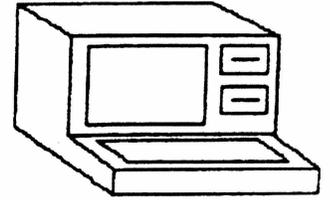


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# THE INTERFACE



NEWSLETTER OF SAGATUG  
THE SAN GABRIEL VALLEY TANDY USER'S GROUP  
*THE CLUB FOR TRSDOS, MS-DOS, CP/M, AND LAPTOP COMPUTERS*

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Volume 10 Number 12

Price \$1.50

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## MODEL 4 HELPERS

### *Cute Little Utilities*

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SAGATUG President George Madison is going to talk about utility programs for the Model 4. Utilities are those neat little programs that make the use of the computer easier, or faster, or add a function that should have been built into DOS, but wasn't. He'll cover some Public Domain and shareware gems, and also some commercial programs. But regardless of the source, these are programs you need.

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The DECEMBER SAGATUG Meeting will be held Friday, December 8, 1989 at 7 PM  
in the Arcadia Park Senior Citizen's Center  
405 South Santa Anita Avenue, Arcadia

-- SAGATUG meets the second Friday of every month --

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### ARTICLE SHORTAGE

After October we got a bunch of articles for the INTERFACE, but they're all used up now. Take a look at Mark Speer's article in this issue - it should give you an idea about something to write about!

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#### CLUB OFFICERS

President .....	George Madison
Vice President .....	Fred Berg
Sec'y/Treasurer .....	Mark Speer
Disk Librarians .....	Eric Bagai, John Phillipp
Members-At-Large .....	Lance Wolstrup, Eric Bagai
.....	Allen Jacobs
INTERFACE Editor .....	John Phillipp

INTERFACE Submissions: SAGATUG, 815 South Walnut, San Dimas, CA 91773  
Club Post Office Box: SAGATUG, PO Box 6818, Burbank, CA 91510

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Contribute to the INTERFACE and Club Disk Library

## A MESSAGE FROM THE PRESIDENT

*I hope you all have had a good Thanksgiving holiday, and like me, are looking forward to the Solstice/Christmas/Hanukkah and New Year's Holidays. Of course, I haven't done my shopping yet, so I may be a little overly optimistic at this point.... Even so, it's a nice time of year; Southern California pretends to have a winter, people seem a little more positive than they might be during the rest of the year, and we can all hope we receive our currently "Most Wanted" computer add-on as a gift. (Grin!)*

*As we noted in the last INTERFACE, last month was our club elections. I came prepared for a rather lengthy experience, but much to my surprise, the elections took virtually no time at all. I presented the slate of candidates prepared by the SAGATUG board (myself as President, Mr. Fred Berg as Vice-President, and Mr. Mark Speer as Secretary-Treasurer), and asked for other nominations. There were none. A motion was made to elect the slate as presented, which passed unanimously. I must say, I do feel appreciated....*

*The next "project" we face is the revamping of the SAGATUG By-Laws. This task has been ignored and neglected, and our by-laws are sadly out of date in some respects. Sometime in the near future, we will try to have copies of the current by-laws available for you all to examine. If you have suggestions to the board for changes you think would be for the better, we would certainly appreciate hearing from you once you've had a look at the current by-laws.*

*Also....*

*The rush of articles that were submitted from guilt stimulated by our INTERFACE Editor John Phillipp's near-resignation has nearly been consumed. As I have written previously, we now have a make or break point to reach, and so we need articles more than ever. Obviously, articles on Tandy computers are welcome, but so are articles about how what you've learned from your computer has been useful elsewhere. Perhaps learning to use a word processor made you less frightened to learn how to program your new whiz-bang VCR to do nearly everything but make the popcorn. Be creative! We really would like to hear from you. If you're worried about how you should submit the article, don't let that stop you; I know for a fact that John would love to tell you.*

*That's about it for this month; to steal a phrase from Tim Sewell, "Make Mine TRS-80!"*





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## FROM THE EDITOR'S DESK

*John T. Phillipp, INTERFACE Editor*

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### SUBMISSIONS

After all the noise at the October meeting, I got a flurry of articles for the INTERFACE. Since then. . . nothing. Well, the flurry is just about used up. I have exactly one article for the January issue. . . and that is one that Allen Jacobs sent me 2 months ago.

Please take a look at Mark Speer's article on possible topics for articles for the INTERFACE. I know there is at least one member who knows a lot about each one of those. Look at Art Molz' question - doesn't anyone else have questions? Look at Roy Beck's article. As he says, it's easy to pick up ideas from another source. Massage them a little and Presto! An INTERFACE article.

