Aaachoo! Gesundheit...

     Pass me another box of kleenex. It's all gone?
I'll just use this month's editorial, then.   What
happened to Donna? Home sick with the flu. Robin
will be in late - her daughter isn't feeling well.
The whole shop gets hit with some bug. And there
isn't a simple fix for it in next month's issue,
either. Even Jed Dog has started a sympathy sneeze!
Oh, here comes Tom. He isn't coughing or sneezing,
but he sure looks, well, odd. Could it be the mo-
hawk haircut he now has? No wonder I feel bad...

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*                                                                         *
*    Side              Title                         Turns Count          *
*                                                                         *
*                                               CTR-41          CTR-80    *
*                                                                         *
*    ****         Design Cover                  15 & 270        9 & 154   *
*  **   **        Life Span                     50 & 295       28 & 168   *
*  **   **        Planets Over Seattle         170 & 385       97 & 220   *
*    ****         Display (System DISP /)      257 & 456      147 & 260   *
*                                                                         *
*                                                                         *
*     **          Spelling Egg                  12 & 266        7 & 151   *
*    ***          Securities Instructions       96 & 327       54 & 186   *
*     **          Securities Portfolio         125 & 349       71 & 198   *
*    ****         Bounce (System BOUNCE /)     240 & 439      136 & 250   *
*                                                                         *
*                                                                         *
* CLOADing Notes - This tape may load at an ODD RECORDER VOLUME.  Set the volume LOWER than normal for your first attempt, then *
* increase it slightly until the tape loads.  If the first copy of a program won't load, try the second.  That is why it is *
* there.  Model I only:  Put an AM radio very close to the keyboard, tune it to a non-station, and you can listen to the tape *
* loading in.  Adjust the recorder volume so the hash from the computer sounds 'cleanest' during a load.                 *
*                                                                         *
* Model III notes - Load the tapes at the LOW speed (POKE 16913,0).  An occasional program will NOT run.  There may be upper and *
* lower case goofs in some programs.  Arrow keys often are translated as follows: (↑, ↓, ←, →) = ([, \, ], ^).          *
*                                                                         *
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     Design Cover makes interesting and pretty designs (how about that?) on
your TRS-80's video.

     If people lived to be a million years old, how long would bees live? If
people only weighed one pound, how much would elephants weigh? How tall
would people be if redwood trees grew to only ten feet high? If you
inherited a couple million dollars, how many new friends and relatives would
you have? The first three questions can be asked and/or answered in Life
Span, and I would volunteer to test the last question...

     Quick now! What planets will you be able to see over your house on
Thanksgiving? By the time you get this issue, that question will be
irrelevant (unless you want to talk about Thanksgiving, 1982). But you can
specify any date and time in the years 1975 to 2000, feed it to Planets Over
Seattle, and get the locations of the planets over your house (or Seattle,
Washington) for that moment. Also, you can either get a rough plot of the
planets' locations or their actual coordinates in the sky. Note - the
asterisk that you see in the plot of the planets is the North Star. Those of
you in the southern hemisphere will have to enter your latitude as a negative
value and longitudes should be entered as degrees west of the Greenwich
Meridian. Also, to get a plot of the planets from a spot on the southern
hemisphere, edit line 2410:

    2410 YY=43+LL/2:PT=33:LI=INT(YY/3)

    The asterisk should (I think) now show the location of the Southern
Cross.

    'What's in there?' department. Display allows you to march through the
ROM and RAM of your computer and get an ASCII and hexadecimal dump of the
values that are found there. To load the program, type 'SYSTEM'<enter>,
answer the '*?' prompt with 'DISP'<enter>, and load the program in. When the
'*?' prompt appears again, just type '/'<enter> and you will see the screen
full of hexadecimal values on the left and the corresponding ASCII characters
on the right.

