the MOBY MUNGER

The official organ of the TECO Special Interest Group

Contributions and correspondence should be sent to
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photographic reproduction.

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SYMPOSIA NOTES

Impetus to start a TECO SIG was generated at the Spring
DECUS symposium. We had a hefty group of over 50 people
show up for a TECO GURUs session. We collected names and
signatures and John Alderman agreed to act as SIG chairman.

We also had a demonstration by Herb Jacobs of his new VT52
support for TECO-11. Everyone was impressed.

There was also a TECO tutorial given. It was attended by
about 50 people (mostly RT-11 users) and was a big success.
We hope to continue to sponsor these tutorials at future
conventions.

There was much discussion about starting up a procedure
by which users would distribute versions of TECO which DEC
did not want to release as products. We did not follow up
on this since it soon became apparent that TECO would ship
with RT-11 and IAS (although as unsupported products). We
plan to discuss this further at the Fall symposium.

The DECUS Fall Symposium will be held this year in San
Diego. The TECO SIG has an organizational meeting scheduled
for Wednesday, November 3Ø, from 2 PM to 3 PM. We hope you
can all attend.

We will spend the first half hour talking about organ-
izational matters. We will need several volunteers to
handle SIG activities. We will need a SIG coordinator,
a library chairman, etc. If you are interested in helping
the SIG but cannot attend our meeting, please drop a note
to either Stan Rabinowitz or John Alderman.

In the second half hour, we hope to have a few informal
talks given. There are still slots open. If you would like
to give a 5 or 1Ø minute short talk on some TECO topic,
just be prepared and we'll make time for you.

There will most likely also be several 'birds of a feather'
TECO sessions scheduled.

Copies of various versions of TECO will be available, so if
you want them, come prepared to copy them. We will
probably have them available on two media; most likely is
magtape, and perhaps DECtape.

Readers are urged to submit articles, techniques, notes,
hacks, ideas, comments, or criticisms about TECO to the
TECO SIG newsletter.

NOTES FROM RSX

The V3 release of RSX-11/M contained TECO V24. TECO is
not a DEC-supported product. No manual for TECO was
included in the RSX manual set, however the TECO manual
distributed in the DECUS 11-288 kit should suffice to
tell you everything you need to know to use and run TECO
under RSX-11/M.

Version 28 (or maybe V29) of RSX-11/M TECO will shortly
be submitted to DECUS, along with a manual and the source
of the RSX TECO I/O module. We will let you know when
this happens via this newsletter.

NOTES FROM TOPS-10

TECO is a DEC-supported product on the DECSYSTEM-10,
although very little work is being done on it.
Fortunately it is very stable with little or no bugs
in it.

Version 23C(175) has recently been released. This version
has very little different from V23B, and in fact, all the
changes only affect the ER, EW, EB, EZ, EX, EG, and EM
commands. V23C understands default paths, SFD's, libraries,
ersatz devices, and some new switches such as /SCAN, /NEW,
/NOCREATE, /NOWRITE, and /SYS.

On the EB command, the new source, the .BAK file, and
any .TMP files will now always appear in the area specified
in the EB command (they used to go into the user's area).
The new source (and .TMP if any) will have the same pro-
tection as the old source. The .BAK file gets the same
protection as the previous .BAK file if one existed,
otherwise it gets the same protection as the input source,
with the owner field lowered if necessary to allow owner
deletion.

If a file is found in a library (such as NEW:), TECO
will treat it as a read-only file.

The current version of TOPS-10 TECO is version 24(202)
which was released in March of 1977. More information
about this version will be given in our next newsletter.

NOTES FROM IAS

TECO V28 was distributed with IAS V2.0 . However, TECO
is not a DEC-supported product. Also distributed was
VTECO, a version of TECO containing a VT52 scope driver.

