```
                 OPERATING SYSTEM =  NOS 2.8.7 871/871.   23/09/20. PRINTED = 24/05/29. 15.48.48.

                 UJN          =  1SJ871      FAMILY    = CYBER         JOB ORIGIN    = INTERACTIVE.
                 CREATING JSN =  AACJ        USER NAME = INSTALL       SERVICE CLASS = INTERACTIVE.



    AAAAAAAAAA    AAAAAAAAAA    AAAAAAAAAA   IIIIIIIIIIII   AAAAAAAAAA    AAAAAAAAAA    CCCCCCCCCC   NN        NN
   AAAAAAAAAAAA  AAAAAAAAAAAA  AAAAAAAAAAAA  IIIIIIIIIIII  AAAAAAAAAAAA  AAAAAAAAAAAA  CCCCCCCCCCCC  NNN       NN
   AA        AA  AA        AA  AA        AA       II       AA        AA  AA        AA  CC        CC  NNNN      NN
   AA        AA  AA        AA  AA        AA       II       AA        AA  AA        AA  CC        CC  NN NN     NN
   AA        AA  AA        AA  AA        AA       II       AA        AA  AA        AA  CC            NN  NN    NN
   AA        AA  AA        AA  AA        AA       II       AA        AA  AA        AA  CC            NN   NN   NN
   AA        AA  AA        AA  AA        AA       II       AA        AA  AA        AA  CC            NN    NN  NN
   AAAAAAAAAAAA  AAAAAAAAAAAA  AAAAAAAAAAAA       II       AAAAAAAAAAAA  AAAAAAAAAAAA  CC            NN     NN NN
   AAAAAAAAAAAA  AAAAAAAAAAAA  AAAAAAAAAAAA       II       AAAAAAAAAAAA  AAAAAAAAAAAA  CC            NN      NNNN
   AA        AA  AA        AA  AA        AA       II       AA        AA  AA        AA  CC            NN       NNN
   AA        AA  AA        AA  AA        AA       II       AA        AA  AA        AA  CC            NN        NN
   AA        AA  AA        AA  AA        AA       II       AA        AA  AA        AA  CC            NN        NN
   AA        AA  AA        AA  AA        AA       II       AA        AA  AA        AA  CC            NN        NN
   AA        AA  AA        AA  AA        AA       II       AA        AA  AA        AA  CC        CC  NN        NN
   AA        AA  AA        AA  AA        AA  IIIIIIIIIIII  AA        AA  AA        AA  CCCCCCCCCCCC  NN        NN
   AA        AA  AA        AA  AA        AA  IIIIIIIIIIII  AA        AA  AA        AA  CCCCCCCCCCC   NN        NN


MWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWM
WMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMWMW
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```
MODIFY INPUT.
MODIFY,L=LIST.


    1   *EDIT 1SJ
```

COPYRT MODIFIERS.

NS2796

4 ACTIVE LINE(S). 1 INACTIVE LINE(S). 1 INSERTED LINE(S).

1SJ MODIFIERS.

NS2040	1SJ10	NS2117	1SJ20	1SJ22	NS2244	1SJ30A	1SJ33	1SJ40	1SJ44	271L716	284L847
1SJ1	1SJ11	1SJ15	1SJ21	1SJ23	NS2242	1SJ31	1SJ36	NS2395A	1SJ45	NS2707	NS2785
1SJ2	1SJ12	1SJ16	V22L602	1SJ24	NS2285	1SJ32	251L664	NS2494	1SJ46	1SJ52	
1SJ3	1SJ13	1SJ18	NS2152	1SJ25	1SJ28	242L642	1SJ30B	1SJ41	1SJ47	271L750	
1SJ4	NS21000	1SJ19	NS2153	1SJ26	1SJ29	NS2361	1SJ37	1SJ42	NS2595	1SJ53	
1SJ5	NS2072	NS22000	NS2181	1SJ27	1SJ30	1SJ34	1SJ39	253L688	1SJ48	NS2731	
1SJ7	1SJ14	NS2134	NS2197	V23L617	241L630	1SJ35	NS2437	NS2437A	1SJ49	273L780	
1SJ8	1SJ17	1SJ19A	NS2202	NS2232	NS2285A	NS2395	1SJ38	NS2542	1SJ50	NS2746	
1SJ9	NS2100	NS2143	NS2210	NS2250	NS2181B	NS2398	252L678	1SJ43	1SJ51	281L803	

*CALL	COMPMAC	1SJ	73		
*CALL	COMSCPS	1SJ	76		
*CALL	COMSDSL	271L716	6	77	
*CALL	COMSDST	241L630	5	77	
*CALL	COMSEJT	1SJ	78		
*CALL	COMSEVT	1SJ	79		
*CALL	COMSJIO	1SJ	80		
*CALL	COMSMSC	1SJ	81		
*CALL	COMSMSP	V23L617	14	81	
*CALL	COMSPIM	1SJ	83		
*CALL	COMSPRD	1SJ	84		
*CALL	COMSSCD	NS22000	1	84	
*CALL	COMSSCP	1SJ	85		
*CALL	COMSSSD	1SJ	86		
*CALL	COMSSSE	1SJ	88		
*CALL	COMS1DS	1SJ	91		
*CALL	COMPCPE	271L716	443	1921	
*CALL	COMPRJC	1SJ	1922		
*CALL	COMSSSD	V22L602	25	2207	
*CALL	COMPAST	1SJ	2210		
*CALL	COMPRSS	1SJ	2211		
*CALL	COMPSFI	NS2707	68	2211	
*CALL	COMPCPE	1SJ	3766		
*CALL	COMPAST	NS2437	9	3801	

3498 ACTIVE LINE(S). 4614 INACTIVE LINE(S). 4273 INSERTED LINE(S).

DECKS ON PROGRAM LIBRARY.

COPYRT	COMCSFN	COMPC2D	COMPVID	COMSWEI	0ST	IHFU	TDUMP	COMFXFO	COMXSEB	EORSS15	SUBMT
CETEXT	COMCSKW	COMPDDT	COMPVLC	COMSZOL	0VJ	INSTALL	TDUOUT	COMFXSB	COMTALT	M86FORM	TARO
ECSTEXT	COMCSNF	COMPDLI	COMPVMS	COMS0VU	0VU	ISF	TDUTAB	COMFXSC	COMTBLD	M86SERV	TERMDEF
PPTEXT	COMCSNM	COMPDTS	COMPVPA	COMS1DS	1AJ	KEY	TERMIO	COMFXWK	COMTBLP	EORSS16	TSIM
PSSTEXT	COMCSOE	COMPDVC	COMPVSP	COMS1MV	1CD	KEYEX	TRMDEF	FSEBUFF	COMTCTW	VERMSGC	TSTAT
NOSTEXT	COMCSRI	COMPDV5	COMPWBB	COMS1RM	1CK	KEYPAN	ULIB	FSECMDS	COMTDBG	EORSS17	WAIT
SSYTEXT	COMCSRT	COMPECX	COMPWCB	COMS176	1CL	KRONREF	VALEX	FSEDATA	COMTDBP	MSE	WAITINP
SYSTEXT	COMCSSN	COMPFAT	COMPWEI	COMTBAN	1DL	LDI	VALNET	FSEEDIT	COMTDEF	MSESLAV	WSTAT
CPCOM	COMCSST	COMPFLF	COMPWSS	COMTCVT	1DS	LIBEDIT	VCC	FSEEX	COMTDER	MSECONF	BTASK
PPCOM	COMCSTF	COMPGBN	COMPWVE	COMTDA8	1HY	LIBGEN	VDTSUBS	FSEFILE	COMTDFP	EORSS18	CRMTASK
COMCMAC	COMCSYS	COMPGFP	COMSACC	COMTDP6	1IO	LIBRARY	VERIFY	FSEFORM	COMTERR	SSCONTL	CTASK
COMCCMD	COMCTIO	COMPGTN	COMSATF	COMTDP9	1IS	LIDOU	VFYLIB	FSEHELP	COMTFMT	FREEDSK	ITASK
COMABZF	COMCUPC	COMPICT	COMSBIO	COMTDSP	1LC	LISTLB	VIRTERM	FSELIB	COMTLAB	DESTAGE	KDIS
COMAFET	COMCUSB	COMPIFR	COMSCIO	COMTNAP	1MA	LISTLID	MAC1	FSEMAIN	COMTLBP	EORSS19	LOGT
COMAMSS	COMCVDE	COMPIMB	COMSCPD	COMTVDT	1MB	LIST80	MAC2	FSEPROC	COMTMOV	ISHARED	MSABT
COMAPFP	COMCVDT	COMPIOU	COMSCPS	COMT6DP	1MC	LOADBC	RFORM	FSESCRN	COMTMVD	COMKMAC	OFFTASK
COMAPFS	COMCVLC	COMPIRA	COMSCVS	COMT8AD	1MD	LO72	SYMSERV	FSESUBS	COMTMVP	COMKARF	RCTASK
COMCARG	COMCVQF	COMPLDA	COMSDFS	COMT9DP	1MI	MAG	CPUREL	FSETABL	COMTOUT	COMKBRD	RTASK
COMCARM	COMCWOD	COMPLDB	COMSDFT	COMUCPD	1MS	MAGNET	APRINST	FSEWORK	COMTSIT	COMKBST	STASK
COMCBAN	COMCWTA	COMPMRA	COMSDSL	COMUEST	1MT	MFILES	CMRINST	FSTEACH	COMTUSE	COMKCBD	SYSMSG
COMCBLP	COMCWTC	COMPMRM	COMSDSP	COMUFMT	1MU	MLSEXEC	EQPINST	SMFEX	COMTUSP	COMKCBT	XTASK
COMCCCE	COMCWTH	COMPMRQ	COMSDST	COMUJCA	1MV	MODIFY	IPRINST	SMFSTAT	COMTVLD	COMKCRM	COMCCDM
COMCCDD	COMCWTO	COMPMSV	COMSEJT	COMUOUT	1PP	MODVAL	COMLBAS	SMF	COMTVLF	COMKDPB	COMCCDP
COMCCFD	COMCWTS	COMPNFL	COMSESS	COMUPRB	1RI	MSI	COMLESM	1HP	COMTVLM	COMKFIO	COMSSTM
COMCCHD	COMCWTW	COMPPDI	COMSEVT	COMUQPR	1RM	NOTE	COMLFLD	COMCLNI	COMTVLP	COMKFLD	ADC
COMCCHG	COMCZAP	COMPPPR	COMSHIO	COMUQQC	1RO	OPLEDIT	COMLIPR	IAFP	COMTVLV	COMKIPR	BAT
COMCCIO	COMCZTB	COMPRBB	COMSIOQ	CALLCPU	1SJ	PACK	COMLSCD	IAFTM	COMTVLX	COMKKIM	DCC
COMCCNS	COMDMAC	COMPRCB	COMSIOU	CALLDIS	1TA	PANEL	COMLUEM	IAFTR	CALLFAS	COMKNWC	DDF
COMCCOD	COMDDBS	COMPRCS	COMSJCE	CALLPPU	1TM	PANSUBS	COMLVER	1TN	1SS	COMKNWF	DOG
COMCCPA	COMDDCM	COMPREI	COMSJIO	CALLSYS	1TO	PDU	APRDECK	RECOVER	EORSS1	COMKOPD	DS1
COMCCPM	COMDDIS	COMPREL	COMSJRO	CALLTAB	1VP	PFAM	CMRDECK	0MF	GMSG	COMKRRD	HFM
COMCCPT	COMDDSP	COMPRFI	COMSLFD	CALLINT	1XD	PFDM	EQPDECK	1MR	SMSG	COMKSCD	MPF
COMCCUA	COMDD7S	COMPRJC	COMSLFM	CPM	1XM	PFDUMP	IPRDECK	MREC	CALPFU	COMKSTC	SMP
COMCCVI	COMDGJD	COMPRLA	COMSLSD	CVL	1XY	PFHELPR	LIBDECK	MTE	GETMST	COMKTAF	WRM
COMCCVL	COMDSYS	COMPRLI	COMSMLS	DIO	5ME	PFILES	RDFP	COMBFAS	SETQP	COMKTDM	1TS
COMCDCM	COMDTFN	COMPRLM	COMSMMF	DIS	6DC	PFLIST	SUPERM	COMBBZF	EORSS2	COMKTER	DDFILE
COMCDCP	COMFCID	COMPRLS	COMSMRT	DSD	6DD	PFLOAD	VEMEM	COMBCDD	SSOVL	COMKTIF	DEMUX
COMCDTC	COMFVD2	COMPRNS	COMSMSC	DSP	6DE	PFS	ZTDAMT0	COMBCHN	SSARG	COMKTIP	DMPCCC
COMCDXB	COMFVD3	COMPRSI	COMSMSI	ELM	6DI	PROFILE	ZTDCCLC	COMBCMD	EORSS3	COMKTLD	KEYUTIL
COMCECM	COMFXTI	COMPRSS	COMSMSP	FDL	6DP	PURGALL	ZTDCCON	COMBCMS	SSEXEC	COMKTRF	LPT
COMCECS	COMFXVT	COMPSAF	COMSMST	IMS	6DX	QDSPLAY	ZTDCERR	COMBCPR	EORSS4	COMKTRN	MST
COMCEDT	COMFPAN	COMPSCA	COMSMTR	LFM	BATCHIO	QDUMP	ZTDCVRB	COMBFET	SSSLV	COMKTSA	PACKER
COMCFCE	COMFTIO	COMPSDA	COMSMTX	MDD	BLANK	QFSP	ZTDNMT0	COMBHFC	EORSS5	COMKTSC	SCRSIM
COMCFLD	COMFVDT	COMPSDI	COMSNCD	MSM	CATALOG	QFTLIST	ZTDPCLP	COMBKDA	ACCCAT	COMKTST	STIMULA
COMCFQO	COMFVD1	COMPSDN	COMSNET	MTR	CATLIST	QGET	ZTDPERR	COMBKDD	ACCMAP	COMKZFN	TST
COMCGMS	COMPMAC	COMPSDR	COMSPDT	OSB	CHKPT	QLOAD	ZTDPFIL	COMBLBL	SSINIT	TAFPRC	DFSORT
COMCGTO	COMPACS	COMPSEI	COMSPFM	O26	CLASS	QMOVE	ZTDPTBD	COMBLRQ	EORSS6	CALLKTS	PSAMP
COMCHXB	COMPANS	COMPSES	COMSPFS	PFM	CLDT	QREC	ZTDPTBS	COMBMAP	SSALTER	KTSDMP	SECART
COMCIQP	COMPAPI	COMPSFB	COMSPFU	PFU	CODING	RECLAIM	ZTDTFIL	COMBMAT	EORSS7	LIBTASK	MSGID
COMCJCR	COMPAST	COMPSFE	COMSPIM	PPR	CONFIG	REDO	ZTDTTAB	COMBMCT	SSBLD	TAFLOG	ABC
COMCLFM	COMPCDB	COMPSFI	COMSPRD	QAC	CONTROL	RESEQ	ZTDVERB	COMBOVL	EORSS8	TAF	CHD
COMCLOD	COMPCDD	COMPSFN	COMSPRO	QAP	COPYB	RESEX	ZTDVMT0	COMBPFP	SSDEBUG	TAFREC	DEBUG
COMCMSF	COMPCEA	COMPSIC	COMSQAC	QFM	COPYC	RESTART	ZTDVPDT	COMBPFS	EORSS9	BAAML	CPD
COMCMTM	COMPCFP	COMPSMI	COMSQFS	REC	CPMEM	ROUTE	5870JDL	COMBRCD	SSDEF	DMREC	ICPD
COMCMTP	COMPCHD	COMPSNT	COMSREM	RPV	CPUMLD	SCREX	EOR1	COMBSIT	EORSS10	TARL	ACPD

COMCMVE	COMPCHI	COMPSOF	COMSRPV	SET	CPUMTR	SCTD	EOR2	COMBSNS	SSLABEL	TMSG	PROBE
COMCOVL	COMPCHL	COMPSPA	COMSRSX	SFM	CPUPFM	SDSPLAY	EOR3	COMBTDM	EORSS11	AAMI	XEDIT
COMCPFM	COMPCHM	COMPSRA	COMSSCD	SFP	CUESHEL	SECHDR	EOR4	COMBUCR	SSMOVE	AAML	XEDITH
COMCPFP	COMPCIB	COMPSRR	COMSSCP	SLL	CVLCP	SETCORE	EOR5	COMBUDT	EORSS12	BEGIN	1DA
COMCPFS	COMPCLC	COMPSRU	COMSSCR	STL	DAYFILE	SFORM	EOR6	COMXACM	SSUSE	BLDABH	0CT
COMCPFU	COMPCKP	COMPSSE	COMSSFM	TLX	DFTERM	SFS	EOR7	COMXBST	EORSS13	CALLRTN	COMCCKD
COMCPOP	COMPCLD	COMPSSF	COMSSFS	VEJ	DOCMENT	SHOW	EOR8	COMXCCB	SSVAL	CALLTRN	COMCMBS
COMCQFM	COMPCLX	COMPSTA	COMSSRT	VER	DSDI	SHOWEX	EOR9	COMXCTF	EORSS14	CALLTSK	COMPTFM
COMCQFP	COMPCMA	COMPSTI	COMSSRU	XHC	EDIT	SMFSUBS	EOR10	COMXEMC	EXDRVR	CEASE	COMSTFU
COMCRDA	COMPCMX	COMPSUD	COMSSSD	0AU	ENQUIRE	SORT	COMFDS1	COMXEXP	SXDEST	CHKON	TFM
COMCRDC	COMPCOB	COMPSUT	COMSSSE	0AV	FCOPY	STAGE	COMFDS2	COMXFCQ	SXHLR	CMDUMP	TFU
COMCRDH	COMPCPE	COMPTGB	COMSSSJ	0BF	FILES	SUBMIT	COMFFSE	COMXHLR	SXINIT	DSDUMP	TFILES
COMCRDO	COMPCRA	COMPTLB	COMSTCM	0DF	FOTD	SUBSYST	COMFMLT	COMXINT	SXKD	EXTRACT	TFSP
COMCRDS	COMPCRS	COMPTMA	COMSTDR	0DQ	GENPFD	SYMPCOD	COMFONL	COMXIPR	SXLLR	INTOT	LDISTAP
COMCRDW	COMPCSC	COMPUFT	COMSTFM	0FA	GTR	SYSEDIT	COMFSGL	COMXJCA	SXMAIN	JOURNL	GETTASV
COMCRSB	COMPCTE	COMPUPP	COMSTIO	0PT	HELPLIB	TCOMND	COMFSMF	COMXLTC	SXSERV	LIMITS	SETTASV
COMCRSP	COMPCTI	COMPUPS	COMSTIR	0QM	HOSTCPY	TDU	COMFTAB	COMXMFD	SXSTGE	LOGIN	TMSPROC
COMCRTN	COMPCUA	COMPVEI	COMSTRX	0RF	HSTCOPY	TDUEX	COMFXCM	COMXMMF	SXSLV	MULTCB	TMSPROG
COMCSCB	COMPCUT	COMPVFC	COMSVED	0RP	IAFEX	TDUFILE	COMFXED	COMXMSC	SXUCP	SEND	
COMCSFM	COMPCVI	COMPVFN	COMSVER	0RT	IEDIT	TDUIN	COMFXFL	COMXOVL	SX3UCP	SETCHT	

COMMON DECKS ON PROGRAM LIBRARY.

COPYRT	COMCGTO	COMCSYS	COMPAST	COMPIFR	COMPSIC	COMSCVS	COMSRPV	COMUEST	COMFXED	COMXHLR	COMKBST
CPCOM	COMCHXB	COMCTIO	COMPCDB	COMPIMB	COMPSMI	COMSDFS	COMSRSX	COMUFMT	COMFXFL	COMXINT	COMKCBD
PPCOM	COMCIQP	COMCUPC	COMPCDD	COMPIOU	COMPSNT	COMSDFT	COMSSCD	COMUJCA	COMFXFO	COMXIPR	COMKCBT
COMCMAC	COMCJCR	COMCUSB	COMPCEA	COMPIRA	COMPSOF	COMSDSL	COMSSCP	COMUOUT	COMFXSB	COMXJCA	COMKCRM
COMCCMD	COMCLFM	COMCVDE	COMPCFP	COMPLDA	COMPSPA	COMSDSP	COMSSCR	COMUPRB	COMFXSC	COMXLTC	COMKDPB
COMABZF	COMCLOD	COMCVDT	COMPCHD	COMPLDB	COMPSRA	COMSDST	COMSSFM	COMUQPR	COMFXWK	COMXMFD	COMKFIO
COMAFET	COMCMSF	COMCVLC	COMPCHI	COMPMRA	COMPSRR	COMSEJT	COMSSFS	COMUQQC	COMCLNI	COMXMMF	COMKFLD
COMAMSS	COMCMTM	COMCVQF	COMPCHL	COMPMRM	COMPSRU	COMSESS	COMSSRT	COMLBAS	COMBFAS	COMXMSC	COMKIPR
COMAPFP	COMCMTP	COMCWOD	COMPCHM	COMPMRQ	COMPSSE	COMSEVT	COMSSRU	COMLESM	COMBBZF	COMXOVL	COMKKIM
COMAPFS	COMCMVE	COMCWTA	COMPCIB	COMPMSV	COMPSSF	COMSHIO	COMSSSD	COMLFLD	COMBCDD	COMXSEB	COMKNWC
COMCARG	COMCOVL	COMCWTC	COMPCLC	COMPNFL	COMPSTA	COMSIOQ	COMSSSE	COMLIPR	COMBCHN	COMTALT	COMKNWF
COMCARM	COMCPFM	COMCWTH	COMPCKP	COMPPDI	COMPSTI	COMSIOU	COMSSSJ	COMLSCD	COMBCMD	COMTBLD	COMKOPD
COMCBAN	COMCPFP	COMCWTO	COMPCLD	COMPPPR	COMPSUD	COMSJCE	COMSTCM	COMLUEM	COMBCMS	COMTBLP	COMKRRD
COMCBLP	COMCPFS	COMCWTS	COMPCLX	COMPRBB	COMPSUT	COMSJIO	COMSTDR	COMLVER	COMBCPR	COMTCTW	COMKSCD
COMCCCE	COMCPFU	COMCWTW	COMPCMA	COMPRCB	COMPTGB	COMSJRO	COMSTFM	ZTDAMT0	COMBFET	COMTDBG	COMKSTC
COMCCDD	COMCPOP	COMCZAP	COMPCMX	COMPRCS	COMPTLB	COMSLFD	COMSTIO	ZTDCCLC	COMBHFC	COMTDBP	COMKTAF
COMCCFD	COMCQFM	COMCZTB	COMPCOB	COMPREI	COMPTMA	COMSLFM	COMSTIR	ZTDCCON	COMBKDA	COMTDEF	COMKTDM
COMCCHD	COMCQFP	COMDMAC	COMPCPE	COMPREL	COMPUFT	COMSLSD	COMSTRX	ZTDCERR	COMBKDD	COMTDER	COMKTER
COMCCHG	COMCRDA	COMDDBS	COMPCRA	COMPRFI	COMPUPP	COMSMLS	COMSVED	ZTDCVRB	COMBLBL	COMTDFP	COMKTIF
COMCCIO	COMCRDC	COMDDCM	COMPCRS	COMPRJC	COMPUPS	COMSMMF	COMSVER	ZTDNMT0	COMBLRQ	COMTERR	COMKTIP
COMCCNS	COMCRDH	COMDDIS	COMPCSC	COMPRLA	COMPVEI	COMSMRT	COMSWEI	ZTDPCLP	COMBMAP	COMTFMT	COMKTLD
COMCCOD	COMCRDO	COMDDSP	COMPCTE	COMPRLI	COMPVFC	COMSMSC	COMSZOL	ZTDPERR	COMBMAT	COMTLAB	COMKTRF
COMCCPA	COMCRDS	COMDD7S	COMPCTI	COMPRLM	COMPVFN	COMSMSI	COMS0VU	ZTDPFIL	COMBMCT	COMTLBP	COMKTRN
COMCCPM	COMCRDW	COMDGJD	COMPCUA	COMPRLS	COMPVID	COMSMSP	COMS1DS	ZTDPTBD	COMBOVL	COMTMOV	COMKTSA
COMCCPT	COMCRSB	COMDSYS	COMPCUT	COMPRNS	COMPVLC	COMSMST	COMS1MV	ZTDPTBS	COMBPFP	COMTMVD	COMKTSC
COMCCUA	COMCRSP	COMDTFN	COMPCVI	COMPRSI	COMPVMS	COMSMTR	COMS1RM	ZTDTFIL	COMBPFS	COMTMVP	COMKTST
COMCCVI	COMCRTN	COMFCID	COMPC2D	COMPRSS	COMPVPA	COMSMTX	COMS176	ZTDTTAB	COMBRCD	COMTOUT	COMKZFN
COMCCVL	COMCSCB	COMFVD2	COMPDDT	COMPSAF	COMPVSP	COMSNCD	COMTBAN	ZTDVERB	COMBSIT	COMTSIT	COMCCDM
COMCDCM	COMCSFM	COMFVD3	COMPDLI	COMPSCA	COMPWBB	COMSNET	COMTCVT	ZTDVMT0	COMBSNS	COMTUSE	COMCCDP
COMCDCP	COMCSFN	COMFXTI	COMPDTS	COMPSDA	COMPWCB	COMSPDT	COMTDA8	ZTDVPDT	COMBTDM	COMTUSP	COMSSTM
COMCDTC	COMCSKW	COMFXVT	COMPDVC	COMPSDI	COMPWEI	COMSPFM	COMTDP6	COMFDS1	COMBUCR	COMTVLD	COMCCKD
COMCDXB	COMCSNF	COMFPAN	COMPDV5	COMPSDN	COMPWSS	COMSPFS	COMTDP9	COMFDS2	COMBUDT	COMTVLF	COMCMBS
COMCECM	COMCSNM	COMFTIO	COMPECX	COMPSDR	COMPWVE	COMSPFU	COMTDSP	COMFFSE	COMXACM	COMTVLM	COMPTFM
COMCECS	COMCSOE	COMFVDT	COMPFAT	COMPSEI	COMSACC	COMSPIM	COMTNAP	COMFMLT	COMXBST	COMTVLP	COMSTFU

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 COMCEDT   COMCSRI   COMFVD1   COMPFLF   COMPSES   COMSATF   COMSPRD   COMTVDT   COMFONL   COMXCCB   COMTVLV
 COMCFCE   COMCSRT   COMPMAC   COMPGBN   COMPSFB   COMSBIO   COMSPRO   COMT6DP   COMFSGL   COMXCTF   COMTVLX
 COMCFLD   COMCSSN   COMPACS   COMPGFP   COMPSFE   COMSCIO   COMSQAC   COMT8AD   COMFSMF   COMXEMC   COMKMAC
 COMCFQO   COMCSST   COMPANS   COMPGTN   COMPSFI   COMSCPD   COMSQFS   COMT9DP   COMFTAB   COMXEXP   COMKARF
 COMCGMS   COMCSTF   COMPAPI   COMPICT   COMPSFN   COMSCPS   COMSREM   COMUCPD   COMFXCM   COMXFCQ   COMKBRD

DECKS WRITTEN ON COMPILE FILE.

