

TI SLAVES AND GODEN TI USERS

GROUPS NEWSLETTER

JANUARY 1991

What's Inside.	
	Page
TI and Senior Citizens.....	2
Screen Stress.....	3
Games in Console.....	4
Netung Software.....	5
Zero Board.....	6
NewAge.....	7
Hardware Mod.....	8



WE WOULD LIKE TO WISH EVERYONE
A
HAPPY NEW YEAR.

TI 99/4A AND THE SENIOR CITIZEN

by Harold Hilburn

A little over a year ago, my wife Helen and I, with help from the Ogden TI Users Group, started a Computer BASIC language course at the Roy, Utah Hillside Center. This is the Senior Citizen Center for the City of Roy. It is located in the basement of the new City Hall building and adjacent to the City's Recreation department. The City had purchased four television sets for use with video games from Nintendo for the Recreation Department. The wife and I purchased three TI 99/4As from the Box Elder County School District and those along with spares we already had, gave us six complete operating positions by also using the Senior Center TVs.

Our biggest problem was the acquisition of the Modulators as the School Board TIs were driving old "Gorilla" monochrome monitors and did not use Modulators. Also, books were not available and the first several lessons for the classes were prepared by summarizing the first two Chapters of the TI "Beginner's BASIC". As time went on, we were able to acquire a few of these books and even fewer of the "User's Reference Guide". Since the students advance at their own rate, they all are working on different portions of the text material. This makes for a very interesting instructor workload, as each question or problem is from a different reference area.

We are now into the winter period of our second year and now have one to four new senior citizens join

our group each week for the introductory presentation and the first two "Chapters" of "Teach Yourself BASIC" from the tape cassetts. More than half of these people come back for these several more sessions, usually staying with us for three or four months and getting through the "Beginner's BASIC", which was the purpose of the course, to understand the BASIC language. We have two students from last year back for the second year and currently studying from the "User's Reference Guide" and learning to solve the syntax differences with other manufacturers' BASIC.

For the first six sessions, which takes them through Chapter Two of "Beginner's BASIC", each student receives a copy of lesson summaries. The first session is an introductory Chalk Board presentation describing the course purpose to teach enough of the BASIC language so they'll understand how to create simple programs, or change preexisting programs to do what they want. We point out how stupid the computer is but how clever the men that designed them were. We describe the various number systems and show a bit of conversion of binary, decimal, octal, hexadecimal and base twenty. A couple of minutes are used to show how simple and workable binary is to a stupid computer that only can relate to one of two conditions. Zero or one, yes or no, plus or minus or whatever you want to call it.

The opening session also is a show and tell of the TI console and all its connections, the modulator,

power supply and the tape recorder. We also give a short history and description of the ASCII Coding and how the computer converts our human letters and decimal numbers into the simple numbers it can understand and use. Then we have each new student run through "Chapters 1 and 2" of the "Teach Yourself BASIC" tape. Then on the following class meeting, they start on the programmed learning outline we have developed from Chapter One, "Beginner's BASIC". By the time they are through Chapter Two, they are spread out enough to work out of the text books at their own individual rates.

Three other Senior Centers have asked for the course, as they too, have Seniors of the same interest in the advancing world around them. We would like to see more people experienced with Home Computers pick up this fine and satisfying work of spreading the knowledge and fun of computer operation. We have finally had people come to the class that had an old TI on the shelf that had been forgotten and are now back in use. We now have such a variety of people coming that we have had to split the class into two sessions and still have two matched students on machines at the same time. This has required an earlier starting time and reduces class time from two hours to one and a half hours.

Our new project is to equip four Centers with Saturday Night BINGO as many of their members love BINGO. We are now faced with the problem of locating Extended BASIC Cartridges to operate the Speech

Synthesizer. We have been able to locate several Speech Synthesizers, but no Cartridges at our normal surplus sources at reasonable prices. We'll probably have to buy these as new items. It seems a shame though, when we only pay five dollars for good consoles at DI and other Goodwill sources.

