

ADDRESS	LENGTH
---------	--------

0	0
0	

BINARY CONTROL CARDS.

IDENT BEAD
END

	IDENT BEAD
VER	MICRO
	LIST
	X
MASTR	XTEXT

0

1,14.1*

		MACRO	CAP,N,TY,INT,B,A	MASTR	1
0		MICRO	1.6.*N*	MASTR	1
	M.*Q*	EQU	*4	MASTR	1
		IF	DEF,GEN	MASTR	1
		VFD	42/OL,N,18/INT	MASTR	1
		VFD	48/OL,OPNAME*,12/*4	MASTR	1
		VFD	30/A,30/B	MASTR	1
		VFD	60/TY	MASTR	1
		ELSE		MASTR	1
		LOC	*+4	MASTR	1
		ENDIF		MASTR	1
		ENDM		MASTR	1
		MACRO	OPER,N	MASTR	1
	N	CAP	OPER,7,C,N	MASTR	1
		ENDM		MASTR	1
	TTYS	MACRO		MASTR	1
		IF	DEF,GEN	MASTR	1
		VFD	42/OLEMPTY,18/B	MASTR	1
		VFD	48/OLUSER,12/*4	MASTR	1
		VFD	60/O	MASTR	1
		VFD	60/ALOC	MASTR	1
		ELSE		MASTR	1
		LOC	*+4	MASTR	1
		ENDIF		MASTR	1
		ENDM		MASTR	1
	0 * XQ.SAVL	EQU	*	MASTR	1
	OPNAME	MICRO	1.7.*OPERATE*	MASTR	1
0		LOC	0	MASTR	1
	000040	DUP	32,1	MASTR	1
		TTYS		MASTR	1
	MASTC	CAP	IFNEXT	MASTR	1
	MASTR	CAP	FILE	MASTR	1
	BEAD	CAP	TAPE	MASTR	1
	PRNLOCK	CAP	EVCH,3,1	MASTR	1
	DSKLOCK	CAP	EVCH,3,1	MASTR	1
	SYSLOCK	CAP	EVCH,3,1	MASTR	1
	OPNAME	MICRO	1.1.*S*	MASTR	1
	DISK	CAP	TAPE	MASTR	1
	OPNAME	MICRO	1.7.*OPERATE*	MASTR	1
	BEADCC	CAP	CLASS,5	MASTR	1
	CALLBD	CAP	CALL,6,0,M.BEADCC	MASTR	1
	OPNAME	MICRO	1.5.*CLASS*	MASTR	1
	SCOPE2	CAP	CLASS,5	MASTR	1
	SCOPE	CAP	CLASS,5	MASTR	1
	OPNAME	MICRO	1.8.*OPERATE*	MASTR	1
	SEQCHN	CAP	EVCH,3,2	MASTR	1
	CALLSC	CAP	CALL,6,0,M.SCOPE2	MASTR	1
	MAINCL	CAP	CLIST,1,200	MASTR	1
	ERROR	CAP	TAPE	MASTR	1
	ERRORC	CAP	CLASS,5	MASTR	1
	CERROR	CAP	CALL,6,0,M.ERRORC	MASTR	1
	SELF	OPER		MASTR	1
	ALLOC	OPER		MASTR	1

READ	OPER
WRITE	OPER
SENDE	OPER
HANG	OPER
CCLIST	OPER
CFILE	OPER
CBLK	OPER
CPROC	OPER
CEVCH	OPER
CSPROC	OPER
CCC	OPER
SAVE	OPER
RESTOR	OPER
DSPCAP	OPER
DSPARB	OPER
MVECAP	OPER
CAPIN	OPER
CAPOUT	OPER
ESMGEN	OPER
ESMLOC	OPER
MKOPR	OPER
RETURN	OPER
FRETUR	OPER
FIXC	OPER
FIXU	OPER
UDAT	OPER
UCAP	OPER
ACAP	OPER
ADDOP	OPER
COPYOP	OPER
CHKBLK	OPER
DELBLK	OPER
DELFIL	OPER
REDSHP	OPER
MAPZRO	OPER
MPCLRO	OPER
MPCHRW	OPER
MOVBLK	OPER
DISHAP	OPER
JUMP	OPER
NEWUN	OPER
DISPST	OPER
DISSEN	OPER
DSFMAP	OPER
DELCL	OPER
PINT	OPER
ADDORD	OPER
CCCLOA	OPER
DONATE	OPER
CRAIBK	OPER
MODPC	OPER
DLPROC	OPER
DELSUB	OPER

[illegible]

PLAST
DEF. GEN. I

[illegible]

3	CAP	MACRO	WHAT
	+	VFD	I/1.29/M.WHAT.30/C.MASTC
		ENDM	
4	S.ENTRY	EQU	4

		SUBPROCESS DESCRIPTOR	
	*		
	*		
	*		
0		ORG	0
	*		
0	0000000000000000000001	DATA	1
1	0000000000000000000000	DATA	0
	*		
2	02050104031401232300	DATA	0LBEADCLASS
3	2217172400000000000000	DATA	0LROOT
4	02050104030114141100	DATA	0LBEADCALLI
5	0205010403140000000000	DATA	0LBEADCL
6	02050104230322060000	DATA	0LBEADSCRF
7	0000000000000000000004	DATA	4
10	0000000000000000000024	DATA	20
11	0000000000000000002541	VFD	60/FLI
12	0000000000000000000631	VFD	60/ENTRY
13	0000000000000000000025	VFD	60/CLSTSZ
14	0000000000000000000611	VFD	60/SCRSZ
	*		
15	02050104230322060000	DATA	0LBEADSCRF
16	0000000000000000000000	VFD	30/0,30/0
17	0000000000000000000611	VFD	1/0,29/0,30/SCRSZ
	*		
20	02050104031704050000	DATA	0LBEADCODE
21	0000000001000000000611	VFD	30/1,30/SCRSZ
22	4000000061100000002541	VFD	1/1,29/SCRSZ,30/FLI
	*		
23	7777777777777777777777	DATA	-0
	*		
L 0		LOC	0
	*		
L 0	14031401141417030000	C.ALLOC DATA	0LLCLALLOC
L 1	0205010403140000000000	C.RCLIST DATA	0LBEADCL
L 2	04112203141123240000	C.MASTC DATA	0LDIRCLIST
L 3	1157220501040000000000	C.READ DATA	0LI.READ
L 4	1157272211240500000000	C.WRITE DATA	0LI.WRITE
L 5	1157230516040500000000	C.SENDE DATA	0LI.SENDE
L 6	1157070524050000000000	C.HANG DATA	0LI.GETE
L 7	2424310611140500000000	C.TTY DATA	0LTTYFILE
L 10	2424312205210000000000	DATA	0LTTYREQ
L 11	2424312205232000000000	DATA	0LTTYRESP
L 12	1157232022052400000000	C.SPRET DATA	0LI.SPRET
	*		
L 13		SYSCLSRS BSS	0
	*		
L 13	02050104031401232300	DATA	0LBEADCLASS
L 14	14111605031401232300	DATA	0LLINECLASS
	*		
L 15	02050104031704050000	SYSCLSCN EQU	*-SYSCLSBS
L 16	11571501232405220000	C.BEADCD DATA	0LBEADCODE
		C.MASTER DATA	0LI.MASTER

L	17	14111605012303111100	C.TLINE	DATA	0LLINEASCII
L	20	00000000000000000000	C.CALLSP	DATA	0
L	21	00000000000000000000	C.CLASS	DATA	0
L	22	00000000000000000000	C.SCRFIL	DATA	0
L	23	00000000000000000000	C.LOCALC	DATA	0
L	24	00000000000000000000	C.CTEMP	DATA	0
			*		
L	25	77777777777777777777	CLSTSZ	DATA	-0
			*		
	52			LOC	*0

LOC	DATA	NAME	TYPE	VALUE	COMMENT
		CALLTYPE	EQU	6	(LOCATION OF HIDDEN PARAM)
		ERRCLASS	EQU	6	(LOCATION OF ERROR CLASS ON ERROR CALL)
		INTPACK	EQU	32B	(TO PRESEVRVE OLD ADDRESS)
		INTDATUM	EQU	2	(LOCATION OF INTERRUPT DATUM ON PANIC)
		E.PANIC	EQU	12	(CLASS OCDE FOR PANIC ERROR)
52		ORG		52B	(ALLOW ROOM FOR INT PACK)
52	0000000000000000000000	FILELEN	DATA	0	
53	0000000000000000000004	WRITEU	VFD	60/C.WRITE	
54	4000000004100000000002		CAP	MASTR	
55	0000000000000000000000		DATA	0	
56	0000000000000000000560		VFD	60/USER	
57	0000000000000000000001		DATA	1	
60	0000000000000000000004	WRITES	VFD	60/C.WRITE	
61	4000000004100000000002		CAP	MASTR	
62	0000000000000000000000		DATA	0	
63	0000000000000000000440		VFD	60/SPACESUM	
64	0000000000000000000001		DATA	1	
65	4000000013500000000002	RTOS	CAP	DISSEN	
66	0000000000000000000561		VFD	60/STACK	
67	0000000000000000000000	RTOSN	DATA	0	
70	4000000010400000000002	MOVEOPS	CAP	CAPOUT	
71	0000000000000000000023		VFD	60/C.LOCALC	
72	0000000000000000000000	OPTAR	DATA	0	
73	0000000000000000000000	OPSRC	DATA	0	
74	7777777777777777777777		DATA	-0	
		CINDX	EQU	OPTAR	
75	0000000000000000000003	READENT	VFD	60/C.READ	
76	4000000004100000000002		CAP	MASTR	
77	0000000000000000000000	FILEADR	DATA	0	
100	0000000000000000000000	CMADR	DATA	0	
101	0000000000000000000004		VFD	60/S.ENTRY	
102		FLAGG	BSSZ	1	
103	0000000000000000000000	ERRCALL	DATA	0	.. CALLED WITH ERROR FLAG
104	0000000000000000000106	PRECNVTS	VFD	60/*+2	
105	0000000000000000000144		VFD	60/100	
106		CNVTS	BSS	4	
112	0000000000000000000004	ENTERF	VFD	60/C.WRITE	
113	0000000000000000000024		VFD	60/C.CTEMP	
114	0000000000000000000000	ENTFA	DATA	0	
115	0000000000000000000117		VFD	60/*+2	
116	0000000000000000000001		DATA	1	
117		ENTFC	BSSZ	2	

121	00000000000000000000	ENTFT	DATA	0
122	00000000000000000000		DATA	0
123	00000000000000000004	WRITEIT	VFD	60/C.WRITE
124	40000000410000000002		CAP	MASTR
125	00000000000000000000	FILE	DATA	0
126	00000000000000000000	CM	DATA	0
127	00000000000000000004		VFD	60/S.ENTRY
130	00000000000000000000	HAVEDIDL	DATA	0
131	000000000000000000133	PREBUSY	VFD	60/*+2
132	000000000000000000170		VFD	60/120
133		BSYMSG	BSSZ	2
135	55551123550225233155		DIS	.. IS BUSY .
137		CALLENT	BSSZ	S.ENTRY
143		CALLAREA	BSSZ	100
307	000000000000000000020	BLOCKS	VFD	60/16,60/32
310	000000000000000000040			
311	0000000000000000000400	BLKSIZE	VFD	60/256 DEFAULT BLOCK SIZE
		*		
312	400000000740000000002	CREATE	CAP	CSPROC
313	000000000000000000021		VFD	60/C.CLASS
314	400000000470000000002		CAP	BEADCC
315	000000000000000000000	MAPENTS	DATA	0
316	000000000000000000000	MAPSIZE	DATA	0
317	000000000000000000000	SPFL	DATA	0
320	000000000000000000000	SPEP	DATA	0
321	000000000000000000023		VFD	60/C.LOCALC
		*		
322	400000000670000000002	GETCLIST	CAP	CCLIST
323	000000000000000000000		VFD	60/C.ALLOC
324	000000000000000000023		VFD	60/C.LOCALC
325	000000000000000000000	CLISTL	DATA	0
		*		
326	000000000000000000000	CHGMAP	DATA	0
327	000000000000000000021		VFD	60/C.CLASS
330	000000000000000000000	MAPNUM	DATA	0
331	000000000000000000000	MAPECAP	DATA	0
332	000000000000000000000	MAPFA	DATA	0
333	000000000000000000000	MAPCM	DATA	0
334	000000000000000000000	MAPWC	DATA	0
		*		
335	400000000700000000002	GENFIL	CAP	CFILE
336	000000000000000000000		VFD	60/C.ALLOC
337	000000000000000000000	NEWFILEC	DATA	0
340	000000000000000000003		DATA	3
341	0000000000000000000307		VFD	60/BLOCKS
		*		
342	400000000750000000002	GENCLASS	CAP	CCC
343	000000000000000000000		DATA	0
344	000000000000000000000		DATA	0
		*		
345	400000001020000000002	MOVE	CAP	MVECAP
346	000000000000000000000	FROMCAP	DATA	0
347	000000000000000000000	TOCAP	DATA	0

350	77777777777777777777	DATA	-0
351	400000010400000000002	* MOVEOBJ CAP	CAPOUT
352	000000000000000000002	VFD	60/C.MASTC
353	000000000000000000000	WHERE DATA	0
354	000000000000000000000	OBJECT DATA	0
355	000000000000000000000	* SPACEOUT DATA	0
356	400000014300000000002	SPACEIN CAP	DONATE
357	400000006200000000002	CAP	ALLOC
360	000000000000000000000	VFD	60/C.ALLOC
361	000000000000000000000	HOWMUCH DATA	0
362	400000014300000000002	SPACEOT CAP	DONATE
363	000000000000000000000	VFD	60/C.ALLOC
364	400000006200000000002	CAP	ALLOC
365	000000000000000000000	DATA	0
366	400000016000000000002	* PROBE CAP	PROBE
367	000000000000000000000	PROBCAP DATA	0
370	000000000000000000000	PROBA DATA	0
371	400000012200000000002	* DELBLK CAP	DELBLK
372	000000000000000000000	DBLKCAP DATA	0
373	000000000000000000000	DBLKA DATA	0
374	400000012300000000002	* DELFIL CAP	DELFIL
375	000000000000000000000	DFILCAP DATA	0
376	0000000000000000000400	LISTS VFD	60/*+2
377	0000000000000000000010	DATA	8
400		LISTWORD BSSZ	1
	143	DELAREA EQU	CALLAREA
	143	SNYCHA EQU	CALLAREA
401	000000000000000000000	CREATED DATA	0
402	000000000000000000000	EUSERRA DATA	0
403	400000007600000000002	* SAVEREG CAP	SAVE
404	0000000000000000000405	VFD	60/*+1
405		BSSZ	16
425	400000007700000000002	RESTREG CAP	RESTOR
426	0000000000000000000405	VFD	60/SAVEREG+2
427	400000014500000000002	* RETURNE CAP	MODPC
430	000000000000000000000	RETURNS DATA	0
431	000000000000000000000	SKIPC DATA	0
432	000000000000000000000	RETURNP DATA	0
433	400000012400000000002	* RSHPCAP CAP	REDSHP
434		BSSZ	1
435	0000000000000000000437	VFD	60/SHAPE
436	0000000000000000000001	DATA	1
437		SHAPE BSSZ	1
440	000000000000000000000	* SPACESUM DATA	0

