

CCCCCCCCCCCC	RRRRRRRRRR	FFFFFFFFFFFF
CCCCCCCCCCCC	RRRRRRRRRR	FFFFFFFFFFFF
CCCCCCCCCCCC	RRRRRRRRRR	FFFFFFFFFFFF
CCC	RRR	RRR
CCC	RRR	RRR
CCC	RRR	RRR
CCC	RRR	RRR
CCC	RRR	RRR
CCC	RRR	RRR
CCC	RRR	RRR
CCC	RRR	RRR
CCC	RRR	RRR
CCC	RRR	RRR
CCC	RRR	RRR
CCC	RRR	RRR
CCC	RRR	RRR
CCC	RRR	RRR
CCC	RRR	RRR
CCCCCCCCCCCC	RRR	RRR
CCCCCCCCCCCC	RRR	RRR
CCCCCCCCCCCC	RRR	RRR

```

CCCCCCCC RRRRRRRR FFFFFFFFFF TTTTTTTTTT FFFFFFFFFF RRRRRRRR VV VV EEEEEEEEE EEEEEEEEE CCCCCCCC
CCCCCCCC RRRRRRRR FFFFFFFFFF TTTTTTTTTT FFFFFFFFFF RRRRRRRR VV VV EEEEEEEEE EEEEEEEEE CCCCCCCC
CC        RR      RR FF          TT          FF          RR      RR VV VV EE          CC
CC        RR      RR FF          TT          FF          RR      RR VV VV EE          CC
CC        RR      RR FF          TT          FF          RR      RR VV VV EE          CC
CC        RRRRRRRR FFFFFFFFFF TT          FF          RRRRRRRR VV VV EE          CC
CC        RRRRRRRR FFFFFFFFFF TT          FF          RRRRRRRR VV VV EE          CC
CC        RR  RR   FF          TT          FF          RR  RR   VV VV EE          CC
CC        RR  RR   FF          TT          FF          RR  RR   VV VV EE          CC
CC        RR  RR   FF          TT          FF          RR  RR   VV VV EE          CC
CC        RR  RR   FF          TT          FF          RR  RR   VV VV EE          CC
CCCCCCCC RR      RR FF          TT          FF          RR      RR VV VV EEEEEEEEE EEEEEEEEE CCCCCCCC
CCCCCCCC RR      RR FF          TT          FF          RR      RR VV VV EEEEEEEEE EEEEEEEEE CCCCCCCC

```

```

LL        IIIIII SSSSSSSS
LL        IIIIII SSSSSSSS
LL        II     SS
LL        II     SS
LL        II     SS
LL        II     SS
LL        II     SSSSSS
LL        II     SSSSSS
LL        II     SS
LL        II     SS
LL        II     SS
LL        IIIIII SSSSSSSS
LLLLLLLLLL IIIIII SSSSSSSS
LLLLLLLLLL IIIIII SSSSSSSS

```

(2) 48
(3) 68

DECLARATIONS
TRANSFER_VECTORS

```
0000 1 .TITLE CRF_TRANSFER
0000 2 .IDENT 'V04-000'
0000 3
0000 4
0000 5 *****
0000 6
0000 7 *
0000 8 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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0000 22 *
0000 23 * DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
0000 24 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0000 25 *
0000 26 *****
0000 27
0000 28
0000 29 :++
0000 30 : FACILITY: CROSS REFERENCE PROGRAM
0000 31
0000 32 : ABSTRACT: DEFINE TRANSFER VECTOR FOR CRF ENTRY POINTS
0000 33
0000 34
0000 35 : ENVIRONMENT: PART OF SHARABLE IMAGE
0000 36
0000 37 : AUTHOR: K.D. MORSE, CREATION DATE: 20-JUN-78
0000 38
0000 39 : MODIFIED BY:
0000 40
0000 41 : : VERSION
0000 42 : V01.01 : 005 B. L. SCHREIBER 19-SEP-1979
0000 43 : Add LIB$CRF_INS_KEY, LIB$CRF_INS_REF and LIB$CRF_OUTPUT
0000 44 : V01.02 : B. C. SCHREIBER 8-JAN-1980
0000 45 : Add CRF$GET_MEM and CRF$FREE_MEM
0000 46 :--
```

