



WHAT IS WRONG WITH THIS PICTURE
OF THE TI-99/4A SYSTEM? YES, THERE
IS NOT A MONITOR WITH IT! OUR CLUB
NEEDS A MONITOR DESPERATLY! IF
ANYONE HAS ONE THAT YOU COULD
DONATE, YOUR TAX-DEDUCTABLE GIFT
WOULD VERY MUCH BE APPRECIATED!

THE 99'ER

MEETING :

TIME: 7:30 to 10:00

DATE: September 5th

PLACE: Lake Island
Recreation Center

All TI users are
welcomed, feel free
to bring a friend!

AGENDA:

OPEN-DISCUSSION
RAFFLE-PARSEC
TWO DEMOS:
RLE GRAPHICS
EDITING FEATURES OF
EX/BASIC
LIBRARY WILL BE OPEN
DURING DEMOS
BOOKS FOR SALE
MEETING ADJOURNED

INSIDE THE 99'er

- * Copyrighting your programs
- * General meeting
- * Universal Terminal Unit
- * Computer Glossary
- * RLE Graphics
- * Letter from Editor's desk
- * From the Library
- * Fun program to test your hearing! (Huh?)

CLUB OFFICERS:

PRESIDENT: SCOTT CARGILL
V. PRES. : DENNIS NEUBAUER
SEC/TRES. : SUSAN NEUBAUER

BOARD MEMBERS:

SARA CARGILL - EDITOR
ERIC MINDOCK - LIBRARIAN
JOHN HIGGINS - AST. LIBR.
RICK GREGORY
BILL GREGORY



Copyrighting Your Programs
By Scott Cargill

In today's age, in-depth knowledge of computers and their programming is becoming more and more wide spread. This is causing a small problem for the computer programmer. It used to be that a programmer was able to market his programs with out any worry that his long work will be pirated by a non-law abiding individual, causing the programmer to lose not only profits, but to hurt his marketability of his programs in general. The United States has taken some steps, keeping the computer programmer in mind, that will now make it easier for that programmer to copyright his programs and protect his investment. (As any of you programmers know, writing a program IS indeed an investment!).

FORMS AND PUBLICATIONS NEEDED:

Circular R1: Copyright Basics

Circular R61: Copyright Registration for Computer Programs

Form TX

Instructions for form TX

GENERAL INFORMATION CONCERNING COPYRIGHTING

Who owns the copyright? The copyright becomes the property of the author who created it, IMMEDIATELY. Only the author or someone deriving the rights from the author can claim the copyright. However, if the author creates the work "for hire", the employer is considered the author. This is covered in detail in circular R1.

The following MAY NOT BE protected by copyright:

- Works that have not been fixed in a tangible form.
- Titles, names, short phrases, slogans.
- Ideas, procedures, methods, systems, concepts, principals.

Copyright is secured AUTOMATICALLY upon creation. No publication or registration, or other action in the Copyright Office is required to secure copyright.

If a work is "published", that is, distributed or conveyed to others, all published copies should bear the notice of copyright. And, works that are "published" are subject to mandatory registration with the Library of Congress.

(Continued on next page)

The notice of copyright should conform to the following format:

1. The symbol for copyright (the letter C in a circle), or the word "Copyright", or the abbreviation "Copr."; followed by:
2. The year of first publication; followed by:
3. The name of the owner of the copyright

To copyright a computer program, send the following:

1. A properly completed application form (Form IX)
2. A non-refundable filing fee of \$10.00
3. One copy of the program listing. If a published user's manual (or other printed docs) accompanies the computer program, two copies of the user's manual along with the single copy of the program.

For large programs, the first 25 and last 25 pages are sufficient, along with the page carrying the copyright notice, reproduced in a form visually perceptible without the aid of a machine or device.

For questions regarding copyrights, you may call the Copyright office information number at (202) 287-8700, between the hours of 8:30 AM and 5 PM, Mon-Fri. For ordering forms and circulars, you may call the 24 hour Hotline and leave a message on an answering machine. The number is (202) 287-9100. Leave your name and address, talking clearly.

