FROM THE PRESIDENT:CINDY KIRBY

FIRST THE NEWS THEN THE FUSS. ON MAY 3RD MARION GIBSON AND I WENT TO THE
NASHVILLE COMPUTER FAIRE. WE HAD A WONDERFUL TIME. I WAS ABLE TO TALK WITH
NUMEROUS OTHER GROUPS. SOME OF THE STATES REPRESENTED WERE OHIO. MISSOURI,
KENTUCKY, FLORIDA, ALABAMA, AND SEVERAL FROM TENNESSEE. IT LOOKED AS IF WE
OUT NUMBERED THE OTHER COMPUTER GROUPS. DON'T IT FEEL GOOD TO DO JUST ONCE.
A REPRESENTATIVE FROM TEXAMENTS DEMOSTRATED THE NEW MYARC COMPUTER. IT COMES
ON A CARD THAT DROPS IN YOUR P-BOX. IT SHOULD BE READY FOR RELEASE IN THE
LATE SUMMER. WHAT FOR THE ADVERTISEMENTS.

THIS WAS MY FIRST MEETING WITH OTHER TI GROUPS AND A GREAT EXPERIENCE. I
HOPE MORE WILL GO NEXT YEAR. NOW ONWARD TO OUR OTHER NEWS.

MINUTES OF THE MAY 8TH MEETING: MEETING CALLED TO ORDER BY MYSELF AND
ERIC SCHILKE. THERE WAS NO NEW BUSINESS. I SPOKE BRIEFLY ON THE TI FAIRE.
FROM THERE WE PROCEED TO INTRODUCE OURSELFS AND DISCUSSED THE TI AND OSBOURE
COMPUTERS. THEN THE MODEM TALK WAS BEGUN. OUR SPEAKER WAS FROM THE OSBOURE
GROUP AND I FORGOT TO GET HIS NAME BUT I THANK HIM AND HIS GROUP FOR
ATTENDING. I AM HUMAN. AFTER OUR BREAK REFRESHMENTS WERE SERVED THEY STARTED
WORKIN ON THE COMPUTERS. THE MODEM TALK COVERED BAUD RATES AND BIT INTERVALS

WE HAD 15 MEMBERS PRESENT WITH TWO RETURNING MEMBERS. MEETING ADJOURNED.
NOW FOR THE FUSSIN'. TO THOSE WHO COMPLAINED A BASIC PROGRAMMING CLASS
WAS FORMED AND THE FIRST CLASS HELD ON MAY 15 AND THE SECOND CLASS ON MAY 22
WHERE WERE YOU?? ERIC STEENBURN HAS OFFERED TO TEACH THIS CLASS AND IS
FANTASTIC AT THE JOB. REMEMBER THIS IS A PROGRESSIVE AND YOU MAY JOIN WHEN
WE REACH YOUR LEVEL OF IGNORANCE. LIKE THAT WORD HUH? I DID TOO. YOU MUST
CONTACT ERIC AS TO THE NEXT CLASS MEETING AND THE MATERIAL TO BE COVERED.
ERIC NUMBER IS 533-0299. SEE YOU IN CLASS.

NEXT FUSSIN'. SAY I LIKE BEING DICTATOR, BETTER WATCH OUT! PLEASE DON'T
FORGET TO RENEW OR YOU WON'T GET A NEWSLETTER ANY MORE AND WE HATE TO LOSE
NEW FRIENDS.

OUR SPEAKER NEXT MONTH WILL BE MR. DANNY MICHEALS FROM THE SHOALS 99ERS.
HE HAS WRITTEN SEVERAL COMMERICALLY MARKED PROGRAMS FOR THE TI. SEE YOU AT 7
P. M. ON JUNE 12. 1986. GOTTA GO FER NOW SEE YOU THERE. CJK

OFFICERS   CALENDER OF EVENTS

PRESIDENT   CINDY KIRBY   882-3599   June 5th :Basic Class
V PRESIDENT   JIM SMITH   723-4281
SECRETARY   P. J. HUX   881-5760   June 12th:Danny Micheals
TREASURER   CHARLES BECRAFT 534-9796
                                              June 19th:Technical & Talk

                                              June 26th:Library

COMMITTEE CHAIRPERSONS:

