FROM THE EDITOR   by Wanda Carter

Not very much for me to say this month,(I know there are
some of you that will be thrilled speechless on that!!, but such
is life).  Have several good articles this month, and hopefully,
more next month.  I was not at the last meeting, but I
understand there were some good talks.  I have not found out
what the program will be for this next meeting.  Will be a
surprise for all of us, I guess!!

We have a vast knowledge of the TI in the newsletters that
are received each month.  I do bring all of these, plus any
other information that comes in from other sources for the
group.  The MICROpendium is just one of these.  The group does
get copies each month, full of some very interesting articles,
also.  Especially this past issue.  Check it out at the next
Thursday night, or at the meeting, which will be on Nov. 8.  See
you at the meeting.

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FROM THE PRESIDENT  by BILL MASON

CorComp, Inc. has filed for Chapter 11 in a bankruptcy
court in California, which means they are requesting more time
to pay their debts while they continue to operate.  They have
new management and new engineers on board.  Their atitude and
service makes them unique in the computer industry.  Their
products at this time are very good.  I personally am going to
stay loyal and continue to buy and enjoy their products.

We have arranged to change our group purchase from the
99000 expansion system to the 9900 expansion system (Micro) with
a liberal adjustment to the group.  The prototype units are due
around the tenth of November.  I am looking forward to an
in-depth evaluation of the unit.

There are several companies sending flyers to the group.  I
will list them and write a comment about each.  The flyers will
be available at the next general meeting.

-Unisource - A wide variety of programs and hardware; software
seems to be reasonable but hardware a little high.
Electronics, Inc.

P. O. Box 64240
Lubbock, TX    79464
telephone #1-800-858-4580

-Control Industries - A variety of items for your telephone; tap
detector looks interesting.
Control Industries
P. O. Box 6292
Bend, OR   97708
telephone # (503) 389-1969

-Bruce's Elec. Shop, Inc. - info. on line interference.
Bruce's Elec. Shop, Inc.
983  S. Quince Rd.
Walnutport, PA   18088-9427
telephone # (215) 767-1413

-ESK Products - good prices on modems, disks are a little high.
ESK Products
P. O. Box 1166
Boulder, CO   80306
telephone # 1-800-621-8385 ext 200

-CMS Systems, Inc. - members get discount on hardware.
CMS Systems, Inc.
P. O. Box 11128
Huntsville, AL   35814-1128

     Our library is still growing fast; check with Thackery
about new programs.

     For those of you not attending meetings, you are missing
good programs, latest information, good conversation, and
getting to talk to me!!

     MICROpendium is a very good magazine for TI Users.  The
magazine has product reviews, general information and some
technical articles.  It also has a section that users input
tips, information, and opinions.  I recommend this magazine to
all users.  It is not a fancy slicked-up job, but a good
informative source of information.  12 ussues for $12.00
MICROpendium
P. O. Box 1343
Round Rock, TX 78680

     Well, a "honey-do" project calls and I will have to close.
See you at the meeting.

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## INSTRUCTIONS FOR USING TWO PH1250
## DISK DRIVES

Two "Internal drives" can be used, with one mounted in the expansion box and one mounted externally, either in a separate box or attached to the outside of the expansion box alongside the internal unit. This can be done in several ways:

      1) use adhesive (may loosen due to thermal cycling and aging)

      2) drill two holes in the side of the expansion box and match those in the drive cover--or use small sheet metal brackets

Since the rear of the drive is exposed, some sort of dust cover must be used unless a custon enclosure is used instead of the origi- nal cover. Thin sheet metal can be formed and attached to the cover furnished with the PH1250 to provide an adequate cover.

## CIRCUIT BOARD ADJUSTMENTS

Using two PH1250 drives, with the cables provided, requires some special precautions, as follows:

1)An external 12vdc power supply is needed (unless special mods are made inside the box). The 5vdc supply can be tapped off of the expansion box supply to drive #1 (pins 3 & 4, which are blue and orange wires). Pin 4 is positive, pin 3 is negative. Splice the wires as shown in Fig 1.

2)A 12vdc regulated power supply may be purchased or it can be easily constructed for less then $20. Fig 2 is a schematic for such a supply. A suitable enclosure for the supply can be purchased or formed from sheet metal or plastic. For ease of identity the 12v output wires should be the same color as the PEB power source wires. Pin 1 (violet or purple) is positive; pin 2 (red) is negative.

