```
RRRRRRRRRRRR    MMM           MMM     SSSSSSSSSSSS
RRRRRRRRRRRR    MMM           MMM     SSSSSSSSSSSS
RRRRRRRRRRRR    MMM           MMM     SSSSSSSSSSSS
RRR      RRR    MMMMMM     MMMMMM     SSS
RRR      RRR    MMMMMM     MMMMMM     SSS
RRR      RRR    MMMMMM     MMMMMM     SSS
RRR      RRR    MMM    MMM    MMM     SSS
RRR      RRR    MMM    MMM    MMM     SSS
RRR      RRR    MMM    MMM    MMM     SSS
RRRRRRRRRRRR    MMM           MMM     SSSSSSSSS
RRRRRRRRRRRR    MMM           MMM     SSSSSSSSS
RRRRRRRRRRRR    MMM           MMM     SSSSSSSSS
RRR   RRR       MMM           MMM              SSS
RRR   RRR       MMM           MMM              SSS
RRR   RRR       MMM           MMM              SSS
RRR     RRR     MMM           MMM              SSS
RRR     RRR     MMM           MMM              SSS
RRR     RRR     MMM           MMM              SSS
RRR      RRR    MMM           MMM     SSSSSSSSSSSS
RRR      RRR    MMM           MMM     SSSSSSSSSSSS
RRR      RRR    MMM           MMM     SSSSSSSSSSSS
```

```
UU        UU  TTTTTTTTTT  LL            DDDDDDD     EEEEEEEEEE  FFFFFFFFFF
UU        UU  TTTTTTTTTT  LL            DDDDDDD     EEEEEEEEEE  FFFFFFFFFF
UU        UU      TT      LL            DD     DD   EE          FF
UU        UU      TT      LL            DD     DD   EE          FF
UU        UU      TT      LL            DD     DD   EE          FF
UU        UU      TT      LL            DD     DD   EE          FF
UU        UU      TT      LL            DD     DD   EEEEEEE     FFFFFFFF
UU        UU      TT      LL            DD     DD   EEEEEEEE    FFFFFFFF
UU        UU      TT      LL            DD     DD   EE          FF
UU        UU      TT      LL            DD     DD   EE          FF
UU        UU      TT      LL            DD     DD   EE          FF
UU        UU      TT      LL            DD     DD   EE          FF    ....
UUUUUUUUUU        TT      LLLLLLLLLL    DDDDDDD     EEEEEEEEEE  FF     ....
UUUUUUUUUU        TT      LLLLLLLLLL    DDDDDDD     EEEEEEEEEE  FF     ....

RRRRRRRR       333333      222222
RRRRRRRR       333333      222222
RR      RR  33      33  22      22
RR      RR  33      33  22      22
RR      RR         33           22
RR      RR         33           22
RRRRRRRR         33           22
RRRRRRRR         33           22
RR   RR         33          22
RR   RR         33          22
RR      RR  33      33  22
RR      RR  33      33  22
RR       RR    333333   2222222222
RR       RR    333333   2222222222
```

```
!++
!
!  UTLDEF.B32 - UTILITY DEFINITION MACROS FOR BLISS PROCESSING
!                 OF STARLET DEFINITION MACROS.
!         Version 'V04-000'
!
!--
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!++
!
!  MODIFIED BY:
!
!        V02-001 REFORMAT          Maria del C. Nasr        01-Aug-1980
!
!--
!
! macros to extract offsets, field widths, etc., from field extraction macros
!

MACRO    $BYTEOFFSET (OFFSET, POSITION, WIDTH, SIGN) = OFFSET%;

MACRO    $BITPOSITION (OFFSET, POSITION, WIDTH, SIGN) = POSITION%;

MACRO    $FIELDWIDTH (OFFSET, POSITION, WIDTH, SIGN) = WIDTH%;

MACRO    $EXTENSION (OFFSET, POSITION, WIDTH, SIGN) = SIGN%;

MACRO    $FIELDMASK (OFFSET, POSITION, WIDTH, SIGN) =
         (1^(POSITION+WIDTH) - 1^POSITION)%;

! macro to generate equlst constructs
!
```

```
MACRO
        $EQULST(P,G,i,S)[A]=
            %NAME(P,GET1ST_ A) =
                %IF NUL2ND_ A
                %THEN (I) + %COUNT*(S)   ! assumes i, s always generated by conversion program
                %ELSE GET2ND_ A
                %FI %,

        GET1ST_(A,B)=
            A %,
        GET2ND_(A,B)=
            B %,            ! known non-null
        NUL2ND_(A,B)=
            %NULL(B) %;
```

RMSCALLS
MAR

RMSIDXLNK
R32

RMS
LST

RMS32MAC
MAR

RMSMSCMAC
MAR

UTLDEF
R32

RMSIDXMAC
R32

UTLDEFUND
R32

RMSINTDEF
LST

RMSIDXDEF
R32

NT0MACROS
MAR