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HARDWARE        ALBERT BOYETT    852-7673
CASS. LIBRARY   JIM SMITH        723-4281
DISK LIBRARY    EARL &P. J. HUX  881-5760
EDUCATION       ERIC STEENBURN   533-0299
TECHNICAL       BRIAN KIRBY      882-3599
MEMBERSHIP      CHARLES BECRAFT  534-9796
DOCUMENTATION   VIRGIL BURRER    772-9597
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EDITOR & PROGRAMS::FOLKS I HAVE BEEN DOING BOTH OF THESE JOBS IN ADDITION TO
    MY PRESIDENTY, THE OTHER OFFICERS ARE HELPING BUT THE RANK AND FILE ARE
TAKING. IF HELP DOES NOT APPEAR I WILL CHOSE. DO YOU WISH NO PROGRAMS, NO
NEWSLETTER, OR NO PRESIDENT!! EACH OF OUR OFFICERS HOLDS A CHAIRMANSHIP IN
ADDITION TO THERE OFFICE WHY CAN'T YOU DEVOTE AN HOUR ALSO??? ENOUGH SAID
THANK YOU FOR READING AND HAVE A GOOD DAY. CJK

FROM THE VICE PRESIDENT: JIM SMITH

    Well I guess it's about time the Vice-President wrote something for the
newsletter. First a little biographical information. My wife, Cathy and I
are high school science teachers living and working in New Hope (a place
where the rest of the world is long distance). We have a son, Austin, who is
two and a half now. We bought our first TI in December 1982 and were tied
to a cassette player until last october, when we purchased the Corcomp 9900
Expansion System, two disk drives and a printer. That's when my wife found
an ad for the North Alabama TI 99-4A User's Group in the newspaper. I was
having trouble with the printer and the second disk drive and decided to
call the number in the ad to ask for help. I was invited to attend the
monthly meeting and was told that there would be someone there who could
help me. Sure enough there were several more than willing to help out and we
solved the problems.

    Since that October meeting I have learned more about the TI 99/4A than I
thought was possible from the information that I thought was avaiable.
Before I joined the User's Group I was in a TI information void. I almost
junked my TI console and was about to purchase a Radio Shack machine but I
guess I'm like so many other TI users, my TI could do what I wanted so why
switch. Anyway since my affilication with the User's Group I've been
introduced to more hardware and software than I ever dreamed was avaiable.
I've met many genuinely friendly and helpful people who are more than
willing to help with problems concerning the computer and peripherals as
well as with software problems. Before the Group I was tied almost
exclusively to an increasingly unrelible migazine as a source of software
and TI information.

    Of the several million 99/4A's sold there must be many owners out there
who have one in the closet gathering dust or are considering changing
machines or feel alone in the "TI information viod". If you areone of these
or know of anyone like this you should come to a meeting and see what is
available for the machine. I was really surprised at what is available. My
machine went from toy to a real computer with some useful applications.

    I guess I've ramled enough for now. I would like to express my thanks to
the members of the User's Group for their assistance and friendship.See you
at the next meeting.

EQUIPMENT REVIEW: THE HORIZON RAMDISK

Manufacturer's address: Horizon Computer,Limited, P.O. Box 554,Walbridge,OH
43465. John Clulow (419) 874-8838, Ron Gries 874-1414, David Romer 666-6911

I purchased the Ramdisk in kit form for $50. The kit I built was a DSSD
kit. What you receive is one printed circuit board and 3 diskettes of
software for the Ramdisk. The PC board is very well made, and it is
silkscreened, so you know where to place parts. I purchased all of the parts
locally expect for the RAM chips. The parts I purchased locally cost about
$65. I mail ordered the RAM chips and it cost me $70 for 24 RAM chips. My
total outlay was $185. You can also buy the Ramdisk assembled and tested for
$230. A single sided version is also available.

Assembling the Ramdisk was easy and it took me about 4 hours to build
it. The manual was well documented with text and drawings. They also
included a schematic, which is unusual nowdays, and it is very handy if you
have a problem. After building the Ramdisk, you will have to run a test,
that's included, to test all the RAM chips. After a sussessful test, you can
use the Ramdisk. After booting up the Ramdisk operating software, the
Ramdisk becomes dsk3. At this point you intialize the Ramdisk, just like any
othe diskette. You can use any disk manager utility to do this and a copy of
DM1000 is inclued for this purpose.

