Weather or not...

Southern California is really a nice
place to live. It's always sunny and
warm. Right? So when it does rain, we
just don't know what to do. Except me.
I drove 100 miles to Los Angeles in my
beat up '65 VW, Spotless, with windshield
wipers somewhat held together with wire
and electrical tape. I only had to stop
every 20 miles or so to 're-adjust' them.
Why don't I fix them? I have the parts
and I could make the time, but it's so nice out today...   November 1983

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***********************************************************************
*                                                                     *
*   Filename      English Translation       PMODE  PCLEAR   Locations  *
*                                                              CTR-80   CCR-81 *
*   FIGURCOV      Figure Cover                 4      4       7/151    5/129  *
*   TIMEFLT       *Time Flight                 0      3      28/166   19/146  *
*   ASSMBLER      Assembler                    0      1      48/180   33/163  *
*   ASMTEST       Assembler Test (data file)              77/203   57/193  *
*   RADRUN        Radiation Run                3      4      96/218   73/214  *
*   MASTERCAT     Master Catalog (disk only)   0      1     110/228   86/231  *
*   TRSMEM        TRS Memory Test             (2)    (4)    129/244  104/255  *
*   ANIHLTR       Annihilator (CLOADM:EXEC)   (2)    (4)    138/251  114/268  *
*                                                                     *
*   Locations are for the R/S recorders.  If the first copy of a program won't load, try the second.  If  *
*   neither copy loads, return the tape for disciplining and a prompt replacement.  If you get an OM, FC,  *
*   or SN error while loading or running a program, you probably have to enter the PMODE and PCLEAR values *
*   for the program directly from the keyboard (values in parenthesis are not set in the program).  *  *
*   These programs may use high speed.  Be sure that the computer is slowed down again before doing I/O to *
*   tape or disk (POKE 65494,0).  Subscribers - The month on the mail label is the last month of your  *
*   subscription.  If you have a cassette subscription, the number next to the month is the amount it  *
*   would cost to convert the rest of your subscription to the disk version ($4.20 per issue for 6 or less *
*   months, $3.75 per issue if more than 6 months).                                                    *
*                                                                     *
***********************************************************************
```

Bouncin' dots traverse the screen in **Figure Cover** (by Alex Kreis).
And what is this? Our disclaimer is printed on the hi-res graphic screen,
courtesy of our November 1982 utility, **Small Text**. Note: The normal
text screen is disabled, so to avoid problems in future programs, turn the
computer off and then on again or type POKE359,126<enter> after running
this cover.

Junior Birdmen - here's **Time Flight** (by Darrell Ulm). Using a
joystick, you attempt to get the oncoming bi-plane, jet, or spaceship in
your F-16's crosshairs to blow it out of the sky! What fun! Note: When
you first start the game, you are asked "MUSIC ON?". If you answer yes, a
little tune is played before the game starts.

Construct machine language with **Assembler** (by Bob Johns). This is a
one-pass assembler written in BASIC, so it assembles a bit slow, but it
works! You must know the 6809 assembly language in order to use this
program and to understand the following documentation:

1) **Use standard Motorola mnemonics.**
2) **Directives**
    RMB Reserve Memory Bytes. Ie: STORE RMB 25 (decimal - 99 max)
    FCC Form constant characters. Ie: MESSG FCC /HI THERE/ (use any
character not in the string for delimeters)

```
FCB    Form constant byte.    Ie: NUMBR FCB   $46 (hex)
FDB    Form double byte.      Ie: LGNUM FDB   $46D0 (hex)
EQU    Equate directive.      Ie: CLS   EQU   $A928 (hex)
ORG    Program start address. Ie:       ORG   $2ABC (hex - if not given
```
or unacceptable, default to present ORG)
```
END    Last line of program.  Ie:       END
```

3) Syntax

Labels may not exceed 5 characters, must start in column 1, and may not include the following characters: $@,'>*[#/

Column 6 must be a space.

Operators (mnemonics and directives) must start in column 7.

Column 11 must be a space.

Operands must start in column 12.

Comments follow the operand, and are preceded by at least one space.

Whole comment lines must start with an asterisk (*) in column 1.

4) Limitations

In the Indexed Address Mode, constant offsets from a register are positive decimal with a maximum of 9. Ie: LABEL LEAX 9,X

All other numeric data (except RMB) is in hex and must be preceded by dollar sign ($).

No LABEL,PC or LABEL,PCR operands are permitted.

5) Address Modes

Defaults to the extended address mode.

Force direct-page with > as the first character of the operand.

Force immediate # as the first character of the operand.

Force indirect with [and] (<shift down arrow> and <right arrow>).

6) Editors

You may use any editor which produces ASCII files (like **Keep Text** from January 1983) to create your source file. You may even use the BASIC editor as long as you save the finished 'program' in ASCII (ie: CSAVE"filename",A or SAVE"filename",A) and you use slash (/) in column 1 in place of blank labels:

