## ESCORT



This document contains the latest information available at the time of preparation. Therefore, it may contain descriptions of functions not implemented at manual distribution time. To ensure that you have the latest information regarding levels of implementation and functional availability, please consult the appropriate release documentation or contact your local Sperry Univac representative.

Sperry Univac reserves the right to modify or revise the content of this document. No contractual obligation by Sperry Univac regarding level, scope, or timing of functional implementation is either expressed or implied in this document. It is further understood that in consideration of the receipt or purchase of this document, the recipient or purchaser agrees not to reproduce or copy it by any means whatsoever, nor to permit such action by others, any purpose without prior written permission from Sperry Univac.

Sperry Univac is a division of the Sperry Corporation.
FASTRAND, SPERRY UNIVAC, UNISCOPE, UNISERVO, and UNIVAC are registered trademarks of the Sperry Corporation. ESCORT, PAGEWRITER, PIXIE, and UNIS are additional trademarks of the Sperry Corporation.

This document was prepared by Systems Publications using the SPERRY UNIVAC UTS 400 Text Editor. It was printed and distributed by the Customer Information Distribution Center (CIDC), 555 Henderson Rd., King of Prussia, Pa., 19406.

## Contents

STATEMENT FORMAT CONVENTIONS AND LANGUAGE RULES ..... 1
RESERVED WORDS ..... 2
ESCORT COMMANDS LISTING ..... 3
PROGRAM STATEMENT FORMATS ..... 4
Change Data Program Statement ..... 4
Delete Data Program Statement ..... 6
Enter Data Program Statement ..... 7
Select Data Program Statement ..... 10
Sort Data Program Statement ..... 13
PROGRAM STATEMENT CLAUSE CROSS-REFERENCE ..... 14
CLAUSE FORMATS ..... 16
ARITHMETIC OPERATORS AND RULES ..... 19
RELATIONAL OPERATORS ..... 20
CHARACTER STRING OPERATORS ..... 21
LOGICAL OPERATORS ..... 22
SYSTEM UTILITY FIELDS ..... 23
STRUCTURE DESIGNATIONS ..... 25
EDIT CODES ..... 26
FUNCTION KEY TABLE ..... 28
$\bullet$

The conventions and rules used to present statement formats are:
In the direct entry method, key in uppercase words exactly as shown. In the screen menu method, uppercase words designate words generated by ESCORT.

Lowercase words designate names, such as file or structure names, that you supply.

Brackets [] enclose optional parameters.
Braces \{ \} indicate alternative parameter choices. When you use the parameter, you must pick one of the choices enclosed by braces.
Reserved words consist of all words used in ESCORT commands, statements, and clauses. You can't use these as variable field or file names, but you can use them in data you input or output or as alphanumeric constants.

ESCORT allows alphanumeric, numeric, and decimal constants.
ESCORT programs can be written in upper or lowercase, but when you're comparing or sorting alphanumeric data fields, lowercase words have greater value than their uppercase counterparts.

| $\sim$ |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\sim$ | AND | EISPLAY | EXTENDING | NOT | STARTS |
| BY | DOES | FIRSTIME | OF | SUBTOTALING | WORKAREA |
| CHANGE | ELSE | FROM | OR | SUBTOTALS | \$DATE |
| CLEARING | END | GE | OUTPUT | TO | \$DAY |
| COMPUTING | ENDOFILE | GT | PRINT | TOTALING | \$LINE |
| CONTAIN | ENDS | IF | PRINTER | TOTALS | \$MONTH |
| CONTAINS | ENTER | LE | SELECT | UPDATING | \$PAGE |
| CREATING | EQ | LT | SORT | USING | \$TIME |
| DATA | EXIT | NE | START | WHILE | \$TIILE |
| DELETE |  |  |  |  | WITH |


| Program Commands | Structure Commands | Job Commands |
| :--- | :--- | :--- |
| CHANGE PROGRAM | CHANGE STRUCTURE | CHANGE JOB |
| DISPLAY PROGRAM | DISPLAY STRUCTURE | DISPLAY JOB |
| DISPLAY PROGRAM NAMES | DISPLAY STRUCTURE NAMES | DISPLAY JOB NAMES |
| ENTER PROGRAM | ENTER STRUCTURE | ENTER JOB |
| PRINT PROGRAM | PRINT STRUCTURE | PRINT JOB |
| PRINT PROGRAM NAMES | PRINT STRUCTURE NAMES | PRINT JOB NAMES |
| RUN PROGRAM | SAVE STRUCTURE | RUN JOB |
| SAVE PROGRAM |  | SAVE JOB |