I've been very proud of the INTERFACE the past two months. . . original articles written *by* our members, *for* our members. Let's keep up the quality into the new year. I'm waiting for your articles.

### LETTERS, WE GET LETTERS

Please pass the word. I would like to sell the following system (which I "inherited" from my father's business and couldn't properly operate)

TRS-80 Model II  
One 8 inch drive  
Corvus 5 MB hard drive  
Tandy Line Printer  
Misc 8" disks, manuals, and books

I have no use for this and would like to get it into good hands - a home where it would be used. It's not a freebie, but I will be easy to deal with.

Ben Elder  
1512 Corinth #6  
Los Angeles, CA 90025  
(213) 478-5083

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In a short time I will be moving to Jamaica in the Caribbean where I will be using an early version Radio Shack Model 4 computer. The current there is 50 Hertz, and this seems to present a problem. I have made at least five long distance calls to Tandy in Fort Worth. Each time they have an answer that they think may work, and another long distance number to call for more further information. Once

I get to Jamaica guesswork will not be very satisfactory. So far I have been told that I may need a "switchable" power supply, a disk with a program on it that refers to the frequency of the power, or have to change some jumpers or a chip and so on.

Please, if your group has any correct knowledge on what I must do to have the unit operate properly I would be very glad to hear from you. Thank you for your interest and whatever help you may be.

Stanley Gussow  
425 Hollyvale Drive  
Nashville, TN 37217

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I have just purchased a used Model 4 D without any manuals and no software. I have been able to acquire a TRSDOS 6.1.2 diskette and BASIC interpreter and a manual for the 4/4P. I have a real interest in learning about this "fine" computer! I have had a CoCo for 3 years and really like it too!, but I have always admired the looks of the TRS-80 machines.

If you or anyone in your club would like to correspond with me about your knowledge and experience with this computer, please do so! I am thinking of trying to start a I, III, 4, 4P, and 4D user's group here and would also like to learn how yours operates.

Please feel free to write me. Any and all replies will be gratefully acknowledged.

Mrs. Barbara James  
1111 State  
South Houston, TX 77587-3931

### MODEL 3 AND 4 STUFF FOR SALE

Ron Chill, the Brooklyn SAGATUG member is getting out of the TRSDOS business. He sent me a list of some of the programs he has for sale, and I will have copies of it at the meeting.

There is a ton of stuff, including his Model 4 computer, an extra Model 4 keyboard, extra (80 track) drives, and an Orchestra 90 board (with 1000 tunes!). He has operating systems, word processors, utilities, games, comm programs, textbooks. If you have any interest in the Model III or 4, check out this list!

## SOLTOFF'S ADVENTURES

Roy T. Beck

This article is based on notes taken by me while reading about Soltoff's Hard Drives in the Fall 1989 Issue of The Misosys Quarterly (TMQ). Most of it consists of simple excerpts from his articles and replies to letters he has received. In a few cases, I attempted to read between the lines. In case of error, blame me, not Soltoff. A few other items of interest are also included.

Soltoff announced his hard disks are being delivered. He is shipping a package consisting of:

- 20 Meg ST-225 or 40 Meg ST-251 bubble
- Adaptec 4000 or 4000A or Xebec S1420 HDC
- Misosys host adapter w/ provision for clock and joystick
- Power supply to serve two drives
- Case to house the above
- Misosys software

In small items scattered through the issue, he says the HDC's are functionally similar to Xebec S-1410A, Konan DJ10, and an unidentified board by Scientific Micro Systems (SMS). (I have a faint recollection that SMS' board is known as "OMTI", but I'm not sure of it). He says he will later offer software for use with "generic Xebec S1410A's", apparently meaning any of the work-alike HDC's mentioned above. He says his package is a subset of SCSI. This should mean SASI as implemented by those other vendors, and now incorporated as a subset of SCSI.

He also noted the Adaptec 4000 was used originally with the MAX-80, and anyone ordering a hard drive for use with the MAX-80 will receive that HDC, which plugs in without need for a host adapter. (This may exclude the possible use of the joystick and mouse on the MAX-80). He promises to sell the Xebec S1420 alone for about \$95.

He notes that VR DATA and ARM, among others, used to use the S1410A. I know he still has available the driver he wrote for the VR DATA Hard Disk III under the name VRHARD. His new driver is more elaborate, needing to determine which HDC is in use (there is some difference in the formatting commands), and containing provisions for the clock and joystick hardware.

His host adapter uses a programmable logical device (PLD) to decode addresses, etc. This reduces chip count, and probably makes him the sole source for the chip. He says the host adapter will probably sell separately for \$75.

There are two SCSI connectors defined in the SCSI docs. One is the 50 pin DIP, the other is a 50 pin

version of the connector used by Centronics for printer connection. Soltoff is using the latter on his HD box.

