

# BITS, BYTES & PIXELS

LIMA 99/4A USERS GROUP



JUNE 1995

Volume 11, #6

## LIMA UG OFFERS TO DISTRIBUTE THE JIM PETERSON PUBLIC DOMAIN DISK COLLECTION, INCLUDING HIS "NUTS & BOLTS"

A disk listing the contents of the Jim Peterson public domain and shareware software library is being distributed to many recipients of this June 1995 Lima newsletter. The Lima UG has been given by the C.O.N.N.I. user group of Columbus Ohio a set of these disks, and we now offer to distribute them to our members and to the TI community in general. Many of the guests attending our recent Lima MUG Conference used that opportunity to make free copies of these disks for themselves thanks to the generosity of the C.O.N.N.I. group.

Among the Peterson disks are his Nuts & Bolts sets 1-3, which have only been RECENTLY PLACED IN THE PUBLIC DOMAIN by Jim Peterson's estate. The Nuts & Bolts collection includes 3 software disks, 3 documentation disks, and one (previously released as public domain) demonstration disk. The complete collection adds up to 7 disks.

Lima UG members can request disks from the Peterson collection in the usual way, by mailing us a want list, the needed number of disks, and a paid return mailer. There is no copy fee.

Those not members of the Lima UG, and Lima members not wishing to send disks, can order from us anything in the Peterson collection for \$1 per disk. Send us a want list money. Your \$1 per disk pays for the disk, mailer, return postage, and out time and effort. We only copy whole disks using whole disk copy software. Please do not ask us to copy or archive several of the Peterson SSSD onto a smaller number of your own disks. If you want to wait, and assuming there is a 1996 Lima MUG Conference, you can make your own free copies at the next Lima Conference.

Almost all our disk masters are SSSD. Some items in the catalog require multiple disks sets, so please read the item description carefully. Except for the 3 Nuts & Bolts sets, much of this material is already in Lima software library and the libraries of other user groups.

Send your requests for Peterson library disks, or for our on disk catalog of these disks, to:

Charles Good  
P.O. Box 647  
Venedocia OH 45894.  
Phone 419-667-3131

\*\*\*DONE\*\*\*

## A NEW CARD FOR THE 99/4A

From: oliver@thorin.swb.de (Oliver)  
Subject: Re: halloTELETEXT  
To: C6DDDE0SULIMA1.LIMA.OHIO-STATE.EDU (Charles Good)  
Date: Fri, 31 Mar 1995

Hello Charles Good!

Last month I have finished my project about the TELETEXT-CARD for the T199/4A. I have developed a singlesided PCB and software written in C language. You only need a T199/4A, 32k and a RS232 interface. As a source for the CVBS signal you need a TV or something else with a SCART connector e.g. Videorecorder, Satellite Receiver,...

The name of the teletextdecoder circuit is SAAS246A/PE. It can handle PAL or NTSC mode. I have written a menu program like the standart Teletext handling from your TV. In this program you can dump or save the pages. I also include the documented C-Routines to write your own Videotext program without the knowledge of the format. The routines emulate the I2C-Bus completely.

In the following you see some examples of TELETEXT pages:

### TWE INTERNATIONAL TELETEXT SERVICE

News	101
CNN TV Guide	200
Hotel Guide	300
Travel/Weather	400
Sport	500
Business	600
Finance	700

### 24-HOUR DIRECT DEALER ACCESS TO THE WORLD'S FOREX MARKETS 692

\*\*\*\*\*  
Latest News 150 World Times 450  
CNTEXT Help 290 Markets Latest 750

\*\*\*\*\*  
BEP SIT RATES 690

295

M1 CNTEXT P100 Tue Mar 21

\*\*\*\*\* ECONOMIC NEWS \*\*\*\*\*  
ECONOMIC WEEK IN REVIEW  
MONDAY 20 MARCH 1995

\*\*\*\*\* 2/2

British lending figures showed the housing market was subdued, with new mortgage commitments falling to \$4.28 billion in February from \$4.65 in 1994.

The European Union was to lend Belarus 75 million European currency units (\$97 million) to help its balance of payments. South Africa was to get loans of \$390m over two years. Monthly inflation in Romania slowed to 1.4 per cent in February for a year-on-year rate of 50.6pc.

