

A large, stylized letter 'A' is formed using the characters 'S' and 'Y'. The letter is symmetrical and composed of multiple rows of these characters. The top of the 'A' is formed by a row of 'S's, followed by rows of 'Y's and 'S's. The sides of the 'A' are formed by rows of 'S's and 'Y's. The bottom of the 'A' is formed by a row of 'S's. The overall shape is a wide, triangular 'A' with a small gap in the center of the top bar.

[illegible]

(1) 74
(1) 96

NULL DEVICE FUNCTION DECISION TABLE
NULL DEVICE FUNCTION DECISION TABLE ROUTINES


```
0000 1      .TITLE NLDRIVER - NULL DEVICE DRIVER
0000 2      .IDENT 'V04-000'
0000 3
0000 4
0000 5 *****
0000 6
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0000 24
0000 25 *****
0000 26
0000 27
0000 28      D. N. CUTLER 8-AUG-77
0000 29
0000 30      NULL DEVICE DRIVER
0000 31
0000 32      MODIFIED BY:
0000 33
0000 34      V03-001 KDM0002      Kathleen D. Morse      28-Jun-1982
0000 35      Added $DCDEF and $DYNDEF.
0000 36
0000 37      MACRO LIBRARY CALLS
0000 38
0000 39
0000 40      $DCDEF      ;DEFINE DEVICE TYPE CODES
0000 41      $DYNDEF      ;DEFINE DATA STRUCTURE TYPES
0000 42      $IODEF      ;DEFINE I/O FUNCTION CODES
0000 43
0000 44
0000 45      LOCAL DATA
0000 46
0000 47      DRIVER PROLOGUE TABLE
0000 48
0000 49
00000000 50      .PSECT $$$105_PROLOGUE
0000 51 NL$DPT:
0000 52      DPTAB      -      ;DEFINE DRIVER PROLOGUE TABLE
0000 53      END=NL END,-      ;END OF DRIVER
0000 54      ADAPTER=UBA,-      ;ADAPTER TYPE
0000 55      UCBSIZE=116,-      ;UCB SIZE
0000 56      NAME=NLDRIVER      ;DRIVER NAME
0038 57      DPT_STORE INIT      ;CONTROL BLOCK INIT VALUES
```


NLDRIVER
V04-000

- NULL DEVICE DRIVER

H 15

16-SEP-1984 00:38:24 VAX/VMS Macro V04-00
5-SEP-1984 03:45:31 [SYS.SRC]NLDRIVER.MAR;1

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```
0038 58      DPT_STORE REINIT      ;CONTROL BLOCK RE-INIT VALUES
0038 59      DPT_STORE END          ;
0000 60
0000 61      ;
0000 62      ; DRIVER DISPATCH TABLE
0000 63      ;
0000 64
0000 65      DDTAB  NL,-            ;DRIVER DISPATCH TABLE
0000 66      0,-                  ;START I/O OPERATION
0000 67      0,-                  ;UNSOLICITED INTERRUPT
0000 68      FUNCTABLE,-          ;FUNCTION DECISION TABLE ADDRESS
0000 69      0,-                  ;CANCEL I/O ENTRY POINT
0000 70      0,-                  ;ADDRESS OF REGISTER DUMP ROUTINE
0000 71      0,-                  ;SIZE OF DIAGNOSTIC BUFFER
0000 72      0                    ;SIZE OF ERROR LOG BUFFER
```



```

0038 74 .SBTTL NULL DEVICE FUNCTION DECISION TABLE
0038 75 :+
0038 76 : NULL DEVICE FUNCTION DECISION TABLE
0038 77 :-
0038 78
0038 79 FUNCTABLE:
0038 80 FUNCTAB -
0038 81 <READLBLK,-
0038 82 READVBLK,-
0038 83 WRITEOF,-
0038 84 WRITELBLK,-
0038 85 WRITEVBLK>
0040 86 FUNCTAB -
0040 87 <>
0048 88 FUNCTAB READ,-
0048 89 <READLBLK,-
0048 90 READVBLK>
0054 91 FUNCTAB WRITE,-
0054 92 <WRITELBLK,-
0054 93 WRITEOF,-
0054 94 WRITEVBLK>

;FUNCTION DECISION TABLE
;LEGAL FUNCTIONS
;READ LOGICAL BLOCK
;READ VIRTUAL BLOCK
;WRITE EOF
;WRITE LOGICAL BLOCK
;WRITE VIRTUAL BLOCK
;BUFFERED I/O FUNCTIONS
;NO BUFFERED I/O FUNCTIONS
;READ FUNCTIONS
;READ LOGICAL BLOCK
;READ VIRTUAL BLOCK
;WRITE FUNCTIONS
;WRITE LOGICAL BLOCK
;WRITE EOF
;WRITE VIRTUAL BLOCK

```



