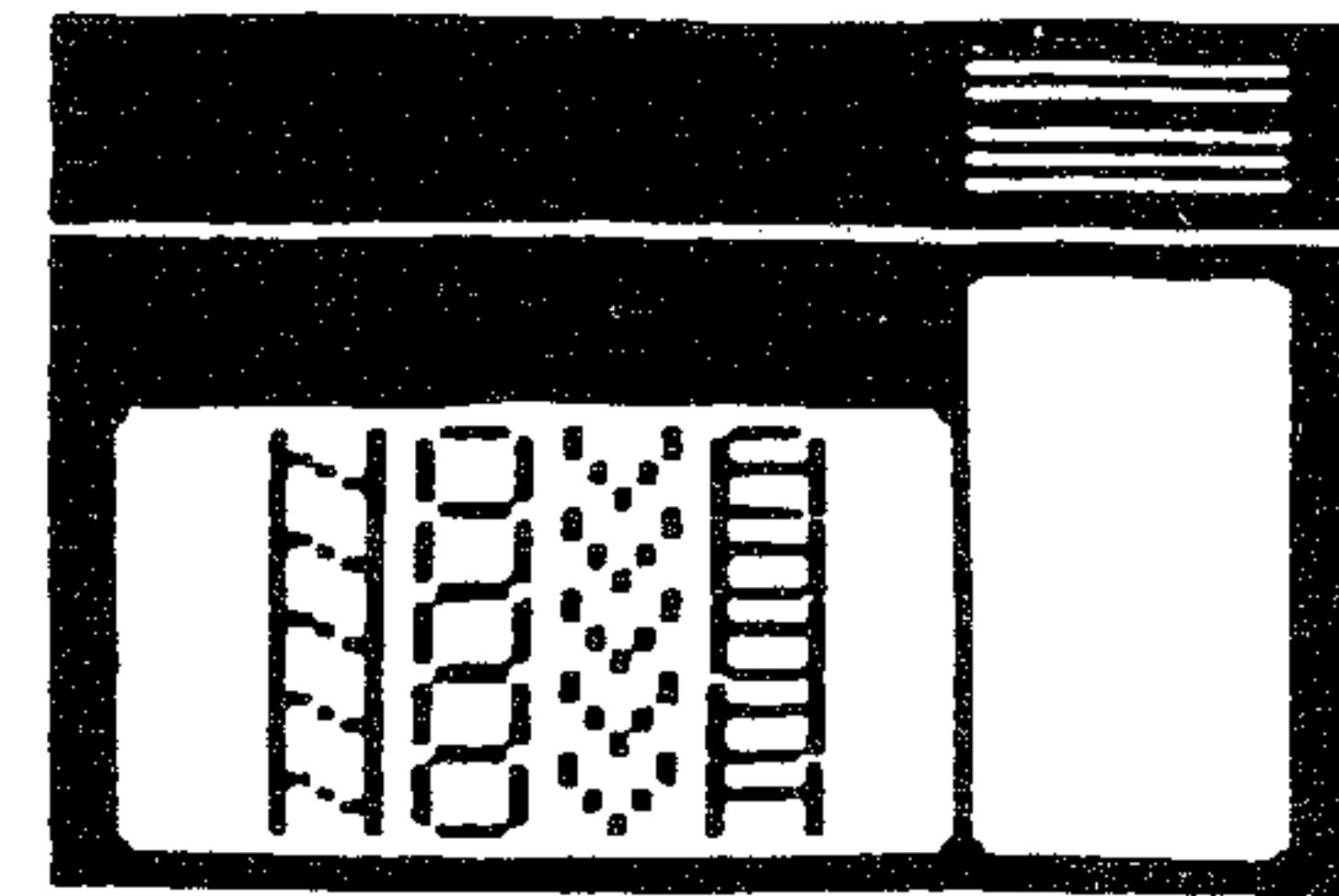


N.O.V.A.

(P.O. Box 508 - Vancouver, Wa. 98666)



NINETY-NINERS OF THE VANCOUVER AREA

VANEWS#77

DEC 1989

Next Meeting :



TUESDAY, DEC 19th

7:00PM Please be prompt we need to be out of this room by 9:00PM.

VANCOUVER MALL, Community Room. (near J.C. Penneys).