 1SJ

   102700B STORAGE USED.          10830 LINES WRITTEN ON COMPILE FILE.
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1SJ

1412THE

1

STORAGE ALLOCATION.

```
                ADDRESS   LENGTH              BINARY CONTROL CARDS.

                   1100     3457              IDENT  1SJ,SCJ
                   4557     (561)

                                    BLOCKS     TYPE       ADDRESS    LENGTH

                                    PROGRAM*   ABSOLUTE         0      4353
                                    TABLES     ABSOLUTE      4353         0
                                    OVERLAY    ABSOLUTE      4353       204
                                    OVERFLOW   ABSOLUTE      4557         0


                ADDRESS   LENGTH              BINARY CONTROL CARDS.

                   4360      722              IDENT  3SA,O3SA   SCHEDULE SUBSYSTEM.
                   5302     (137)

                                    BLOCKS     TYPE       ADDRESS    LENGTH

                                    PROGRAM*   ABSOLUTE         0      5302
                                    OVERFLOW   ABSOLUTE      5302         0


                ADDRESS   LENGTH              BINARY CONTROL CARDS.

                   4360     1570              IDENT  3SB,O3SB    SCHEDULE INPUT FILES TO EJT.
                   6150     (263)             END

                                    BLOCKS     TYPE       ADDRESS    LENGTH

                                    PROGRAM*   ABSOLUTE         0      5454
                                    TABLES     ABSOLUTE      5454       474
                                    OVERFLOW   ABSOLUTE      6150         0


                                               IDENT  1SJ,SCJ                                        1SJ          1
                                               PERIPH                                                1SJ          2
                          D_M                  BASE   MIXED                                          1SJ          3
                                               LIST   F                                              1SJ          4
                                               SST                                                   1SJ          5
                                    COMMENT    82/02/26. 96/06/05. 1SJ - JOB SCHEDULER.              1SJ          6
                                               COMMENT  COPYRIGHT CONTROL DATA SYSTEMS INC.  1992.    281L803      1
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          ***       1SJ - JOB SCHEDULER.                                  1SJ          10
          *         G. R. MANSFIELD.   70/09/24.                          1SJ          11
          *         R. E. TATE.        71/01/25.                          1SJ          12
          *         R. M. DANISCH      81/01/28.                          1SJ          13


          ***              *1SJ* IS RESPONSIBLE FOR SCHEDULING JOBS TO AND FROM   1SJ          15
          *         CENTRAL MEMORY.                                       1SJ          16
          *                                                               1SJ          17
          *         *1SJ* ALWAYS ATTEMPTS TO SATISFY CM/ECS FL INCREASE   1SJ          18
          *         REQUESTS OF JOBS ALREADY AT CONTROL POINTS BEFORE SELECTING   1SJ          19
          *         ROLLED OUT JOBS FOR SCHEDULING.  WHEN NO CM/ECS FL INCREASE   1SJ          20
          *         REQUESTS ARE PRESENT, *1SJ* ATTEMPTS TO SCHEDULE ROLLED   1SJ          21
          *         OUT JOBS TO CONTROL POINTS.  WHETHER OR NOT ANY SUCH   1SJ          22
          *         SCHEDULING ACTUALLY OCCURS DURING A GIVEN SCHEDULER CYCLE   1SJ          23
          *         DEPENDS ON MANY FACTORS INCLUDING - AVAILABILITY OF CM AND   1SJ          24
          *         ECS, AVAILABILITY OF CONTROL POINTS, PRIORITIES OF SCHEDULING 1SJ          25
          *         CANDIDATES, PRIORITIES OF JOBS PRESENTLY IN CM, AND SERVICE   1SJ          26
          *         CLASS CONSTRAINTS ON THE ALLOCATION OF MEMORY.        1SJ          27
          *                                                               1SJ          28
          *         IN ADDITION TO IT-S CM/EM SCHEDULING FUNCTION, *1SJ* ALSO     271L716       1
          *         PERIODICALLY SCHEDULES INPUT FILES TO THE EJT.        271L716       2


          ***       CALL.                                                 1SJ          47
          *                                                               1SJ          48
          *                                                               1SJ          49
          *T        18/  *1SJ*,6/  CP,11/  0,1/  Q,24/                    271L716       3
          *         CP      SYSTEM CONTROL POINT NUMBER.                  1SJ          51
          *         Q = 0  NO QFT SCHEDULING.                             1SJ          54
          *           = 1  PERFORM INPUT FILE SCHEDULING.                 271L716       4


          **        PROGRAMS CALLED.                                      1SJ          62
          *                                                               1SJ          63
          *                                                               1SJ          64
          *         1AJ - JOB INITIATION.                                 1SJ          66
          *         1RI - ROLLIN JOB.                                     1SJ          68
```

```
                         **        COMMON DECKS.                                         1SJ         70
                                                                                         1SJ         71
                                                                                         1SJ         72
          0                        CTEXT  COMPMAC - PP SYSTEM MACROS.                    COMPMAC      1
                                   QUAL   CPS                                            1SJ         75
          0                        CTEXT  COMSCPS - CPUMTR SUBFUNCTION CODES.            COMSCPS      1
                                   QUAL    *                                             1SJ         77
                                   QUAL   DSL                                            271L716      5
          0                        CTEXT  COMSDSL - DEAD START LOAD PARAMETERS.          COMSDSL      1
                                   QUAL   *                                              271L716      7
          0                        CTEXT  COMSDST - NOS/VE DUAL STATE DEFINITIONS.       NS2418       1
                                   LIST   X                                              271L716      8
```

```
   0                       CTEXT  COMSEJT - EXECUTING JOB DEFINITIONS.                     COMSEJT       1

                M_M        BASE   M                                                        COMSEJT       3
                      *    COMMENT  COPYRIGHT CONTROL DATA SYSTEMS INC.  1992.             281L803       1

                      ***  COMSEJT - EXECUTING JOB DEFINITIONS.                            COMSEJT       7
                      *                                                                    COMSEJT       8
                      *    R. M. DANISCH.     81/01/27.                                    COMSEJT       9

                      **   COMSEJT DEFINES SYMBOLS USED BY PROGRAMS CONCERNED WITH JOB     COMSEJT      11
                      *    CONTROL.                                                        COMSEJT      12

                      **   JOB STATUS.                                                     COMSEJT      14
                                                                                           COMSEJT      15
                                                                                           COMSEJT      16
                  0    PRJS     EQU    0          PRE-INITIAL JOB STEP                     COMSEJT      17
                  1    EXJS     EQU    1          EXECUTING                                COMSEJT      18
                  2    ROJS     EQU    2          SCHEDULER ROLLOUT                        COMSEJT      19
                  3    SIJS     EQU    3          SCP ROLLIN                               COMSEJT      20
                  4    SOJS     EQU    4          SCP ROLLOUT                              COMSEJT      21
                  5    TOJS     EQU    5          TIMED/EVENT ROLLOUT                      COMSEJT      22
                  6    IOJS     EQU    6          INTERACTIVE ROLLOUT                      COMSEJT      23
                  7    DOJS     EQU    7          DISABLED ROLLOUT                         COMSEJT      24
                 10    SUJS     EQU    10         SUSPENDED ROLLOUT                        COMSEJT      25
                 11    PCJS     EQU    11         PSEUDO-ROLLOUT                           271L716       1
                                                                                           271L716       2
                 11    RCJS     EQU    11         HIGHEST RECOVERABLE JOB STATUS           271L716       3
                                                                                           271L716       4
                 12    ERJS     EQU    12         I/O ERROR ON ROLLOUT FILE                271L716       5
                 13    NVJS     EQU    13         *NVE*                                    271L716       6
                 14    PWJS     EQU    14         PRE-INITIAL WAIT                         271L716       7
                 15    SWJS     EQU    15         SERVICE LIMIT WAIT                       271L716       8
                 16    MXJS     EQU    16         MAXIMUM JOB STATUS + 1                   271L716       9
                                                                                           271L716      10
                      *         EQU    16-30      RESERVED FOR CDC                         271L716      11
                      *         EQU    31 - 37    RESERVED FOR INSTALLATIONS               COMSEJT      31
```

```
                                **        CONNECTION STATUS.                                       COMSEJT     33
                                                                                                   COMSEJT     34
                                                                                                   COMSEJT     35
                           0     NICS     EQU    0             NOT INTERACTIVE                     COMSEJT     36
                           1     DTCS     EQU    1             DETACHED                            COMSEJT     37
                           2     OLCS     EQU    2             ON-LINE                             COMSEJT     38
                                                                                                   COMSEJT     39
                           3     MXCS     EQU    3             MAXIMUM CONNECTION STATUS + 1       COMSEJT     40
                                                                                                   COMSEJT     41
                                 *        EQU    3 - 13        RESERVED FOR CDC                    COMSEJT     42
                                 *        EQU    14 - 17       RESERVED FOR INSTALLATIONS          COMSEJT     43



                                **        SYSTEM JOB SEQUENCE NUMBER.                              COMSEJT     45
                                                                                                   COMSEJT     46
                                                                                                   COMSEJT     47
                                 SJSN     MICRO  1,,*SYS *                                         COMSEJT     48




                                **        EJT RA+1 REQUEST CODES.                                  COMSEJT     50
                                                                                                   COMSEJT     51
                                                                                                   COMSEJT     52
          0                      BEGIN    BSSN   1                                                 COMSEJT     54
                                                                                                   COMSEJT     55
      L   1                      DTEJ     BSSN   1             DETACH JOB                          COMSEJT     56
      L   2                      ENEJ     BSSN   1             ENABLE JOB FOR SCHEDULING           COMSEJT     57
      L   3                      FJEJ     BSSN   1             FREEZE JOB                          COMSEJT     58
      L   4                      RCEJ     BSSN   1             RECOVER DETACHED JOB                COMSEJT     59
      L   5                      RSEJ     BSSN   1             RESTART RECOVERED JOB               COMSEJT     60
      L   6                      RTEJ     BSSN   1             RESET TIMEOUT                       COMSEJT     61
      L   7                      SAEJ     BSSN   1             SET ABORT FLAG                      COMSEJT     62
      L  10                      TJEJ     BSSN   1             TERMINATE JOB                       COMSEJT     63
      L  11                      MXEJ     BSSN   1             MAXIMUM REQUEST VALUE + 1           COMSEJT     64




                           7     EJPB     EQU    7             PARAMETER BLOCK LENGTH              NS2224       1




                                **        ERROR RESPONSES FOR EJT RA+1 REQUESTS.                   COMSEJT     68
                                                                                                   COMSEJT     69
                                                                                                   COMSEJT     70
      L  12                      BEGIN    BSSN   0                                                 COMSEJT     71
                                                                                                   COMSEJT     72
          0                      NOER     BSSN   1             NO ERROR                            COMSEJT     73
      L   1                      IEER     BSSN   1             INVALID EJTO                        COMSEJT     74
      L   2                      ISER     BSSN   1             INVALID SERVICE CLASS               COMSEJT     75
      L   3                      IOER     BSSN   1             INVALID ORIGIN TYPE                 COMSEJT     76
      L   4                      MAER     BSSN   1             MESSAGE BUFFER OUT OF RANGE         COMSEJT     77
      L   5                      IPER     BSSN   1             INVALID PPI                         COMSEJT     78
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L     6                       JFER      BSSN   1            JOB NOT FOUND                               COMSEJT     79
L     7                       ERER      BSSN   1            ERROR ON ROLLOUT FILE READ                  COMSEJT     80
L    10                       NDER      BSSN   1            JOB NOT DISABLED                            COMSEJT     81
L    11                       ENER      BSSN   1            ENTRY POINT NAME NOT FOUND                  COMSEJT     82
L    12                       HEER      BSSN   1            HIGHER ERROR FLAG SET                       COMSEJT     83
L    13                       JDER      BSSN   1            JOB CANNOT BE DETACHED                      COMSEJT     84
L    14                       NRER      BSSN   1            JOB NOT RECOVERABLE                         COMSEJT     85
L    15                       DLER      BSSN   1            DETACH LIMIT EXCEEDED                       COMSEJT     86
L    16                       NTER      BSSN   1            JOB NOT DETACHED                            COMSEJT     87
L    17                       NSER      BSSN   1            JOB NOT SUSPENDED                           COMSEJT     88
L    20                       RTER      BSSN   1            RETRY - RESOURCE REJECT OR INTERLOCK        COMSEJT     89
L    21                       SFER      BSSN   1            SERVICE CLASS FULL                          NS22000      1
L    22                       JOER      BSSN   1            JOB NOT ONLINE CONNECTION STATUS            NS2091       1
L    23                       SSER      BSSN   1            SYSTEM SOFTWARE ERROR                       241L630      1
L    24                       REER      BSSN   1            RECOVERABLE DISK ERROR                      NS2658       1



                             **         REASON CODES FOR DETACH.                                        COMSEJT     94
                                                                                                        COMSEJT     95
                                                                                                        COMSEJT     96
L    25                       BEGIN     BSSN   1                                                        V22L602      1
                                                                                                        V22L602      2
L     1                       LDRC      BSSN   1            LINE DISCONNECT                             V22L602      3
L     2                       TORC      BSSN   1            TIMEOUT                                     V22L602      4
L     3                       SARC      BSSN   1            SUBSYSTEM ABORT                             V22L602      5
L     4                       UDRC      BSSN   1            USER DETACH                                 V22L602      6
L     5                       PDRC      BSSN   1            PROGRAM INITIATED DETACH                    V22L602      7
L     6                       PIDL      BSSN   1            PROGRAM INITIATED DETACH AND LOGOUT         241L630      2
L     7                       MXDT      BSSN   1            MAXIMUM DETACH REASON CODE                  V22L602      8
                                                                                                        V22L602      9
L    10                       END       BSSN                                                            V22L602     10



                      M_M               BASE   *                                                        COMSEJT    102
                                        ENDX                                                            COMSEJT    103
                                        LIST   *                                                        271L716      9
      0                                 CTEXT  COMSEVT - EVENT DESCRIPTORS.                             COMSEVT      1
     46                                 CTEXT  COMSJIO - QFT EQUIVALENCES.                              COMSJIO      1
     46                                 CTEXT  COMSMSC - MISCELLANEOUS SYSTEM CONSTANTS.                COMSMSC      1
     46                                 CTEXT  COMSMSP - MASS STORAGE PROCESSING EQUIVALENCES.          COMSMSP      1
     46                                 CTEXT  COMSPIM - PP INSTRUCTION MNEMONICS.                      COMSPIM      1
                                        LIST   X                                                        271L716     13
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 46                                  CTEXT  COMSPRD - PRIORITY DEFINITIONS.                    COMSPRD      1
                               M_M   BASE   M                                                  COMSPRD      2
                               *     COMMENT  COPYRIGHT CONTROL DATA SYSTEMS INC.  1992.       281L803      1
                               *
                               *     ***      COMSPRD - PRIORITY DEFINITIONS.                  COMSPRD      5
                               *     *        L. C. HAAS.        76/07/01.                     COMSPRD      6
                               *
                               *     ***      COMSPRD DEFINES CPU PRIORITIES.                  COMSPRD      8
                               *
                               *     **       CPU    PRIORITIES.                               COMSPRD     10
                               *                                                               COMSPRD     11
                               *                                                               COMSPRD     12
                                 0     BICS     EQU    0          BATCHIO                       COMSPRD     13
                                 0     MSCS     EQU    0          MSM                           COMSPRD     14
                                                                                               271L716      1
                                 1     IDCS     EQU    1          IDLE PACKAGE                  271L716      2
                                                                                               271L716      3
                                 2     LJCS     EQU    2          LOWEST USER JOB CPU PRIORITY  271L716      4
                                                                                               271L716      5
                                60     TSCS     EQU    60         STIMULATOR                    NS2731       1
                                                                                               COMSPRD     15
                                70     LSCS     EQU    70         LOWEST SYSTEM CPU PRIORITY    NS2731       2
                                                                                               COMSPRD     19
                                71     SCCS     EQU    71         SCRSIM                        COMSPRD     20
                                71     QFCS     EQU    71         QFSP                          COMSPRD     21
                                                                                               COMSPRD     22
                                72     MFCS     EQU    72         ALTERNATE STORAGE, AT=1 - MSS V23L617      1
                                72     AFCS     EQU    72         ALTERNATE STORAGE, AT=2 - MSE 242L642      1
                                72     CZCS     EQU    72         CDCS                          COMSPRD     24
                                72     MCCS     EQU    72         MCS                           COMSPRD     25
                                72     RBCS     EQU    72         RBF                           COMSPRD     26
                                72     LTCS     EQU    72         LIBTASK                       NS2523       1
                                72     TACS     EQU    72         TAF                           COMSPRD     27
                                72     EICS     EQU    72         EI200                         COMSPRD     28
                                72     SMCS     EQU    72         SMF                           NS21000      1
                                72     MPCS     EQU    72         MAP III                       COMSPRD     29
                                72     PFCS     EQU    72         PFS                           COMSPRD     30
                                72     TLCS     EQU    72         TLF                           V23L617      3
                                72     NJCS     EQU    72         NJF                           V23L617      4
                                72     ATCS     EQU    72         ATF                           274L797      1
                                72     C1CS     EQU    72         CRS                           NCCCRS       1
                                72     I1CS     EQU    72         IN1 (RESERVED FOR INSTALLATION) V22L602    1
                                72     I2CS     EQU    72         IN2 (RESERVED FOR INSTALLATION) V22L602    2
                                                                                               COMSPRD     31
                                                                                               COMSPRD     32
                                74     MLCS     EQU    74         NVE                           NS21000      2
                                74     RFCS     EQU    74         RHF                           COMSPRD     33
                                74     NSCS     EQU    74         NS                            COMSPRD     34
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                    74      CSCS    EQU     74          CS                                      COMSPRD     35
                    74      NVCS    EQU     74          NVF                                     COMSPRD     36
                    74      SSCS    EQU     74          SSF                                     NS21000      3
                    74      PLCS    EQU     74          CYBIS STARTUP JOB                       NS2746       1
                                                                                                COMSPRD     37
                    75      MVCS    EQU     75          MODVAL                                  COMSPRD     38
                    75      RXCS    EQU     75          RESEX                                   COMSPRD     39
                    75      PRCS    EQU     75          PROFILE                                 COMSPRD     40
                    75      ISCS    EQU     75          ISF                                     COMSPRD     41
                                                                                                COMSPRD     42
                    76      LCCS    EQU     76          LOADBC                                  COMSPRD     43
                    76      MTCS    EQU     76          MAGNET                                  COMSPRD     44
                    76      SYCS    EQU     76          SYSEDIT                                 COMSPRD     45
                    76      MRCS    EQU     76          MREC                                    COMSPRD     46
                    76      IACS    EQU     76          IAF                                     COMSPRD     47
                                                                                                COMSPRD     48
                    77      NMCS    EQU     77          NIP/NAM                                 COMSPRD     49
                                                                                                COMSPRD     50
                   100      MPRS    EQU     100         MONITOR FUNCTION PRIORITY               COMSPRD     51


                    M_M             BASE    *                                                   COMSPRD     53
                                    ENDX                                                        COMSPRD     54
                                    LIST    *                                                   271L716     14
          46                        CTEXT   COMSSCD - SERVICE CLASS DEFINITIONS.                COMSSCD      1
                                    LIST    G                                                   COMSSCD    119
                                    LIST    *                                                   COMSSCD    166
          46                        CTEXT   COMSSCP - SYSTEM CONTROL POINT EQUIVALENCES.        COMSSCP      1
                                    LIST    X                                                   271L716     15
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  46                                     CTEXT  COMSSSD - SUBSYSTEM DEFINITIONS.                        COMSSSD       1
                        M_M              BASE   M                                                       COMSSSD       3
                               *         COMMENT  COPYRIGHT CONTROL DATA SYSTEMS INC.  1992.            281L803       1
                               ***       COMSSSD - SUBSYSTEM DEFINITIONS.                               COMSSSD       6
                               *                                                                        COMSSSD       7
                               *         R. M. DANISCH.     81/01/26.                                   COMSSSD       8
                               *         R. C. SCHMITTER.   83/08/17.                                   COMSSSD       9
                               **        COMSSSD DEFINES SUBSYSTEM IDENTIFICATION NUMBERS FOR           COMSSSD      11
                               *         ALL SUBSYSTEMS.  IN ADDITION, IF SYMBOL *SUB$* IS DEFINED      COMSSSD      12
                               *         BY THE CALLING PROGRAM, A MACRO CALL WILL BE ISSUED FOR        COMSSSD      13
                               *         EACH SUBSYSTEM.  THE CALLING PROGRAM MUST DEFINE THE           COMSSSD      14
                               *         *SUBSYST* MACRO SUCH THAT IT GENERATES THE REQUIRED CODE.      COMSSSD      15
                               ***       SSID - DEFINE SUBSYSTEM ID.                                    COMSSSD      17
                               *                                                                        COMSSSD      18
                               *         SSID   ID,TAG                                                  COMSSSD      19
                               *                                                                        COMSSSD      20
                               *         ENTRY  *ID* = SUBSYSTEM ID SYMBOL NAME.                        COMSSSD      21
                               *                *TAG* = ALTERNATE SYMBOL NAME.                          COMSSSD      22
                                                                                                        COMSSSD      23
                                                                                                        COMSSSD      24
                                         PURGMAC  SSID                                                  COMSSSD      25
                                                                                                        COMSSSD      26
                                SSID     MACRO  ID,TAG                                                  COMSSSD      27
                                .A       IFC    EQ,$ID$BEGIN$                                           COMSSSD      28
                                .1       SET    10000B                                                  COMSSSD      29
                                .D       SKIP                                                           COMSSSD      30
                                .A       ELSE                                                           COMSSSD      31
                                .B       IFC    NE,$ID$END$                                             COMSSSD      32
                                ID       EQU    .1                                                      COMSSSD      33
                                .B       ENDIF                                                          COMSSSD      34
                                .C       IFC    NE,$TAG$$                                               COMSSSD      35
                                TAG      EQU    .1                                                      COMSSSD      36
                                .C       ENDIF                                                          COMSSSD      37
                                .D       ENDIF                                                          COMSSSD      38
                                .1       SET    .1-1                                                    COMSSSD      39
                                SSID     ENDM                                                           COMSSSD      40
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                        **      DEFINE SUBSYSTEM IDENTIFICATION NUMBERS.                        COMSSD     42
                        *                                                                       COMSSD     43
                        *       TO ADD A NEW SUBSYSTEM ID, INSERT AN *SSID* MACRO CALL          COMSSD     44
                        *       WITH THE ID SYMBOL.  THE POSITION OF THE SUBSYSTEM IN THE       COMSSD     45
                        *       TABLE DETERMINES ITS SUBSYSTEM ID; THEY ARE DEFINED IN          COMSSD     46
                        *       DESCENDING NUMERICAL ORDER.  A NEW SUBSYSTEM SHOULD             COMSSD     47
                        *       ONLY BE ADDED AT THE END OF THE TABLE TO AVOID BINARY           COMSSD     48
                        *       INCOMPATIBILITIES BETWEEN EXISTING ABSOLUTE BINARIES            COMSSD     49
                        *       AND *SCP* TYPE SUBSYSTEMS, SUCH AS *CDCS* AND *MCS*.            COMSSD     50
                        *       TWO SUBSYSTEMS ARE DEFINED AND RESERVED FOR INSTALLATION        COMSSD     51
                        *       USE.                                                            COMSSD     52
                                                                                                COMSSD     53
                                                                                                COMSSD     54
                                SSID    BEGIN                                                   COMSSD     56
                                SSID    DSSI        DEADSTART SEQUENCING                        COMSSD     57
                                SSID    IFSI,MXSI   IAF                                         COMSSD     58
                                SSID    RFSI        RHF                                         COMSSD     59
                                SSID    I1SI        RESERVED FOR INSTALLATION                   COMSSD     60
                                SSID    I2SI        RESERVED FOR INSTALLATION                   COMSSD     61
                                SSID    TRSI        TAF                                         COMSSD     62
                                SSID    MPSI        MAP III                                     COMSSD     63
                                SSID    NMSI        NAM                                         COMSSD     64
                                SSID    NVSI        NVE                                         COMSSD     65
                                SSID    CDSI        CDCS                                        COMSSD     66
                                SSID    MCSI        MCS                                         COMSSD     67
                                SSID    RDSI        RDF                                         COMSSD     68
                                SSID    MFSI        MSS                                         COMSSD     69
                                SSID    RBSI        RBF                                         COMSSD     70
                                SSID    BISI        BATCHIO                                     COMSSD     71
                                SSID    MTSI        MAGNET                                      COMSSD     72
                                SSID    STSI        STIMULATOR                                  COMSSD     73
                                SSID    MSSI        MSM                                         COMSSD     74
                                SSID    SMSI        SMF                                         COMSSD     75
                                SSID    SSSI        SSF                                         COMSSD     76
                                SSID    ASSI        MSE                                         COMSSD     77
                                SSID    TLSI        TLF                                         COMSSD     78
                                SSID    NJSI        NJF                                         COMSSD     79
                                SSID    PLSI        CYBIS                                       NS2746      1
                                SSID    ATSI        ATF                                         274L797     1
                                SSID    C1SI        CRS                                         NCCCRS      1
                                SSID    END,LSSI    LOWEST SUBSYSTEM ID - 1                     274L797     2
                                                                                                COMSSD     83
                          43            ERRNG   LSSI-MXSI+60D  TOO MANY SUBSYSTEMS              COMSSD     84
                                                                                                COMSSD     85
                           4    FZSI    EQU     4           INHIBIT ROLLOUT (FROZEN JOB)        NS2355      1
                           3    ORSI    EQU     3           ALLOW OPERATOR ROLLOUT (FOR *SSJ=* JOBS)  COMSSD  86
                           1    IRSI    EQU     1           INHIBIT ROLLOUT (USED BY *SSJ=* JOBS)     COMSSD  88
                           0    UJSI    EQU     0           NON-SUBSYSTEM JOB (DEFAULT FOR USER JOBS) COMSSD  89
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          35      .A        SET    MXSI-LSSI+4                                  COMSSSD      91
           5      SSCTL     EQU    .A/5          LENGTH OF SSCT                 COMSSSD      92
                  SUB$      IF     DEF,SUB$                                     COMSSSD      93
                            SPACE  4,10                                         COMSSSD      94
                 **         DEFINE SUBSYSTEM ATTRIBUTES.                        COMSSSD      95
                 *                                                              COMSSSD      96
                 *          THESE MACRO CALLS DEFINE THE ATTRIBUTES OF EACH SUBSYSTEM     COMSSSD      97
                 *          IN THE SYSTEM.  EACH DECK THAT REQUIRES A TABLE OF ONE OR     COMSSSD      98
                 *          MORE OF THESE ATTRIBUTES MUST DEFINE THE *SUBSYST* MACRO      COMSSSD      99
                 *          APPROPRIATELY.  IN ORDER TO ADD A SUBSYSTEM, THE FOLLOWING    COMSSSD     100
                 *          DECKS MUST BE CHANGED AND ALL DECKS CALLING THIS COMMON       COMSSSD     101
                 *          DECK (COMSSSD) MUST BE REASSEMBLED.                 COMSSSD     102
                 *                                                              COMSSSD     103
                 *          1. PPCOM - DOCUMENT THE BYTE POSITION IN THE *SSCT* AND       COMSSSD     104
                 *                     *SSAT* TABLES.                           COMSSSD     105
                 *          2. COMSPRD - DEFINE A CPU PRIORITY FOR THE SUBSYSTEM.         COMSSSD     106
                 *          3. COMSSSD - DEFINE A SUBSYSTEM ID WITH THE *SSID* MACRO.     COMSSSD     107
                 *                       ADD A *SUBSYST* MACRO CALL WITH ALL ATTRIBUTES.  COMSSSD     108
                 *          4. COMUCPD - ADD THE SUBSYSTEM NAME TO THE HEADER TABLE.      COMSSSD     109
                 *          5. DSD - ADD A SYNTAX TABLE ENTRY FOR INITIATING THE          COMSSSD     110
                 *                   SUBSYSTEM IN ALPHABETICAL ORDER IN THE SYNTAX TABLE  COMSSSD     111
                 *                   OVERLAYS.                                  COMSSSD     112
                 *          6. COMTNAP - IF THE NEW SUBSYSTEM IS A *NAM* APPLICATION,     274L797       3
                 *                   ADD AN ENTRY TO THE *TNAV* TABLE.          274L797       4
                 *          7. COMSACC - IF THE NEW SUBSYSTEM IS A *NAM* APPLICATION,     274L797       5
                 *                   DOCUMENT THE APPLICATION VALIDATION BIT.   274L797       6
                 *          8. MODVAL - IF THE NEW SUBSYSTEM IS A *NAM* APPLICATION,      274L797       7
                 *                   DOCUMENT THE APPLICATION VALIDATION BIT.   274L797       8
                 *                                                              COMSSSD     113
                 *          THE FOLLOWING ATTRIBUTES ARE DEFINED BY THE *SUBSYST* MACRO   COMSSSD     114
                 *          CALLS.  THEY ARE DESCRIBED IN THE ORDER THEY APPEAR IN THE    COMSSSD     115
                 *          CALL; EACH DECK MUST INSURE THAT ITS MACRO IS DEFINED WITH    COMSSSD     116
                 *          THE PARAMETERS DEFINED IN THE SAME ORDER.  THE *SUBSYST*      COMSSSD     117
                 *          MACRO IS CALLED AS FOLLOWS -                        COMSSSD     118
                 *                                                              COMSSSD     119
                 *          SUBSYST  NAME,ID,PR,PP,AUTO,DEF,DCP,CP,PROC,ABT,CPU           271L750       1
                 *                                                              COMSSSD     121
                 *                                                              COMSSSD     122
                 *          NAME - SUBSYSTEM NAME (THREE CHARACTERS).           COMSSSD     123
                 *          ID   - SUBSYSTEM ID (AS DEFINED BY THE *SSID* MACRO ABOVE).   COMSSSD     124
                 *          PR   - CPU PRIORITY (AS DEFINED IN *COMSPRD*).      COMSSSD     125
                 *          PP   - WHETHER OR NOT THE SUBSYSTEM IS PP INITIATED.  IF SO,  COMSSSD     126
                 *                 THE PP NAME IS USED AS THE PARAMETER VALUE.  IF NOT, A COMSSSD     127
                 *                 NULL VALUE IS USED.                          COMSSSD     128
                 *          AUTO - WHETHER OR NOT THE SUBSYSTEM IS INITIATED BY THE AUTO  COMSSSD     129
                 *                 OPERATOR COMMAND (IF ENABLED IN *SSSL*).  IF SO, THE   COMSSSD     130
                 *                 VALUE *AUTO* IS USED.  IF NOT, A NULL VALUE IS USED.   COMSSSD     131
                 *          DEF  - WHETHER OR NOT THE SUBSYSTEM IS ENABLED BY DEFAULT.    COMSSSD     132
                 *                 IF SO, A VALUE OF *ENABLE* IS USED.  OTHERWISE A NULL  COMSSSD     133
                 *                 VALUE IS USED.                               COMSSSD     134
                 *          DCP  - WHETHER OR NOT A DEFAULT CONTROL POINT NUMBER IS       COMSSSD     135
                 *                 DEFINED AT WHICH TO INITIATE THE SUBSYSTEM (IF NONE    COMSSSD     136
                 *                 IS SUPPLIED BY AN IPRDECK *ENABLE/DISABLE* ENTRY OR    COMSSSD     137
                 *                 OPERATOR *ENABLE/DISABLE* ENTRY FROM THE *SUBSYST*     COMSSSD     138
                 *                 L-DISPLAY.  THIS VALUE CAN BE A SYMBOL OR A VALUE SUCH COMSSSD     139
                 *                 AS -1, WHICH MEANS THE LAST CONTROL POINT.   COMSSSD     140
                 *          CP   - WHETHER OR NOT A CONTROL POINT IS ALLOWED ON THE       COMSSSD     141
```

```
                *           *ENABLE/DISABLE* COMMANDS.   FOR EXAMPLE, *IAF* DOES   COMSSD    142
                *           NOT ALLOW THE DEFAULT OF CONTROL POINT 1 TO BE         COMSSD    143
                *           CHANGED.  IF ANOTHER CONTROL POINT IS ALLOWED, THE     COMSSD    144
                *           VALUE *YES* IS USED.  IF NOT, THE VALUE *NO* IS USED.  COMSSD    145
                *     PROC - WHETHER OR NOT THE PROCEDURE THAT INITIATES THE       COMSSD    146
                *           SUBSYSTEM CAN CONSIST OF MORE THAN JUST THE 3          COMSSD    147
                *           CHARACTER SUBSYSTEM NAME.  FOR EXAMPLE, *BATCHIO* MUST COMSSD    148
                *           BE INITIATED BY A PROCEDURE NAMED *BIO*, WHILE *IAF*   COMSSD    149
                *           IS INITIATED BY ANY PROCEDURE OF THE FORM *IAFXXXX*.   COMSSD    150
                *           IF AN ALTERNATE NAME IS ALLOWED, THE VALUE *YES* IS    COMSSD    151
                *           USED.  IF NOT, THE VALUE *NO* IS USED.                 COMSSD    152
                *     ABT  - WHETHER OR NOT THE SUBSYSTEM SHOULD BE ABORTED BY     COMSSD    153
                *           *1CK* WHEN PROCESSING A *CHECKPOINT SYSTEM* COMMAND.   COMSSD    154
                *           IF THE SUBSYSTEM IS NOT TO BE ABORTED, THE VALUE *NA*  COMSSD    155
                *           IS USED.  IF THE SUBSYSTEM IS TO BE ABORTED, A NULL    COMSSD    156
                *           VALUE IS USED.                                         COMSSD    157
                *     CPU  - WHETHER OR NOT THE SUBSYSTEM SHOULD BE FORCED INTO    271L750     2
                *           CPU 0 ON A DUAL CPU MACHINE WITH CACHE.  IF THE        271L750     3
                *           SUBSYSTEM IS TO BE FORCED INTO CPU 0, THE VALUE *CPU0* 271L750     4
                *           IS USED.  IF THE SUBSYSTEM MAY RUN IN EITHER CPU,      271L750     5
                *           A NULL VALUE IS USED.                                  271L750     6
                                                                                   COMSSD    158
                                                                                   COMSSD    159
                     SUBSYST  IAF,IFSI,IACS,,AUTO,,VCPT,NO,YES,,CPU0               271L750     7
                     SUBSYST  RHF,RFSI,RFCS,,AUTO,,,YES,YES                        COMSSD    161
                     SUBSYST  IN1,I1SI,I1CS,,AUTO,,,YES,YES                        COMSSD    162
                     SUBSYST  IN2,I2SI,I2CS,,AUTO,,,YES,YES                        COMSSD    163
                     SUBSYST  TAF,TRSI,TACS,,AUTO,,,YES,YES                        COMSSD    164
                     SUBSYST  MAP,MPSI,MPCS,,AUTO,,,YES,YES,NA                     COMSSD    165
                     SUBSYST  NAM,NMSI,NMCS,,AUTO,,,YES,YES                        COMSSD    166
                     SUBSYST  NVE,NVSI,MLCS,,AUTO,,,YES,YES,NA,CPU0                NS2779      1
                     SUBSYST  CDC,CDSI,CZCS,,AUTO,,,YES,YES                        COMSSD    168
                     SUBSYST  MCS,MCSI,MCCS,,AUTO,,,YES,YES                        COMSSD    169
                     SUBSYST  RDF,RDSI,,,AUTO,,VCPT,NO,YES,,CPU0                   271L750     8
                     SUBSYST  MSS,MFSI,MFCS,,AUTO,,,YES,YES                        COMSSD    171
                     SUBSYST  RBF,RBSI,RBCS,,,,,YES,YES                            274L797     9
                     SUBSYST  BIO,BISI,BICS,1IO,AUTO,ENABLE,-2,YES,NO              COMSSD    173
                     SUBSYST  MAG,MTSI,MTCS,,AUTO,ENABLE,-3,YES,YES,NA,CPU0        271L750     9
                     SUBSYST  STM,STSI,TSCS,,,,-1,YES,YES                          NS2715      1
                     SUBSYST  CMS,MSSI,MFCS,CMS,,,,NO,NO                           COMSSD    176
                     SUBSYST  SMF,SMSI,SMCS,,AUTO,,,YES,YES                        COMSSD    177
                     SUBSYST  SSF,SSSI,SSCS,,AUTO,,,YES,YES                        COMSSD    178
                     SUBSYST  MSE,ASSI,AFCS,,AUTO,,,YES,YES                        COMSSD    179
                     SUBSYST  TLF,TLSI,TLCS,,AUTO,,,YES,YES                        COMSSD    180
                     SUBSYST  NJF,NJSI,NJCS,,AUTO,,,YES,YES                        COMSSD    181
                     SUBSYST  CYB,PLSI,PLCS,,,,,YES,YES                            NS2746      2
                     SUBSYST  ATF,ATSI,ATCS,,,,,YES,YES                            274L797    10
                     SUBSYST  CRS,C1SI,C1CS,,AUTO,,,YES,YES                        NCCCRS      2
                SUB$ ENDIF                                                         274L797    11
```

