```
LLL                 IIIIIIIIII   BBBBBBBBBBBB   RRRRRRRRRRR    TTTTTTTTTTTTTTT   LLL
LLL                 IIIIIIIIII   BBBBBBBBBBBB   RRRRRRRRRRR    TTTTTTTTTTTTTTT   LLL
LLL                 IIIIIIIIII   BBBBBBBBBBBB   RRRRRRRRRRR    TTTTTTTTTTTTTTT   LLL
LLL                    III       BBB      BBB   RRR      RRR         TTT         LLL
LLL                    III       BBB      BBB   RRR      RRR         TTT         LLL
LLL                    III       BBB      BBB   RRR      RRR         TTT         LLL
LLL                    III       BBB      BBB   RRR      RRR         TTT         LLL
LLL                    III       BBB      BBB   RRR      RRR         TTT         LLL
LLL                    III       BBBBBBBBBBBB   RRRRRRRRRRR         TTT         LLL
LLL                    III       BBBBBBBBBBBB   RRRRRRRRRRR         TTT         LLL
LLL                    III       BBB      BBB   RRR   RRR           TTT         LLL
LLL                    III       BBB      BBB   RRR   RRR           TTT         LLL
LLL                    III       BBB      BBB   RRR    RRR          TTT         LLL
LLL                    III       BBB      BBB   RRR     RRR         TTT         LLL
LLL                    III       BBB      BBB   RRR      RRR        TTT         LLL
LLLLLLLLLLLLLLL        III       BBBBBBBBBBBB   RRR      RRR        TTT         LLLLLLLLLLLLLL
LLLLLLLLLLLLLLL     IIIIIIIIII   BBBBBBBBBBBB   RRR      RRR        TTT         LLLLLLLLLLLLLL
LLLLLLLLLLLLLLL     IIIIIIIIII   BBBBBBBBBBBB   RRR      RRR        TTT         LLLLLLLLLLLLLL
```

```
SSSSSSSS  TTTTTTTTTT  RRRRRRRR     LL          NN      NN  KK        KK
SSSSSSSS  TTTTTTTTTT  RRRRRRRR     LL          NN      NN  KK        KK
SS            TT      RR      RR   LL          NN      NN  KK        KK
SS            TT      RR      RR   LL          NN      NN  KK        KK
SS            TT      RR      RR   LL          NNNN    NN  KK      KK
SS            TT      RR      RR   LL          NNNN    NN  KK    KK
 SSSSSS       TT      RRRRRRRR     LL          NN  NN  NN  KKKKK
 SSSSSS       TT      RRRRRRRR     LL          NN  NN  NN  KKKKK
       SS     TT      RR  RR       LL          NN    NNNN  KK    KK
       SS     TT      RR  RR       LL          NN    NNNN  KK      KK
       SS     TT      RR    RR     LL          NN      NN  KK        KK   ....
       SS     TT      RR    RR     LL          NN      NN  KK        KK   ....
SSSSSSSS      TT      RR      RR   LLLLLLLLLL   NN      NN  KK        KK   ....
SSSSSSSS      TT      RR      RR   LLLLLLLLLL   NN      NN  KK        KK   ....
```

```
RRRRRRRR   EEEEEEEEEEE   QQQQQQ
RRRRRRRR   EEEEEEEEEEE   QQQQQQ
RR    RR   EE           QQ      QQ
RR    RR   EE           QQ      QQ
RR    RR   EE           QQ      QQ
RRRRRRRR   EEEEEEEE     QQ      QQ
RRRRRRRR   EEEEEEEE     QQ      QQ
RR  RR     EE          QQ   QQ  QQ
RR  RR     EE          QQ   QQ  QQ
RR    RR   EE          QQ      QQ
RR    RR   EE          QQ      QQ
RR      RR EEEEEEEEEEE   QQQQ  QQ
RR      RR EEEEEEEEEEE   QQQQ  QQ
```

```
!+
!       Require file STRLNK.REQ          Edit: RKR1011
!
! This file, STRLNK.REQ, defines the linkages to the STR facility,
! and to the routines LIB$SCOPY_R_DX6, LIB$SCOPY_DXDX6, LIB$SFREE1_DD6
! and LIB$ANALYZE_SDESC_R2.
!-
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!
!
!++
! AUTHOR: R. Will,        CREATION DATE: 20-FEB-79
!
! MODIFIED BY:
!
! 1-001 - Original.     RW 20-FEB-79
! 1-002 - Add linkages for by ref entry points. RW 15-Mar-79
! 1-003 - Add linkages for GET and FREE JSB entry points.
!         JBS 04-JUN-1979
! 1-004 - Remove PRINT statement, for new BLISS compiler.
!         JBS 02-OCT-1979
! 1-005 - Make $$MOVQ, add LEFT, RIGHT, LEN_EXTR, POS_EXTR.
!         RW  1-Nov-79
! 1-006 - Add POSIT.  RW  1-NOV-79
! 1-007 - Add DUPL_CHAR.  RW  7-Nov-79
! 1-008 - Add REPLACE.  RW  3-Dec-79
! 1-009 - Add linkages to LIB$SCOPY_R_DX6, LIB$SCOPY_DXDX6,
!         LIB$SFREE1_DD6, LIB$ANALYZE_SDESC_R3, and
!         STR$$CHECK_STATUS_R2.
!         RKR 3-MAY-1981.
! 1-010 - Add linkage to STR$ANALYZE_SDESC_R2.  RKR 19-OCT-1981.
! 1-011 - Revised linkage to LIB$ANALYZE_SDESC_R2 to not use R3.
!         Revised linkage to STR$ANALYZE_SDESC_R1 to not use R2.
!         RKR 18-NOV-1981.
```