```
       Text Editor                  Basic Editor
CLS    EQU   $A928          20 CLS   EQU   $A928
PRINT  EQU   $A282          40 PRINT EQU   $A282
       JSR   CLS            60 /     JSR   CLS
       LDA   #'Q'           80 /     LDA   #'Q'
       JSR   PRINT         100 /     JSR   PRINT
       RTS                 120 /     RTS
       END                 140 /     END
```

Note: If you only have 16k, you must type PMODE0:PCLEAR1 before loading the program.

Just to test **Assembler**, you get **Assembler Test** (how did we ever come up with that name?). This is a very UNuseful program that asks you to type in a string of up to eight characters, and then tells you how long the string was. But the program is well commented and will demonstrate how **Assembler** works. To run it, load and run **Assembler**. Answer the system questions and the printer/screen question. When it asks for the origin of the source file, answer T if you have the tape version and D if you have the disk version. Answer the BASIC/Text editor question with T (for text), and give the filename as ASMTEST. The test file will load in and be assembled. When it is done, you will be able to save the resulting machine language file (object code) to tape or disk. Now you can run the assembled version of **Assembler Test** by typing
CLOADM"filename":EXEC<enter>

And in the "I love this game" corner comes **Radiation Run** (by Eric Olson). Use the arrow keys to 'pipe' the deadly radiation into the bucket. In the 96 square grid, there are elbows, straight pieces, and

intersections to connect. You move the pipe pieces into position by
trading places with your 'cursor'. In other words, if you move the cursor
up, the piece above you and your cursor switch places on the board. When
you have completed a path for the radiation, press E (Excite) to get the
radiation to move faster. Try it, you'll get a charge (old pun) out of
it...

        Having trouble keeping track of all your programs on disk? Try
Master Catalog (by Ronald Terry Constant). Just run this program and
insert your disks one at a time. The directories of each disk will be
read and stored on a disk file. You can then sort the file one of four
ways and list it to the screen or to a printer. We used it to sort and
list all of the Chromasette programs to date (over 200) and it worked
great!

        How's your memory been lately? Check out CoCo's with this exhaustive
TRS Memory Test (by Scott Gravenhorst and Jim Moran). Run it overnight!
Or over the weekend! It does a rotating bit test (end of pass indication
is R), clear memory test (end of pass indication is O) and a
convergence/retention test (end of pass indication is C). The author
notes that it took 3 hours per pass for a 32k machine, and 12 hours per
pass for a 64k machine (we did not test it on a 64k, so we can't verify
that statement). You are asked for the start and end addresses of memory
(in HEX) to test when the program first runs. If you just hit <enter> to
each question, memory will be tested from 0800 hex to the top of memory.
P.S. Our machine passed with flying colors...

        Arrow keys to move, space bar to shoot, and the clear key to wipe ALL
of the enemies off of the screen. Sound familiar? Sound fun? It is!
It's **Annihilator** (by Doug Kelly). It's in machine language, so type
CLOADM"ANIHLTR"<enter> to load it. If you want to save a copy, do it
now by typing CSAVEM"ANIHLTR",10240,15718,10240<enter> (use SAVEM to
save to disk). Now type EXEC<enter> and you're off. Feature: If you
wait too long to play, it goes into demo mode. If you move the arrow keys
while in demo mode, it appears that you are playing, but shots fired to
the left will leave garbage on the screen. Hit <break> or the <reset
button> to start the game. Note: The reset vector is changed, so the
only way out of the game once you have started playing is to turn CoCo's
power off and then on again.

        Showin' our stuff...

        We took Chromasette and SilverWare (our "best-of Chromasette"
packages) to a couple of Color Computer shows recently. In October there
was the southern Rainbowfest (by the Rainbow) in Fort Worth. In the early
part of November the Color Computer Expo was held (by Color Computer
Magazine and the Color America Users Group) in Pasadena, California. I
had a GREAT time selling at both shows:

        The Texas show started with a missed flight. Then there was the
constant 'random pattern display' on our monitor for the entire first
night of the show (I told people it was the latest program on
Chromasette). But things got better. I got to meet a lot of Color
Computer people (sold 'em some software too, heh, heh), got wonderful
southern hospitality (believe me folks, it's real!), and finally met some
of the figureheads at Rainbow (hi, Lonnie). Even found a couple of hours
to sneak in the Texas State Fair...

        The California show was in the beautiful Pasadena Center (no flight to
miss). And our booth was right across from the the lunatic folks at Color
Computer Magazine. Steve Bjork (Zaxxon), Mark Randall (Color America),

Jake Commander, Dennis Kitsz, David Ezequelle (how was Disneyland?), Kerry Leichtman, Michael Federle, etc. (I know I missed some) are ALL nuts. And they put on a great Color Computer show (even after hours...). Again I got to meet a lot of Color Computer people (again sold 'em some software, heh, heh, heh) and had a blast.

Only working 60 hours a week...

Time to start up a few more 'magazettes'. There are some wonderful computer manufacturers who could use a boost from CLOAD Publications. Here's a few names we're knocking around:

TI-tape - $49.95 for a lifetime subscription.
Atarette - Including a 12-month series on PONG.
Aquaridisk - Free Barbie doll with every subscription.
Osbload - Including a 3x5 11 chapter manual.
Calicocass - Needs a cassette module.
Vicsette - With faster loading (only 1/2 hour per program).

How about Chromasette?

Dave

ed.

TRS-80 COLOR COMPUTER