

3 USAGE

OPERATION

This section describes usage under Data General's RDOS (RDOS [73]) operating system on a NOVA line computer, or an equivalent system. Operation on other systems may vary in some respects.

The general concept of operation is that overall control is exercised interactively at the main console (\$TTO/\$TTI), while all other input and output is to and from sequential files that, thanks to the generality afforded by RDOS, may be disk- or tape-resident or any device addressable by the system. The operator specifies the names of these files or devices at the console, together with a limited number of run parameters. Exception messages are directed back to the console during the progress of the run.

The translator is activated for a series of runs by the RDOS-level command

TRANSLATE

whereupon the translator announces itself, viz. DUXBURY BRAILLE TRANSLATOR 7/76 and prompts the operator for file names and run parameters as described in the next section. After the run, all files are closed and the translator asks:

MORE TRANSLATIONS?:

If the response is YES, the cycle resumes with the request for file names and parameters. Since one of the files is the driving table, which does not usually vary from run to run, provision is made to allow a given table to persist without re-reading. If the response to the "MORE" question is NO, a return to RDOS is made.

The translator has been equipped to permit a copy of the remarks (error and comment messages) it sends to the console to be directed to some other file or device. It requests the name of this file just before the self-announcement message, with the prompt:

DESTINATION OF REMARKS?:

If such a copy is desired, a file name (as described for run parameters, below) should be supplied; otherwise respond "-1".

RUN PARAMETERS (CONSOLE DIALOG)

The following are the questions asked by the Translator of the operator. In all cases, response should be followed by a carriage return; as with RDOS console input in general, the rubout character (echoed as < or _) may be used to delete one or more characters of a response before the carriage return. However, please note that the control-A character will interrupt back to RDOS.

In YES or NO responses, only the first two characters are checked. File names should be in standard RDOS form, e.g. XYZ, DP0:ABC.D (using the "0" convention for zero).

1. SOURCEOF TABLES/:

Respond with the name of a file containing binary tables to drive the Translator. For the standard tables, reply:

AMERICAN

The binary form of tables is generated by a table preparation program (Sullivan [76B]). User-generated tables may be run through this program for use with the Translator.

The identity of the tables read in and the exact date of compilation is written back to the console for verification.

2. USE TABLES LAST READ IN?:

This question is always asked just after the tables are read in, to allow recovery in case the tables, as identified in the console message, are not the ones desired.

The question is also the first one asked for the second and subsequent runs.

Respond YES or NO. If YES, dialog proceeds to question 3, otherwise a return is made to question 1.

3. SOURCE OF TEXT?:

Respond with the file name of the input text to be processed. Preparation of the text file is described in a later section.

4. CAPITALIZE AUTOMATICALLY?:

Respond YES if the input is in ordinary (mixed case) form and it is desirable to introduce braille capital signs in accordance with standard U. S. practice.

Respond NO in either of the following two cases:

(a) Input text is in ordinary form and braille capitals are not wanted, in accordance with standard British and Canadian practice. (Note that it is possible to force occasional capitals in the text, if desired, with literal controls.)

(b) Input text is in old DOTSYS form, i.e. all upper-case with capitals entered literally. (Note that in this case the literal capitals are not suppressed.)

5. DESTINATION OF BRAILLE (EDITOR'S CODE)?:

Respond with the name of a file to receive the output, as described in a later section. The file may preexist or not. (In the former case, the old data is overwritten.)

6. LINES PER BRAILLE PAGE?:
Respond with an integer in the range 3 - 100 to specify length of an output page in lines.
7. SIGNS PER BRAILLE LINE?:
Respond with an integer in the range 7 - 40 to specify the width of an output page in braille signs.
8. BRAILLE PAGES NUMBERED?:
Respond YES if it is desirable to number the braille output pages automatically, NO otherwise. If the answer is NO, questions 9 and 10 are not asked.

Ordering

When two or more special symbols must be typed (e.g. an italicized accented letter), possibly in conjunction with ordinary punctuation, the ordering should be:

- Opening parenthesis or bracket
- Opening quotation mark
- Italic sign(s) (or)
- Letter sign (+, discussed below)
- Accent sign (%)
- Capital sign(s) (= or ==, if entered literally)

(Brailleists will note that the last two are in the reverse of the correct braille order. The Translator will put them in correct order in the output, but requires this order of input for internal technical reasons.)

Replacement Symbols and Control Symbols in General

There are three classes of special symbols that may be included in text input to the Translator.

The first class is that of replacement symbols, i.e. groups of one or more characters that are (1) typed in place of an inkprint character or character sequence, or to express properties of the following character(s), and that (2) give rise to a sign or sign sequence in braille. (The percent, underscore and equals for accent, italics and capitals are thus replacement symbols.) An example would be &ae, entered for the ae diphthong in some instances of foreign-language text. The general typing rule for replacement symbols is that they be entered directly in place of the inkprint character, possibly abutting non-blank characters, with the alphabetic characters in lower case (unless automatic capitalization is disabled). Replacement symbols, excepting those already mentioned, always begin with the ampersand (&).

The second class includes all control symbols, i.e. those that cause some action, often relating to formatting, and usually without corresponding to some fixed sequence of braille signs. The general typing rule regarding these is that they be entered with surrounding spaces, although many control symbols would operate properly even if this restriction is not observed. Most control symbols begin with a dollar sign (&). Those that do not are < and >. Control symbols may be entered in either case (upper or lower or mixed). The symbols already introduced for basic text handling, e.g. \$PAR, are examples of control symbols.

The third class comprises the editor's symbols; these will be discussed separately.

symbols for those letters (presented below), rather than the general accent () mark.

In cases of works incorporating substantial foreign language passages, as in English textbooks for the study of foreign languages, the foreign passages should be translated in grade 1 and special replacement symbols should always be used for accented letters or other characters peculiar to the language.

This statement of the rules is considerably simplified in relation to the Standard, and here as elsewhere the attention of an editor may be required.

Language Class and Grade Switches

The class of foreign language to be translated must be declared in advance by use of "\$FL" (foreign language) mode switch. The two available are:

\$FL-SPAN	Spanish
\$FL-LIFG	Latin, Italian, French, and German

The mode switch need be entered only once in the text, unless the class is to change in the midst of the text, and may be placed anywhere before the foreign language passage(s). If no switch is present, \$FL-LIFG is assumed.

A switch into grade 1 mode (\$G!...\$G@) should be made for the entirety of each foreign language passage.

Latin, Italian, French and German Symbols

For vowels with accents, enter "" followed by the vowel followed by

a	for an acute accent ()
g	for a grave accent ()
x	for a circumflex accent ()
d	for a diaeresis or umlaut ()

For example, &ea is input for . For other special symbols:

<u>enter</u>	<u>for</u>
&cc	 (cedilla)
&ae	ae (diphthong)
&oe	oe (diphthong)
&(lv)	
long vowel sign (before	affected letter)
&(sv)	short vowel sign (before affected letter)