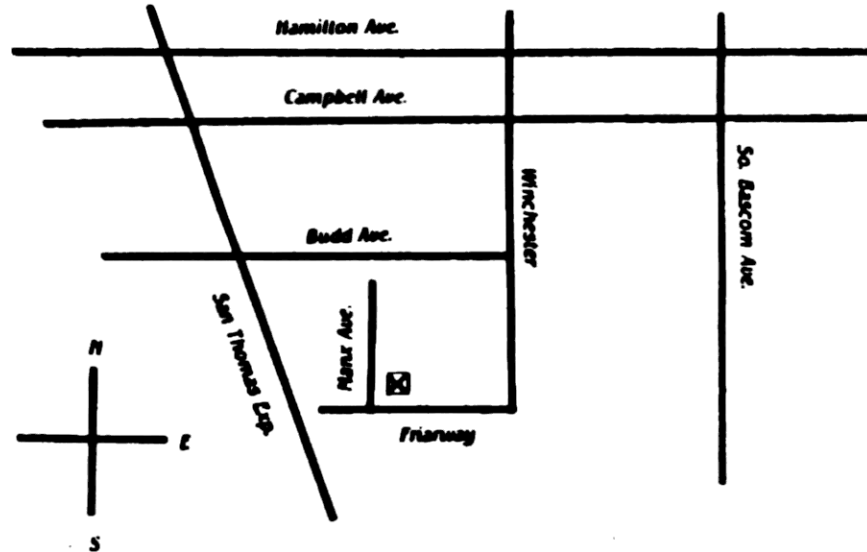This club has been established to provide its members total computer knowledge using "hands-on" application during the meetings. For better understanding of existing hardware and software in an informal—social club atmosphere.

We hope to provide members close contact between novice and amateur home computer entusiasts; young and old, male and female, school, home, business and hobbiest.



INFORMATION...CALL 408-379-2774

MEETINGS:

2ND   SAT.....................1PM   WORKSHOP

4TH   WED.....................7PM   LECTURE

........................................................................

HAPPY NEW YEAR TO ALL OUR CLUB MEMBERS THROUGHOUT THE USA.   1988 SHOULD
BE A BUSY YEAR WITH MANY NEW ENHANCEMENTS IN THE CLUB'S STRUCTURE.
The 4th wed. meeting will combine the lecture subject with maintance of
the club's activities-libraries ect. (this way participating members
will go home with applied knowledge).
The 2nd. sat meeting will remain the same format.
Please bring your computers to the meetings if you are having problems-
if you need your computer updatedor your adding new accesoriesect..or
you just need assistance with a program or any other reason...just bring
it with you to the meeting.
Out of the area memberships:
We have had an increase in our out of the area club memberships so we
need to address the coverage of club services to those persons. The increase
comes from our posted listing in "80 micro" Nov.issue. there are a bunch
of stranded trsdos users out there. Persons whose clubs went "POOF". We
can assist them easily so we offer our club membership to them.
CLUB BBS:
The club bbs is set up on the model 3 machine,it has its own telephone
line and number 408-374-1539 (this is a change from the origional posting)
We split it off the ms dos clone to give better acess to everyone and it
is an easier bbs to use. large files and programs will be maintained on
the ms dos computer but club news and small files will be maintained on
the model 3 machine.... So pull out the modem and give the bbs a try its
not hard to use and a neat way to communicate.
TRSDOS DATE FIX:
The club ordered the LSDOS date fix patch program for those who need to
continue the datefix on their model 4-4p TRSDOS6.2 disk operating disks,
we also obtained a program called "DATE/fix" that fixes TRSDOS. and another
program that is posted on 80-micro bbs that fixes the date system. This
coverage should satisfy any persons reason for needing a fix to their
model 4 computers dos. We even obtained another that is called"SIX2XEND"
the three patch programs extend the calender year past 1987. Some how, the
person who designed the model 4 dos's didnt think the machines would stay
alive longer than the year 1987 so they put a terminal end to the dos as
of the year 1987...........another Tandy first????????????????????????
NOTE.....each program has its own quirks,you get to pick which one you
think will drive you up a tree the least.

GRAFPLUS-PRINT COMMANDER:

These are two MS DOS resident programs we obtained that will allow you to use your older R/S printers (non ibm charater set)or other printers to work with the MSDOS text and graphics modes. We noted that many ex-trsdos persons kept their old printers hoping they would work in the MSDOS enviorments. They now have a second chance to use those machines. These two programs are at the club. we recommend you try them out and buy them if you see that they solve your printer problems.

GRAFPLUS gives text and graphics capabilities while PRINT COMMANDER gives you text capabilities.

PACKET HAM RADIO:

Sam recieved his "TECH." ham radio lic. so now we can fully impliment the two meter FM radio communications system into the bbs system. We joined a local amature radio club also so we may enhance a few of their members into our computer club. Sams call letters are KB6OQT.We will monitor ch.145.07 with the bbs and listen on station 14676 on the 2 meter band.  I'm sure we can learn, everybody starts somewhere, and in the amature world we are lost.............