Main Index 100 Business News 600  
 \*\*\*\*\*  
 SURGE TRADING S.A. 24 HOUR DESK  
 FOREX AND FUTURES BROKERS SEE 695  
 NO CNTEXT P661 Tue Mar 21 19:15:58

(Below from a German TV program)

Donnerstag, 23.3.	Geld	Brief
USA (1 US-Dollar)....	1,3958	1,4038
England (1 Pfund) ...	2,2183	2,2323
Irland (1 iri.Pfund)	2,2240	2,2380
Kanada (1 kan.Dollar)	0,9905	0,9985
Niederlande (100 hfl)	89,088	89,308
Schweiz (100 sfr) ...	120,600	120,800
Belgien (100 bf s) ..	4,8262	4,8462
Frankreich (100 FF) .	28,090	28,210
Dänemark (100 dkr) ..	24,885	25,005
Norwegen (100 nkr) ..	22,297	22,417
Schweden (100 skr) ..	19,040	19,160
Italien (1000 Lit.) .	0,8039	0,8119
Osterreich (100 IS) .	14,189	14,229
Spanien (100 Ptas) ..	1,0784	1,0864
Portugal (100 Esc) ..	0,9462	0,9522
Japan (100 Yen) .....	1,5850	1,5880
Finnland (100 Fmk) ..	31,800	31,960
Australien (1 Dollar)	1,0070	1,0270
ohne Gew/hr		>> 444
NO 443 ARD/ZDF Fr 24.03.95		14:12:05

The price of the PCB + SAA5246 + Docs + Software is 50 DM.

You need again some Resistors and Condensators, a Transistor, a Quarz, 8kstatic RAM and 5V DC.

Please give this information to other TI-Users.

Yours...

Oliver Arnold  
 Hauptstrasse 44  
 69517 Gornheimertal  
 GERMANY

\*\*\*DONE\*\*\*

HOW TO INSTALL FUNNELWEB ON A HARD DRIVE

by Charles Boob  
 Lima Ohio User Group

This article assumes you are installing Funnelweb on SCSI hard drive #1. The device name is SCSI (that's a "one"). If you are installing on a hard drive controlled by a Myarc MFDC card substitute the letters "MDS" or "WDS" each time "SCS" is used in this article:

You need to put all the Funnelweb files you plan to put on your hard drive on a floppy disk, configure these files on disk, and then upload them to your hard drive. Funnelweb only recognizes a directory named "FWB", so from HDGS on the Geneve and create this directory from the root directory by entering "MD FWB". The Geneve should respond with "Done".

The important files to configure are FW, CF, CG, and to a lesser extent LOAD. Once properly set up and uploaded to your hard drive, not only will Funnelweb operate properly, but you can reconfigure at any time from the hard drive by running Funnelweb's configuration program.

Start Funnelweb from disk. One way is to use EXEC and type "EXEC A:FW". Run Funnelweb's Configure and under the LOADING heading press H for hard disk path until WDS.FWB is displayed. Press Back (Fctn/B). Now select DEVICES and press "N" to configure a workfile name. This should be the subdirectory where most of your text files will be stored when you use Funnelweb's word processor. I suggest entering "SCSI.TEXT." for the workfile name. Press Back (Fctn/B). Now save your configuration to SYSCON, then press Back again and INSTALL this hard disk path to files FW and LOAD. Then QUIT Configure and go back to a Funnelweb central menu.

Start Disk Review and bring up a directory of the disk containing your Funnelweb files. Move the cursor next to file FW and press I (for inspect). Select 2 File Search. Select ASCII and search for the string WDS1.FWB. Press 2 to edit and change this to "SCSI.FWB.". Press CTRL/W and then CTRL/A to write this change back to disk. Then press Back a few times to abandon the search. Move the cursor next to the file LOAD, press I, and in a similar manner change WDS1.FWB. to "SCSI.FWB.". Press Back a few times to abandon the search and return to the disk directory listing.

Now move the cursor next to file CG and press I. Select 2 file search and search for the ascii string DSK1.S which should be at the very end of a sector. Press 2 to edit this sector and change this to SCSI.F and then move the cursor in the ascii field to the character immediately in front of the "S" that you just typed. Press Ctrl/H to go to the hex display and change this byte to 0F. Now go back to ascii by pressing Ctrl/A and move to the next sector by pressing Ctrl/N, and you will see YSCON at the beginning of the sector. Put the cursor over the Y and type NO.YSCON and

save this change with Ctrl/W followed by Ctrl/A. What you just did was change the string DSK1.SYSCON, which was spread over two sectors, to the string SCS1.FWB.SYSCON and you also altered the length byte at the beginning of the string to reflect the new longer length of the string.