.. CLASS CODE
 .. NUMBER OF OCCURANCES TO SKIP
 .. NEW VALUE OF P CNTR

441		STRDSCR	BSSZ	2	
443		ADDR	BSSZ	1	
444		COUNTX	BSSZ	1	
445		PAR	BSSZ	15	
	445	PARS	EQU	PAR	
464	0000000000000000000003	PFR	VFD	60/C.READ	
465	0000000000000000000024		VFD	60/C.CTEMP	
466	0000000000000000000000	PFA	DATA	0	
467	00000000000000000000472		VFD	60/FILEBUF	
470	0000000000000000000000	PFCNT	DATA	0	
471	0000000000000000000000	ERSPMAD	DATA	0	
472		FILEBUF	BSS	20B	(SEE PF3 + 3)
		*			
512	4000000010000000000002	CAPDIS	CAP	DSPCAP	DISPLAY CAPABILITY
513		CAPDISX	BSSZ	1	
		*			
514	4000000016600000000002	RTNINTER	CAP	USRER	RETURN WITH INTERUPR ERROR
515	0000000000000000000014		VFD	60/E.PANIC	
516		RTNINTEN	BSSZ	1	COMPUTED ERROR NUMBER
		*			
		*			
		*			
517		NREGS	BSSZ	20B	

```

*
537 000000000000000000001 AGAIN DATA 1 FIRST TIME FLAG
*
*
540 400000006300000000002 READINT CAP READ
541 400000000200000000016 VFD 1/1,29/2,30/C.MASTER
542 000000000000000000000 VFD 60/0,60/SPCLX,60/1
543 0000000000000000000551
544 000000000000000000001
*
*
545 400000010000000000002 DSPITF CAP DSPCAP
546 000000000000000000007 VFD 60/C.TTY
*
*
547 400000010300000000002 GETTTY CAP CAPIN
550 000000000000000000016 VFD 60/C.MASTER
551 SPCLX BSSZ 1
552 000000000000000000024 VFD 60/C.CTEMP
*
*
553 400000010000000000002 DSPITY CAP DSPCAP
554 000000000000000000024 VFD 60/C.CTEMP
*
*
555 TTF BSSZ 1 MO T + UNIQUE NAME OF LOCAL TTY
*
*
556 000000000000000000000 TTYNUM DATA 0
557 0000000000000000002541 USERRA VFD 40/FLI
560 051520243100000000000 USER DATA 0LEMPY
561 STACK BSSZ 1
562 CLLRCLS BSSZ 1
563 BSSZ 1
*
*
*
564 000000000000000000017 Q.TLINE VFD 60/C.TLINE
565 Q.TTYPE BSSZ 1 ( TYPE OF LINE COLLECTOR CALL )
566 000000001700000000571 VFD 30/MYTTBFSZ,30/MYTTBF
*
*
567 000000001700000000571 Q.TRTN VFD 30/MYTTBFSZ,30/MYTTBF
570 000000000000000000000 VFD 30/0,30/0
*
*
17 MYTTBFSZ EQU 15
*
571 MYTTBF BSSZ MYTTBFSZ
*
610 MYLNSV7 BSSZ 1
*
611 SCRSZ BSS 0 END OF SCRATCH AREA
*

```

611	40000000630000000002	READSELF	CAP	READ
612	00000000000000000015		VFD	60/C*READCD
613	00000000000000000000		VFD	60/0'60/0.60/SCRSZ
614	00000000000000000000			
615	000000000000000000611			
*				
*				
616	40000000760000000002	INTSAVE	CAP	SAVE
617	00000000000000000032		VFD	60/INTPACK
620	40000000770000000002	INTREST	CAP	RESTOR
621	00000000000000000032		VFD	60/INTPACK
*				
*				
622	40000000760000000002	NSAVE	CAP	SAVE
623	000000000000000000517		VFD	60/NREGS
*				
624	40000000770000000002	NRESTORE	CAP	RESTOR
625	000000000000000000517		VFD	60/NREGS

```

*
*
XJ      MACRO      WHERE,CNT
+      VFD          12/0130B,18/WHERE,30/CNT
      ENDM

*
*
ASCII   MACRO      TEXT
      DIS          ,S+TEXT+S
      ENDM

*
*
XJR      MACRO      LOC,AUTH
+      VFD          12/0130B,18/LOC,12/1,18/1
      VFD          60/AUTH
      ENDM

*
*
CALL     MACRO      LOC
+      SB7          *-1
      JP            LOC
      ENDM

*
*
*
*
*
626      BSSZ      1          PROCESS INITIAL CALL
627      0200000703    JP      NEWINT      NEW INTERRUPT HANDLER
630      0200000712    JP      NEWERR      NEW ERROR HANDLER
*
631      01300006220000000000    ENTRY    XJ      NSAVE
632      5140000006          SA4          CALLTYPE  PICK UP HIDDEN PARAMB
          63240          SB2          X4
633      0720000677          LT          B2,B0,ENTRYZ      BAD HIDDEN PARAM
          6132777773          SB3      B2-NENTVEC
634      0703000677          GT          B3,B0,ENTRYZ      BAD HIDDEN PARAM
          0220000635          JP      ENTRYX+B2
*
635      0200000641    ENTRYX    JP      ENTRYI      BUILDER INITIALIZER CALL
636      0200001113    JP      INIT          BEAD START UP
637      0200001107    JP      BEADGO      USER CALL
640      0200000660    JP      ENTRY5      SPECIAL INTERRUPT PROCESSING ( MAJ PAN )
*
641      BSS      0
          4          NENTVEC    EQU      *-ENTRYX
*
*
*
*
641      01300006110000000000    ENTRYI    XJ      READSELF  SET UP SCRATCH AREA
642      01300005400000000000    XJ      READINT  GET INDEX OF SPECIAL TTY IN MASTER CLIST

```

```

643 5110000551          SA1      SPCLX
                                SX6    X1+3
                                SA6    A1      SPCLX NOW POINTS TO TTY 0
644 54610              XJ      DSPTTF  TTF NOW CONTAINS MOT OF LOCAL TTY
645 01300005450000000000
646 5170000555          SA7      TTF

*
*
*
647 01300005470000000000  ENTRYL  XJ      GETTTY  GET TTY FILE FOR TTY AT TTNUM
650 01300005530000000000      XJ      DSPTTY  GET MOT OF TTY AT TTY NUM
651 5110000555          SA1      TTF
                                BX1    X1-X7  COMPARE WITH LOCAL TTY
                                NZ      X1,++2  NO
652 0311000654          NG      X1,++2  MATCH
                                XJ      RETURNOP ( DONE INITIALIZING )
653 01300024630000000000
*
654 5110000551          SA1      SPCLX  STEP TO NEXT TTY
                                SX6    X1+3
655 54610              SA6    A1
                                SA1    TTNUM  ADVANCE TTNUM
656 7261000001          SX6    X1+1
                                SA6    A1
657 0200000647          JP      ENTRYL

*
*
*
*
*
*
*
*
*
*
660 7160000001          ENTRYS  SX6    I
                                SA6    RTOSN
661 01300000650000000000      XJ      RTOS  READ TOP OF STACK
662 6120000013          SB2    SYSCLSBS BASE OF SYSTEM CLASS CODES
                                SB1    SYSCLSBN COUNT OF SYSTEM CLASS ODES
*
663 0601000671          ENTRYS1 LE      B1,B0,ENTRYS2  SCAN ALL SYSTEM CLASS ODES
                                SX6    B2
664 5160000513          SA6    CAPDISX SET UP TO DISPLAY CAP
665 01300005120000000000      XJ      CAPDIS
666 5120000562          SA2    CLLRCLS  PICK UP CLASS CODE OF CALLER
                                IX1    X2-X7
667 0301000673          ZR      X1,ENTRYS3  FOUND CALLERS CLASS, HENCE SYSTEM
                                SB2    B2+1
670 6111777776          SB1    B1-1
                                JP      ENTRYS1

*
*
*
*
671 7160000001          ENTRYS2  SX6    I

```

5160000103
672 0200002432

SA6
JP

ERRCALL FLAG FOR SPECIAL RETURN
INTERUPT NOW GO TO OLD INTERRUPT CODE

*
*
*

CALLER IS SYSTEM SO DO ERROR RETURN

673 7160000001
5160000516
674 01300006200000000000
675 01300024220000000000
676 01300005140000000000

ENTRYS3

SX6
SA6
XJ
XJ
XJ

RTNINTEN SET ERROR NUMBER FOR MAJOR PANIC
INTREST RESTORE REGISTERS
CLRIL CLEAR INTERRUPT INHIBIT
RTNINTER RETURN WITH MAJOR PANIC ERROR

```

*
*
*
*
677 5100000700      ENTRYZ  SA0      BADHMSG
                                JP      COMMANDD
                                0200001670
*
700 02010455101104040516  BADHMSG  ASCII  (BAD HIDDEN PARAM, BEAD HERE.)
*
*
*
*
*
*
*
*
*
*
703 01300006160000000000  NEWINT  XJ      INTSAVE
704 0130000242700000000000  XJ      SETESM  SET ESM JUST IN CASE INTERRUPT AT NEWERR
*
705 5110000002          SA1      INTDATUM  BEFORE SET II
                                NZ      PICK UP INTERRUPT DATUM
*
                                X1,ENTRYS  MAJOR PANIC
*
706 76600             SX6      B0
                                SA6      RTNINTEN  SET ERROR NUMBER FOR MILD PANIC
707 0130000620000000000000  XJ      INTREST  RESTORE REGISTERS
710 0130000242200000000000  XJ      CLRII   CLEAR INTERRUPT INHIBIT
711 0130000514000000000000  XJ      RTNINTER  RETURN WITH INTERRUPT ERROR
*
*
*
*
*
*
712 0130000242300000000000  NEWERR  XJ      SETII
713 0130000616000000000000  XJ      INTSAVE
714 5110000006          SA1      ERRCLASS  PICK UP ERROR CLAS
                                SX1      X1-E-PANIC
715 0311002326          NZ      X1,ERRORC  NOT INTERRUPT ERROR CLASS, OLD CODE
716 0130000242700000000000  XJ      SETESM  RESET ERROR SELECTION MASK
717 7160000001          SX6      I
                                SA6      ERRCALL  FLAG FOR SPECIAL RETURN
720 0200002432          JP      INTERRUPT  TREAT WITH OLD INTERRUPT CODE

```

```

*
*
*
*
721 76670          DLNOUT  SX6      R7
                        5160000610    SA6      MYLNSV7
722 6170000723    CALL      MYSET
723 64100          SB1      A0
                        6120000144    SB2      100
724 6170000725    CALL      DISLINE
725 6170000726    CALL      CRASCII
726 6170000727    CALL      MYOUT
727 5110000610    SA1      MYLNSV7
                        63710          SB7      X1
730 0270000000    JP        R7

*
*
*
*
731 76670          ALNOUT  SX6      R7
                        5160000610    SA6      MYLNSV7
                        64100          SB1      A0
732 66200          SB2      R0
733 6170000734    CALL      MVT0BF
734 6170000735    CALL      MYOUT
735 5110000610    SA1      MYLNSV7
                        63710          SB7      X1
736 0270000000    JP        R7

*
*
*
*
737 56112          MVFMBF  SA1      B1+B2
                        5120000571    SA2      MYTTBF
                        10622          BX6      X2
740 5061000001    SA6      A1+1
                        73112          SX1      X1+B2

*
*
*
*
741 63360          LX6      60-3      NOW COMPUTE WORD COUNT
                        43203          SB3      FROM PSEUDO CHARACTER COUNT
                        11626          MX2      3
                        20603          BX6      X2*X6
742 0306000743    LX6      3
                        6133000001    ZR      X6,*+1
743 0403000750    SB3      B3+1
                        5022000001    EQ      R0,B3,MVFMBF2

*
*
*
744 10622          SA2      A2+1      MOVE 1ST WORD
                        53610          BX6      X2
                        SA6      X1

```

```

*
745 6133777776      0403000750  MVFMBF1  SB3      R3-1      MOVE SUBSEQUENT WORDS
                                EQ      B0,B3,MVFMBF2
746 5022000001      10622      SA2      A2+1
                                BX6      X2
747 5066000001      0200000745  SA6      A6+1
                                JP      MVFMBF1
                                B7
*
*
* ADDRESS OF STRING DESC IN B1
* RELOC IN B2
*
* MOVES TO MYTTBF
*
751 56112           73112      5021000001  MVTOBF  SA1      R1+B2
                                SX1      X1+B2
                                SA2      A1+1
752 10622           5160000571  BX6      X2
                                SA6      MYTTBF
753 6130000013      53110      SB3      I1
                                SA1      X1
*
754 10611           5066000001  MVTOBF1 BX6      X1
                                SA6      A6+1
755 6133777776      0430000757  SB3      B3-1
                                EQ      R3,B0,MVTOBF2
756 5011000001      0200000754  SA1      A1+1
                                JP      MVTOBF1
*
757 0270000000      MVTOBF2  JP      B7
*
*
* SETS UP WITH NO BLANK COMP
*
760 6140000571      6150000017  MYSET   SB4      MYTTBF
                                SB5      MYTTBFSZ
761 66600           0200001036  SB6      B0
                                JP      STASCII
*
*
* OUTPUTS THE BUFFER
*
762 7160000002      5160000565  MYOUT   SX6      2
                                SA6      Q.TTYPE
763 01300005640001000001  XJR      Q.TLINE,Q.TRTN
765 0270000000      JP      B7

```

Address	Instruction	Register	Operation	Comment
	INSTALL DISPLAY CODE IN AN ASCII LINE			
	POINTS TO 1ST WORD OF DISPLAY CODE	B1		
	COUNT	B2		
	STOPS WHEN COUNT GOES TO ZERO OR ON ZERO CHARACTER			
		B3	CHARS LEFT IN CURRENT WORD	
		X1	CURRENT WORD	
		A1	ADDRESS CURRENT WORD	
		A0	HOLDS RETURN	
		X2	6 BIT MASK	
		X3	WILL HOLD COUNT	
		B2	WILL HOLD A SHIFT COUNT DURING XLATION	
		X4	PORTION OF XLATE TABLE	
766	56070	DISLINE	SA0	
	56110		SA1	
	43266		MX2	
767	6130000012		SB3	
	76320		SX3	
770	0303001001	DISLINE1	ZR	
	0703000772		GT	
771	5011000001		SA1	
	6130000012		SB3	
772	6133777776	DISLINE2	SB3	
	7233777776		SX3	
773	20106		LX1	
	15712		BX7	
	0307001001		ZR	
774	20771		LX7	
	63270		SB2	
	5142001002		SA4	
775	11727		BX7	
	20703		LX7	
	63270		SB2	
	20703		LX7	
776	67202		SB2	
	63272		SB2	
	22424		LX4	
	20413		LX4	
777	43765		MX7	
	15747		BX7	
1000	0200001044		SB7	
	6170000770	DISLINE1	JP	
			PKASCII	

1001 64700
0270000000

*
DISLINE3 SB7
JP

A0
B7

EXIT

MACRO FOR CONSTRUCTIONG CONVERSION TABLE

*
*
*
*
*
TOASC MACRO
* VFD
VFD
ENDM

S,T,U,V,W,X,Y,Z
6/0,7/S,B,7/T,B,7/U,B,7/V,B,7/W,B
7/X,B,7/Y,B,7/Z,B

CONVERSION TABLE

1002 0000412110664
1003 0120512512654
1004 0140613114664
1005 0160713504021
1006 0052261346031
1007 0036100441035
1010 0006733646407
1011 0174021607440

*
*
*
*
DISASC TOASC
TOASC
TOASC
TOASC
TOASC
TOASC
TOASC
TOASC

00,41,42,43,44,45,46,47
50,51,52,53,54,55,56,57
60,61,62,63,64,65,66,67
70,71,72,20,21,22,23,24
25,26,27,30,31,13,15,12
17,10,11,04,35,00,14,16
03,73,75,32,07,77,01,06
76,02,34,36,40,37,76,33

[illegible]

```

1022      56070
           76210
           20201
           73221
1023      63220
           67202
           6122000074
1024      22121
           43271
1025      0601001021
           61111777776
1026      20103
           15712
           0317001017
1027      7170000000
           6170001025
1030      0200001044

```

ОСІВРК

ОТВЕТЫ

SA0
SX2
LX2
SX2
SB2
SB2
SB2
LX1
MX2

DIGIT COUNT IN B1
DATA1 WD IN X1

THE RIGHT MOST 81 DIGITS WILL BE PLACED IN ASCII LINE
WITH LEADING ZEROS REPLACED BY BLANKS

3*COUNT
 X1 NOW

01.00.OCTPK2
ALL DONE

```

*
*
*
*
*
*
1031 56070      BLNKPK  SA0      B7
*
1032 0601001035 BLNKPK1 LE      B1,B0,BLNKPK2
        611177776 SB1      B1-1
1033 7170000000 SX7      BLNKASC
        6170001032 SB7      BLNKPK1
1034 0200001044 JP      BKASCII
*
1035 64700      BLNKPK2 SB7      A0
        0270000000 JP      B7

```

THIS PACKAGE FORMS ASCII LINES

FORM OF A LINE IS A WORD CONTAINING PSEUDO CHARACTER COUNT, COMPRESSED BLANKS COUNTED AS 2 CHARS, FOLLOWED BY WORDS CONTAINING THE SYSTEXT.