Problems with TECO type-in

There is a bug in IAS TECO's terminal type-in code
that causes some characters to be entered incorrectly.
This bug is corrected using the following TKB patch
(IAS TECO patch #1):

```
GBLPAT=DATA:TLISTN+500:121427
GBLPAT=DATA:TLISTN+506:121427
GBLPAT=DATA:TLISTN+514:112714
GBLPAT=DATA:TLISTN+520:121427
GBLPAT=DATA:TLISTN+526:142714
```

Edit these five lines into the command file, TECBLD.CMD,
immediately preceding the last line in the file and then
rebuild TECO.

The same patch works for the build file for VTECO.

NOTES FROM OS/8

TECO V5 was recently released with OS/8 V3D. Considerable
work has been done on it to make it more compatible with
the TECOs on the -10 and -11. The most notable improve-
ments are: improved error messages, improved precision,
scope support, and data protection for the Yank command.
Details about the differences between V4 and V5 can be
found in an article elsewhere in this newsletter.

OPTIONAL PATCH to change the default EH value

In OS/8 TECO V5, as on the PDP-10 and -11, the default
value of the EH flag is 0, which is the same as 2. This
value causes the one-line form of an error message to
print upon encountering an error. This could be annoying
to experienced users with slow terminals. Naturally, you
can change this at run-time by executing the 1EH command
which causes only the 3-character error message code to
print thereafter. Users who wish to cause the default
value of the EH flag to be permanently set to 1, can
install the following patch:

```
.GET SYS:TECO
.ODT
4572/0000  1
↑C
.SAVE SYS:TECO
```

OPTIONAL PATCH to remove Yank protection

Probably the most common way to lose data in TECO is to
accidentally type 'Y' when you meant to type 'T'. OS/8 TECO
V5 has included what is know as Yank protection, first
implemented on the PDP-11. Yank protection causes the
error message ?YCA (Yank Command Aborted) to be produced
any time that the Y or _ command is issued and there is
text in the text buffer and there is an output file open.
If all these conditions are met, it is presumed that you
are about to lose some important data, and so the command
is rejected. Note that the Yank is always legal if the
text buffer is empty or if no output file is open. If
you really want to do the Yank, you can always type HKY,
a command which will always succeed.

The PDP-11 also put in a feature which allows you to turn
off Yank protection (set ED, the edit level flag, to -1).
Unfortunately, there was not enough time (or room) to
implement this feature in OS/8 .   [It will probably
make it into the next release.]

In the mean time, people who do not wish to have Yank
protection, can patch it out of TECO by installing the
following patch:

```
.GET SYS:TECO
.ODT
2032/7640 7610
↑C
.SAVE SYS:TECO
```

OPTIONAL PATCH to change the default EU value

In OS/8 TECO V5, the default value for the EU flag is 0
(unless .SET TTY SCOPE has been specified to the KBM,
in which case the default value is -1.) Users who wish
to permanently change the default value to be -1 (no case
flagging) may install the following patch:

```
.GET SYS:TECO
.ODT
4576/0000 7777
2245/7650 7200
↑C
.SAVE SYS:TECO
```

NOTES FROM RT-11

RT-11 TECO Version 28 is included in the RT-11 V3 kit as
an unsupported product. Also included is a manual that
is applicable to all the PDP-11 TECOs. Note that this
manual describes version 27 of TECO-11 and that the
changes for V28 can be found in the RT-11 release notes.
Also in the release notes manual can be found a macro,
which, when used in conjunction with the VT52 support in
TECO, gives the user immediate mode keypad editing on a
VT52.

This macro, in machine readable form, will be included in
the RT-11 V3 TECO kit that is being submitted to DECUS
and will probably replace DECUS 11-288. The new source
of the RT-11 TECO I/O module will also be included.

Changes have been made to the ↑W command to accommodate
VT52 support. [VT11 support remains unchanged.]
The VT52 screen shows a portion of the text buffer
including lines before and after the current text pointer.
The screen is automatically updated each time TECO goes
back to command level. In addition, the user can cause
the screen to be updated from within a macro via use of
the n↑W command.

