THE DATA BUS

THE DELAWARE VALLEY USERS GROUP
DEDICATED TO THE TI AND COMPATIBLE HOME COMPUTER FAMILY

P.O. BOX 6240 STANTON BRANCH, WILMINGTON DE 19804
4TH THURS. 6:30-9:30 P.M. CHRISTIANA MALL COMMUNITY ROOM

KENT COUNTY, DE COURTHOUSE	<CHAPTER>	DEPTFORD, NJ MUNICIPAL BLDG.
2ND MONDAY 7:00-9:00 P.M.	<MEETING>	3RD MONDAY 6:45-9:00 P.M

Nominations
by Jim Folz

The Nominating Committee has agreed upon the following slate of officers for 1987.

President: Tom August

Vice-President: Jim Davis

Secretary: Tim Evers

Treasurer: Dan Farrow

Sergeant-at-Arms: Jim Folz

Elections will take place at the January meeting. Installation of the new officers occurs at the February meeting.

DVUG EXECUTIVE COMMITTEE MEMBERS IN 1986

PRESIDENT ....TOM AUGUST
VICE PRESIDENT ....JIM DAVIS
SECRETARY ....LYNN ACQUARD
TREASURER ....TOM KLEIN
SGT. AT ARMS ....JIM FOLZ
DELMARVA CHAPTER CHR ....CHARLES BOWER
SO.JERSEY CHAPTER CHR ....ERROL LANSBERRY

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DVUG BBS:   (302)322-3999  Anytime
            (609)429-7792  Anytime
            (302)674-1449  6:00 PM-6:00 AM
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For general information, you may contact

TOM KLEIN	Pa.	(215)494-1372
GIL or KAY QUILLEN	Del.	(302)492-8189
JACK SHATTUCK	Del.	(302)764-8619
BUTCH FISHER	N.J.	(609)783-8276

Delaware Valley Users Group membership includes: library and software privileges, monthly DATABUS newsletter, plus other special benefits. Annual membership rates are: Family or Individual $15; Student $10; Newsletter only (beyond 75 mi) $10.

TRANSMIT YOUR NEWSLETTER COPY TO: The Data Bus Editor --- Jim Folz, Telephone (302)995-6848, or use the DVUG mailing address shown on Page One. PLEASE SUBMIT NEWSLETTER ARTICLES FOR AN ISSUE BEFORE THE 2ND THURSDAY OF EACH MONTH.

An article appearing in The Data Bus may be reproduced for publication by another TI Users Group as long as acknowledgement is given to the sources as indicated. We encourage exchange newsletters; mail to DVUG business address shown on Page One.

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DVUG ADVERTISING RATES FOR THE DATA BUS:
1/4 page - $ 5/issue, or $ 45/12 issues
1/2 page - $ 8/issue, or $ 75/12 issues
Full page - $15/issue, or $125/12 issues
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DELAWARE VALLEY USERS GROUP MEETINGS

Plenary meetings: Delaware's Christiana Mall on Rte. 7, at I-95 Exit 4-S, in the Community Room. Enter between J. C. Penney and Liberty Travel inside the Mall.

DELMARVA CHAPTER: Kent County Courthouse, Basement Conference Rm #25, Green & State Sts, Dover, De. Use the Green St. side entrance.

SOUTH JERSEY CHAPTER: Deptford Municipal Bldg, Cooper Ave. and Delsea Drive, (Rtes. 534 & 47), in Gloucester County. Enter and park in rear of the building.

CONTENTS OF THE JANUARY ISSUE OF THE DATA BUS:

NOISE on The Data Bus
by Jim Folz

Perhaps if you saw as many newsletters as I do, you would see how genuine the need is for volunteers. Within our group, many of the officers and committee members are doing double duty. Some jobs, by their nature, are two man jobs and, generally, the same people swap jobs around until they burn out and cannot be coerced into further service. Other groups appear to have the same problem.

Currently, we have no Equipment, Membership, or Refreshment committees. The Software Librarian is hopelessly swamped with the job of getting our library in order and I struggle with the task of providing a newsletter based mainly on other newsletters or information sources. Please help us out. Everyone in this group should do something. (If you don't do anything, then don't complain.)

I should thank Norm Sellers and Jim Davis for their literary contributions. Their articles and programs brought us much attention. Also, thanks to Jack Shattuck who is always good for a page. Finally, thanks to Joe Brooks for the typing help.

On to the news... .

FLASH   FLASH   FLASH
Steve Lawless has decided to place MASSCOPY in the public domain. Source code will be placed in the software library. Thanks, Steve, for all the work that you have done in support of the TI community.

Please note that the Delmarva Chapter has changed its meeting date to the second Monday. This change is effective with the February meeting.

Note, also, that the Christiana Chapter meets on the fourth Thursday (not the last one). January has five Thursdays. The January meeting is scheduled for 1/22/87.

As mentioned in the last newsletter, we have set up another special meeting. Date- Saturday, 1/24/87 Time 10:00-2:00 Place- Calvary Episcopal Church (See map on Page 9) Equipment maintainance, software exchange, demonstrations, etc. are planned. Stop by and see us.