He also notes the WD XT-GEN HDC for IBM uses a subset of SCSI; this is probably SASI again.

A reader asked about MISOSYS' QIC-40 JUMBO tape backup unit, specifically if it will be made available for TRS-80's? The device connects to the regular FDC, and dumps the HD contents to an industry-standard DC2000 tape cartridge. Roy's ad says you can backup 10 MB in 5.5 minutes and 40 MB in 18-20 minutes.

Soltoff replied that he is giving some consideration to implementing this device for the TRS-80. If he carries this through, that will give us a neat backup arrangement for our hard disks!

The tape drive control signals are sent serially to the tape drive as a series of timed STEP pulses; status is returned as a signal on the TRK00 indication line! Ought to be easy to implement, especially as he has already done it for the clones.

I am not sure I am interpreting his ad in TMQ correctly, but it seems to say (for the IBM clones) that the tape recorder itself goes for \$300, and the DC2000 cassettes go for \$22.50. This setup mounts the half-height drive in an available 5.25" slot. In an IBM with all FDC connectors already in use, a tape adaptor for \$80 (requiring a bus slot) is additionally required. For a still further addition of \$35, the drive will be supplied as an external unit which plugs into the tape adapter. In this configuration, one drive can be shared among several different machines.

A possible arrangement in a Mod 3 or 4 might be a half-height HD, the tape drive, and one or two floppies. The 4P would have to be an external setup, but that might be out of the realm of a "kit package". A Mod 4 might get by for \$300 if its power supply can handle the extra drive, but I am sure you would have to add at least \$125 to that to build up an external unit for a 4P or a 3 or 4 with no extra drive space, as a case and power supply would have to be included. Remember, in all of this I am just guessing. (But it's fun)!

A reader noted that diskDISK does not presently respect the software write protect. Roy says it probably should respect the write protect, but the code as written doesn't do it. From the tone of his comment, diskDISK was evidently written by someone else at LSI, not Roy. In a telephone conversation with him, (Roy to Roy), he told me his

HD software package includes a version of diskDISK identified as SUBDISK, emphasizing the concept of sub-directories. In this version he implemented the changes necessary to make Subdisk's (diskDISK) software write protect function as expected.

In response to another reader's query, Roy noted that the LDOS Mod III disassembler can handle Mod 4 files OK, no problem. Same formats, directories, etc. I presume the Mod 4 disassembler could also handle Mod III files.

A reader commented that Micro-Smart's HD driver is way too long at over 500 bytes and asked if Roy wrote it or will rewrite it; answer to both was "no". Roy said to return the whole thing to Micro-Smart and instead buy Roy's package of soft and hardware!

Note to LDOS users. You can get a pocket folder of LDOS 5.1 commands from Soltoff for the price of a legal size SASE (4" x 9.5"). Put 45 cents postage on the SASE. Note this is not for LDOS 5.3, but what the heck, it covers most of the commands, and the price is right!

There is more stuff to be gleaned from the TMO; this is just what caught my eye. Thinking back to last month's discussion at the meeting about contributions to the INTERFACE, this is an example of how easy it is. I just picked up a few ideas from another source, and let fly with my trusty Model 100. C'mon fellows, you can do it too. And its always good for the ego to see one's stuff in print!

## A PC-PURSUIT PRIMER

*By George Madison*

I was rather surprised recently to run across some very computer literate people who had never heard of the PC-Pursuit telecommunications service. For those of us who are addicted to computer bulletin boards, PC-P is invaluable.

PC Pursuit is a service that allows you to make a local call to an "indial node," and use the Telenet high-speed data network to connect to an "outdial node" from which you can call a BBS local to that outdial node. The neat thing about all this is the fact that while your indial node is (for example) in Southern California, the outdial node can be in any of a variety of major cities in the USA -- San Francisco, Denver, Atlanta, New York City -- or more! Of course, this neat trick wouldn't be of any real use if it weren't for one other thing -- PC-Pursuit service is charged at a flat rate. Whether you're connected to San Francisco or New York City, you pay the same hourly rate, which starts at \$1/hour! There isn't any such thing as a free lunch, of course; the \$1/hour rate only holds for the first 30 hours per month; after that, the price increases to \$4.95/hour. However, that's still below the prevailing rates for the voice telephone long distance services such as AT&T or MCI.

The other caveat in using PC Pursuit is the fact that dialing through PC Pursuit can be phenomenally tedious. Hence, there are programs specifically designed to route calls through PC Pursuit. For the TRS-80, there is PCPlus, and one of the better known MS-DOS programs for this purpose is called ICEX. Let's say you want to call a BBS in Denver, for sake of argument.