For a VT52, the n↑W command works as follows:

n↑W where n is positive specifies that the line containing
   the current text pointer is to be displayed on the nth
   line of the VT52. n should be between 6 and 23
   inclusive. The default display corresponds to 16↑W .

Ø↑W is the same as 16↑W .

-1↑W causes a VT52 screen update. Note that the VT52
   support remembers what characters were previously on
   the screen and only changes those characters which
   have changed.

n↑W where -23≤ n ≤-2 performs a screen update but forces

   the first |n|-1 lines to be redisplayed even if they

   hadn't changed. (This might be useful if the macro
   had performed output to the screen which destroyed
   the integrity of the window into the text buffer.)

NOTES FROM RSTS/E

TECO-11 has been running under RSTS/E in-house at DEC
for quite a while now, however it is not currently
available from DEC. At the last DECUS symposium, we
talked about the feasibility of distributing RSTS TECO
through users and we will follow up on this proposal at
San Diego. We expect to have version 29 available at the

SIG meeting to anyone who wishes to copy it. We are also
trying to convince the RSTS group to release it with the
next RSTS/E release.

PROBLEM READING RMS FILES

RSTS TECO V28 cannot read certain RMS files. This bug will
be corrected in version 29.

DIFFERENCES BETWEEN TECO-11 V28 and V27:

TECO-11 V28 contains the following new features:

a) New use for colon modifier.
      The X and ↑U TECO commands may now be colon
      modified. The colon modifier, in these cases,
      indicates that the specified text is to be
      appended to the end of the contents of the
      specified Q-register. (Without the :, the
      Q-register gets loaded and its previous contents
      are lost.)

b) New match control construct.
      The construct ↑EGq now has new meaning when
      encountered within a search string. This
      construct matches any character which belongs
      to the group of characters contained within
      Q-register q. For example, if Q-register A
      contains the text string, abcd, then the command
      S↑EGA$ would search for the first occurrence of
      one of the letters a, b, c, or d in the text
      buffer (following the pointer). This example
      is equivalent to the TOPS-1Ø TECO command

      S ↑E [a,b,c,d]$.

c) Two new ET bits have been defined.
      Bit 9 (representing 512) if on indicates that the
      terminal is a VT52 and that VT52 support code has
      been configured into TECO.
      Bit 1Ø (representing 1Ø24) if on indicates that an
      auxiliary VT11 is present and that VT11 support
      code has been configured into TECO.
      Both bits are read-only.

d) Revision to ↑C trap code.
      Now, if ↑C trapping is enabled (bit 15 of ET flag
      on), and ↑C is typed to a pending ↑T, then bit 15
      is turned off and a 3 is returned to TECO. TECO
      continues to execute. (In previous versions of
      TECO-11, the ↑C would abort TECO command execution
      in this case.)

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TECO MACRO OF THE MONTH

```
+ØUn Qn"E2ØUn' ØUh ØUv HK
Qn<J ØUq Qn*1Ø/3Ui
Qi<\+2*1Ø+(Qq*Qi)Ua ØLK Qi*2-1Uj Qa/QjUq Qa-(Qq*Qj)-2\1ØI$ Qi-1Ui>
Qq/1ØUt Qh+Qt+48Uw Qw-58"E48Uw %v' Qv"NQv↑T' QwUv Qq-(Qt*1Ø)Uh>
Qv↑T
```

The above macro should run on the PDP-8, PDP-1Ø, and PDP-11
with the following exception: TOPS-1Ø TECO and older versions
of OS/8 TECO do not have the n↑T feature. This command types
out the character whose ASCII representation is n. For TECOs
which do not have this feature, it can be easily simulated
as specified below:

$$n↑T \equiv nI\$.-1,.T -D$$

This month's macro was written by Stan Rabinowitz with
modifications by Mark Bramhall and has been submitted without
comments or explanation.

