

```

PC      =%000007      RKT2      000000RG      R0      =%000000
R1      =%000001      R2      =%000002      R3      =%000003
R4      =%000004      R5      =%000005      R6      =%000006
R7      =%000007      SLINE      = ***** G      SP      =%000006
XDISP2  = ***** G      XSIZE2  = ***** G      YDISP2  = ***** G
YSIZE2  = ***** G      = 000142R

```

END ?

\*\*\*\*\*

# SUBROUTINE RKT2

VERSION 1C

BILL SEILER

AUG. 24, 1974

DRAWS ROCKET # TWO

USES ALL REGISTERS AND THE STK;

```

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

```

. TITLE RKT2

GLOBAL SLINE, RKT2, XDISP2, YDISP2, XSIZE2, YSIZE2

. CSECT

```

000000 016702' RKT2:  MOV      XDISP2, R2      ; R2=XD2

```

```

000000
000004 016703'      MOV      YDISP2, R3      ; R3=YD2
000000

```

```

000010 016700'      MOV      XSIZE2, R0      ; R0=X52
000000

```

```

000014 016701'      MOV      YSIZE2, R1      ; R1=Y52
000000

```

```

000020 010204      MOV      R2, R4      ; R4=XD2
000022 010305      MOV      R3, R5      ; R5=YD2

```

\*\*\*\*\*POINT A\*\*\*\*\*

```

000024 060004      ADD      R0, R4      ; R4=XD2+X52
000026 060105      ADD      R1, R5      ; R5=YD2+Y52

```

\*\*\*\*\*POINT B\*\*\*\*\*

```

000030 160002      SUB      R0, R2      ; R2=XD2-X52
000032 160103      SUB      R1, R3      ; R3=YD2-Y52
000034 006200      ASR      R0      ; R0=X52/2
000036 006201      ASR      R1      ; R1=Y52/2

```

\*\*\*\*\*POINT E\*\*\*\*\*

```

000040 010546      MOV      R5, -(SP)      ; YD2+Y52
000042 010446      MOV      R4, -(SP)      ; XD2+X52

```

\*\*\*\*\*POINT D\*\*\*\*\*

```

000044 010346      MOV      R3, -(SP)      ; YD2-Y52
000046 060016      ADD      R0, (SP)      ; YD2+X52/2-Y52
000050 010246      MOV      R2, -(SP)      ; XD2-X52
000052 160116      SUB      R1, (SP)      ; XD2-Y52/2-X52

```

\*\*\*\*\*POINT C\*\*\*\*\*

```

000054 010346      MOV      R3, -(SP)      ; YD2-Y52
000056 060116      ADD      R1, (SP)      ; YD2-Y52/2
000060 010246      MOV      R2, -(SP)      ; XD2-X52
000062 060016      ADD      R0, (SP)      ; XD2-X52/2

```

\*\*\*\*\*POINT F\*\*\*\*\*

```

000064 010346      MOV      R3, -(SP)      ; YD2-Y52
000066 160016      SUB      R0, (SP)      ; YD2-X52/2-Y52

```

```

000070 010246      MOV      R2, -(SP)          ; XD2-X52
000072 060116      ADD      R1, (SP)          ; XD2+Y52/2-X52
; *****DRAW LINES*****
000074 004767'     JSR      PC, SLINE          ; DRAW LINE # 1
000000
000100 012604      MOV      (SP)+, R4
000102 012605      MOV      (SP)+, R5          ; GET POINT F
000104 004767'     JSR      PC, SLINE          ; DRAW LINE # 2
000000
000110 012604      MOV      (SP)+, R4
000112 012605      MOV      (SP)+, R5          ; GET POINT C
000114 004767'     JSR      PC, SLINE          ; DRAW LINE # 3
000000
000120 012604      MOV      (SP)+, R4
000122 012605      MOV      (SP)+, R5          ; GET POINT D
000124 004767'     JSR      PC, SLINE          ; DRAW LINE # 4
000000
000130 012604      MOV      (SP)+, R4
000132 012605      MOV      (SP)+, R5          ; GET POINT E
000134 004767'     JSR      PC, SLINE          ; DRAW LINE # 5
000000
000140 000207      RTS      PC                  ; ALL DONE!!!!!!!!!!!!!!
000001      .END

```

## 000000 ERRORS

PAL-115 V003A

\*S H

\*B H

\*L T

\*T T