MURA-572
Internal

IDENTIFICATION

Fortran Error Return,   MU ERR1
704 FORTRAN Program
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PURPOSE

To provide evidence of error occurance within a subroutine of the FORTRAN General Library.

RESTRICTIONS

ERR1 requires the use of the MURA 2, SHARE 1, or SHARE 2 printer boards (normally used with FORTRAN programs).

METHOD

Since FORTRAN, as originally supplied by IBM, contains no error returns in any of its subroutines, certain of these routines have been modified and added to the FORTRAN system to contain an exit to ERR1 for error indication. An example might be a square root routine, which exits if asked to take the square root of a negative number.

When entered, ERR1 prints one line:

ERROR RETURN FROM _ (NAME) _ _

where (NAME) is the 6 character name of the subroutine from which entered. In the example above, the name would be SQR5. After printing the line, ERR1 immediately returns (without stopping) to the subroutine.

USAGE

ERR1 is not available by means of FORTRAN statements. Any routine desiring to use it must have the following SAP code:

```
 α        TSX   (ERR1),4
 α+1      BCD   1(name)
 α+2      return
```

STORAGE REQUIREMENT

59 Words

1

```
MUERR1 REM  0063 05010                                              ERR1  0001
       REM  MU ERR1 - FORTRAN ERROR RETURN                         ERR1  0002
       REM     PRINTS ERROR SIGNAL ON 716 PRINTER                  ERR1  0003
 ERROR SXD  ERROR+38,1                                              ERR1  0004
       SXD  ERROR+39,2                                              ERR1  0005
       SXD  ERROR+40,4                                              ERR1  0006
       STO  ERROR+41                                                ERR1  0007
       STQ  ERROR+42                                                ERR1  0008
       LDQ  1,4                                                     ERR1  0009
       LXA  ERROR+7,1                                               ERR1  0010
       PXD  6,0                                                     ERR1  0011
       LGL  2                                                       ERR1  0012
       PAX  12,2                                                    ERR1  0013
       PXD  0,0                                                     ERR1  0014
       LGL  4                                                       ERR1  0015
       PAX  0,4                                                     ERR1  0016
       CAL  ERROR+43                                                ERR1  0017
       TXH  ERROR+17,4,0                                            ERR1  0018
       TXH  ERROR+19,2,2                                            ERR1  0019
       TXH  ERROR+18,2,0                                            ERR1  0020
       ORS  ERROR+53,4                                              ERR1  0021
       ORS  ERROR+56,2                                              ERR1  0022
       ARS  1                                                       ERR1  0023
       SLW  ERROR+43                                                ERR1  0024
       TIX  ERROR+7,1,1                                             ERR1  0025
       WPR                                                          ERR1  0026
       LXA  ERROR+9,1                                               ERR1  0027
       CPY  ERROR+56,1                                              ERR1  0028
       CPY  ERROR+43                                                ERR1  0029
       CAL  ERROR+56,1                                              ERR1  0030
       ANA  ERROR+57                                                ERR1  0031
       SLW  ERROR+56,1                                              ERR1  0032
       TIX  ERROR+26,1,1                                            ERR1  0033
       CAL  ERROR+58                                                ERR1  0034
       SLW  ERROR+43                                                ERR1  0035
       LXD  ERROR+38,1                                              ERR1  0036
       LXD  ERROR+39,2                                              ERR1  0037
       LXD  ERROR+40,4                                              ERR1  0038
       CLA  ERROR+41                                                ERR1  0039
       LDQ  ERROR+42                                                ERR1  0040
       TRA  2,4                                                     ERR1  0041
       HTR  **                                                      ERR1  0042
       HTR  **                                                      ERR1  0043
       HTR  **                                                      ERR1  0044
       HTR  **                                                      ERR1  0045
       HTR  **                                                      ERR1  0046
       HTR  32                                                      ERR1  0047
       HTR  8704,4,26                                               ERR1  0048
       HTR  0                                                       ERR1  0049
       HTR  0                                                       ERR1  0050
       HTR  1280,0,4                                                ERR1  0051
       HTR  4096,2,32                                               ERR1  0052
       HTR  16512                                                   ERR1  0053
       HTR  0,1                                                     ERR1  0054
       HTR  0                                                       ERR1  0055
       HTR  0                                                       ERR1  0056
       HTR  16384,1                                                 ERR1  0057
       HTR  19184,4,30                                              ERR1  0058
       HTR  1024,2,32                                               ERR1  0059
       HTR  **                                                      ERR1  0060
```

```
HTR 32640,7,63                                              ERR1  0061
HTR 32                                                      ERR1  0062
END                                                         ERR1  0063
```