NEWSLETTER EDITORS take note. Starting with the September DATABUS, articles appearing there have been placed in the DVUG library. Anyone interested in these or other DVUG software holdings can contact us at the address on Page 1.

I understand that a new service is available to TI users. Called GENIE, this service has a TI special interest group and lower connect time rates. If anyone has any info on the service, perhaps they could write a short article for the DATABUS.

ATTENTION DVUG MEMBERS! The Treasurer asks that transactions with the group be made using checks. Generally, these transactions will be for software or renewals. Please try to help out the Treasurer. His loss is our loss.

February is the anniversary month for the DVUG. Usually, the event is celebrated by having

DVUG SOFTWARE LIBRARY NOTES
by Jack Shattuck

Beyond doubt, the story of the month is the new IBM-compatible sidebox which Craig Miller is offering the TI-99/4A public. It has a built-in 1/2-height disk drive, 256K memory with sockets for 640K capacity, color graphics card, 8 mhz of running speed, Turbo XT characteristics, all in a bridge box the same width yet only slightly a little wider than the CorComp add-on. Marketed by TRITON of California for $499, shipment to TI buyers will begin March 1st.

It uses the 99/4A keyboard, so help me, and has LED lights to advise you whether you're in a TI or IBM mode - a la Pascal, for you old-timers - and is compatible with everything out there... but not Geneve. You can still run your TI P-Box with CorComp, Horizon, Myarc RAMDisks for the TI mode! Do you believe this?!! YOU CAN GO FROM A TI-99/4A 16K CONSOLE AND TAPE RECORDER TO AN IBM OVERNIGHT! (Well, you will need to get an 80-column monitor for that: monochrome sells around $75-100, and color about $200 for low resolution and Craig's baby takes either RGB or Composite.)

Calling the TRITON toll-free number, (800) 227-6900, will get you a flyer extolling the new device, so I'll let you read about it that way.

'TIS THE SEASON TO COUNT YOUR REFUND...

While you start drooling about how to spend anticipated tax refunds, how about getting them first? Three marketers of tax aids for your TI in past years have announced new software help.

DATAX, 1923 Linden St., Ridgewood, NY 11385 has their 1986 DA-TAX AUDITOR, for Form 1040 and Schedule A, $19. They take charge accounts, and orders at (800)628-2828 Ext. 820, and questions at (714)417-0165.

RMJ Home Computer Sales, 2982 Whileaway Circle W., Colorado Springs, CO 80917, provides instructions and information to printout data to your tax forms for Forms 1040 and Schedule A for $12.95, 1040A and Schedule 1 $8.95, Schedules B, C, W and Form 2441 $4.95 each, and Schedule D or E, $5.95 each. The whole batch is yours if you send $39.95.

If you prefer to use Multiplan Tax Template data printouts, you may prefer writing to James Sleeth, Financial Mgt. Consulting, PO Box 20723, El Cajon, CA 92021 with a $10 check. He has the 1040 and Schedules A,B,C,D,E and W templates.

I've been busy at work with the new Leading Edge Model D (IBM compatible) 30 megabyte harddisk delight which Uncle Sam finally got me. For the past three years, I've used my TI-Writer and PRK Cartridge for word processing and data, after I got tired of an old TRS-80 Model I's gobbling up my input with a locking index disk - 3 times!

That's of interest to our Delaware Valley Users Group because I had to learn how to create spreadsheets. I naturally turned to a Multiplan module which I've had for years, waiting for the right moment. For a week and one-half, I became engrossed and rapidly educated, when suddenly I lost my screen and couldn't bring anything up at all. It was essential for work.

One member had another cartridge which he, too, had never used and was willing to lend. The second member I contacted kindly explained, upon opening the module, that the circuitry wire was cut by a narrow crack for some reason. A little soldering job with a fine iron could do a shunt which would put me back in business. He was not the one to do it, but a third DVUG member could, and I was back up within the week.

That wasn't the end of it. A number of DVUG members joined me recently in collective buying of some of Dave Rose's CHARACTER SETS GRAPHIC DESIGNS programs, as discussed last month. Dave has done a marvelous job of increasing speed and utility of many of his routines while adding new ones. Many individuals have begun piggy-backing on his fine and not always properly acknowledged work.

By the way, we will be having some workshop sessions in CSGD programs on January 24th, at Calvary Episcopal Church from 10-2 on Lore Ave., in North Wilmington. (Note spelling of street.) Hope to see you there.

Anyway, I was trying one of the newer label programs when one of them came off and stuck on the back of my roller feed bar. It was too far back to reach, and again within a week, I called on you, my DVUG colleagues, for help. One member provided a local reference, who inexpensively and graciously undid and redid a million pieces to get me back up in two days. (Freon helped.)

I'm in my 5th year of DVUG involvement, and as you see, I only know how to "push the button" to make things work. I avoided mentioning names due to respect for privacy but especially to our current and former officers who helped me out so superbly, I thank you most gratefully. THAT is what User Groups are for!

And if anyone wants to reach ME, I'm home at (302)764-8619, in North Wilmington.