Here's what a manually conducted PC Pursuit call might be like:

- 1) Dial the local indial node.
- 2) Press <ENTER> twice to get the TERMINAL= prompt.
- 3) Enter your terminal type (D1 for the vast majority of people).
- 4) Receive the "@" prompt.
- 5) Type "C D/CODEN/12,<PC-PID> , <Password>"
- 6) Receive notification as to whether the CODEN node is available.
- 7) If so, proceed to dial the Denver BBS.
- 8) If connected, proceed with session; otherwise, try #7 again.

Since there are so many steps, and the possibility of running into a "busy signal" in two important places -- getting into the outdial node, and actually dialling into the target BBS -- you can see that having a program do the "drudge work" would be almost essential. If you do most of your telecommunicating via local phone calls to nearby BBS systems, PC Pursuit would very likely be of little interest to you. On the other hand, if you're one of those people who absolutely dreads the coming of the long distance phone bill because of your BBS habit, you should look into PC Pursuit. It could save your wallet from an unnecessary beating.

To get information on the PC Pursuit service, call Telenet Customer Service at 1-(800)-336-0437.

## THE WORM BEFORE CHRISTMAS

by David Bradley, Betty Cheng, Hal Render, Greg Rogers, and Dan LaLiberte  
(with sincere and profound apologies to Clement C. Morris)

'Twas the night before finals, and all through the lab  
Not a student was sleeping, not even McNabb.  
Their projects were finished, completed with care  
In hopes that the grades would be easy (and fair).

The students were wired, caffeine in their veins  
While visions of quals nearly drove them insane.  
With piles of books and a brand new high-lighter,  
I had just settled down for another all nighter...

When out from the gateways arose such a clatter,  
I sprang from my desk to see what was the matter;  
Away to the console I flew like a flash,  
And logged in as root to fend off a crash.

The windows displayed on my brand new SUN-3,  
Gave oodles of info - some in 3-D.  
When, what to my burning red eyes should appear  
But dozens of "nobody" jobs. Oh dear!

With a blitzkrieg invasion, so virulent and firm,  
I knew in a moment, it was Morris's Worm!  
More rapid than eagles his processes came,  
And they forked and exec'd and they copied by name:

"Now Dasher! Now Dancer! Now Prancer and Vixen!  
On Comet! On Cupid! On Donner and Blitzen!  
To the sites in .rhosts and host.equiv  
Now dash away! dash away! dash away all!"

And then in a twinkling, I heard on the phone,  
The complaints of the users. (I thought I was alone!)  
"The load is too high!" "I can't read my files!"  
"I can't send my E-mail over the miles and miles!"

I unplugged the net, and was turning around,  
When the worm-ridden system went down with a bound.  
I fretted. I frittered. I sweated. I wept.  
Then finally I core dumped the worm in /tmp.

It was smart and pervasive, a right jolly old stealth.  
And I laughed when I saw it, in spite of myself.  
A look in the dump of that invasive thread  
Soon gave me to know we had nothing to dread.

The next day was slow with no network connections,  
For we wanted no more of those pesky infections.  
But in spite of the news and the noise and the clatter,  
Soon all became normal, as if naught were the matter.

Then later that month while all were away,  
A virus came calling and then went away.  
The system then told us when we logged in one night:  
"Merry Christmas to all! (You guys aren't so bright.)"

# TOPICS FOR INTERFACE ARTICLES

Mark Speer

At the October SAGATUG meeting there was a considerable amount of discussion about the lack of original articles for the INTERFACE. Someone stated they didn't know what to write about. Well, I gave it some thought the next morning and jotted down some topics that I would be interested in or felt others might be interested in. The list I came up with follows this introductory paragraph.

If you think I am just trying to get out of writing some articles myself I will tell you that I also made notes on articles I personally felt that I could write. These are not included on the list below. So as you can see there is no shortage of things to write about, nor is there a shortage of talent in our club. For each of these topics, the name of a Club member who has a particular interest or expertise in that area pops into mind. What seems to be in short supply is the willingness on the part of most people to gather their thoughts together and type them into a word processor and send them to John. So what do you say. Can't you spend a hour writing an article for the benefit of your fellow club members??

## TOPICS

1. *How to purchase, install and use a Hi-Resolution graphics board on a TRS-80.*

List the best deals, who in the club has software, who in the club has installed one him or herself, etc.

2. *How to buy a PC.*

Lists where to shop, what to avoid, how to sort through all the graphics, disk drive, and memory options.

3. *A review of on-line services.*

Prodigy, CompuServe, Genie. How to sign up, costs, services offered, ease of use, etc.

4. *How to safely transport a computer.*

Hard disk drive "parking", floppy drive handling, how to pack, where to carry the computer in your car for maximum safety.