3)You will need to purchase a special connector(the same as used at the power supply to drive #1 connector). Or, alternately, female socket pins can be used as individual connections to the drive #2 connector.

4)The cable connector from the disk controller to drive #2 must be modified. One end of the as-furnished cable will fit the rear flat connector on the controller (note the orientation of the red strip; it should be the same as the cable for drive #1). The other end must be modified to fit the connector on drive #2. Remove the guide slot by using a thin razor blade or exacto knife, taking care to protect the pins. Insertion of a toothpick will push the pins out of the way to allow easy access of the blade. The cable will then slip onto the drive connector. Again make sure that the red strip is in the proper orientation--same as for drive #1.

5)Termination Resistors: The TI manual states that the termi- nation resistor chip must be removed for drive#1. Do NOT remove the terminator. Leave it as it is in both drives.

6)Shunt Connections: For proper addressing of the drives by the controller, the shunt must be modified on drive #2. Leave drive #1 as furnished (check to make sure it is as shown in Fig.3). For drive #1, pins 1 to 14 and 2 to 13 are connected. For drive #2, pins 1 to 14 and 3 to 12 are connected. Break the connection between 2 and 13 on drive #2. The pin assembly can be unplugged (carefully) to make these mods. Punch out the 2 to 13 shunt with a small blade and re-solder the 3 to 12 connection. As furnished, the chip has all shunts open except 1 to 14 and 2 to 13. Make sure it is plugged back into the same sockets, since the female has 14 pins and the male has 12 pins.

### This completes the installation.

For a convenient arrangement, the expansion box should be raised approximately 2½ inches by placing small wooden blocks underneath at the four corners. This allows the cables from the rear of the console to pass underneath the PEB. The external power source (12v) can fit underneath drive#2 located on the right side of the Box. (See Fig 4). The monitor can be placed on top of the PEB unless this causes some interference problems. If so, try placing a foil panel between the two.

THIS INSTALLATION HAS WORKED BEAUTIFULLY FOR ME, BUT I TAKE NO RESPON-
SIBILITY FOR PROBLEMS THAT ANY OTHER MEMBER MAY ENCOUNTER. THE MODS
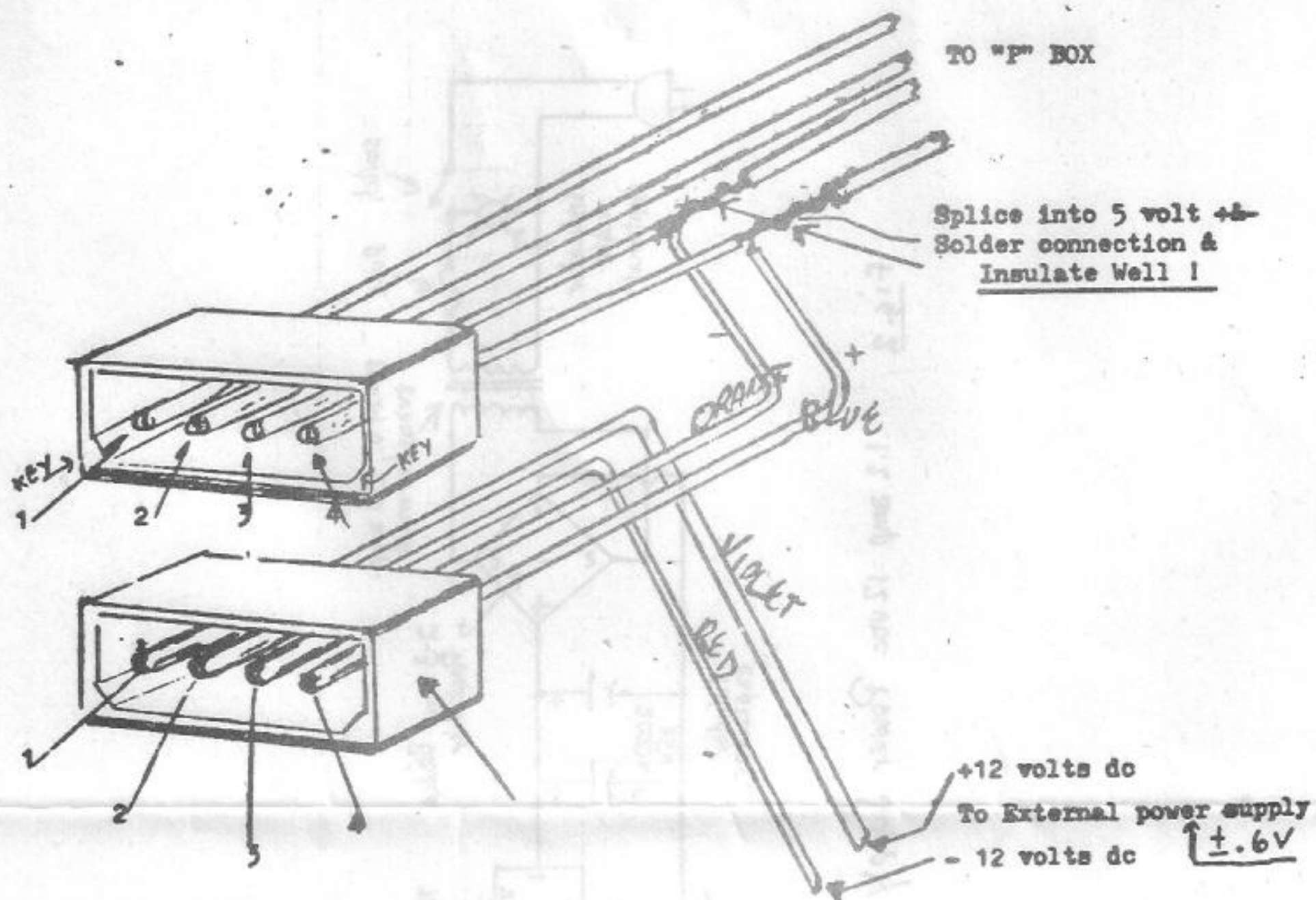REPRESENT THE ADVICE OF SEVERAL CLUB MEMBERS WHO HAVE WORKED SIMILAR
ARRANGEMENTS.