Another entry in the print graphics program development underway is THE PRINTER'S APPRENTICE from (Mike) McCann Software, PO Box 34160, Omaha NE 68134. It contains both picture and character editor (you create your own graphics and a font style), and combines with TI-Writer text files. You can print the latter in several font styles. It uses 32K, Disk, E/A or XBasic, and sells for $22.50. A companion TPA FONTS DISK ONE can be obtained for $11.50, via check or Money Order.

TIGERCUB Jim Peterson, whose columns we had carried in The Data Bus and distributed at DVUG meetings, will produce no more wide-circulation gratuitous work. His previous items have been discussed before; a final Tips from the Tigercub Vol. IV, covering Tips 33-41, is on disk for $15 from Tigercub Software, 156 Collingwood Avenue, Whitehall, OH 43213. Earlier Tips disks are $27 for two, $35/3, or $42 for the set of all four.

Also announced recently by Ron Albright is: THE ORPHAN'S SURVIVAL HANDBOOK published by Disk Only Software, PO Box 4170, Rockville, MD 20850. $16.95, a 200+ page compendium of programs, tips and general information, it comes punched as a three-hole binder insert (if you have a binder), with "updates for registered owners" promised.

For orders, call (800)446-4462 on a touch-tone phone, and enter 897335 when appropriate. Human response is available at (301)369-1339, if you call between 9 a.m.-6 p.m.

The DVUG catalogue update is pending return of Joe Brooks from the Middle East. Butch Fisher of Deptford and Joe like the format used in the South Jersey Chapter, and we'll incorporate that for you - I hope for the February meeting in the New Castle County area. IT'LL BE OUR BIRTHDAY! That marks the start of our formal involvement, when we began with election of officers, meeting at Christiana Mall in the days when J.C. Penney, Sears, Bamberger's and the "Electronic Boutique" in the Mall all carried TI-99/4A equipment. Over four years, my, how we have grown!

THE SCREEN PAGER UTILITY
by Michael St. Vincent - LA 99ers

How often have you wanted to look at part of a program as it runs or set up an initial instruction screen that could be stored and recalled in an instant? If you are familiar with the almost complete impossibility of doing this, especially in the Extended BASIC environment and want to get free of such limits, here is your answer: an assembly language subroutine that is short and non-complex.

Simple solutions to problems such as screen storage are often overlooked in favor of staying strictly in one language's environment. Most people are unfamiliar with the usefulness of having machine language routines take over chores that are much slower in BASIC. To store a screen in BASIC, for example, most programmers would use GCHAR to read all of the screen and store the result in an array. Besides being slow and inefficient, a BASIC routine to do such would use large amounts of memory.

Enter the amazing and fast 9900 machine language routine! The screen, usually a set of rows and columns to a BASIC programmer becomes only a set of memory locations. In this form, moving a copy of the screen becomes as simple as assigning the assembly equivalent of a few variables and a GOSUB. Operation of the subroutines is kept simple by having the computer do the calculating. The possible applications of these subprograms are limited only to the programmer's imagination.

HOW THE PROGRAM IS USED:

The subroutines, once assembled, are some of the simplest to use. Loading the programs into memory is accomplished by using a CALL INIT command followed by a CALL LOAD ("DSK1.PAGER/OBJ") command. The routines are automatically stored in the memory and become invisible until needed. Four programs are loaded simultaneously for use in Extended BASIC: PGSAV1, PGSAV2, PGSHO1, and PGSHO2. The SAV programs save everything on the screen at the instant they are called to pages 1 and 2 respectively. The SHO programs return the previously saved pages to the screen. All four programs are accessed by CALL LINK("pgname") where pgname is one of the program names given above. The amount of time spent by the programs can only be measured in microseconds. Using OLD, SAVE, MERGE, and NEW commands have no effect on the screens stored in memory (thus, one could list a program, save a screen of the list, load a new program, and still be able to look at the listing of the old program). The only restrictions on the programs are that they only store the characters, neither the colors nor any sprites are kept.

HOW THE PROGRAM WORKS:

The programs in assembly use a simple system of seting up a block of CPU RAM to store pages. Once a screen is to be stored, the registers 0, 1, and 2 are loaded with the address of the screen map in VDP RAM (000), the address of the CPU RAM block, and the number of bytes to transfer (768 for the full screen). A simple BLWP (branch and link with workspace pointer) command links to another utility routine which does the actual transfer. After the transfer is completed, the program uses the psuedo-opcode RT to reset the workspace pointer to the BASIC interpreter area from where it branched. At that point, the BASIC level program continues to execute.