5. *How you got involved in SAGATUG.*

A personal account of how and when you first came. Who did you talk to at meeting one? What made you want to join? What did you find scary or confusing the first night?

6. *Why I like SAGATUG.*

Again, a personal look at why this club is important to you.

7. *How to share files between TRS-80 computers and MS/DOS computers.*

Commercial software programs, null modems, transfers over phone lines.

8. *Sources of Public Domain/Shareware programs.*

Perhaps include information for both TRS-80 and MS/DOS.

9. *I just bought a modem, now what do I do?*

A basic tutorial on hooking it up, what software to use, who to call, and what the "300/1200/2400-8-N-1" means.

10. *How to use the Public Domain disks available at SAGATUG.*

How to copy them, what their formats are, what to expect.

11. *Program reviews.*

There is an almost limitless number of programs that could be reviewed in the INTERFACE. Commercial programs, shareware programs, public domain programs, home-made programs.

12. *Hardware reviews.*

There is also an almost a limitless number of hardware items that could be reviewed in the INTERFACE.

13. *What's this I hear about SAGATUG II???*

The true story of our escapades at local restaurants.

14. *How to sell used TRS-80 software and hardware.*

Placing ads in newspapers, selling at the clubs, how to price items. When you should try to sell an item vs. when to just give it away.

15. *How to select and utilize computer swap meets.*

Where do you find out the dates and locations. When should you arrive? How to know when something is a bargain? How do you know if the product is okay?

16. *How to write and submit an article to the INTERFACE.*

Which formats are best? How do I get it to the Editor? How long should an article be?

17. *How to organize your hard disk.*

Commercial software available. Subdirectories etc.

18. *My favorite INTERFACE articles.*

A list of articles from past issues that you found useful or interesting.

19. *How to label your floppy disks.*

What to include on the label, programs that will do it for you, colored disks, colored dots and labels.

## SUBMITTING ARTICLES TO THE INTERFACE

John T. Phillipp, *INTERFACE* Editor

Did you read Mark Speer's article about possible topics for articles for the *INTERFACE*? I noticed that one of the topics was "how to write and submit an article for the *INTERFACE*". That got me thinking. . . I'm always asking for articles, but I've never actually made it clear how to do it. Mark, this will be the first article to use one of your suggested topics.

### SO, HOW DO I GET AN ARTICLE TO THE INTERFACE?

Submissions can be given to me at the meeting. If I'm not around, they can be given to Mark Speer.

Submissions can also be mailed to me directly (815 South Walnut, San Dimas, CA 91773) or to the SAGATUG post office box (PO Box 6818, Burbank, CA 91510). It's better to mail direct to me, though. If Mark finds a submission in the box, he has to forward it to me, and that adds a delay.

Submissions can also be sent by modem. Give me a call (at home: (714) 592-4178, or at my office: (818) 914-5803) and we can arrange it.

### WHAT FORMAT SHOULD IT BE IN?

As Editor, I prefer submissions in a format that is the least work for me, but I will take what I can get.

For example, I will gladly accept handwritten (neatness counts!), typewritten, or computer hard-copy submissions, but I will have to type them into my computer before they can be used. And I am a slow typist.

So I *prefer* articles that are already on disk. In MS-DOS, I can read 360 K or 1.2 MB high density 5 1/4" disks, or 720 K or 1.4 MB 3.5" disks.

Model I, III, 4 disks are a little more complicated. I have to use TRSCROSS to read TRSDOS disks on my AT clone. TRSCROSS will read only single or double sided 40 track TRSDOS 1.3 or 6.x disks. If necessary, I can read NewDos and 80 track disks, and copy the files to a TRSDOS disk using Super Utility 4/4P, but I prefer to get TRSDOS disks that TRSCROSS can handle directly. If you use NewDos, please set the PDRIVE to make a 40 track, single sided, single density disk. TRSCROSS can read that.

Regardless of what kind of disk you send, label it with the operating system used, how many tracks, how many sides, and (if using NewDos) the PDRIVE setting, so I know what I've got. All disks look alike!

Submissions by modem avoid the whole media conversion mess. My modem can handle 300/1200/2400 baud.

### WHAT ABOUT THE FILE ON THE DISK?

Please don't worry about formatting your text on your word processor. I will remove all your formatting codes - margins, columns, bold, italic, and everything else when I format the text with WordPerfect. I'm trying to make the *INTERFACE*

more professional looking by using consistent formatting and fonts throughout the newsletter.

If you have some special formatting that you think is important to the article, include a hard-copy with the disk so I can see what you want to do, and I will try to duplicate it with WordPerfect.