Readers are urged to submit worthy macros to the editor
for possible inclusion in this column. Each issue, the
editor will select the 'best' one received (if any) and
print it, thus giving great fame and recognition to its
author. The selection will be based purely on the subjective
whim of the editor, and his decision will be final.
(But I can tell you right now - usefulness is not an
important criterion.) Non-standard TECO features should
be avoided, unless essential to the hack-value or beauty
of the submission. Macros over 1ØØ characters long should
be submitted in machine-readable form along with a neat
listing.

TECO DOCUMENTATION AVAILABLE FROM DEC

TOPS-10: DEC-SYSTEM-10 TECO PROGRAMMERS REFERENCE MANUAL
          DEC-10-UTPRA-A-D
          available from SDC

OS/8:   OS/8 HANDBOOK, pp. 2-132 to 2-184.
          DEC-S8-OSHBA-A-D

          OS/8 HANDBOOK UPDATE pp. 20-25.
          DEC-S8-OSHBA-A-DN4

          both available from SDC

PDP-11:   PDP-11 TECO User's Guide   July 1977
          DEC-11-UTECA-A-D
          DEC-11-UTECA-A-DN1 (update notice no. 1)
          available from SDC

          NOTE: Although the cover of this manual claims it
          represents TECO V28, this is wrong. The V28
          refers to the fact that the software distributed
          with RT-11 is V28; however, the manual actually
          describes TECO V27.

RT-11:   RT-11 TECO RELEASE NOTES
          DEC-11-ORTNA-A-D
          comes with RT-11 kit and supplements the User's
          guide.

BEGINNER'S COLUMN

At the last few DECUS symposia, we found a lot of
people interested in learning TECO. For these people, we
hope to publish a column which will talk about common
tricks and techniques which are old-hat to the experienced
users. Material is solicited for this column for the next
issue.

Although TECO is very complex, it turns out that a small
subset of commands is enough to allow you to perform all
your every-day editing functions. Specific information on
novice subsets of TECO can be found in the following documents:

TOPS-10: INTRODUCTION TO TECO, DEC-10-UTECA-A-D
OS/8:   OS/8 HANDBOOK, pages 2-132 to 2-141.
PDP-11:   TECO User's Guide, Chapter I.

VT8-E TECO

Bob Harper has sent in the following information about
a version of OS/8 TECO which uses a VT8-E:

For those of you wierd people with VT8-E's on their
machines, the P?S has available a version of OS/8 TECO V4
with VT8-E support. The code takes full advantage of the
features of the VT8-E in a manner similar to GT-4Ø TECO
on the PDP-11. If a VT8-E is indeed present on your
system and at least 12K of core is available, TECO will
come up on the VT8-E; if either of these conditions fail,
TECO will come up on the console in the usual fashion.
The se...e switch is used to arbitrate which display mode
is in effect. The user can either select a text buffer
display window or a command/user-input display. The
↑W command is supported (a la VR14 TECO) for immediate
display update and for controlling the number of lines
per screen to display. One field is stolen for the two
display buffers, so if you have 12K, TECO will be limited
to using 8K, whereas if you have 16K, TECO will be given
12K so that increased Q-register space will be used.

If anyone is interested, contact Bob Harper directly.
His address is:

> Bob Harper
> 2Ø Diamond Street
> Naugatuck, CT Ø677Ø .

COMMENTS FROM BOB HARPER

Bob also sent along some comments.

1. Page 42, 3rd paragraph of TECO-11 V27 manual has a typo.
   "apostophe" should read "apostrophe". Also, on page 58,
   the comment on the 1ØU1 line would be clearer if it read
   ! Put a 1Ø (if radix is decimal) or 8 (if radix is octal)
   into Q-register 1 !

   Agreed. - Ed.

2. There should be a command to insert an arbitrary
   character into the text part of a Q-register, as with
   the nI$ command. I suggest n↑Uq$ and n@↑Uq// .