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                 M_M           BASE   *                                                   COMSSSD    185
                               ENDX                                                       COMSSSD    186
                               LIST   *                                                   1SJ         87
      46                       CTEXT  COMSSSE - SYSTEM SECTOR EQUIVALENCES.               COMSSSE      1
                               QUAL   1DS                                                 1SJ         90
      46                       CTEXT  COMS1DS - 1DS FUNCTION CODE DEFINITIONS.            COMS1DS      1
                               QUAL   *                                                   1SJ         92
```

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          **        MACRO  DEFINITIONS.                                                1SJ         94
                                                                                       1SJ         95
                                                                                       1SJ         96
          **        JOBSTAT - DEFINE JOB STATE ATTRIBUTES.                             242L642      2
          *                                                                            1SJ         98
          *         JOBSTAT NAME,STATUS,SS,ES,FR,TE,PI                                 242L642      3
          *                NAME         TABLE NAME IF PRESENT.                         242L642      4
          *                STATUS       JOB STATUS.                                    242L642      5
          *                SS           NON-BLANK IF SCHEDULABLE JOB STATUS.           242L642      6
          *                ES           NON-BLANK IF ERROR FLAG SET CAUSES JOB         242L642      7
          *                             STATUS TO BECOME SCHEDULABLE.                  242L642      8
          *                FR           NON-BLANK IF JOB MAY BE FORCED ROLLED IN.      242L642      9
          *                TE           NON-BLANK IF TIMED/EVENT TYPE JOB STATUS.      242L642     10
          *                PI           NON-BLANK IF PRE-INITIAL JOB STEP TYPE         242L642     11
          *                             STATUS.                                        242L642     12
          *         JOBSTAT A,B,C,D,E,F,G                                              242L642     13
          *                                                                            271L716     16
          *         NOTE - ANY CHANGES TO THIS MACRO MUST BE ACCOMPANIED BY A          271L716     17
          *                CORRESPONDING CHANGE TO THE *JOBSTAT* MACRO DEFINED         271L716     18
          *                IN *1PP*.                                                   271L716     19
                                                                                       1SJ        106
                                                                                       1SJ        107
                    PURGMAC JOBSTAT                                                    1SJ        108
                                                                                       1SJ        109
                    MACRO  JOBSTAT,NAME,STATUS,SS,ES,FR,TE,PI                          242L642     14
          .1        IFC    NE,$NAME$$                                                  242L642     15
          NAME      INDEX                                                              271L716     20
          .1        ELSE                                                               242L642     18
          .V        SET    0                                                           271L716     21
                    IFC    NE,$SS$$,1                                                  242L642     22
          .V        SET    .V+4000                                                     271L716     22
                    IFC    NE,$ES$$,1                                                  242L642     24
          .V        SET    .V+2000                                                     271L716     23
                    IFC    NE,$FR$$,1                                                  242L642     26
          .V        SET    .V+1000                                                     271L716     24
                    IFC    NE,$TE$$,1                                                  242L642     28
          .V        SET    .V+400                                                      271L716     25
                    IFC    NE,$PI$$,1                                                  242L642     30
          .V        SET    .V+200                                                      271L716     26
                    INDEX  STATUS,.V                                                   271L716     27
          .1        ENDIF                                                              242L642     33
                    ENDM                                                               1SJ        126


          **        SUBSYST - GENERATE SUBSYSTEM TABLE.                                V22L602      2
          *                                                                            V22L602      3
          *         SUBSYST  NAME,ID,PR,PP,AUTO,DEF,DCP,CP,PROC,ABT                    V22L602      4
          *                                                                            V22L602      5
          *         ENTRY  *PR* = CPU PRIORITY AT WHICH TO INITIATE THE                V22L602      6
          *                       SUBSYSTEM.                                           V22L602      7
          *                                                                            V22L602      8
          *         TABLE OF SUBSYSTEM CPU PRIORITIES.                                 V22L602      9
          *                                                                            V22L602     10
          *T        12/ PRIORITY                                                       V22L602     11
                                                                                       V22L602     12
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                                                                                       V22L602      13
                                PURGMAC  SUBSYST                                       V22L602      14
                                                                                       V22L602      15
                       SUBSYST  MACRO  NM,ID,PT,PP,AU,DF,DC,CP,PR,AB                   V22L602      16
                       .A       IFC    NE,$PT$$                                        V22L602      17
                       .SUB     RMT                                                    V22L602      18
                                INDEX  (MXSI-ID),PT                                    V22L602      19
                       .SUB     RMT                                                    V22L602      20
                       .A       ENDIF                                                  V22L602      21
                       SUBSYST  ENDM                                                   V22L602      22



                      **        CONSTANTS.                                             1SJ         128
                                                                                       1SJ         129
                                                                                       1SJ         130
              7777     MXPR     EQU    7777        MAXIMUM SCHEDULING PRIORITY (INTERNAL)  1SJ         131
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                         ****      DIRECT CELL ASSIGNMENTS.                                      1SJ        133
                                                                                                 1SJ        134
                                                                                                 1SJ        135
                 16      T8        EQU     16            SCRATCH                                 242L642     34
                 17      T9        EQU     17            SCRATCH                                 242L642     35
                 20      AA        EQU     20 - 24       SCRATCH (5 CELLS)                       1SJ        136
                 25      TM        EQU     25 - 26       SECONDS PORTION OF *RTCL* (2 CELLS)     1SJ        137
                 27      BB        EQU     27 - 33       SCRATCH (5 CELLS)                       1SJ        138
                 34      EO        EQU     34            EJT ORDINAL                             1SJ        139
                 35      IO        EQU     35            QFT ORDINAL (USED ONLY IN *SIE*)        1SJ        140
                 36      TE        EQU     36            LWA OF LAST *TACP* ENTRY                1SJ        141
                 37      AM        EQU     37 - 40       AVAILABLE + ROLLING CM (2 CELLS)        1SJ        142
                 41      SC        EQU     41            SERVICE CLASS                           271L716     28
                 42      AE        EQU     42            AVAILABLE + ROLLING EM                  271L716     29
                 43      TP        EQU     43            SCRATCH                                 271L716     30
                 44      RM        EQU     44 - 45       ROLLING CM (2 CELLS)                    271L716     31
                 46      RE        EQU     46            ROLLING EM                              271L716     32
                 47      ES        EQU     47            EXCESS ECS OF SERVICE CLASS             1SJ        147
                 50      EJ        EQU     50 - 54       EJT BUFFER (5 CELLS)                    1SJ        148
                 57      CS        EQU     57 - 60       EXCESS CM OF SERVICE CLASS (2 CELLS)    271L716     33
                 61      SP        EQU     61            SERVICE CLASS OF SELECTED JOB           1SJ        151
                 62      JP        EQU     62            SCHEDULING PRIORITY OF SELECTED JOB     1SJ        152
                 63      JC        EQU     63            CONTROL POINT NUMBER OF SELECTED JOB    1SJ        153
                 64      JM        EQU     64            CM FL REQUIRED BY SELECTED JOB          1SJ        154
                 65      JE        EQU     65            ECS FL REQUIRED BY SELECTED JOB         1SJ        155
                 66      NC        EQU     66            NUMBER OF CONTROL POINTS                1SJ        156
                 67      EP        EQU     67            EJT ORDINAL OF SELECTED JOB             271L716     34
                                                                                                 1SJ        158
                                                                                                 1SJ        159
                         ****                                                                    1SJ        160
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                                      USE    TABLES                                                1SJ        162


                                **       TDAC - DEVICE ACTIVITY.                                   1SJ        164
                                *        ENTRY = 1 WORD.                                           1SJ        165
                                *        INDEXED BY EST ORDINAL.                                   1SJ        166
                                *                                                                  1SJ        167
                                *T       12/ AC                                                    1SJ        168
                                *        AC     ACTIVITY COUNT FROM MST OF DEVICE.                 1SJ        169
                                                                                                   1SJ        170
                                                                                                   1SJ        171
      4353                       TDAC    BSS    0                                                  1SJ        172
                           1     TDACE   EQU    1            ENTRY SIZE                            271L716     35



                                **       TTCU - ASSIGNED CM FL.                                    1SJ        174
                                *        ENTRY = 2 WORDS.                                          1SJ        175
                                *        INDEXED BY SERVICE CLASS.                                 1SJ        176
                                *                                                                  1SJ        177
                                *T       24/ CM                                                    1SJ        178
                                *        CM     CM FL ASSIGNED TO JOBS OF SERVICE CLASS.           1SJ        179
                                                                                                   1SJ        180
                                                                                                   1SJ        181
                        5353     TTCU    EQU    TDAC+ESMX                                          NS22000      2
                           2     TTCUE   EQU    2            ENTRY SIZE                            271L716     36



                                **       TTUE - ASSIGNED ECS FL.                                   284L847      1
                                *        ENTRY = 1 WORD.                                           1SJ        185
                                *        INDEXED BY SERVICE CLASS.                                 1SJ        186
                                *                                                                  1SJ        187
                                *T       12/ EC                                                    1SJ        188
                                *        EC     ECS FL ASSIGNED TO JOBS OF SERVICE CLASS.          1SJ        189
                                                                                                   1SJ        190
                                                                                                   1SJ        191
                        5421     TTUE    EQU    TTCU+MXJC*TTCUE                                    284L847      2
                           1     TTUEE   EQU    1            ENTRY SIZE                            284L847      3



                                      USE    *                                                     1SJ        193
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                        *       THE FOLLOWING TABLES ARE LOCATED TOWARD THE HIGH END OF PP    1SJ        195
                        *       MEMORY TO FACILITATE *1SJ-S* OVERLAY STRUCTURE.               1SJ        196


                        **      TEPB - EJT/CP SCHEDULING PARAMETERS.                          1SJ        198
                        *       ENTRY = 4 WORDS.                                              271L716     41
                        *       INDEXED BY SERVICE CLASS.                                     1SJ        200
                        *                                                                     1SJ        201
                        *T      12/  LB,12/  UB,12/  WF,12/  IP                               271L716     42
                        *       LB     LOWER BOUND SCHEDULING PRIORITY OF EXECUTING JOBS.     1SJ        205
                        *       UB     UPPER BOUND SCHEDULING PRIORITY OF EXECUTING JOBS.     1SJ        206
                        *       WF     WEIGHTING FACTOR.                                      1SJ        207
                        *       IP     INITIAL SCHEDULING PRIORITY OF EXECUTING JOBS.         1SJ        208
                                                                                              1SJ        209
                                                                                              1SJ        210
                      4  TEPBE  EQU    4           ENTRY SIZE                                 271L716     43
                   6662  TEPB   EQU    BFMS-MXJC*TEPBE                                        271L716     44


                        **      TJAM - SERVICE CLASS RESOURCE CONSTRAINTS.                    1SJ        213
                        *       ENTRY = 6 WORDS.                                              1SJ        214
                        *       INDEXED BY SERVICE CLASS.                                     1SJ        215
                        *                                                                     1SJ        216
                        *T      12/ MJ,12/ MCJ,24/ MCT,12/ MEJ,12/ MET                        1SJ        217
                        *       MJ     MAXIMUM NUMBER OF JOBS OF SERVICE CLASS ALLOWED IN     1SJ        218
                        *              SYSTEM (ASSIGNED TO EJT ENTRIES).                      1SJ        219
                        *       MCJ    MAXIMUM CM FL/100B PER JOB OF SERVICE CLASS.           1SJ        220
                        *       MCT    MAXIMUM TOTAL CM FL/100B FOR ALL JOBS OF SERVICE       1SJ        221
                        *              CLASS.                                                 1SJ        222
                        *       MEJ    MAXIMUM ECS FL/100B PER JOB OF SERVICE CLASS.          1SJ        223
                        *       MET    MAXIMUM TOTAL ECS FL/100B FOR ALL JOBS OF SERVICE      1SJ        224
                        *              CLASS.                                                 1SJ        225
                                                                                              1SJ        226
                                                                                              1SJ        227
                      6  TJAME  EQU    6           ENTRY SIZE                                 271L716     45
                   6500  TJAM   EQU    TEPB-MXJC*TJAME                                        271L716     46
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                    *         THE FOLLOWING TABLES ARE OVERLAYED BY *3SA* AND *3SB*.        271L716     47


                    **        TACP - ACTIVE CP-S AND PCP-S.                                271L716     48
                    *         ENTRY = 1 WORD.                                              1SJ         233
                    *         ENTRIES ARE ORDERED BY DESCENDING SCHEDULING PRIORITY. A ZERO 1SJ         234
                    *         ENTRY TERMINATES THE TABLE AND A ZERO WORD MUST PRECEDE THE   1SJ         235
                    *         TABLE.                                                       1SJ         236
                    *                                                                      1SJ         237
                    *T        1/  P,1/  R,3/,7/  CP                                        271L716     49
                    *         P      ROLLOUT IN PROGRESS.                                  1SJ         239
                    *         R      REQUEST ROLLOUT.                                      1SJ         240
                    *         CP     CP/PCP NUMBER.                                        271L716     50
                                                                                           1SJ         242
                                                                                           1SJ         243
                       1      TACPE  EQU    1           ENTRY SIZE                        271L716     51
                    6407      TACP   EQU    TJAM-/DSL/NCPS-1-/DSL/NPPS                    271L716     52


                    **        TJEC - JOB ECS FIELD LENGTH.                                 1SJ         246
                    *         ENTRY = 1 WORD.                                              1SJ         247
                    *         INDEXED BY CP/PCP NUMBER.                                    271L716     53
                    *                                                                      1SJ         249
                    *T        12/ EC                                                       1SJ         250
                    *         EC     EM FL ASSIGNED TO CP/PCP.                             271L716     54
                                                                                           1SJ         252
                                                                                           1SJ         253
                       1      TJECE  EQU    1           ENTRY SIZE                        271L716     55
                    6315      TJEC   EQU    TACP-/DSL/NCPS-2-/DSL/NPPS                    271L716     56


                    **        TJCM - JOB CM FIELD LENGTH (INCLUDING NFL).                  1SJ         256
                    *         ENTRY = 1 WORD.                                              1SJ         257
                    *         INDEXED BY CP/PCP NUMBER.                                    271L716     57
                    *                                                                      1SJ         259
                    *T        12/ FL                                                       1SJ         260
                    *         FL     CM FL (INCLUDING NFL) ASSIGNED TO CP/PCP.             271L716     58
                                                                                           1SJ         262
                                                                                           1SJ         263
                       1      TJCME  EQU    1           ENTRY SIZE                        271L716     59
                    6224      TJCM   EQU    TJEC-/DSL/NCPS-1-/DSL/NPPS                    271L716     60
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                          **        TJPR - JOB SCHEDULING PRIORITY.                      1SJ        266
                          *         ENTRY = 1 WORD.                                      1SJ        267
                          *         INDEXED BY CP/PCP NUMBER.                            271L716     61
                          *                                                              1SJ        269
                          *T        12/ PR                                               1SJ        270
                          *         PR      SCHEDULING PRIORITY OF JOB.                  1SJ        271
                                                                                         1SJ        272
                                                                                         1SJ        273
                  1        TJPRE    EQU     1           ENTRY SIZE                       271L716     62
               6133        TJPR     EQU     TJCM-/DSL/NCPS-1-/DSL/NPPS                   271L716     63


                          **        TJSC - JOB SERVICE CLASS.                            1SJ        276
                          *         ENTRY = 1 WORD.                                      1SJ        277
                          *         INDEXED BY CP/PCP NUMBER.                            271L716     64
                          *                                                              1SJ        279
                          *T        12/ SC                                               1SJ        280
                          *         SC      SERVICE CLASS OF JOB.                        1SJ        281
                                                                                         1SJ        282
                                                                                         1SJ        283
                  1        TJSCE    EQU     1           ENTRY SIZE                       271L716     65
               6042        TJSC     EQU     TJPR-/DSL/NCPS-1-/DSL/NPPS                   271L716     66
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                                **        SCJ - MAIN PROGRAM.                                    1SJ         286
                                                                                                 1SJ         287
                                                                                                 1SJ         288
          1100                            ORG    PPFW                                            1SJ         289
                                                                                                 1SJ         290
          1100                      SCJ   BSS    0                                               1SJ         291
          1100      0200 4354             RJM    PRS            PRESET                           1SJ         292
          1102      1400                  LDN    **                                              271L716      67
                                *         LDN    1              (INPUT FILE SCHEDULING REQUIRED) 271L716      68
                              1102  SCJA  EQU    *-1            (PP INPUT REGISTER FLAGS BYTE)   271L716      69
          1103      0410                  ZJN    SCJ1           IF INPUT FILE SCHEDULING NOT REQUIRED  271L716  70
          1104      1400                  LDN    **                                              271L716      71
                              1104  SCJB  EQU    *-1            (SCHEDULER CONTROL FLAGS FROM *INWL*)  1SJ   302
          1105      1206                  LPN    6                                               NS2134        1
          1106      0505                  NJN    SCJ1           IF SCHEDULING DISABLED OR LIMITS CHANGING  NS2134  2
          1107      2036 2302             EXECUTE  3SB          PERFORM INPUT FILE SCHEDULING    271L716      72
                                                                                                 1SJ         310
                                *         INITIALIZE/RESTORE CELLS FOR THE EJT/CM SCHEDULING FUNCTION.  1SJ  311
                                                                                                 1SJ         312
          1113      0200 2522       SCJ1  RJM    INT            INITIALIZE CELLS FOR EJT/CM SCHEDULING  271L716  73
                                                                                                 1SJ         314
                                *         BUILD THE FOLLOWING TABLES - *TACP*, *TJCM*, *TJEC*, *TJSC*,  1SJ  315
                                *         *TJPR*, *TTCU*, *TTUE*.  CALCULATE AVAILABLE AND ROLLING CM.  284L847  4
                                                                                                 1SJ         317
          1115      0200 1642             RJM    BST            BUILD CP AND SERVICE CLASS TABLES  1SJ       318
                                                                                                 1SJ         319
                                *         OBTAIN AVAILABLE CM AND EM FROM *ACML*.                271L716      74
                                                                                                 271L716      75
          1117      1422                  LDK    ACML                                            271L716      76
          1120      6037                  CRD    AM                                              271L716      77
                                 0        ERRNZ  AE-AM-3        CODE DEPENDS ON VALUE            271L716      78
                                                                                                 1SJ         332
                                *         CALCULATE AVAILABLE + ROLLING CM AND ECS.              1SJ         333
                                                                                                 1SJ         334
          1121      3045                  LDD    RM+1                                            1SJ         335
          1122      3540                  RAD    AM+1                                            1SJ         336
          1123      1063                  SHN    -14                                             1SJ         337
          1124      3144                  ADD    RM                                              1SJ         338
          1125      3537                  RAD    AM                                              1SJ         339
          1126      3046                  LDD    RE                                              1SJ         340
          1127      3542                  RAD    AE                                              1SJ         341
                                                                                                 1SJ         342
                                *         DETERMINE IF ANY JOB AT A CP OR PCP IS REQUESTING A CM  271L716     79
                                *         OR ECS FL INCREASE.  IF SO, IT MUST BE ADDRESSED BEFORE  1SJ       344
                                *         SCHEDULING ANOTHER JOB TO A CONTROL POINT.             1SJ         345
                                                                                                 1SJ         346
          1130      3063                  LDD    JC                                              1SJ         347
          1131      0433                  ZJN    SCJ4           IF NO JOB IS REQUESTING AN FL INCREASE  1SJ   348
                                                                                                 1SJ         349
                                *         THE FOLLOWING CODE IS NECESSARY TO PREVENT A DEADLOCK IN THE  1SJ  350
                                *         CASE OF SEVERAL OUTSTANDING CM FL INCREASE REQUESTS FOR JOBS  1SJ  351
                                *         OF EQUAL PRIORITY, BUT INSUFFICIENT AVAILABLE CM TO SATISFY  1SJ   352
                                *         ANY OF THE REQUESTS.                                   1SJ         353
                                                                                                 1SJ         354
          1132      1477                  LDN    PSNI                                            1SJ         355
          1133      5400 2314             STM    CFLA                                            1SJ         356
          1135      5000 1151             LDM    SCJD                                            1SJ43         1
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1137          0404                             ZJN    SCJ2         IF ROLLOUT NOT INHIBITED                   271L716     80
1140          1477                             LDK    PSNI         ALLOW ROLLOUT OF HIGHER PRIORITY JOBS      1SJ43        3
1141          5400 2313                        STM    CFLC                                                    1SJ43        4
1143          0200 2257              SCJ2      RJM    CFL          COMMIT FIELD LENGTH                        271L716     81
1145          0415                             ZJN    SCJ3         IF SUFFICIENT FL                           271L716     82
1146          0714                             MJN    SCJ3         IF ROLLOUT REQUEST REJECTED                271L716     83
1147          3411                             STD    CM+1         SET CM/EM OPTION                           NS22000      6
1150          2000 0000                        LDC    0                                                       NS22000      7
                           1151      SCJD      EQU    *-1          (ROLLOUT INHIBITED FLAG)                   NS22000      8
1152          0510                             NJN    SCJ3         IF ROLLOUT INHIBITED                       271L716     84
1153          3063                             LDD    JC           SET CP/PCP NUMBER                          271L716     85
1154          3412                             STD    CM+2                                                    NS22000     11
1155          1410                             MONITOR  SFLM       REJECT FL INCREASE                         NS22000     12
1160          0100 1113                        LJM    SCJ1         RECYCLE                                    271L716     86
                                                                                                              NS22000     14
1162          0100 1242              SCJ3      LJM    SCJ11        EXIT                                       271L716     87
                                                                                                              1SJ        358
1164          5000 1104              SCJ4      LDM    SCJB                                                    1SJ        359
1166          1202                             LPN    2                                                       NS2181B      1
1167          0572                             NJN    SCJ3         IF EJT SCHEDULING DISABLED                 271L716     88
1170          0200 2457                        RJM    DDA          BUILD *TDAC* TABLE                         1SJ        362
                                                                                                              1SJ        363
                                     *         SCAN EJT LOOKING FOR THE BEST SCHEDULABLE JOB.  IF THE         1SJ        364
                                     *         SELECTED JOB IS A SUBSYSTEM, OVERLAY *3SA* WILL BE CALLED.     1SJ        365
                                                                                                              1SJ        366
1172          0200 3102                        RJM    SFJ          SEARCH FOR SCHEDULING CANDIDATE            1SJ        367
1174          3067                             LDD    EP                                                      1SJ        368
1175          0424                             ZJN    SCJ7         IF NO SCHEDULABLE JOBS FOUND               271L716     89
1176          3434                             STD    EO           SET *EO* FOR FUTURE *EJA* CALLS            1SJ        370
1177          3061                             LDD    SP                                                      1SJ        371
1200          1123                             LMN    DSSC                                                    NS2181B      2
1201          0410                             ZJN    SCJ5         IF DEADSTART SEQUENCING JOB WAS SELECTED   NS2181B      3
1202          5000 1104                        LDM    SCJB                                                    NS2181B      4
1204          1210                             LPN    10                                                      NS2181B      5
1205          0520                             NJN    SCJ8         IF DEADSTART SEQUENCING JOB NOT COMPLETE   NS2181B      6
1206          3061                             LDD    SP                                                      NS2181B      7
1207          1107                             LMN    SSSC                                                    1SJ        372
1210          0507                             NJN    SCJ6         IF SELECTED JOB IS NOT A SUBSYSTEM         271L716     90
1211          2036 2301              SCJ5      EXECUTE  3SA                                                   1SJ        376
1215          0522                             NJN    SCJ10        IF SUBSYSTEM NOT SCHEDULED                 271L716     91
1216          0336                             UJN    SCJ12        RESTART *1SJ*                              271L716     92
                                                                                                              NS2181       9
1217          0200 2741              SCJ6      RJM    SCP          SELECT CONTROL POINT                       271L716     93
1221          0416                   SCJ7      ZJN    SCJ10        IF NO CP AVAILABLE                         271L716     94
1222          0713                             MJN    SCJ9         IF PCP REJECT                              271L716     95
1223          0200 2257                        RJM    CFL          COMMIT FIELD LENGTH                        271L716     96
1225          0512                   SCJ8      NJN    SCJ10        IF INSUFFICIENT FL                         271L716     97
1226          0200 1257                        RJM    ASJ          ASSIGN JOB TO CONTROL POINT                1SJ        419
1230          0200 4123                        RJM    USD          UPDATE STATISTICAL DATA                    NS22000     25
1232          2000 0000                        LDC    0                                                       1SJ        420
                           1233      SCJC      EQU    *-1          (RECYCLE FLAG)                             1SJ        421
1234          0406                             ZJN    SCJ11        IF RECYCLE NOT REQUESTED                   271L716     98
1235          0100 1113              SCJ9      LJM    SCJ1         RECYCLE ON THE EJT SCAN                    271L716     99
                                                                                                              271L716    100
1237          1401                   SCJ10     LDN    1            SET JOB NOT SCHEDULED                      271L716    101
1240          0200 4123                        RJM    USD          UPDATE STATISTICAL DATA                    NS22000     27
1242          1461                   SCJ11     MONITOR  DPPM       DROP PP                                    271L716    102
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1245          1443                          LDN    JSCL        CLEAR SCHEDULER ACTIVE FLAG                1SJ         426
1246          6010                          CRD    CM                                                     1SJ         427
1247          2077 3777                     LDC    -4000                                                  1SJ         428
1251          3510                          RAD    CM                                                     1SJ         429
1252          1443                          LDN    JSCL                                                   1SJ         430
1253          6210                          CWD    CM                                                     1SJ         431
1254          0100 0257          SCJ12      LJM    PPR         EXIT TO IDLE LOOP                          271L716     103
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                                **        ASJ - ASSIGN JOB TO CONTROL POINT.                                1SJ       435
                                *                                                                           1SJ       436
                                *         REQUEST CM/ECS FL; PERFORM MINIMAL CPA INITIALIZATION; STORE     1SJ       437
                                *         PRIORITY IN EJT; CALL *1AJ* IF JOB STATUS IS *PRJS*,             1SJ       438
                                *         OTHERWISE CALL *1RI*.                                            1SJ       439
                                *                                                                          1SJ       440
                                *         ENTRY  (JM) = CM FL TO BE ASSIGNED TO JOB.                       1SJ       441
                                *                (JE) = ECS FL TO BE ASSIGNED TO JOB.                      1SJ       442
                                *                (EO) = EJT ORDINAL OF SELECTED JOB.                       1SJ       443
                                *                (JC) = CONTROL POINT NUMBER FOR JOB ASSIGNMENT.           1SJ       444
                                *                (SP) = SERVICE CLASS OF SELECTED JOB.                     1SJ       445
                                *                (TM - TM+1) = SECONDS PORTION OF REAL TIME CLOCK.          1SJ       446
                                *                (NC) = SYSTEM CONTROL POINT NUMBER.                       1SJ       447
                                *                                                                          1SJ       448
                                *         EXIT   (A) = 0 IF JOB WAS SCHEDULED TO THE CONTROL POINT.        1SJ       449
                                *                   .NE. 0 IF SCHEDULING ATTEMPT FAILED.                   1SJ       450
                                *                                                                          1SJ       451
                                *         USES   JE, JM, AA - AA+4, BB - BB+4, CM - CM+4, EJ - EJ+4,       273L780     1
                                *                T1 - T5, T6, T7.                                          273L780     2
                                *                                                                          1SJ       454
                                *         CALLS  AST, CPR, EJA, RJC, RST.                                  271L716   106
                                *                                                                          1SJ       456
                                *         MACROS MONITOR.                                                  1SJ       457
                                                                                                           1SJ       458
                                                                                                           1SJ       459
        1256    0100 1256        ASJ      SUBR                ENTRY/EXIT                                1SJ       460
        1260    3063                      LDD     JC                                                      1SJ       461
        1261    2300 6000                 LMC     /CPS/RCPS+/CPS/ENRS  SET *CCAM* OPTIONS                 273L780     3
        1263    3411                      STD     CM+1                                                    1SJ       467
        1264    3034                      LDD     EO          SET EJT ORDINAL FOR *CCAM*                  1SJ       468
        1265    3412                      STD     CM+2                                                    1SJ       469
        1266    1452                      MONITOR  CCAM                                                   1SJ       470
        1271    3011                      LDD     CM+1                                                    1SJ       471
        1272    0563                      NJN     ASJX        IF *CCAM* FAILED                            273L780     4
                                                                                                          1SJ       477
                                *         REQUEST CM.                                                     1SJ       478
                                                                                                          1SJ       479
        1273    0200 2507                 RJM     EJA         CALCULATE EJT ENTRY ADDRESS                 273L780     5
                                          ADK     JSNE                                                    271L716   108
        1275    6050                      CRD     EJ                                                      271L716   109
        1276    1601                      ADK     SCHE-JSNE                                               271L716   110
        1277    6020                      CRD     AA                                                      271L716   111
        1300    1602                      ADK     SCLE-SCHE                                               271L716   112
        1301    6027                      CRD     BB                                                      271L716   113
        1302    2000 0000                 LDC     **                                                      271L716   114
                        1303     ASJA     EQU     *-1         (ORIGINAL JOB STATUS)                       271L716   115
        1304    3354                      LMD     EJ+4                                                    271L716   116
        1305    2200 7676                 LPC     7676                                                    271L716   117
        1307    0512                      NJN     ASJ3        IF JOB/CONNECTION/SCP STATUS CHANGED        271L716   118
        1310    3064                      LDD     JM                                                      271L716   119
        1311    0505                      NJN     ASJ2.1      IF CM FL ALREADY SET (NOT PCP JOB)          271L716   120
        1312    3032                      LDD     BB+3        SET EM AMOUNT                               271L716   121
        1313    3465                      STD     JE                                                      271L716   122
        1314    3033                      LDD     BB+4        SET CM AMOUNT                               271L716   123
        1315    3464                      STD     JM                                                      271L716   124
        1316    0200 2713        ASJ2.1   RJM     RST         REQUEST CM STORAGE                          271L716   125
        1320    0416                      ZJN     ASJ5        IF FUNCTION ACCEPTED                        1SJ       486
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1321  1401            ASJ3    LDN   /CPS/CCPS  RELEASE CP, CLEAR JOB ADVANCE          1SJ        487
1322  3411                    STD   CM+1                                              1SJ        488
1323  1463                    MONITOR  JACM                                          1SJ        489
1326  3066                    LDD   NC          CHANGE ASSIGNMENT TO SYSTEM CP       273L780      6
1327  3411                    STD   CM+1                                              1SJ        491
1330  1452                    MONITOR  CCAM                                          1SJ        492
1333  1401                    LDN   1           SET JOB NOT SCHEDULED                273L780      7
1334  0100 1256               UJP   ASJX        TERMINATE SCHEDULING ATTEMPT         273L780      8
                                                                                     1SJ        496
                        *       REQUEST ECS.                                         1SJ        497
                                                                                     1SJ        498
1336  3065            ASJ5    LDD   JE                                              1SJ        499
1337  0416                    ZJN   ASJ6        IF NO ECS REQUESTED                  1SJ        500
1340  2301 0000               LMC   10000                                            271L716    127
1342  0200 2713               RJM   RST         REQUEST EM STORAGE                   271L716    128
1344  0411                    ZJN   ASJ6        IF FUNCTION ACCEPTED                 1SJ        506