The address is:

Register of Copyrights
Library of Congress
Washington DC 20559

GENERAL MEETING

The meeting of August 12, 1986 was called to order at 8:01.

Old Business - None

New Business - Welcomed visitors: Fred Lairmen, Francisco Garcia, Sarah B. Raffle - TI-ARTIST Winner Dennis Neubauer.

Newsletter - Discussed was an idea for designing a new cover for each month's newsletter. Whoever has the best entry will be picked from the club members by secret ballot. The winning entry will be printed on Jan. newsletter and will receive a disk full of programs.

Library - John Higgins discussed the status and price of the programs on disk and cassette.

Bylaws - Updated bylaws are now available, at monthly club meetings.

Questions and Answers - Many members have items for sale and show an interest in buying items computer oriented.

Demo - Personal Record Keeping by Richard Eriley.

Business meeting adjourned at 8:28

Club meeting adjourned at 10:00

Thank You
Susan Neubauer
Sec/Treasurer

UNIVERSAL TERMINAL UNIT

The Kantronics Universal Terminal Unit is a new type of Computer/Transceiver Interface.

With the UTU, a Computer and your Transceiver, your station becomes a complete CW/RTTY/ASCII/AMTOR Send-Receive Communications Facility.

While most systems require additional software to operate, the Universal Terminal Unit uses an internal microprocessor to send and receive in all four coded amateur formats.

Connection to your computer is via the RS232 or Serial Port. In this way, the UTU is universal to many different computers.

Only a short basic "TERMINAL" Program is required to operate the system.

The Internal UTU Program features include:

Morse Code - Send/Receive - 6 to 99 WPM

Radio Teletype Send/Receive - 60, 67, 75, 100, 132 WPM

ASCII Send/Receive - 100, 150, 200, 300 Band

AMTOR Operation- Modes A, B, and L

The Modulator/Demodulator portion of the Universal Terminal Unit features switched capacitance filters to process the mark and space tones and to prefilter both RTTY and CW Signals.

Front Panel Indicators make tuning easy, with Mark and Space Indicators for RTTY and Lock and Valid leds for AMTOR.

The 132 WPM setting is for European use only and is illegal in the U.S.A. The Universal Terminal Unit is attached to your computer and Transceiver via Jacks and Connectors on its back panel. Eight connections are possible: Power, Audio In, Transceiver, External Speaker, Computer, Key In, Key Out and FSK Out.

You must provide the RS232 Connector and check your Computer Manual to correctly wire the corresponding pins of the Computer RS232 Port.

You must use a Serial Port and a Terminal Program such as TEII, Fast Term or Mass Term.

All the Terminal Program does is to allow your Computer to be used as a Communications Terminal. That is all it really does. Hamsoft Interfaces are available.

For more information on the above subject contact Gene Diveglia at the 99ERS USERS GROUP Monthly Meetings. Perhaps a Demo will be in order by the October or November Meeting.

Gene Diveglia

COMPUTER GLOSSARY—By Bill Gregory

For those of you who are unfamiliar with computer terminology, I have listed the following glossary of some of the most commonly used computer terms:

Address--The label or number identifying the register or memory location where a unit of information is stored.

ALU--Arithmetic Logic Unit. The part of a CPU where binary data is acted upon.

ASCII--Acronym for American Standard Code for Information Interchange. A seven-bit code used to represent alpha numeric characters. It is useful for such things as sending information from a keyboard to the computer, and from one computer to another.

Assembler--A program that translates assembly language instructions into machine language instructions.

Assembly language--A machine oriented language in which mnemonics are used to represent each machine language instruction. Each CPU has its own specific assembly language. See CPU and machine language.

Baud rate--Serial-data transmission speed. Originally a telegraph term 300 baud is approximately equal to a transmission speed of 30 bits-per-second.

Binary--Refers to the base-2 number system in which the only allowable digits are 0 and 1.

Bit--Acronym for Binary digit. The smallest unit of computer information. It is used to represent either a binary 0 or 1.

Bubble memory--A relatively new type of computer memory, it uses tiny magnetic "pockets" or "bubbles" to store data.