IT HAS 4 ENTRY POINTS

STASCII SET UP
B4 = 1ST WORD OF BUFFER (CHAR COUNT WORD)
B5 = TOTAL WORDS IN BUFFER (INCL CHAR CNT)
B6 = 0 NO BLANK COMPRESSION
.NE. 0 BLANK COMPRESSION

PKASCII PACK A CHARACTER FROM X7
BOTTOM 7 BITS ALL THAT ARE LOOKED AT
(IGNORED IF BUFFER TOO FULL)

FNASCII FINISH THE LINE WITHOUT CR

CRASCII FINISH THE LINE WITH CR

THIS PACKAGE MAINTAINS 1ST STATE IN REGISTERS AS FOLLOWS

A5 ADDRESS OF CHAR COUNT WD
X5 ALLOWED NO OF CHARS BEFORE BUFF TOO FULL
A6 ADDRESS OF WD BEFORE NEXT WORD TO STORE
X6 PARTIAL PACKED WORD

B4 BLANK COMPRESSION CONTROL
+1 NO BLANK COMPRESSION
0 NO PREVIOUS BLANKS
-128+K K PREVIOUS BLANKS

B5 PSEUDO CHARACTER COUNT
B6 BITS LEFT IN PARTIAL PACKED WORD
B7 RETURN

X7 CHARACTER, WILL GET MODIFIED
X0 SCRATCH

FREE REGISTERS ARE

A0,A1,X1,A2,X2,A3,X3,A4,X4, B1,B2,B3

[illegible]

```

*
*
*
*
PACK A CHARACTER ROUTINE

1044 0335001056      43065      15770      PKASCII NG      X5,PKASCII4      NOT ENOUGH ROOM
                                MX0
                                BX7
                                GT      B4,B0,PTASCII      MASK THE CHARACTER
                                NO BLANK COMPRESSION

1045 0704001066      *
1046 7207777777      0300001052      PKASCII1 SX0      X7-BLNKASC      CHECK FOR BLANK
                                ZR      X0,PKASCII2      HAVE BLANK
1047 0404001066      EQ      B0,B4,PTASCII      NOT A BLANK + NO PREVIOUS BLANK
1050 7100001051      +      SX0      **1
                                JP      FCASCII      FORCE OUT BLANKS
1051 66400      0200001073      SB4      B0      SET TO NO PREV BLANKS
                                JP      PTASCII      PUT THE CHARACTER
                                *
1052 0404001055      PKASCII2 EQ      B0,B4,PKASCII3      HAVE A BLANK, SEE OF ANY PREV
                                SB4      B4+1      YES, PREV, ADD OT COUNT
1053 0740001056      LT      B4,B0,PKASCII4      COUNT DID NOT OVERFLOW, SO EXIT
                                SB4      B4-1      OVERFLOW
1054 7100001055      +      SX0      BKASCII3
                                JP      FCASCII      FORCE OUT BLANKS
                                *
1055 6140777600      PKASCII3 SB4      -128+1      SET TO 1 BLANK
                                *
1056 0270000000      PKASCII4 JP      B7      EXIT

```

```

*
*
*
*
1057 0640001061      76700      FNASCII  GE      B4,B0,FNASCII1  NO PREVIOUS BLNKS
*                                     SX7      B0      CLEAR X7
1060 7100001061      0200001073  +      SX0      **1
*                                     JP      FCASCII  FORCE OUT PREV BLANKS
*
1061 22666           5066000001      FNASCII1 LX6      B6,X6
*                                     SA6      A6+1
*                                     SX6      B5
1062 54650           76650           SA6      A5
*                                     SX5      B0
*                                     JP      B7
*                                     B7

```

```

*
*
*
*
1063 76070          7170000155  CRASCII  SX0  B7  TERMINATE WITH CR
1064 6170001065      0200001066  +      SX7  CRASC  PUT OUT CR
1065 63700          0200001061  SB7  **1
JP  PTASCII
SB7  X0
JP  FNASCII1  FINISH UP

```

```

*
*
*
*
THIS IS BASIC CHARACTER PUT ROUTINE
1066 20607 12667 PTASCII LX6 7
BX6 X6+X7 INSTALL CHARACTER
1067 7255777776 6166777770 SB6 B6-7 DECREMENT BIT COUNT
SX5 X5-1 DECREMENT INSTALLED CHARACTER COUNT
1070 0406001071 6155000001 SB5 B5+1 INCREMENT PSEUDO CHAR COUNT
EQ B0.B6,PTASCII1 FULL WD
JP R7
*
1071 5066000001 PTASCII1 SA6 A6+1 FULL WD
76600 SX6 B0 SET NOEMPTY
1072 6160000070 SB6 B6 SET BIT COUNT
0270000000 JP R7

```

Address	Value	Label	Operation	Comment
1073	20022	FCASCII	LX0	18
	12007		BX0	X0+X7
	20022		LX0	18
	76770		SX7	B7
1074	12007		BX0	X0+X7
	6144000176		SB4	B4+128-2
1075	0604001103	LE		B4,B0,FCASCII2
	7170000173		SX7	BLNKFLG
1076	6170001077		SB7	*+1
	0200001066		LP	BTASCII
1077	7174000002		SX7	B4+2
1100	6170001101		SB7	*+1
	0200001066		LP	BTASCII
1101	63700	FCASCII1	SB7	X0
	20052		LX0	60-18
	73700		SX7	X0
1102	63400		LX0	60-18
	0240000000		SB4	X0
			LP	B4
1103	7170000000	FCASCII2	SX7	BLNKASC
1104	6170001105		SB7	*+1
	0200001066		LP	BTASCII
1105	0740001101	LT		B4,B0,FCASCII1
	6170001101	SB7		FCASCII1
1106	0200001066	LP		BTASCII

RE SET XJ FOR JIM GRAYS CODE

*
*
*
*
*
*
XJ
+

MACRO
VFD
ENDM

LOC
12/0130B.18/LOC

			LIST	L	
			LIST	R	
		XJ	MACRO	WHERE,CNT	
		+	VFD	12/0130B,18/WHERE,30/CNT	
			ENDM		
1107	01300024230000000000	BEADGO	XJ	SETII	
1110	5140000003		SA4	3	RA OF CALLER
	5150000004		SA5	4	CLIST RA OF CALLER
1111	63240		SB2	X4	
	63350		SB3	X5	
	73640		SX6	X4	
1112	5160000557		SA6	USERRA	
	0200001131		JP	CALLED	
1113	5110000556	INIT	SA1	TTYNUM	
	20102		LX1	2	
	73610		SX6	X1	
1114	5160000055		SA6	WRITEU+2	
	7266000003		SX6	X6+3	
1115	5160000062		SA6	WRITESP+2	
1116	01300024230000000000		XJ	SETII	
1117	01300024270000000000		XJ	SETESM	
1120	5100001125		SA0	HELLO	
1121	6170001122		CALL	OLNOUT	
1122	5100001123	+	SA0	*+1	
	0200001670		JP	COMMANDD	
1123	05162405225525230522		ASCII	(ENTER USER NAME)	
1125	02050104552605222311	HELLO	ASCII	(BEAD VERSION *VER*)	
1127	02050104551005220500	BEADHERE	ASCII	(BEAD HERE)	
1131	7136777762	CALLED	SX3	B6=N.CALLS	
	0323002321		PL	X3=BADCALLX	
1132	0760002321		NO	B6=BADCALLX	
	0260001133		JP	JTABLE2+B6	
1133	0200001164	JTABLE2	JP	READD	
1134	0200001220		JP	WRITED	
1135	0200001261		JP	DELD	
1136	0200001272		JP	CALL	
1137	0200001426		JP	STOP	
1140	0200001227		JP	TTYOUT	
1141	0200001236		JP	TTYIN	
1142	0200001246		JP	CHAROUT	
1143	0200001160		JP	LOCK	8
1144	0200001162		JP	UNLOCK	
1145	6140001244		SB4	TTYRTN	
	0200001571		JP	FIND	10
1146	0200001253		JP	EDIT	11
		*			
1147	0200001150		JP	COPYCL	12
1150		15	BSS	0	
		N.CALLS	EQU	*JTABLE2	

EDIT A SPECIFIED LINE
WITH THE LINE EDITOR
.. COPY BEAD CLIST

1150	76637	COPYCL	SX6	R3+B7	
	5160000071		SA6	MOVEOPS+1	
1151	7160000000		SX6	0	
1152	5160000072	COPYCLL	SA6	OPTAR	
	5160000073		SA6	OPSRC	
1153	01300000700000000000		XJ	MOVEOPS	
1154	5110000072		SA1	OPTAR	
	7261000001		SX6	X1+1	
1155	7276777747		SX7	X6-24	
	0337001152		NG	X7,COPYCLL	
1156	7160000023		SX6	C.LOCALC	
	5160000071		SA6	MOVEOPS+1	
1157	01300024630000000000		XJ	RETURNOP	
1160	01300024570000000000	LOCK	XJ	DIDLE	
1161	01300024630000000000		XJ	RETURNOP	
1162	01300024540000000000	UNLOCK	XJ	UNDIDLE	
1163	01300024630000000000		XJ	RETURNOP	
1164	01300024570000000000	READD	XJ	DIDLE	GET/HANG
1165	7160000001		SX6	1	
	5160000130		SA6	HAVEDIDL	
1166	6140001167		SB4	READD2	
	0200001571		JP	FIND	
1167	56321	READD2	SA3	B2+B1	
	73430		SX4	X3	
	0334001200		NG	X4-BUSY	
1170	43601	CONTINUE	MX6	1	
	20622		LX6	18	
	12663		BX6	X4+X3	
	54630		SA6	A3	
1171	6140001172		SB4	READD3	
	0200001644		JP	UPDATE	
1172	5130000130	READD3	SA3	HAVEDIDL	
	0303001174		ZR	X3+*+2	
1173	01300024540000000000		XJ	UNDIDLE	
1174	7160000000		SX6	0	
	5160000130		SA6	HAVEDIDL	
1175	56321		SA3	B2+B1	
	43073		MX0	59	
	20021		LX0	17	
	11603		BX6	X5+X3	
1176	54630		SA6	A3	
1177	01300024630000000000		XJ	RETURNOP	
1200	5130000130	BUSY	SA3	HAVEDIDL	
	0303001202		ZR	X3+*+2	
1201	01300024540000000000		XJ	UNDIDLE	
1202	01300004030000000000		XJ	SAVEREG	
1203	10611		BX6	X1	
	5160000133		SA6	RSYMSG	
	10622		BX6	X2	
1204	5066000001		SA6	A6+1	
1205	6170001206		CALL	MYSET	
1206	6110000133		SB1	RSYMSG	
	6120000010		SB2	R	

1207	6170001210		CALL	DISLINE	
1210	6110000134		SB1	BSYMSG+1	
		6120000010	SB2	B	
1211	6170001212		CALL	DISLINE	
1212	6110000135		SB1	BSYMSG+2	
		6120000062	SB2	EO	
1213	6170001214		CALL	DISLINE	
1214	6170001215		CALL	CRASCI	
1215	6170001216		CALL	MYOUT	
1216	0200001674		JP	COMMANDX	
1217	7160000000		SX6	0	
		5160000130	SA6	HAVEDIDL	
1220	01300024570000000000	WRITED	XJ	DIDLE	
1221	7160000001		SX6	1	
		5160000130	SA6	HAVEDIDL	
1222	6140001223		SB4	WRITED2	
		0200001644	JP	UPDATE	
1223	5130000130	WRITED2	SA3	HAVEDIDL	
		0303001225	ZR	X3:++2	
1224	01300024540000000000		XJ	UNDIDLE	
1225	7160000000		SX6	0	
		5160000130	SA6	HAVEDIDL	
1226	01300024630000000000		XJ	RETURNOP	
1227	56112	TTYOUT	SA1	R1+B2	
	73612		SX6	X1+B2	
		5160000441	SA6	STRDSCR	RELOCATE STRING POINTER
1230	5011000001		SA1	A1+1	. GET COUNT
		10611	BX6	X1	
1231	7211777633		SX1	X1-100	. BUT LIMIT IT TO 100 CHARS.
1232	0331001233	*	NG	X1:++1	
		7160000144	SX6	100	
1233	5066000001		SA6	A6+1	
		5100000441	SA0	STRDSCR	
1234	6170001235		CALL	ALNOUT	
1235	0200001244		JP	TTYRTN	
		*			
1236	7160000001	TTYIN	SX6	I	(INPUT A LINE)
		5160000565	SA6	Q.TTYPE	
1237	01300005640001000001		XJR	Q.TLINE*Q.TRTN	
1241	76612		SX6	R1+B2	
		5160000441	SA6	STRDSCR	
1242	6110000441		SB1	STRDSCR	
		66200	SB2	R0	
1243	6170001244		CALL	MVFMBS	
		*			
1244	01300006240000000000	TTYRTN	XJ	NRESTORE	
1245	01300024630000000000		XJ	RETURNOP	
		*			
1246	10611	CHAROUT	BX6	X1	
		5160000571	SA6	MYTTBF	
1247	7160000003		SX6	3	(CHAR OUT)
		5160000565	SA6	Q.TTYPE	
1250	01300005640001000001		XJR	Q.TLINE*Q.TRTN	