The best text file to send me is a plain ASCII file with no special codes in it. Each Word processor has its own way of saving an ASCII file to disk (SCRIPSIT for the Model 4 uses "SAVE *filename,A*") so look in your documentation. If you're not sure if it's plain ASCII, go to the operating system prompt and type (without quotes): "TYPE *filename* <ENTER>" (for MS-DOS) or "LIST *filename* <ENTER>" (for Model I/III/4 DOSes). If the text that appears on the screen is just letters, with no smiley faces or funny looking symbols, the text is probably ASCII.

### HOW LONG SHOULD IT BE?

The *INTERFACE* can be no more than 6 pages (12 sides) long, because 7 pages requires 2 stamps. Of the 12 sides, 1 side is the front page, 1 side is the index/ mailing label, and 1 side is the President's letter. That leaves 9 sides for articles.

It's nice to have 4 or 5 articles in the newsletter each month, so that means that the average submission should be 1 or 2 pages long. 3 pages is a long article. If I have enough material, I will usually try to break up a 4 page or longer article into 2 or more parts, and run them in consecutive months, like Eric's series on User Groups. If I'm short of articles (as usual), I may print a 4 or 5 page article in one month.

One page is anywhere from 600 to 900 words, depending on the size of the font I use to print it. But don't worry. I can put several shorter articles together to make one page, or put a longer one and a shorter one together as I did with Roy's and George's articles this month.

The bottom line is: don't worry about how long or how short your submission is. I will arrange everything to fit. And the more material I have, the easier it is.

### WHEN IS IT DUE?

The *INTERFACE* is printed monthly, so you needn't worry about deadlines - anything I don't get in time for this issue will be held over and printed in the next one.

What if a submission is time sensitive, and must be in a certain issue (like the Christmas poem in this issue)? I usually put the *INTERFACE* together on the Sunday before the weekend before the meeting. The meeting this month is December 8. . . I'm writing this on Saturday, November 25. The issue will go together tomorrow. In general, any submissions I receive less than 2 weeks before the meeting will be held over for the next month.

## HOW TO START AND KEEP A USER GROUP PART 3

Eric Bagai

### WHO WRITES THIS TRASH?

Anyone with a laptop computer probably uses it primarily for word processing and should be co-opted for the job of user-group *EDITOR* regardless of protests of lack of time. All writers complain of a lack of time - it is often what they do best. They can be appealed to: "Nobody else has the talent to do the kind of job you can do for us." This appeal only fails if the person really is a professional writer and used to getting paid for her work. This position usually is called *SECRETARY*. Nobody wants to be a *SECRETARY*. Everybody wants to be an *EDITOR*.

The *EDITOR* maintains a list of members, their addresses and phone numbers, interests, areas of expertise, machines used, etc., and uses this list for whatever mailing is sent to the membership each month. This can be a postcard, a newsletter, or a diskletter, but it has to be something. It is astonishing how quickly a user group can disappear when its monthly notice is not sent.

About every six to twelve months the *EDITOR* should produce an updated membership list printout and duplicate it for the membership. This should contain names, phone numbers, and maybe addresses, but not detailed descriptions of how much expensive hardware they own. Between times, you should poll members for interests, languages, DOSs, machines, or whatever strikes you as being useful for the group to know. You should also get a rough attendance record at each meeting, and delete no-shows after six months.

The *EDITOR* also composes, prints, and mails a notice of meetings to all members. At first this will be a postcard. It should be mailed a full week before each meeting. You can get franked postcards from the post office and save yourself the taste of stamps, but you may prefer to use printer's 3-up postcards, or continuous-form postcards with sprocket holes; or you can just copy them 4-up from an 8.5 X 11" master sheet and slice them with a razor or guillotine cutter. Costs are roughly equivalent, but use the most convenient rather than the least expensive.

An amazing amount of information can be put on a postcard. Think of it as a constraining form, like haiku, which forces clarity of thought and purpose. The postcard should contain a brief notice of the subject of the meeting, the date, time, and address, as well as anything else you think might get people to show up. A border decoration is a nice touch.

Ideally, this develops into a newsletter or a diskletter. In practice, it's hard enough just to get the little suckers in the mailbox.

### WHO KEEPS THE TREASURE?

Every club has to raise money, and somebody has to collect and disburse all the club funds. This person is the *TREASURER*. If your expenses (room rental, FOG affiliation, newsletter) are high enough, you may need to collect annual dues. Sometimes there's just no other way to survive. Just remember that the group's survival shouldn't require the exclusion of potentially valuable members. I favor giving the *TREASURER* the discretion to award scholarships to anyone who asks for one. The emcee should regularly make it known that anyone can ask, and that contributions to the scholarship fund are welcome. Only the *TREASURER* needs to know who the recipients are.