COMPUTER NEWS 80:

This is a new magazine for the model 1-3-4-4p computers, we have a copy in this months news for your review and if you wish to obtain it you can send them their fee and subscribe to it.  WE will have it at the house too. come to the club meetings and read these new magazines.

MODEL 4REALTIME CLOCK:

There is a schematic in this newsletter that gives speed to the model 4 computers. the print comes from our club up in canada"MICROGRAM" we swap newsletters with them and use their articals too. This newsletter is at the club meetings also. come and read them.

Installing the rs-232  model 1:

The two major components to the model 1 rs-232 system are the circuit board and the cable assembly. It isnt easy to make it work,......The old machine needs some pre-cleaning of the internal connecting points before it all happens. Find the rs-232 connecting bar- remove it from the circuit board of the interface unit. clean the contacts on the bar and clean the circuit-traces on the interface board. reposition the bar and reinstall it on the interface board.Position the rs-232 circuit board on its contacts. holding it while tightening the two screws.(the aliegnment is critical) next, clean the card edge for the rs-232 cable. this can be done with an eraser. the top and bottom of the edge should be cleaned.    To make your own cable.................................see picture::::::::

# RS-232 cable assy.

```
   40 pin connector                db25 connector
       pin#16                          pin#1
          18                             2
          22                             3
          36                             4
          32                             5
          40                             6
          30                             8
          34                            20
          38                            22
```
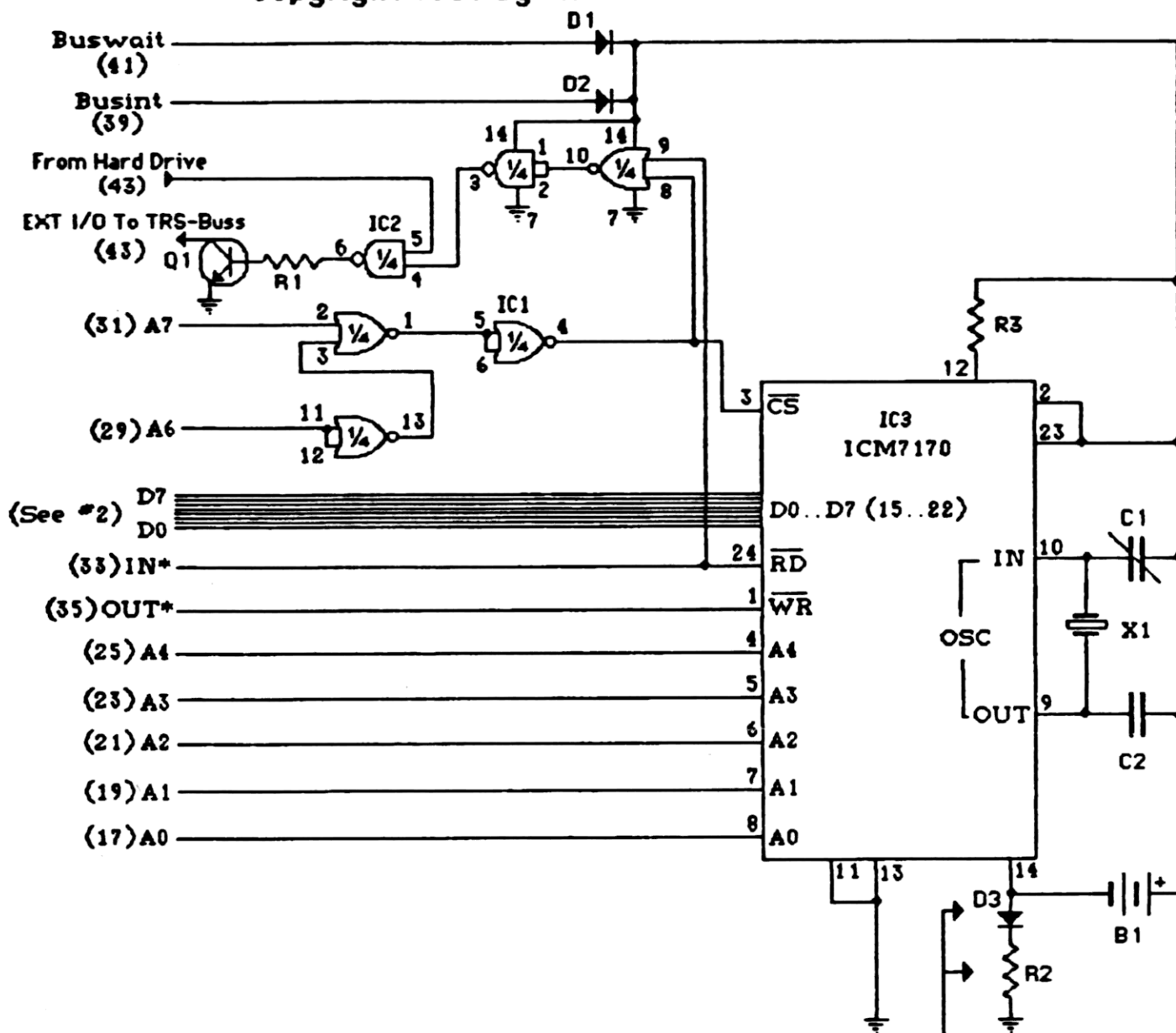
THIS CABLE DESIGN IS MANDITORY........................