HOW TO ASSEMBLE AND INSTALL THIS PROGRAM ON YOUR DISKS:

Using the Editor/Assembler package, type in the source listing which follows exactly as shown. Spacing is important to insure that the program will assemble properly. Once the program is typed in (you don't need to copy the remarks that are preceeded by an asterisk), store the source code (what you typed) under the filename "PAGER/SOU". Then load the Assembler. When asked for the source filename, give "DSK1.PAGER/SOU", and when asked for the object filename, give "DSK1.PAGER/OBJ". If you have a printer, give the device name at the prompt, otherwise, hit <enter>. The options for assembly are "RSL" if you have given a printer device name, or "RS" if you haven't. The assembler should do its job within 5 minutes and should print "0000 ERRORS" at the end. If there are any errors during assembly, refer to the source listing of this newsletter and compare what you typed in to it. As listed, the program assembles with no errors.

```
* THE SCREEN PAGER UTILITY
* SOURCE CODE WRITTEN BY MICHAEL ST. VINCENT
* USED TO STORE UP TO 2 SCREEN-FULLS FOR LATER
* USE
       DEF  PGSAV1,PGSAV2,PGSHO1,PGSHO2 * NAME
*                                         ROUTINES
VMBW   EQU  >2024         * VDP WRITE ROUTINE
VMBR   EQU  >202C         * VDP READ ROUTINE
SCRMAP EQU  >0000         * START OF SCREEN MAP
*                           ADDRESS
SCRCNT EQU  768           * NUMBER OF CHARACTERS
*                           IN MAP
PAGE1  BSS  768           * STORAGE BUFFER 1
PAGE2  BSS  768           * STORAGE BUFFER 2
PGSAV1 LI   R1,PAGE1      * ACTIVATE BUFFER 1
       JMP  GOSAVE        * GOTO THE SAVE ROUTINE
PGSAV2 LI   R1,PAGE2      * ACTIVATE BUFFER 2
GOSAVE LI   R0,SCRMAP     * STARTING POINT TO
*                           READ FROM MAP
       LI   R2,SCRCNT     * NUMBER OF BYTES TO
*                           MOVE
       BLWP @VMBR         * "GOSUB" TO READ
       RT                 * RETURN TO BASIC
PGSHO1 LI   R1,PAGE1      * ACTIVATE BUFFER 1
       JMP  GOSHOW        * GOTO THE RESTORE
*                           ROUTINE
PGSHO2 LI   R1,PAGE2      * ACTIVATE BUFFER 2
GOSHOW LI   R0,SCRMAP     * STARTING POINT TO
*                           REPLACE MAP
       LI   R2,SCRCNT     * NUMBER OF BYTES TO
*                           MOVE
       BLWP @VMBW         * "GOSUB" TO WRITE BACK
*                           TO MAP
       RT                 * RETURN TO BASIC
       END                * TELL ASSEMBLER TO
*                           STOP
```

If you want to use this program in BASIC with the Editor/Assembler module, change the lines to match this header:

```
* NAME ROUTINES
       DEF  PGSAV1,PGSAV2,PGSHO1,PGSHO2
       REF  VMBR,VMBW
SCRMAP EQU  >0000         * START OF SCREEN MAP
*                           ADDRESS
SCRCNT EQU  768           * NUMBER OF CHARACTERS
*                           IN MAP
```

Operation of the program is the same as described for Extended BASIC.

1987

```
        JANUARY                    FEBRUARY
 S  M  T  W  T  F  S        S  M  T  W  T  F  S
             1  2  3        1  2  3  4  5  6  7
 4  5  6  7  8  9 10        8  9 10 11 12 13 14
11 12 13 14 15 16 17       15 16 17 18 19 20 21
18 19 20 21 22 23 24       22 23 24 25 26 27 28
25 26 27 28 29 30 31

         MARCH                      APRIL
 S  M  T  W  T  F  S        S  M  T  W  T  F  S
 1  2  3  4  5  6  7                 1  2  3  4
 8  9 10 11 12 13 14        5  6  7  8  9 10 11
15 16 17 18 19 20 21       12 13 14 15 16 17 18
22 23 24 25 26 27 28       19 20 21 22 23 24 25
29 30 31                   26 27 28 29 30

          MAY                       JUNE
 S  M  T  W  T  F  S        S  M  T  W  T  F  S
             1  2                 1  2  3  4  5  6
 3  4  5  6  7  8  9        7  8  9 10 11 12 13
10 11 12 13 14 15 16       14 15 16 17 18 19 20
17 18 19 20 21 22 23       21 22 23 24 25 26 27
24 25 26 27 28 29 30       28 29 30
31
          JULY                     AUGUST
 S  M  T  W  T  F  S        S  M  T  W  T  F  S
          1  2  3  4                          1
 5  6  7  8  9 10 11        2  3  4  5  6  7  8
12 13 14 15 16 17 18        9 10 11 12 13 14 15
19 20 21 22 23 24 25       16 17 18 19 20 21 22
26 27 28 29 30 31          23 24 25 26 27 28 29
                           30 31
        SEPTEMBER                  OCTOBER
 S  M  T  W  T  F  S        S  M  T  W  T  F  S
       1  2  3  4  5                    1  2  3
 6  7  8  9 10 11 12        4  5  6  7  8  9 10
13 14 15 16 17 18 19       11 12 13 14 15 16 17
20 21 22 23 24 25 26       18 19 20 21 22 23 24
27 28 29 30                25 26 27 28 29 30 31

        NOVEMBER                   DECEMBER
 S  M  T  W  T  F  S        S  M  T  W  T  F  S
 1  2  3  4  5  6  7                 1  2  3  4  5
 8  9 10 11 12 13 14        6  7  8  9 10 11 12
15 16 17 18 19 20 21       13 14 15 16 17 18 19
22 23 24 25 26 27 28       20 21 22 23 24 25 26
29 30                      27 28 29 30 31
```

REMINDER:

January meeting date is 1/22/87

This is just a few of the dealers who supply the TI 99/4(A) community. Pretty good support for an "orphan" computer!