It is not a good idea to raise a great deal more money than you really need. This not only looks bad to the membership, it gives people funny ideas. If more than \$2000 per year flows through your coffers you will need to get a club bank account and consider incorporating with non-profit (educational) status. Ask the local IRS office for a 501(c)(3) application and information package. Ask for it anyway - it will include a sample set of bylaws.

But solving your financial problems is easier than you might think. I think the usual practice of charging an annual fee or a door fee is the lazy way out. Better, and much more fun, is to provide a service to the group that more than pays for itself. Here are some ways that work:

Someone can afford to buy bulk disks (\$21.00/1000 or \$.21 each) and then sell them to club members at \$.50 each, with the profits going to the club. This is a natural adjunct to your club library, and the price is reasonable. Suggest that members have their employers or businesses buy disks from the club.

You can raise money from outside the group with the equivalent of a bake sale: make a collection of member-written programs and sell them by mail at \$5 a for each disk. You'll need to write a description of what's on each disk, and put each disk description in a printed catalog. When you have five full disks, advertise in the want-ads of *Computer Shopper* (or equivalent) that you have new public domain programs, that a free catalog is available for an SASE (self-addressed, stamped envelope), and that a sample disk is available for \$5.00, including postage. (Always offer something for immediate sale; don't just advertise a free catalog.) Some people won't send a SASE; some will send a SASE and an order for the sample disk, thus giving you a stamped re-addressable envelope to use for the former individuals. After selling more than a thousand disks for a small club, I have three extra SASEs. Of course, demonstration and

explanation of member-developed programs make the for very best presentations at your meetings.

If your club is frequented by commercial vendors, charge them a table fee for setting up a display. (Don't put up a 5% consignment table for stuff that members sell to each other: you'll just send them to other groups.) If you have three or more vendors, ask each one to donate a piece of software or hardware once every four months or so, sell raffle tickets, and raffle off one item at the end of each meeting. With a large enough group you can even reimburse the vendors for their donations (at cost, of course).

If you have no vendors, you can poll the members for their needs, make bulk purchases of hardware and supplies at a substantial discount, and then keep half of the discount for the club.

### **FRAUDS AND CONS**

About one in ten user groups in the Los Angeles area is a commercial venture designed solely to make money off its "members." At such fraudulent user-group meetings, several presumably essential pieces of software and hardware are demonstrated by the emcee. The membership is then given the opportunity to line up and buy everything in sight. The membership then lines up and buys everything in sight. Some of these groups even have skills in the audience to ask questions and start the buying. The same skills and vendors will be at each meeting. Of course, you can't tell a fraud from the real thing by its newspaper ads. But if you've ever been to a real user group, you will be able to spot one of these frauds without too much difficulty. If you find yourself at one, pass out your own group's business cards, perhaps with a written notice on the back: "a real user group."

At the same time, some relatively expensive user groups are quite worthwhile. Club 100, First Osborne Group, and the Boston Computer Society, can seem like rip-offs until you examine the services they offer in return. So don't just condemn anything that isn't free - look for a balance between costs and benefits. Look for this balance in your own group, and if you don't find it, bring it up at the next RAM session.

### **EMERGENCIES**

Every group has problems from time to time. Problems with the membership occur when someone "goes too far" - in playing politics, in expressing dislike of another member, in generally being crazy. This is where the Board must act unanimously and firmly. Keep in mind that regardless of personal sympathies, fear of retribution, or a deep dislike of making a fuss, the

Board is responsible first to the group and the purpose for which the group was formed.

Problems with fundraising can often be met by putting the issue directly to the membership--just don't make a habit of it or no one will take you seriously. Maybe you are trying to offer too many services and are not charging enough for them. However, if it's just a matter of group stinginess or financial inertia, then they deserve what they get.

Problems with vendors should be dealt with as you would with any benefactors who provide you with a small but useful allowance: decide how much you will put up with, given the size of the allowance, and tell them exactly what their allowance is worth. Problems with shrinking membership occur when advertising is not taken seriously. Take it seriously.

The resolution of these emergencies will always take courage and require measured and just action. In golf (my other hobby), getting out of trouble without compromising your honor is called "building character."

### **BURN OUT**

It is very fashionable to complain of stress from overwork. This is nonsense: what people really mean is that they are bored. People get bored when no one is willing to share the work. They get bored when no one says thank you. They get bored when each meeting is just like every other meeting. If you begin to get bored with your computer user-group, you need to try doing something entirely different. You could learn how to delegate responsibility without being hypercritical. You could make your job an elective position. You could take up juggling (they have user groups, too.) Or you could sell your machine, buy one with a different CPU, and join (or start) a new user group. If it isn't fun, it isn't a hobby.