1252 0200001244

JP TTYRTN

```

*
* EDIT IS CALLED WITH B1 SET TO A STRING DESCRIPTOR AND
* B6 SET TO 11 SPECIFYING A EDIT REQUEST
* TO THE BEAD
* BY THE TIME IT GETS HERE B2 = RA OF CALLER
*
* THE LINE IS FIRST CHECKED FOR VALIDITY
* IT IS TRUNCATED AT THE FIRST NON GRAPHIC CHARACTER
* OR AT 88 CHARACTERS WHICHEVER COMES FIRST
*
* UNHAPPILY IT DOESNT DO BLANK COMPRESSION
*
* UNLIKE GETLINE IT UPDATES THE STRING DESCRIPTOR IN THE
* CALLERS SPACE SO THAT IT IS CORRECT
*
*
* CODE IS NOW MY VERSION ( HES ) TO CALL LINE COLLECTOR

```

1253 6170001254
1254 7160000004
5160000565
1255 01300005640001000001
1257 6170001260
1260 0200001244

```

EDIT CALL MVTOBF
      SX6 4 ( EDIT )
      SA6 Q.TTYPE
      XJR Q.TLINE,Q.TRTN
CALL MVFMBF
JP TTYRTN

```

1261 01300024570000000000
1262 7160000001
5160000130
1263 6140001264
0200001651
1264 76000
56621
6140001223

```

*
* DELD XJ DIDDLE
      SX6 1
      SA6 HAVEDIDL
      SB4 DEL2
      JP EVICT
      SX0 B0
      SA6 B2+B1
      SB4 WRITED2
      JP UPDATE

```

1265 0200001644
1266 01300024540000000000
1267 7160000000
5160000130

```

BADCALL XJ UNDIDDLE
      SX6 0
      SA6 HAVEDIDL
      SA0 *+1
      JP COMMAND

```

1271 02010455232502000000
1272 5130000401
0313002317

```

*
CALL ASCII
      SA3 (BAD SUB)
      NZ CREATED
      XJ X3,CMDERR
      SX6 DIDDLE

```

1273 01300024570000000000
1274 7160000001
5160000130
1275 66700
66200
6110000137

```

      SA6 1
      SB7 HAVEDIDL
      SB2 B0
      SB1 B0
      SB3 CALLENT
      SB4 C.CTEMP
      CALL2

```

1276 6130000024
6140001301

1277	7160000001		SX6	I	
	5160000143		SA6	CALLAREA	
1300	0200001571		JP	FIND	
1301	01300024650000000001	CALL2	XJ	READCALL+1	READ INITIAL PARAMTERS
1302	0200001266		JP	BADCALL	
1303	6130000021		SB3	C.CLASS	
	5110000143		SA1	CALLAREA	
1304	0311001266		NZ	X1,BADCALL	
	5011000002		SA1	A1+2	
1305	5021000001		SA2	A1+1	
	6140001310		SB4	CALL4	
1306	7160000001		SX6	I	
	5160000102		SA6	FLAGG	
1307	0200001571		JP	FIND	
1310	5110000147	CALL4	SA1	CALLAREA+4	NUMBER OF MAP ENTRIES
	7160000000		SX6	0	
1311	5160000102		SA6	FLAGG	
	5021000001		SA2	A1+1	SIZE OF MAP
1312	10611		BX6	X1	
	22702		LX7	X2	
	5160000315		SA6	MAPENTS	
1313	5170000316		SA7	MAPSIZE	
	5012000001		SA1	A2+1	SPFL
1314	5021000001		SA2	A1+1	SPFP
	10611		BX6	X1	
	22702		LX7	X2	
1315	5160000317		SA6	SPFL	
	5170000320		SA7	SPFP	
1316	5022000001		SA2	A2+1	
	10622		BX6	X2	
1317	5160000325		SA6	CLISTL	
	7160777776		SX6	-1	
1320	5160000330		SA6	MAPNUM	
1321	01300003220000000000		XJ	GETCLIST	
1322	5022000001		SA2	A2+1	GET SIZE OF LOCAL FILE
	10622		BX6	X2	
1323	5160000052		SA6	FILELEN	
1324	01300024720000000000		XJ	GETFIL	
1325	01300024770000000000		XJ	MAKEBLK	
1326	01300003120000000000		XJ	CREATE	CREATE SUB PROC
1327	7160000001		SX6	I	
	5160000401		SA6	CREATED	
1330	5110000330	MAKEMAP	SA1	MAPNUM	
	7261000001		SX6	X1+1	
1331	54610		SA6	A1	
	7160000024		SX6	C.CTEMP	
1332	5160000331		SA6	MAPFCAP	
	5012000001		SA1	A2+1	
1333	5021000001		SA2	A1+1	
	0331001352		NG	X1,ENDMAP	
1334	6130000024		SB3	C.CTEMP	
	6140001337		SB4	MAP2	
1335	0311001571		NZ	X1,FIND	

1336	5160000331		SX6	C.SCRFIL	
1337	5012000001	MAP2	SA6	MAPFCAP	
			SA1	A2+1	FILE ADDRESS
			SA3	A1+1	CM ADDRESS
1340	5043000001		SA4	A3+1	WORD COUNT
			SA2	A4+1	ROF
1341	0324001342	+	PL	X4,*+1	.. SENSE OLD MAPS
			SX4	X4	
			LX4	X4-X3	.. COMPUTE WORD COUNT
1342	10611		BX6	X1	
			LX7	X3	
			SA6	MAPFA	
1343	5170000333		SA7	MAPCM	
			BX6	X4	
1344	7170000127		SX7	M.MPCHRW	
			SX0	C.MASIC	
1345	0302001346	+	ZR	X2,*+1	. IF FLAG = 0; ENTRY IS READ-WRITE
			SX7	M.MPCHRO	. OTHERWISE, ITS READ ONLY
1346	43101		MX1	1	
			LX7	30	
			BX7	X7+X0	
			BX7	X7+X1	
1347	5160000334		SA6	MAPWC	
			SA7	CHGMAP	
1350	01300003260000000000		XJ	CHGMAP	
1351	0200001330		JP	MAKEMAP	
1352	5022777776	ENDMAP	SA2	A2-1	
			SX6	13	
1353	5160000072		SA6	CINDX	
			SX6	C.CTEMP	
1354	5160000073		SA6	OPERC	
1355	5012000001	FILLCLST	SA1	A2+1	
			ZR	X1,FILLED	
1356	5021000001		SA2	A1+1	
			SB3	C.CTEMP	
1357	6140001360		SB4	FILL2	
			JP	FIND	
1360	5150000072	FILL2	SA5	CINDX	
			SX6	X5+1	
1361	54650		SA6	A5	
1362	01300000700000000000		XJ	MOVEOPS	
1363	0200001355		JP	FILLCLST	
1364	01300025020000000000	FILLED	XJ	MAKECALL	MAKE CALL OPERATION
1365	5110002510		SA1	MOVECAPS	
1366	73610	FILLED	SX6	X1	
			AX1	30	
			SX7	X1	
			LX1	31	
1367	0321001371		PL	X1,NOTIND	
			SX1	C.MASTC	
1370	20736		LX7	30	
			MX0	1	
			BX7	X7+X0	

1371	12771	NOTIND	BX7	X7+X1
1371	5160000072		BSS	0
	5170000073		SA6	OPTAR
1372	01300000700000000000		SA7	OPSRC
1373	5011000001		XJ	MOVEOPS
	0321001366		SA1	A1+1
1374	5110000130		PL	X1,FILLED
	0301001376		SA1	HAVEDIDL
1375	01300024540000000000		ZR	X1,*+2
1376	7160000000		XJ	UNDIDLE
	5160000130		SX6	0
1377	5140000450	RECALL2	SA6	HAVEDIDL
	5054000001		SA4	PAR+3
1400	5110000401		SA5	A4+1
	0301001423		SA1	CREATED
1401	01300024640000000000		ZR	X1,NOSUBP
1402	5100001127	GOODPCNT	XJ	CALLSUB
	5110000401		SA0	BEADHERE
1403	0301001670		SA1	CREATED
1404	01300014120000000000		ZR	X1.COMMANDD
1405	76600		XJ	KILLSUB
	54610		SX6	B0
1406	01300014140000000000		SA6	A1
1407	01300014170000000000		XJ	KILLSCRB
1410	01300014210000000000		XJ	KILLSCRF
1411	0200001670		XJ	KILLCLST
			JP	COMMANDD
1412	400000014700000000002	*		
1413	000000000000000000021	KILLSUB	CAP	DELSUB
1414	400000012200000000002		VFD	A0/C.CLASS
1415	000000000000000000022	KILLSCRB	CAP	DELBLK
1416	000000000000000000000		VFD	A0/C.SCRFIL
1417	400000012300000000002		DATA	0 .. FILE ADDRESS 0
1420	000000000000000000022	KILLSCRF	CAP	DELFIL
1421	400000013700000000002		VFD	A0/C.SCRFIL
1422	000000000000000000023	KILLCLST	CAP	DELCL
1423	5100001424		VFD	A0/C.LOCALC
	0200001670	NOSUBP	SA0	*+1
1424	15175523250220221703		JP	COMMANDD
1426	5100001427	STOP	ASCII	(NO SUBPROCESS)
	0200001670		SA0	*+1
1427	57572324172000000000		JP	COMMANDD
1430	5130000446	SETBLK	ASCII	(.STOP)
	6140001432		SA3	PARS+1
1431	0200001543		SB4	SETBLK2
1432	73610	SETBLK2	JP	CNVTA
	5160000311		SX6	X1
1433	5100002312		SA6	BLKSIZE
	0200001670		SA0	NULLLINE
1434	7160000001	PONE	JP	COMMANDD
	5160000444		SX6	1
1435	0200001446		SA6	COUNTX
			JP	DSPYL

1436	5130000446	DISPLAY	SA3	PARS+1
			ZR	X3,PONE
1437	6140001440		SB4	DSPY2
	0303001434		JP	CNVTA
1440	5033000001	DSPY2	SA3	A3+1
	0200001543		SX6	X1
1441	5160000443		SA6	ADDR
	73610		SB4	DSPY3
1442	0200001543		JP	CNVTA
1443	73610	DSPY3	SX6	X1
1444	0316001445	+	NZ	X6,++1
	7160000001		SX6	1
1445	5160000444		SA6	COUNTX
1446	5110000443	DSPYL	SA1	ADDR
	7261000001		SX6	X1+1
1447	54610		SA6	A1
	53310		SA3	X1
	6170001451		SB7	DSPYE
1450	0200001560		JP	CNVTB
1451	5100000104	DSPYE	SA0	PRECNVTS
	5110000444		SA1	COUNTX
1452	7261777776		SX6	X1-1
	43767		MX7	60-5
	15667		DX6	-X7*X6
1453	54610		SA6	A1
	0306001672		ZR	X6:COMMANDA
1454	0336001672		NG	X6:COMMANDA
1455	6170001456		CALL	ALNOUT
1456	0200001446		JP	DSPYL
1457	5110000446	PF	SA1	PARS+1
	5120000447		SA2	PARS+2
1460	6170000024		SB7	C:CTEMP
	66200		SB2	B0
1461	6110000143		SB1	DELAREA
	66300		SB3	B0
1462	6140001463		SB4	PF1
	0200001571		JP	FIND
1463	5130000450	PF1	SA3	PARS+3
	6140001465		SB4	PF2
1464	0200001543		JP	CNVTA
1465	73610	PF2	SX6	X1
	5160000466		SA6	PEA
1466	5033000001		SA3	A3+1
	6140001470		SB4	PF3
1467	0200001543		JP	CNVTA
1470	73610	PF3	SX6	X1
1471	0316001472	+	NZ	X6,++1
	7160000001		SX6	1
1472	7216777757		SX1	X6-208
1473	0331001474	+	NG	X1,++1
	7160000020		SX6	208
1474	5160000470		SA6	PECNT
	5160000444		SA6	COUNTX

ASSUME 0 IS 1

ASSUME 0 IS 1

RESTRICT COUNT TO 208 (SEE FILEBUF)

1475	01300004640000000000		XJ	PFR	READ FILE
1476	7160000472		SX6	FILEBUF	
	5160000443		SA6	ADDR	
1477	0200001446		JP	DSPLY	
1500	5110000446	EC	SA1	PARS+1	
	10611		BX6	X1	
1501	5160000117		SA6	ENTFC	
	54360		SA3	A6	
1502	6140001503		SB4	EC1	
	0200001543		JP	CNVTA	
1503	10611	EC1	BX6	X1	
	5160000114		SA6	ENTFA	
1504	5110000447		SA1	PARS+2	
	10611		BX6	X1	
1505	5160000117		SA6	ENTFC	
	54360		SA3	A6	
1506	6140001507		SB4	EC2	
	0200001543		JP	CNVTA	
1507	5120000114	EC2	SA2	ENTFA	
	20236		LX2	30	
	12621		BX6	X2+X1	
1510	5160000117		SA6	ENTFC	
	5130000450		SA3	PARS+3	
1511	6140001512		SB4	EC3	
	0200001543		JP	CNVTA	
1512	5120000117	EC3	SA2	ENTFC	
	10622		BX6	X2	
	53610		SA6	X1	
1513	5100002312		SA0	NULLLINE	
	0200001670		JP	COMMAND	
1514	01300024570000000000	ENTER	XJ	DIDLE	
1515	7160000001		SX6	1	
	5160000130		SA6	HAVEDIDL	
1516	5110000446		SA1	PARS+1	
	5120000447		SA2	PARS+2	
1517	6110000143		SB1	DELAREA	
	66200		SB2	B0	
1520	6130000024		SB3	C.CTEMP	
	66700		SB7	B0	
1521	6140001522		SB4	ENT2	
	0200001571		JP	FIND	
1522	5130000452	ENT2	SA3	PARS+5	
	6140001524		SB4	ENT3	
1523	0200001543		JP	CNVTA	
1524	10611	ENT3	BX6	X1	
	5160000114		SA6	ENTFA	
1525	5140000450		SA4	PARS+3	
	10644		BX6	X4	
1526	5160000121		SA6	ENTFT	
	54360		SA3	A6	
1527	6140001530		SB4	ENT4	
	0200001543		JP	CNVTA	
1530	10611	ENT4	BX6	X1	

5160000117
1531 5130000451 10633
1532 5160000121 54360
1533 6140001534 0200001543
1534 5120000117 20236 36612
1535 54620
1536 01300001120000000000
1537 5110000130 0301001541
1540 01300024540000000000
1541 7160000000 5160000130
1542 5100002312 0200001670

ENT5

SA6 ENTFC
SA3 PARS+4
BX6 X3
SA6 ENTFT
SA3 A6
SB4 ENT5
JP CNVTA
SA2 ENTFC
LX2 30
IX6 X1+X2
SA6 A2
XJ ENTERF
SA1 HAVEDIDL
ZR X1+2
XJ UNIDLE
SX6 0
SA6 HAVEDIDL
SA0 NULLLINE
JP COMMAND