C CATALDO
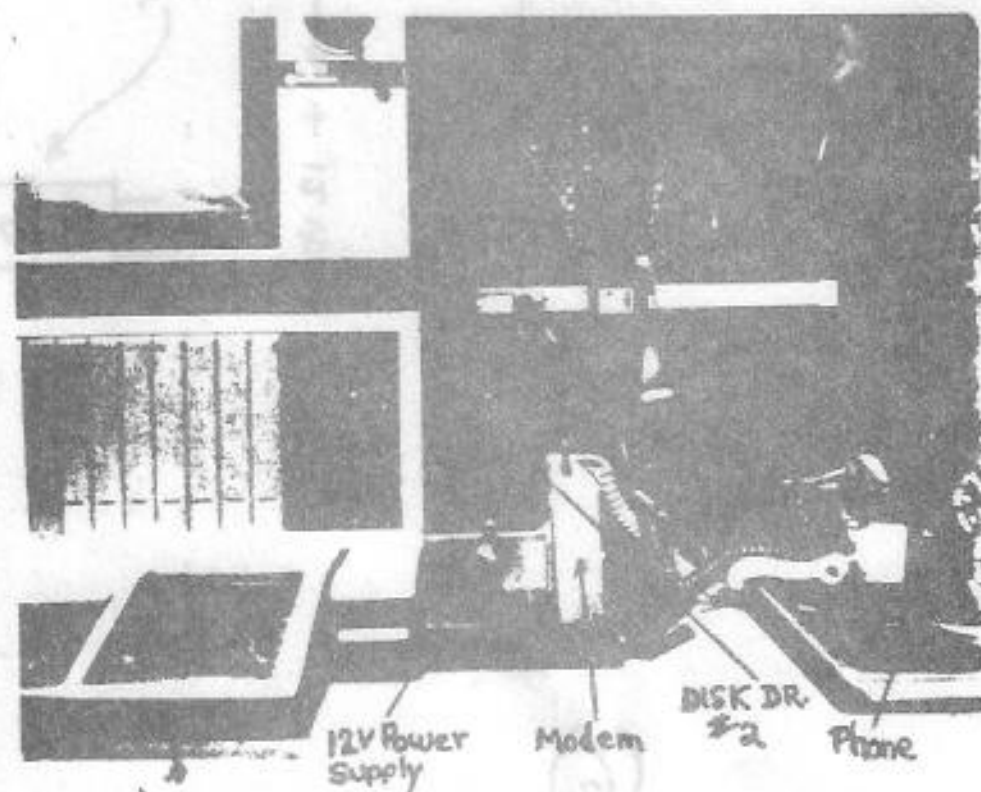
TO "P" BOX

Splice into 5 volt +&
Solder connection &
Insulate Well !