Those students that have TI's will become very good members of the TI Users Group and continue to learn and develop uses for their machines. Those same people are the ones that will expand their systems so that even more great things can be done. Helen and I encourage anyone to set up a similar course at their own Senior Center. We would be happy to provide copies or a disk of the documentation and summaries we have developed. We feel there are still thousands of TI 99/4As gathering dust in the closet. This is a fine way to get them back into service and bring enjoyment to many older people.

Screen Stress Blues

Some 40 million Americans regularly use video display terminals, and more than half have trouble focusing on distant objects after staring at the computer screen for a long time.

Here are some helpful hints that you may find beneficial.

- 1). Terminal viewing distance: about 20 inches from screen.
- 2). Avoid terminals with attached keyboards: Clear the clutter off computer furniture so you can move

Keyboard.

3). Screen filters can help eliminate glare, static and radiation.

4). Use a carefully placed desk lamp.

5). Take a 15-20 minute break every two hours.

For more information on this subject you can obtain a book titled Computers and Visual Stress: How to Enhance Visual Comfort While Using Computers from Seacoast Information Services, 4446 S. County Trail, Charlestown, RI, 02813

Submitted By:

David K. Mischler,
President
OGDEN TI USERS GROUP 90-91

PUTTING GROM BASED
CARTRIDGES IN YOUR CONSOLE
(THE EASY WAY) by John
Willforth

If you would like to install several (up to 6 GROM chips) inside your own console without any circuit boards, and little wire, listen up!

Because the addressing is internal in a GROM, they can be stacked, and all of the GROM sockets in the TI-99/4A are pin for pin identical to each other. Take GROM 0, 1 and 2 from their sockets above the CPU chip, and stack them carefully and solder ALL 16 of their legs together. Now plug the whole 3-chip unit in the Grom socket next to the Sound chip, observing direction (pin 1 location). Now you will note that you have two empty GROM sockets with the potential of six

of these little beasts being stacked right on the CPU board. First though you better test the console to see that you have everything still operational.

Multi-Plan requires five GROMS, and Editor Assembler one, for a total of six, and this will be a full boat for these sockets without cutting a hole in the RF shield to stack these chips to sky-scraper proportions. You may prefer TI-WRITER, one GROM, Disk Manager II, two GROMS, or any of the many GROM only cartridges that TI made, even games could be included in this list.

To keep this simple, however, I reference Multi-Plan, and Editor Assembler. Remove the groms from their circuit boards carefully. Since you must keep all five of the MP chips selected at the same time, I would recommend that you make note of the E/A chip so that it doesn't get mixed with the MP chips just yet.

Stack any three of the MP chips and solder them together as you did to the console GROM chips earlier. Cut the part of pin 14 off the bottom chip of this 3-chip unit so that when this unit is inserted in the middle of the three sockets, there will be no connection to the corresponding pin in the GROM socket, but be sure that all three GROM pin 14s are soldered together. Now take the other two MP GROMS and piggyback them, and cut the bottom of pin 14 as before. Pick up the E/A GROM, and bend pin 14 straight out, you don't have to cut it's pin. Slip the two MP GROMS on top of the E/A GROM, and solder ALL but 14.

Using 3- 12" length of multi-stranded wire

(ribbon-cable works well), attach the center wire to the column of three pin 14s, on the console GRMS by using a low wattage soldering iron, and one of the other two wires to the single pin extended from the E/A GRM, and the remaining wire to the two pin 14s of the MP immediately above the E/A GRM. Connect the two GRM pin 14s to the three MP GRM pin 14s in the middle GRM socket using a short length of wire. Using a SPDT switch (on that is off in the center, and will stay on when it is thrown to either side), solder the center wire (from pins 14) of the console GRMS to the center lug on the switch. Attach the other two wires to either of the two remaining lugs on the switch. Before buttoning up the console test the switch to see that if the switch is in the middle on power-up, only Console BASIC is on the menu. When the switch is thrown in one of the two possible directions, on power-up, BASIC and EDITOR ASSEMBLER will appear on the screen, and in the third position, on power-up, BASIC and MULTI-PLAN will appear on the screen. Then locate the switch inside the console in a convenient position, and button it up. If you desire more selections, follow this same scheme but use a rotary switch to allow more selections. This works, and should take very little time. You may want to order your GRMS from TI, instead of tearing up a cartridge. GOOD LUCK!