Asgard Software
P. O. Box 10306
Rockville, MD 20850
(301)345-2492

DataBioTics Inc.
P. O. Box 1194
Palos Verdes Estates, CA 90274

Disk Only Software
P. O. Box 4170
Rockville, MD 20850
(800)446-4462 + 897335 at tone
                Touchtone Order Line
(301)369-1339   Alternate Order Line
(301)340-7179   Information

Millers Graphics
1475 W. Cypress Avenue
San Dimas, CA 91773
(714)599-1431

Pilgrim's Pride
P. O. Box 2
5 Williams Lane
Hatboro, PA 19040
(215)441-4262

Quality 99 Software
1884 Columbia Road #1021
Washington, DC 20009
(202)667-3574

Ryte Data
210 Mountain Street
Haliburton, Ontario K0M 1S0
(705)457-2774

Tenex Computer Express
P. O. Box 6578
South Bend, IN 46660
(219)259-7051   Information
(800)348-2778   Order
(219)259-7053   Order Status

Tex-Comp
P. O. Box 33084
Granada Hills, CA 91344
(818)366-6631

Triton Products Company
P. O. Box 8123
San Francisco, CA 94128
(800)227-6900

IBM COMPATIBILITY FOR THE 99/4A
by Millers Graphics

Technical Info:
1. Two part system. A TURBO XT and a small bridge box that connects to the side I/O port on your 4A.
2. The TURBO XT is an 8 Mhz, 4.77 Mhz (switchable) mother board, power supply, XT style case, CGA color graphics card (both RGB and Composite), Floppy Disk controller, 1 half height DS/DD disk drive, Parallel port and 256K of Ram on the mother board. The mother board has sockets for up to 640K of ram. There are 8 expansion slots, two of which are used by the CGA card and the Floppy disk controller.
3. The bridge box has inputs for 4A Video in, XT Video in and outputs for XT Keyboard out and Monitor out. It also contains the software for Keyboard switching between 4A mode and XT mode and the software to convert the 4A key strokes into XT keycodes. It also has a pass through so you can keep your P-Box or other Periphs hooked up.
4. Mode switching from 4A to XT can be done through Basic or X-Basic with CALL XT or by holding down FCTN CTRL ENTER on power up of the 4A.
5. Mode switching from XT to 4A is done by pressing FCTN CTRL ENTER.
6. The ONLY items shared by the two systems are the 4A keyboard and your current monitor or TV. Yes you can get 80 columns out of a composite monitor, but it is easiest to read with the color turned off in 80 mode. The XT allows MODE 40 which also gives you 40 column mode. Graphics programs, such as games and drawing programs work fine in 80 column and most other software that doesn't combine weird foreground and background text colors are also quite readable.
7. By not sharing the disk drives it is possible to do concurrent processing on the XT. Example: Go into XT mode, start up your COMMUNICATIONS software, log on to a BBS and start a download. Now you can switch modes back to the 4A and do whatever you would like in 4A mode while the XT is still downloading from the BBS!!
8. We have tested this system on a number of 4A system configurations and have found it to be very compatible. Since it is an IBM clone it is also fully compatible with both IBM software and IBM HARDWARE. Yes, you can add ANY IBM cards you would like to the system.
9. The minimum 4A system requirements: A TI 99/4A console and a monitor or a TV set with RF modulator.

General Info:
1. This system is being marketed by Triton Products Company in San Francisco, CA. They are also handling the production of the bridge boxes and they have contracted for the Turbo XT clones to their specifications.
2. The system has a 30 DAY money back guarantee and a 1 YEAR parts and labor warranty.
3. The cost for this system (Turbo XT, Bridge box and cables) is 499.00 plus 19.90 for shipping and handling.
4. Their toll free number for additional info and/or a 6 page, 4 color brochure on this system is 800-227-6900, Monday through Friday 6AM to 6PM and Saturday 9AM to 4PM, Pacific Time. PLEASE DON'T CALL THEM UNTIL MONDAY, JANUARY 19, 1987 FOR TECHNICAL INFO OR

QUESTIONS. You can call before then to get a brochure. The people that answer the phones are going through a training course this week so they won't be able to properly answer your questions until then.
5. Delivery is scheduled to start on March 1st of this year.

We have been using this system for awhile now and we are very pleased with its performance. This isn't vaporware, ALL R&D, testing and software is complete and the units are ready for production, so the March time frame is a reality.