1543	43066		CNVTA	MX0	54	
	7120000000			SX2	0	
1544	7110000000			SX1	0	
1545	0303001552		CNVTA1	ZR	X3,CNVTA2	
	20306			LX3	6	
	15630			BX6	-X0*X3	
1546	13336			BX3	X3-X6	
	7266777744			SX6	X6-1R0	
1547	0336001551			NG	X6,ADDRA	
	20203			LX2	3	
	36226			IX2	X2+X6	
1550	0400001545			EQ	CNVTA1	
1551	5120000557		ADDRA	SA2	USERRA	
1552	36112		CNVTA2	IX1	X1+X2	
	7120000000			SX2	0	
1553	5033000001			SA3	A3+1	
	0313001545			NZ	X3,CNVTA1	
1554	0240000000			JP	B4	
1555	43071		CNVUCT2	MX0	57	
	15630			BX6	-X0*X3	
	7266000020			SX6	X6+16	
1556	21303			AX3	3	
	15330			BX3	-X0*X3	
	7233000020			SX3	X3+16	
1557	20307			LX3	7	
	12663			BX6	X6+X3	
	0270000000			JP	B7	
1560	43771		CNVTB	MX7	57	
	6146777773			SB4	-4	
1561	6120000005		CNVTB1	SB2	5	
	7160000000			SX6	0	
1562	20303		CNVTB2	LX3	3	
	15437			BX4	-X7*X3	
	7244000020			SX4	X4+16	
1563	20607			LX6	7	
	12664			BX6	X6+X4	
	6122777776			SB2	B2-1	
1564	0520001562			NZ	B2,CNVTB2	
	20625			LX6	21	
1565	5164000112			SA6	CNVTS+4+B4	
	6144000001			SB4	B4+1	
1566	0540001561			NZ	B4,CNVTB1	
	7170000155			SX7	155B	
1567	20716			LX7	14	
	12667			BX6	X6+X7	
	54660			SA6	A6	
1570	0270000000			JP	B7	
1571	43052		FIND	MX0	42	
	66500			SB5	B0	
	76500			SX5	B0	
	43760			MX7	48	
1572	11101			BX1	X0*X1	
	11227			BX2	X2*X7	

.. ADD CR
.. RETURN

76621
1573 5160000100
0312001575
1574 5120000560
1575 73650
6155000001
1576 5160000077
7255000004
1577 01300000750000000001
1600 02000001621
1601 56321
5043000001
11303
1602 11447
13331
13442
1603 0313001575
0314001575
1604 7165777776
71700000002
1605 43001
20636
12660
12667
1606 5160000346
76637
1607 5160000347
1610 01300003450000000000
1611 54330
20366
21366
1612 0313001620
50340000002
1613 21336
76700
0303001620
1614 5160000367
5170000370
1615 01300003660000000000
1616 36773
54770
0306001615
1617 37773
20336
12773
54730
1620 0240000000
1621 7150001024
6150000205
1622 73650
7255000004
1623 6155000001
5160000077

FINDL

SRCHB

RTNFIND
NOENTRY

FINDE

SX6
SA6
NZ
SA2
SX6
SB5
SA6
SX5
XJ
JP
SA3
SA4
BX3
BX4
BX3
BX4
NZ
NZ
SX6
SX7
MX0
LX6
BX6
BX6
SA6
SX6
SA6
XJ
SA3
LX3
AX3
NZ
SA3
AX3
SX7
ZR
SA6
SA7
XJ
IX7
SA7
ZR
IX7
LX3
BX7
SA7
JP
SX5
SB5
SX6
SX5
SB5
SA6

B2+B1
CMADR
X2.FINDL
USER
X5
B5+1
FILEADR
X5+S.ENTRY
READENT,1
NOENTRY
B2+B1
A3+1
X0*X3
X4*X7
X3-X1
X4-X2
X3.FINDL
X4.FINDL
B5-1
C.MASTC
I
30
X6+X0
X6+X7
FROMCAP
B3+B7
TOCAP
MOVE
A3
B4
B4
X3.RTNFIND
A4+2
B0
B0
X3.RTNFIND
PROBCAP
PROBA
PROBE
X7+X3
A7
X6.SRCHB
X7-X3
30
X7+X3
A3
B4
M.NULL*4
M.NULL
X5
X5+S.ENTRY
B5+1
FILEADR

RETURN

1624	01300000750000000001		XJ	READENT,1	
1625	0200002523		JP	FULLDIR	
1626	56321		SA3	B2+B1	
	11303		BX3	X0+X3	
	0313001622		NZ	X3+FINDE	
1627	7165777776		SX6	B5-1	
	5160000353		SA6	WHERE	
1630	76637		SX6	B3+B7	
	5160000343		SA6	GENCLASS+1	
1631	5160000354		SA6	OBJECT	
	5160000337		SA6	NEWFILEC	
1632	5150000102		SA5	FLAGG	
	0315001635		NZ	X5+NEWCLASS	
1633	01300003350000000000		XJ	GENFIL	
1634	7130000000		SX3	0	FILE TYPE
	0200001637		JP	FINDEE	
1635	01300003420000000000	NEWCLASS	XJ	GENCLASS	
1636	7130000005		SX3	5	CLASS CODE TYPE
1637	01300003510000000000	FINDEE	XJ	MOVEDBJ	
1640	7165777776		SX6	B5-1	
	12726		BX7	X2+X6	
	12613		BX6	X1+X3	
1641	54630		SA6	A3	
	5076000001		SA7	A6+1	
	76600		SX6	B0	
1642	5067000001		SA6	A7+1	
	5130000311		SA3	BLKSIZE	
1643	73630		SX6	X3	
	20636		LX6	30	
	5066000001		SA6	A6+1	
1644	76712	UPDATE	SX7	B1+B2	
	5237000001		SA3	X7+1	
	43060		MX0	48	
1645	15630		BX6	-X0+X3	
	20602		LX6	2	* S.ENTRY
	5160000125		SA6	FILE	
1646	5170000126		SA7	CM	
1647	01300001230000000000	FORCEU	XJ	WRITEIT	* UPDATE DIRECTORY ENTRY
1650	0240000000		JP	B4	RETURN
1651	7150000000	EVICT	SX5	0	FILE ADDRESS
	76412		SX4	B1+B2	
1652	5244000003		SA4	X4+3	GET BLOCK SIZE
	21436		AX4	30	GET BLOCK SIZE
	76673		SX6	B7+B3	
1653	5160000434		SA6	RSHPCAP	
1654	01300004330000000000		XJ	RSHP	
1655	5110000437		SA1	SHAPE	
	5160000367		SA6	PROBCAP	
1656	5160000372		SA6	DBLKCAP	
	5160000375		SA6	DFILCAP	
1657	10655	EVICT1	BX6	X5	
	5160000370		SA6	PROBA	
1660	5160000373		SA6	DRLKA	

1661 01300003660000000000

1662 39554

0306001666

37661

1663 0336001657

1664 01300003740000000000

1665 0240000000

1666 01300003710000000000

1667 0200001657

XJ

IX5

ZR

IX6

NG

XJ

JP

XJ

JP

PROBE

X5+X4

X6, EVICT2

X6-X1

X6, EVICT1

DELFIL

BA

DELBLK

EVICT1

CHECK IF THIS IS IT

RETURN

EVICT2

```

*
*
*
1670 6170001671      COMMANDD CALL  DLNOUT
1671 0200001674      JP      COMMANDX

*
1672 6170001673      COMMANDA CALL  ALNOUT
1673 0200001674      JP      COMMANDX

*
1674 46000      COMMANDX NO
1675 7160000001  INONLY SX6      INPUT A LINE
                               SA6
                               Q.TTYPE
                               Q.TLINE,Q.TRTN
1676 01300005640001000001  XJR      RESTREG
1700 01300004250000000000  XJ
1701 5130000572      SA3      MYTTBF+1
                               SA0      0
1702 43065      MX0      53
                               SB5      60
                               SB4      8
1703 6140000010      LX3      4
                               SX6      B0
                               SA6      PAR
                               DUP      10+1
                               SA6      A6+1
1712 20307      CMDL      LX3      7
                               BX7      -X0*X3
                               LX7      60-3
1713 5247001735      SA4      X7+TTYCDC      BEGIN FANCY EXPENSIVE XLATION
                               BX7      X0*X7
                               LX7      3
1714 63670      SB6      X7      CHAR DISPLACEMENT
                               LX7      3      8 * CHAR DISPLACEMENT
                               SB6      -B6
1715 22464      SB6      B6+X7      7 * CHAR DISPLACEMENT
                               LX4      B6,X4
                               LX4      4+7
1716 7274777721      BX4      -X0*X4      REST OF SHIFT
                               SX7      X4-1R      NOW HAVE THE CHARACTER
1717 0540001721      SB4      B4-1
                               NZ      B4,CHKX7
1720 20304      SA3      A3+1
                               LX3      4
1721 0307001724      SB4      8
                               ZR      X7,ENDPAR
                               ZR      X4,ENDPAR
1722 20606      LX6      6
                               BX6      X6+X4
                               SB5      R5-6
1723 0200001712      JP      CMDL
1724 22656      ENDPAR LX6      X6,B5
                               SA6      PAR+A0
1725 5000000001      SA0      A0+1
                               SX6      A0-9
                               7060777766

```

1726 0326002315
0304001731
1727 6150000074 76600
1730 0200001712
1731 6140000032
1732 0440002317 5130000445
1733 13443 5144002006
6144777776
1734 0314001732
0240001755

PL X6,TOOMANY
ZR X4,GETCMD
SB5 60
SX6 B0
JP CMDL
SB4 N,CMD
SA3 PAR
ZR B4,CMDERR
SA4 B6+CMDBCD-1
BX4 X4-X3
SB4 B4-1
NZ X4,CHKCMD
JP JTABLEC+B4

*

*

*

TOCDC

*

MACRO

S,T,U,V,W,X,Y,Z

VFD

4/0,7/S+B,7/T+B,7/U+B,7/V+B

VFD

7/W+B,7/X+B,7/Y+B,7/Z+B

ENDM

*

*

*

TTYCDC

TOCDC

55,66,71,60,53,74,67,64

TOCDC

51,52,47,45,56,46,57,50

TOCDC

33,34,35,36,37,40,41,42

TOCDC

43,44,63,77,72,54,73,75

TOCDC

76,01,02,03,04,05,06,07

TOCDC

10,11,12,13,14,15,16,17

TOCDC

20,21,22,23,24,25,26,27

TOCDC

30,31,32,61,76,62,70,65

TOCDC

64,01,02,03,04,05,06,07

TOCDC

10,11,12,13,14,15,16,17

TOCDC

20,21,22,23,24,25,26,27

TOCDC

30,31,32,51,52,55,55,55

TOCDC

55,55,55,55,55,55,55,55

TOCDC

55,55,55,55,55,00,55,55

TOCDC

55,55,55,55,55,55,55,55

TOCDC

55,55,55,55,55,55,55,55

*

*

*

JTABLEC

JP

CALLCMD

JP

CALLCMD

JP

SETBLX

JP

SNATCH

JP

SNATCH

JP

DELETE

JP

DELETE

JP

CONTINUE

JP

READD

JP

SETUSER

JP

ENTER

1755 0200002262
1756 0200002262
1757 0200001430
1760 0200002264
1761 0200002264
1762 0200002301
1763 0200002301
1764 0200001170
1765 0200001164
1766 0200002240
1767 0200001514

Line	Address	Hex	Label	Comment
1770	0200001436	JP	DISPLAY	
1771	0200002231	JP	RECALL	
1772	0200001244	JP	TTYRTN	
1773	0200002313	JP	STOPBEAD	
1774	0200002220	JP	VIEW	
1775	0200001457	JP	PF	
1776	0200001560	JP	EC	
1777	0200002112	JP	CLEAN	
2000	0200002073	JP	RECOVER	
2001	0200002041	JP	CLEAR	
2002	0200002064	JP	RESTORE	
2003	0200002115	JP	LIST	
2004	0200002164	JP	SPACE	
2005	0200002155	JP	TRIM	
2006	0200002440	JP	BYEBEAD	
2007	0301141400000000000000	DATA	CMDBCD	
2010	0300000000000000000000	DATA	OLCALL	
2011	0214170313000000000000	DATA	OLC	
2012	2316012403100000000000	DATA	OLBLOCK	
2013	2300000000000000000000	DATA	OLSNATCH	
2014	0405140524050000000000	DATA	OLIS	
2015	1300000000000000000000	DATA	OLDELETE	
2016	0317162411162505000000	DATA	OLK	
2017	2422310000000000000000	DATA	OLCONTINUE	
2020	2523052200000000000000	DATA	OLTRY	
2021	0500000000000000000000	DATA	OLUSER	
2022	2000000000000000000000	DATA	OLE	
2023	2205030114140000000000	DATA	OLP	
2024	2205242522160000000000	DATA	OLRECALL	
2025	2324172000000000000000	DATA	OLRETURN	
2026	2611052700000000000000	DATA	OLSTOP	
2027	2006000000000000000000	DATA	OLVIEW	
2030	0503000000000000000000	DATA	OLPF	
2031	2025220705000000000000	DATA	OLC	
2032	2205031726052200000000	DATA	OLPURGE	
2033	0514050122000000000000	DATA	OLRECOVER	
2034	2205232417220500000000	DATA	OLCLEAR	
2035	1417071725240000000000	DATA	OLRESTORE	
2036	2320010305000000000000	DATA	OLLOGOUT	
2037	2422111500000000000000	DATA	OLSPACE	
2040	0231050205010400000000	DATA	OLTRIM	
		EQU	OLBYEBEAD	
2041	5110000446	SA1	CMDBCD-UTABLEC	
	0301002057	ZR	BAR+1	* GET NAME
2042	5120000447	SA2	X1,CLEAR1	* CLEAR DIDDLE
	0312002044	NZ	BAR+2	* GET USER NAME
2043	5120002537	SA2	X2,**2	
2044	0130002457000000000000	XJ	OPERATE	* IF ZERO, USER OPERATE
2045	7160000001	SX6	DIDDLE	* GET DIRECTORY
	5160000130	SA6	I	
2046	6110000143	SB1	HAVEDIDL	* SET FLAG
	6130000024	SB3	DELAREA	* SCRATCH
2047	6140002051	SB4	C.CTEMP	
			CLEAR3	* RETURN

66200
66700
2050 0400001571
2051 5130000130 0303002053
2052 01300024540000000000
2053 13666 54630
2054 013000244700000000001
2055 0200002062
2056 0400002054
2057 013000246100000000001
2060 0200002062
2061 0400002057
2062 5100002063 0200001670
2063 03140501220504000000
2064 5110000103 0301002071
2065 76600 54610
2066 013000062000000000000
2067 013000207000000000000
2070 000000000000000000012
2071 013000062000000000000
2072 013000246300000000000
2073 5110000446 0301002110
2074 5120000447 0312002076
2075 5120002537
2076 013000245700000000000
2077 7160000001 5160000130
2100 6110000143 66200
66700
2101 6130000024 6140002103
2102 0400001571
2103 5130000130 0303002105
2104 013000245400000000000
2105 13666 54630
2106 013000245100000000000
2107 0400002111
2110 013000245400000000000
2111 5100002312 0400001670
2112 013000252500000000000