The following comes from:

NOTUNG SOFTWARE
7647 MCGROARTY ST.
TUCUMCA, CA 91042

STAR TREK THE NEXT GENERATION CALENDAR

by Ray Kazmer

Notung is pleased to present a wonderful package from Ray Kazmer featuring digitized pictures of the popular TV Series, Star Trek: The Next Generation. Captain Picard, Data, Worf, Dianna Troi, Riker, Geordi and others are pictured in a calendar setting. Included are 12 full page files accessible from Acorn's PIX-PRO, JP's McFix or Maccan's TPA MDOCS. Please specify SSSD, OSDD or OSDD format. \$10



THE RING COMPANION

by Ken Gilliland

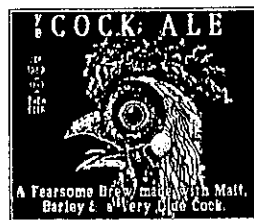
AN incredible two-disk package of artwork, music and literature about Richard Wagner's "Der Ring des Nibelungen". Explore the fiery world of Wagner's Grand Epic through 14 TI-Artist formatted art files depicting his world of Dwarves, Giants, Heroes and Gods. There are on screen (and printable) text files on the life of Wagner, descriptions of every character found in the Ring, his musical style and even notes on instrumentation! There's also a program which explains and plays over 30 of his "Leitmotifs" (or musical words) found in the Ring. A definite must if you are a student of art or music, a Wagnerite or have Ken's "Wagner" fairware disks. \$8



FILMLIB 77-BASE

by Ken Gilliland

FINALLY, there's a complete database for your Video Library. Filmlib has almost everything a videophile would want. There are entries for up to 3 actors, the director, the producer, score composer, the year it was made, film length, 1 to 4 star rating, it's title (of course!), whether it's color, colorized or black & white, a short synopsis of the story, what tape it's on (including counter and speed recorded at) and much more. But that's not all... It prints a short one line list of your library as well as a full descriptive list. It can search and print by date, by category or by a person's name. Double drive system and TI-BASE are required. Double density capabilities suggested. \$7 (Updates are free)



your own home-brew to boot! Requires Extended Basic and a TI-ARTIST.P compatible program. \$7

The Baba Brewery Beer Labels

Perhaps, the most unique package on the market! There's 4 B&W labels, 3 8-color labels plus the recipes on how to make



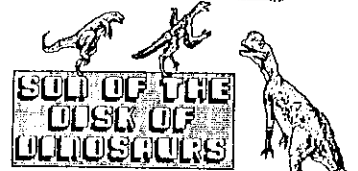
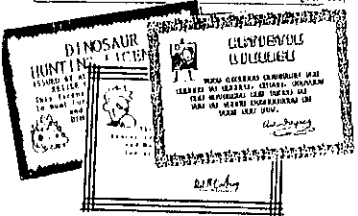
Another wonderful, arty package from Ken Gilliland and Ray Kazmer with borders even better than Font Volume II

Certificate 99 COMPANION PLUS

by Ken Gilliland

Imagine having so many choices of Borders and Fonts that you have to use not only ALL your fingers, but all your toes and even a friend or two to count'em! Sound too incredible, like dream? Well then it's time to awake to reality with CERTIFICATE 99 COMPANION PLUS. There's 11 new, READABLE fonts, evenly spaced with true descenders. There's 50 borders, ranging from very simple to incredibly ornate. There's a few new graphics, 60 of 'em to be exact with many sports, dinosaur, and whimsical designs. There's 11 new signatures ranging from Cavanaugh Thug to Mozart to Paul McCartney! And if that isn't enough... there's even 7 already made Certificate files on the disk. And now here's the most incredible feature of all, the price... \$7

Great Lakes Software's Certificate 99 REQUIRED!