At last, a MAJOR expansion for the 4A. We hope you are as pleased with this product as you have been with our other products in the past. As the Triton Brochure says:

MAKE THE IBM CONNECTION TO YOUR TI 99/4A

----------MG----------

Computer Center
by Jim Mekeel-NorthCoast 99er's

This month, I thought that I would share with you some plans I found at a lumberyard for a computer work center that you can make from a single sheet of plywood. Of course, you can modify the plans to suit your own needs. The center has a seat for two people and uses an easily assembled slot-together design that just as easily permits dismantling for storage or transport. (Plans by American Plywood Association - See Pages 7 and 8)
(Also of note, is a computer table design mentioned in the Central Jersey newsletter dated May 1985. Bill Wright guides all through a project originally appearing in Popular Science Magazine (August, 1984)..........Editor)

Continued From Page 2

refreshments and perhaps some special program. The Executive Board is looking for a few good members to VOLUNTEER and plan the event. Please help. This is your group, too.
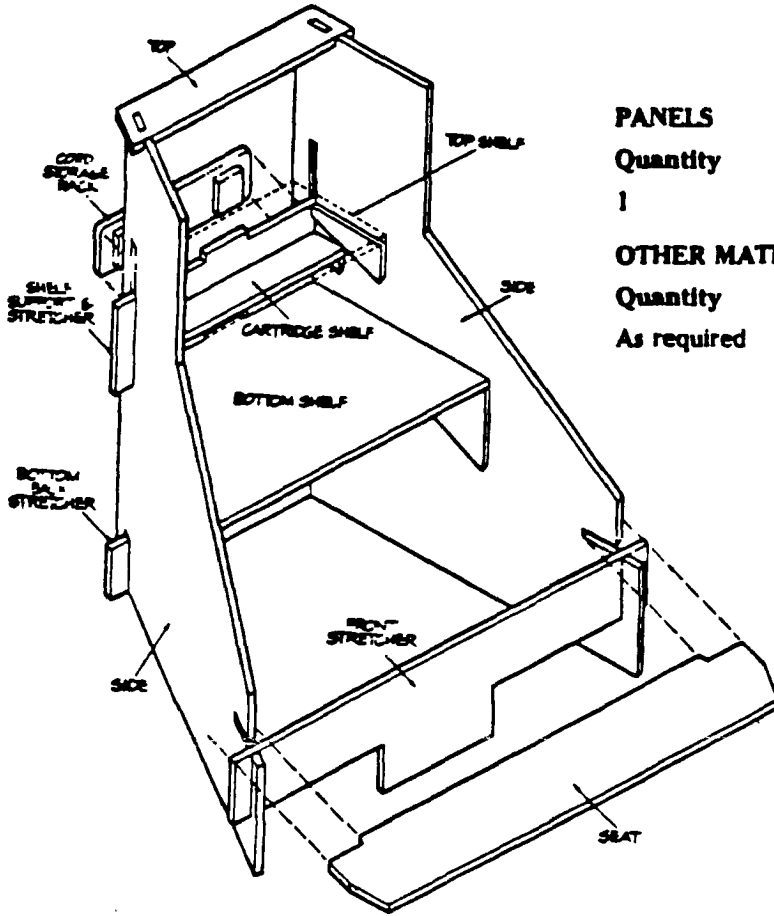
Check your renewal date. Since this is our anniversary, many memberships will expire at this time.

The Executive Board is seriously considering the purchase of a hard disk for the BBS. The topic will be discussed at the next meeting.

Effective in January, Christiana Mall has decided to charge for the use of the Community Room. In addition, they would not schedule us for the fourth Thursday of each month in 1987. As a result, our February meeting is scheduled for Wednesday, February 25. Does anyone know of an alternate meeting site?

A Special Meeting, like the one mentioned above, is tentatively scheduled for February 28. Watch here for more details.

Recommended panels: APA trademarked Medium Density Overlay (MDO), overlaid both sides, if available, or

APA trademarked A-B or A-C, or

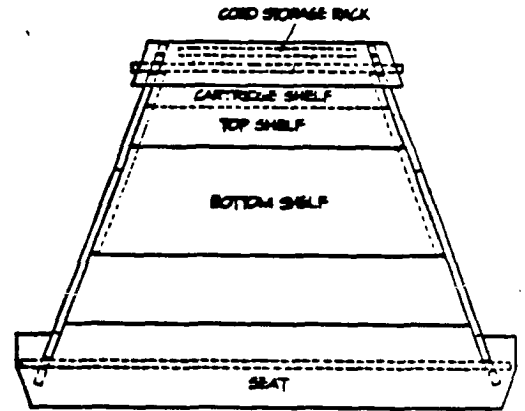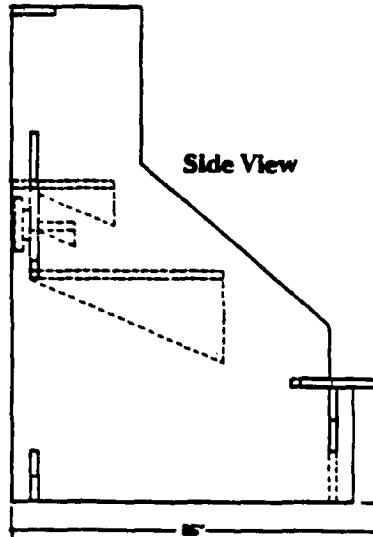For unique appearance, an APA trademarked reconstituted wood panel

PANELS

Quantity	Description
1	3/4 in. x 4 ft. x 8 ft.