Another feature of the Ramdisk is, it is battery backed up by 3 AAA
Nicad batterys. While you use the computer the batteries charge up. When you
turn the computer off, your Ramdisk contents are still there. I leave the
DM1000 in the Ramdisk, so thats one less program to load from a diskette.
DM1000 loads in about 3 seconds from the Ramdisk.

What is the main reason for a Ramdisk? Speed. And speed saves time. You
can load your TI-Writer files or E/A files into the Ramdisk and when you
call them up, they will be in the computer in a few seconds. A good
application is assembling source code. Instead of taking, say,20 minutes to
assemble an object file on disk, the Ramdisk will do it in a few minutes.
Another time saver is when you are transferring files via a terminal
emulator. You don't have to wait on the disk drives to read and write. If
you are using a data base that charges by the minute, you could save a few
nickels. The reason the Ramdisk is quicker is because it is electronic
circuitry that can communicate as fast as the computer can. When you use a
disk drive there are severals delays that the computer must wait on. First
you have to wait on the motor to come up to speed, then you must wait on the
head to be positioned. Then the actual data is read at a low speed in
comparison to what the computer can accept. The Ramdisk has none of these
delays.

I have had no problems with the Ramdisk, software or hardware yet. The
disks that are included with the kit are documented. There are several good
utilities for advanced programmers who like to reconfigure the Ramdisk for
extra memory for the computer. Also, there is documentation on how to make
new "calls" for the 99/4A. There are a few new calls available just by
having the Ramdisk. These calls allow you to change the Ramdisk drive number
in XB or Basic. You can also turn on/off disk protection, execute machine
code directly, load DM1000 while in XB or Basic, etc. The manual is 36 pages.

With the Ramdisk, you can have up to six allocated drive locations. If
you have two disk drives, you can allocate the Ramdisk to drive position 3
thru 6. Also you can run more than one Ramdisk with the system. Another
feature I would like to point out is the compatability with the TI device
service routines (DSR). It does not try to take over the system to do its
job. You can also change CRU allocations for the Ramdisk, in case you are
using a Myarc or Corcomp disk controller. Overall, I am pleased with the
operation of the Ramdisk, and the price was right.

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TECHNICAL:by BRIAN KIRBY

CORCOMP WOES (or HOW TO GET RID OF FEW)

TRIPLE-TECH CARD: The main problem with the Triple Tech card has been the lithium battery has been exploding. Somehow current is being allowed to reach the battery from the P-Box. Lithum Batteries were never designed to be rechared and exploding is their normal reaction to charging. The cure is to remove a 100 ohm resistor, R7, and replace it with a diode, 1N914. The anode side of the diode must face towards the battery.

PEB RS-232 Card and the micro Expansion System (MES) : These are the current revisions. Pin 38 of the TMS9901 IC should have a 1.5 Kohm resistor to ground. If it does not have this resistor, it could cause you not to have any menu screen when using the CorComp Floopy Disk Controller (FDC). DTR/1 and DTR/2 inputs to the RS232 port needs a 3.3 Kohm pullup resistor to +5 V.

PEB FDC and MES: Pin 15 of the 74LS123 should have a 200 Kohm resistor to +5 V. Possible problems without this resistor are: 1) No Diskette or Drive Error 2) Problems when copying with one drive 3) Cannot intialize brand new diskettes 4) Cannot run Miller's Grapics Advanced Diagnostics. After replacing the resistor and if the drive motor goes off and on repeatedly, then the 74LS123 is shot. Replace it. Any 2793A FDC ICS, unless having an "07" number predominatly marked on it , are bad. Usual failure mode is failure during read and writes in the double density mode. If any 2793 has no "A" behind it, it is OK. If you have a 2793A replace it.

ALL CARDS with voltage regulator ICs and very much the FDC: Heatsinks are required on all these regulators. Silicone grease/theral compound is highly recommended. Without the heatsinks you can have numerous problems. The regulators can and will go into theral shutdown, which limits the amount of current to the card.

FDC alignment for cards using the 2793 FDC: Allow computer to warm up and install a jumper clip across to the W5 connector. Adjust the variable capacitor so that the frequency counter reads 250 Khz. Use an oscope and adjust R6 (10K) to .3uS. Use scope again and adjust r5 (50K) to .5uS.