The two games I brought home this year were TI-Casino and TI-PEI. So far it's been a struggle to pry the kids off the computer for meals, homework and bedtime.

### Seminars In Review

At the conference, I managed to find time to attend three of the seminars. Two of them were hardware oriented (Don O'Neil and Bud Mills) and the other fit more into the category of miscellaneous (Jack Sughrue). I have seen many of Mr Sughrue's articles in newsletters and decided to see how he uses the computer in an educational environment. With two children in the New Jersey school system, I was curious to see what type of software Jack uses in his third grade class. Most, if not all the software Jack uses, is

written in either Extended Basic or Basic. To make the software "user friendly" for his students, Jack uses the menu boot program. This takes alot of the guess work out of how to execute the educational software. Most of it involves just moving the menu bar to the program of choice and pressing the ENTER Key. While Jack has written some of the software, he spent quite a bit of time demonstrating a disk collector entitled "Tony Falco's Classics". Most of what I saw was very professionally done and rivaled the educational modules that TI produced. It tended to avoid the shooter up type of stuff that some vendors used to feel was necessary and dealt more with teaching the child. The mathematics drills were especially well done and didn't get into cutesy-type name calling if the child got the answer wrong. In one of the drills, it would display both the solution of the child and the computer. Since all the work was shown on the screen, the child could see exactly where they went wrong.

Last year, Don O'Neil introduced some projects/products and this year was more of an update on past projects and a few new products. The Digi-Port device that was introduced last year is still available and version 2.0 of the software is still in the works. Last year at show, version 1.0 of the digi port software was available and they were working on an upgrade. This past year, the SCSI card was being sold at the Chicago show and the DSR for the card would be shipped as soon as it was available. It's still not available, but I believe that much of the work done by Jill McGovern (FunWeb fame), has escalated the completion date. McGovern is responsible for writing much of the low level i/o needed for the device. Jeff White is responsible for writing the DSR for the device and it's estimated that the DSR is approximately 60% complete. Don O'Neil has a commitment from Mike Maksimik to write the "backup" software for the device. The 4a/MEMEX's fate has had some of "Murphy's laws" applied to it. The original design of the card went back into a redesign phase because the dynamic ram chip was discontinued by the chip manufacturer. O'Neil redesigned the board to use a National semi-conductor chip which should remain in production for at least the next three years. The pricing on the 4a/MEMEX will be \$180 for a board with no memory on it, \$190 for a MEMEX with four 256 Kb SIMMS and \$210 for a MEMEX with one 1Mb SIMM.

Two new products were also announced by Don O'Neil called Turbo Video and a 99/4a Rom upgrade for the AUPC. The turbo video product is a Geneve product that will increase the speed of the Geneve by 15-20%. The ROM upgrade for the AUPC fixes the interrupt problems and RS232 problems of the AUPC.

The last seminar I stayed to watch was Bud Mills. Some of what he showed/talked about, covered WHT products that were developed jointly. The Horizon 4000 has many of the features/wiring mods that were thought of after the initial 3000 series boards were developed. The Phoenix modification and the RAMBO mod are switch selectable on the new card. The PGRAM card is still available in Kit form or fully assembled. From what I deciphered about the product, it appears to be much like a GranCracker or Granulator type device. When the topic of the SCSI device came up, it was described as being capable of supporting hard-drives or

floppy drives that are either SCSI-I or SCSI-II compatible. The card will be packaged with a disk manager called UNImanager by Mike Maksimik. Backup software will be available from Maksimik but as a separate product. CD ROM devices can be supported but they require a browser utility (separate product) to work. A digital scanner is also doable, but would require separate software to support it.

Much of what was discussed/promised at this show is dependent on the spare time of the parties involved. Since most of the vendors still supporting the TI product line can not make a living just selling to the TI community, it usually requires them to have day jobs. Please keep this in mind when you are considering the purchase or repair of a product.

## Editor's Forum



"Is GUI or not to GUI, that is the question". Much has been made about GUI type interfaces for programs, operating systems and alike, but my jury is still out on this one.

Being forced to use a PC clone at my day job, many of the newer products I see are windows products. Old MSDOS products are being upgraded to make them windows compatible. After seeing a number of these applications, it quickly becomes apparent that NOT all applications are suited to a GUI interface. Those that are, may not be structured as intuitively as you would have hoped.

I've noticed that many video games lend themselves well to a simple GUI/mouse interface. This is probably due to the fact that most games require few (high) strokes (if any) to accomplish any functionality. Most game playing can be easily accomplished by moving the mouse and clicking. To

activate functions, simply click the mouse on the appropriate icon. If a drop down menu is necessary, simply place the mouse on the menu bar and click. Much of what I've just said, sounds alot like the dialog you here from those who favor windows. However, not everything is intuitive and easy to use. After you struggle with a few windows products, you quickly vary your opinion on the subject.

If you should find a T1994/a application that would benefit from a GUI, the next question you need to ask is "Can the 99/4a support a GUI interface and the application?" The answer to the question depends on the graphics mode you choose, the number of icons the application needs and the amount of RAM memory needed for storage. The amount of video memory needed by the application varies depending on the graphics mode chosen. For example, if bitmap mode is used in an application, there is little or no video memory available for anything else. In fact, it becomes necessary to temporarily store some video memory in regular RAM if file i/o is performed. A GUI is nothing without a mouse, so be prepared to reserve space for a mouse driver. Before you know it,

## COMMENTS & SUGGESTIONS

You run out of memory resources before you've written many a line of

Don't get discouraged and say "the heck with it", there are two resources to consider. If you are going to use a hi-res application, consider using some of the video memory in the 80 column device for temporary storage. The 80 column card has a minimum of 128K (most have 192K) and the hi-res modes (66/67) will never require more than 64k for the viewing screen. The other alternative is to make use of the AMS/AMS memory card from Regard. Within a few months, WHT should also have the 4a/MEMEX available.

The last word I have on this subject is that a 39/4a product exists that has a GUI. It's called Page Pro Page Composer from Regard Software. Hopefully, in the next few months there will be others.

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