!--

```
!-
! Public linkages.  These begin with STR$.  Private linkages (only used
! within the STR facility) begin with STR$$.
!-

LINKAGE

!+
! JSB interface for routine written in MACRO to do a MOVQ
! arguments are passed in R0 and R1, no other registers are used
!-

    STR$$JSB_MOVQ = JSB (REGISTER = 0, REGISTER = 1) :
                    NOTUSED (2, 3, 4, 5, 6, 7, 8, 9, 10, 11),

!+
! JSB interface for STR$COPY routines.  User is responsible for R2-R8,
! they will be destroyed.  R9, R10 and R11 are not used.
! _DX linkage is for routines called with 2 descriptors.  _R linkage
! is used for routines called with source length and address and
! the destination descriptor.
!-

    STR$JSB_COPY_DX = JSB (REGISTER = 0, REGISTER = 1) :
                          NOPRESERVE (2, 3, 4, 5, 6, 7, 8)
                          NOTUSED (9, 10, 11),

    STR$JSB_COPY_R = JSB (REGISTER = 0, REGISTER = 1, REGISTER = 2) :
                         NOPRESERVE (2, 3, 4, 5, 6, 7, 8)
                         NOTUSED (9, 10, 11),

!+
! JSB interface for STR$LEFT
!-

    STR$JSB_LEFT = JSB (REGISTER  = 0, REGISTER = 1, REGISTER = 2) :
                       NOPRESERVE (2, 3, 4, 5, 6, 7, 8)
                       NOTUSED (9, 10, 11),

!+
! JSB interface for STR$RIGHT
!-

    STR$JSB_RIGHT = JSB (REGISTER  = 0, REGISTER = 1, REGISTER = 2) :
                        NOPRESERVE (2, 3, 4, 5, 6, 7, 8)
                        NOTUSED (9, 10, 11),

!+
! JSB interface for STR$LEN_EXTR_R8
!-

    STR$JSB_LEN_EXT = JSB
        (REGISTER  = 0, REGISTER = 1, REGISTER = 2, REGISTER = 3) :
                        NOPRESERVE (2, 3, 4, 5, 6, 7, 8)
                        NOTUSED (9, 10, 11),
!+
```

```
! JSB interface for STR$POS_EXTR_R8
!-

    STR$JSB_POS_EXT = JSB
        (REGISTER  = 0, REGISTER = 1, REGISTER = 2, REGISTER = 3) :
                        NOPRESERVE (2, 3, 4, 5, 6, 7, 8)
                        NOTUSED (9, 10, 11),
!+
! JSB interface for STR$DUPL_CHAR_R8
!-

    STR$JSB_DUPL_CH = JSB (REGISTER = 0, REGISTER = 1, REGISTER = 2):
                        NOPRESERVE (2, 3, 4, 5, 6, 7, 8)