1345  1400            ASJ5.1  LDN   0           RELEASE CM FL                        271L716    129
1346  0200 2713               RJM   RST                                              271L716    130
1350  2001 0000               LDC   10000       RELEASE EM FL                        271L716    131
1352  0200 2713               RJM   RST                                              271L716    132
1354  0344                    UJP   ASJ3        TERMINATE SCHEDULING ATTEMPT         271L716    133
                                                                                     1SJ        512
1355  2000 0112       ASJ6    LDK   LOSL        SAVE EJT ORDINAL OF LAST JOB SCHEDULED 271L716  134
1357  6010                    CRD   CM                                               NS2153       2
1360  3034                    LDD   EO                                               NS2153       3
1361  3414                    STD   CM+4                                             NS2153       4
1362  2000 0112               LDK   LOSL                                           NS2153       5
1364  6210                    CWD   CM                                             NS2153       6
1365  1466                    LDN   ZERL        CLEAR *TSCW* IMAGE                   1SJ53        1
1366  6001                    CRD   T1                                             1SJ53        2
1367  3061                    LDD   SP                                             271L750      2
1370  0200 4332               RJM   RJC         CALCULATE JCB ADDRESS              271L750      3
1372  0412                    ZJN   ASJ6.1      IF NO JCB FOR SERVICE CLASS        271L750      4
1373  1603                    ADN   SVJT        GET CP/CM TIME SLICE               1SJ53        3
1374  6027                    CRD   BB                                             1SJ53        4
1375  1604                    ADN   CSJT-SVJT   GET SERVICE CLASS CPU PRIORITY     1SJ53        5
1376  6010                    CRD   CM                                             271L750      6
1377  3030                    LDD   BB+1        SET CONTROL POINT TIME SLICE       1SJ53        6
1400  3405                    STD   T1+4                                           1SJ53        7
1401  3031                    LDD   BB+2        SET CM TIME SLICE                  1SJ53        8
1402  3402                    STD   T1+1                                           1SJ53        9
1403  3010                    LDD   CM          SAVE SERVICE CLASS CPU PRIORITY    271L750      7
1404  3406            ASJ6.1  STD   T6                                             271L750      8
1405  1466                    LDN   ZERL                                           1SJ        519
1406  6027                    CRD   BB          CLEAR *CWQW* IMAGE                 271L750      9
1407  6010                    CRD   CM          CLEAR *JCIW* IMAGE                 271L750     10
1410  2000 2670               LDC   2000+LSCS*10-10  SET DEFAULT CPU PRIORITY     NS2731       1
1412  3427                    STD   BB                                             1SJ        524
1413  2000 6000               LDC   6000        PRESET CPU SCHEDULING FLAGS FOR *1AJ/3AA*  271L750  12
1415  3430                    STD   BB+1                                           271L750     13
1416  2000 1240               LDC   SSSC*JCBE*10B  SET PARAMETERS INDEX FOR NO JCB DEFINED  271L750  14
1420  3431                    STD   BB+2                                           271L750     15
1421  3006                    LDD   T6                                             271L750     16
1422  0437                    ZJN   ASJ8        IF NO JCB FOR SERVICE CLASS        1SJ        527
1423  3000                    LDD   T0          SET CPU SCHEDULING PARAMETERS INDEX 271L750     17
1424  1003                    SHN   3                                              271L750     18
1425  3431                    STD   BB+2                                           271L750     19
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1426          3061                       LDD   SP                                         1SJ          530
1427          1107                       LMN   SSSC                                       1SJ          531
1430          0522                       NJN   ASJ7         IF NOT A SUBSYSTEM            1SJ          532
1431          5000 7137                  LDM   SISS                                       1SJ9           1
1433          3412                       STD   CM+2         SET SUBSYSTEM ID              271L750       20
1434          2177 0031                  SBK   LSSI+1                                     NS22000       28
1436          0714                       MJN   ASJ7         IF PSEUDO SUBSYSTEM           NS22000       29
1437          2000 7776                  LDC   MXSI         CALCULATE SUBSYSTEM INDEX     NS22000       30
1441          5200 7137                  SBM   SISS                                       1SJ          534
1443          3407                       STD   T7                                         1SJ          535
1444          5007 5251                  LDM   /3SA/TSCI,T7  SET SUBSYSTEM INITIAL CPU PRIORITY    271L750       21
1446          0404                       ZJN   ASJ7         IF CPU PRIORITY NOT SPECIFIED 1SJ          537
1447          3406                       STD   T6                                         271L750       22
1450          3072                       LDD   TH           SET CPU PRIORITY NOT FROM SERVICE CLASS    NS2731         2
1451          3530                       RAD   BB+1                                       NS2731         3
1452          3006               ASJ7    LDD   T6           SET CPU PRIORITY IN *CWQW* IMAGE    271L750       23
1453          1003                       SHN   3                                          271L750       24
1454          2100 2000                  ADC   2000                                       271L750       25
1456          3427                       STD   BB                                         1SJ          541
1457          5061 6705                  LDM   TEPB+1*MXJC,SP  SAVE PRIORITY IN EJT DATA BLOCK    271L716      137
1461          5400 1531          ASJ8    STM   ASJC                                       271L716      138
1463          3074                       LDD   CP                                         1SJ          553
1464          6220                       CWD   AA           SAVE EJT SCHEDULING FIELD FOR *1RI*    1SJ          554
1465          1621                       ADN   CWQW                                       271L750       26
1466          6227                       CWD   BB           SET CPU PRIORITY              271L750       27
1467          1605                       ADN   JCIW-CWQW                                  271L750       28
1470          6210                       CWD   CM           SET SUBSYSTEM ID              271L750       29
1471          1674                       ADK   TSCW-JCIW                                  1SJ          557
1472          6201                       CWD   T1                                         1SJ          558
1473          2000 0000                  LDC   **                                         1SJ          559
                          1474   ASJB    EQU   *-1          (EJT ORDINAL IF ONLY NFL WILL BE ROLLED)    1SJ          560
1475          3334                       LMD   EO                                         1SJ          561
1476          0502                       NJN   ASJ10        IF NO CHANGE NEEDED TO CM FL IN EJT ENTRY    1SJ          562
1477          3464                       STD   JM           TELL *1RI* ONLY NFL NEEDED    271L716      141
                                                                                          1SJ          564
                                 *       UPDATE EJT ENTRY AS FOLLOWS -                    1SJ          565
                                 *             SET EXECUTION SCHEDULING PRIORITY.         1SJ          566
                                 *             SET CONTROL POINT NUMBER.                  1SJ          567
                                 *             SET ROLLIN CM FL.                          1SJ          568
                                                                                          1SJ          569
1500          0200 2507          ASJ10   RJM   EJA          GET EJT ENTRY ADDRESS         271L716      142
1502          1601                       ADK   SCHE                                       271L716      143
1503          6020                       CRD   AA                                         271L716      144
1504          1602                       ADK   SCLE-SCHE                                  271L716      145
1505          6027                       CRD   BB                                         271L716      146
1506          3064                       LDD   JM           SET CM FL                     271L716      147
1507          3433                       STD   BB+4                                       271L716      148
1510          3054                       LDD   EJ+4         SAVE JOB STATUS               271L716      149
1511          1276                       LPN   76                                         271L716      150
1512          1076                       SHN   -1                                         271L716      151
1513          3403                       STD   T3                                         271L716      152
1514          1111                       LMK   PCJS                                       271L716      153
1515          0513                       NJN   ASJ10.1      IF NOT PCP JOB                271L716      154
1516          3023                       LDD   AA+3         SET ENTRY TIME FOR *CPR*      271L716      155
1517          3401                       STD   T1                                         271L716      156
1520          3024                       LDD   AA+4                                       271L716      157
1521          3402                       STD   T2                                         271L716      158
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1522         3061                        LDD    SP                                             271L716    159
1523         1014                        SHN    14                                             271L716    160
1524         1101                        LMK    EXQT                                           271L716    161
1525         0200 4241                   RJM    CPR         COMPUTE SCHEDULING PRIORITY        271L716    162
1527         0303                        UJN    ASJ10.2     STORE PRIORITY IN EJT              271L716    163
                                                                                               271L716    164
1530         2000 0000         ASJ10.1   LDC    **          SET SCHEDULING PRIORITY            271L716    165
                        1531   ASJC      EQU    *-1                                            271L716    166
1532         3424              ASJ10.2   STD    AA+4                                           271L716    167
1533         3063                        LDD    JC          SET CP NUMBER                      271L716    168
1534         3423                        STD    AA+3                                           271L716    169
1535         0200 2507                   RJM    EJA         UPDATE EJT ENTRY                   271L716    170
1537         1601                        ADK    SCHE                                           271L716    171
1540         6220                        CWD    AA                                             271L716    172
1541         1602                        ADK    SCLE-SCHE                                      271L716    173
1542         6227                        CWD    BB                                             271L716    174
1543         1466                        LDN    ZERL        CLEAR PP INPUT REGISTER IMAGE      1SJ        572
1544         6020                        CRD    AA                                             1SJ        573
1545         3054                        LDD    EJ+4                                           1SJ        574
1546         5003 4072                   LDM    TJST,T3                                        271L716    175
1550         1012                        SHN    21-7                                           242L642     39
1551         0705                        MJN    ASJ11       IF PRE-INITIAL JOB STATE           242L642     40
1552         2011 3422                   LDC    3RI1R                                          1SJ        578
1554         0100 1615                   UJP    ASJ13       CALL *1RI*                         NS2244       1
                                                                                               1SJ        580
1556         3061              ASJ11     LDD    SP                                             1SJ        581
1557         1107                        LMN    SSSC                                           1SJ        582
1560         0532                        NJN    ASJ12       IF NOT SUBSYSTEM                   1SJ        583
1561         5000 7137                   LDM    SISS                                           NS2232       1
1563         2177 0032                   ADC    -LSSI                                          NS2232       2
1565         0725                        MJN    ASJ12       IF SUBSYSTEM NOT IN *SSAT*         NS2232       3
1566         2000 7750                   LDC    PLSI        CHECK FOR CYBIS                    NS2746       1
1570         5300 7137                   LMM    SISS                                           NS2244       3
1572         0510                        NJN    ASJ11.1     IF NOT CYBIS                       NS2746       2
1573         5000 7137                   LDM    SISS        FETCH *SSAT* ENTRY (EJT ORDINAL)   NS2244       5
1575         2104 0000                   ADC    /3SA/FEAF*10000                                NS2244       6
1577         0200 4726                   RJM    /3SA/AST                                       NS2244       7
1601         0511                        NJN    ASJ12       IF ALREADY ACTIVE                  NS2244       8
1602         3034              ASJ11.1   LDD    EO                                             NS2244       9
1603         3401                        STD    T1                                             1SJ        585
1604         5000 7137                   LDM    SISS                                           1SJ        586
1606         2106 0000                   ADC    /3SA/SEAF*10000                                1SJ        587
1610         0200 4726                   RJM    /3SA/AST    STORE EJT ORDINAL IN SSAT TABLE    1SJ        588
1612         3622              ASJ12     AOD    AA+2        SET *1AJ* FUNCTION 1               1SJ        589
1613         2012 3401                   LDC    3RJ1A       CALL *1AJ*                         1SJ        590
1615         3420              ASJ13     STD    AA                                             1SJ        591
1616         1071                        SHN    -6                                             1SJ        592
1617         1377                        SCN    77                                             1SJ        593
1620         3363                        LMD    JC                                             1SJ        594
1621         3421                        STD    AA+1                                           1SJ        595
1622         3077                        LDD    MA          WRITE *1RI*/*1AJ* CALL TO MESSAGE BUFFER   1SJ   596
1623         6220                        CWD    AA                                             1SJ        597
1624         1400                        LDN    0           CLEAR PRIORITY REQUEST FLAG        1SJ        598
1625         3411                        STD    CM+1                                           1SJ        599
1626         2000 0100                   MONITOR  RPPM      CALL *1RI*/*1AJ*                   1SJ        600
1632         3066                        LDD    NC          CHANGE ASSIGNMENT BACK TO SYSTEM CP   273L780   9
1633         3411                        STD    CM+1                                           1SJ        602
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1634          1452                          MONITOR  CCAM                                      1SJ          605
                                  *         LDN    0            SET JOB SCHEDULED              273L780       10
1637          0100 1256                     LJM    ASJX         RETURN                         273L780       11


                                  **        BST - BUILD SCHEDULING TABLES.                     1SJ          626
                                  *                                                            1SJ          627
                                  *         BUILD SCHEDULING TABLES AND CHECK FOR JOBS HAVING FL INCREASE 1SJ          628
                                  *         REQUESTS OUTSTANDING.  IF ANY ARE FOUND, SELECT THE HIGHEST   1SJ          629
                                  *         PRIORITY ONE FOR SCHEDULING.                       1SJ          630
                                  *                                                            1SJ          631
                                  *         ENTRY  (JC) = 0.                                   1SJ          632
                                  *                (JP) = 0.                                   271L716      177
                                  *                (RM - RM+1) = 0.                            1SJ          633
                                  *                (RE) = 0.                                   1SJ          634
                                  *                                                            1SJ          635
                                  *         EXIT   (JC) = CP NUMBER OF HIGHEST PRIORITY JOB REQUESTING AN 1SJ          636
                                  *                       FL INCREASE.                         1SJ          637
                                  *                     = 0 IF NO OUTSTANDING FL INCREASE REQUESTS.       1SJ          638
                                  *                                                            1SJ          639
                                  *         USES   CS, EO, EP, ES, JC, JE, JM, JP, RE, SC, SP, TE, TP,    271L716      178
                                  *                AA - AA+4, BB - BB+4, CM - CM+4, EJ - EJ+4, RM - RM+1, 271L716      179
                                  *                T0 - T6.                                    271L716      180
                                  *                                                            1SJ          643
                                  *         CALLS  CCA, CCP, CPR, EJA.                         273L780       13
                                                                                               1SJ          645
                                                                                               1SJ          646
1641          0100 1641            BST      SUBR                ENTRY/EXIT                     1SJ          647
                                                                                               1SJ          648
                                  *         INITIALIZE *TTCU* AND *TTUE* TABLES.               284L847        5
                                                                                               1SJ          650
1643          1422                          LDN    MXJC-1                                      1SJ          651
1644          3401                          STD    T1                                          1SJ          652
1645          1400                 BST1     LDN    0                                           1SJ          653
1646          5401 5353                     STM    TTCU,T1                                     1SJ          654
1650          5401 5376                     STM    TTCU+1*MXJC,T1                              1SJ          655
1652          5401 5421                     STM    TTUE,T1                                     284L847        6
1654          3701                          SOD    T1           DECREMENT INDEX                1SJ          657
1655          0667                          PJN    BST1         IF NOT FINISHED                1SJ          658
1656          2000 6407                     LDC    TACP         SET END OF *TACP* TABLE        1SJ          659
1660          3436                          STD    TE                                          1SJ          660
1661          1400                          LDN    0                                           1SJ          661
1662          5400 6406                     STM    TACP-1       MARK START OF *TACP* TABLE     1SJ          662
1664          4436                          STI    TE           MARK END OF *TACP* TABLE       1SJ          663
1665          3443                          STD    TP           INITIALIZE CP/PCP NUMBER       271L716      184
                                                                                               1SJ          684
                                  *         SCAN CONTROL POINT AREAS CALCULATING AVAILABLE CM AND ECS.    1SJ          685
                                  *         CHECK FOR OUTSTANDING FL INCREASE REQUESTS.        1SJ          686
                                                                                               1SJ          687
1666          3643                 BST2     AOD    TP           ADVANCE CP/PCP NUMBER          271L716      185
1667          3366                          LMD    NC                                          271L716      186
1670          0475                          ZJN    BST2         IF SYSTEM CONTROL POINT        271L716      187
1671          3366                          LMD    NC                                          271L716      188
1672          2300 0000                     LMC    **                                          271L716      189
                           1673    BSTB     EQU    *-1                                         271L716      190
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1674          0444                      ZJP    BSTX          IF END OF SCAN                         271L716     191
1675          3043                      LDD    TP            SET CP/PCP ADDRESS                     273L780      14
1676          0200 2223                 RJM    CCA                                                  273L780      15
1700          1623                      ADK    FLSW          READ CM CONTROL WORD OF CURRENT CP/PCP 273L780      16
1701          6010                      CRD    CM                                                   1SJ         696
1702          1602                      ADN    ECSW-FLSW     READ EM CONTROL WORD OF CURRENT CP/PCP 271L716     193
1703          6000                      CRD    T0                                                   1SJ         698
                                                                                                    271L716     194
                                 *      STORE CP/PCP *TP* CM FL IN *TJCM* TABLE.                    271L716     195
                                                                                                    1SJ         732
1704          3014                      LDD    CM+4                                                 1SJ         733
1705          3110                      ADD    CM            NFL                                    1SJ         734
1706          5443 6223                 STM    TJCM-1,TP                                            1SJ         735
1710          3405                      STD    T5                                                   1SJ         736
                                                                                                    1SJ         737
                                                                                                    1SJ         746
                                 *      STORE CONTROL POINT *TP* ECS FL IN *TJEC* TABLE.            1SJ         747
                                                                                                    1SJ         748
1711          3004                      LDD    T0+4                                                 1SJ         749
1712          5443 6314                 STM    TJEC-1,TP                                            1SJ         750
1714          3406                      STD    T6                                                   1SJ         751
                                                                                                    1SJ         752
                                 *      CHECK FOR AVAILABLE CONTROL POINT.                          1SJ         753
                                                                                                    1SJ         754
1715          3043                      LDD    TP            SET CP/PCP ADDRESS                     273L780      17
1716          0200 2223                 RJM    CCA                                                  273L780      18
1720          1626                      ADK    JCIW                                                 273L780      19
1721          6010                      CRD    CM                                                   1SJ         758
1722          1644                      ADN    TFSW-JCIW                                            1SJ         759
1723          6050                      CRD    EJ                                                   1SJ         760
1724          3050                      LDD    EJ                                                   1SJ         761
1725          0517                      NJN    BST6          IF CP/PCP IS OCCUPIED                  271L716     197
1726          3043                      LDD    TP                                                   271L716     198
1727          3266                      SBD    NC                                                   271L716     199
1730          0612                      PJN    BST5          IF PCP                                 271L716     200
1731          5000 2773                 LDM    SCPA                                                 271L716     201
1733          0404                      ZJN    BST4          IF NO FREE CP YET SET                  271L716     202
1734          0200 2234                 RJM    CCP                                                  271L716     203
1736          0504                      NJN    BST5          IF CURRENT CP IS NEITHER FIRST NOR LAST 271L716    204
1737          3043             BST4     LDD    TP            SAVE NUMBER OF FREE CONTROL POINT      271L716     205
1740          5400 2773                 STM    SCPA                                                 271L716     206
1742          0100 1666        BST5     LJM    BST2          CONTINUE CONTROL POINT SCAN            1SJ         764
                                                                                                    1SJ         765
1744          3434             BST6     STD    EO            SAVE EJT ORDINAL                       1SJ         766
1745          0200 2507                 RJM    EJA           CALCULATE EJT ENTRY ADDRESS            1SJ         767
                                        ADK    JSNE                                                 1SJ         768
1747          6050                      CRD    EJ                                                   1SJ         769
1750          1601                      ADN    SCHE-JSNE                                            1SJ         770
1751          6020                      CRD    AA                                                   1SJ         771
1752          1602                      ADN    SCLE-SCHE                                            1SJ         772
1753          6027                      CRD    BB                                                   1SJ         773
1754          3027                      LDD    BB            GET SERVICE CLASS AND FORCED ROLL FLAGS 1SJ        778
1755          1014                      SHN    14                                                   1SJ         779
1756          5443 6041                 STM    TJSC-1,TP                                            1SJ         780
1760          3441                      STD    SC                                                   1SJ         781
1761          1001                      SHN    1                                                    1SJ         782
1762          0603                      PJN    BST7          IF NOT FORCED ROLLIN                   1SJ         783
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1763         1401                  LDN   1           SET NO ROLLOUT FLAG                     1SJ          784
1764         3412                  STD   CM+2                                                1SJ          785
1765         3024           BST7   LDD   AA+4        SET CP JOB SCHEDULING PRIORITY          1SJ52          2
1766         5443 6132             STM   TJPR-1,TP                                           1SJ          787
1770         3011                  LDD   CM+1        CHECK *CPUPFM* ACTIVE                   NS2542         1
1771         1210                  LPN   10                                                  NS2542         2
1772         0505                  NJN   BST8        IF *CPUPFM* ACTIVE                      NS2542         3
1773         3013                  LDD   CM+3        SET/CLEAR NO ROLLOUT FLAG               1SJ          788
1774         2200 1000             LPC   1000        MASK *DIS* FLAG                         1SJ          789
1776         3112                  ADD   CM+2                                                1SJ          790
1777         5400 2157      BST8   STM   BSTA                                                1SJ          791
2001         3054                  LDD   EJ+4                                                1SJ38          1
2002         1276                  LPN   76                                                  1SJ38          2
2003         1102                  LMN   EXJS*2                                              1SJ38          3
2004         0417                  ZJN   BST8.1      IF JOB IS AT A CP                       271L716      207
2005         1120                  LMK   PCJS*2&EXJS*2                                       271L716      208
2006         0527                  NJN   BST8.2      IF NOT A PCP JOB                        271L716      209
2007         3023                  LDD   AA+3        SET ENTRY TIME FOR *CPR*                1SJ52          3
2010         3401                  STD   T1                                                  1SJ52          4
2011         3024                  LDD   AA+4                                                1SJ52          5
2012         3402                  STD   T2                                                  1SJ52          6
2013         3041                  LDD   SC                                                  1SJ52          7
2014         1014                  SHN   14                                                  1SJ52          8
2015         1101                  LMK   EXQT                                                1SJ52          9
2016         0200 4241             RJM   CPR         COMPUTE SCHEDULING PRIORITY             1SJ52         10
2020         5443 6132             STM   TJPR-1,TP                                           1SJ52         11
2022         1400                  LDN   0                                                   1SJ52         12
                                                                                             1SJ          792
                            *      CHECK FOR ROLLOUT ACTIVITY AT CP/PCP.  ACCUMULATE CM      271L716      210
                            *      AND ECS FL ASSIGNED TO THE JOB IF IT IS ROLLING OUT.      1SJ          794
                                                                                             1SJ          795
2023         3454           BST8.1 STD   EJ+4                                                271L716      211
2024         3043                  LDD   TP          SET CP/PCP ADDRESS                      273L780       20
2025         0200 2223             RJM   CCA                                                 273L780       21
2027         1620                  ADK   STSW                                                273L780       22
2030         6010                  CRD   CM                                                  1SJ          799
2031         1645                  ADN   FLIW-STSW                                           1SJ          800
2032         6020                  CRD   AA                                                  1SJ          801
2033         3012                  LDD   CM+2                                                1SJ          802
2034         1021                  SHN   21-0                                                271L716      213
2035         0630           BST8.2 PJN   BST9        IF JOB NOT ROLLING OUT                  271L716      214
2036         3043                  LDD   TP                                                  271L716      215
2037         3266                  SBD   NC                                                  271L716      216
2040         0612                  PJN   BST8.4      IF JOB AT PCP                           271L716      217
2041         5000 2776             LDM   SCPB                                                271L716      218
2043         0404                  ZJN   BST8.3      IF NO ROLLING CP YET SET                271L716      219
2044         0200 2234             RJM   CCP                                                 271L716      220
2046         0504                  NJN   BST8.4      IF CURRENT CP NEITHER FIRST NOR LAST    271L716      221
2047         3043           BST8.3 LDD   TP          SAVE NUMBER OF ROLLING CP               271L716      222
2050         5400 2776             STM   SCPB                                                271L716      223
2052         3012           BST8.4 LDD   CM+2                                                271L716      224
2053         1012                  SHN   21-7                                                271L716      225
2054         0707                  MJN   BST8.5      IF PSEUDO-ROLLOUT IN PROGRESS           271L716      226
2055         3005                  LDD   T5          ACCUMULATE ROLLING CM                   271L716      227
2056         3545                  RAD   RM+1                                                1SJ          807
2057         1063                  SHN   -14                                                 1SJ          808
2060         3544                  RAD   RM                                                  1SJ          809
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2061          3006                 LDD    T6          ACCUMULATE ROLLING ECS                    1SJ          810
2062          3546                 RAD    RE                                                    1SJ          811
2063          0100 1666   BST8.5   LJM    BST2        CONTINUE CP/PCP SCAN                      271L716      228
                                                                                                1SJ          813
                         *         JOB IS NOT ROLLING OUT.  CHECK FOR AN OUTSTANDING FL INCREASE 1SJ         814
                         *         REQUEST.  IF ONE IS FOUND AT THIS CONTROL POINT, SEE IF THE  1SJ          815
                         *         JOB-S SCHEDULING PRIORITY IS SUFFICIENTLY HIGH TO MAKE THE   1SJ          816
                         *         JOB THE BEST SCHEDULING CANDIDATE FOUND SO FAR.              1SJ          817
                                                                                                1SJ          818
2065          3041        BST9     LDD    SC                                                    1SJ          819
2066          1723                 SBN    MXJC                                                  1SJ          820
2067          0612                 PJN    BST10       IF NO JCB FOR THIS SERVICE CLASS          1SJ          821
2070          3005                 LDD    T5          ACCUMULATE CM ASSIGNED TO SERVICE CLASS   1SJ          822
2071          5541 5376            RAM    TTCU+1*MXJC,SC                                        1SJ          823
2073          1063                 SHN    -14                                                   1SJ          824
2074          5541 5353            RAM    TTCU,SC                                               1SJ          825
2076          3006                 LDD    T6          ACCUMULATE ECS ASSIGNED TO SERVICE CLASS  1SJ          826
2077          5541 5421            RAM    TTUE,SC                                               284L847        7
2101          3054        BST10    LDD    EJ+4                                                  1SJ38          7
2102          0560                 NJN    BST8.5      IF JOB IS ROLLING IN                      271L716      229
2103          5043 6132            LDM    TJPR-1,TP                                             1SJ38          9
2105          3262                 SBD    JP                                                    1SJ          831
2106          0722                 MJN    BST12       IF CP HAS LOWER PRIORITY THAN CURRENT HIGH 1SJ         832
2107          3024                 LDD    AA+4                                                  1SJ          833
2110          0414                 ZJN    BST11       IF NO CM FL INCREASE REQUESTED            1SJ          834
2111          3021                 LDD    AA+1                                                  1SJ          835
2112          1021                 SHN    21-0                                                  1SJ          836
2113          0715                 MJN    BST12       IF REQUEST WAS ALREADY REJECTED           1SJ          837
2114          3024                 LDD    AA+4                                                  1SJ          838
2115          3205                 SBD    T5                                                    1SJ          839
2116          0406                 ZJN    BST11       IF CM ALREADY ASSIGNED                    271L716      230
2117          0705                 MJN    BST11       IF CM ALREADY ASSIGNED                    1SJ          841
                                                                                                1SJ          842
                         *         THIS CONTROL POINT IS THE BEST SCHEDULING CANDIDATE FOUND SO 1SJ          843
                         *         FAR.  SAVE SCHEDULING INFORMATION.                           1SJ          844
                                                                                                1SJ          845
2120          3464                 STD    JM                                                    1SJ          846
2121          1400                 LDN    0           CLEAR ECS REQUIREMENT                     1SJ          847
2122          3465                 STD    JE                                                    1SJ          848
2123          0315                 UJN    BST13       GO FINISH SAVING SCHEDULING INFORMATION   1SJ          853
                                                                                                1SJ          854
2124          3023        BST11    LDD    AA+3                                                  1SJ          855
2125          0435                 ZJN    BST14.1     IF NO ECS FL INCREASE REQUESTED           1SJ19          1
2126          3021                 LDD    AA+1                                                  1SJ          857
2127          1020                 SHN    21-1                                                  1SJ          858
2130          0732        BST12    MJN    BST14.1     IF REQUEST WAS ALREADY REJECTED           1SJ19          2
2131          3023                 LDD    AA+3                                                  1SJ          860
2132          3206                 SBD    T6                                                    1SJ          861
2133          0427                 ZJN    BST14.1     IF ECS ALREADY ASSIGNED                   1SJ19          3
2134          0726                 MJN    BST14.1     IF ECS ALREADY ASSIGNED                   1SJ19          4
                                                                                                1SJ          864
                                                                                                1SJ          865
                         *         THIS CONTROL POINT IS THE BEST SCHEDULING CANDIDATE SO       1SJ          866
                         *         FAR.  SAVE SCHEDULING INFORMATION.                           1SJ          867
                                                                                                1SJ          868
2135          3465                 STD    JE                                                    1SJ          869
2136          1400                 LDN    0           CLEAR CM REQUIREMENT                      1SJ          870
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2137          3464                        STD    JM                                       1SJ           871
2140          1500              BST13     LCN    0          PREVENT SERVICE CLASS ECS LIMIT       1SJ32           1
2141          3447                        STD    ES                                       1SJ           873
2142          3460                        STD    CS+1       PREVENT SERVICE CLASS CM LIMIT        1SJ32           2
2143          1437                        LDN    37                                       1SJ32           3
2144          3457                        STD    CS                                       1SJ32           4
2145          5043 6132                   LDM    TJPR-1,TP  SAVE SCHEDULING PRIORITY      1SJ32           5
2147          3462                        STD    JP                                       1SJ           875
2150          3043                        LDD    TP         SAVE CP/PCP NUMBER            271L716       231
2151          3463                        STD    JC                                       1SJ           877
2152          3034                        LDD    EO         SAVE EJT ORDINAL              1SJ           878
2153          3467                        STD    EP                                       1SJ           879
2154          3041                        LDD    SC         SAVE SERVICE CLASS            1SJ           880
2155          3461                        STD    SP                                       1SJ           881
2156          2000 0000         BST14     LDC    **                                       1SJ           882
                          2157  BSTA      EQU    *-1        (NO ROLLOUT FLAG)             1SJ           883
2160          5400 1151                   STM    SCJD       (SET/CLEAR NO REJECT FLAG)    NS2072          4
2162          5000 2157         BST14.1   LDM    BSTA                                     1SJ19           5
2164          0532                        NJN    BST18      IF ROLLOUT MUST NOT OCCUR     1SJ           884
                                                                                          1SJ           885
                                *         BUILD *TACP* ENTRY FOR THIS CONTROL POINT.      1SJ           886
                                                                                          1SJ           887
2165          2000 6406                   LDC    TACP-1     SET START OF *TACP* TABLE     1SJ           888
2167          3401                        STD    T1                                       1SJ           889
2170          3601              BST15     AOD    T1         INCREMENT *TACP* INDEX        1SJ           890
2171          4001                        LDI    T1                                       1SJ           891
2172          0417                        ZJN    BST17      IF END OF *TACP* TABLE        1SJ           892
2173          3402                        STD    T2                                       1SJ           893
2174          5002 6132                   LDM    TJPR-1,T2                                1SJ           894
2176          5243 6132                   SBM    TJPR-1,TP                                1SJ           895
2200          0667                        PJN    BST15      IF PRIORITY OF *TP* .LE. *TACP* ENTRY  1SJ    896
                                                                                          1SJ           897
                                *         MOVE ALL *TACP* ENTRIES THAT ARE BEYOND CURRENT POSITION  1SJ  898
                                *         ONE SLOT TOWARD THE END OF THE *TACP* TABLE.    1SJ           899
                                                                                          1SJ           900
2201          3036                        LDD    TE                                       1SJ           901
2202          3402                        STD    T2                                       1SJ           902
2203          5002 7776         BST16     LDM    -1,T2                                    1SJ           903
2205          4402                        STI    T2                                       1SJ           904
2206          3702                        SOD    T2                                       1SJ           905
2207          3301                        LMD    T1                                       1SJ           906
2210          0572                        NJN    BST16      IF MOVE NOT COMPLETE          1SJ           907
                                                                                          1SJ           908
                                *         ALL ENTRIES OF LOWER PRIORITY HAVE BEEN MOVED ONE SLOT    1SJ  909
                                *         TOWARD END OF *TACP* TABLE.  STORE CP/PCP NUMBER IN       271L716  232
                                *         VACATED *TACP* ENTRY.                           1SJ           911
                                                                                          1SJ           912
2211          3043              BST17     LDD    TP                                       1SJ           913