    Operation of Display is simple. To move up a line, hit <up-arrow>. The
<down-arrow> moves down a line. If you hold the <shift> down when you hit
the <up-arrow> or <down-arrow>, you move 16 lines at a time. Hitting <break>
gets you out of Display (you may have to hit the reset button on the Model
III). The author says that this program can be a great help in solving some
machine language adventures. In the lower case - if you want lower case
ASCII characters to be displayed also (they are all displayed as upper case
originally), use this sequence to load and run:

    > SYSTEM
    *? DISP
    *? <enter>
    > POKE 32754,0 : POKE 32755,0
    > SYSTEM
    *? /32586

    The start, end, and entry addresses are 7F4A, 7FFF, and 7F4A.

    Humpty Dumpty sat on a wall... In the 'Hangman' tradition, we give you
Spelling Egg. From a list of 2 to 20 words, you are asked to guess (one
letter at a time) which word the computer picked. If you guess the wrong
letter 5 times, then Humpty Dumpty has a great fall. In order to get neat
sounds, just plug the large grey plug that goes to your recorder into an
external amplifier.

    I'll take 2000 shares of Tandy Corp. stock. Add it to my Securities
Portfolio. With this program you can keep track of up to 30 different
securities. You can enter new items, update the old items, have different
reports sent to the screen, and save the data to disk or tape. The
Securities Instructions will tell you all of the neat things this program can
do. If you find that this program gives you false info, tell us about it.
But don't hold us liable! This program is for your use as-is. We have
checked the program as well as we can in the available time. If you plan to
use it seriously, you should play with it a while to find any defects. We
don't have the resources to support this program any farther than to give it
to you and to print fixes for any real bugs that are discovered.

    Robin says that I have to stop playing Bounce, and finish this drivel.
What a fun game, though! You start out by dodging one bouncing square. Then
another square is added. Then another. Heeelp! To start dodging, type
'SYSTEM'<enter>, answer the '*?' with 'BOUNCE'<enter>, and when the program
is through loading in, answer the next '*?' with '/'<enter>. Technical stuff
- the program starts at 7000 hex, ends at 78AB hex, and is entered at 789D
hex.

    Bowing to the masses...

    I have been asked several (hundred?) times to put the counter locations

of the programs from the CTR-80 on the cassette label, instead of the CTR-41 values. Since the CTR-41 has not been sold for the Model I or Model III for over 2 years now, I've decided to succumb to the pressure and put the CTR-80 locations on the label as of this month's issue. Remember that these locations are only approximate (our two CTR-80s give slightly different values), but it sure beats loading from the beginning of the tape. How do you CTR-80 people make it without cue and review (which the CTR-41 has)?

Something is wrong...

If you have a problem loading a tape, or find a bug in a program, please let us know what type of computer you have (Model I or III, disk or non-disk, etc), how much memory you have in your machine, and the steps you went through before the problem occurred. In this way we can hopefully get to the root of the irritation.

Throw it back... If you get a bad tape, you only have to put it back in the coin envelope it came in (along with a short note explaining the badness), and mark the envelope 'REFUSED - RETURN TO SENDER'. No postage required. Ah, the beauty of First Class Mail.

I've heard that somewhere... We've been getting quite a few submissions lately (we love it - but it still takes 6 to 8 weeks to process them). However, we are getting more and more programs that use the themes and/or logos from movies (ie: Starwars). That stuff is heavily copyrighted, folks! So we really can't publish anything that uses that type of thing. Ok?

RUNning out of DATA...

If you look in the beginning of our cover programs, you will find a statement that says 'POKE 16553,255'. This tickles the computer so that it will read the data from the DATA statements correctly. A while back, R/S put a ROM in a bunch of Model Is that would not read data correctly without this POKE. It also turns out that this problem can crop up in other programs (like Jerusalem Adventure and Troll's Treasure). If the program looks like it loaded alright, but it won't run right, you might try this POKE (directly from the keyboard or insert it in the program itself somewhere at the beginning). Thanks to Doug Davies of Scarborough, Ontario.

New goodies to be out soon...