Bus-- Paralleled lines used to transfer signals between devices. Computers are often described by their bus structure. (i.e. S-100-bus computers, etc.).

Byte--A group of eight bits.

Clock--The timing circuit for a micro processor.

Compiler--A program that translates a high-level language, such as Basic, into machine language.

CPU--Acronym for Central Processing Unit. The part of the computer that contains the circuits that control and perform the execution of computer instructions.

Data base--A large amount of data stored in a well organized manner. A data base management system is a program that allows access to the information.

Disk operating-system--Program used to transfer information to and from a disk. Often referred to as a DOS.

Eprom--A PROM that can be erased by the user, usually by exposing it to ultraviolet light. See PROM.

File--A collection of data that is treated as a unit.

Firmware--Programs stored in PROM or EPROM.

Hardware--The physical components that make up a computer.

Hexadecimal--Refers to the base-sixteen number system. Machine language programs are often written in hexadecimal notation.

Interface--The connecting device between a computer and a peripheral.

K--abbreviation for kilobyte (1024 bytes).

Machine language--Instructions written in binary form, that a computer can execute directly. Also called machine code or object code.

Microprocessor--A one-IC CPU. One common microprocessor often used in personal computers is the Intel 8080.

Modem--Acronym for Modulator/DEModulator. A device that transforms electrical signals into audio tones for transmission over telephone lines, and does the reverse for reception.

Motherboard--IN a bus-oriented system, the board that contains the bus lines and edge connectors to accommodate the other boards in the system.

Port--A channel through which data is transferred to and from the CPU. An 8-bit CPU can address 256 ports.

PROM--Acronym for Programmable Read Only Memory. A semiconductor memory whose contents cannot be changed.

RAM--Acronym for Random Access Memory. A semiconductor memory that can be both read and changed during computer operation. Unlike other semiconductor memories, this one is volatile--if power to the RAM is cut off for any reason, all data stored in the device is lost.

Rom--Acronym for Read Only Memory. A semiconductor memory containing fixed data--the computer can read the data but can't change it in any way.

Software--Programs stored on tape or disk.

Source code--A non-executable program written in a high-level language. A compiler or assembler must translate the source code into an object code (machine language) that the computer can understand.

Word--Number of bits treated as a single unit by the CPU. In an eight-bit machine, the word length is eight bits; in a sixteen-bit machine, it is sixteen bits.

RLE Graphics

Article by Rick Gregory

RLE graphics for the TI has made a big impact on the TI society. Many people have heard of it, but don't know quite what it is. We will discuss this new addition to the TI in this article without getting into much of the technical part. RLE stands for Run Length Encoded. The purpose of RLE is simple: to allow the transferring of graphic pictures from one computer type to another. The resolution of the computer must be atleast 255x192. A graphic picture on the computer is "encoded" into a text file, which through the definitions of different characters, can hold the picture. This text file can then be sent to any computer type which has a decoder program capable of reading the text file and "decoding" it back to a picture on the screen. MAX-RLE is the name of such a program which exists for the TI. Max-RLE allows you to take an RLE picture file and display it on the screen. Next you can convert it into a format which is loadable by TI-Artist or GRAPHX. Then you can edit the picture as you wish with either of those drawing programs. Please note that RLE picture files are not capable of having color, they are black and white (on/off). The reason for this is that different computer types have different color tables. So color can not be transferred, however, you can color the pictures using GRAPHX / ARTIST. Plus MAX-RLE can print out any picture to your EPSON or compatible printer. You can order MAX-RLE with DOCS, explanation info on how the files work, and example pictures, from the Clubs Library. It's a great piece of software well worth the fee. It requires: E/A or mini-memory module, Disk System, and 32K expansion. Below is a brief explanation of how RLE text files hold the pixel definitions of HI-RES pictures.