2212          4401                        STI    T1                                       1SJ           914
2213          3636                        AOD    TE         ADVANCE END OF *TACP* TABLE POINTER   1SJ   915
2214          1400                        LDN    0          MARK END OF *TACP* TABLE      1SJ           916
2215          4436                        STI    TE                                       1SJ           917
2216          0100 1666         BST18     LJM    BST2       CONTINUE CP/PCP SCAN          271L716       233
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                                  **        CCA - COMPUTE CPA/PCPA ADDRESS.                               273L780     24
                                  *                                                                       273L780     25
                                  *         ENTRY  (A) = CP/PCP NUMBER.                                   273L780     26
                                  *                (NC) = NUMBER OF CONTROL POINTS.                       273L780     27
                                  *                                                                       273L780     28
                                  *         EXIT   (A) = CPA/PCPA ADDRESS.                                273L780     29
                                                                                                          273L780     30
                                                                                                          273L780     31
          2220         3166        CCA1     ADD    NC                                                     273L780     32
          2221         1007                 SHN    7                                                      273L780     33
                                                                                                          273L780     34
          2222         0100 2222   CCA      SUBR                 ENTRY/EXIT                               273L780     35
          2224         3266                 SBD    NC                                                     273L780     36
          2225         0772                 MJN    CCA1          IF CONTROL POINT                         273L780     37
          2226         0471                 ZJN    CCA1          IF SYSTEM CONTROL POINT                  273L780     38
          2227         1007                 SHN    7                                                      273L780     39
          2230         2100 0000   CCAA     ADC    **            (PCP AREAS BASE ADDRESS)                 273L780     40
          2232         0367                 UJN    CCAX          RETURN                                   273L780     41


                                  **        CCP - CHECK FOR FIRST OR LAST CONTROL POINT.                  271L716    235
                                  *                                                                       271L716    236
                                  *         ENTRY  (A) = CONTROL POINT NUMBER.                            271L716    237
                                  *                (NC) = SYSTEM CONTROL POINT NUMBER.                    271L716    238
                                  *                                                                       271L716    239
                                  *         EXIT   (A) = 0 IF CONTROL POINT 1 OR LAST CONTROL POINT.      271L716    240
                                                                                                          271L716    241
                                                                                                          271L716    242
          2233         0100 2233   CCP      SUBR                 ENTRY/EXIT                               271L716    243
          2235         1701                 SBN    1                                                      271L716    244
          2236         0474                 ZJN    CCPX          IF CP 1                                  271L716    245
          2237         1602                 ADN    2                                                      271L716    246
          2240         3366                 LMD    NC                                                     271L716    247
          2241         0371                 UJN    CCPX          RETURN                                   271L716    248
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                                   **        CFL - COMMIT FIELD LENGTH.                                    1SJ          920
                                   *                                                                       1SJ          921
                                   *         SCAN THE *TACP* TABLE IN AN ATTEMPT TO FIND ENOUGH CM/ECS     1SJ          922
                                   *         ASSIGNED TO LOWER PRIORITY JOBS TO ACCOMODATE THE JOB         1SJ          923
                                   *         SELECTED FOR SCHEDULING.  REQUEST ROLLOUT FOR ONLY AS MANY    271L716      249
                                   *         SUCH JOBS AS NECESSARY.                                       1SJ          925
                                   *                                                                       1SJ          926
                                   *         ENTRY  (TE) = LWA OF *TACP* TABLE.                            1SJ          927
                                   *                (AM - AM+1) = AVAILABLE + ROLLING CM.                  1SJ          928
                                   *                (AE) = AVAILABLE + ROLLING ECS.                        1SJ          929
                                   *                (JC) = CP NUMBER OF JOB REQUESTING FL INCREASE         1SJ13          1
                                   *                       (IF ANY).                                       1SJ13          2
                                   *                (JP) = SCHEDULING PRIORITY OF SELECTED JOB.            1SJ          930
                                   *                (JM) = CM FL REQUIRED BY SELECTED JOB.                 1SJ          931
                                   *                (JE) = ECS FL REQUIRED BY SELECTED JOB.                1SJ          932
                                   *                (SP) = SERVICE CLASS OF SELECTED JOB.                  1SJ          933
                                   *                (CS - CS+1) = EXCESS CM OF SERVICE CLASS.              1SJ          934
                                   *                (ES) = EXCESS ECS OF SERVICE CLASS.                    1SJ          935
                                   *                                                                       1SJ          936
                                   *         EXIT   (A) = 0 IF SUFFICIENT CM/ECS AFTER ROLLOUTS.           1SJ          937
                                   *                    = 1 IF INSUFFICIENT CM.                            1SJ          938
                                   *                    = 2 IF INSUFFICIENT ECS.                           1SJ          939
                                   *                    .LT. 0 IF ROLLOUT REQUEST WAS REJECTED.            1SJ          940
                                   *                                                                       1SJ          941
                                   *         USES   T1, T3 - T7, CM - CM+4 TP.                             1SJ          942
                                   *                                                                       1SJ          943
                                   *         CALLS  IRR.                                                   1SJ          944
                                                                                                           1SJ          945
                                                                                                           1SJ          946
                                   *         REQUEST ROLLOUT FOR ANY JOB WHOSE ROLLOUT REQUEST BIT (BIT    1SJ          947
                                   *         10D) IS SET IN ITS *TACP* ENTRY.                              1SJ          948
                                                                                                           1SJ          949
  2242          3643                CFL11    AOD    TP            INCREMENT *TACP* POINTER                 271L716      250
  2243          4043                         LDI    TP                                                     1SJ          954
  2244          0412                         ZJN    CFLX          IF *TACP* SCAN COMPLETE                  1SJ          955
  2245          1007                         SHN    21-12                                                  1SJ          956
  2246          0673                         PJN    CFL11         IF ROLLOUT REQUEST BIT CLEAR             271L716      251
  2247          1070                         SHN    12-21         GET CP/PCP NUMBER                        271L716      252
  2250          2200 0177                    LPC    177                                                    271L716      253
                             0               ERRNZ  /CPS/ROSR     CODE DEPENDS ON VALUE                    271L716      254
  2252          0200 2621                    RJM    IRR           ISSUE *ROCM*                             1SJ          960
  2254          0465                         ZJN    CFL11         IF ROLLOUT REQUEST WAS ACCEPTED          1SJ          961
  2255          1500                         LCN    0             SET RETURN STATUS                        1SJ          962
                                                                                                           1SJ          963
  2256          0100 2256           CFL      SUBR                 ENTRY/EXIT                               1SJ          964
  2260          3037                         LDD    AM                                                     NS22000       31
  2261          1014                         SHN    14                                                     NS22000       32
  2262          3340                         LMD    AM+1                                                   NS22000       33
  2263          3264                         SBD    JM                                                     NS22000       34
  2264          1056                         SHN    -21                                                    NS22000       35
  2265          0505                         NJN    CFL0          IF INSUFFICIENT CM                       NS22000       36
  2266          3042                         LDD    AE                                                     NS22000       37
  2267          3265                         SBD    JE                                                     NS22000       38
  2270          1056                         SHN    -21                                                    NS22000       39
  2271          0464                         ZJN    CFLX          IF SUFFICIENT EM                         NS22000       40
  2272          3036                CFL0     LDD    TE            INITIALIZE *TACP* POINTER                NS22000       41
  2273          3443                         STD    TP                                                     1SJ          966
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2274         3037                        LDD    AM           INITIALIZE CM ACCUMULATOR               1SJ          967
2275         3405                        STD    T5                                                   1SJ          968
2276         3040                        LDD    AM+1                                                 1SJ          969
2277         3406                        STD    T6                                                   1SJ          970
2300         3042                        LDD    AE           INITIALIZE ECS ACCUMULATOR              1SJ          971
2301         3407                        STD    T7                                                   1SJ          972
                                                                                                     1SJ          973
                                *        ACCUMULATE CM AND ECS ASSIGNED TO LOWER PRIORITY JOBS.  SET 1SJ          974
                                *        THE REQUEST ROLLOUT BIT IN THE *TACP* ENTRY OF EACH LOWER   1SJ          975
                                *        PRIORITY JOB.                                               1SJ          976
                                                                                                     1SJ          977
2302         3743                CFL1    SOD    TP           DECREMENT *TACP* POINTER                1SJ          978
2303         4043                        LDI    TP                                                   1SJ          979
2304         0427                        ZJN    CFL2         IF END OF *TACP* TABLE REACHED          1SJ          980
2305         3401                        STD    T1                                                   1SJ          984
2306         3363                        LMD    JC                                                   1SJ13          3
2307         0472                        ZJN    CFL1         IF CP SELECTED FOR FL INCREASE          1SJ13          4
2310         3062                        LDD    JP           COMPARE SCHEDULING PRIORITIES           1SJ          985
2311         5201 6132                   SBM    TJPR-1,T1                                            1SJ          986
2313         0766                        MJN    CFL1         IF SELECTED JOB HAS LOWER PRIORITY      1SJ          987
                                *        PSN                 (LOCKED IN JOB REQUIRES FL INCREASE)    1SJ43          6
                           2313  CFLC    EQU    *-1                                                  1SJ43          7
2314         0465                        ZJN    CFL1         IF PRIORITIES ARE EQUAL                 1SJ          988
                                *        PSN                 (IF SELECTED JOB WANTS FL INCREASE)     1SJ          989
                           2314  CFLA    EQU    *-1                                                  1SJ          990
2315         2000 2000                   LDC    2000                                                 1SJ          991
2317         4543                        RAI    TP           SET ROLLOUT FLAG IN *TACP* ENTRY        1SJ          992
2320         1006                        SHN    21-13                                                271L716      255
2321         0760                        MJN    CFL1         IF ROLLOUT IN PROGRESS                  271L716      256
2322         5001 6223                   LDM    TJCM-1,T1    ACCUMULATE CM OF ROLLABLE JOB           1SJ          993
2324         3506                        RAD    T6                                                   1SJ          994
2325         1063                        SHN    -14                                                  1SJ          995
2326         3505                        RAD    T5                                                   1SJ          996
2327         5001 6314                   LDM    TJEC-1,T1    ACCUMULATE ECS OF ROLLABLE JOB          1SJ          997
2331         3507                        RAD    T7                                                   1SJ          998
2332         0347                        UJN    CFL1         CONTINUE *TACP* TABLE SCAN              1SJ          999
                                                                                                     1SJ         1000
2333         3005                CFL2    LDD    T5                                                   1SJ         1001
2334         1014                        SHN    14                                                   1SJ         1002
2335         3306                        LMD    T6                                                   1SJ         1003
2336         3264                        SBD    JM                                                   1SJ         1004
2337         0604                        PJN    CFL4         IF ENOUGH CM CAN BE OBTAINED VIA ROLLOUT 1SJ         1005
2340         1401                        LDN    1            INDICATE INSUFFICIENT CM TO *SCJ*       1SJ         1006
2341         0100 2256           CFL3    LJM    CFLX         RETURN                                  1SJ         1007
                                                                                                     1SJ         1008
2343         3406                CFL4    STD    T6           SAVE EXCESS CM AMOUNT                   1SJ         1009
2344         1063                        SHN    -14                                                  1SJ         1010
2345         3405                        STD    T5                                                   1SJ         1011
2346         3007                        LDD    T7                                                   1SJ         1012
2347         3265                        SBD    JE                                                   1SJ         1013
2350         0603                        PJN    CFL5         IF ENOUGH ECS CAN BE OBTAINED VIA ROLLOUT 1SJ        1014
2351         1402                        LDN    2            INDICATE INSUFFICIENT ECS TO *SCJ*      1SJ         1015
2352         0366                        UJN    CFL3         RETURN                                  1SJ         1016
                                                                                                     1SJ         1017
2353         3407                CFL5    STD    T7           SAVE EXCESS ECS AMOUNT                  1SJ         1018
2354         3105                        ADD    T5                                                   1SJ         1019
2355         3106                        ADD    T6                                                   1SJ         1020
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2356          0406                        ZJN    CFL7         IF NO EXCESS CM/ECS                      1SJ          1021
                                                                                                       1SJ          1022
                                 *        DISQUALIFY AS MANY JOBS AS POSSIBLE FROM ROLLOUT.            1SJ          1023
                                                                                                       1SJ          1024
2357          3043                        LDD    TP           INITIALIZE *TACP* TABLE POINTER          1SJ          1025
2360          3404                        STD    T4                                                    1SJ          1026
2361          3604                CFL6    AOD    T4           INCREMENT *TACP* POINTER                 1SJ          1027
2362          4004                        LDI    T4                                                    1SJ          1028
2363          0503                        NJN    CFL8         IF NOT END OF *TACP* TABLE               1SJ          1029
2364          0100 2242           CFL7    LJM    CFL11        ROLLOUT JOBS                             271L716       257
                                                                                                       1SJ          1031
2366          1007                CFL8    SHN    21-12                                                 1SJ          1032
2367          0671                        PJN    CFL6         IF JOB IS NOT A ROLLOUT CANDIDATE        1SJ          1033
2370          1070                        SHN    12-21        GET CP/PCP NUMBER                        271L716       258
2371          2200 0177                   LPC    177                                                   271L716       259
2373          3403                        STD    T3                                                    1SJ          1036
2374          3005                        LDD    T5                                                    1SJ          1037
2375          1014                        SHN    14                                                    1SJ          1038
2376          3306                        LMD    T6                                                    1SJ          1039
2377          5203 6223                   SBM    TJCM-1,T3                                             1SJ          1040
2401          0757                CFL9    MJN    CFL6         IF JOB-S CM FL TOO BIG TO REMAIN AT CP/PCP 271L716     260
2402          3411                        STD    CM+1         SAVE CM AMOUNT                           271L716       261
2403          1063                        SHN    -14                                                   1SJ          1043
2404          3410                        STD    CM                                                    1SJ          1044
2405          3007                        LDD    T7                                                    1SJ          1045
2406          5203 6314                   SBM    TJEC-1,T3                                             1SJ          1046
2410          0750                        MJN    CFL6         IF JOB-S EM FL TOO BIG TO REMAIN AT CP/PCP 271L716     262
2411          3412                        STD    CM+2         SAVE EM AMOUNT                           271L716       263
2412          5003 6041                   LDM    TJSC-1,T3                                             1SJ19A          1
2414          3361                        LMD    SP                                                    1SJ19A          2
2415          0523                        NJN    CFL10        IF DIFFERENT SERVICE CLASSES             1SJ19A          3
2416          3057                        LDD    CS                                                    1SJ          1052
2417          1014                        SHN    14                                                    1SJ          1053
2420          3360                        LMD    CS+1                                                  1SJ          1054
2421          5203 6223                   SBM    TJCM-1,T3                                             1SJ          1055
2423          0755                        MJN    CFL9         IF MAXIMUM CM FOR SERVICE CLASS EXCEEDED 1SJ          1056
2424          3414                        STD    CM+4         SAVE NEW EXCESS CM                       1SJ          1057
2425          1063                        SHN    -14                                                   1SJ          1058
2426          3413                        STD    CM+3                                                  1SJ          1059
2427          3047                        LDD    ES                                                    1SJ          1060
2430          5203 6314                   SBM    TJEC-1,T3                                             1SJ          1061
2432          0746                        MJN    CFL9         IF MAXIMUM ECS FOR SERVICE CLASS EXCEEDED 1SJ         1062
2433          3447                        STD    ES           SAVE NEW EXCESS ECS                      1SJ          1063
2434          3013                        LDD    CM+3         SAVE NEW EXCESS CM                       1SJ          1064
2435          3457                        STD    CS                                                    1SJ          1065
2436          3014                        LDD    CM+4                                                  1SJ          1066
2437          3460                        STD    CS+1                                                  1SJ          1067
2440          3010                CFL10   LDD    CM           UPDATE REMAINING CM AMOUNT               1SJ19A          4
2441          3405                        STD    T5                                                    1SJ          1069
2442          3011                        LDD    CM+1                                                  1SJ          1070
2443          3406                        STD    T6                                                    1SJ          1071
2444          3012                        LDD    CM+2         UPDATE REMAINING ECS AMOUNT              1SJ          1072
2445          3407                        STD    T7                                                    1SJ          1073
2446          2077 5777                   LDC    -2000        CLEAR ROLLOUT BIT IN *TACP* ENTRY        1SJ          1074
2450          4504                        RAI    T4                                                    1SJ          1075
2451          0100 2361                   LJM    CFL6         CONTINUE *TACP* SCAN                     1SJ          1076
                                                                                                       1SJ          1077
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         2453                       CFLB     BSS    0                                            1SJ       1078
       L 2314                                LOC    CFLA                                         1SJ       1079
       L 2314           0465                 ZJN    CFL1        IF PRIORITIES ARE EQUAL          1SJ       1080
         2454                                LOC    *O                                           1SJ       1081


                                    **       DDA - DETERMINE DEVICE ACTIVITY.                    1SJ       1083
                                    *                                                            1SJ       1084
                                    *        BUILD *TDAC* TABLE.                                 1SJ       1085
                                    *                                                            1SJ       1086
                                    *        USES   T1 - T5, CM - CM+4.                          1SJ       1087
                                    *                                                            NS22000     42
                                    *        MACROS SFA.                                         NS22000     43
                                                                                                 1SJ       1088
                                                                                                 1SJ       1089
         2454           5400 4354   DDA2     STM    TDAC+1      CLEAR PCP ACTIVITY               271L716    264
                                                                                                 271L716    265
         2456           0100 2456   DDA      SUBR               ENTRY/EXIT                       1SJ       1090
         2460           1472                 LDN    ESTP                                         1SJ       1091
         2461           6001                 CRD    T1                                           1SJ       1092
         2462           1404                 LDN    NOPE-1      INITIALIZE EST ORDINAL FOR SEARCH NS22000    44
         2463           3401                 STD    T1                                           1SJ       1094
         2464           3601        DDA1     AOD    T1          INCREMENT EST ORDINAL            1SJ       1095
         2465           3304                 LMD    T1+3                                         NS22000     45
         2466           0465                 ZJN    DDA2        IF END OF EST SCAN               271L716    266
         2467           3001                 SFA    EST,T1                                       NS22000     47
                                             ADK    EQDE                                         NS22000     48
         2472           6010                 CRD    CM                                           1SJ       1097
         2473           3010                 LDD    CM                                           1SJ       1100
         2474           1006                 SHN    21-13                                        1SJ       1101
         2475           0666                 PJN    DDA1        IF NOT MASS STORAGE              1SJ       1102
         2476           3014                 LDD    CM+4        READ MST ENTRY                   1SJ       1103
         2477           1003                 SHN    3                                            1SJ       1104
         2500           1612                 ADN    DALL                                         1SJ       1105
         2501           6010                 CRD    CM                                           1SJ       1106
         2502           3010                 LDD    CM          SAVE DEVICE ACTIVITY IN *TDAC* TABLE 1SJ   1107
         2503           5401 4353            STM    TDAC,T1                                      1SJ       1108
         2505           0356                 UJN    DDA1        CONTINUE EST SCAN                1SJ       1109


                                    **       EJA - CALCULATE EJT ENTRY ADDRESS.                  1SJ       1111
                                    *                                                            1SJ       1112
                                    *        ENTRY  (EO) = EJT ORDINAL.                          1SJ       1113
                                    *                                                            1SJ       1114
                                    *        EXIT   (A) = EJT ENTRY ADDRESS.                     1SJ       1115
                                    *                                                            1SJ       1116
                                    *        MACROS CFI.                                         1SJ       1117
                                                                                                 1SJ       1118
                                                                                                 1SJ       1119
         2506           0100 2506   EJA      SUBR               ENTRY/EXIT                       1SJ       1120
         2510           3034                 CFI    EJT,EO      CALCULATE ENTRY OFFSET           1SJ       1121
         2512           2100 0000            ADC    **                                           1SJ       1122
                                 2513 EJAA   EQU    *-1         (EJT FWA)                        1SJ       1123
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2514          0371                      UJN    EJAX         RETURN                          1SJ        1124


                                **       INT - INITIALIZE CELLS FOR EJT/CM SCHEDULING.          1SJ        1126
                                *                                                               1SJ        1127
                                *        ENTRY  (SCJC) .NE. 0 IF RECYCLE CALL.                  1SJ        1128
                                *                                                               1SJ        1129
                                *        USES   JP, JC, EP, RM - RM+1, RE, TM - TM+4, CM - CM+4. 1SJ       1130
                                *                                                               NS22000      49
                                *        CALLS  SSA.                                            NS22000      50
                                                                                                1SJ        1131
                                                                                                1SJ        1132
2515          0200 4111          INT1   RJM    SSA          SET STATISTICAL AREA ADDRESS        NS22000      51
2517          6101 4213                 CRM    SPST+JS0S*5,T1  READ SCHEDULER STATISTICS        NS22000      52
                                                                                                NS22000      53
2521          0100 2521          INT    SUBR                ENTRY/EXIT                          1SJ        1133
2523          1400                      LDN    0                                                1SJ        1134
2524          3462                      STD    JP           PRIORITY OF SELECTED JOB            1SJ        1135
2525          3463                      STD    JC           CP NUMBER OF JOB REQUESTING FL INCREASE 1SJ    1136
2526          3467                      STD    EP           EJT ORDINAL OF SELECTED JOB         1SJ        1137
2527          3444                      STD    RM           ROLLING CM ACCUMULATOR              1SJ        1138
2530          3445                      STD    RM+1                                             1SJ        1139
2531          3446                      STD    RE           ROLLING ECS ACCUMULATOR             1SJ        1140
2532          2000 0106                 LDC    RTCL         READ REAL-TIME CLOCK                1SJ        1141
2534          6025                      CRD    TM                                               1SJ        1142
2535          5000 1233                 LDM    SCJC                                             1SJ        1143
2537          0455                      ZJN    INT1         IF NOT RECYCLE                      NS22000      54
                                                                                                1SJ        1145
                                *        RESET CELLS AND INSTRUCTIONS FOR RECYCLE.              1SJ        1146
                                                                                                1SJ        1147
2540          1400                      LDN    0                                                1SJ        1148
2541          5400 1233                 STM    SCJC                                             1SJ        1149
2543          5400 4146                 STM    USDA                                             NS22000      55
2545          5400 4155                 STM    USDB                                             NS22000      56
2547          5400 4174                 STM    USDC                                             NS22000      57
2551          5400 2773                 STM    SCPA                                             1SJ        1150
2553          5400 2776                 STM    SCPB                                             1SJ        1151
2555          5400 3467                 STM    SFJK                                             1SJ        1152
2557          5400 3502                 STM    SFJL                                             1SJ        1153
2561          1500                      LCN    0                                                1SJ14         1
2562          5400 3461                 STM    SFJG                                             1SJ14         2
2564          5400 3063                 STM    SFJM                                             1SJ8          2
2566          2000 3067                 LDC    LDDI+EP                                          1SJ        1156
2570          5400 3131                 STM    SFJB                                             1SJ        1157
2572          2000 3716                 LDC    SFJ29                                            1SJ        1158
2574          5400 3530                 STM    SFJH                                             1SJ        1159
2576          2000 3041                 LDC    LDDI+SC                                          1SJ        1160
2600          5400 3536                 STM    SFJI                                             1SJ        1161
2602          5000 2453                 LDM    CFLB                                             1SJ        1162
2604          5400 2314                 STM    CFLA                                             1SJ        1163
2606          5000 4010                 LDM    SFJQ                                             1SJ        1164
2610          5400 3132                 STM    SFJC                                             1SJ        1165
2612          2000 5700                 LDC    SOMI                                             NS2153        7
2614          5400 3115                 STM    SFJR                                             1SJ        1167
2616          0100 2521                 LJM    INTX         RETURN                              1SJ        1168
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                                        **       IRR - ISSUE ROLLOUT REQUEST.                                    1SJ        1206
                                        *                                                                        1SJ        1207
                                        *        ENTRY  (A) = 6/  OP,12/  CP.                                    271L716     267
                                        *                     OP    *ROCM* OPTIONS.                              1SJ        1209
                                        *                     CP    CP/PCP TO ROLL.                              271L716     268
                                        *                                                                        1SJ        1211
                                        *        EXIT   (A) = 0 IF ROLLOUT REQUEST WAS ACCEPTED.                 1SJ        1212
                                        *               JOBS PREEMPTED STATISTIC UPDATED.                        NS22000      58
                                        *                                                                        1SJ        1213
                                        *        USES   CM - CM+4.                                               1SJ        1214
                                        *                                                                        1SJ        1215
                                        *        MACROS MONITOR.                                                 1SJ        1216
                                                                                                                 1SJ        1217
                                                                                                                 1SJ        1218
 2620         0100 2620                  IRR     SUBR               ENTRY/EXIT                                   1SJ        1219
 2622         3412                               STD    CM+2        STORE CP/PCP NUMBER                          271L716     269
 2623         1063                               SHN    -14                                                      271L716     270
 2624         2300 4000                          LMC    4000        SET ALTERNATE CP/PCP OPTION                  271L716     271
 2626         3411                               STD    CM+1                                                     271L716     272
 2627         5600 4222                          AOM    SPST+JS1S*5+2  INCREMENT JOBS PREEMPTED                  NS22000      59
 2631         1063                               SHN    -14                                                      NS22000      60
 2632         5500 4221                          RAM    SPST+JS1S*5+1                                            NS22000      61
 2634         1476                               MONITOR  ROCM      REQUEST ROLLOUT                              271L716     273
 2637         3011                               LDD    CM+1                                                     1SJ        1226
 2640         0357                               UJN    IRRX        RETURN                                       1SJ        1227



                                        **       IUT - ISSUE *UTEM* MONITOR FUNCTION.                            1SJ        1229
                                        *                                                                        1SJ        1230
                                        *        ENTRY  (A) = 1/ F,1/ I,1/ 0,3/ C,12/ P                          1SJ        1231
                                        *                     F = 0 IF EJT ENTRY UPDATE.                         1SJ        1232
                                        *                       = 1 IF QFT ENTRY UPDATE.                         1SJ        1233
                                        *                     I = 0 IF INTERLOCK SHOULD BE SET.                  1SJ        1234
                                        *                       = 1 IF INTERLOCK SHOULD BE CLEARED.              1SJ        1235
                                        *                     C = NUMBER OF *UTEM* PARAMETER WORDS.              1SJ        1236
                                        *                       = 0 IF INTERLOCK REQUEST.                        1SJ        1237
                                        *                     P = PARAMETER LIST ADDRESS.                        1SJ        1238
                                        *                                                                        1SJ        1239
                                        *        EXIT   (A) = 0 IF *UTEM* FUNCTION WAS SUCCESSFUL.               1SJ        1240
                                        *                 .NE. 0 IF *UTEM* VERIFICATION FAILED.                  1SJ        1241
                                        *                                                                        1SJ        1242
                                        *        USES   CM - CM+4.                                               1SJ        1243
                                        *                                                                        1SJ        1244
                                        *        CALLS  EJA, IOA.                                                1SJ        1245
                                        *                                                                        1SJ        1246
                                        *        MACROS MONITOR.                                                 1SJ        1247
                                                                                                                 1SJ        1248
                                                                                                                 1SJ        1249
 2641         0100 2641                  IUT     SUBR               ENTRY/EXIT                                   1SJ        1250
 2643         5400 2673                          STM    IUTB        PARAMETER LIST ADDRESS                       1SJ        1251
 2645         2277 0000                          LPC    -7777                                                    1SJ        1252
 2647         1001                               SHN    1                                                        1SJ        1253
 2650         3410                               STD    CM          TABLE INDICATOR                              1SJ        1254
 2651         1301                               SCN    1           SAVE INTERLOCK FLAG                          1SJ        1255
 2652         1001                               SHN    1                                                        1SJ        1256
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2653          3412                        STD    CM+2                                   1SJ        1257
2654          1061                        SHN    -14-2                                  1SJ        1258
2655          3411                        STD    CM+1        NUMBER OF PARAMETER WORDS  1SJ        1259
2656          5010 2710                   LDM    IUTC,CM     USE TABLE FLAG TO SET SUBROUTINE ADDRESS  1SJ  1260
2660          5400 2663                   STM    IUTA                                   1SJ        1261
2662          0200 0000                   RJM    **          CALCULATE TABLE ADDRESS    1SJ        1262
                         2663     IUTA    EQU    *-1                                    1SJ        1263
2664          3414                        STD    CM+4                                   1SJ        1264
2665          1063                        SHN    -14                                    1SJ        1265
2666          3413                        STD    CM+3                                   1SJ        1266
2667          3011                        LDD    CM+1                                   1SJ        1267
2670          0404                        ZJN    IUT1        IF NO PARAMETER WORDS      1SJ        1268
2671          3077                        LDD    MA          WRITE PARAMETERS TO MESSAGE BUFFER  1SJ  1269
2672          6311 0000                   CWM    **,CM+1                                1SJ        1270
                         2673     IUTB    EQU    *-1                                    1SJ        1271
2674          3012                IUT1    LDD    CM+2        SET/CLEAR INTERLOCK FLAG   1SJ        1272
2675          1005                        SHN    5                                      1SJ        1273
2676          3511                        RAD    CM+1                                   1SJ        1274
2677          1400                        LDN    0                                      1SJ        1275
2700          3412                        STD    CM+2                                   1SJ        1276
2701          2000 0115                   MONITOR  UTEM                                 1SJ        1277
2705          3011                        LDD    CM+1                                   1SJ        1278
2706          0100 2641                   LJM    IUTX        RETURN                     1SJ        1279
                                                                                        1SJ        1280
2710          2507                IUTC    CON    EJA         CALCULATE EJT ENTRY ADDRESS  1SJ      1281
2711          4773                        CON    /3SB/IOA    CALCULATE QFT ENTRY ADDRESS  271L716   274


                                 **       RST - REQUEST STORAGE.                        271L716     276
                                 *                                                      271L716     277
                                 *        ENTRY  (A) = 6/ T,12/ FL.                     271L716     278
                                 *                      T  = MEMORY TYPE.  0 IF CM, 1 IF EM.  271L716  279
                                 *                      FL = STORAGE AMOUNT.            271L716     280
                                 *               (AA - AA+4) = *SCHE* WORD OF EJT ENTRY.  271L716   281
                                 *               (EJ - EJ+4) = *JSNE* WORD OF EJT ENTRY.  271L716   282
                                 *                                                      271L716     283
                                 *        EXIT   (A) = 0 IF REQUEST ACCEPTED, ELSE NON-ZERO.  271L716  284