Press Back a few times and again search file CG, this time for "DSK1.FW" which you should type over with "SCS1.FWB.FW". Now move to the space immediately before the first S and press Ctrl/H to switch to hex. Type "0B" here to change the length byte to the new longer length and write these changes to disk with Ctrl/W and then Ctrl/A.

In a similar manner search file CG for "DSK1.LOAD" and change this to SCS1.FWB.LOAD and change the length byte immediately in front of the first S to "0D". Now search for "DSK1.UL" and type over this with "SCS1.FWB.UL". Move the cursor to the space in front of the first S, do Ctrl/W for hex and change the length byte to "0B". Write these changes to disk with Ctrl/W and then Ctrl/A.

Now press Back a few times to the Disk Review directory and move the cursor to file CF. Press I and search this file for the string "WDS.FWB.", which should be changed to "SCS1.FWB." and written back to disk.

You are almost done. Exit Funnelweb and go to MDOS. Copy all the files on the modified Funnelweb disk to the FWB directory. If the disk is in the A drive and your hard drive is drive H then you can type "A:" and enter, then "COPY \* SCS1.FWB." and enter will copy the files.

Funnelweb should now run properly from your hard drive. You can boot it any time from extended basic, or directly from MDOS using EXEC.

**\*\*DONE\*\***

**The Solution to Scott Adams's Graphic Adventure  
RETURN TO PIRATE'S ISLE  
by Joe Waters and Barry Boone**

(Note: This article was originally published in the March 1988 issue of THE COMPUTER VOICE, newsletter of the Southern California Computer group. We have the game on disk Lima disk #10A bootable from EAS.)

This was done for all the Tiers who are fed up with this game. The following commands should be typed in exactly as they appear. Remember to save your game often (as we found out the hard way). If you want to play the game without the pictures press "Z". To restore the pictures do the same. I found no differences between the disk and cartridge version of this game, so I'll assume this solution file will work with either of them, though it was tested on the disk version. Good luck!

- LIFT MATT
- GET UP
- WEAR GLASSES
- GO TOP
- TAKE MASK
- TAKE WATCH
- GO DOWN
- DROP BOOK
- DROW WATCH
- DROP MASK
- MOVE BED
- DROP RING
- LOOK CEILING
- PUSH BUTTON
- LOOK FAN

You must repeat the last two steps until you see that the fan blades are no longer turning. You must do it approximately 15-20 times.

- DROP BROOM
- GO DOWN
- GO ENGINE
- LOOK ENGINE
- GO DOWN
- GO DOWN
- GO UP
- UNSCREW BLADE
- DROP SCREW
- GO UP
- GO DOCK
- GO NORTH
- DIG
- CLIMB HILL
- JUMP UP
- DROP RUM
- DROP BLADE
- GO CRACK
- GO SHED
- TAKE HAMMER
- GO NORTH
- GO CRACK
- LOOK PIRATE
- LOOK PIRATE
- TAKE RUM
- GIVE RUM
- WAKE PIRATE

Remember PIRATE ADVENTURE #2? Try this:  
GO DOWN (see the sign?)  
GO UP (neat, eh?)

- JUMP LEDGE
- GO DOWN
- GO EAST
- TAKE ROCK
- LOOK ROCK
- GO WEST

GO SOUTH  
GO BOAT  
GO DOWN

Note: Should see Pirate at  
Helm. If not, you goofed.

DROP EARRING  
DROP HAMMER  
DROP BOX  
DROP ROCK  
DRIP ALGAE  
REMOVE RIM  
MAKE GLUE  
GLUE LENS  
IN MASK  
SPLIT MASK  
WEAR MASK

NOTE: Sny time during your  
game that your mask fogs, enter  
the sea at some point and:  
REMOVE MASK, WASH MASK, SPIT  
MASK, WEAR MASK.