SON OF THE DINOSAUR
DISK OF DISKS

Welcome back to the Stone Age again with Ken Gilliland's second all dinosaur feature. As in "Disk of Dinosaur", "Son" has lots of dinosaur artwork. There's 16 realistic dinosaurs ranging in size from 1/2 to 1 1/2 of a screen in size. Also included is background to place them on. On a second disk, there's the sequel to "Thug learns to fly" entitled, "Thug Gets Egg on His Face", an animated cartoon with over 60 frames! But that's not all! Also included is a text library with over 10 files about dinosaurs suitable for on screen viewing or printing and a game in which you have to help a noted paleontologist build a dinosaur exhibit by answering dinosaur questions. Extended Basic and TI-Artist (or like program required). \$12.00



Included are 7 TI-ARTIST fonts and over 15 Border/Design instances. All for \$7!

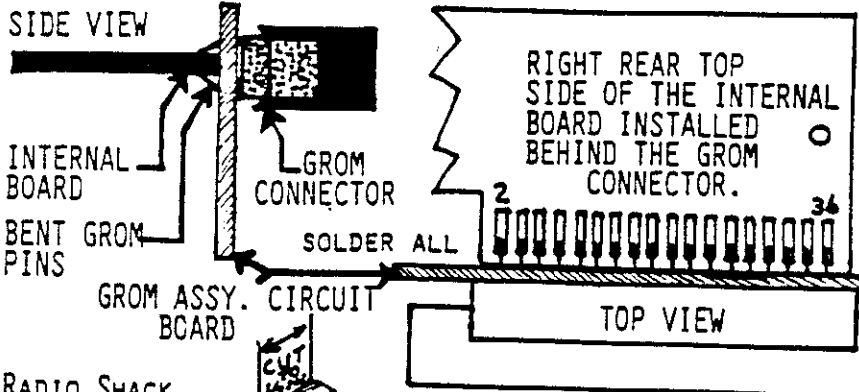


There's 6 larger borders, the Artist font, BRICKS and a very special Instance alphabet. Wouldn't you like to be able to add a little...

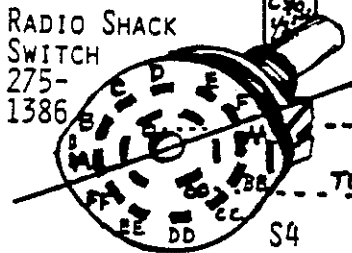
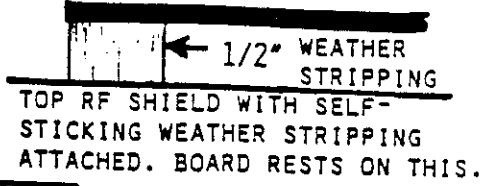
LASS to your text with a Floral Capitol letter to start off a paragraph with? Well there's A to Z Floral Caps in the package as well, and best yet, it's yours for just \$7...



(CONTINUED ON PAGE 9)

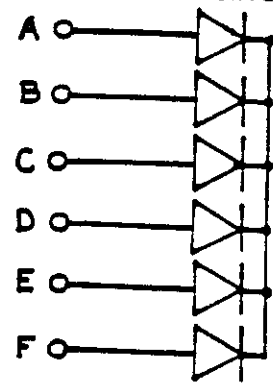
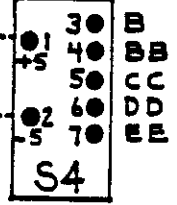