                                 *                                                      271L716     285
                                 *        USES   CM - CM+4.                             271L716     286
                                 *                                                      271L716     287
                                 *        MACROS MONITOR.                               271L716     288
                                                                                        271L716     289
                                                                                        271L716     290
2712          0100 2712           RST     SUBR               ENTRY/EXIT                 271L716     291
2714          3411                        STD    CM+1        SET FL                     271L716     292
2715          1063                        SHN    -14         SET REQUEST TYPE           271L716     293
2716          3412                        STD    CM+2                                   271L716     294
2717          3054                        LDD    EJ+4                                   271L716     295
2720          1076                        SHN    -1                                     271L716     296
2721          1237                        LPN    37                                     271L716     297
2722          1111                        LMK    PCJS                                   271L716     298
2723          0506                        NJN    RST1        IF JOB NOT AT PCP          271L716     299
2724          2000 4000                   LDC    4000        SET PSEUDO-ROLLIN FLAG     273L780      42
2726          3512                        RAD    CM+2                                   271L716     301
2727          3021                        LDD    AA+1        STORE PCP NUMBER IN *RSTM* REQUEST  271L716  302
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2730          3413                     STD    CM+3                                         271L716     303
2731          1417           RST1      MONITOR  RSTM         REQUEST STORAGE               271L716     304
2734          3011                     LDD    CM+1           RETURN STATUS IN (A)          271L716     305
2735          0354                     UJN    RSTX           RETURN                        271L716     306


                            **         SCP - SELECT CONTROL POINT.                          1SJ        1284
                            *                                                               1SJ        1285
                            *          ENTRY  (JC) = 0.                                     271L716     307
                            *                 (JP) = SCHEDULING PRIORITY OF SELECTED JOB.   1SJ        1296
                            *                 (TE) = LWA OF *TACP* TABLE.                   271L716     308
                            *                                                               1SJ        1297
                            *          EXIT   (A) = (JC) = CP NUMBER IF ONE IS AVAILABLE.   271L716     309
                            *                              = 0 IF NO CP IS AVAILABLE.       271L716     310
                            *                     .LT. 0 IF PCP JOB WAS SELECTED BUT ONLY FIRST OR   271L716     311
                            *                              LAST CP IS AVAILABLE.            271L716     312
                            *                                                               1SJ        1301
                            *          USES   AE, AM - AM+1, T0 - T2.                       271L716     313
                            *                                                               1SJ        1303
                            *          CALLS  CCP, IRR.                                     271L716     314
                                                                                            1SJ        1305
                                                                                            1SJ        1306
2736          1400           SCP8      LDN    0              SET EXIT CONDITION = NO CP AVAILABLE   271L716     315
2737          3463           SCP9      STD    JC             SET CP NUMBER                 271L716     316
                                                                                            271L716     317
2740          0100 2740      SCP       SUBR                  ENTRY/EXIT                    271L716     318
2742          5000 1303                LDM    ASJA                                         271L716     319
2744          1276                     LPN    76                                           271L716     320
2745          1122                     LMK    PCJS*2                                       271L716     321
2746          3400                     STD    T0                                           271L716     322
2747          0523                     NJN    SCP2           IF SELECTED JOB NOT AT PCP    271L716     323
2750          5000 2773                LDM    SCPA                                         271L716     324
2752          0200 2234                RJM    CCP            CHECK FOR FIRST/LAST CP       271L716     325
2754          0505                     NJN    SCP1           IF FREE CP NEITHER FIRST NOR LAST   271L716     326
2755          5400 2773                STM    SCPA           CLEAR FREE CP NUMBER          271L716     327
2757          5600 3007                AOM    SCPC                                         271L716     328
2761          5000 2776      SCP1      LDM    SCPB                                         271L716     329
2763          0200 2234                RJM    CCP            CHECK FOR FIRST/LAST CP       271L716     330
2765          0505                     NJN    SCP2           IF ROLLING CP NEITHER FIRST NOR LAST   271L716     331
2766          5400 2776                STM    SCPB           CLEAR ROLLING CP NUMBER       271L716     332
2770          5600 3007                AOM    SCPC                                         271L716     333
2772          2000 0000      SCP2      LDC    **             (NUMBER OF AVAILABLE CP)      271L716     334
                         2773  SCPA    EQU    *-1                                          271L716     335
2774          0542                     NJN    SCP9           IF THERE IS AN AVAILABLE CONTROL POINT   271L716     336
2775          2000 0000                LDC    **             (NUMBER OF ROLLING CP)        271L716     337
                         2776  SCPB    EQU    *-1                                          271L716     338
2777          0403                     NJP    SCP8           IF CP JOB IS ALREADY BEING ROLLED   271L716     339
3002          3036                     LDD    TE             SET *TACP* POINTER            271L716     340
3003          3401                     STD    T1                                           271L716     341
3004          3701           SCP3      SOD    T1             DECREMENT *TACP* INDEX        271L716     342
3005          4001                     LDI    T1                                           271L716     343
3006          0510                     NJN    SCP3.3         IF NOT END OF SEARCH          271L716     344
3007          1400           SCP3.1    LDN    0                                            271L716     345
                            *          LDN    1 OR 2         PCP JOB AND UNUSABLE CP FREE/ROLLING   271L716     346
                         3007  SCPC    EQU    *-1                                          271L716     347
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3010         0404                          ZJN    SCP3.2      IF NO NEED TO BLOCK PCP JOB SCHEDULING     271L716   348
3011         5600 3405                     AOM    SFJY        INHIBIT PCP JOB SCHEDULING                 271L716   349
3013         1500                          LCN    0                                                      271L716   350
3014         0100 2740           SCP3.2    UJP    SCPX        RETURN                                     271L716   351
                                                                                                         271L716   352
3016         3402                SCP3.3    STD    T2                                                     271L716   353
3017         3266                          SBD    NC                                                     271L716   354
3020         0663                          PJN    SCP3        IF PCP JOB                                 271L716   355
3021         5002 6132                     LDM    TJPR-1,T2                                              271L716   356
3023         3262                          SBD    JP                                                     271L716   357
3024         0662                          PJN    SCP3.1      IF LOWEST PRIORITY .GE. SELECTED JOB       271L716   358
3025         3002                          LDD    T2                                                     271L716   359
3026         0200 2234                     RJM    CCP         CHECK FOR FIRST/LAST CP                    271L716   360
3030         0503                          NJN    SCP4        IF NEITHER FIRST NOR LAST CP               271L716   361
3031         3000                          LDD    T0                                                     271L716   362
3032         0451                          ZJN    SCP3        IF SELECTED JOB AT PCP                     271L716   363
3033         2000 2000           SCP4      LDC    2000        CAUSE *CFL* TO IGNORE THIS CP              271L716   364
3035         4501                          RAI    T1                                                     271L716   365
3036         5002 6223                     LDM    TJCM-1,T2   ACCUMULATE ROLLING CM FL                 271L716   366
3040         3540                          RAD    AM+1                                                   271L716   367
3041         1063                          SHN    -14                                                    271L716   368
3042         3537                          RAD    AM                                                     271L716   369
3043         5002 6314                     LDM    TJEC-1,T2   ACCUMULATE ROLLING EM FL                 271L716   370
3045         3542                          RAD    AE                                                     271L716   371
3046         3002                          LDD    T2                                                     271L716   372
3047         0200 2234                     RJM    CCP         CHECK FOR FIRST/LAST CP                    271L716   373
3051         0502                          NJN    SCP5        IF NEITHER FIRST NOR LAST CP               271L716   374
                                  *        LDN    0           DISALLOW PSEUDO-ROLLOUT OF CP 1 JOB        271L716   375
                               0           ERRNZ  /CPS/ROSR   CODE DEPENDS ON VALUE                      271L716   376
3052         0303                          UJN    SCP6        ISSUE ROLLOUT REQUEST                      271L716   377
                                                                                                         271L716   378
3053         2020 0000           SCP5      LDC    /CPS/ROPR*10000  ALLOW PSEUDO-ROLLOUT                271L716   379
3055         3302                SCP6      LMD    T2                                                     271L716   380
3056         0200 2621                     RJM    IRR         ISSUE ROLLOUT REQUEST                      271L716   381
3060         0100 2736           SCP7      UJP    SCP8        RETURN                                     271L716   382
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                                       **        SFJ - SEARCH FOR JOB.                                             1SJ         1423
                                       *                                                                           1SJ         1424
                                       *         SCAN THE EJT LOOKING FOR THE HIGHEST PRIORITY JOB IN A            1SJ         1425
                                       *         SCHEDULABLE JOB STATE THAT MAY BE SCHEDULED WITHIN THE BOUNDS     1SJ         1426
                                       *         OF AVAILABLE CM/ECS AND SERVICE CLASS RESOURCE CONSTRAINTS.       1SJ         1427
                                       *                                                                           1SJ         1428
                                       *         ENTRY  (EP) = 0.                                                  1SJ         1429
                                       *                (TM - TM+1) = SECONDS PORTION OF *RTCL*.                   1SJ         1430
                                       *                (TE) = LWA OF *TACP* TABLE.                                1SJ         1431
                                       *                                                                           1SJ         1432
                                       *         EXIT   (EP) = EJT ORDINAL OF SELECTED JOB.                        1SJ         1433
                                       *                     = 0 IF NO SCHEDULABLE JOB FOUND.                      1SJ         1434
                                       *                (CS - CS+1) = EXCESS CM IN SERVICE CLASS.                  1SJ         1435
                                       *                (ES) = EXCESS ECS IN SERVICE CLASS.                        1SJ         1436
                                       *                (JP) = SCHEDULING PRIORITY OF SELECTED JOB.                1SJ         1437
                                       *                (JM) = CM REQUIRED BY SELECTED JOB.                        1SJ         1438
                                       *                (JE) = ECS REQUIRED BY SELECTED JOB.                       1SJ         1439
                                       *                (SP) = SERVICE CLASS OF SELECTED JOB.                      1SJ         1440
                                       *                                                                           1SJ         1441
                                       *         USES   T0 - T7, CM - CM+4, AA - AA+4, BB - BB+4, EO,              1SJ         1442
                                       *                CS - CS+1, ES, EJ - EJ+4, SC, EP, SP, JP, JM, JE, TP.      1SJ         1443
                                       *                                                                           1SJ         1444
                                       *         CALLS  IUT.                                                       NS2395         1
                                       *                                                                           NS2395         2
                                       *         MACROS CFI.                                                       1SJ         1445
                                                                                                                   1SJ         1446
                                                                                                                   1SJ         1447
 3062          2000 7777              SFJ33     LDC    7777                                                        1SJ8           3
                          3063        SFJM      EQU    *-1          (2ND BEST JOB-S DEVICE ACTIVITY)               1SJ         1456
 3064          1006                             SHN    21-13                                                       1SJ14          3
 3065          0714                             MJN    SFJX         IF NO SECOND JOB                               1SJ14          4
 3066          1071                             SHN    13-21                                                       1SJ14          5
 3067          1703                             SBN    3                                                           1SJ14          6
 3070          0707                             MJN    SFJ34        IF NOT TOO MUCH ACTIVITY                       1SJ14          7
 3071          1452                             LDN    PPAL                                                        1SJ14          8
 3072          6010                             CRD    CM                                                          1SJ14          9
 3073          3014                             LDD    CM+4                                                        1SJ14         10
 3074          0405                             ZJN    SFJX         IF NO PP-S AVAILABLE                           1SJ14         11
 3075          1701                             SBN    1                                                           NS2210         1
 3076          0403                             ZJN    SFJX         IF ONLY 1 PP AVAILABLE                         1SJ14         14
 3077          5600 1233              SFJ34     AOM    SCJC         SET RECYCLE FLAG                               1SJ14         15
                                                                                                                   1SJ         1460
 3101          0100 3101              SFJ       SUBR                ENTRY/EXIT                                     1SJ         1461
 3103          5600 4214                        AOM    SPST+JS0S*5+1  INCREMENT EJT SCANS                          V23L617       15
 3105          1063                             SHN    -14                                                         NS22000       63
 3106          5500 4213                        RAM    SPST+JS0S*5                                                 V23L617       16
 3110          5000 4004                        LDM    SFJA         START SCAN WITH CURRENT ORDINAL                NS2153         8
 3112          3434                             STD    EO                                                          NS2153         9
 3113          0100 3165                        LJM    SFJ3         ENTER LOOP                                     NS2153        10
                                                                                                                   1SJ         1465
                                       *         SCAN EJT LOOKING FOR HIGHEST PRIORITY SCHEDULABLE JOB.            1SJ         1466
                                                                                                                   1SJ         1467
 3115          5700 4004              SFJ2      SOM    SFJA         DECREMENT EJT ORDINAL                          NS2153        11
                                       *                UJN    SFJX         (SCHEDULABLE JOB WITH ERROR FLAG SET)  1SJ         1469
                          3115        SFJR      EQU    *-2                                                         NS2153        12
 3117          3434                             STD    EO                                                          NS2153        13
 3120          0606                             PJN    SFJ2.1       IF NOT WRAP OF THE EJT                         NS2153        14
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3121         2000 0000                 LDC    **                                     NS2153       15
                       3122     SFJS   EQU    *-1         (HIGHEST EJT ORDINAL)      NS2153       16
3123         5400 4004                 STM    SFJA                                   NS2153       17
3125         3434                      STD    EO                                     NS2153       18
3126         2300 0000          SFJ2.1 LMC    **                                     NS2153       19
                       3127     SFJT   EQU    *-1         (STARTING EJT ORDINAL)     NS2153       20
3130         0535                      NJN    SFJ3        IF EJT SCAN NOT COMPLETE   1SJ        1471
3131         3067                      LDD    EP                                     1SJ        1472
                             *         UJN    SFJ2.2      (POST-REJECT SCAN COMPLETE) NS2153      21
                       3131     SFJB   EQU    *-1                                    1SJ        1474
3132         0331                      UJN    SFJ2.2      EXIT                       NS2153       22
                             *         NJN    SFJ2.2      (JOB WAS REJECTED)         NS2153       23
                       3132     SFJC   EQU    *-1                                    1SJ        1478
                                                                                     1SJ        1479
                             *         NO JOB WAS SELECTED FOR SCHEDULING BUT AT LEAST ONE JOB WAS   1SJ        1480
                             *         REJECTED DUE TO VIOLATION OF SERVICE CLASS RESOURCE           1SJ        1481
                             *         CONSTRAINTS.  REMOVE SERVICE CLASS RESOURCE CONSTRAINTS AND   1SJ        1482
                             *         RE-SCAN THE EJT TO SELECT THE HIGHEST PRIORITY JOB OF THOSE   1SJ        1483
                             *         PREVIOUSLY REJECTED.  THE SELECTED JOB WILL BE SCHEDULED ONLY 1SJ        1484
                             *         IF SUFFICIENT CM AND ECS IS AVAILABLE WITHOUT ROLLING OUT     1SJ        1485
                             *         OTHER JOBS.  IF FLEXIBLE MEMORY PARTITIONING IS DISABLED, NO  271L716     383
                             *         RE-SCAN WILL BE PERFORMED.                                    271L716     384
                                                                                     1SJ        1487
3133         5000 2773                 LDM    SCPA                                   1SJ        1488
                             *         UJN    SFJX        (FLEXIBLE MEMORY PARTITIONING DISABLED)   271L716     385
                       3133     SFJW   EQU    *-2                                    271L716     386
3135         0443                      ZJN    SFJX        IF NO AVAILABLE CONTROL POINTS            1SJ        1489
3136         1400                      LDN    0           REINITIALIZE EJT SCAN      NS22000      65
3137         5400 4146                 STM    USDA                                   NS22000      66
3141         5400 4155                 STM    USDB                                   NS22000      67
3143         5400 4174                 STM    USDC                                   NS22000      68
3145         5000 4005                 LDM    SFJN                                   1SJ        1490
3147         5400 3131                 STM    SFJB                                   1SJ        1491
3151         2000 3115                 LDC    SFJ2                                   1SJ        1494
3153         5400 3530                 STM    SFJH                                   1SJ        1495
3155         5000 4006                 LDM    SFJO                                   1SJ        1496
3157         5400 3536                 STM    SFJI                                   1SJ        1497
3161         0100 3115                 LJM    SFJ2        PERFORM POST-REJECT SCHEDULING        NS2153       24
                                                                                     NS2153       25
3163         0100 3062          SFJ2.2 LJM    SFJ33       CONTINUE                   NS2153       26
                                                                                     NS2153       27
3165         3034               SFJ3   CFI    EJT,EO      GET EJT ENTRY OFFSET       NS2153       28
3167         2100 0000                 ADC    **          ADD EJT FWA (SET BY *PRS*) 1SJ        1501
                       3170     SFJD   EQU    *-1         (EJT FWA)                  1SJ        1502
                                       ADK    JSNE        READ EJT ENTRY             1SJ        1503
3171         6050                      CRD    EJ                                     1SJ        1504
3172         3421                      STD    AA+1        SAVE EJT ADDRESS           1SJ        1505
3173         1063                      SHN    -14                                    1SJ        1506
3174         3420                      STD    AA                                     1SJ        1507
3175         3050                      LDD    EJ                                     1SJ        1508
3176         0404                      ZJN    SFJ4        IF EMPTY ENTRY             1SJ        1509
3177         3054                      LDD    EJ+4                                   1SJ        1510
3200         1013                      SHN    21-6                                   1SJ        1511
3201         0603                      PJN    SFJ5        IF JOB ADVANCE IS CLEAR    1SJ        1512
3202         0100 3115          SFJ4   LJM    SFJ2        CONTINUE EJT SCAN          1SJ        1513
                                                                                     1SJ        1514
3204         1006               SFJ5   SHN    6-0                                    1SJ        1515
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3205  0774          MJN   SFJ4      IF JOB ADVANCE INHIBITED                  1SJ       1516
3206  1237          LPN   37        GET JOB STATUS                            1SJ       1517
3207  3402          STD   T2                                                  1SJ       1518
3210  5400 4015     STM   SFJU+4                                              NS2395       3
3212  3020          LDD   AA        READ REMAINDER OF EJT ENTRY               1SJ       1519
3213  1014          SHN   14                                                  1SJ       1520
3214  3321          LMD   AA+1                                                1SJ       1521
3215  1601          ADN   SCHE-JSNE                                           1SJ       1522
3216  6020          CRD   AA                                                  1SJ       1523
3217  1601          ADN   PRFE-SCHE                                           1SJ       1524
3220  6010          CRD   CM                                                  1SJ       1525
3221  1601          ADN   SCLE-PRFE                                           1SJ       1526
3222  6027          CRD   BB                                                  1SJ       1527
3223  3027          LDD   BB        GET SERVICE CLASS                         1SJ       1528
3224  1071          SHN   -6                                                  1SJ       1529
3225  3441          STD   SC                                                  1SJ       1530
            -100    ERRPL 7677-MXPR ENSURE *LCN* MAY BE USED                  1SJ       1531
3226  1500          LCN   7777-MXPR PRESET SCHEDULING PRIORITY                 1SJ       1532
3227  3430          STD   BB+1                                                1SJ       1533
3230  3020          LDD   AA        GET EST ORDINAL                           1SJ       1534
3231  3431          STD   BB+2                                                1SJ       1535
3232  3011          LDD   CM+1                                                1SJ       1536
3233  0503          ZJP   SFJ7      IF NO ERROR FLAG SET IN EJT ENTRY         1SJ33        1
3236  5002 4072     LDM   TJST,T2                                             1SJ       1538
3240  1007          SHN   21-12                                               1SJ       1539
3241  0632          PJN   SFJ6      IF JOB MAY NOT BE SCHEDULED               1SJ       1540
3242  3002          LDD   T2                                                  1SJ       1541
3243  1110          LMN   SUJS                                                1SJ       1542
3244  0516          NJN   SFJ5.1    IF NOT SUSPENDED JOB                      1SJ       1543
3245  3054          LDD   EJ+4                                                1SJ       1544
3246  1070          SHN   0-7                                                 1SJ       1545
3247  1217          LPN   17                                                  1SJ       1546
3250  1102          LMN   OLCS                                                1SJ       1547
3251  0422          ZJN   SFJ6      IF ON-LINE INTERACTIVE JOB                1SJ       1548
3252  1103          LMN   DTCS&OLCS                                           1SJ33        2
3253  0507          NJN   SFJ5.1    IF NOT DETACHED                           1SJ33        3
3254  3011          LDD   CM+1                                                1SJ33        4
3255  1724          SBK   ODET                                                1SJ33        5
3256  0604          PJN   SFJ5.1    IF ERROR FLAG .GE. *ODET*                 1SJ33        6
3257  3027          LDD   BB                                                  1SJ33        7
3260  1015          SHN   21-4                                                1SJ33        8
3261  0612          PJN   SFJ6      IF NOT FORCED ROLLIN                      1SJ33        9
3262  3011    SFJ5.1LDD   CM+1                                                241L630     13
3263  1747          SBK   MXET                                                271L716    387
3264  0607          PJN   SFJ6      IF ERROR FLAG NOT VALID                   241L630     15
3265  5011 4023     LDM   TEFP,CM+1 GET TRANSFER ADDRESS FROM *TEFP* TABLE    241L630     16
3267  0404    SFJV  ZJN   SFJ6      IF NO PROCESSOR DEFINED FOR ERROR FLAG    1SJ40        1
              *     UJN   SFJ6      (IF DEADSTART SEQUENCING JOB HAS NOT RUN) 1SJ40        2
3270  3401          STD   T1                                                  1SJ       1551
3271  0101 0000     LJM   0,T1                                                1SJ       1553
                                                                              1SJ       1554
3273  0100 3115 SFJ6LJM   SFJ2      CONTINUE EJT SCAN                         1SJ       1555
                                                                              1SJ       1556
              *     CHECK FOR FORCED ROLLIN/ROLLOUT.                          1SJ       1557
                                                                              1SJ       1558
3275  3027      SFJ7LDD   BB                                                  1SJ       1559
3276  1014          SHN   21-5                                                1SJ       1560
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3277          0773                          MJN    SFJ6         IF FORCED ROLLOUT                        1SJ        1561
3300          1001                          SHN    5-4                                                   1SJ        1562
3301          0624                          PJN    SFJ10        IF NOT FORCED ROLLIN                     1SJ        1563
3302          5002 4072                     LDM    TJST,T2                                               1SJ        1564
3304          1010                          SHN    21-11                                                 1SJ        1565
3305          0620                          PJN    SFJ10        IF JOB MAY NOT BE FORCED ROLLED IN       1SJ        1566
3306          0100 3370            SFJ8     LJM    SFJ12        SCHEDULE JOB WITH FL                     242L642      41
                                                                                                         1SJ        1571
                                  *         IF ENTERING AT THIS LOCATION DUE TO AN ERROR FLAG REQUIRING  1SJ        1572
                                  *         ROLLIN WITH ONLY NFL, SET THE MAXIMUM NFL AS THE REQUIRED CM 1SJ        1573
                                  *         FL.  ROUTINE *ASJ* WILL REQUEST THIS MUCH CM STORAGE TO      1SJ        1574
                                  *         ENSURE *1RI* WILL HAVE SUFFICIENT SPACE FOR NFL ROLLIN.      1SJ        1575
                                                                                                         1SJ        1576
3310          1412                 SFJ9     LDK    MNFL                                                  242L642      42
3311          3433                          STD    BB+4                                                  1SJ        1578
3312          1400                          LDN    0            CLEAR ECS REQUIREMENT                    1SJ        1579
3313          3432                          STD    BB+3                                                  1SJ        1580
                                                                                                         1SJ        1581
                                  *         SAVE THE JOB-S EJT ORDINAL AS A FLAG FOR ROUTINE *ASJ*       1SJ        1582
                                  *         INDICATING THE CM FL FIELD IN THE EJT ENTRY MUST BE CLEARED  1SJ        1583
                                  *         TO TELL *1RI* ONLY NFL SHOULD BE ROLLED IN.  IF THE JOB      1SJ        1584
                                  *         STATE IS *PRJS*, CLEARING THE CM FL FIELD WILL HAVE NO       1SJ        1585
                                  *         EFFECT.                                                      1SJ        1586
                                                                                                         1SJ        1587
3314          3034                          LDD    EO                                                    1SJ        1588
3315          5400 1474                     STM    ASJB                                                  1SJ        1589
3317          2000 0363                     LDC    UJNI+77-SFJR+SFJX  TERMINATE JOB SEARCH               1SJ        1590
                        -24                 ERRPL  SFJR-SFJX-40  RANGE ERROR                             1SJ        1591
3321          5400 3115                     STM    SFJR                                                  1SJ        1592
3323          0100 3435                     LJM    SFJ12.5      CHECK PRIORITY                           271L716     388
                                                                                                         1SJ        1594
                                  *         DETERMINE WHETHER OR NOT THE JOB IS IN A SCHEDULABLE STATE.  1SJ        1595
                                                                                                         1SJ        1596
3325          3011                 SFJ10    LDD    CM+1                                                  1SJ        1597
3326          0511                 SFJ10.1  NJN    SFJ11        IF ERROR FLAG SET                        1SJ30A       15
3327          5002 4072                     LDM    TJST,T2                                               1SJ        1599
3331          1006                          SHN    21-13                                                 1SJ        1600
3332          0703                          MJN    SFJ10.3      IF SCHEDULABLE JOB                       1SJ30A       16
3333          0100 3115            SFJ10.2  LJM    SFJ2         CONTINUE SEARCH                          1SJ30A       17
                                                                                                         1SJ        1603
3335          3041                 SFJ10.3  LDD    SC                                                    271L716     389
3336          1723                 SFJ10.5  SBK    MXJC                                                  271L716     390
3337          0631                 SFJ11    PJN    SFJ12        IF NO JCB FOR SERVICE CLASS              1SJ        1606
3340          3002                          LDD    T2                                                    1SJ5          1
3341          1103                          LMK    SIJS                                                  1SJ5          2
3342          0426                          ZJN    SFJ12        IF SCP ROLLIN JOB STATUS                 1SJ5          3
                                                                                                         1SJ        1607
                                  *         CALCULATE SCHEDULING PRIORITY.  THE CALCULATION IS PERFORMED 1SJ        1608
                                  *         IN-LINE TO AVOID THE OVERHEAD OF SUBROUTINE USAGE.           1SJ        1609
                                                                                                         1SJ        1610
3343          2000 1077                     LDC    SHNI+77      CALCULATE THE WEIGHTING FACTOR SHIFT     1SJ18         1
3345          5241 6730                     SBM    TEPB+2*MXJC,SC                                        271L716     391
3347          5400 3356                     STM    SFJE                                                  1SJ        1613
3351          3025                          LDD    TM                                                    1SJ        1614
3352          3223                          SBD    AA+3                                                  1SJ        1615
3353          1014                          SHN    14                                                    1SJ        1616
3354          3126                          ADD    TM+1                                                  1SJ        1617
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3355          3224                      SBD   AA+4                                                    1SJ         1618
3356          1000              SFJE    SHN   **                                                      1SJ         1619
3357          5141 6662                 ADM   TEPB,SC                                                 271L716      392
3361          5241 6705                 SBM   TEPB+1*MXJC,SC                                          271L716      393
3363          0702                      MJN   SFJ11.1     IF SCHEDULING PRIORITY .LT. UPPER BOUND     1SJ18          2
3364          1400                      LDN   0           SET PRIORITY TO UPPER BOUND                 1SJ18          3
3365          5141 6705         SFJ11.1 ADM   TEPB+1*MXJC,SC                                          271L716      394
3367          3430                      STD   BB+1        SAVE SCHEDULING PRIORITY                    1SJ         1628
3370          3011              SFJ12   LDD   CM+1                                                    1SJ         1629
                               *        UJN   SFJ12.2     (USER EM ENABLED)                           NS22000       69
                        3370    SFJF    EQU   *-1                                                     1SJ         1631
3371          1146                      LMN   ORET                                                    NS2143         1
3372          0502                      NJN   SFJ12.1     IF NOT OPERATOR OVERRIDE                    NS2143         2
3373          3432                      STD   BB+3                                                    1SJ         1635
3374          3032              SFJ12.1 LDD   BB+3                                                    1SJ         1636
3375          0403                      ZJN   SFJ12.2     IF EM NOT REQUIRED                          NS22000       70
3376          0100 3115                 LJM   SFJ2        CHECK NEXT JOB                              NS22000       71
                                                                                                      NS22000       72
3400          5600 4174         SFJ12.2 AOM   USDC        INCREMENT SCHEDULABLE JOB COUNT             NS22000       73
3402          3002                      LDD   T2                                                      271L716      395
3403          1111                      LMK   PCJS                                                    271L716      396
3404          0511                      NJN   SFJ12.3     IF NOT PCP JOB                              271L716      397
3405          1400                      LDN   0                                                       271L716      398
                               *        LDN   1           (PCP JOB SCHEDULING INHIBITED)              271L716      399
                        3405    SFJY    EQU   *-1                                                     271L716      400
3406          0403                      NJP   SFJ2        IF PCP JOB SCHEDULING INHIBITED             271L716      401
3411          3432                      STD   BB+3        CLEAR EM REQUIREMENT                        271L716      402
3412          3433                      STD   BB+4        CLEAR CM REQUIREMENT                        271L716      403
3413          1401                      LDN   1           SET EST ORDINAL FOR ZERO ACTIVITY           271L716      404
3414          3431                      STD   BB+2                                                    271L716      405
3415          3037              SFJ12.3 LDD   AM                                                      271L716      406
3416          1014                      SHN   14                                                      NS22000       75
3417          3340                      LMD   AM+1                                                    NS22000       76
3420          3233                      SBD   BB+4                                                    NS22000       77
3421          1056                      SHN   -21                                                     NS22000       78
3422          3401                      STD   T1                                                      NS22000       79
3423          0403                      ZJN   SFJ12.4     IF SUFFICIENT CM                            271L716      407
3424          5400 4146                 STM   USDA        SET INSUFFICIENT CM                         NS22000       81
3426          3042              SFJ12.4 LDD   AE                                                      271L716      408
3427          3232                      SBD   BB+3                                                    NS22000       83
3430          0605                      PJN   SFJ12.5     IF SUFFICIENT EM                            271L716      409
3431          1401                      LDN   1           SET INSUFFICIENT EM                         NS22000       85
3432          5400 4155                 STM   USDB                                                    NS22000       86
3434          3401                      STD   T1          SET CP SEARCH REQUIRED                      NS22000       87
3435          3030              SFJ12.5 LDD   BB+1                                                    271L716      410
3436          3262                      SBD   JP                                                      1SJ         1640
3437          0727                      MJN   SFJ13.2     IF PRIORITY .LT. CURRENT BEST               1SJ8           7
3440          0525                      NJN   SFJ13.1     IF PRIORITY .GT. CURRENT BEST               1SJ8           8
3441          3002                      LDD   T2                                                      271L716      411
3442          1111                      LMK   PCJS                                                    271L716      412
3443          0510                      NJN   SFJ12.6     IF NOT PCP JOB                              271L716      413
3444          5000 2773                 LDM   SCPA        CHECK IF CP AVAILABLE FOR PSEUDO-ROLLIN     271L716      414
3446          0200 2234                 RJM   CCP                                                     271L716      415
3450          0515                      NJN   SFJ13.1     IF FREE CP NEITHER FIRST NOR LAST           271L716      416
3451          0100 3115                 LJM   SFJ2        CONTINUE EJT SCAN                           271L716      417
                                                                                                      271L716      418
3453          3041              SFJ12.6 LDD   SC                                                      271L716      419
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 3454         1123                         LMN    DSSC                                     NS2181       12
 3455         0503                         NJN    SFJ13.0     IF NOT DEADSTART SEQUENCING JOB     271L716     420
 3456         0100 3522          SFJ13     LJM    SFJ15.1     SELECT THIS JOB AS CURRENT BEST CANDIDATE  271L716     421
                                                                                       271L716     422
 3460         2000 7777          SFJ13.0   LDC    7777                                     271L716     423
                         3461    SFJG      EQU    *-1         (ACTIVITY COUNT OF CURRENT BEST JOB)   1SJ        1644
 3462         5231 4353                    SBM    TDAC,BB+2                                1SJ        1645
 3464         0702                         MJN    SFJ13.2     IF CURRENT BEST HAS LESS DEVICE ACTIVITY  1SJ8          9
 3465         0534               SFJ13.1   NJN    SFJ15       IF CURRENT BEST HAS MORE DEVICE ACTIVITY  1SJ8         10
 3466         2000 0000          SFJ13.2   LDC    **                                       1SJ8         11
                         3467    SFJK      EQU    *-1         (PRIORITY OF SECOND BEST JOB)           1SJ8         12
 3470         3230                         SBD    BB+1                                     1SJ8         13
 3471         0714                         MJN    SFJ13.4     IF PRIORITY .GT. 2ND BEST                1SJ8         14
 3472         0525               SFJ13.3   NJN    SFJ14       IF PRIORITY .LT. 2ND BEST                1SJ8         15
 3473         5031 4353                    LDM    TDAC,BB+2                                1SJ8         16
 3475         5200 3063                    SBM    SFJM                                     1SJ8         17
 3477         0706                         MJN    SFJ13.4     IF ACTIVITY .LT. 2ND BEST                1SJ8         18
 3500         0517                         NJN    SFJ14       IF ACTIVITY .GT. 2ND BEST                1SJ8         19
 3501         2000 0000                    LDC    **                                       1SJ8         20
                         3502    SFJL      EQU    *-1         (CM FL OF 2ND BEST JOB)                 1SJ8         21
 3503         3233                         SBD    BB+4                                     1SJ8         22
 3504         0613                         PJN    SFJ14       IF REQUIRED CM .LE. 2ND BEST             1SJ8         23
 3505         3030               SFJ13.4   LDD    BB+1        SET 2ND BEST = CURRENT JOB               1SJ8         24
 3506         5400 3467                    STM    SFJK                                     1SJ8         25
 3510         5031 4353                    LDM    TDAC,BB+2                                1SJ8         26