OTHER MATERIALS

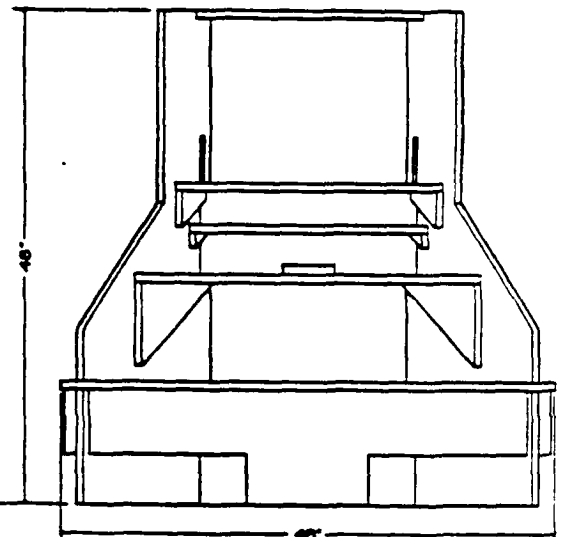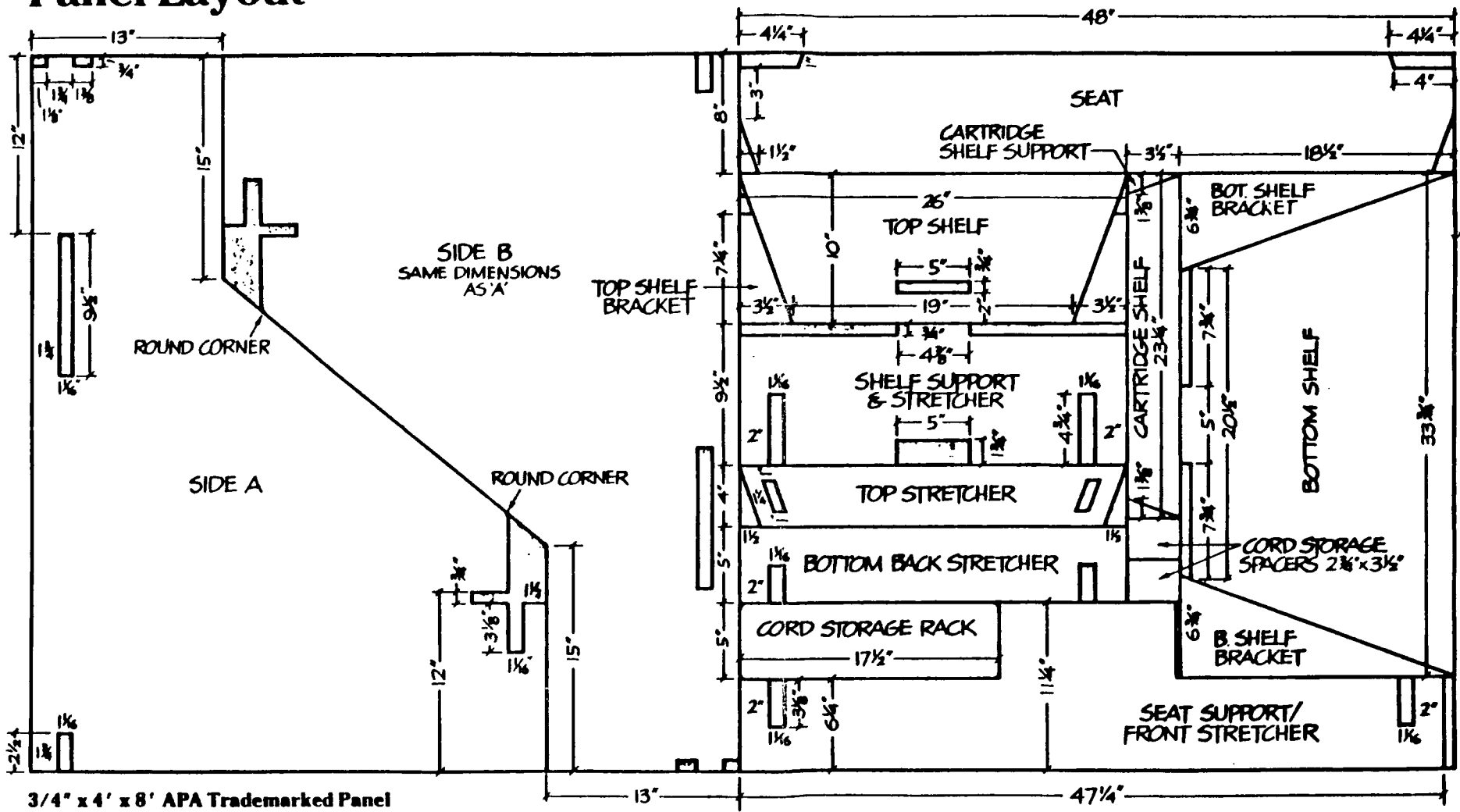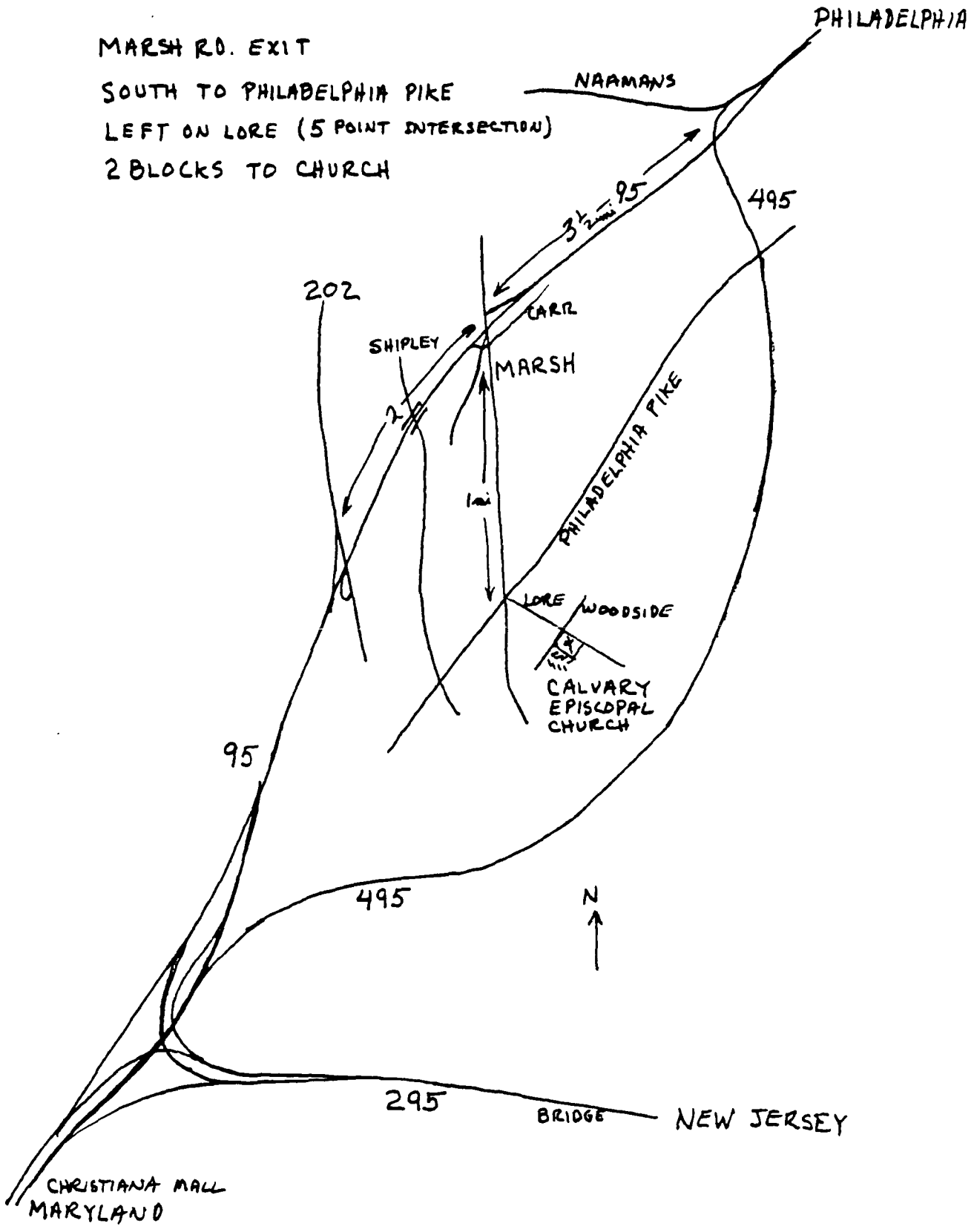| Quantity	Description
As required	Finishing nails and white or urea resin glue, (for shelves and cord storage rack), wood dough or synthetic filler, fine sandpaper, top quality finish (see finishing section)