KEY
1
2
3
4

KEY

ORANGE

BLUE

VIOLET

RED

+12 volts dc

To External power supply

-12 volts dc

$\pm .6V$

Fig. 1.

12V Power
Supply

Modem

DISK DR.
#2

Phone

Fig. 2    1.2 amp 12 VDC Power Supply

switch

fuse

indicator
light
(optional)

10-24 V, 2-3 amp.
transformer

2-3 amp Bridge
Rectifier

tubular
capacitors

2000 μF
35 V.

7812 voltage regulator
on small heat sink

wafer
capacitor

.1 μF

+ 12 VDC

7812
□ 3 2
1 2 3

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SHUNT - DRIVE SELECT

TERMINATION
RESISTOR PACK

1 2 3 4

Power Connector 1-2

```
1  14        1  14
2  13        2  13
3  12        3  12
4  11        4  11
5  10        5  10
6   9        6   9
7   8        7   8
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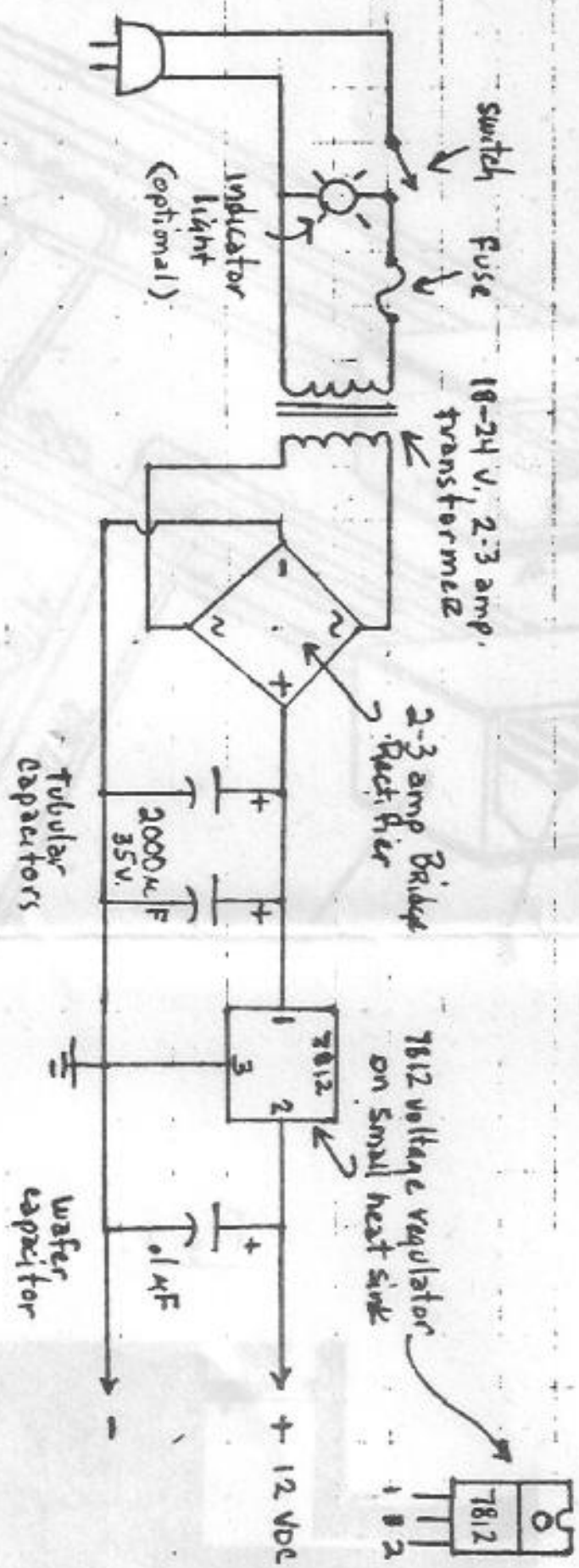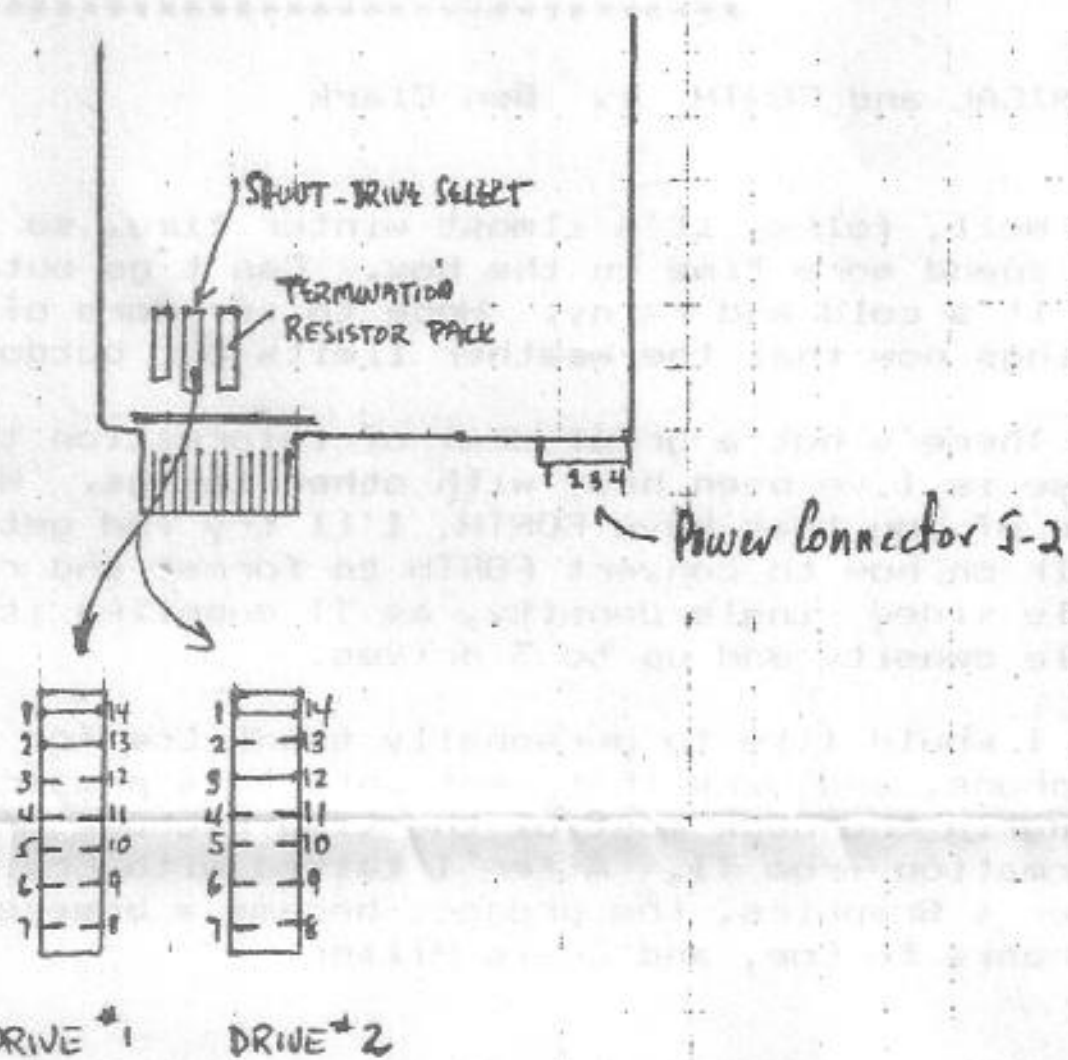
DRIVE #1     DRIVE #2
(as furnished)

Fig. 3   Drive Select Connections.

PROGRAM COMMITTEE by Glenn Allen

    Next meeting - who knows?  Have been unable to contact
Glenn to see what he has in store for us, so lets all turn out
and see!!  We may be in for a big SURPRISE!!  If you have any
ideas for future programs, please contact Glenn at home or at
the meeting.  Any and all ideas are welcomed.  See you at the
meeting.


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TECHNICAL and FORTH  by  Ben Clark


    Well, folks, it's almost winter time, so maybe you guys
will spend more time on the box.  Can't go out to play as much
when it's cold and rainy.  Hope to see more of you at the
meetings now that the weather limits our outdoor activities.

    There's not a great deal of information this month, my
excuse is I've been busy with other things.  What's yours?
Those of you that have FORTH, I'll try and get Coe Case to give
a talk on how to convert FORTH to format and read disk from
single sided single density, as TI supplies it, to double sided
double density and up to 3 drives.

    I would like to personally thank Coe for the long hours on
the phone, and work that went into this project.  The guy was
flying in the dark most of the time because of lack of
information from TI.  After I talked with Craig Miller of
Miller's Graphics, the project became a breeze for Coe.  Again
my thanks to Coe, and Craig Miller.


    There is more technical information on the 99/4 now, thanks