 3512         5400 3063                    STM    SFJM                                     1SJ8         27
 3514         3033                         LDD    BB+4                                     1SJ8         28
 3515         5400 3502                    STM    SFJL                                     1SJ8         29
 3517         0100 3115          SFJ14     LJM    SFJ2        CONTINUE EJT SCAN                        1SJ        1651
                                                                                       1SJ        1652
                                 *         DETERMINE IF ENOUGH CM AND ECS ARE AVAILABLE WITHOUT ROLLING  1SJ        1653
                                 *         JOBS OUT.  ALSO, CHECK FOR VIOLATION OF SERVICE CLASS         1SJ        1654
                                 *         RESOURCE CONSTRAINTS.                                         1SJ        1655
                                                                                       1SJ        1656
 3521         1400               SFJ15     LDN    0           INITIALIZE CM/ECS ACCUMULATORS           1SJ        1657
 3522         3405               SFJ15.1   STD    T5                                       271L716     424
 3523         3406                         STD    T6                                       1SJ        1659
 3524         3407                         STD    T7                                       1SJ        1660
 3525         3001                         LDD    T1                                       NS22000      88
 3526         0403                         ZJN    SFJ18       IF LOWER PRIORITY JOB SEARCH NOT REQUIRED  271L716     425
 3527         0100 3716          SFJ16     LJM    SFJ29       GO PERFORM SCAN FOR LOWER PRIORITY JOBS   1SJ        1666
                                 *         LJM    SFJ2        (IF POST-REJECT SCHEDULING)               1SJ        1668
                         3530    SFJH      EQU    *-1                                      1SJ        1669
                                                                                       1SJ        1674
                                 *         CHECK FOR VIOLATION OF SERVICE CLASS CONSTRAINTS.             1SJ        1675
                                                                                       1SJ        1676
 3531         1500               SFJ18     LCN    0           INITIALIZE EXCESS CM/ECS ACCUMULATORS    1SJ        1677
 3532         3421                         STD    AA+1                                     1SJ        1678
 3533         3422                         STD    AA+2                                     1SJ        1679
 3534         1437                         LDN    37                                       1SJ        1680
 3535         3420                         STD    AA                                       1SJ        1681
 3536         3041                         LDD    SC                                       1SJ        1682
                                 *         UJN    SFJ19       (IF POST-REJECT SCHEDULING)               1SJ        1683
                         3536    SFJI      EQU    *-1                                      1SJ        1684
 3537         1723                         SBN    MXJC                                     1SJ        1685
 3540         0703                         MJN    SFJ20       IF JCB EXISTS FOR JOB-S SERVICE CLASS     1SJ        1686
 3541         0100 3636          SFJ19     LJM    SFJ26       GO MAKE THIS JOB CURRENT BEST CANDIDATE   1SJ        1687
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                                                                                   1SJ       1688
3543          3011             SFJ20    LDD     CM+1                               NS2395       4
3544          0574                      NJN     SFJ19        IF ERROR FLAG SET     NS2395       5
3545          5041 6523                 LDM     TJAM+1*MXJC,SC                     NS2395       6
3547          1612                      ADN     MNFL                               1SJ44        1
3550          3233                      SBD     BB+4                               1SJ       1690
3551          0705                      MJN     SFJ21        IF REQUIRED CM .GT. MAXIMUM FOR ONE JOB   1SJ       1691
3552          5041 6614                 LDM     TJAM+4*MXJC,SC                     1SJ       1692
3554          3232                      SBD     BB+3                               1SJ       1693
3555          0615                      PJN     SFJ21.2      IF REQUIRED EM .LE. MAXIMUM FOR ONE JOB   271L716    426
3556          5002 4072        SFJ21    LDM     TJST,T2                            271L716    427
3560          1012                      SHN     21-7                               NS2395A      2
3561          0603                      MJP     SFJ14        IF INITIAL JOB STATE  NS2395A      3
3564          2002 4011                 LDC     SFJU+2*10000  SET SERVICE WAIT JOB STATUS   NS2395       7
3566          0200 2642                 RJM     IUT          ISSUE *UTEM* REQUEST  NS2395       8
3570          0100 3627                 LJM     SFJ24        REJECT JOB            NS2395       9
                                                                                   1SJ       1695
                              *         DETERMINE IF THE TOTAL CM/ECS ASSIGNED TO JOBS OF THIS          1SJ       1696
                              *         CANDIDATE-S SERVICE CLASS WILL EXCEED THE MAXIMUM ALLOWABLE     1SJ       1697
                              *         IF THE CANDIDATE JOB IS SELECTED FOR SCHEDULING. THE INITIAL    1SJ       1698
                              *         CHECK DOES NOT CONSIDER THE AMOUNT OF CM/ECS ASSIGNED TO        1SJ       1699
                              *         LOWER PRIORITY JOBS OF THE CANDIDATE-S SERVICE CLASS.           1SJ       1700
                              *         HOWEVER, IF THE FIRST CHECK SHOWS THE CM/ECS MAXIMUM WOULD BE   1SJ       1701
                              *         EXCEEDED, A SECOND CHECK IS PERFORMED THAT INCLUDES THE         1SJ       1702
                              *         CM/ECS ASSIGNED TO LOWER PRIORITY JOBS OF THE CANDIDATE-S       1SJ       1703
                              *         SERVICE CLASS.                                                  1SJ       1704
                                                                                   1SJ       1705
3572          5041 6546        SFJ21.2  LDM     TJAM+2*MXJC,SC                     NS2152      19
3574          5241 5353                 SBM     TTCU,SC                            1SJ       1707
3576          1014                      SHN     14                                 1SJ       1708
3577          5141 6571                 ADM     TJAM+3*MXJC,SC                     1SJ       1709
3601          5241 5376                 SBM     TTCU+1*MXJC,SC                     1SJ       1710
3603          3233                      SBD     BB+4                               1SJ       1711
3604          0611                      PJN     SFJ22        IF TOTAL CM .LE. ALLOWABLE MAXIMUM   1SJ       1712
3605          1006                      SHN     6                                  1SJ       1713
3606          3105                      ADD     T5                                 1SJ10        1
3607          1014                      SHN     14                                 1SJ       1715
3610          3106                      ADD     T6                                 1SJ10        2
3611          0714                      MJN     SFJ23        IF TOTAL CM .GT. ALLOWABLE MAXIMUM   1SJ       1717
                                                                                   1SJ       1718
                              *         CALCULATE THE AMOUNT OF CM ASSIGNED TO JOBS OF THE              1SJ       1719
                              *         CANDIDATE-S SERVICE CLASS THAT MAY REMAIN ASSIGNED IF THE       1SJ       1720
                              *         CANDIDATE IS SELECTED FOR SCHEDULING.                           1SJ       1721
                                                                                   1SJ       1722
3612          3421                      STD     AA+1                               1SJ       1723
3613          1063                      SHN     -14                                1SJ       1724
3614          3420                      STD     AA                                 1SJ       1725
                                                                                   1SJ       1726
                              *         PERFORM ECS RESOURCE CONSTRAINT CHECK AS WAS JUST DONE FOR      1SJ       1727
                              *         CM.                                                             1SJ       1728
                                                                                   1SJ       1729
3615          5041 6637        SFJ22    LDM     TJAM+5*MXJC,SC                     1SJ38       10
3617          5241 5421                 SBM     TTUE,SC                            284L847      8
3621          3232                      SBD     BB+3                               1SJ       1732
3622          0614                      PJN     SFJ26        IF TOTAL ECS .LE. ALLOWABLE MAXIMUM  1SJ       1733
3623          3107                      ADD     T7                                 1SJ       1734
3624          0611                      PJN     SFJ25        IF TOTAL ECS .LE. ALLOWABLE MAXIMUM  1SJ       1735
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3625         0100 3716          SFJ23    LJM    SFJ29       GO CALCULATE ECS OF LOWER PRIORITY JOBS    1SJ       1736
                                *        LJM    SFJ24       (IF LOWER PRIORITY SCAN ALREADY PERFORMED) 1SJ       1738
                        3626    SFJJ     EQU    *-1                                                    1SJ       1739
                                                                                                       1SJ       1740
                                *        THIS JOB WILL BE SELECTED FOR SCHEDULING ONLY IF NO OTHER      1SJ       1741
                                *        CANDIDATES ARE FOUND THAT WOULD NOT VIOLATE SERVICE CLASS      1SJ       1742
                                *        RESOURCE CONSTRAINTS AND FLEXIBLE MEMORY PARTITIONING IS       271L716    428
                                *        ENABLED.  ADDITIONALLY, IT WILL BE SCHEDULED ONLY IF NO        271L716    429
                                *        ROLLOUTS ARE REQUIRED AND WILL BE ASSIGNED THE LOWER BOUND     271L716    430
                                *        SCHEDULING PRIORITY OF ITS SERVICE CLASS.                      271L716    431
                                                                                                       1SJ       1746
3627         5000 4007          SFJ24    LDM    SFJP        SET REJECT FLAG                            1SJ       1747
3631         5400 3132                   STM    SFJC                                                   1SJ       1748
3633         0100 3703                   LJM    SFJ27       CONTINUE EJT SCAN                          1SJ11       14
                                                                                                       1SJ       1750
                                *        MAKE THIS JOB THE CURRENT BEST SCHEDULING CANDIDATE.           1SJ       1751
                                                                                                       1SJ       1752
3635         3422               SFJ25    STD    AA+2                                                   1SJ       1753
3636         3020               SFJ26    LDD    AA          SAVE EXCESS CM AMOUNT                      1SJ       1754
3637         3457                        STD    CS                                                     1SJ       1755
3640         3021                        LDD    AA+1                                                   1SJ       1756
3641         3460                        STD    CS+1                                                   1SJ       1757
3642         3022                        LDD    AA+2        SAVE EXCESS ECS AMOUNT                     1SJ       1758
3643         3447                        STD    ES                                                     1SJ       1759
3644         3062                        LDD    JP          SAVE PRIORITY                              1SJ8        30
3645         3402                        STD    T2                                                     1SJ8        31
3646         3030                        LDD    BB+1        SAVE SCHEDULING PRIORITY                   1SJ       1764
3647         3462                        STD    JP                                                     1SJ       1765
3650         3002                        LDD    T2          SAVE PREVIOUS BEST PRIORITY                1SJ8        32
3651         3430                        STD    BB+1                                                   1SJ8        33
3652         3064                        LDD    JM          SAVE CM AMOUNT                             1SJ8        34
3653         3402                        STD    T2                                                     1SJ8        35
3654         3033                        LDD    BB+4        SAVE REQUIRED CM                           1SJ       1766
3655         3464                        STD    JM                                                     1SJ       1767
3656         3002                        LDD    T2                                                     1SJ8        36
3657         3433                        STD    BB+4                                                   1SJ8        37
3660         3032                        LDD    BB+3        SAVE REQUIRED ECS                          1SJ       1768
3661         3465                        STD    JE                                                     1SJ       1769
3662         5000 3461                   LDM    SFJG        SAVE ACTIVITY IN FIRST *TDAC* ENTRY        1SJ8        38
3664         5400 4353                   STM    TDAC                                                   1SJ8        39
3666         5031 4353                   LDM    TDAC,BB+2   SAVE MASS STORAGE ACTIVITY COUNT           1SJ       1770
3670         5400 3461                   STM    SFJG                                                   1SJ       1771
3672         1400                        LDN    0           CAUSE FIRST *TDAC* ENTRY TO BE USED        1SJ8        40
3673         3431                        STD    BB+2                                                   1SJ8        41
3674         3034                        LDD    EO          SAVE EJT ORDINAL                           1SJ       1772
3675         3467                        STD    EP                                                     1SJ       1773
3676         3041                        LDD    SC          SAVE SERVICE CLASS                         1SJ       1774
3677         3461                        STD    SP                                                     1SJ       1775
3700         3054                        LDD    EJ+4        SAVE JOB STATUS                            1SJ11       15
3701         5400 1303                   STM    ASJA                                                   271L716    432
3703         2000 3716          SFJ27    LDC    SFJ29       RESTORE INSTRUCTION                        1SJ       1776
3705         5400 3626                   STM    SFJJ                                                   1SJ       1777
3707         3061                        LDD    SP                                                     NS2181      14
3710         1123                        LMN    DSSC                                                   NS2181      15
3711         0503                        ZJP    SFJX        IF DEADSTART SEQUENCING JOB SELECTED       NS2181      16
3714         0100 3466                   LJM    SFJ13.2     CHECK FOR NEW 2ND BEST JOB                 1SJ8        42
                                                                                                       1SJ       1779
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                                *       CALCULATE AMOUNTS OF CM AND ECS OCCUPIED BY LOWER PRIORITY    1SJ       1780
                                *       JOBS.                                                        1SJ       1781
                                                                                                     1SJ       1782
 3716           2000 3627        SFJ29  LDC    SFJ24                                                1SJ       1783
 3720           5400 3626               STM    SFJJ                                                 1SJ       1784
 3722           3040                    LDD    AM+1        INITIALIZE CM ACCUMULATOR                1SJ       1785
 3723           3403                    STD    T3                                                   1SJ       1786
 3724           3037                    LDD    AM                                                   1SJ       1787
 3725           3402                    STD    T2                                                   1SJ       1788
 3726           3042                    LDD    AE          INITIALIZE ECS ACCUMULATOR               1SJ       1789
 3727           3404                    STD    T4                                                   1SJ       1790
 3730           3036                    LDD    TE          SET *TACP* TABLE POINTER                 1SJ       1791
 3731           3443                    STD    TP                                                   1SJ       1792
 3732           3743             SFJ30  SOD    TP          DECREMENT *TACP* POINTER                 1SJ       1793
 3733           4043                    LDI    TP                                                   1SJ       1794
 3734           0515                    NJN    SFJ31       IF *TACP* SCAN NOT COMPLETE              1SJ       1795
 3735           3002                    LDD    T2                                                   1SJ       1796
 3736           1014                    SHN    14                                                   1SJ       1797
 3737           3303                    LMD    T3                                                   1SJ       1798
 3740           3233                    SBD    BB+4                                                 1SJ       1799
 3741           0706                    MJN    SFJ30.1     IF INSUFFICIENT CM TO SCHEDULE THIS JOB  1SJ8        43
 3742           3004                    LDD    T4                                                   1SJ       1801
 3743           3232                    SBD    BB+3                                                 1SJ       1802
 3744           0703                    MJN    SFJ30.1     IF INSUFFICIENT ECS TO SCHEDULE THIS JOB 1SJ8        44
 3745           0100 3531               LJM    SFJ18       GO CHECK RESOURCE CONSTRAINTS            1SJ       1804
                                                                                                     1SJ8        45
 3747           0100 3115        SFJ30.1 LJM    SFJ2        CONTINUE EJT SCAN                        1SJ8        46
                                                                                                     1SJ       1805
 3751           3401             SFJ31  STD    T1          SAVE CP/PCP NUMBER                       271L716    433
 3752           5001 6132               LDM    TJPR-1,T1                                            1SJ       1807
 3754           3230                    SBD    BB+1                                                 1SJ       1808
 3755           0654                    PJN    SFJ30       IF *TACP* PRIORITY .GE. CANDIDATE-S      1SJ       1809
 3756           5001 6041               LDM    TJSC-1,T1                                            1SJ       1810
 3760           3341                    LMD    SC                                                   1SJ       1811
 3761           0511                    NJN    SFJ32       IF *TACP* SERVICE CLASS .NE. CANDIDATE-S 1SJ       1812
                                                                                                     1SJ       1813
                                *       ACCUMULATE CM AND ECS OF LOWER PRIORITY JOB HAVING THE SAME  1SJ       1814
                                *       SERVICE CLASS AS THAT OF THE CANDIDATE JOB.                  1SJ       1815
                                                                                                     1SJ       1816
 3762           5001 6223               LDM    TJCM-1,T1                                            1SJ       1817
 3764           3506                    RAD    T6                                                   1SJ       1818
 3765           1063                    SHN    -14                                                  1SJ       1819
 3766           3505                    RAD    T5                                                   1SJ       1820
 3767           5001 6314               LDM    TJEC-1,T1                                            1SJ       1821
 3771           3507                    RAD    T7                                                   1SJ       1822
                                                                                                     1SJ       1823
                                *       ACCUMULATE CM AND ECS OF LOWER PRIORITY JOB REGARDLESS OF    1SJ       1824
                                *       SERVICE CLASS.                                               1SJ       1825
                                                                                                     1SJ       1826
 3772           5001 6223         SFJ32 LDM    TJCM-1,T1                                            1SJ       1827
 3774           3503                    RAD    T3                                                   1SJ       1828
 3775           1063                    SHN    -14                                                  1SJ       1829
 3776           3502                    RAD    T2                                                   1SJ       1830
 3777           5001 6314               LDM    TJEC-1,T1                                            1SJ       1831
 4001           3504                    RAD    T4                                                   1SJ       1832
 4002           0100 3732               LJM    SFJ30       CONTINUE *TACP* SCAN                     1SJ       1833
                                                                                                     1SJ       1834
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                4004                    1     SFJA     BSS    1           LAST EJT ORDINAL SCHEDULED                NS2153      29
                                                                                                                   NS2153      30
                4005                          SFJN     BSS    0                                                     1SJ       1835
          L     3131                                   LOC    SFJB                                                  1SJ       1836
          L     3131          0332                     UJN    SFJ2.2      POST-REJECT SCAN COMPLETE                 NS2153      31
                4006                                   LOC    *O                                                    1SJ       1838
                                                                                                                   1SJ       1839
                4006                          SFJO     BSS    0                                                     1SJ       1840
          L     3536                                   LOC    SFJI                                                  1SJ       1841
          L     3536          0303                     UJN    SFJ19       POST-REJECT SCHEDULING, SELECT JOB        1SJ       1842
                4007                                   LOC    *O                                                    1SJ       1843
                                                                                                                   1SJ       1844
                4007                          SFJP     BSS    0                                                     1SJ       1845
          L     3132                                   LOC    SFJC                                                  1SJ       1846
          L     3132          0531                     NJN    SFJ2.2      IF SELECTION MADE AND REJECT FOUND        NS2153      32
                4010                                   LOC    *O                                                    1SJ       1848
                                                                                                                   1SJ       1849
                4010                          SFJQ     BSS    0                                                     1SJ       1850
          L     3132                                   LOC    SFJC                                                  1SJ       1851
          L     3132          0331                     UJN    SFJ2.2      EXIT                                      NS2153      33
                4011                                   LOC    *O                                                    1SJ       1853
                                                                                                                   NS2395      10
                                              *        *UTEM* PARAMETERS FOR SETTING JOB STATUS.                    NS2395      11
                                                                                                                   NS2395      12
                4011          4005            SFJU     VFD    1/1,5/JSNE,6/5  VERIFY THAT JOB STATUS HAS NOT CHANGED NS2395      13
                4012          0100                     VFD    6/1,6/0                                               NS2395      14
                4013          0000 0000                CON    0,0                                                   NS2395      15
                4015          0000                     CON    0           JOB STATUS WHEN JOB WAS SELECTED          NS2395      16
                                                                                                                   NS2395      17
                4016          0005                     VFD    1/0,5/JSNE,6/5  SET JOB STATUS                        NS2395      18
                4017          0100                     VFD    6/1,6/0                                               NS2395      19
                4020          0000                     CON    0                                                     NS2395      20
                4021          0000                     CON    0                                                     NS2395      21
                4022          0015                     CON    SWJS                                                  NS2395      22
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                                              **       TEFP - TABLE OF ERROR FLAG PROCESSORS.                       1SJ       1855
                                              *                                                                     1SJ       1856
                                              *        EACH ENTRY CONTAINS THE ADDRESS OF THE PROCESSOR ASSOCIATED  1SJ       1857
                                              *        WITH THE ERROR FLAG.                                         1SJ       1858
                                                                                                                    1SJ       1859
                4023                           TEFP    INDEX                                                        1SJ       1862
          L     3             3306                     INDEX  ARET,SFJ8   ARITHMETIC ERROR, ROLLIN FL              1SJ       1863
          L     4             3306                     INDEX  ITET,SFJ8   SCP INVALID TRANSFER ADDRESS, ROLLIN FL  1SJ       1864
          L     5             3306                     INDEX  PSET,SFJ8   PROGRAM STOP, ROLLIN FL                  1SJ       1865
          L     6             3306                     INDEX  PPET,SFJ8   PPU ABORT, ROLLIN FL                     1SJ       1866
          L     7             3306                     INDEX  CPET,SFJ8   CPU ABORT, ROLLIN FL                     1SJ       1867
          L    10             3306                     INDEX  PCET,SFJ8   PP CALL ERROR, ROLLIN FL                 1SJ       1868
          L    14             3306                     INDEX  MLET,SFJ8   MESSAGE LIMIT, ROLLIN FL                 1SJ       1869
          L    15             3306                     INDEX  TLET,SFJ8   TIME LIMIT, ROLLIN FL                    1SJ       1870
          L    16             3306                     INDEX  FLET,SFJ8   FILE LIMIT, ROLLIN FL                    1SJ       1871
          L    17             3306                     INDEX  TKET,SFJ8   TRACK LIMIT, ROLLIN FL                   1SJ       1872
          L    20             3306                     INDEX  SRET,SFJ8   SRU LIMIT, ROLLIN FL                     1SJ       1873
          L    22             3306                     INDEX  FSET,SFJ8   FORCED ERROR, ROLLIN FL                  242L642     43
          L    24             3306                     INDEX  ODET,SFJ8   OPERATOR DROP, ROLLIN FL                 1SJ       1875
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                L   25          3306                    INDEX  IDET,SFJ8   SUBSYSTEM IDLEDOWN, ROLLIN FL                1SJ       1876
                L   34          3306                    INDEX  RRET,SFJ8   OPERATOR RERUN, ROLLIN FL                   1SJ       1877
                L   37          3310                    INDEX  DRET,SFJ9   DEADSTART RERUN, ROLLIN NFL                1SJ       1878
                L   27          3306                    INDEX  STET,SFJ8   SUSPENSION TIMEOUT, ROLLIN FL              NS2100       1
                L   35          3306                    INDEX  OKET,SFJ8   OPERATOR KILL, ROLLIN FL                   1SJ       1880
                L    1          3275                    INDEX  TIET,SFJ7   USER BREAK ONE, ROLLIN FL                   1SJ       1881
                L    2          3275                    INDEX  TAET,SFJ7   USER BREAK TWO, ROLLIN FL                   1SJ       1882
                L   42          3310                    INDEX  SVET,SFJ9   SECURITY VIOLATION, ROLLIN NFL            1SJ       1884
                L   32          3306                    INDEX  SSET,SFJ8   SUBSYSTEM ABORT, ROLLIN FL                 1SJ       1885
                L   30          3306                    INDEX  ECET,SFJ8   ECS PARITY ERROR, ROLLIN FL                1SJ       1886
                L   44          3306                    INDEX  PEET,SFJ8   CPU PARITY ERROR, ROLLIN FL                1SJ       1887
                L   41          3310                    INDEX  JSET,SFJ9   JOB STEP ABORT, ROLLIN NFL                242L642     44
                L   43          3310                    INDEX  SYET,SFJ9   SYSTEM ABORT, ROLLIN NFL                  1SJ       1888
                L   40          3310                    INDEX  RAET,SFJ9   RECOVERY ABORT, ROLLIN NFL                 1SJ       1889
                L   45          3310                    INDEX  SWET,SFJ9   SYSTEM SOFTWARE ERROR, ROLLIN NFL         241L630     17
                L   46          3310                    INDEX  ORET,SFJ9   OVERRIDE CONDITION, ROLLIN NFL           1SJ       1890
                  4072                                  INDEX  MXET                                                    271L716    434
```

```
                                                **      TJST - TABLE OF JOB STATE ATTRIBUTES.                          242L642     45
                                                *       ENTRY = 1 WORD.                                                1SJ       1894
                                                *       INDEXED BY JOB STATUS.                                         1SJ       1895
                                                *                                                                      1SJ       1896
                                                *T      1/ SS, 1/ ES, 1/ FR, 1/ TE, 1/ PI                              242L642     46
                                                *       SS     SET IF SCHEDULABLE JOB STATE.                           242L642     47
                                                *       ES     SET IF SCHEDULABLE JOB STATE WHEN ERROR FLAG IS SET.    242L642     48
                                                *       FR     SET IF JOB IN THIS STATE MAY BE FORCED ROLLED IN.       242L642     49
                                                *       TE     SET IF TIMED/EVENT TYPE JOB STATE.                      242L642     50
                                                *       PI     SET IF PRE-INITIAL TYPE JOB STATE.                      242L642     51
                                                *                                                                      271L716    435
                                                *       NOTE - ANY CHANGE TO THIS TABLE MUST BE COUPLED WITH A         271L716    436
                                                *              CORRESPONDING CHANGE TO THE *TJST* TABLE IN *1PP*.      271L716    437
                                                                                                                       1SJ       1902
                  4072                           TJST   JOBSTAT                                                        1SJ       1903
                L    0          7200                    JOBSTAT PRJS,SS,ES,FR,,PI                                      242L642     52
                L    1          0000                    JOBSTAT EXJS                                                   1SJ       1905
                L    2          7000                    JOBSTAT ROJS,SS,ES,FR                                          242L642     53
                L    3          7000                    JOBSTAT SIJS,SS,ES,FR                                          242L642     54
                L    4          3000                    JOBSTAT SOJS,,ES,FR                                            242L642     55
                L    5          2400                    JOBSTAT TOJS,,ES,,TE                                           242L642     56
                L    6          0000                    JOBSTAT IOJS                                                   1SJ       1910
                L    7          0000                    JOBSTAT DOJS                                                   1SJ       1911
                L   10          2000                    JOBSTAT SUJS,,ES                                               242L642     57
                L   11          7000                    JOBSTAT PCJS,SS,ES,FR                                          271L716    438
                L   12          1400                    JOBSTAT ERJS,,,FR,TE                                           242L642     58
                L   13          0000                    JOBSTAT NVJS                                                   NS21000      6
                L   14          0600                    JOBSTAT PWJS,,,,TE,PI                                          242L642     59
                L   15          2000                    JOBSTAT SWJS,,ES                                               NS2395      23
                                                                                                                       1SJ       1914
                  4110                                  INDEX  MXJS       TERMINATE TABLE                              271L716    439
```

```
                                **      SSA - SET SCHEDULER STATISTICAL AREA ADDRESS.                    NS22000    91
                                *                                                                       NS22000    92
                                *       EXIT    (A) = FWA SCHEDULER STATISTICS WORD 0.                  V23L617    17
                                *               (T1) = WORD COUNT FOR EJT SCHEDULING DATA.               V23L617    18
                                *                                                                       NS22000    95
                                *       USES    CM - CM+4, T1.                                          NS22000    96
                                                                                                        NS22000    97
                                                                                                        NS22000    98
4110            0100 4110        SSA    SUBR                ENTRY/EXIT                              NS22000    99
4112            1404                    LDN     JS3S-JS0S+1 SET WORD COUNT                          NS22000   100
4113            3401                    STD     T1                                                  NS22000   101
4114            1676                    ADK     SDAP-JS3S+JS0S-1   SET SCHEDULER STATISTICS ADDRESS   271L716   440
4115            6010                    CRD     CM                                                  NS22000   103
4116            3010                    LDD     CM                                                  NS22000   104
4117            1014                    SHN     14                                                  NS22000   105
4120            3311                    LMD     CM+1                                                NS22000   106
                                        ADK     JS0S                                                271L716   441
4121            0366                    UJN     SSAX        EXIT                                    NS22000   108


                                **      USD - UPDATE STATISTICAL DATA.                                  NS22000   110
                                *                                                                       NS22000   111
                                *       ENTRY   (A) = 0 IF JOB SCHEDULED.                               NS22000   112
                                *                                                                       NS22000   113
                                *       EXIT    SCHEDULING STATISTICAL DATA UPDATED.                    NS22000   114
                                *                                                                       NS22000   115
                                *       CALLS   SSA.                                                    NS22000   116
                                                                                                        NS22000   117
                                                                                                        NS22000   118
4122            0100 4122        USD    SUBR                ENTRY/EXIT                              NS22000   119
4124            0521                    NJN     USD1        IF JOB NOT ASSIGNED                     NS22000   120
4125            5600 4224               AOM     SPST+JS1S*5+4  INCREMENT JOBS SCHEDULED               NS22000   121
4127            1063                    SHN     -14                                                 NS22000   122
4130            5500 4223               RAM     SPST+JS1S*5+3                                       NS22000   123
4132            5000 3131               LDM     SFJB                                                NS22000   124
4134            5300 4005               LMM     SFJN                                                NS22000   125
4136            0535                    NJN     USD2        IF NOT SCHEDULED ON RESCAN              NS22000   126
4137            5600 4227               AOM     SPST+JS2S*5+2  INCREMENT JOBS SCHEDULED ON RESCAN    NS22000   127
4141            1063                    SHN     -14                                                 NS22000   128
4142            5500 4226               RAM     SPST+JS2S*5+1                                       NS22000   129
4144            0327                    UJN     USD2        UPDATE STATISTICS                       NS22000   130
                                                                                                        NS22000   131
4145            2000 0000        USD1   LDC     0           UPDATE INSUFFICIENT CM COUNT            NS22000   132
                                 *      LDC     1           (INSUFFICIENT CM FOR JOB)               NS22000   133
                        4146     USDA   EQU     *-1                                                 NS22000   134
4147            5500 4231               RAM     SPST+JS2S*5+4                                       NS22000   135
4151            1063                    SHN     -14                                                 NS22000   136
4152            5500 4230               RAM     SPST+JS2S*5+3                                       NS22000   137
4154            2000 0000               LDC     0           UPDATE INSUFFICIENT EM COUNT            NS22000   138
                                 *      LDC     1           (INSUFFICIENT EM FOR JOB)               NS22000   139
                        4155     USDB   EQU     *-1                                                 NS22000   140
4156            5500 4234               RAM     SPST+JS3S*5+2                                       NS22000   141
4160            1063                    SHN     -14                                                 NS22000   142
4161            5500 4233               RAM     SPST+JS3S*5+1                                       NS22000   143
4163            5000 2773               LDM     SCPA                                                NS22000   144
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4165          0506                        NJN    USD2         IF CONTROL POINT AVAILABLE                 NS22000    145
4166          5600 4236                   AOM    SPST+JS3S*5+4  SET NO CONTROL POINT AVAILABLE           NS22000    146
4170          1063                        SHN    -14                                                     NS22000    147
4171          5500 4235                   RAM    SPST+JS3S*5+3                                           NS22000    148
4173          2000 0000          USD2     LDC    0            UPDATE SCHEDULABLE JOB COUNT               NS22000    149
                          4174   USDC     EQU    *-1          (SCHEDULABLE JOB COUNT)                    NS22000    150
4175          5500 4217                   RAM    SPST+JS0S*5+4                                           V23L617     20
4177          1063                        SHN    -14                                                     NS22000    152
4200          5500 4216                   RAM    SPST+JS0S*5+3                                           V23L617     21
4202          1063                        SHN    -14                                                     NS22000    154
4203          5500 4215                   RAM    SPST+JS0S*5+2                                           V23L617     22
4205          0200 4111                   RJM    SSA          SET STATISTICAL AREA ADDRESS               NS22000    156
4207          6301 4213                   CWM    SPST+JS0S*5,T1  WRITE STATISTICAL DATA                  NS22000    157
4211          0100 4122                   LJM    USDX         EXIT                                       NS22000    158


                          4213   SPST     EQU    *-JS0S*5     SCHEDULER PERFORMANCE STATISTICS           NS22000    160
4213                        24            BSS    JS3S*5+5-JS0S*5                                         NS22000    161


                                *         COMMON DECKS.                                                  1SJ       1918
                                                                                                         1SJ       1919
                                                                                                         1SJ       1920
                                          LIST   X                                                       1SJ       1921
                             1   CPR$     SET    1            ASSEMBLE ROUTINE *CPR* OF *COMPCPE*        271L716    442
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4237                                    CTEXT  COMPCPE - CALCULATE PRIORITY OR ENTRY TIME.           COMPCPE      1


                                        IF     -DEF,QUAL$,1                                        COMPCPE      3
                                        QUAL   COMPCPE                                             COMPCPE      4
                              M_M       BASE   M                                                   COMPCPE      5
                                COMMENT 82/02/26. 96/06/05. COMPCPE - CALCULATE PRIORITY OR ENTRY TIMECOMPCPE      6
                              *         COMMENT  COPYRIGHT CONTROL DATA SYSTEMS INC.  1992.        281L803      1


                              ***       CPE - CALCULATE PRIORITY OR ENTRY TIME.                     COMPCPE      9
                              *                                                                     COMPCPE     10
                              *         R. M. DANISCH      81/02/05.                                COMPCPE     11


                              ***             *CPE* CONTAINS ROUTINES TO CALCULATE A PRIORITY FROM A COMPCPE     13
                              *         GIVEN ENTRY TIME AND CONVERT A PRIORITY TO AN ENTRY TIME.   COMPCPE     14
                              *         ASSEMBLY OF ROUTINES WITHIN THIS COMMON DECK IS CONTROLLED BY COMPCPE     15
                              *         SELECTIVELY DEFINING THE FOLLOWING SYMBOLS -                COMPCPE     16
                              *               CPR$       CAUSES ASSEMBLY OF SUBROUTINE *CPR*        COMPCPE     17
                              *               CET$       CAUSES ASSEMBLY OF SUBROUTINE *CET*        COMPCPE     18
                              *               IOQ$       CAUSES ASSEMBLY OF QUEUE PRIORITY CODE IN  COMPCPE     19
                              *                          SUBROUTINE *CPR*                           COMPCPE     20
                                                                                                    COMPCPE     21
                               .CPR     IF     DEF,CPR$                                            COMPCPE     22
```