DECLARATIONS

.SBTTL DECLARATIONS

0000	48	
0000	49	:
0000	50	INCLUDE FILES:
0000	51	:
0000	52	:
0000	53	:
0000	54	MACROS:
0000	55	:
0000	56	:
0000	57	:
0000	58	:
0000	59	EQUATED SYMBOLS:
0000	60	:
0000	61	:
0000	62	:
0000	63	:
0000	64	OWN STORAGE:
0000	65	:
0000	66	:

TRANSFER_VECTORS

```

0000 68 .SBTTL TRANSFER_VECTORS
0000 69 :++
0000 70 : FUNCTIONAL DESCRIPTION:
0000 71 :
0000 72 : THIS MODULE DEFINES THE TRANSFER VECTORS FOR THE ENTRY POINTS CALLED
0000 73 : BY A USER OF CRF. THIS MODULE ENABLES CRF TO BE LINKED AS A SHARABLE IMAGE.
0000 74 :
0000 75 : CALLING SEQUENCE:
0000 76 :
0000 77 : NONE
0000 78 :
0000 79 : INPUT PARAMETERS:
0000 80 :
0000 81 : NONE
0000 82 :
0000 83 : IMPLICIT INPUTS:
0000 84 :
0000 85 : NONE
0000 86 :
0000 87 : OUTPUT PARAMETERS:
0000 88 :
0000 89 : NONE
0000 90 :
0000 91 : IMPLICIT OUTPUTS:
0000 92 :
0000 93 : NONE
0000 94 :
0000 95 : COMPLETION CODES:
0000 96 :
0000 97 : NONE
0000 98 :
0000 99 : SIDE EFFECTS:
0000 100 :
0000 101 : NONE
0000 102 :
0000 103 :--
0000 104 :
0000 105 :
00000000 106 .PSECT $$VECTOR_0_CRF,PIC,SHR,NOWRT,EXE
0000 107
0000 108 CRF_TRANSFER:
0000 109 .TRANSFER CRF$INSRTKEY ; INSERTS A CROSS REFERENCE KEY
FFF8' 31 0002 110 .MASK CRF$INSRTKEY
0005 111 BRW CRF$INSRTKEY+2
0005 112
0005 113 .TRANSFER CRF$INSRTREF ; INSERTS A REFERENCE TO A KEY
FFF8' 31 0007 114 .MASK CRF$INSRTREF
000A 115 BRW CRF$INSRTREF+2
000A 116
000A 117 .TRANSFER CRF$OUT ; OUTPUTS CROSS REFERENCE SUMMARY
FFF3' 31 000C 118 .MASK CRF$OUT
000F 119 BRW CRF$OUT+2
000F 120
000F 121 .TRANSFER LIB$CRF_INS_KEY ; INSERT CROSS REFERENCE KEY
FFEE' 31 0011 122 .MASK LIB$CRF_INS_KEY
0014 123 BRW LIB$CRF_INS_KEY+2
0014 124

```

TRANSFER_VECTORS						
		0014	125	.TRANSFER	LIB\$CRF_INS_REF	; INSERT REFERENCE TO A KEY
		0014	126	.MASK	LIB\$CRF_INS_REF	
FFE9'	0000'	0016	127	BRW	LIB\$CRF_INS_REF+2	
		0019	128			
		0019	129	.TRANSFER	LIB\$CRF_OUTPUT	; OUTPUT CROSS REFERENCE
		0019	130	.MASK	LIB\$CRF_OUTPUT	
FFE4'	0000'	001B	131	BRW	LIB\$CRF_OUTPUT+2	
		001E	132			
		001E	133	.TRANSFER	CRF\$GET_MEM	; ALLOCATE DYNAMIC MEMORY
FFDF'	31	001E	134	BRW	CRF\$GET_MEM	; JSB ENTRY
		0021	135			
		0021	136	.TRANSFER	CRF\$FREE_MEM	; DEALLOCATE DYNAMIC MEMORY
FFDC'	31	0021	137	BRW	CRF\$FREE_MEM	
		0024	138			
00000200		0024	139	.BLKB	512-<.-CRF_TRANSFER>	; PAD TO FULL PAGE
		0200	140	.END		