Dan Lisson and Gary Crawford will demonstrate the the new B.B.S. using Telco and Fast Term.



Next Workshop :



Sunday JAN 7th 1990 11:AM to 4:PM
VANCOUVER MALL, Community Room. (near J.C. Penneys)
Bring your computer and any questions or problems.



N.O.V.A. BBS :

206-687-4497

24hrs, except when the Sysop needs the system.

***** Order your library programs for delivery to the meetings! *****

The Officers of NOVA:

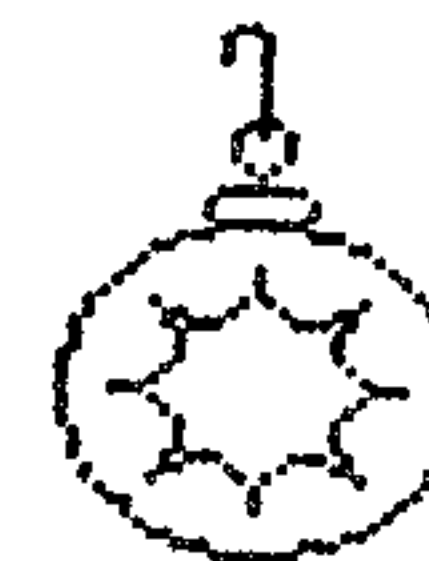
Area Code

Dan Lisson	President	206 693-7575
Quinton Tormanen	Vice President	206 687-4972
Lila Simmons	Treasurer	206 896-0113
Beth Webber	Secretary	206 892 1386



Committees:

Gary Crawford	Sysop/Librarian	message	206 687 3516
Maria Adler	Editor		206 695 9932
Bob Chase	Editor Advisor		206 695 7002



The officers and committee members welcome your questions and will do their best to answer them or get someone who can help. Please feel free to call. Early evening is probably the best time as most of these people work during the day.

Schedule of upcoming meetings and workshops.

January 30th Meeting	February 4th Workshop
February 27th Meeting (Tentative)	March 4th Workshop
March 27th Meeting	April 1st Workshop
April 24th Meeting	May 6th Workshop
May 29th Meeting? (Memorial Day)	



FROM THE NEW VICE-PRESIDENT..... ❄️

Greetings fellow 99ers! Thanks for getting me into this fix they call "Vice-President!" Oh well, I guess it's what I wanted. I hope you will be at the next business meeting -- I will be demoing, for the third or so time, two of my games, War Zone and Living Tomb. But this time it is not for teasing you, or for showing off, but for you to get one last look before you buy one of each. In case you haven't heard, Comprodine has released them at the Chicago faire, and they are for sale!