to a gentleman, that shall remain anonymous for now, for I
didn't think to ask if he would like his name known.  This
information is on trouble shooting the 4A console and the theory
of operation on the console, RS232 & P-Code & DSSD Controller
Card.  Should prove most enlightening to those who are of the
technical nature.  These documents are available through the
group.  Check with me Thursday night if you wish access to this
info.  It's quite good in some areas.


    If you missed the last regular meeting, I stumbled around
with Super Bug, and mentioned we were trying to secure a good
copy of same with all or at least most of the bugs straightened
out.  Hope to have this in the library soon.  Will announce when
it gets here.  I'm attempting to set up an exchange of
information and newsletters with a European group, which I
understand have done all kinds of great things with the 4A.  If

this materialize$, will need someone who can translate in German. Any volunteers? Contact me any Thursday or at home after 4:00P.M. ████-3987.

If anyone has had trouble with any of the hardware modifications - YELL!, and I will try and help. Has anyone found anything to use them for that would be of interest to the Group? If so, let us know please. I know I need all the help I k can get!!

I know this is more than a little scattered, but this is just me. I seem to have been going in about 379 of a possible 380 different directions at one time most of my life, so if you can just bear with me.

A thought on FORTH - the interest in FORTH seems to be growing, so I think it'stime someone set up a FORTH meeting, say on Software night in the back of the room? Just a seed to get the idea growing. You don't even have to know how to spell FORTH, just have a sincere interest in learning this language. Let's get together at the next Software night and discuss this more in detail.

Enough for now. See you soon.

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ANNOUNCEMENTS:

-The regular monthly meeting will be Nov. 8, at 7:00 P.M., at the Westside Neighborhood Center.

-Software/Library still meet each Thursday night at 7:00 P.M., at the Center. There are always a bunch of us down there, just for general chit-chat, not just computering, although there is a LOT of that going on then, too!!

