```
KBS      = 177560          PC     =%000007        PFLAG      000102R
PRS      = 177564          PWRDWN   000044R        PWRSAV     000104R
PWRUP      000000R         R0     =%000000        R1         =%000001
R2       =%000002          R3     =%000003        R4         =%000004
R5       =%000005          R6     =%000006        R7         =%000007
SP       =%000006          .      = 000106R

END ?
                 ; *******************************************************
                 ;
                 ;                   SUBROUTINE PWRUP
                 ;
                 ;                   VERSION          2A
                 ;
                 ;                   BILL SEILER
                 ;                   SEPT 6,1974
                 ;         HANDLES POWER FAILURE AND
                 ;         RESTARTS THE RUNNING PROGRAM
                 ;
        000000           R0=%0
        000001           R1=%1
        000002           R2=%2
        000003           R3=%3
        000004           R4=%4
        000005           R5=%5
        000006           R6=%6
        000007           R7=%7
        000006           SP=R6
        000007           PC=R7
        177560           KBS=177560              ; ADDRESS OF KEYBOARD STATUS REG.
        177564           PRS=177564              ; ADDRESS OF PRINTER STATUS REG.
        000000           .ASECT
        000024            =24
000024 000000'           PWRUP
000026 000340            340
                         .TITLE   PWRUP
        000000           .CSECT
000000 005767 PWRUP:  TST      PFLAG            ; IS THIS PWR UP OR DOWN
       000076
000004 001417          BEQ      PWRDWN           ; IF CLEAR PWR DOWN
000006 016706          MOV      PWRSAV,R6        ; IF NOT PWR UP-RESTORE STK
       000072
000012 012667'         MOV      (SP)+,KBS        ; RETURN KEYBOARD STATUS
       177560
000016 012667'         MOV      (SP)+,PRS        ; RETURN PRINTER STATUS
       177564
000022 012605          MOV      (SP)+,R5
000024 012604          MOV      (SP)+,R4
000026 012603          MOV      (SP)+,R3
000030 012602          MOV      (SP)+,R2
000032 012601          MOV      (SP)+,R1
000034 012600          MOV      (SP)+,R0         ; RESTORE REGISTERS
000036 005067          CLR      PFLAG            ; CLEAR PWR FLAG
       000040
000042 000002          RTI                       ; RETURN FROM INTERUPT
000044 010046 PWRDWN: MOV      R0,-(SP)         ; POWER D
000046 010146          MOV      R1,-(SP)         ;        O
000050 010246          MOV      R2,-(SP)         ;        W
000052 010346          MOV      R3,-(SP)         ;        N
000054 010446          MOV      R4,-(SP)
000056 010546          MOV      R5,-(SP)         ; SAVE REGISTERS
000060 016746'         MOV      PRS,-(SP)        ; SAVE PRINTER STATUS
       177564
000064 016746'         MOV      KBS,-(SP)        ; SAVE KEYBOARD STATUS
       177560
```

```
000070 010667          MOV     SP,PWRSAV      ;SAVE THE STK
       000010
000074 005267          INC     PFLAG          ;SET FLAG FOR PWR UP NEXT TIME
       000002
000100 000000          HALT                   ;WAIT FOR THE POWER TO RETURN
000102 000000 PFLAG:   .WORD   0
000104 000000 PWRSAV:  .WORD   0
       000001          .END
```

000000 ERRORS

PAL-11S V003A

*S H

*B H

*L T

*T I