   *This seems very reasonable and consistent with other parts of the
   language. I am told that this feature will probably go into
   version 29 of TECO-11. - Ed.*

3. There should be a command to get a line of input (from the terminal or indirect file) and put it into a Q-register, so that the usual editing features (RUBOUT, CTRL/U) are available without simulation by a macro and so that the text buffer need not be used. This feature would be great for things like ADDCOM macros.

An interesting idea. However, what you probably need is a TECO macro library. This would make a wonderful addition to such a library. - Ed.

4. To reiterate an old argument, the 'PW' command is inconsistent with the language and should be replaced by, say, a 'W' command. All TECO commands are either 1 character or 1 character followed by one of a set of characters (as in the 'E' command). Therefore 'PW' is inconsistent since only 'W' (or nothing) may follow. The '==' command also falls into this category. Some other technique for local radix change should be implemented.

We never claimed TECO was consistent. 'traditional' and 'cryptic' might be better adjectives. - Ed.

5. The 'F_' command should not be disallowed. 'F' should be generally allowed as a preface to the search commands (as with '@' and ':').

The -10 people seem to disagree and so do the -11 imple- mentors. The -11 people convinced the -8 people that the command was useless, so F_ was removed from OS/8 TECO. Also, the presence of the FR command on the PDP-11 would mean that F couldn't become a general modifier. It appears that F is heading the same way as E. - Ed.

6. The use of ':' in the ':G', ':Q', '::', and ':=' commands is inconsistent. As we all know, colon means "try to perform this function; if you fail, don't bomb out; let me know if it succeeded or not". The addition of ':ER' and ':[' is quite welcome! The functions provided by the ':G', ':Q', ':=', and '::' commands are very useful but some other syntax should be defined.

What do you suggest? The PDP-11 people seem to be treating : as a general purpose modifier which modifies a command to a similar, but slightly different, command. - Ed.

7. The CTRL/V and CTRL/W commands should be implemented in TECO-11 as in TOPS-10 TECO V23.

The -11 people don't seem to care too much for case control since most of DEC's new terminals support lower case. - Ed.

DIFFERENCES BETWEEN OS/8 TECO V4 and V5:

Features added to OS/8 TECO for TOPS-10 TECO compatibility:

(i)   New conditionals "T, "S, "F, and "U added.

(ii)   3-character error message codes implemented
        along with short one-line English explanations.
        Error message format controlled by EH flag.
        3EH not implemented; 2EH works only on systems
        with at least 16K of memory.

(iii)   = and \ commands return signed results
        (decimal radix only).

(iv)   P command never creates form feeds that weren't
        initially present.

(v)   F is no longer a modifier. Now it must be followed
        by an S or an N, or an error message results.
        [In TECO V4, F was a command which affected the
        action of a subsequent, but not necessarily
        adjacent, search command.]

(vi)   Except on a PDP-12, the W command now gives an
        error message. [In V4, the W command was
        ignored.]

(vii)   Case flagging implemented, controlled by EU flag.

(viii) == command implemented (types in octal).

(ix)   ↑N end-of-file flag implemented.

(x)   Image mode typeout permitted via use of 1ET
        command.

(xi)   Vertical tab and form feed are now end-of-line
        terminators (in addition to line feed).

(xii)   The ↑K command now results in an error message.
        [This command was ignored in V4.]

(xiii) A negative or 0 iteration count causes the
        iteration to be skipped.

(xiv)   It is now an error to do an EB on a .BK file.

Features added to OS/8 TECO for PDP-11 TECO compatibility:

(xv)   New conditionals "R, "<, and "> added.

(xvi)   If no iteration count is specified to an
        iteration, the count is now truly infinite.
        (In V4, the default iteration count was 4096.)

(xvii) n↑T command implemented.

(xviii) := and :== commands implemented.

(xix)   @ modifier allowed on ER, EW and EB commands.

(xx)   EK command implemented.

(xxi)   :G command implemented.

(xxii) Y and _ protection installed. These commands
abort if the text buffer is not empty and an
output file is open. Unfortunately, this
protection can not be removed by the ED flag.