SB2
SB7
EQ
CLEAR3 SA3
ZR
XJ
BX6
SA6
XJ
JP
EQ
CLEAR4
XJ
JP
EQ
CLEAR1
XJ
JP
EQ
CLEAR5
SA0
JP
ASCII
RESTORE SA1
ZR
SX6
SA6
XJ
XJ
*
SPRETN VFD
*
RESTORE2 XJ
XJ
RECOVER SA1
ZR
SA2
NZ
SA2
XJ
SX6
SA6
SB1
SB2
SB7
SB3
SB4
EQ
RECOVER2 SA3
ZR
XJ
BX6
SA6
XJ
EQ
RECOVER1 XJ
RECOVER3 SA0
EQ
CLEAN XJ

R0
B0
B0
FIND * GET EVENT CHANNEL
HAVEDIDL
X3,**2
UNDIDLE
X6-X6
A3
CLR.1
CLEAR5
CLEAR4 * CLEAR EVENT CHANNEL
CLR.1
CLEAR5
CLEAR1 * GET ALL THE DIDDLES
**1
COMMANDD
CLEARED
ERRCALL
X1.RESTORE2
B0 .. CLEAR FLAG
A1
INTREST
SPRETN
A0/C.SPRET
INTREST
RETURNOP RETURN
PAR+1 * GET NAME
X1.RECOVER1 * IF ZERO, DIDDLE
PAR+2 * USER NAME
X2,**2
OPERATE * IF ZERO, USER OPERATE
DIDLE * GET DIRECTORY
1
HAVEDIDL * SET FLAG
DELAREA
B0
B0
C-CTEMP
RECOVER2
FIND * GET EVENT CHANNEL
HAVEDIDL
X3,**2
UNDIDLE
X6-X6
A3
RECOVER
RECOVER3
UNDIDLE
NULLLINE
COMMANDD
FIXPC

2113	01300024240000000000		XJ	JUMPRET	
2114	5100002312		SA0	NULLLINE	INCASE AM TOP
	02000001670		JP	COMMANDD	
2115	01300024570000000000	LIST	XJ	DIDLE	
2116	6110000143		SB1	DELAREA	
	61200000000		SB2	0	
2117	6170000024		SB7	C.CTEMP	
	61300000000		SB3	0	
2120	5110002535		SA1	NULL	
	5120002537		SA2	OPERATE	
2121	6140002122		SB4	LISTL	
	02000001571		JP	FIND	
2122	01300000750000000001	LISTL	XJ	READENT.1	
2123	0200002141		JP	LOGEDOUT	
2124	5110000560		SA1	USER	
	5120000144		SA2	DELAREA+1	
2125	5130000077		SA3	FILEADR	
	72630000004		SX6	X3+4	
2126	54630		SA6	A3	
	43660		MX6	48	
	11262		BX2	X6*X2	
	13221		BX2	X2-X1	
2127	0312002122		NZ	X2*LISTL	
	5110000143		SA1	DELAREA	
2130	21302		AX3	2	
	73730		SX7	X3	
	71600000002		SX6	C.MASTC	
2131	20736		LX7	30	
	43001		MX0	1	
	12770		BX7	X7+X0	
	12776		BX7	X7+X6	
2132	7160000024		SX6	C.CTEMP	
	5160000347		SA6	TOCAP	
2133	5170000346		SA7	FROMCAP	
	0301002122		ZR	X1*LISTL	
2134	43066		MX0	54	
	15010		BX0	-X0*X1	
	0310002122		NZ	X0*LISTL	
2135	01300003450000000000		XJ	MOVE	BRING IN CAP
2136	6140002137		SB4	**1	
	02000001651		JP	EVICT	
2137	7160000000		SX6	0	
	5160000143		SA6	DELAREA	
2140	6140002122		SB4	LISTL	
	02000001644		JP	UPDATE	
2141	01300024540000000000	LOGEDOUT	XJ	INDIDLE	
2142	6170002143		CALL	MYSET	
2143	6110000560		SB1	USER	
	61200000010		SB2	8	
2144	6170002145		CALL	DISLINE	
2145	6170002146		CALL	CRASCII	
2146	6170002147		CALL	MYOUT	
2147	5100002153		SA0	LISTM	

2150 10611 5110002536
5160000560
2151 01300000530000000000
2152 0200001670
2153 14170707050455172524
2155 01300025310000000000
2156 5110000143
43036
15010
2157 21136
37610
14766
2160 5170000355
5160000361
2161 0316002170
2162 5100002163
0200001670
2163 32052217000000000000
2164 5130000446
6140002166
2165 0200001543
2166 10611
10766
5170000355
2167 5160000361
2170 01300024570000000000
2171 5110002535
5120002537
2172 66200
66300
6170000024
2173 6110000143
2174 6140002175
0200001571
2175 5110000355
5140000146
2176 37641
0336002215
54640
2177 6140002200
0200001644
2200 5110000355
0321002204
2201 14611
5160000365
2202 01300003620000000000
2203 0400002205
2204 01300003560000000000
2205 7160000003
5160000060
2206 01300000600000000000
2207 5110000355

LISTM
TRIM

+

SPACE

SPACE2

GOSPACE

+

+

SPCIN
SPCIN2

SA1
BX6
SA6
XJ
JP
ASCII
XJ
SA1
MX0
BX0
AX1
IX6
BX7
SA7
SA6
NZ
SA0
JP
ASCII
SA3
SB4
JP
BX6
BX7
SA7
SA6
XJ
SA1
SA2
SB2
SB3
SB7
SB1
SB4
JP
SA1
SA4
IX6
NG
SA6
SB4
JP
SA1
PL
BX6
SA6
XJ
EQ
XJ
SX6
SA6
XJ
SA1

DEFAULTU
X1
USER
WRITEU
COMMANDD
(LOGGED OUT)
DSPSPACE
DELAREA
30
-X0*X1
30
X1-X0
-X6
SPACEOUT
HOWMUCH
X6,GOSPACE
*+1
COMMANDD
(ZERO)
PARS+1
SPACE2
CNVTA
X1
X6
SPACEOUT
HOWMUCH
DIDLE
NULL
OPERATE
B0
B0
C-CTEMP
DELAREA
*+1
FIND
SPACEOUT
DELAREA+3
X4-X1
X6,TOOMUCH
A4
*+1
UPDATE
SPACEOUT
X1,SPCIN
-X1
SPACEOUT+3
SPACEOT
SPCIN2
SPACEIN
C-READ
WRITESP
WRITESP
SPACEOUT

:: SPACE RESERVED
:: -UNUSED SPACE

. SET UP FOR DONATION IN REVERSE

2210	36612	5120000440	
	54620		
		7160000004	
2211	5160000060		
2212	01300000600000000000		
2213	0130000245400000000000		
2214	51000002312		
	02000001670		
2215	0130000245400000000000	TOOMUCH	
2216	51000002217		
	02000001670		
2217	24171755152503100000		
2220	51300000446	VIEW	
	61400002222		
2221	02000001543		
2222	73610	VIEW2	
2223	03160002224	+	
	71600000001		
2224	51600000067		
2225	0130000065000000000000		
2226	71600000561		
	51600000443		
2227	71600000001		
	51600000444		
2230	02000001446		
2231	0130000223400000000000	RECALL	
2232	0130000242400000000000		
2233	02000001377		
2234	4000000014500000000002	SETPCNT	
2235	4000000004700000000002		
2236	7777777777777777777776		
2237	0000000000000000001377		
2240	51100000446	SETUSER	
	51200000560		
2241	10022		
	10611		
	51600000560		
2242	0130000005300000000000		
2243	51300002536		
	13223		
2244	03020002255		
	10600		
2245	51600000133		
2246	61700002247		
2247	61100000133		
	61200000010		
2250	61700002251		
2251	61100002260		
	61200000024		
2252	61700002253		
2253	61700002254		
2254	61700002255		

SA2	SPACESUM
IX6	X1+X2
SA6	A2
SX6	C.WRITE
SA6	WRITESP
XJ	WRITESP
XJ	UNDIDLE
SA0	NULLLINE
JP	COMMANDD
XJ	UNDIDLE
SA0	**1
JP	COMMANDD
ASCII	(TOO MUCH)
SA3	PARS+1
SB4	VIEW2
JP	CVTA
SX6	X1
NZ	X6.**+1
SX6	1
SA6	R10SN
XJ	R10S
SX6	STACK
SA6	ADDR
SX6	1
SA6	COUNTX
JP	OSPYL
XJ	SETPCNT
XJ	JUMPRET
JP	RECALL2
CAP	MODPC
CAP	BEADCC
DATA	-1
VFD	60/RECALL2
SA1	PAR+1
SA2	USER
BX0	X2
BX6	X1
SA6	USER
XJ	WRITEU
SA3	DEFAULTU
BX2	X2-X3
ZR	X2.NOCNE
BX6	X0
SA6	RSYMSG
CALL	MYSET
SB1	RSYMSG
SB2	R
CALL	DISLINE
SB1	WASON
SB2	20
CALL	DISLINE
CALL	CRASCII
CALL	MYOUT

JUMP BACK
INCASE AM TOP

2255	5100002256	NOONE	SA0	REMEMBER
	0200001670		JP	COMMANDD
2256	22051505150205225524	REMEMBER	ASCII	(REMEMBER TO LOGOUT)
2260	5555527012355171655	WASON	ASCII	(WAS ON)
2262	5110000446	CALLCMD	SA1	PAR+1
	5120000447		SA2	PAR+2
2263	0200001272		JP	CALL
2264	01300024570000000000	SNTCH	XJ	DIDLE
2265	7160000001		SX6	1
	5160000130		SA6	HAVEDIDL
2266	5110000446		SA1	PAR+1
	5120000447		SA2	PAR+2
2267	66200		SB2	B0
	6110000143		SB1	SNTCHA
	66300		SB3	B0
2270	6170000024		SB7	C.CTEMP
	6140002272		SB4	SNTCH2
2271	0200001571		JP	FIND
2272	5110000143	SNTCH2	SA1	SNTCHA
	43673		MX6	59
	20621		LX6	17
2273	11661		BX6	X6*X1
	54610		SA6	AI
	6140002275		SB4	SNTCH3
2274	0200001644		JP	UPDATE
2275	5130000130	SNTCH3	SA3	HAVEDIDL
	0303002277		ZR	X3**2
2276	01300024540000000000		XJ	UNDIDLE
2277	5100002312		SA0	NULLLINE
	7160000000		SX6	0
2300	5160000130		SA6	HAVEDIDL
	0200001670		JP	COMMANDD
2301	01300024570000000000	DELETE	XJ	DIDLE
2302	7160000001		SX6	1
	5160000130		SA6	HAVEDIDL
2303	6110000143		SB1	DELAREA
	66200		SB2	B0
2304	6130000024		SB3	C.CTEMP
	66700		SB7	B0
2305	6140002307		SB4	DELT2
	5110000446		SA1	PAR+1
2306	5120000447		SA2	PAR+2
	0200001571		JP	FIND
2307	6140002310	DELT2	SB4	DELT3
	0200001651		JP	EVICT
2310	7160000000	DELT3	SX6	0
	5160000143		SA6	DELAREA
2311	6140002275		SB4	SNTCH3
	0200001644		JP	UPDATE
2312	17130000000000000000	NULLLINE	ASCII	OK
2313	01300024220000000000	STOPBEAD	XJ	CLRII
2314	0000000000		PS	
2315	5100002316	TOOMANY	SA0	*+1

2316	24175515011631000000		JP	COMMANDD
2317	5100002320	CMDERR	ASCII	(TO MANY)
	0200001670		SA0	*+1
2320	75751617757500000000		JP	COMMANDD
2321	01300004030000000000	BADCALLX	ASCII	(22NO22)
2322	5100002323		XJ	SAVEREG
	0200001670		SA0	*+1
2323	02010455010324000000		JP	COMMANDD
2324	5100002325	BADENTRY	ASCII	(BAD ACT)
	0200001670		SA0	*+1
2325	23312355052222000000		JP	COMMANDD
2326	01300024230000000000	ERRORC	ASCII	(SYS ERR)
2327	01300024270000000000		XJ	SETII
2330	7170000001		XJ	SETESM .. SET ESM
	5170000103		SX7	1
2331	5110000003		SA7	ERRCALL
	73610		SA1	3
2332	5160000402		SX6	X1
2333	0516002334	+	SA6	FUSERRA
	43701		NZ	X6,*+1
	54770		MX7	1
2334	5130000006		SA7	A7
2335	6170002336	+	SA3	6
	0200001555		SB7	*+1
2336	5130000007		JP	CNVOC12
	20652		SA3	7
	10766		LX6	6*7
2337	6170002340	+	BX7	X6
	0200001555		SB7	*+1
2340	7150000014		JP	CNVOC12
	20543		SX5	14B
	12775		LX5	5*7
2341	20625		BX7	X7+X5
	12776		LX6	5*7
	21525		BX7	X7+X6
	12775		AX5	21
2342	5130000007		BX7	X7+X5
	21322		SA3	7
2343	6170002344	+	AX3	18
	0200001555		SB7	*+1
2344	12776		JP	CNVOC12
	5170000400		BX7	X7+X6
2345	5110000130		SA7	LISTWORD
	0301002350		SA1	HAVEDIDL
2346	01300024540000000000		ZR	X1+ERROR2
2347	7160000000		XJ	UNDIDL
	54610		SX6	0
2350	5100000376	ERROR2	SA6	AT
2351	6170002352		SA0	LIST8
2352	5100002375		CALL	ALNOUT
2353	6170002354		SA0	ERRMSG
2354	5110000006		CALL	DLNOUT
			SA1	6

	7211777771		SX1	X1-6	
2355	0301002367		ZR	X1,RTRNERR	WATCH OUT FOR SPACE EXHAUSTED
2356	7160000000	MAKEIT2	SX6	0	
	5160000102		SA6	FLAGG	
2357	5110000471		SA1	ERSPMAD	
	0311002365		NZ	X1,DELIT	
2360	5110000006		SA1	6	
	5120000007		SA2	7	
2361	01300024000000000000		XJ	MAKEERSP	
2362	7160000001		SX6	1	
	5160000471		SA6	ERSPMAD	
2363	01300024100000000000		XJ	MAKEERSP	
2364	01300024170000000000		XJ	CALLERSP	
2365	01300024200000000000	DELIT	XJ	DELERSP	
2366	7160000000		SX6	0	
	5160000471		SA6	ERSPMAD	
2367	01300024220000000000	RTRNERR	XJ	CLRIT	
2370	5110000402		SA1	USERRA	
	73610		SX6	X1	
2371	5160000557		SA6	USERRA	
	0311001675		NZ	X1,INONLY	
2372	5100002373	*	SA0	*+1	
	0200001670		JP	COMMANDD	
2373	0205010455052221722		ASCII	(BEAD ERROR)	
2375	5505222172255575755	ERRMSG	ASCII	(ERROR .. BEAD HERE)	