PLEASE DO NOT FORGET TO CHECK YOU MEMBERSHIP RENEWALS. CHECK THE ADDRESS LABLE FOR THE RENEWAL DATE. SO MANY THINGS YOU WILL MISS OUT ON IF YOU LET YOUR MEMBERSHIP EXPIRE. PRICE IS ONLY $10.00 A YEAR, WELL WORTH THE MONEY. EQUALLY IMPORTANT IS YOUR PRESENCE AT THE GENERAL MEETINGS. AFTER ALL, THIS IS YOUR GROUP. AND IT DOES NEED YOUR TOTAL SUPPORT!!!

-Any articles that you feel need to be printed, just let me know, either at the Thursday night meets, or call me at home (837-3987) after 5:00 P.M. There is always room for any items

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of interest. And WE have had some very interesting articles
through the months. I do hope this will continue. Being
editor, you people have made my job easier by contributing all
the info you have through the months, and I do appreciate that,
and thank you from the bottom of my heart. Do you know what
it's like to go into "cardiact arrest" when there is nothing to
print?? Let me tell you, it is NO fun!! But, I DO thank each
and every one of you for the time and efforts you have
contributed to the group.

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BUY, SALE, OR TRADE:

I did not hear from any one as to whether their items had
sold or not last month, and did not receive any new items, so am
not running those old ones again. If you have any items, just
let me know.

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EDUCATIONAL COMMITTEE

RANDY WALLER

PLATO

The most comprehensive course of study for the TI-994A or for
any home computer is Plato. I've had the opportunity for the
past several months to review many of the courses that Plato
offers. Excellent is the word I would use to describe Plato.
From basic number ideas to geometry, from nouns and verbs to
French and German--all these are available in the Plato series.
Actually there are over 108 courses with over 450 programs
available to serve as a tutorial for any subject your child may
be having problems with.

To get started using Plato, you will need the Plato interpreter
cartridge. The cost of the cartridge is about $45.00. I would
recommend Plato to those who have school age children. Perhaps
in a regular meeting in the future, if there is enough interest,
we could have a demonstration of Plato.

OFFICERS & COMMITTEE CHAIRPERSONS:

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