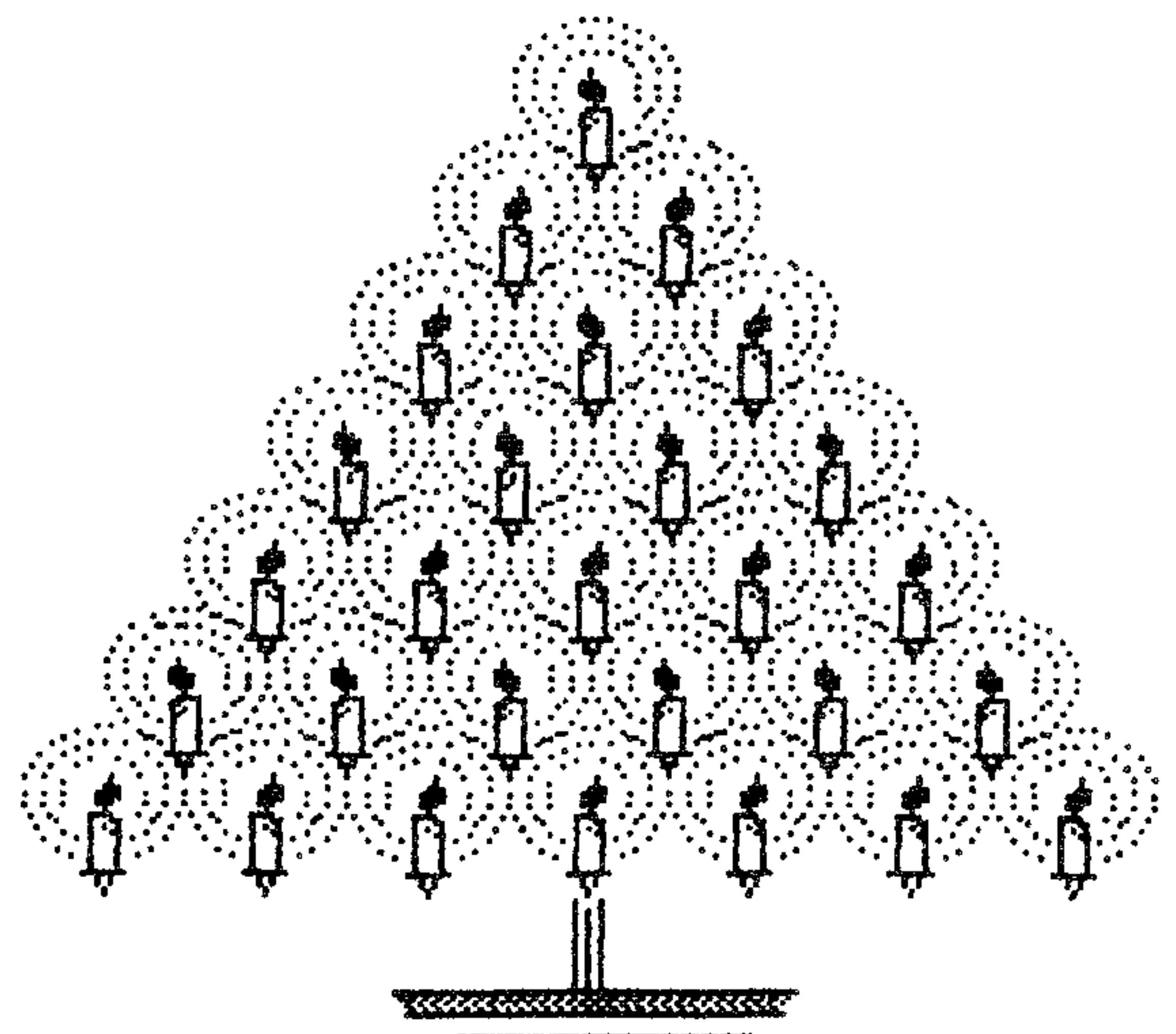
I hope you all have the Telco terminal program, because the new BBS run by Gary Crawford has been up and running, and believe it or not, it still is up and running!!!! We'll all have to give him a big hand on that feat at the meeting! It is now run on a new program and uses graphics that may be viewed by Telco, but I won't get into that because I'm sure Gary will talk about that in "On Line With the NOVA BBS."

I'd like to apologize for not having that new fangled "PAGE PRO 99" thinga-ma-jig that Greg Hedrick (your ex-vice-pres) was using for that past few months in this column. You'll just have to learn to read this column without the beautiful clown inserts until I buy one.

Have any of you ever dreamed of, tried, failed at, pondered over, or otherwise approached Assembly Language but came to the conclusion that it is a little too advanced? I know that some of you must have, so I have decided to write a monthly tutorial on assembly language in the NOVA newsletter. Let me know what you think of it by leaving me a message on the BBS or at the meeting.

I hope you saw the front page, and noticed that the meeting was moved from the 26th to the 19th for obvious reasons. Well, I guess that's all the unimportant stuff that I'm supposed to report on! Hopefully, I'll see you at the next meeting. Catchya later.....
Quinton Tormanen. ❄️

**HAPPY
HOLIDAYS**



COMMUNICATIONS CORNER

REACH OUT AND TOUCH SOMEONE (FOR FREE)

* OFFER FOR WASHINGTON STATE
RESIDENTS ONLY

By: Kevan Coleman

Some of you will be getting modems for Christmas, and will want to jump right in and discover what awaits you in the new medium. This is the first of what I hope will be a continuing series on telecommunications.

There are many things to be covered besides bulletin boards. The first articles will cover basic subjects.

This first article will deal with FREE LONG DISTANCE within Washington state. My purpose is to get some input from you, the reader, as to what topics you would like covered.

If no readers take time to reply, I will consider this article a bust.

If you have any information to share, leave a message. I will include it and give you credit for the info.