### **WHEN IT'S OVER**

What do you do when the meeting is over? You go to the nearest all-night restaurant and talk and eat until exhausted. This will probably happen whether or not it is an official group function, because, aside from being loyal to a particular machine, you are friends; and friends eat and drink together. When your group is first established this may be your only meeting place. When your group declines past being able to afford its own room, this can be your last stand. But no matter where your group is in this cycle, save me a french fry.

Part three of a three-part article.

## ? QUESTIONS ?

Well, here goes. I have been promising myself to write something for many months and finally I am going to do it. I have been a member since the club met in the Real Estate Office. That is even before Dan Dresselhaus invented his *FingerPrint* for the EPSON printer.

When I joined the club I needed to learn about my Model I TRS-80, which I still have, and the club was the place to find help. At every meeting I always would learn something. As the years have gone by I have been able to help some of the newer members in the club.

I still have my Model I and now also a Model 4 and a new AT-286. I enjoy the club and the members, and I always learn something or am able to help someone else at a meeting. Well I now need to learn things about my new AT-286, as maybe some of you do.

So maybe I will get better at writing if I try each month. I have only had my MS-DOS machine for 10 months so

I have had a lot to learn. It seems that almost every month this year I have learned something about my AT, at the SAGATUG meetings. I have learned a little about BATCH files and a little about Nortons "ASK" file. I will be glad to share these with the club.

Now I need something. I would like to know how to do a screen dump on command from software, in MS-DOS. In the TRS-80 world JKL was the screen dump from the key board, and Multidos has a command SCREEN which can be issued from DOS or from BASIC with CMD"SCREEN" in a program and do a screen dump. I would like to know how to do the same thing on my AT-286.

Well, that is all for now. See you at the meeting.

10/25/89 Art Molz.

---

Sorry that this has taken so long, Art. I just got your question in the mail a few days ago. As I told Harry last month, I'm no Sweet Sally, but I think that I can help you out. Of course, if anyone in the Club has a more complete answer, we'd love to hear from them.

Hitting the Shift and PrtSc keys sends a screen dump to the printer on an MS-DOS computer, just like JKL on the Model 4. The first thing that I tried to do to get a screen dump from a program was to see what scan codes were sent to the computer from the keyboard when the Shift and PrtSc keys were pressed.

I wrote a little BASIC program to do that:

```
10 CLS
20 A$=INKEY$:IF A$="" THEN 20
30 IF LEN(A$)=2 THEN PRINT ASC(LEFT$(A$,1));
   ASC(RIGHT$(A$,1)) ELSE PRINT A$
40 GOTO 10
```

Guess, what. While running this program, hitting Shift-PrtSc dumped the screen to the printer. No scan codes were generated. Well, time to hit the books.

PC-Magazine's *DOS Power Tools* book has a wealth of information on Shift-PrtSc. It says that hitting those keys generates an INTERRUPT 5 for the CPU.

When an interrupt arrives at the CPU, it checks the INTERRUPT VECTOR TABLE to get the address of the interrupt handler routine for that interrupt. The interrupt handler is a program located in RAM or in the ROM BIOS. The handler for Shift-PrtSc is located in the ROM.

So there's the solution: write a little program that generates an interrupt 5. When the program is executed, the screen will be dumped to the printer, just as if Shift-

PrtSc had been pressed. I wrote a DEBUG script to do that.

Use EDLIN or a word processor to make the following ASCII file, and then save it to disk with the filename PRNTSCRN.SCR:

```
N PRNTSCRN.COM
A
INT 5
RET

RCX
5
W
Q
```

Make sure there is a blank line between RET and RCX, and a carriage return after the Q.

Go to DOS, make sure DEBUG and PRNTSCRN.SCR are in the same directory and type:

```
DEBUG < PRNTSCRN.SCR <ENTER>
```

The program file PRNTSCRN.COM will be generated.

This program can be executed from DOS, used in a batch file, or can be called from a GWBASIC program using the SHELL command:

```
10 SHELL"PRNTSCRN"
```

That's it, Art, a screen dump from inside a program, just as if Shift-PrtSc had been pressed. I hope this helps you out.

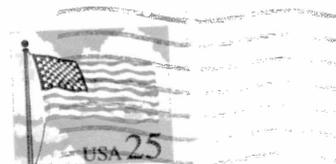
John Phillipp

In this issue:

President's Message ----- page 2  
From the Editor's Desk ----- page 3  
Soltoff's Adventures ----- page 4  
PC-Pursuit Primer ----- page 5  
The Worm Before Christmas ----- page 6  
INTERFACE Topics ----- page 7  
Submitting Articles ----- page 8  
User Group, Part 3 ----- page 9  
Question ----- page 11



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