Top View

Side View

Front View

Panel Layout

SIDE B
SAME DIMENSIONS AS "A"

SIDE A

ROUND CORNER

ROUND CORNER

3/4" x 4' x 8' APA Trademarked Panel

SEAT

CARTRIDGE SHELF SUPPORT

TOP SHELF

TOP SHELF BRACKET

BOT. SHELF BRACKET

CARTRIDGE SHELF

BOTTOM SHELF

SHELF SUPPORT & STRETCHER

TOP STRETCHER

BOTTOM BACK STRETCHER

CORD STORAGE SPACERS 2¾" x 3½"

CORD STORAGE RACK

B. SHELF BRACKET

SEAT SUPPORT/ FRONT STRETCHER

MARSH RD. EXIT
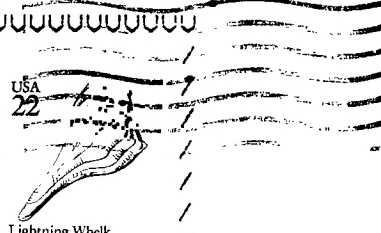
SOUTH TO PHILADELPHIA PIKE

LEFT ON LORE (5 POINT INTERSECTION)

2 BLOCKS TO CHURCH

LOST: One Secretary, last seen at the November Executive Board Meeting. (See picture above) No reward offered.

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PM
2 FIRST
CLASS
MAIL

USA 22

Lightning Whelk