However, the best thing about this board is the message base. Since this board is toll-free, you can call up and leave a message for your out-of-town TI buddies. It does not matter if he/she lives in Seattle, Tacoma, Spokane, Toledo, Longview, or even Vancouver.

There is no charge for time used on the board. But please do not abuse the board or hog time. One of the first rules of modeming is be thoughtful of others.

The first time you call, you may be unable to leave a message. After a day or two, your access will be upgraded. Take the time to learn how the board operates: read the menus, download a file or two. Later, leave a message.

Telecommunications is the ace in the hole that will keep the TI community alive and well.

This is also a great way for all the TI clubs in the state to get together and plan events.

Oh yeah, the telephone number is: 1-800-544-9222.

ENJOY

3/12/24 at 8/N/1

FREE MESSAGE BASE To Washington State Residents

The Washington State Small Business Administration has a toll-free number you can use to get: trade leads for business, your local elected officials' addresses, as well as other information.

A SWITCHED OUTLET FOR EXTERNAL DRIVES

By: Kevan J. Coleman

INTRODUCTION

When using external drives with the TI-99/4A an odd problem occurs. When you turn off power to the peripheral box, the external drives start turning, and they don't stop until you cut power to them as well.

Since I installed my third drive, I kept forgetting to turn off the external drive's power. One time it was left on for three hours... I had an EXTREMELY hot disk drive. You can imagine how hot the heads got, not to mention how much life was cooked out of the drive's lifespan.

Since power is cut off from the internal drives when you turn off the P-Box this problem cannot occur in the box. But since external drives have their own power supply, I needed to do something before I trashed my drive.

All that is needed to accomplish this is to install a "SWITCHED OUTLET" in the P-Box. A switched outlet is a plug-in that supplies power when switched on (like on a stereo amplifier).

MECHANICS

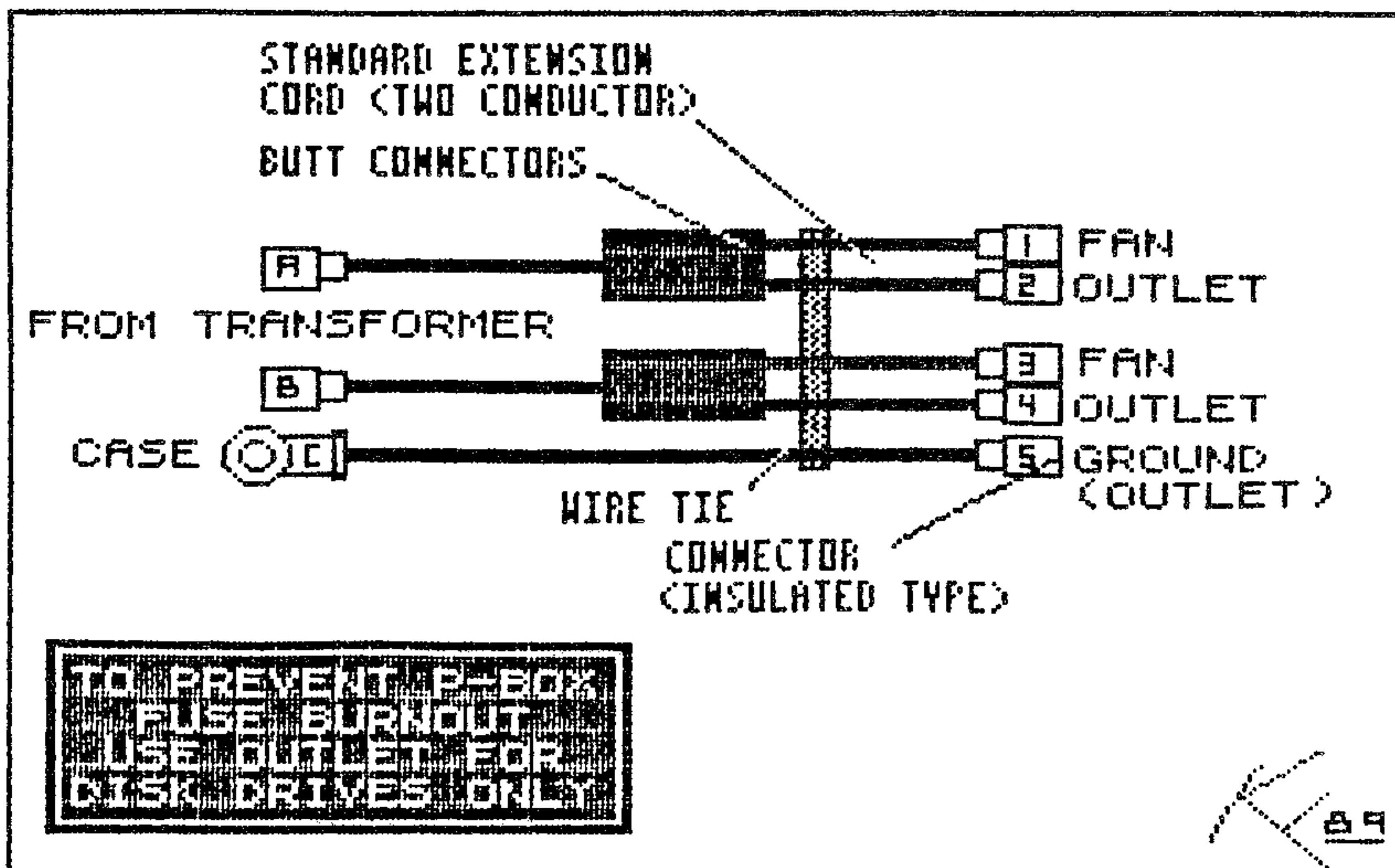
Power lead one comes into the box via the plug in the back of the P-Box, through the switch, into and out of the fuse and into the transformer. Power lead two comes into the box via the plug in the back of the P-Box, through the switch and directly to the transformer.