2400	40000000740000000002	MAKEERSP	CAP	OSPROC	
2401	40000000570000000002		CAP	ERRORC	
2402	40000000470000000002		CAP	BEADCC	
2403	00000000000000000001		VFD	60/1,60/50,60/2000B,60/32	
2404	000000000000000000062				
2405	000000000000000002000				
2406	000000000000000000040				
2407	000000000000000000001		VFD	60/C.BCLIST	
2410	400000012600000000002	MAKEERP	CAP	MPCHRO	
2411	400000005700000000002		CAP	ERRORC	
2412	000000000000000000000		DATA	0	
2413	400000005600000000002		CAP	ERROR	
2414	000000000000000000000		DATA	0,0,2000B	
2417	400000006000000000002	CALLERSP	CAP	ERROR	
2420	400000014700000000002	DELEERSP	CAP	DELSUB	
2421	400000005700000000002		CAP	ERRORC	
2422	400000015100000000002	CLRII	CAP	CLRIB	
2423	400000015100000000002	SETII	CAP	CLRIB	.. SHOULD BE SETIIB TO INHIBIT INTERRUPTS
2424	400000013200000000002	JUMPRET	CAP	JUMP	
2425	400000004700000000002		CAP	BEADCC	
2426	77777777777777777776		DATA	-1	JUMP TO FIRST INCARNATION
2427	400000010600000000002	SETESM	CAP	FSNLOC	
2430	000000000000000002431		VFD	60/*+1	
2431	77777777777777777777		VFD	60/-0	
2432	5110000003	INTERURT	SA1	3	
	73610		SX6	X1	
2433	51600000557		SAB	USERRA	
2434	013000242200000000000		XJ	CLRII	
2435	5100002436	*	SA0	*+1	
	0200001670		JP	COMMAND	
2436	20011611035557575502		ASCII	(PANIC .. BEAD HERE)	
		*			
		*			
2440	013000244300000000000	BYEBEAD	XJ	FIXPCBY	FORCE TO BYEBEADP
2441	013000242400000000000		XJ	JUMPRET	
2442	013000244300000000000	BYEBEADP	XJ	RETURNOP	NOW RETURN TO BUILDER
		*			
		*			
2443	400000014500000000002	FIXPCBY	CAP	MODPC	
2444	400000004700000000002		CAP	BEADCC	
2445	77777777777777777776		DATA	-1	
2446	000000000000000002442		VFD	60/BYEBEADP	
		*			
		*			
2447	400000015200000000002	CLR	CAP	GETEVE	
2450	000000000000000000024		VFD	60/C.CTEMP	
2451	000000000000000000005	RECVER	VFD	60/C.SENDE	
2452	000000000000000000024		VFD	60/C.CTEMP	
2453	000000000000000000003		VFD	60/3	* EVENT
2454	000000000000000000005	UNDIDLE	VFD	60/C.SENDE	
2455	400000004500000000002		CAP	SYSLOC	
2456	000000000000000000003		VFD	60/3	EVENT

2457	0000000000000000000006	DIDLE	VFD	60/C.HANG	
2460	4000000045000000000002		CAP	SYSLOC	
2461	4000000015200000000002	CLRD	CAP	GETEVF	
2462	4000000045000000000002		CAP	SYSLOC	
2463	4000000011000000000002	RETURNOP	CAP	RETURN	
2464	0000000000000000000020	CALLSUR	VFD	60/C.CALLSP	
2465	0000000000000000000003	READCALL	VFD	60/C.READ	
2466	0000000000000000000024		VFD	60/C.CTEMP	
2467	0000000000000000000000		DATA	0	
2470	00000000000000000000143		VFD	60/CALLAREA	
2471	00000000000000000000144		VFD	60/100	
2472	4000000007000000000002	GETFIL	CAP	CFILE	
2473	0000000000000000000000		VFD	60/C.ALLOC	
2474	0000000000000000000022		VFD	60/C.SCRFIL	
2475	0000000000000000000001		VFD	60/1	
2476	0000000000000000000052		VFD	60/FILELEN	
2477	4000000007100000000002	MAKEBLK	CAP	CBLK	
2500	0000000000000000000022		VFD	60/C.SCRFIL	
2501	0000000000000000000000		VFD	60/0	FILE ADDRESS
2502	4000000010700000000002	MAKECALL	CAP	MKOPR	
2503	0000000000000000000000		VFD	60/C.ALLOC	
2504	0000000000000000000020		VFD	60/C.CALLSP	
2505	0000000000000000000000		VFD	60/0	
2506	0000000000000000000021		VFD	60/C.CLASS	
2507	0000000000000000000000		DATA	0	
		MOVECAP	MACRO	FROM,TO,I	
		+	VFD	1/0,1/I,28/C.FROM,30/TO	
			ENDM		
2510	0000000002000000000002	MOVECAPS	MOVECAP	CALLSP,2	
2511	0000000000000000000000		MOVECAP	ALLOC,0	
2512	2000000004700000000007		MOVECAP	BEADCC,7,1	
2513	2000000005000000000001		MOVECAP	CALLBD,1,1	
2514	0000000002300000000012		MOVECAP	LOCALC,10	
2515	0000000002200000000014		MOVECAP	SCRFIL,12	
2516	0000000002100000000015		MOVECAP	CLASS,13	
2517	0000000000300000000003		MOVECAP	READ,3	
2520	0000000000400000000004		MOVECAP	WRITE,4	
2521	0000000000500000000005		MOVECAP	SENDE,5	
2522	0000000000600000000006		MOVECAP	HANG,6	
2523	5100002524	* FULDIR	NEXT WORD	MUST BE NEGATIVE	
	0200001670		SA0	*+1	
2524	55062514140000000000		JP	COMMANDD	
2525	4000000145000000000002	FIXPC	ASCII	(FULL)	
2526	4000000047000000000002		CAP	MODPC	
2527	7777777777777777777776		CAP	BEADCC	
2530	0000000000000000001402		DATA	-1	
			VFD	60/GOODPCNT	
2531	4000000162000000000002	* DSPSPACE	CAP	DSPAB	
2532	0000000000000000000000		VFD	60/C.ALLOC	
2533	000000000000000000143		VFD	60/DELAREA	
2534	0000000000000000000005		VFD	60/5	
2535	1625141400000000000000	NULL	DATA	0LNULL	

2536	05152024310000000000	DEFAULTU	DATA	0LEMPY
2537	17200522012405000000	OPERATE	DATA	0LOPERATE
	47	C.BEADCC	EQU	M.BEADCC
	50	C.CALLBD	EQU	M.CALLBD
		#		
		#		
2540	00000000000000000001		DATA	1
2541	00000000000000000001	FL	DATA	1
		#		
		#		

0

END

36260

STORAGE USED
6600 ASSEMBLY

3714 STATEMENTS
21.189 SECONDS

487 SYMBOLS
1474 REFERENCES

3 TYPE ERROR DUPLICATE MACRO DEFINITION. NEW ONE OVERRIDES.
OCCURRED ON PAGES 6, 33, 34

ADDR	443	12/02 L	41/07 S	41/14	42/03 S	54/23 S
ADDRA	1551	44/09	44/13 L			
AGAIN	537	13/02 L				
ALNOUT	731	19/20 L	36/35	41/29	48/08	56/51
BADCALL	1266	37/38 L	38/05	38/08		
BADCALLX	2321	34/30	34/31	56/06 L		
BADENTRY	2324	56/10 L				
BADHMSG	700	18/05	18/08 L			
BEADGO	1107	15/43	34/06 L			
BEADHERE	1127	34/28 L	40/18			
BLKSIZE	311	10/17 L	40/48 S	46/27		
BLNKASC	0	24/26	25/11	27/04 D	28/10	32/34
BLNKFLG	173	27/05 D	32/17			
BLNKPK	1031	25/07 L				
BLNKPK1	1032	25/09 L	25/12			
BLNKPK2	1035	25/09	25/15 L			
BLOCKS	307	10/15 L	10/45			
BSYMSG	133	10/11 L	35/48 S	35/52	36/02	36/05
BUSY	1200	35/25	35/43 L			54/44 S
BYEBEAD	2440	50/15	58/35 L			54/46
BYEBEADP	2442	58/37 L	58/43			
CALL	1272	34/36	37/44 L	55/07		
CALLAREA	143	10/14 L	11/31	11/32	38/02 S	38/07
CALLCMD	2262	49/43	49/44	55/05 L	38/15	59/10
CALLED	1131	34/13	34/29 L			
CALLENT	137	10/13 L	37/51			
CALLERSP	2417	57/13	58/14 L			
CALLSUB	2464	40/17	59/06 L			
CALLTYPE	6	9/04 D	15/34			
CALL2	1301	37/53	38/04 L			
CALL4	1310	38/11	38/15 L			
CAPDIS	512	12/14 L	16/42			
CAPDISX	513	12/15 L	16/41 S			
CHAROUT	1246	34/40	36/49 L			
CHGMAP	326	10/33 L	39/24 S	39/25		
CHKCMD	1732	49/08 L	49/12			
CHKX7	1721	48/40	48/44 L			
CINDX	72	9/36 D	39/29 S	39/38		
CLEAN	2112	50/08	51/53 L			
CLEAR	2041	50/10	50/43 L			
CLEAR1	2057	50/44	51/12 L	51/14		
CLEAR3	2051	50/53	51/04 L			
CLEAR4	2054	51/09 L	51/11			
CLEAR5	2062	51/10	51/13	51/15 L		
CLISTL	325	10/31 L	38/31 S			
CLLRCLS	562	13/32 L	16/43			
CLR	2447	51/09	58/46 L			
CLRD	2461	51/12	59/03 L			
CLRII	2422	17/09	18/25	55/51	57/17	58/17 L
CLSTSZ	25	7/19	8/08 L			58/29
CM	126	10/06 L	46/37 S			
CMADR	100	9/41 L	45/02 S			
CMDBCD	2007	49/09	50/16 L	50/42		

CMDERR	2317	37/45	49/08	56/03 L					
CMDL	1712	48/25 L	48/49	49/05					
CNVOCT2	1555	44/19 L	56/25	56/30	56/41				
CNVTA	1543	40/46	41/09	41/45	42/18	42/44	43/07	53/22	
		41/04	41/40	42/10	42/25	42/52	44/01 L	54/16	
CNVTA1	1545	44/04 L	44/12	44/17					
CNVTA2	1552	44/04	44/14 L						
CNVTR	1560	41/19	44/28 L						
CNVTB1	1561	44/30 L	44/42						
CNVTB2	1562	44/32 L	44/38						
CNVTS	106	9/47 L	44/40 S						
COMMANDA	1672	41/26	41/27	48/07 L					
COMMANDD	1670	18/06	40/27	42/30	51/52	54/09	56/01	57/23	
		34/25	40/39	43/19	52/03	54/12	56/04	58/31	
		37/42	40/42	48/04 L	53/05	55/02	56/08	59/42	
		40/20	40/50	51/16	53/18	55/32	56/11		
COMMANDX	1674	36/10	48/05	48/08	48/10 L				
CONTINUE	1170	35/26 L	49/50						
COPYCL	1150	34/47	35/01 L						
COPYCLL	1152	35/04 L	35/10						
COUNTX	444	12/03 L	40/52 S	41/13 S	41/21	41/53 S	54/25 S		
CRASC	155	27/06 D	30/05						
CRASCI	1063	19/12	30/05 L	36/09	52/52	54/53			
CREATE	312	10/19 L	38/40						
CREATED	401	11/33 L	37/44	38/42 S	40/15	40/19			
C.ALLOC	0	7/34 L	10/42	11/14	59/21	59/50			
		10/29	11/11	59/13	59/30				
C.BCLIST	1	7/35 L	58/08						
C.BEADCC	47	59/31	60/03 D						
C.BEADCD	15	7/52 L	14/02						
C.CALLBU	50	59/32	60/04 D						
C.CALLSP	20	8/02 L	59/06	59/22	59/29				
C.CLASS	21	8/03 L	10/20	10/34	38/06	40/30	59/24	59/35	
C.CTEMP	24	8/06 L	13/19	38/46	39/35	50/52	52/32	55/38	59/08
		9/49	13/23	38/51	41/32	51/40	53/32	58/47	
		12/07	37/52	39/30	42/38	52/07	55/16	58/49	
C.HANG	6	7/40 L	59/01	59/39					
C.LOCALC	23	8/05 L	9/32	10/26	10/30	35/11	40/37	59/33	
C.MASTC	2	7/36 L	10/41	11/22	13/16	40/31	58/09	58/23	59/17
		9/17	10/47	11/26	13/22	40/34	58/10	58/40	59/20
		9/22	10/51	11/36	14/01	40/36	58/12	58/41	59/44
		9/26	11/03	11/39	14/08	45/20	58/14	58/46	59/45
		9/31	11/04	11/42	14/10	52/27	58/15	58/52	59/49
		9/39	11/09	11/47	14/14	54/30	58/16	59/02	
		10/04	11/10	12/14	14/17	54/31	58/17	59/03	
		10/19	11/13	12/17	39/16	58/01	58/18	59/04	
		10/21	11/15	13/05	39/50	58/02	58/20	59/05	
		10/28	11/18	13/12	40/29	58/03	58/21	59/12	
C.MASTER	16	7/53 L	13/06	13/17					
C.READ	3	7/37 L	9/38	12/06	53/50	59/07	59/36		
C.SCRFIL	22	8/04 L	39/01	40/32	40/35	59/14	59/18	59/34	
C.SENDE	5	7/39 L	58/48	58/51	59/38				
C.SPRET	12	7/44 L	51/25						

C.TLINE	17	8/01 L	13/37						
C.TTY	7	7/41 L	13/13						
C.WRITE	4	7/38 L	9/16	9/21	9/48	10/03	54/04	59/37	
DBLKA	373	11/24 L	46/53 S						
DBLKCAP	372	11/23 L	46/49 S						
DEFAULTU	2536	53/01	54/40	60/01 L					
DELAREA	143	11/31 D	42/36	51/37	52/16	52/43 S	53/33	55/36	59/51
		41/34	50/51	52/05	52/24	53/08	53/37	55/47 S	
DELBLK	371	11/22 L	47/08						
DELD	1261	34/35	37/29 L						
DELERSP	2420	57/14	58/15 L						
DELETE	2301	49/48	49/49	55/33 L					
DELFIL	374	11/26 L	47/06						
DELIT	2365	57/06	57/14 L						
DELT2	2307	55/40	55/44 L						
DELT3	2310	55/44	55/46 L						
DEL2	1264	37/32	37/34 L						
DFILCAP	375	11/27 L	46/50 S						
DIDLE	2457	35/14	36/13	37/46	50/48	52/04	55/08	59/01 L	
		35/18	37/29	42/31	51/34	53/27	55/33		
DISASC	1002	21/40	22/17 L						
DISLINE	766	19/11	21/20 L	36/02	36/05	36/08	52/51	54/49	54/55
DISLINE1	770	21/26 L	21/52						
DISLINE2	772	21/27	21/32 L						
DISLINE3	1001	21/26	21/36	22/02 L					
DISPLAY	1436	41/01 L	50/01						
DLNOUT	721	19/05 L	34/24	48/05	56/53				
DSPSPACE	2531	53/07	59/49 L						
DSPITF	545	13/12 L	16/04						
DSPITTY	553	13/22 L	16/10						
DSPYE	1451	41/18	41/20 L						
DSPYL	1446	40/53	41/14 L	41/29	42/04	54/26			
DSPY2	1440	41/03	41/05 L						
DSPY3	1443	41/08	41/10 L						
EC	1500	42/05 L	50/07						
EC1	1503	42/09	42/11 L						
EC2	1507	42/17	42/19 L						
EC3	1512	42/24	42/26 L						
EDIT	1253	34/45	37/21 L						
ENDMAP	1352	38/50	39/27 L						
ENOPAR	1724	48/44	48/45	48/50 L					
ENTER	1514	42/31 L	49/53						
ENTERF	112	9/48 L	43/12						
ENTFA	114	9/50 L	42/12 S	42/19	42/46 S				
ENTFC	117	9/53 L	42/07 S	42/15 S	42/22 S	42/26	43/01 S	43/08	
ENTFT	121	10/01 L	42/49 S	43/04 S					
ENTRY	631	7/18	15/33 L						
ENTRY1	641	15/41	15/52 L						
ENTRYL	647	16/09 L	16/23						
ENTRYS	660	15/44	16/33 L	18/20					
ENTRYS1	663	16/39 L	16/48						
ENTRYS2	671	16/39	16/53 L						
ENTRYS3	673	16/45	17/06 L						

