

AutoLetter: A T_EX form letter procedure

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The inquiry from John Lee (TUGboat, October 1986) concerning form letters was particularly interesting to me as I had recently completed such a procedure at the request of our office staff. The procedure (called AutoLetter) is a “plain” T_EX procedure which requires two files, one containing a delimited listing of names and addresses, the other a generic form letter.

Each entry in the address file is followed by a line containing a single asterisk. The last entry must also be followed by this line, which in turn *must* be followed by the end-of-file mark. Each individual entry consists of six lines for the addressee’s title, name, etc., followed by as many address lines as desired. The lines for the addressee’s name are:

- (1) Title (Prof., Mr., Ms., etc.)
- (2) First name/initial
- (3) Name to be used as a familiar form of address
- (4) Middle name(s)/initial(s)
- (5) Last/family name
- (6) Additional name information (Jr., II, Esq., etc.)

These lines are then used to reconstruct the person’s name for various forms of address (including for the address block) and to address the person formally (Sir, Madam, Sir or Madam), familiarly (by item (3) above or, if (3) is blank, by first name), or by title and last name. If any of these lines are left blank, AutoLetter doesn’t mind, but if the entry is irrelevant or absent from the person’s name, *it must*

still be left blank. An example of an address entry might be:

```
Mr.
Edwin
Ed
V.
Bell
II
Department of Physics \& Astronomy
University of Kansas
Lawrence, KS\ \ \ 66045
*
```

The letter file is quite simple and uses macros that are the same as or slight variations of those listed in Appendix E of *The T_EXbook*. AutoLetter takes care of the placement of the date and address block (and could as well the letterhead, although I have not yet implemented that here), so the letter file might appear as:

```
\letterbody
Dear \person--

..text...

\closing
Sincerely,
..

\annotations...
\ps...

\endletter
```

AutoLetter consists of two files, one the T_EX procedure itself, the other containing the letter-formatting macros (and local macros, if desired). Below are the AutoLetter procedure and our local letter-formatting macros.

The AutoLetter procedure

```
\input letter_format

\message{+-----+}
\message{| AutoLetter Version 1.1 -- 9 October 1986 |}
\message{+-----+}

\newread\addressfile

\message{Enter name of file containing the addresses:}
\read-1 to\addfile
\openin\addressfile=\addfile

\message{Enter name of file containing the body of the letter:}
\read-1 to\letfile
```

```

%:.....:
%      Now read in an entry containing the person to whom to send the letter
%:.....:

\endlinechar=-1
\read\addressfile to\text \let\title=\text

\loop
  \read\addressfile to\text \let\firstname=\text
  \read\addressfile to\text \let\nickname=\text
  \read\addressfile to\text \let\middlename=\text
  \read\addressfile to\text \let\lastname=\text
  \read\addressfile to\text
  \ifx\text\blank\def\jr{}\else\def\jr{, \text}\fi
  \endlinechar='015
  \message{Now processing letter to \addressee.}
  \getaddress
  \doletter
  \endlinechar=-1
  \read\addressfile to\text \let\title=\text
  \ifeof\addressfile\endfalse\else\endtrue\fi
  \ifend
\repeat

\bye

```

The letter-formatting macros

```

\input whatever local macro package you wish here

\twelvept    % 12-point size is so much easier to read

\hsize=6.5truein
\vsize=8.0truein
\hoffset=1.0truein
\voffset=1.5truein

\raggedbottom
\interlinepenalty=1000
\parindent=0pt
\parskip=0pt

\nopagenumbers

```

```

%:.....
%      Define some stuff so that the headlines will come out the way
%      we want them to be.
%:.....

\newbox\headbox
\headline={\ifnum\pageno>1
  {\twelvem
    \global\setbox\headbox=\vbox\bgroup%
      \leftline{\addressee}
      \leftline{\today}
      \leftline{Page \folio}\egroup}\copy\headbox
    \else\hfil\fi}

\def\makeheadline{\vbox to 0pt{\vskip-70.6pt
  \line{\vbox to30.6pt{\the\headline}\vss}
  \nointerlineskip}

\newif\ifend

%:.....
%      Macros for reading in the address from the file.
%:.....

\def\blank{ }

\def\endletter{\endmode\vfill\eject\pageno=1}

\newdimen\longindentation \longindentation=10truecm
\newbox\theaddress
\newif\ifast
\def\aster{* }
\def\getaddress{{\global\setbox\theaddress=\vbox\bgroup\raggedright%
  \hsize=\longindentation
  \everypar{\hangindent2em}
  \line{\vbox to10.2pt{\addressee\hss}\egroup%
  {\loop{\read\addressfile to\text
    \ifx\text\aster\astfalse\else\asttrue\fi
    \ifast\global\setbox\theaddress=\vbox\bgroup\unvbox\theaddress
      \line{\vbox to 10.2pt{\text\hss}\egroup}\repeat}}}}

```

```

%:.....
%      Macros for formatting the letter.
%:.....

\def\letterbody{\beginparmode}
\def\closing{\beginlinemode\getclosing}
{\obeylines\gdef\getclosing #1
  #2
  {\#1\nobreak\bigskip \leftskip=\longindentation #2
  \nobreak\bigskip\bigskip\bigskip\bigskip % space for signature
  \def
  {\endgraf\nobreak}}}}
\def\annotations{\beginlinemode\def\par{\endgraf\nobreak}\obeylines\par}
\def\ps{\beginparmode\nobreak
  \interlinepenalty5000\def\par{\endgraf\penalty5000}
  P.~S.~ }

\def\address{\beginlinemode \copy\theaddress \endgroup}
\def\doletter{\leftskip=\longindentation%
  \rm\today\bigskip\address\bigskip}
  \input \letfile}

%:.....
%      Macros for setting up forms of salutation.
%:.....

\def\mr{Mr.}
\def\ms{Ms.}
\def\mrs{Mrs.}
\def\miss{Miss}

\def\addressee{\ifx\blank\title\else\title\space\fi%
  \firstname\space\ifx\blank\middlename\else\middlename\space\fi%
  \lastname\jr}
\def\person{\ifx\blank\title Sir or Madam\else\title\space\lastname\fi}
\def\familiar{\ifx\blank\nickname \firstname\else\nickname\fi}
\def\formal{\ifx\mr\title Sir\else{\ifx\ms\title Madam\else%
  {\ifx\mrs\title Madam\else{\ifx\miss\title Madam\else{\person}\fi}%
  \fi}\fi}\fi}

```

The AutoLetter procedure prompts the user for the names of the address and letter files and then goes to work. A similar procedure (called LABELS) can also be used with the address file to produce 33 labels/page (3 columns of 11 labels). This enables us to produce form letters with or without labels or to maintain mailing lists without requiring letters (for abstract mailings, for example).

If anyone is interested in having these procedures, drop me a line. If response is high, I would be more than willing to provide them to the T_EX community at large. Mail may be sent to:

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