It is important to understand that nothing happens to the power going to the fan, it is just raw "HOUSE CURRENT" or 110 VAC. Since the fan comes on when you turn on the box, it figures that this is where to insert a "Y-CABLE" (or a parallel branch).

Since disk drives only require 12 VDC (very low drain), you will not have to worry about blowing the 1.5 amp fuse in the back of the box. I tell you this only so you DO NOT get cocky and plug a power strip in the outlet and hang your monitor, modem, printer, and everything else to come on at the flick of a switch.

CONSTRUCTION

- 1) Cut six (6) three inch leads of 12 gauge wire and remove 1/4 inch of insulation off of both ends of all six pieces. Next cut one (1) eight inch lead of 12 gauge wire and remove 1/4 inch of insulation from both ends of the wire.
- 2) Cut a 3-foot length of grounded extension cable and remove 1/4 inch of insulation. (We will be using the female end).
- 3) Following RLE diagram, crimp on the quick connectors:
A and B are male terminals. 1 through 5 are female terminals.
C is lug terminal.
- 4) Crimp A into butt connector with 1 and 2 at the other end.
Crimp B into butt connector with 3 and 4 at the other end.
- 5) Unplug and remove fan for easier access. Install "C" on grounding post. (just under fan location)
- 6) Cut leads off of the fan two inches above quick connectors. Strip 1/4 inch of insulation off and crimp on the female connectors.
- 7) Crimp male connectors on leads from fan, then re-mount fan in box.
- 8) Drill hole for power cord (grounded extension cable). Feed cord through hole. Crimp on male connectors. Now tie simple knot in the cord so it cannot be pulled from the box.
- 9) Plug connectors in as per diagram. Test unit re-assemble.





Assembly Language Tutorial

By Quinton Tormanen

I am assuming that you have a TI or Geneve, disk drive, Editor/Assembler (E/A), and a 32K memory expansion. I am also assuming that you know very little about assembly language, but are familiar with the Editor part of the E/A (Its just like TI-Writer). Let's start with an introduction to Assembly Language (AL from here). It's fast, compact, powerful, flexible, and logical. It also uses a heck of a lot of math, but if you are using a computer, you should be accustomed to that.

AL is THE fastest language for every machine, because it is what the computer uses to operate and doesn't have to be interpreted. It uses about 70 commands that are abbreviated to 1-4 letters. (e.g. Move word is MOV, Add is A, Add byte is AB, etc.) I hope to introduce each of the more common commands and tell you how to network them together to make a program. From there you can use your own creativity and the E/A to further your programming skills.