ENTRYX	635	15/39	15/41 L	15/47					
ENTRYZ	677	15/36	15/38	18/05 L					
ENT2	1522	42/40	42/42 L						
ENT3	1524	42/43	42/45 L						
ENT4	1530	42/51	42/53 L						
ENT5	1534	43/06	43/08 L						
ERRCALL	103	9/44 L	17/01 S	18/38 S	51/18	56/16 S			
ERRCLASS	6	9/05 D	18/33						
ERRMSG	2375	56/51	57/25 L						
ERRORC	2326	18/35	56/13 L						
ERROR2	2350	56/45	56/49 L						
ERSPMAD	471	12/11 L	57/05	57/11 S	57/16 S				
EUSERRA	402	11/34 L	56/19 S	57/18					
EVICT	1651	37/33	46/40 L	52/41	55/45				
EVICT1	1657	46/51 L	47/05	47/09					
EVICT2	1666	47/03	47/08 L						
E.PANIC	14	9/09 D	12/18	18/34					
FCASCII	1073	28/14	28/23	29/08	32/08 L				
FCASCII1	1101	32/24 L	32/37	32/38					
FCASCII2	1103	32/15	32/34 L						
FILE	125	10/05 L	46/36 S						
FILEADR	77	9/40 L	45/07 S	45/53 S	52/17				
FILEBUF	472	12/09	12/12 L	42/02					
FILELEN	52	9/15 L	38/37 S	59/16					
FILLCLST	1355	39/32 L	39/42						
FILLED	1364	39/33	39/43 L						
FILLED1	1366	39/45 L	40/07						
FILL2	1360	39/36	39/38 L						
FIND	1571	34/44	38/03	38/53	41/37	44/48 L	51/42	53/35	55/43
		35/22	38/14	39/37	42/41	51/03	52/12	55/18	
FINDE	1622	45/50 L	46/05						
FINDEE	1637	46/16	46/19 L						
FINDL	1579	45/03	45/05 L	45/17	45/18				
FIXPC	2525	51/53	59/44 L						
FIXPCBY	2443	58/35	58/40 L						
FL	2541	7/17	7/28	13/29	60/08 L				
FLAGG	102	9/43 L	38/13 S	38/17 S	46/12	57/04 S			
FNASCII	1057	29/05 L							
FNASCII1	1061	29/05	29/10 L	30/10					
FORCEU	1647	46/38 L							
FROMCAP	346	10/52 L	45/25 S	52/34 S					
FULLDIR	2523	46/02	59/41 L						
GENCLASS	342	10/47 L	46/09 S	46/17					
GENFIL	335	10/41 L	46/14						
GETCLIST	322	10/28 L	38/34						
GETCMD	1731	49/02	49/06 L						
GETFIL	2472	38/38	59/12 L						
GETTTY	547	13/16 L	16/09						
GOODPCNT	1402	40/18 L	59/47						
GOSPACE	2170	53/16	53/27 L						

HAVEDIDL	130	10/08 L	35/43	36/22 S	40/08	43/17 S	51/43	55/35 S
		35/20 S	36/12 S	37/31 S	40/12 S	50/50 S	55/10 S	56/44
		35/32	36/15 S	37/40 S	42/33 S	51/04	55/26	
		35/36 S	36/18	37/48 S	43/13	51/36 S	55/31 S	
HELLO	1125	34/22	34/27 L					
HOWMUCH	361	11/12 L	53/15 S	53/26 S				
INIT	1113	15/42	34/14 L					
INONLY	1675	48/11 L	57/21					
INTDATUM	2	9/08 D	18/19					
INTERUPT	2432	17/02	18/39	58/26 L				
INTPACK	32	9/06 D	14/09	14/11				
INTREST	620	14/10 L	17/08	18/24	51/22	51/27		
INTSAVE	616	14/08 L	18/16	18/32				
JTABLEC	1755	49/13	49/43 L	50/42				
JTABLE2	1133	34/32	34/33 L	34/49				
JUMPRET	2424	52/01	54/28	58/20 L	58/36			
KILLCLST	1421	40/26	40/36 L					
KILLSCR8	1414	40/24	40/31 L					
KILLSCRF	1417	40/25	40/34 L					
KILLSUB	1412	40/21	40/29 L					
LIST	2115	50/12	52/04 L					
LISTL	2122	52/11	52/13 L	52/23	52/35	52/38	52/44	
LISTM	2153	52/53	53/06 L					
LISTWORD	400	11/30 L	56/43 S					
LIST8	376	11/28 L	56/49					
LOCK	1160	34/41	35/14 L					
LOGEDOUT	2141	52/14	52/46 L					
MAKEBLK	2477	38/39	59/17 L					
MAKECALL	2502	39/43	59/20 L					
MAKEERMP	2410	57/12	58/09 L					
MAKEERSP	2400	57/09	58/01 L					
MAKEIT2	2356	57/03 L						
MAKEMAP	1330	38/43 L	39/26					
MAPCM	333	10/38 L	39/13 S					
MAPENTS	315	10/22 L	38/21 S					
MAPFA	332	10/37 L	39/12 S					
MAPFCAP	331	10/36 L	38/47 S	39/02 S				
MAPNUM	330	10/35 L	38/33 S	38/43				
MAPSIZE	316	10/23 L	38/22 S					
MAPWC	334	10/39 L	39/23 S					
MAP2	1337	38/52	39/03 L					
MOVE	345	10/51 L	45/28	52/39				
MOVECAPS	2510	39/44	59/29 L					
MOVEOBJ	351	11/03 L	46/19					
MOVEOPS	70	9/31 L	35/02 S	35/06	35/12 S	39/41	40/05	
MVFM8F	737	19/36 L	36/45	37/26				
MVFM8F1	745	20/02 L	20/07					
MVFM8F2	750	19/49	20/03	20/09 L				
MVTOBF	751	19/25	20/17 L	37/22				
MVTOBF1	754	20/25 L	20/30					
MVTOBF2	757	20/28	20/32 L					
MYLNSV7	610	13/49 L	19/06 S	19/13	19/21 S	19/26		
MYOUT	762	19/13	19/26	20/45 L	36/10	52/53	55/01	

MYSET	760	19/08	20/37 L	35/52	52/48	54/46			
MYTTBF	571	13/39	13/41	13/47 L	19/37	20/21 S	20/37	36/50 S	48/15
MYTTBFSZ	17	13/39	13/41	13/45 D	13/47	20/38			
M.ACAP	116	4/28 D							
M.ADDOPT	117	4/29 D							
M.ADDORD	141	4/47 D							
M.ALLOC	62	3/53 D	11/10	11/15					
M.BDAT	163	5/12 D							
M.BEAD	42	3/33 D							
M.BEADCC	47	3/40 U	10/21	54/31	58/03	58/21	58/41	59/45	60/03
M.BLKCAP	164	5/13 D							
M.CAGEN	171	5/18 D							
M.CALLBD	50	3/41 D	60/04						
M.CALLSC	54	3/47 D							
M.CAPIN	103	4/17 D	13/16						
M.CAPOUT	104	4/18 D	9/31	11/03					
M.CBLK	71	4/07 D	59/17						
M.CCC	75	4/11 D	10/47						
M.CCCLOA	142	4/48 D							
M.CCLIST	67	4/05 D	10/28						
M.CERROR	60	3/51 D	58/14						
M.CEVCH	73	4/09 D							
M.CFILE	70	4/06 D	10/41	59/12					
M.CGEN	172	5/19 D							
M.CHKBLK	121	4/31 D							
M.CHMPRO	201	5/26 D							
M.CHMPRW	200	5/25 D							
M.CLRIB	151	5/02 D	58/17	58/18					
M.COPYOP	120	4/30 D							
M.CPROC	72	4/08 D							
M.CRALBK	144	4/50 D							
M.CSPROC	74	4/10 D	10/19	58/01					
M.DELAB	153	5/04 D							
M.DELBLK	122	4/32 D	11/22	40/31					
M.DELCL	137	4/65 D	40/36						
M.DELFIL	123	4/33 D	11/26	40/34					
M.DELSUB	147	4/53 D	40/29	58/15					
M.DESECH	156	5/07 D							
M.DISK	46	3/38 D							
M.DISMAP	131	4/39 D							
M.DISPOP	165	5/14 D							
M.DISPST	134	4/42 D							
M.DISSEN	135	4/43 D	9/26						
M.DLPROC	146	4/52 D							
M.DONATE	143	4/49 D	11/09	11/13					
M.DSCLX	204	5/29 D							
M.DSFMAP	136	4/44 D							
M.DSKLOC	44	3/35 D							
M.DSPAB	162	5/11 D	59/49						
M.DSPALC	177	5/24 D							
M.DSPARB	101	4/15 D							
M.DSPCAP	100	4/14 D	12/14	13/12	13/22				
M.DSPCLX	157	5/08 D							

M.DSPOB	176	5/23 D				
M.DSPSP	173	5/20 D				
M.ERROR	56	3/49 D	58/12			
M.ERRORC	57	3/50 D	58/02	58/10	58/16	
M.ESMGEN	105	4/19 D				
M.ESMLOC	106	4/20 D	58/23			
M.FIXC	112	4/24 D				
M.FIXD	113	4/25 D				
M.FRETUR	111	4/23 D				
M.GETEVF	152	5/03 D	58/46	59/03		
M.HANG	66	4/04 D				
M.JUMP	132	4/40 D	58/20			
M.MAINCL	55	3/48 D				
M.MAPZRO	125	4/35 D				
M.MASTC	40	3/31 D				
M.MASTR	41	3/32 U	9/17	9/22	9/39	10/04
M.MGETF	155	5/06 D				
M.MGETH	154	5/05 D				
M.MKMPRO	203	5/28 D				
M.MKMPRW	202	5/27 D				
M.MKOPR	107	4/21 D	59/20			
M.MODPC	145	4/51 D	11/42	54/30	58/40	59/44
M.MOVBLK	130	4/38 D				
M.MPCHRO	126	4/36 D	39/18	58/09		
M.MPCHRW	127	4/37 D	39/15			
M.MVECAP	102	4/16 D	10/51			
M.NEWUN	133	4/41 D				
M.NULL	205	5/30 D	45/48	45/49		
M.NWTMP	161	5/10 D				
M.PINT	140	4/46 D				
M.PRNLOC	43	3/34 D				
M.PROBE	160	5/09 D	11/18			
M.READ	63	4/01 D	13/05	14/01		
M.REDSHP	124	4/34 D	11/47			
M.RESTOR	77	4/13 D	11/39	14/10	14/17	
M.RETPAR	167	5/16 D				
M.RETURN	110	4/22 D	59/05			
M.SAVE	76	4/12 D	11/36	14/08	14/14	
M.SCOPE	52	3/44 D				
M.SCOPE2	51	3/43 D				
M.SELF	61	3/52 D				
M.SENDE	65	4/03 D				
M.SEQCHN	53	3/46 D				
M.SETIIB	150	5/01 D				
M.SETLIM	175	5/22 D				
M.SYSLOC	45	3/36 D	58/52	59/02	59/04	
M.TIMDT	170	5/17 D				
M.TRDB	174	5/21 D				
M.UCAP	115	4/27 D				
M.UDAT	114	4/26 D				
M.USRER	166	5/15 D	12/17			
M.WRITE	64	4/02 D				
NENTVEC	4	15/37	15/47 D			

[illegible]

Q. TYPE	565	13/38 L	20/46 S	36/38 S	36/52 S	37/23 S	48/12 S
READCALL	2465	38/04	59/07 L				
READD	1164	34/33	35/18 L	49/51			
READD2	1167	35/21	35/23 L				
READD3	1172	35/30	35/32 L				
READENT	75	9/38 L	45/09	46/01	52/13		
READINT	540	13/05 L	15/53				
READSELF	611	14/01 L	15/52				
RECALL	2231	50/02	54/27 L				
RECALL2	1377	40/13 L	54/29	54/33			
RECOVER	2073	50/09	51/29 L				
RECOVER1	2110	51/30	51/50 L				
RECOVER2	2103	51/41	51/43 L				
RECOVER3	2111	51/49	51/51 L				
RECV	2451	51/48	58/48 L				
REMEMBER	2256	55/01	55/03 L				
RESTORE	2064	50/11	51/18 L				
RESTORE2	2071	51/19	51/27 L				
RESTREG	425	11/39 L	48/14				
RETURNE	427	11/42 L					
RETURNOP	2463	16/15	35/15	35/42	36/47	58/37	
		35/13	35/17	36/23	51/28	59/05 L	
RETURNP	432	11/45 L					
RETURNS	430	11/43 L					
RSH	433	11/47 L	46/46				
RSHPCAP	434	11/48 L	46/45 S				
RTNFIND	1620	45/32	45/36	45/47 L			
RTNINTEN	516	12/19 L	17/07 S	18/23 S			
RTNINTER	514	12/17 L	17/10	18/26			
RTOS	65	9/26 L	16/35	54/21			
RTOSN	67	9/28 L	16/34 S	54/20 S			
RTRNERR	2367	57/02	57/17 L				
SAVEREG	403	11/36 L	11/40	35/46	56/06		
SCRSZ	611	7/20	7/24	7/27	7/28	13/51 L	14/05
SETBLK	1430	40/44 L	49/45				
SETBLK2	1432	40/45	40/47 L				
SETESM	2427	18/17	18/36	34/21	56/14	58/23 L	
SETII	2423	18/31	34/06	34/20	56/13	58/18 L	
SETPCNT	2234	54/27	54/30 L				
SETUSER	2240	49/52	54/34 L				
SHAPE	437	11/49	11/51 L	46/47			
SKIP	431	11/44 L					
SNATCH	2264	49/46	49/47	55/08 L			
SNYCHA	143	11/32 D	55/14	55/19			
SNYCH2	2272	55/17	55/19 L				
SNYCH3	2275	55/24	55/26 L	55/48			
SPACE	2164	50/13	53/20 L				
SPACEIN	356	11/09 L	53/49				
SPACEOUT	362	11/13 L	53/46 S	53/47			
SPACEOUT	355	11/08 L	53/14 S	53/25 S	53/36	53/43	53/53
SPACESUM	440	9/24	11/53 L	54/01			
SPACE2	2166	53/21	53/23 L				
SPCIN	2204	53/44	53/49 L				

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