PICA MAGAZINE:

The club was sent 6 copies of PICA portable computing magazine for those who are into laptop computers. these can be obtained at the club meetings while they last.  This magazine covers the tandy portables and others and is a good guide to keeping the little machines up and running.

4.

# Real Time Clock Circuit for the TRS-80 Model 4 Microcomputer
## Copyright 1987 by Mel Patrick – Version 2.5



Buswait (41)
Busint (39)
From Hard Drive (43)
EXT I/O To TRS-Buss (43)
(31) A7
(29) A6
(See #2) D7 D0
(33) IN*
(35) OUT*
(25) A4
(23) A3
(21) A2
(19) A1
(17) A0

D1 D2
IC2 ¼
IC1 ¼
Q1 R1

IC3 ICM7170
$\overline{CS}$ 3
D0..D7 (15..22)
$\overline{RD}$ 24
$\overline{WR}$ 1
A4 4
A3 5
A2 6
A1 7
A0 8
11 13 14

R3 12
IN 10
OSC
OUT 9
C1
X1
C2
D3
R2
B1

NOTE – if you decide to use the 3V lithium cell OMIT D3 and R2

## Parts List

Diodes – D1,D2,D3 – IN4148
Resistors – R1 – 470 OHM 1/4W
R2 – 2K2 OHM 1/4W (optional for nicads)
R3 – 4K7 OHM 1/4W (used for timing setup)
IC's – IC1 – 74HCT02
IC2 – 74HCT00
IC3 – ICM7170... (INTERSIL Clock Chip)
Q1 – 2N3904 – Silicon NPN switching transistor
Capacitors – C1 – 33pf trimmer
C2 – 18 pf
X1 – Crystal 32.768 KHZ (small watch type)
B1 – two 1.25V nicads or one 3V Lithium Watch Cell Radio Shack CR2032
Misc – Sockets, solder, wire wrap (30 awg)
ribbon cable, edge card connector, etc.

### Inset #2

| TRS -- Data -- 7170 Pin ----------- Pin | |
|---|---|
| 1 ----- D0 ----- | 15 |
| 3 ----- D1 ----- | 16 |
| 5 ----- D2 ----- | 17 |
| 7 ----- D3 ----- | 18 |
| 9 ----- D4 ----- | 19 |
| 11 ---- D5 ----- | 20 |
| 13 ---- D6 ----- | 21 |
| 15 ---- D7 ----- | 22 |

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TRS-80's
4th Wed. Meeting Schedule  1988

The 4th Wed. Meeting's Agenda will be amended to include
Functional Training, as well as Club Maintenance, for the year
1988.

JAN

      TRSDOS-Transferring-Saving-Copying of Programs
      Setting up a Data Base Program
      Indexing the Club's Book Library

FEB

      Word Processing:Installation-Transfer-Saving Files
      Printer Paper Settings
      Indexing of the Instruction's Book Library

MARCH

      Modem: Installation-Program Up-down Loading
      Up load Programs to BBS
      Index the Program Disks

APRIL

      Spreadsheet: Design Files-Sorting
      Set up Club Mail List System-Labels

MAY

      Computer Upgrades:
      Install RS-232 in Model I
      External Disks Model III & IV
      MS-Clone Card DIP Switches etc.

JUNE

      Model IV: Using the 128K Memory-RAM Drive
      Using 64K in Model III Mode

JULY

      Utility Program Applications
      Hyperzap Model I
      SuperUtility Model III & IV
      Norton's Utilities MS Clone
      Fastback Model 11,12,16
      DOS Application Files

AUG

      DOS to DOS Program & Files Transferring
      TRSDOS to MULTIDOS      Model I
      LDOS to TRSDOS      Model IV
      NEWDOS to MS-DOS      Model III-MS Clone

SEP

      BASIC Programming Classes Start
      Computer Maintenance
      School Educational Programs Update

OCT

      BASIC Programming Classes
      CAD-CAM Program Set-up and Usage

NOV

      BASIC Programming Classes
      Machine Language Introduction
      Installion of Program Patches

DEC

      Machine Language Usage
      Computer Club Review

Byte Bandits of Amer.
TRS-80's Computer Clb
780 Mann Ave.
Campbell, CA 95008



BYTE BANDITS
CLUB
MEMBER MACHINE
OF AMERICA