AL is written as "source code" with the Editor, and is compiled into "object code" which is runnable with option 3 (Load Run). The format of each command is as follows:

LABEL<spaces>COMMAND<spaces>OPERAND1 [,OPERAND2]<spaces>COMMENT or
* COMMENT

The first is the usual format and the second is the same as a REMark statement in BASIC. About the first format: The Label is a group of letters or numbers both up to six characters and is the name given to a line. A label is not required but is used to refer to a line. Line numbers are not used, so if you want to GOTO a line, the line to go to must have a label. Example:

```
THERE  NOP          * The NOP Command means No OPeration and does nothing but
*                               * goes onto the next line.
START  JMP  THERE   * JMP stands for JuMP to and will go to the OPERAND, which
*                               * is THERE, so this line will jump to THERE.
```

In BASIC this program would be:

```
10 REM
20 GOTO 10
```

```
RUN 20
```

As you can see that is a simple program and effectively does nothing. The listing demonstrates the fields very well. I usually start the Labels on column 1, commands on 8, operands on 13, and comments anywhere after that. Also shown in this listing are your first two commands, NOP and JMP which are fairly straight forward.

Every AL program must have line to tell it where to start the program running at. That line is a DEFinition. Example:

```
      DEF  START,THERE
HERE  NOP
START  JMP  THERE
      END
```


Here we added two lines to our previous program, a DEF and an END, the DEF tells the computer that it may start the program at either START or THERE. END tells the Assembler that this is the end of the program and to stop assembling. Every program MUST end in the END command. NOTE: END does not tell the computer to stop like the END in BASIC but tells the ASSEMBLER that this is the end of the program. The following program will lock up:

```
DEF  START
START NOP
      NOP
      END
```

Why? Because when the program is run and the program name START is given, the computer will execute a NOP, which means to go on to the next line, another NOP, next line: END? Not to the computer! The END is not put in the source code, so the computer will read the next memory address in memory which could be anything, and the computer will continue to execute random commands.

The program with both THERE and START as entries would not lock up, but instead will loop between two commands forever, as good as a lock up, but that is what the program tells it to do, so it will.

The major drawback to assembly is that there are no wopping commands like PRINT or INPUT to do big things like displaying a message on screen, and everything must be hand crafted.

Another commonly used command is REFERENCE, and is used to allow your program to use built in routines like VSBW, VMBW, KSCAN, GPLLNK, DSRLNK, and many more. Notice that none are more than six letters and can be used just like any other label.

AL is set up using 16 variables, labeled R0 to R15. These variables are used continuously for everything, just about. The command Load Immediate (LI) will put a value into a register. Example:

```
LI  R0,10
```

What that does is places a 10 in the R0 variable. These variables are called registers (Which is where the R comes from, of course). Values can be moved between the registers:

```
MOV R0,R1
```

This will move the value in R0 to R1, but leave the original value in R0. Here is a commented program:

```
START  DEF  START * Define a starting point as START
      LI  R0,10 * Load R0 with a 10.
      LI  R1,12 * Put 12 in R1
      LI  R2,5  * Put 5 in R2
      A   R0,R1 * Add R0 to R1 and place the sum in the
*                               * Second operand or R1. So R1=22.
      S   R2,R1 * Subtract R2 from R1 and place the
*                               * Difference in R1. R1=17.
      LIM 2    * Allow interrupts such as <FCTN =>
LOOP   JMP  LOOP * Jump to itself for a continuous loop.
      END    * Done!
```

Here is what we did in BASIC:

```
10 R0=10
20 R1=12
30 R2=5
40 R1=R1+R0
50 R1=R1-R2
60 ON BREAK STOP
70 GOTO 70
```

The Add and Subtract functions were introduced along with the more complex LIMM with means to Load Interrupt Mask Immediate. In English that means to let to computer to cut into the program every 60th of a second and do what it needs to. Some things it does is move sprites on screen, turn off a sound when needed, or check for the <FCTN => key to quit. The last one is the one I wanted to happen. The operand after LIMM tells whether or not you want the computer to be able to cut in. If the operand is a "0" then the only thing allowed to cut in is the RESET button or turning the computer off and back on. If the number is 2 or greater than the computer is allowed to cut in. Go ahead and try the last program, but it won't do anything but sit there because the result is not printed.