                        NOTUSED (9, 10, 11),
!+
! JSB interface for STR$REPLACE
!-

    STR$JSB_REPLACE = JSB
(REGISTER = 0, REGISTER = 1, REGISTER = 2, REGISTER = 3, REGISTER = 4):
        NOPRESERVE (2, 3, 4, 5, 6, 7, 8)
        NOTUSED (9, 10, 11),
!+
! JSB interface for STR$POSITION_R6
!-

    STR$JSB_POSIT = JSB (REGISTER = 0, REGISTER = 1, REGISTER = 2):
                        NOPRESERVE (2, 3, 4, 5, 6)
                        NOTUSED (7, 8, 9, 10, 11),

!+
! JSB interface for STR$GET1_DX and STR$FREE1_DX routines.
!-

    STR$JSB_GETFRE = JSB (REGISTER = 0, REGISTER = 1) :
                        NOPRESERVE (4, 3, 2, 1, 0)
                        NOTUSED (11, 10, 9, 8, 7, 6, 5),


!+
! JSB interface for LIB$SCOPY_R_DX6, LIB$SCOPY_DXDX6 and
! LIB$SFREE1_DD6 routines.
!-

    STRING_JSB = JSB (REGISTER = 0, REGISTER = 1, REGISTER = 2) :
                        NOPRESERVE (2, 3, 4, 5, 6)
                        NOTUSED (7, 8, 9, 10, 11),
!+
! JSB interface for LIB$ANALYZE_SDESC_R2 routine.
!-

    LIB$ANALYZE_SDESC_JSB_LINK = JSB ( REGISTER = 0 ;
                                REGISTER = 1, REGISTER = 2) :
                                NOTUSED (3,4,5,6,7,8,9,10,11),
!+
! JSB interface for STR$ANALYZE_SDESC_R1 routine.
```

```
!-

    STR$ANALYZE_SDESC_JSB_LINK = JSB ( REGISTER = 0 ;
                                REGISTER = 0, REGISTER = 1) :
                                NOTUSED (2,3,4,5,6,7,8,9,10,11),
!+
! JSB interface for STR$$CHECK_STATUS_R2 routine.
!-

    STR$$CHECK_STATUS_LINKAGE = JSB ( REGISTER = 0 ) :
                                NOPRESERVE (1, 2)
                                NOTUSED (3, 4, 5, 6, 7, 8 ,9, 10, 11) ;

!       End of file STRLNK.REQ
```

RTLMACMAR
MAR

LIBASCEBC
LIS

LIBASTINP
LIS

RTLMACB32
REQ

STRMACROS
REQ

LIBBINTRE
LIS

RTLODBG
REQ

LIBDEF
FOR

LIBANASTR
LIS

LIBASNMBX
LIS

LIBBBCCI
LIS

LIBCHAR
LIS

LIBABUPCA
LIS

LIBADDX
LIS

RTLPSECT
REQ

SIGDEF
FOR

LIBASCTIM
LIS

LIBTABMAC
MAR

LIBATTACH
LIS

STRLNK
REQ

LIBA2EREV
LIS

LIBBBSSI
LIS

LIBCALLG
LIS

LIBCLICAL
LIS

LIBADDP
LIS