NOTES ON THE INTERNAL BOARD (ZENO BOARD) BY JFW



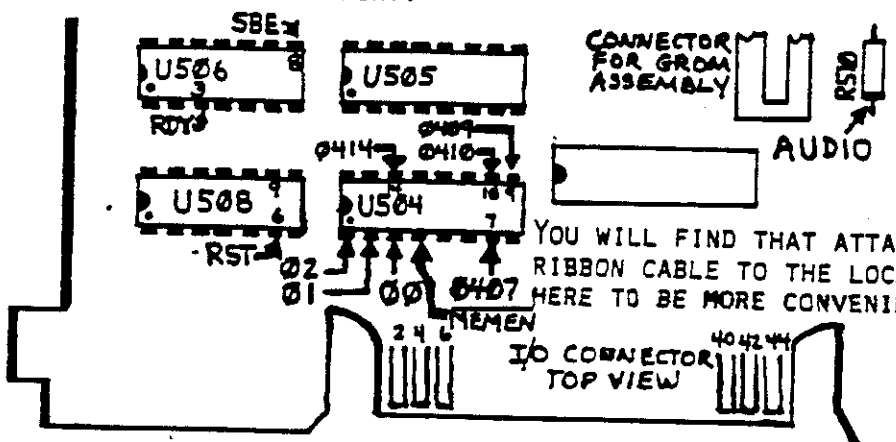
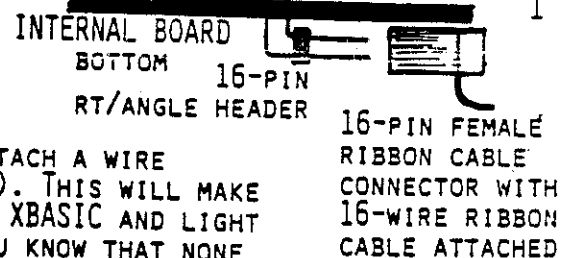
CARTRIDGE SEL. SWITCH

Sw. CONNECTIONS ON BOARD.



THE SIX LEDs BELOW ARE AN EXAMPLE OF LED INDICATOR USAGE TO INDICATE THE ONE INTERNAL CARTRIDGE SELECTED WHETHER IT IS THE XBASIC, OR ANY GROM. YOU WILL NOTE THAT THE INTERNAL BOARD HAS ONLY 3 ADDITIONAL GROM SOCKETS BUT I HAVE 6 SHOWN. THE ONE ON "A" POSITION SHOWS ALL INTERNAL ARE DISABLED. THE OTHER 5 ARE XB AND 4 GROM CARTRIDGES. SEE NOTE 1

THE SWITCH S4, THE SWITCH CONNECTIONS AND THE LED DRAWING ON THE RIGHT CAN ALL BE USED TO SELECT AND DESELECT AS WELL AS INDICATE WHICH OF THE CARTRIDGES OR GROM PORT IS IN USE AT ANY ONE INSTANT. CONNECT WIRES FROM THE POSTS ON S4 INDICATED BY LETTERS A-F AND BB-FF. SEE NOTE ON HOW TO ADD A FOURTH GROM CARTRIDGE WHICH WILL USE FF ON S4. JUST TRUST ME THIS WORKS! EXAMPLE: ATTACH A WIRE ON POST B OF S4 AND THE SAME WIRE TO B ON INTERNAL Bd. S4 LOCATION 3 (B) AND ALSO TO LED AT TERMINAL B. ATTACH A WIRE FROM BB ON S4 TO BB ON INTERNAL Bd. S4 LOCATION 4 (B). THIS WILL MAKE THE SECOND POSITION ON THE ROTARY SWITCH S4 ACTIVATE XBASIC AND LIGHT THE SECOND LED. THE FIRST LED WILL BE USED TO LET YOU KNOW THAT NONE OF THE INTERNAL CARTRIDGES ARE ENABLED SO THAT A CARTRIDGE CAN BE INSERTED IN THE GROM PORT.



ROUTING THE RIBBON CABLE FROM CPU TO P2 CONN. CAN BE DONE BY CUTTING A 1/4" SLOT FROM FRONT EDGE OF TOP RF SHIELD OVER THE U506 AND U505 CHIPS. TAPE THE ROUGH EDGES TO PREVENT CUTTING THE RIBBON CABLE.

YOU WILL FIND THAT ATTACHING THE 12 WIRES USED FROM P2 RIBBON CABLE TO THE LOCATIONS ON THE CPU BOARD LISTED HERE TO BE MORE CONVENIENT AND MUCH SAFER.