```

0060 96 .SBTTL NULL DEVICE FUNCTION DECISION TABLE ROUTINES
0060 97 :+
0060 98 : READ - READ FUNCTIONS
0060 99 : WRITE - WRITE FUNCTIONS
0060 100 :
0060 101 : THE NULL DEVICE IS A SPECIAL DEVICE IN THAT ALL WRITES ARE DISCARDED AND ALL
0060 102 : READS RETURN AN END OF FILE STATUS. THERE IS NO ACTUAL DRIVER, BUT RATHER ALL
0060 103 : PROCESSING IS DONE BY FUNCTION DECISION TABLE ROUTINES.
0060 104 :
0060 105 : INPUTS:
0060 106 :
0060 107 : R0 = SCRATCH.
0060 108 : R1 = SCRATCH.
0060 109 : R2 = SCRATCH.
0060 110 : R3 = ADDRESS OF I/O REQUEST PACKET.
0060 111 : R4 = CURRENT PROCESS PCB ADDRESS.
0060 112 : R5 = ASSIGNED DEVICE UCB ADDRESS.
0060 113 : R6 = ADDRESS OF CCB.
0060 114 : R7 = I/O FUNCTION CODE BIT NUMBER.
0060 115 : R8 = FUNCTION DECISION TABLE DISPATCH ADDRESS.
0060 116 : R9 = SCRATCH.
0060 117 : R10 = SCRATCH.
0060 118 : R11 = SCRATCH.
0060 119 : AP = ADDRESS OF FIRST FUNCTION DEPENDENT PARAMETER.
0060 120 :
0060 121 : OUTPUTS:
0060 122 :
0060 123 : IF THE FUNCTION IS A READ, THEN $$$_ENDOFFILE IS RETURNED.
0060 124 :
0060 125 : IF THE FUNCTION IS A WRITE, THEN $$$_NORMAL IS RETURNED.
0060 126 : -
0060 127 :
0060 128 : .ENABL LSB
0060 129 : .PSECT $$$115 DRIVER
50 0000'8F 3C 0060 130 READ: MOVZWL #$$$_ENDOFFILE,R0 ;SET END OF FILE STATUS
11 0065 131 BRB 10$ ;
50 0000'8F 3C 0067 132 WRITE: MOVZWL #$$$_NORMAL,R0 ;SET NORMAL COMPLETION
00000000'EF 17 006C 133 10$: JMP EXE$FINISHIOC ;FINISH I/O OPERATION
0072 134 .DSABL LSB
0072 135 NL_END: ;ADDRESS OF LAST LOCATION IN DRIVER
0072 136
0072 137 .END

```


NLDRIVER Symbol table

- NULL DEVICE DRIVER

K 15

16-SEP-1984 00:38:24
5-SEP-1984 03:45:31

VAX/VMS Macro V04-00
[SYS.SRC]NLDRIVER.MAR;1

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\$\$\$	= 00000020	R	02
ATS_UBA	= 00000001		
DPTSC_LENGTH	= 00000038		
DPTSC_VERSION	= 00000004		
DPT\$INITAB	00000038	R	02
DPT\$REINITAB	00000038	R	02
DPT\$TAB	00000000	R	02
DYN\$C_DPT	= 0000001E		
EXE\$FINISHIOC	*****	X	03
FUNCTABLE	00000038	R	03
FUNCTAB_LEN	= 00000028		
IOS_READBLK	= 00000021		
IOS_READVBLK	= 00000031		
IOS_VIRTUAL	= 0000003F		
IOS_WRITEBLK	= 00000020		
IOS_WRITEOF	= 00000028		
IOS_WRITEVBLK	= 00000030		
IOCSMNTVER	*****	X	03
IOCSRETURN	*****	X	03
MASKH	= 00010101		
MASKL	= 00000000		
NL\$DDT	00000000	RG	03
NL\$DPT	00000000	RG	02
NL_END	00000072	R	03
READ	00000060	R	03
\$\$\$_ENDOFFILE	*****	X	03
\$\$\$_NORMAL	*****	X	03
WRITE	00000067	R	03

+-----+ ! Psect synopsis ! +-----+

PSECT name	Allocation	PSECT No.	Attributes
. ABS	00000000 (0.)	00 (0.)	NOPIC USR
\$AB\$\$	00000000 (0.)	01 (1.)	NOPIC USR
\$\$\$105_PROLOGUE	00000039 (57.)	02 (2.)	NOPIC USR
\$\$\$115_DRIVER	00000072 (114.)	03 (3.)	NOPIC USR

+-----+ ! Performance indicators ! +-----+

Phase	Page faults	CPU Time	Elapsed Time
Initialization	35	00:00:00.05	00:00:02.11
Command processing	117	00:00:00.50	00:00:02.97
Pass 1	249	00:00:07.07	00:00:23.30
Symbol table sort	0	00:00:01.12	00:00:03.89
Pass 2	43	00:00:01.24	00:00:05.23
Symbol table output	5	00:00:00.05	00:00:00.05
Psect synopsis output	2	00:00:00.02	00:00:00.02
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	453	00:00:10.06	00:00:37.57

The working set limit was 1350 pages.

39622 bytes (78 pages) of virtual memory were used to buffer the intermediate code.
There were 40 pages of symbol table space allocated to hold 751 non-local and 1 local symbols.
137 source lines were read in Pass 1, producing 15 object records in Pass 2.
18 pages of virtual memory were used to define 15 macros.

+-----+
! Macro library statistics !
+-----+

Macro library name	Macros defined
-----	-----
\$255\$DUA28:[SYS.OBJ]LIB.MLB;1	7
\$255\$DUA28:[SYS.LIB]STARLET.MLB;2	6
TOTALS (all libraries)	13

975 GETS were required to define 13 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LISS:NLDRIVER/OBJ=OBJ\$:NLDRIVER MSRC\$:NLDRIVER/UPDATE=(ENH\$:NLDRIVER)+EXECML\$/LIB

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