The RLE file begins with an (ESCAPE) character [CHR\$(27)]. This is followed by ASCII characters which, when the ASCII char code is reduced by 32, it gives the number of pixels to be turned either on or off (in alternating fashion - first is number off, second is number on, third is number off, etc.) Using this, the pixel definitions can be held in a text file. The END-OF-PICTURE characters are (ESC)GN which tells the decoder program the file ends. You can see then, if the picture has alot of mixed on/off pixels next to each other the RLE file will grow in length in order to hold the info. However, if the picture is basicly solid BLACK or solid WHITE the file will be smaller in length.

LETTER FROM THE EDITOR'S DESK

Dennis and Susan Neubauer our past editors have turned over the honors of being editor of the club's newsletter. I hope I can do a fine job of editing the newsletter. We would like to thank them for getting the newsletter out on time and will try to keep up the good work. I have alot of good ideas that I would like to put into the newsletter to continue its outstanding success. To start out with we are presently holding a contest for the cover of the newsletter.

Send your entries to:
The Editor
6820 Edgefield Ln
Orlando, Fl 32822
(or bring to the general meeting)

The winner will receive the honor of having their entry on the January issue and they will also receive a disk full of programs. All entries must be received by December 5th to be judged at the December 5th meeting. ALL entries will be printed in subsequent issues. This is your newsletter, therefore we need your input!! Remember that your entry can be anything from a hand drawing to a digitized picture. Please keep entries club oriented (and clean).

Starting next issue we will have a For Sale/Wanted section. You can send your ad to the above address or drop it off at the box that will be available at each meeting. Please include your phone number and the price. Please keep items club oriented (no real estate and automobiles please).

Thank-you,
Sara Cargill
Editor

From the Library

I have almost completed the task of dividing the library into the six main categories of:

- 1) Games & Entertainment
- 2) Education
- 3) Home & Business Management
- 4) Utilities
- 5) Program Packages
- 6) Music

(The last of these categories holds a wide variety of programs with various applications, such as the new "MAX/RLE" converter program, a computer version of "CRAPS" and many others.)

Once I have completed this job, it will be much easier to compile a complete program catalog for distribution to club members. Keep your fingers crossed, but remember I am working as fast as possible.

Here is a sample of some programs now available.

Games

TI Runner	Microsurgeon
King of the Castle	Burger-Time
Love Tennis	Boxer
Centipede	Defender
Bigfoot	Missile Command (Barrage)
Donkey Kong	Pinball

Utils

Mass-Copy	Vfiler
Fast-Copy	Neat-List
Disk Manager 1000	Micro-Keys
Diskc2	Track-Copier
Library/Catalogger	Catalogger

Music

Axelf	Tocatta
Puppytown	Time in/Bottle
Yesterday	Hill Street Blues

That's just a sample, for more come to the meeting, and take a look.

Eric

ENCLOSE CHECK OR MONEY ORDER, PAYABLE TO "GREATER ORLANDO 99er USER GROUP",
AND THIS COMPLETED APPLICATION TO : Greater Orlando 99er User Group
P.O. Box 13819
Maitland, Fl. 32751

: NAME _____ TODAYS DATE _____
: _____
ACTIVE MEMBER
: _____
: ADDRESS _____ APT # _____
: _____
: _____
NEW \$ 20 _____
: _____
: _____
RENEWAL \$ 16 _____
: _____
: _____
SUBSCRIBING MEMBER
: CITY _____ STATE _____ ZIP _____
: _____
: _____
NEW \$ 14 _____
: _____
: OCCUPATION _____ PHONE (_____) _____
RENEWAL \$ 12 _____
: _____
: SPECIAL _____
Mount INTERESTS _____
Enclosed _____
: _____
: COMMENTS _____
: _____

DO YOU ENDORSE THE CORPORATION PURPOSES AND BYLAWS OF THE
GREATER ORLANDO 99ERS USERS GROUP ?
YES _____

BULK RATE
U.S. Postage
PAID
PERMIT 158
MAITLAND, FL
32751

GREATER ORLANDO 99er USER GROUP
P.O. BOX 1381
MAITLAND, FL. 32751

DELIVER TO: _____

PLEASE INFORM US IF
YOU HAVE MOVED.

MIAMI COUNTY AREA 99/99
NEWSLETTER EXCHANGE
P.O. BOX 1194
PERU IN 46378