I HOPE THAT THESE DRAWINGS AND NOTES WILL AID ALL THOSE WHO PURCHASED AN INTERNAL BOARD TO

- CONSTRUCT IT AND ENJOY IT SOONER WITHOUT MUCH TROUBLE. BELOW ARE NOTES:
- NOTE 1. TO ADD A 4TH GROM PIGGY-BACK IT (UP TO TWO HIGH) ON ANOTHER GROM PIN FOR PIN EXCEPT PIN 14. ATTACH A WIRE FROM PIN 14 OF THE 4TH GROM TO POST FF ON S4.
 - NOTE 2. DO NOT INSTALL LEDs WITHOUT A 200 OHM RESISTOR IN SERIES.
 - NOTE 3. THE SPEECH SYNTHESIZER HAS TWO ERRORS, BELOW U1 AUD P2-8 SHOULD BE P2-10 AND BELOW U2 RDY P2-9 SHOULD BE P2-4. (ERROR ON SCHEMATIC)
 - NOTE 4. MORE LATER

NEW/AGE SPECIAL

* by JACK SUGHRUE, Box 459, East Douglas, MA 01516 *

GOOD, BETTER, BEST!

There is only one program in the TI disk community that is (as my 5th-grade pupils would say) "totally wicked awesome rad to a gnarly degree." I agree with the sentiment, if not the mode of expression.

Nothing else in our world computer community has equalled the impact of the FUNNELWEB environment created for us by Tony McGovern and his son, Will. These two Australian geniuses (and I do not use the word lightly) put together what all of us deemed impossible for the TI.

FUNNELWEB just grew and grew. The original American release was a TI WRITER and EDITOR ASSEMBLER combo, more or less (actually more). Next version a few months later contained a bit more with lots of enhancements of what went on before. TIW, for example, does not contain a ruler or address recall or macro-key CAPS or LC. Tony put all these things in fairly early versions, all of which we take for granted in our word processing activities. The environment always loaded by either E/A or XB, thus making it ideal for supercarts (again from earlier versions) or RAMs or whatever device hardwarers could devise. Then things like Disk Manager 1000 and Diskpatch were added and modified. As were loaders for c99, FORTH, etc. Each time Tony (primarily) would unravel the complexities caused by these needs and create new and better solutions than dreamed possible.

When he came up with the windowing effects for the CONFIG program, for example, which established a profound systems configuration (still able to be ported *en masse* to any newer version, I felt he had reached his peak. Boy, was I ever wrong.

FUNNELWEB is not a program. It is an environment which gives you, the user, some great computing tools in such a complete package that it becomes almost impossible to do without them after using them.

Probably 80% or more of normal (non-programmer) use of computers - especially the TI - is word processing. People need to communicate. FUNNELWEB turned TIW into a great word processor, adding so many features that should have been in the original cart/disk combo that when you go back to that combo you are apalled at its limitations. As I say, we have become spoiled by Tony and take for granted what is surely a remarkable achievement.

Much as I ♡ my TI, I know that if FUNNELWEB did not exist I would no longer be TIing. I couldn't. FWB's a structure equal to the best that any home computer has to offer its users at any price.

Let's face it. It serves as a Master DOS. What does a Disk Operating System do? Well, it lets you load up other programs, primarily, or lets you handle some disk management tasks. FWB does all that as a sideline.

With the new 4.31 FUNNELWEB the console 99 disk user has just leaped quantumly into an exciting era. The 40-column (standard) TI computer fan now has available to him or her a package heretofore only available to non-standard 80-col upgraders.

Before I go on, I'd like to say:

STOP!

The bad news is this: Will went over to the Amiga a long while ago, and his father will be following shortly. This will mean that the greatest single piece of software for the TI will no longer grow; nor will we be seeing any other pieces come from Funnelweb Farm; nor will there be any more great tutorials (particularly those on exploring XB). This is not only BAD news, it is HORRIBLE news. Not that I can blame Tony. Although close to 100% of all TI disk users use FWB and its

upgrades, an extremely small number has ever paid the author a penny - and a tinier number, still, has ever given a second contribution (though the original to present upgrade is similar to the difference between my salary and Donald Trump's). And a tinier number, still, have ever written to Tony to tell him how much they use and appreciate FUNNELWEB and all the other great things he has done for us.

Remember, this is not commercialware. Fairware authors need and deserve our support. Fairware authors of the stature of Tony McGovern have earned massive support financially and socially. They just don't get it.