DOP RIM  
TAKE PAINT  
REMOVE FRAME  
LOOK PAINT  
LOOK PAINT  
DROP FRAME  
DROP MAP  
OPEN PORTHOLE  
DROP MASK  
GO PORTHOLE

NOTE: Want to see what a  
beauty of a ship you own? Type:  
SQUINT. You can do this from  
anyplace you can't take your  
mask or glasses.

TAKE RAIN  
GO SEA  
GO BOAT  
GO DOWN  
SPIT MASK  
WEAR MASK  
WRAI RAIN  
IN RAIN  
GO UP  
GO DOCK  
GO SEA

NOTE: Good place to save  
game. Here is where we enter  
the water. Never forget to  
HOLD your BREATH!

HOLD BREATH  
SWIM DOWN  
SWIM EAST  
SWIM UP  
GO DOCK  
LOOK BEAM  
TAKE DOLL  
GO DOWN  
HOLD BREATH  
SWIM DOWN  
SWIM WEST  
SWIM UP  
GO DOCK  
GO BOAT  
GO SEA  
HOLD BREATH

SWIM DOWN  
SWIM WEST  
FEEL BOAT  
FEEL SILT  
SWIM OPEN  
GO BOAT  
DROP DOLL  
DROP PIN  
DROP OYSTER  
DROP MASK  
GO CRAW  
(squint?)  
GO EAST  
(squint?)  
NOTE: At last! You found  
the clock!

TAKE CLOCK  
TAKE SIGN  
GO WEST  
GO WEST  
SPIT MASK  
WEAR MASK  
DROP SIGN  
TAKE OYSTER  
DROP CLOCK

NOTE: Ha-ha! That'll teach  
the clock! Into the pool with  
ye' sea scum!

GO POOL (Note: Flying  
fish???)  
HOLD BREAK  
SWIM DOWN  
SWIM EAST  
SWIM UP  
GO BOAT  
GO DOWN  
DROP OYSTER

TAKE HAMMER  
TAKE BOX  
NOTE: Don't open the box  
with thge hammer yet. It has  
the stamps.

TAKE EARRING  
TAKE WATCH  
TAKE BROOM  
TAKE RING  
TAKE PAINT  
GO UP  
GO SEA  
HOLD BREATH  
SWIM DOWN  
SWIM WEST  
SWIM OPEN  
GO BOAT  
NOTE: Still floating? Takes  
a licking and keeps on ticking!

DROP WATCH  
DROP RING  
DRIP FARRING  
DROP BROOM  
UNWRAP PAINT  
DROP PAINT  
OPEN BOX  
(score?)  
NOTE: Good place to save  
game. Uk, the reason you had  
to open the box here is ther  
was no other way to get the  
#RAKE STAMPS# to the Sauggler's  
Hold without getting them wet.

GO POOL  
HOLD BREATH  
SWIM DOWN  
SWIM EAST  
SWIM UP  
GO BOAT  
GO DOWN  
DROP HAMMER  
DROP BOX  
DROP RAIN  
TAKE MAP  
GO DOWN  
START ENGINE  
GO UP  
SAIL SHIP

NOTE: Good place to save  
game. A bit dark, eh? Better  
get those flood lights working!

GO DOWN  
 STOP ENGINE  
 GO UP  
 PUSH BUTTON (flood lights)  
 GO UP  
 GO SEA  
 HOLD BREATH  
 SWIM DOWN  
 GO SHIP  
 TAKE CHEST  
 SWIM UP  
 GO BOAT  
 GO DOWN  
 PUSH BUTTON  
 GO DOWN  
 START ENGINE  
 STOP ENGINE (recharge

GO BEACH  
 GO WEST  
 GO SOUTH  
 GO BOAT  
 GO SEA  
 HOLD BREATH  
 SWIM DOWN  
 SWIM WEST  
 SWIM OPEN  
 GO BOAT  
 DROP DUDLOON  
 GO POOL  
 HOLD BREATH  
 SWIM DOWN  
 SWIM EAST  
 SWIM UP  
 GO BOAT

battery)