- Change Data Program Statement

CHANGE DATA OF master-file [structure] $\left[\right.$ FROM $\left.\left\{\begin{array}{l}\text { WS } \\ \text { input-file }\end{array}\right\}\left[\left\{\begin{array}{l}\text { structure } \\ \text { structure,form }\end{array}\right\}\right]\right]$
[USING input-file-1,...,input-file-5]
WORKAREA structure [data replacement statements]
SUBTOTALING fieldnames ["literal expressions"]
TOTALING fieldnames ["literal expressions:"]
IF $\left\{\begin{array}{l}\text { conditions } \\ \text { FIRSTIME } \\ \text { ENDOFILE }\end{array}\right\}$ clauses FELSE clauses] END
COMPUTING data replacement statements

WHILE conditions clauses END
CLEARING fieldnames


OUTPUT TO $\left\{\begin{array}{l}\text { WS } \\ \text { PRINTER }\end{array}\right\}\left\{\begin{array}{l}\text { structure } \\ \text { structure,form }\end{array}\right\}$
EXIT
0) Delete Data Program Statement

DELETE DATA OF master-file $\left\{\begin{array}{c}\left.\text { FROM }\left\{\begin{array}{l}\text { WS } \\ \text { input-file }\end{array}\right\} \begin{array}{l}\text { structure } \\ \text { structure,form }\end{array}\right\} \\ \text { [IF conditions] }\end{array}\right\}$

Enter Data Program Statement

## ENTER DATA FROM WS $\left[\left\{\begin{array}{l}\text { structure } \\ \text { structure,form }\end{array}\right\}\right]$

WORKAREA structure [data replacement statements]
SUBTOTALING fieldnames ["literal expressions"]
TOTALING fieldnames ["literal expressions"]
IF $\left\{\begin{array}{l}\text { conditions } \\ \text { FIRSTIME } \\ \text { ENDOFILE }\end{array}\right\}$ clauses [ELSE clauses] END

Enter Data Program Statement (cont)

COMPUTING data replacement statements

WHILE conditions clauses END

CLEARING fieldnames

CREATING output-file [structure]
EXTENDING output•file [structure]
PRINT $\left[\begin{array}{ll}\text { fieldnames } & \text { ["literal expressions"] } \\ \text { SUBTOTALS } & \\ \text { TOTALS } & \\ \text { structure } & \end{array}\right\}$
DISPLAY $\left.\left[\begin{array}{ll}\text { fieldnames } & \text { ["literal expressions"] } \\ \text { SUBTOTALS } & \\ \text { TOTALS } \\ \text { structure }\end{array}\right\}\right]$

OTUPUT TO $\left.\left\{\begin{array}{l}\text { WS } \\ \text { PRINTER }\end{array}\right\} \begin{array}{l}\text { structure } \\ \text { structure,form }\end{array}\right\}$
EXIT


COMPUTING data replacement statements

WHILE conditions clauses END

CLEARING fieldnames
CREATING output-file [structure]
EXTENDING output-file [structure]
UPDATING output-file [structure]
OUTPUT TO $\left\{\begin{array}{l}\text { WS } \\ \text { PRINTER }\end{array}\right\}\left\{\begin{array}{l}\text { structure } \\ \text { structure,form }\end{array}\right\}$

Select Data Program Statement (cont)


EXIT

Sort Data Program Statement

SORT DATA OF master-file [structure] [BY field1,...,field6]
CREATING output-file [structure]

| Clauses | Enter <br> Data | Change <br> Data | Select <br> Data | Sort <br> Data | Delete <br> Data |
| :--- | :--- | :--- | :--- | :--- | :--- |
| BY |  |  |  | $X$ |  |
| COMPURING | $X$ | $X$ | $X$ |  |  |
| CREATING | $X$ | $X$ | $X$ | $X$ | $X$ |
| DISPLAY | $X$ | $X$ | $X$ | $X$ |  |
| EXIT | $X$ | $X$ | $X$ |  |  |
| EXTENDING | $X$ |  |  |  |  |


| IF | X | X | X | $x$ |
| :---: | :---: | :---: | :---: | :---: |
| OUTPUT TO | X | X | X |  |
| PRINT | $x$ | X | X |  |
| SUBTOTALING | X | X | X |  |
| TOTALING | X | $\chi$ | X |  |
| UPDATING |  |  | X |  |
| USING |  | X | X |  |
| WHILE | $x$ | X | X |  |
| WORKAREA | X | $x$ | $X$ |  |


| Clause | Format |
| :--- | :--- |
| BY | BY field-1,..., field-6 |
| CLEARING | CLEARING fieldnames |
| CREATING | COMPUTING data replacement statements |
| DISPLAY | $\left.\begin{array}{l}\text { CREATING output-file [structure] } \\ \text { DISPLAY }\left[\begin{array}{l}\text { fieldnames ["literal expressions"] } \\ \text { SUBTOTALS } \\ \text { TOTALS } \\ \text { structure }\end{array}\right.\end{array}\right]$ |