I guess I've put in my monthly two bits worth so, I guess I'll see you next month!

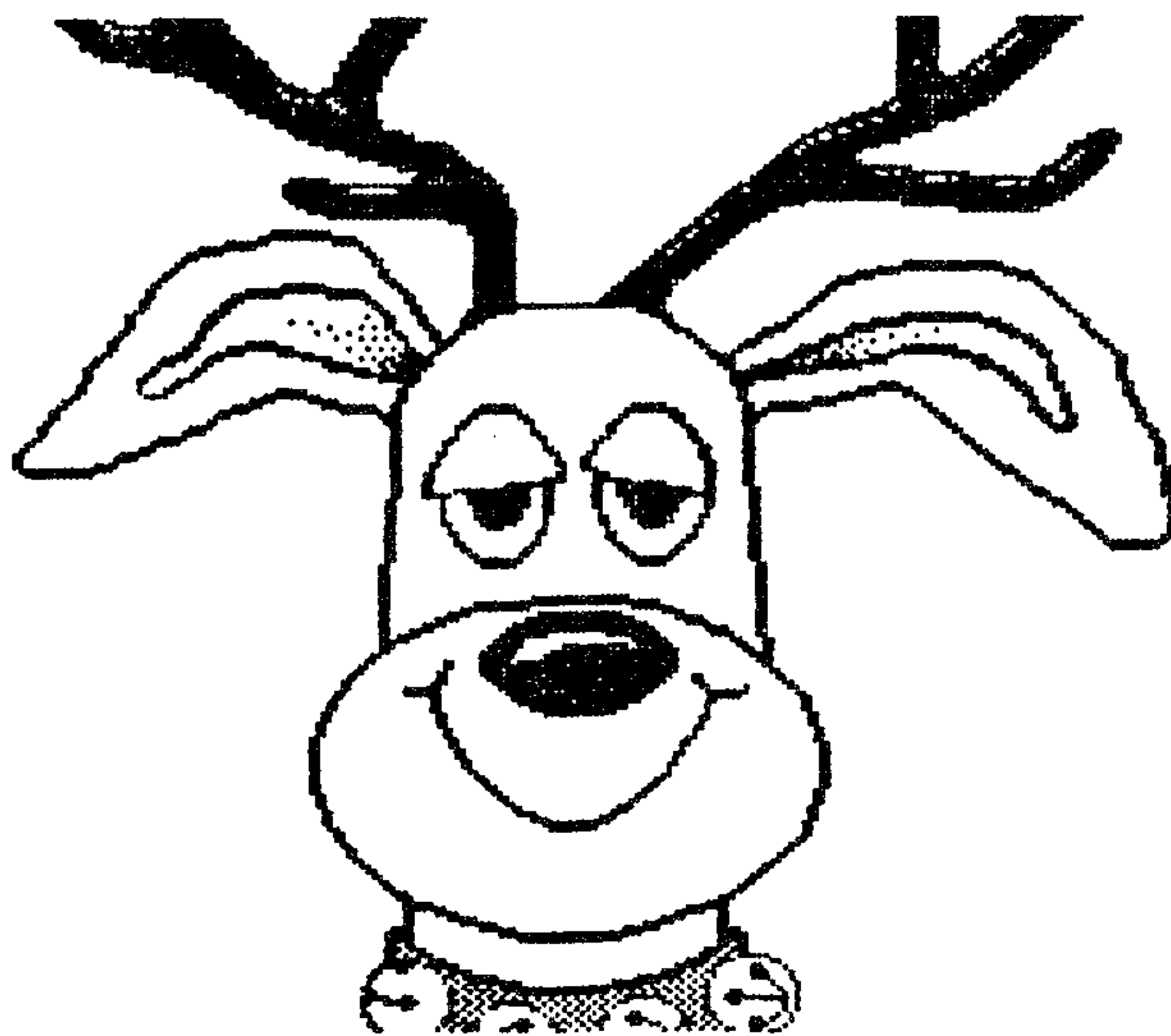
Merry
Christmas



HOLIDAY POTPOURRI

- 3 cups water
- 2 cinnamon sticks
- 1 tbsp ground cinnamon
- 1 orange rind
- 4 tsp Tang orange drink
- 1 tbsp whole cloves
- 1 tea bag

Mix all ingredients then boil for 15 minutes. Let simmer. Add water as needed when liquid level drops.