CRF TRANSFER
Symbol table

L 11

15-SEP-1984 23:38:41 VAX/VMS Macro V04-00
4-SEP-1984 23:39:06 [CRF.SRC]CRFTFRVEC.MAR;1

Page 5
(3)

CRF\$FREE MEM	*****	X	01
CRF\$GET MEM	*****	X	01
CRF\$INSRTKEY	*****	X	01
CRF\$INSRTREF	*****	X	01
CRF\$OUT	*****	X	01
CRF TRANSFER	00000000	R	01
LIB\$CRF_INS_KEY	*****	X	01
LIB\$CRF_INS_REF	*****	X	01
LIB\$CRF_OUTPUT	*****	X	01

! Psect synopsis !

PSECT name	Allocation	PSECT No.	Attributes												
ABS	00000000 (0.)	00 (0.)	NOPIC	USR	CON	ABS	LCL	NOSHR	NOEXE	NORD	NOWRT	NOVEC	BYTE		
\$\$VECTOR_0_CRF	00000200 (512.)	01 (1.)	PIC	USR	CON	REL	LCL	SHR	EXE	RD	NOWRT	NOVEC	BYTE		

! Performance indicators !

Phase	Page faults	CPU Time	Elapsed Time
Initialization	31	00:00:00.10	00:00:00.46
Command processing	134	00:00:00.54	00:00:01.91
Pass 1	73	00:00:00.43	00:00:01.18
Symbol table sort	0	00:00:00.00	00:00:00.00
Pass 2	39	00:00:00.31	00:00:00.74
Symbol table output	3	00:00:00.01	00:00:00.03
Psect synopsis output	1	00:00:00.01	00:00:00.01
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	283	00:00:01.40	00:00:04.35

The working set limit was 750 pages.
1439 bytes (3 pages) of virtual memory were used to buffer the intermediate code.
There were 10 pages of symbol table space allocated to hold 9 non-local and 0 local symbols.
140 source lines were read in Pass 1, producing 11 object records in Pass 2.
0 pages of virtual memory were used to define 0 macros.

! Macro library statistics !

Macro library name	Macros defined
-\$255\$DUA28:[CRF.OBJ]CRF.MLB;1	0
-\$255\$DUA28:[SYSLIB]STARLET.MLB;2	0
TOTALS (all libraries)	0

0 GETS were required to define 0 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:CRFTFRVEC/OBJ=OBJ\$:CRFTFRVEC MSRC\$:CRFTFRVEC/UPDATE=(ENH\$:CRFTFRVEC)+LIB\$:CRF/LIB

...	...	...	CRFOR LIS	...	...	...	...	...	...	...	...	...
...	...	...	CRFEM LIS	...	...	...	...	...	...	...	...	...
...	...	...	CRFMACROS MAR	...	...	...	...	...	...	...	...	CLITABDEF SOL
...	FILEINPUT LIS	KEYS LIS	...	...	...	...	...	CRFTRVEC LIS	...	...	...	DCLDEF MDL
...	...	...	CRFMDL MDL	...	...	...	...	...	...	...	...	...
...
...	...	...	CRF LIS	...	...	...	...	CRFERMSG LIS	...	...	...	...
...	...	...	CRF SOL	...	...	...	...	...	...	...	...	...
...	...	CRF	...	...	...	...	...	CRFSUB LIS	...	...	...	...
...	FILEOUTPUT LIS	CRFSHR MAP	...	...	...	...	...	CRFGLOBAL LIS	...	...	...	...
...	...	...	CRFMAC REQ	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	DCL	...	...	...
...	...	...	...	...	...	...	...	...	DCL MAP	...	...	...