| EXIT | EXIT |
| :---: | :---: |
| EXTENDING | EXTENDING output－file［structure］ |
| IF | IF $\left\{\begin{array}{l}\text { conditions } \\ \text { FIRSTIME } \\ \text { ENDOFILE }\end{array}\right\}$ clauses［ELSE clauses］END |
| OUTPUT TO | $\text { OUTPUT TO\{ } \left.\left\{\begin{array}{l} \text { WS } \\ \text { PRINTER } \end{array}\right\} \begin{array}{l} \text { structure } \\ \text { structure,form } \end{array}\right\}$ |
| PRINT | PRINT $\left[\left\{\begin{array}{l}\text { fieldnames［＂literal expressions＂］} \\ \text { SUBTOTALS } \\ \text { TOTALS } \\ \text { structure }\end{array}\right\}\right.$ |


| Clause | Format |
| :--- | :--- |
| SUBTOTALING | SUBTOTALING fieldnames ["literal expressions"] |
| TOTALING | TOTALING fieldnames ["literal expressions"] |
| UPDATING | UPDATING input-file-n |
| USING | USING input-file-1,..., input-file-5 |
| WHILE | WHILE conditions clauses END |
| WORKAREA | WORKAREA structure [data replacement statements] |


| Arithmetic Operators |  |
| :---: | :--- |
| + | Addition |
| - | Subtraction |
| $*$ | Multiplication |
| $/$ | Division |
| $:$ | Modulo（a division operation where the result is the remainder portion） |

In arithmetic expressions，multiplication，division，and modulo are performed before addition and subtraction．

The sequence for performing operations of the same level is left to right．
Expressions enclosed within parentheses are evaluated first．When using nested parentheses，evaluation begins with the innermost set and works outward．

| Alphabetic | Symbolic | Meaning |
| :--- | :--- | :--- |
| EQ | $=$ | Equal to |
| NE | $<>$ | Not equal to |
| GT | $>$ | Greater than |
| LT | $<$ | Less than |
| GE | $<=$ | Greater than or equal to |
| LE | Less than or equal to |  |

## Character String Operators

| STARTS WITH "string" |
| :--- |
| ENDS WITH "string" |
| CONTAINS "string" |
| DOES NOT START WITH "string" |
| DOES NOT END WITH "string" |
| DOES NOT CONTAIN "string" |

In addition to the relational and special character string operators, there are two logical operators, OR and AND that are used to connect one or more conditionals.

ESCORT provides eight system utility fields you can specify in any ESCORT program. These fields are always prefixed by a dollar sign (\$).

| Field | Length | Function |
| :--- | :--- | :--- |
| $\$$ DATE | 8 A | Gives you the current system date (mm/dd/yy) |
| \$DAY | 2 N | Gives you the current system day |
| \$LINE | 3 N | Sets the system printer to a specified line number before printing |
| \$MONTH | 2 N | Gives you the current system month |
| \$PAGE | 4 N | Sets the system page number to a specific page number |


| Field | Length | Function |
| :--- | :--- | :--- |
| $\$$ TIME | 5 A | Gives you the current system time (hh:mm) |
| $\$$ IITLE | 40 A | Allows you to provide a title line for printed reports |
| $\$$ YEAR | 2 N | Gives you the current system year |

In the LENGTH/TYPE parameter, the following symbols are used to designate field type:

A - alphanumeric
N - numeric

V - assumed decimal
$P$ - packed decimal
B $\quad-\quad$ binary
In the KEYS parameter, the letter K, followed by a number 1 through 6 is used to designate key values.

| Symbol | Function |
| :--- | :--- |
| $Z$ | Suppress leading zeros |
| $*$ | Replace leading zeros with asterisks |
| , | Insert commas where applicable <br> If the number is: <br> - <br> Positive $\quad-\quad$ the sign inserted is a blank character <br> Negative $\quad-\quad$ the sign inserted is a minus symbol |


| $/$ | Insert slash character where applicable in date field. <br> In four digit date fieid, one slash is inserted. <br> In six digit date field, two slashes are inserted. |
| :--- | :--- |
| $* \$$ | Fixed dollar sign is assumed when the asterisk is used in the first position of the field. |
| $\$$ | Floating dollar sign is assumed when the asterisk is omitted. |

NOTE:
The slash, sign, comma codes, and the decimal point are characters that are added to the field and should be allowed for in your output.

| Key | Structure <br> Processor | Program <br> Mode | Tutorial <br> Mode | Run-time <br> Processor |
| :--- | :--- | :--- | :--- | :--- |
| F1 | End of input, <br> return to <br> master menu | Not used | Not used | Not used |
| F2 | Cancel display <br> output | Not used | Not used | Not used |
| F3 | Not used | Cancel current <br> screen and <br> return to <br> previous screen | Cancel current <br> screen and <br> return to <br> previous screen | Not used |


| F4 | Abort structure <br> and return to <br> menu | Terminate free- <br> form input and <br> return to <br> previous menu | Not used | Terminate data <br> input and <br> return to <br> caller |
| :--- | :--- | :--- | :--- | :--- |

NOTE:

In the run-time F4 key description, caller refers to the ESCORT processor that called for a ron-time function. The processor can be either program mode or tutorial mode. Structures do not use run-time functions.