(xxiii) Command level scope editing implemented.

(xxiv) ↑C typed during macro execution now returns
control to TECO. Typing ↑C to TECO's *
returns control to OS/8.

(xxv) Echoing to ↑T input can be suppressed via
bit 8 (representing 8) in the ET flag.

Commands removed from OS/8 TECO to improve compatibility
with other TECO implementations:

(xxvi) ↑R removed (same as FS).

(xxvii) "A and "B removed (no longer necessary now
that 13-bit arithmetic precision supported).

(xxviii) ↑Z removed (unnecessary command which conflicts
with TOPS-1∅ TECO.)

(xxix) ↑V changed to EO.

(xxx) ↑W changed to W.

↑V and ↑W were changed to resolve incompatibility
with TOPS-1∅ TECO. Although it was felt that TOPS-1∅
was the culprit (they implemented ↑V and ↑W long after
OS/8's use was established), the TOPS-1∅ use is more
consistent with other case control commands and fewer
macros would have to be modified if OS/8 changed.

(xxxi) F_ was removed because the PDP-11 people
complained about its impracticality.
[They seem to have changed their minds; and
it seems that F_ will probably appear in
V29 of TECO-11.]

New features added to OS/8 TECO:

(xxxii) Arithmetic precision has been improved so that
range of signed numbers is now -4∅95 to +4∅95
(used to be -2∅47 to +2∅47).

(xxxiii) An error message is generated if a numeric
argument is specified to a Y command.

(xxxiv) A CTRL/S typed during output will freeze the
output until a CTRL/Q is typed.

(xxxv) The EGtext$ command was implemented. It is
the same as the EG$ command but causes the
specified text to be passed to OS/8 to be
executed as a KBM or CCL command.

MACROs AVAILABLE FROM DECUS

Readers are urged to submit useful TECO macros to the
DECUS library. Submissions should be made through the
usual channels. There is currently no TECO language
category so the program or macro should be submitted
under the category determined by the machine or operating
system upon which development was performed. Be sure to
specify in the abstract that the source language is TECO
and specify which other operating systems it will run on.

Currently Available:

DECUS 11-288 (RT-11 TECO V24).

> This submission contains a few macros which may
> be of some interest to non-RT-11 TECO users.
> A few of the macros contained therein are summarized
> below:

> INSERT   allows immediate-mode editing on VT11
>   or VS6Ø display

> EDIT   loads up INSERT and other macros and
>   remembers the filename used by its
>   previous invocation (useful on operating
>   systems where the system does not
>   'remember' the argument on the last
>   TECO command)

> LOCAL   takes a MACRO-11 assembly language sourc...
>   program and puts the local symbols in ea...
>   local symbol block into numerical order

> SORT   sorts lines of text in the text buffer
>   (using a key). Slow but effective.

TECO TECHNIQUES

This column will cover interesting tricks or techniques
which readers would like to share with others.

I was recently confronted with the problem of removing all
the spaces from an exceedingly large file (several hundred
thousand characters and no form feeds). The straightforward
solution: <N $;-D> would take too long to be practical
since each -D would cause all the characters above the
current one to shift down.

The following solution was practical:

```
TECO filename
*I<FN $ 27I$ ØI$ 27I$ I;>EX$ ØXA ØK MA$$
TECO filename
*EX$$
```

COMPATIBILITY CORNER   by Stanley Rabinowitz

On 24-July-1975, I did a compatibility study of the
various TECO's generally available around DEC (TOPS-10 TECO,
OS/8 TECO, and TECO-11). The conclusions reached were as
follows:

Total compatibility	51 commands
Subset compatibility	34 commands
Slight incompatibility	26 commands
Major incompatibility	6 commands

We held various compatibility meetings amongst the TECO
implementors and reached many conclusions, as well as
several standoffs. Our main problem was that we could not
find anyone in -10 land at that time (or now) who would
commit to making changes in TECO. However, my hopes are
still high. If anyone from -10 land is reading this and
would like to resume compatibility talks with the -8 and -11
worlds, please get in touch with me.