"ON-LINE" WITH THE NOVA BBS

Since the last newsletter there have been some changes to the group BBS. We are now using the 99BBS program and it has been running great. Dan Lisson and I solved most of the initial problems in setting it up. There remains one problem to be solved and that is to get it to go back up to 2400 baud after someone has been on at a lower baud rate. This will be resolved soon. I took the time to transfer ALL pertinent information for each person from the other BBS program to the new one. Therefore everyone has the same user number and password as before. To help you get better acquainted I have included below, the HELP file from the BBS so that you will have a better idea of what is what when you are on.

Don't miss our next business meeting, as we will be demonstrating both Fast Term and Telco. Tips will be given on how to configure defaults for each and get the optimum performance from them. Don't miss this!

This file contains the information you need to know to efficiently use 99BBS, Version 7.7

=====



MAIL

If you have messages waiting the system will show you the messages numbers when you log on right after you read the bulletin. Write these messages down so you can read them later.

The best way to find mail is to select M)essage bases from the main menu, and then use N)ew on each message base to find your messages as you read all the new messages in each base. This keeps all messages in context and in order.

You can "scan" the message bases by pushing S at any time after the address header is printed. This will stop the current message and take you to the sub-menu

You can search message headers by using the S)earch feature. Enter whatever word you want to search for EXACTLY as it appears in the message header. This will give you the message numbers, which you must then read individually.

Although it is encouraged that you read all new messages, you may pick specific messages to read by selecting S)ingle from the message base menu. This way, you may read those messages the numbers of which you were given at logon.

To reply to a message, press R)eply. The header is pre-filled in, and you can then enter text for your reply.

Pressing C)ontinuous will display each message one after the other without interruption. Press S while text is printing to abort.

If a message you read is addressed to you and is a public message, you have the option of deleting it after you have read it.

=====

MAIN MENU, (and the others will be later), is "hot key", that is just push the key while the menu is printing, and you will go directly to the selected function.

=====

SPECIAL KEY FUNCTIONS are listed below. Any one of the keys or combinations

listed on each line below will have the desired effect.

ACTION	KEYS
Pause current printing of Text.	P CTRL S
Resume printing of Text.	R ENTER CTRL Q
Backspace	CTRL H
Abort current printing of Text.	S or A CTRL C
Erases current line of Text being input.	CTRL X
Jump to next message in message base	N

The message base now has wordwrap. While entering messages, merely keep typing. your word will automatically wrap to the next line. A bell will tell you when you have reached the end of the last line. To view line numbers for editing, use the L)ist function.

) "special" backspace (make the cursor move back over and erase the characters just before it), first type the text you want backspaced over, plus at least one extra space (2 or 3 are better), then push CTRL H one time, then push CTRL N until the text that you want to backspace over is gone. Then type whatever you want to be there now.

This effect can be repeated as many times as you want in one spot, provided you haven't used up the 80 characters in the line.

Each CTRL N uses up one character in your line. Lines are 80 characters long. If you use 10 CTRL N's, then the line as it finally appears on the screen will be 70 characters long.

To clear the screen, enter FCTN C.

=====

FILE TRANSFER INFORMATION

DOWNLOADS - there are two options available for downloads:

1) TE-II - This mode of transfer is not used here. If you don't have a terminal program with Xmodem, leave me a sysop message and I will arrange for you to get one, so that you can use this more efficient file transfer method.

2) XMODEM - This more efficient method of file transfer is supported by the better communications Programs.

When downloading archived files (with > as the first character of the filename), you MUST include the > in the filename!

UPLOADS - TE-II uploads are not supported, please use xmodem for this. See the

instructions just above if you don't have an xmodem communications program.

If you are uploading a program that has more than one file, including docs, please archive it with Archiver first, and put a > in front of the file name or if it is compressed, please end the filename with a /Q

When uploading a program or text file, please give as complete a description as possible in the 3 80 column lines of text provided. If it is an assembly file, be sure to include the program start name.

More HELP will be added as questions are asked. Please leave any questions about the BBS in the L)eave Sysop message function from the main menu.