Announcing the 'Good Games #1' package and the 'Adventures #1' package. These will be on a C-45 cassette and will contain some of the best programs from past issues as follows:

Good Games #1 ($12.00*)	Adventures #1 ($13.00*)
Blockade	Dungeons and Dragons
Breakthrough	CIA Adventure
Alien	Backpack Adventure
Stars	Troll's Treasure
Starwars	Frankenstein Adventure
Reversi	
LTC-21	*Add 6% tax in Calif.
Disk Exec	Overseas orders add $1

Hey hardware fiddlers...

Charles W. Evans (9806 Amber Trail, Sun City, AZ 85351) sent in the following tape loading aid for the TRS-80 (I'll just print what he wrote):

"TRS-80s, when saving programs on tape recorders, put out a series of

equal positive and negative pulses. The CTR-80 recorder records a reasonably faithful copy of this signal. Other recorders, including many commercial duplicators (ed. note - YOU BET!), distort the signal considerably and make the tapes hard to load. Different TRS-80s have different tolerances to variation in signal levels and to distorted signals. The saving recorder is more important than the loading recorder in the matter of waveform.

"Different brands of tape often record signals at significantly different levels. Loading with a given setting of the recorder volume control does not take this into account.

"Loading can be simplified by bridging a peak-reading AC voltmeter across the ear jack of the recorder and also bridging a telephone receiver or a speaker in series with a resistor at the same point.

"A meter to use for this is Radio Shack's 50-microampere, Catalog (270-1751 p.111). The signal is rectified by a bridge made from four 1N34 diodes (274-1123 p.99). The output is made peak-responding by connecting a .1 mf capacitor across the the bridge output. A 68,000-ohm resistor (271-1345 p.108) is used in series with the meter to make the meter read full scale with a peak input signal of 5 volts.

"The bridge must be connected to make the meter read up-scale. The black bands of two of the diodes connect to the negative terminal of the meter. The positive terminal of the meter connects to the 68k resistor which in turn connects to the red bands of the other two diodes.

"A Radio Shack 40-245, 2", 8-ohm speaker (p.60) in series with about a 100-ohm resistor (271-012 p.108) should give a moderate volume to monitor the load.

"Radio Shack Project Case (270-223 p.110) is a convenient box for mounting the equipment. It stands on end nicely. A mini-jack should be mounted in the box for connecting the black plug to the computer. a short cord with a mini-plug should connect to the ear jack of the recorder.
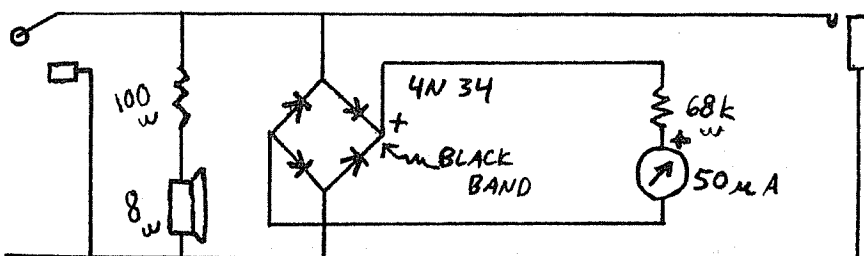
"An R/S jack (274-297 p.104) is suitable or the R/S Cable Assembly (42-2472 p.59) could be used for both the plug and jack.

"Experiment and find the best meter reading for loading tapes into your particular computer. It probably will be at a reading of about half-scale.

"A volt-ohmmeter with a 5-volt AC scale could be used as a temporary substitute for the meter described above, but would be average- rather than peak-reading and, therefore, the meter response would not match the needs of the computer as well. Most VOMs have half-wave rectifiers and would respond to only the positive or negative pulses of the signal depending on how the meter is connected.

"(Page numbers are given for the 1982 R/S catalog)."

I couldn't have said it better myself (I couldn't have even said it!). With that in my head and turkey in my belly,

Happy Thanksgiving,

Dave

ed.