GO UP  
 PUSH BUTTON  
 GO UP  
 GO SEA  
 HOLD BREATH  
 SWIM DOWN  
 SWIM WEST  
 SWIM OPEN  
 GO BOAT  
 OPEN CHEST  
 DROP BOOK  
 DROP CHEST (score?)  
 GO POOL  
 HOLD BREATH  
 SWIM DOWN  
 SWIM EAST  
 SWIM UP  
 GO BOAT  
 GO DOWN  
 PUSH BUTTON  
 GO DOWN  
 START ENGINE  
 GO UP  
 SAIL SHIP  
 GO DOWN  
 STOP ENGINE  
 GO UP  
 GO UP  
 GO DOCK  
 GO NORTH  
 GO EAST  
 GO SEA  
 HOLD BREATH  
 SWIM DOWN  
 FEEL SILT  
 SWIM UP

Ok, here is where we got stumped! We went through the game again and again, and still couldn't get the last two treasures. We can tell you this: One of them we suspect to be a pearl inside of that oyster. You must find a snail to open it for you. The other one is a **PIECE OF AMBERT**. We had this in one of our earlier games, but we couldn't find it again. Suspect it to be on the **PUMICE ROCK**. Once you **LOOK** to find the **ALGAE**, look again.

In one of our earlier games we found a second **OYSTER**, which was a **SMASHED OYSTER**. I believe this was found under the ship in the silt, after you sail to the other island. Good luck!

**\*\*DONE\*\***

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**PATCH NOTICE: FUNNELWEB 128K EDITOR,  
 LIMA RELEASE  
 by Tony McGovern**

These patches are to the 80 column v5.20 editor released at the recent Lima MUG Conference.

1- If you are using a TI or CorComp FDC the character files may load correctly from floppy. (Myarc FDC, Horizon RDs are ok). Use Disk Review sector editor, or other, to edit the first sector of the ED file. Byte >80 on sector #0 is >08, change to >09. In DR this is the first byte of the second block.

2- Install process gives only 128K mode as default load. Use Disk Review on the INSTALL (or INSTALL/ED) program file. Search file for byte >EB (with N for word-align). This should show up in 2 places on sector #3 of the file. Change both of these bytes to >02.

3- French command line file is now available from Charlie Good.

**\*\*DONE\*\***

**THE TIGERCUB NUTS & BOLTS DISKS**

What are they? The Nuts & Bolts Disks are collections of 100 or more subprograms in merge format, ready to merge into your own programs.

And what does that mean? Well, TI-99/4A Extended Basic allows the use of user-written subprograms. And what are subprograms? You know them well. CALL COLOR, CALL SOUND, CALL HCHAR - those are all subprograms which are built into the Basic language. You can write your own subprograms, to do anything that Extended Basic is capable of, and tack them onto the end of your program to be CALLED whenever you need them.

To put it another way, using a subprogram is almost like running one program from another - except that you can access it much faster, you can pass along any values you want to, and you can return to where you left the first program.

Also, with a disk drive you can save programs in MERGE format and then MERGE them into a program in memory. Providing that the line numbers are different, the program which you MERGE in will be added to the program in memory.

The variables used in a subprogram are entirely separate from those used in the main program, therefore libraries of utility subprograms can be developed in MERGE format, and MERGED into any program without conflict.

The Nuts & Bolts Disks are libraries of such subprograms. The first disk contains 100 subprograms, plus a tutorial on using them. Disk No. 2 contains 108, and Disk No. 3 contains 140 more in 114 files. Nothing like them has ever been offered by anyone else for the TI-99/4A computer.

These 348 subprograms have been consecutively line-numbered with high line numbers so that they will not overwrite your program line numbers, and so that any number of them may be MERGED into a program without overwriting each other.

Advanced programming techniques have been used to make these routines as compact as possible, averaging hardly more than 3 sectors each, so that a hundred or more could be crammed onto a disk and so that they would add very little to the length of a program. If you are learning to program, you might learn a great deal by studying these subprograms.

Each disk is accompanied by several pages of documentation, explaining the use of each subprogram and listing a short demo routine which you can key in, run, and experiment with.

Many of these subprograms can be used by persons with almost no programming knowledge, to modify existing programs. For instance, a program written in Basic, which crashes with BAD VALUE when run in XBasic, will run with a simple CALL BXB, and CALL KILLQUIT will disable the infernal QUIT key. Many different screen character styles are available, as well as colorful wipes to replace CALL CLEAR.

However, it is the programmer who will find these disks truly invaluable. Even if you have the skill and ingenuity to develop these routines for yourself, wouldn't you rather just pay five cents apiece for them?