Looking over the situation today, I find that there
has been some improvements.   There are now 58 commands
that are totally compatible amongst all DEC TECOs and only
5 commands that exhibit gross incompatibilities. [The major
incompatibility that was fixed up was the incompatible use
of "A which the PDP-8 world recently removed.]

The following 5 commands behave radically different
on various TECO implementations and users are urged to avoid
these commands whenever possible (because eventually they
might change):

1)   ↑V   This is a case control command on the -10,
            a version number command on the -11,
            and unused on the -8.

2)   ↑W   This is a case control command on the -10,
            a scope control command on the -11,
            and unused on the -8.

3)   n↑W   This is a case control command on the -10,
            a scope control command on the -11,
            and unused on the -8.

4)   m n   (Space operator)
            When used between digits, this is the same as m+n
            on the -10, but on the -8 and -11, the space is
            ignored.

5)   ↑Z   This is an I/O close command on the -10,
            returns a value on the -11 (number of characters
            used by Q-register storage),
            and unused on the -8.

I make the following personal recommendations concerning how to clear up these 5 incompatibilities:

a)   TECO-11 should change Watch command (scope control) from ↑W to W.

b)   TECO-11 should change version number command from ↑V to EO.

c)   TOPS-1Ø should ignore spaces between digits.

d)   All TECOs should drop use of ↑Z command.

I have already modified OS/8 TECO (V5) to conform to these recommendations.

At previous DECUS symposia, I have distributed a memo, entitled TECISS.TXT which lists 35 compatibility issues along with the pros and cons associated with various proposals for ironing out these differences. I don't have the time to discuss these all in this column, so I will just list the titles of these issues. I will discuss them in future columns in more detail. (Note that some of these issues have already been solved.)

1.   Implementation dependent date
2.   Implementation dependent time
3.   Incompatible form feed command
4.   Radix control problem
5.   Obsolete use of ↑R
6.   Incompatible ↑V command
7.   Incompatible ↑W command
8.   Incompatible ↑Z command
9.   Space problem
1Ø. Incompatible "A command
11. Definition of alphanumeric character
12. Generalization of % command
13. Unspecified repeat counts for iterations
14. = problem
15. Generalized nA command
16. Location of @
17. Filespecs treated as text
18. EH value is implementation dependent
19. ET value is implementation dependent
2Ø. Closing of files with EW
21. Required altmode on nI
22. Passing values through macros
23. Negative arguments to searches
24. Strange W command
25. Alpha and numeric Q-registers

26. Assumed ; after searches in iterations
27. Concatenated commands which return values
28. Checking for erroneous number of arguments
29. End-of-line character
3Ø. Echoing of bell
31. *Z command is (↑S) on PDP-8
32. Vertical tab command
33. Partial error reporting with ?
34. Assumed : modifier for searches in iterations
35. F modifier on PDP-8

BUG IN TECO-11:

The "V and "W conditional commands in TECO-11 V28 are
implemented in the reverse manner from TOPS-1Ø TECO.
Presumably, this is a bug in TECO-11 and will be fixed
in V29. The traditional (TOPS-1Ø) meaning for these
commands is as follows:

n"Vcmds'   If n is the ASCII code for a lower-case alpha-
             betic character, execute the commands specified.

n"Wcmds'   If n is the ASCII code for an upper-case
             alphabetic character, execute the commands
             specified.

Users who discover other incompatibilities between existing
TECO implementations should send them to me, so that I can
report them in future newsletters. In that manner, other
TECO users can be made aware of these problems and can avoid
using incompatible commands in any TECO macros that they
intend to transport across operating systems.

TECO TECHNIQUES (continued from page 14)

This procedure creates a macro which replaces all blanks
with nulls (using an FN command which is very fast since
no characters have to shuffle down). A second pass through
TECO then removes all the nulls.