I urge every user group to "charge" a minimum \$10 copying fee to each member for this upgrade and send the entire collected sum to Tony. Send a group letter. Write him up in your newsletter. Let's let '91 be the Year of the McGovern. Even more, I urge every single reader to sit down at your first opportunity and write (probably using FUNNELWEB) a supporting letter, enclosing the largest cash (certified check, international coupon, money order) contribution you can really afford. It'll still be cheaper than anything you'd have to pay for that would be in the same league as FUNNELWEB (if such a thing exists). People couldn't wait, for example, to shell out \$60 for PRESS (sight unseen) or \$25 to \$60 for data bases. Many of our game cartridges cost at least five times what some consider a "fair" price to pay for the finest piece of software ever for the TI.

How about this for a rule of thumb? Take the most expensive piece of software you ever bought (and probably don't even use anymore) and double it. Send that as a donation. Remember what you paid in those pre-inflationary days for LOGO and MULTIPLAN and TI WRITER and DISK MANAGER II and E/A and whatever?

Well, the new FUNNELWEB has so many new features that most of those expensive cartridges and upgrade disks can be chucked in the basket.

What's your TI worth to you? What'll it be worth to you down the road with Tony McGovern gone? Decide soon about your commitment and make the investment today in your future.

~~~~~  
So what are a few of these outstanding features? Well, for one, there is no more Disk Manager 1000 nor Disk Patch, because the new Disk Review performs all the functions of both (and then some) from within the FWB environment, including COPYING FILE BY FILE (to eliminate fractures) WHOLE DISKS TO MULTIPLE DRIVES! So stick a disk in Drive 1 and copy to Drives 2, 3, AND 4, while you go comb your wallaby. Disks can be FORMATTed to Quad density, if you have the right controller. Any program can be RUN right out of DR, including the huge IV254s. The Quick Directory now lets you mark a file from WITHIN the FORMATTER or ASSEMBLER. And the disk editing functions are plentiful and profound.

The whole FUNNELWEB 4.31 environment is profound. You'll realize this immediately when you see BOTH central menus displayed on the screen simultaneously and you just have to move the cursor around to either RUN the program (or VIEW and/or PRINT the text file).

This is a must for everyone!

Get it from your user group today, being aware that everything worthwhile in life costs.

[If you use NEW-AGE/99 please put me on your exchange list.]





# TI SLAVES AND OGDEN TI USERS GROUPS OFFICERS

| TI SLAVES                            |                       | OGDEN TI USERS GROUP |                         |
|--------------------------------------|-----------------------|----------------------|-------------------------|
| PRESIDENT---                         | BOB BEAUDOIN 262-6045 | ---                  | DAVE NISCHLER 782-1004  |
| VICE PRES---                         | WARREN YOUNG 278-1052 | ---                  | HAROLD BINGHAM 394-6382 |
| SEC/TREAS---                         | JOE NASARDNE 966-3694 | ---                  | RICHARD SCOTT 776-2551  |
| LIBRARIAN---                         | RENN CRUMP 966-7144   | ---                  | ED ISLER 825-9158       |
| ASST. LIB.---                        | JIN FISHER 571-0804   | ---                  | NEL BRAGG 393-9605      |
| NEWSLETTER EDITOR FOR BOTH GROUPS--- |                       | NEL BRAGG 393-9605   |                         |

## JANUARY 1991 NEWSLETTER

**TI SLAVES:**  
OUR NEXT MEETING IS JANUARY 19  
1991 AT 9:00 am. WE MEET IN  
THE DISABLED AMERICAN VETERANS  
HALL AT 273 E. 800 S. PLEASE  
BE THERE PROMPTLY.

**OGDEN TI USERS GROUP**  
OUR NEXT MEETING IS JANUARY  
1st AT 9:00 am. AND JANUARY  
15th AT 7:30 pm. WE MEET AT  
THE OGDEN MUNICIPAL AIRPORT  
IN THE FIRST BUILDING JUST  
EAST OF THE NEW TOWER.

Slaves & Oding  
1396 Lincoln APT B  
Ogden, Utah 84404



HAPPY NEW YEAR!

EVERY ONE.