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                                **       CPR - CALCULATE PRIORITY.                               COMPCPE     24
                                *                                                                COMPCPE     25
                                *               *CPR* CALCULATES QUEUE AND SCHEDULING PRIORITIES VIA   COMPCPE     26
                                *        THE FOLLOWING FORMULA -                                 COMPCPE     27
                                *                                                                COMPCPE     28
                                *               PR = LB + (CT - ET) / WF                          COMPCPE     29
                                *                                                                COMPCPE     30
                                *                  WHERE    PR = CALCULATED PRIORITY              COMPCPE     31
                                *                           LB = LOWER BOUND PRIORITY OF SERVICE CLASS COMPCPE     32
                                *                           WF = WEIGHTING FACTOR FROM JCB        COMPCPE     33
                                *                           CT = CURRENT TIME (SECONDS PORTION OF WORD COMPCPE     34
                                *                                *RTCL*)                         COMPCPE     35
                                *                           ET = ENTRY TIME FROM EJT OR IOQT ENTRY     COMPCPE     36
                                *                                                                COMPCPE     37
                                *        ENTRY  (A) = 6/  SC,12/  QT.                            COMPCPE     38
                                *                     SC    SERVICE CLASS (MUST BE .LT. *MXJC*).  COMPCPE     39
                                *                     QT    QUEUE TYPE (*INQT*, *EXQT* OR *OTQT*). COMPCPE     40
                                *               (T1 - T2) = ENTRY TIME.                          COMPCPE     41
                                *                                                                COMPCPE     42
                                *        EXIT   (A) = QUEUE PRIORITY OR SCHEDULING PRIORITY.     COMPCPE     43
                                *                   = 0 IF *IOQ$* IS DEFINED AND ENTRY TIME = 0. COMPCPE     44
                                *                   .LT. 0 IF NO JCB IS DEFINED FOR SERVICE CLASS. COMPCPE     45
                                *                                                                COMPCPE     46
                                *        USES   CM - CM+4.                                       COMPCPE     47
                                *                                                                COMPCPE     48
                                *        CALLS  RJC.                                             COMPCPE     49
                                *                                                                COMPCPE     50
                                *        XREF   COMPRJC, COMSPIM.                                COMPCPE     51
                                *                                                                COMPCPE     52
                                *        NOTE   THE LARGEST RESOLVED CLOCK DIFFERENCE IS         COMPCPE     53
                                *               377777.  ANYTHING OVER THAT IS ASSUMED TO BE     COMPCPE     54
                                *               EQUAL TO UPPER BOUND PRIORITY.                   COMPCPE     55
                                                                                                 COMPCPE     56
                                                                                                 COMPCPE     57
       4237          1500                CPR3     LCN    0           INDICATE NO JCB FOR SERVICE CLASS    COMPCPE     58
                                                                                                 COMPCPE     59
       4240          0100 4240           CPR      SUBR               ENTRY/EXIT                  COMPCPE     60
       4242          5400 4256                    STM    CPRA        SAVE QUEUE TYPE             COMPCPE     61
       4244          1063                         SHN    -14                                     COMPCPE     62
       4245          0471                         ZJN    CPR3        IF NO SERVICE CLASS         PCPE2        1
       4246          1123                         LMN    DSSC                                    PCPE1        1
       4247          0502                         NJN    CPR0        IF NOT DEADSTART SEQUENCING SERVICE CLASS  PCPE1        2
       4250          1124                         LMN    SSSC&DSSC   USE JCB FOR SUBSYSTEM SERVICE CLASS   PCPE1        3
       4251          1123                CPR0     LMN    DSSC                                    PCPE1        4
       4252          0200 4332                    RJM    RJC         CALCULATE JCB ADDRESS       COMPCPE     63
       4254          0462                         ZJN    CPR3        IF NO JCB FOR SERVICE CLASS COMPCPE     64
       4255          2100 0000                    ADC    **          READ QUEUE CONTROL WORD FROM JCB     COMPCPE     65
                                4256     CPRA     EQU    *-1         (QUEUE TYPE - USED AS JCB WORD INDEX)  COMPCPE     66
       4257          6010                         CRD    CM                                      COMPCPE     67
                                                                                                 COMPCPE     68
                                         .IOQ     IF     DEF,IOQ$                                COMPCPE     69
                                                                                                 COMPCPE     70
                                                  LDD    T1                                      COMPCPE     71
                                                  ADD    T2                                      COMPCPE     72
                                                  ZJN    CPRX        IF ENTRY TIME = 0           COMPCPE     73
                                                                                                 COMPCPE     74
                                         .IOQ     ENDIF                                          COMPCPE     75
```

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                                                                                     COMPCPE     76
4260          2000 1077                   LDC    SHNI+77     USE WEIGHTING FACTOR AS SHIFT COUNT     COMPCPE     77
4262          3213                        SBD    CM+3                                COMPCPE     78
4263          5400 4315                   STM    CPRB                                COMPCPE     79
4265          3011                        LDD    CM+1        SAVE LOWER AND UPPER BOUNDS             COMPCPE     80
4266          5400 4317                   STM    CPRC                                COMPCPE     81
4270          3012                        LDD    CM+2                                COMPCPE     82
4271          5400 4325                   STM    CPRD                                COMPCPE     83
4273          2000 0106                   LDC    RTCL        READ REAL-TIME CLOCK    COMPCPE     84
4275          6010                        CRD    CM                                  COMPCPE     85
4276          3710                        SOD    CM                                  COMPCPE     86
4277          3011                        LDD    CM+1                                COMPCPE     87
4300          2101 0000                   ADC    10000                               COMPCPE     88
4302          3202                        SBD    T2                                  COMPCPE     89
4303          3414                        STD    CM+4                                COMPCPE     90
4304          1063                        SHN    -14                                 COMPCPE     91
4305          3110                        ADD    CM                                  COMPCPE     92
4306          3201                        SBD    T1                                  COMPCPE     93
4307          3413                        STD    CM+3                                COMPCPE     94
4310          1337                        SCN    37                                  COMPCPE     95
4311          0512                        NJN    CPR1        IF .GT. MAXIMUM VALUE   COMPCPE     96
4312          3013                        LDD    CM+3                                COMPCPE     97
4313          1014                        SHN    14                                  COMPCPE     98
4314          3314                        LMD    CM+4                                COMPCPE     99
4315          1000                 CPRB   SHN    **                                  COMPCPE    100
4316          2100 0000                   ADC    **                                  COMPCPE    101
                         4317      CPRC   EQU    *-1         (LOWER BOUND PRIORITY)  COMPCPE    102
4320          5200 4325                   SBM    CPRD                                COMPCPE    103
4322          0702                        MJN    CPR2        IF PRIORITY .LT. UPPER BOUND            COMPCPE    104
4323          1400                 CPR1   LDN    0                                   COMPCPE    105
4324          2100 0000            CPR2   ADC    **                                  COMPCPE    106
                         4325      CPRD   EQU    *-1         (UPPER BOUND PRIORITY)  COMPCPE    107
4326          0100 4240                   LJM    CPRX        RETURN                  COMPCPE    108
                                                                                     COMPCPE    109
                                   .CPR   ENDIF                                      COMPCPE    110
                                                                                     COMPCPE    111
                                   .CET   IF     DEF,CET$                            COMPCPE    112
                                   CET    SPACE  4,25                                COMPCPE    113
                                  **      CET - CALCULATE ENTRY TIME.                COMPCPE    114
                                  *                                                  COMPCPE    115
                                  *              *CET* CALCULATES ENTRY TIME VIA THE FOLLOWING       COMPCPE    116
                                  *       FORMULA -                                  COMPCPE    117
                                  *                                                  COMPCPE    118
                                  *              ET = CT - (PR - LB) * WF            COMPCPE    119
                                  *                                                  COMPCPE    120
                                  *                 WHERE    ET = ENTRY TIME         COMPCPE    121
                                  *                          CT = CURRENT TIME (SECONDS PORTION OF WORD COMPCPE    122
                                  *                               *RTCL*)            COMPCPE    123
                                  *                          PR = QUEUE OR SCHEDULING PRIORITY        COMPCPE    124
                                  *                          LB = LOWER BOUND PRIORITY OF SERVICE CLASS COMPCPE    125
                                  *                          WF = WEIGHTING FACTOR FROM JCB           COMPCPE    126
                                  *                                                  COMPCPE    127
                                  *              IF PR = 0 THEN ET = 0.              COMPCPE    128
                                  *              IF PR .LT. LB THEN ET = CT.         COMPCPE    129
                                  *                                                  COMPCPE    130
                                  *       ENTRY  (A) = 6/  SC,12/  QT.               COMPCPE    131
                                  *                    SC    SERVICE CLASS (MUST BE .LT. *MXJC*).     COMPCPE    132
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                *                 QT    QUEUE TYPE (*INQT*, *EXQT*, OR *OTQT*).    COMPCPE   133
                *           (T1) = QUEUE PRIORITY OR SCHEDULING PRIORITY.          COMPCPE   134
                *                                                                  COMPCPE   135
                *       EXIT  (T1 - T2) = ENTRY TIME.                              COMPCPE   136
                *                       = 0 IF PRIORITY = 0.                       COMPCPE   137
                *                                                                  COMPCPE   138
                *       USES  T1, T2, CM - CM+4.                                   COMPCPE   139
                *                                                                  COMPCPE   140
                *       CALLS RJC.                                                 COMPCPE   141
                *                                                                  COMPCPE   142
                *       XREF  COMPRJC, COMSPIM.                                    COMPCPE   143
                *                                                                  COMPCPE   144
                *       NOTE  *CET* DOES NOT CONSIDER THE CASE WHERE THE DESIRED   COMPCPE   145
                *             PRIORITY IS GREATER THAN THE UPPER BOUND FOR THE     COMPCPE   146
                *             SERVICE CLASS. *CPR* WILL ADJUST THE PRIORITY        COMPCPE   147
                *             APPROPRIATELY WHEN IT IS BEING CALCULATED.           COMPCPE   148
                *                                                                  COMPCPE   149
                *             THE MINIMUM *RTCL* VALUE MUST EXCEED 377740          COMPCPE   150
                *             AS PRESET BY *SET* AND MAINTAINED BY *MTR*.          COMPCPE   151
                                                                                   COMPCPE   152
                                                                                   COMPCPE   153
                 CET2   STD   T2                                                   COMPCPE   154
                                                                                   COMPCPE   155
                 CET    SUBR                ENTRY/EXIT                          COMPCPE   156
                        STD   T2            SAVE QUEUE TYPE                     COMPCPE   157
                        SHN   -14                                               COMPCPE   158
                        LMN   DSSC                                              PCPE1       5
                        NJN   CET0          IF NOT DEADSTART SEQUENCING SERVICE CLASS  PCPE1  6
                        LMN   SSSC&DSSC     USE JCB FOR SUBSYSTEM SERVICE CLASS PCPE1       7
                 CET0   LMN   DSSC                                              PCPE1       8
                        RJM   RJC           CALCULATE JCB ADDRESS               COMPCPE   159
                        ADD   T2            READ QUEUE CONTROL WORD FROM JCB    COMPCPE   160
                        CRD   CM                                                COMPCPE   161
                        LDD   CM+3          USE WEIGHTING FACTOR AS SHIFT COUNT COMPCPE   162
                        ADD   TH            *SHNI* INSTRUCTION                  COMPCPE   163
                        ERRNZ SHNI-1000                                         COMPCPE   164
                        STM   CETA                                              COMPCPE   165
                        LDD   T1                                                COMPCPE   166
                        ZJN   CET2          IF PRIORITY = 0                     COMPCPE   167
                        SBD   CM+1                                              COMPCPE   168
                        PJN   CET1          IF PRIORITY .GE. LOWER BOUND        COMPCPE   169
                        LDN   0                                                 COMPCPE   170
                 CET1   SHN   **                                                COMPCPE   171
                 CETA   EQU   *-1                                               COMPCPE   172
                        STD   T2                                                COMPCPE   173
                        SHN   -14                                               COMPCPE   174
                        STD   T1                                                COMPCPE   175
                        LDC   RTCL          READ REAL-TIME CLOCK                COMPCPE   176
                        CRD   CM                                                COMPCPE   177
                        SOD   CM                                                COMPCPE   178
                        LDD   CM+1                                              COMPCPE   179
                        ADC   10000                                             COMPCPE   180
                        SBD   T2                                                COMPCPE   181
                        STD   T2            SET ENTRY TIME                      COMPCPE   182
                        SHN   -14                                               COMPCPE   183
                        ADD   CM                                                COMPCPE   184
                        SBD   T1                                                COMPCPE   185
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                                    STD    T1                                                 COMPCPE    186
                                    LJM    CETX         RETURN                                COMPCPE    187
                                                                                              COMPCPE    188
                              .CET  ENDIF                                                     COMPCPE    189


                     M_M            BASE   *                                                  COMPCPE    191
                              QUAL$ IF     -DEF,QUAL$                                         COMPCPE    192
                                    QUAL   *                                                  COMPCPE    193
                              CPR$  IF     DEF,CPR$                                           COMPCPE    194
                    4241      CPR   EQU    /COMPCPE/CPR                                       COMPCPE    195
                              CPR$  ENDIF                                                     COMPCPE    196
                              CET$  IF     DEF,CET$                                           COMPCPE    197
                              CET   EQU    /COMPCPE/CET                                       COMPCPE    198
                              CET$  ENDIF                                                     COMPCPE    199
                              QUAL$ ENDIF                                                     COMPCPE    200
                                    ENDX                                                      COMPCPE    201
                                    LIST   *                                                  271L716    444
          4330                      CTEXT  COMPRJC - CALCULATE JCB ADDRESS.                   COMPRJC      1


                                    USE    OVERLAY                                            1SJ       1925


                             **     OVERLAY ORIGINS.                                          1SJ       1927
                                                                                              1SJ       1928
                                                                                              1SJ       1929
                    4360      O3SA  EQU    *+5          *3SA* ORIGIN                          1SJ       1930
                    4360      O3SB  EQU    *+5          *3SB* ORIGIN                          271L716    446


                             **     OVERFLOW CHECKS.                                          1SJ       1934
                                                                                              1SJ       1935
                                                                                              1SJ       1936
                     375            ERRNG  TJSC-TTUE-MXJC-1  CHECK *1SJ* TABLES OVERFLOW      284L847      9
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                                               **       PRS - PRESET.                                          1SJ        1940
                                               *                                                               1SJ        1941
                                               *        USES   T1, CM - CM+4, AA - AA+4, BB - BB+4, EJ - EJ+4, 1SJ        1942
                                               *               TM - TM+4, NC.                                  1SJ        1943
                                               *                                                               1SJ        1944
                                               *        CALLS  RJC.                                            1SJ        1945
                                               *                                                               271L716     447
                                               *        MACROS ISTORE.                                         273L780      43
                                                                                                               1SJ        1946
                                                                                                               1SJ        1947
        4353          0100 4353                 PRS     SUBR                 ENTRY/EXIT                        1SJ        1948
        4355          2000 0134                         LDK    PCPP          SET FWA OF PCPA-S                 273L780      44
        4357          6010                              CRD    CM                                              273L780      45
        4360          3013                              LDD    CM+3                                            273L780      46
        4361          1014                              SHN    14                                              273L780      47
        4362          3314                              LMD    CM+4                                            273L780      48
        4363          2177 7577                         SBK    200B                                            273L780      49
        4365          5400 2231                         STM    CCAA+1                                          273L780      50
        4367          1063                              SHN    -14                                             273L780      51
        4370          2300 2100                         LMC    ADCI                                            273L780      52
        4372          5400 2230                         STM    CCAA                                            273L780      53
        4374          3012                              LDD    CM+2          SET NUMBER OF MCT ENTRIES         271L716     450
                                     0                  ERRNZ  MCTP-PCPP     CODE DEPENDS ON VALUE             271L716     451
        4375          5400 1673                         STM    BSTB                                            271L716     452
        4377          1474                              LDN    EJTP          PRESET EJT FWA                    1SJ        1949
        4400          6010                              CRD    CM                                              1SJ        1950
        4401          3011                              LDD    CM+1                                            1SJ        1951
        4402          5400 2513                         STM    EJAA                                            1SJ        1952
        4404          5400 3170                         STM    SFJD                                            1SJ        1953
        4406          3010                              LDD    CM                                              1SJ        1954
        4407          5500 2512                         RAM    EJAA-1                                          1SJ        1955
        4411          1277                              LPN    77                                              1SJ        1956
        4412          5500 3167                         RAM    SFJD-1                                          1SJ        1957
        4414          3712                              SOD    CM+2          SET THE LAST EJT ORDINAL          NS2153       34
        4415          5400 3122                         STM    SFJS                                            NS2153       35
        4417          2000 0112                         LDK    LOSL          SET START OF THE EJT SCAN         NS2153       36
        4421          6010                              CRD    CM                                              NS2153       37
        4422          3014                              LDD    CM+4                                            NS2153       38
        4423          5400 4004                         STM    SFJA                                            1SJ        1959
        4425          5400 3127                         STM    SFJT                                            NS2153       39
        4427          2000 0106                         LDC    RTCL          READ REAL TIME CLOCK              1SJ        1960
        4431          6025                              CRD    TM                                              1SJ        1961
        4432          3052                              LDD    IR+2          SAVE FLAGS BYTE FROM CALL         1SJ        1962
        4433          5500 1102                         RAM    SCJA                                            271L716     453
        4435          3074                              LDD    CP            SET NUMBER OF CONTROL POINTS      1SJ        1964
        4436          1070                              SHN    -7                                              1SJ        1965
        4437          3466                              STD    NC                                              1SJ        1966
        4440          2000 0124                         LDC    INWL                                            1SJ        1967
        4442          6010                              CRD    CM                                              1SJ        1968
        4443          3013                              LDD    CM+3          SAVE SCHEDULER CONTROL FLAGS      1SJ        1969
        4444          1277                              LPN    77                                              271L716     454
        4445          5500 1104                         RAM    SCJB                                            271L716     455
        4447          1210                              LPN    10                                              1SJ40         3
        4450          0405                              ZJN    PRS0          IF DEADSTART SEQUENCING JOB HAS RUN 1SJ40         4
        4451          5000 4556                         LDM    PRSB                                            1SJ40         5
        4453          5400 3267                         STM    SFJV                                            1SJ40         6
        4455          1445                      PRS0    LDN    SSTL                                            1SJ40         7
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       4456          6010                 CRD    CM                                                  1SJ        1972
       4457          3010                 LDD    CM                                                  1SJ        1973
       4460          1014                 SHN    21-5                                                1SJ        1974
       4461          0705                 MJN    PRS0.1       IF USER ECS DISABLED                   271L716     456
       4462          5000 4555            LDM    PRSA                                                1SJ        1976
       4464          5400 3370            STM    SFJF                                                1SJ        1977
       4466          3013       PRS0.1    LDD    CM+3                                                271L716     457
       4467          1007                 SHN    21-12                                               271L716     458
       4470          0605                 PJN    PRS1         IF FLEXIBLE PARTITIONING ENABLED       271L716     459
       4471          2000 0000            ISTORE SFJW,(UJN SFJX)  DISABLE POST-REJECT SCHEDULING     271L716     460
                                                                                                     1SJ        1978
                                *         BUILD *TEPB*, *TJAM* TABLES.                               1SJ        1979
                                                                                                     1SJ        1980
       4475          1422       PRS1      LDN    MXJC-1       INITIALIZE INDEX                       1SJ        1981
       4476          3401                 STD    T1                                                  1SJ        1982
       4477          0200 4332  PRS2      RJM    RJC          CALCULATE JCB ADDRESS                  1SJ        1983
       4501          1601                 ADN    EXQT         READ *EXQT* WORD OF JCB                1SJ        1984
       4502          6020                 CRD    AA                                                  1SJ        1985
       4503          1602                 ADN    SVJT-EXQT    READ *SVJT* WORD OF JCB                1SJ        1986
       4504          6010                 CRD    CM                                                  1SJ        1987
       4505          1601                 ADN    MCMT-SVJT    READ *MCMT* WORD OF JCB                1SJ        1988
       4506          6027                 CRD    BB                                                  1SJ        1989
       4507          1601                 ADN    MECT-MCMT    READ *MECT* WORD OF JCB                1SJ        1990
       4510          6050                 CRD    EJ                                                  1SJ        1991
       4511          3021                 LDD    AA+1                                                1SJ        1994
       4512          5401 6662            STM    TEPB,T1                                             271L716     461
       4514          3022                 LDD    AA+2                                                1SJ        1996
       4515          5401 6705            STM    TEPB+1*MXJC,T1                                      271L716     462
       4517          3023                 LDD    AA+3                                                1SJ        1998
       4520          5401 6730            STM    TEPB+2*MXJC,T1                                      271L716     463
       4522          3024                 LDD    AA+4                                                1SJ        2000
       4523          5401 6753            STM    TEPB+3*MXJC,T1                                      271L716     464
       4525          3013                 LDD    CM+3                                                1SJ        2002
       4526          5401 6500            STM    TJAM,T1                                             1SJ        2003
       4530          3031                 LDD    BB+2                                                1SJ        2004
       4531          5401 6523            STM    TJAM+1*MXJC,T1                                      1SJ        2005
       4533          3032                 LDD    BB+3                                                1SJ        2006
       4534          5401 6546            STM    TJAM+2*MXJC,T1                                      1SJ        2007
       4536          3033                 LDD    BB+4                                                1SJ        2008
       4537          5401 6571            STM    TJAM+3*MXJC,T1                                      1SJ        2009
       4541          3052                 LDD    EJ+2                                                1SJ        2010
       4542          5401 6614            STM    TJAM+4*MXJC,T1                                      1SJ        2011
       4544          3054                 LDD    EJ+4                                                1SJ        2012
       4545          5401 6637            STM    TJAM+5*MXJC,T1                                      1SJ        2013
       4547          3701                 SOD    T1           DECREMENT JCB INDEX                    1SJ        2014
       4550          0703                 MJN    PRS3         IF ALL JCB-S HAVE BEEN PROCESSED       1SJ        2015
       4551          0100 4477            LJM    PRS2         GO PROCESS NEXT JCB                    1SJ        2016
                                                                                                     1SJ        2017
       4553          0100 4353  PRS3      LJM    PRSX         RETURN                                 271L716     465
                                                                                                     1SJ        2019
       4555                     PRSA      BSS    0                                                   1SJ        2020
     L 3370                               LOC    SFJF                                                1SJ        2021
     L 3370          0310                 UJN    SFJ12.2      (USER ECS ENABLED)                     NS22000     162
       4556                               LOC    *O                                                  1SJ        2023
                                                                                                     1SJ40         8
       4556                     PRSB      BSS    0                                                   1SJ40         9
     L 3267                               LOC    SFJV                                                1SJ40        10
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L 3267         0304                    UJN    SFJ6        (DEADSTART SEQUENCING JOB NOT RUN)          1SJ40       11
  4557                                 LOC    *O                                                      1SJ40       12


                                *      OVERFLOW CHECKS.                                                1SJ        2025
                                                                                                       1SJ        2026
                          1721         ERRNG  TJAM-*      CHECK FOR *TJAM*/*TEPB* OVERFLOWING *PRS*   1SJ        2027


                                       USE    OVERFLOW                                                1SJ        2029
                                       OVERFLOW                                                       1SJ        2030

                                                                                                              OVERFLOW.1
                          3105         ERRNG  .2-.1+5-.3/500B*500B   BYTES LEFT AFTER LAST SECTOR    OVERFLOW.1
                           114         ERRNG  .3/500B*500B-*+.1-5    BYTES LEFT IN LAST SECTOR        OVERFLOW.1
                          3214         ERRNG  .4/500B*500B-*+.1-5    BYTES CAN BE ADDED TO OVERLAY    OVERFLOW.1
                             6         ERRNG  .3/500B                SECTORS NEEDED FOR OVERLAY       OVERFLOW.1
                                                                                                              OVERFLOW.1
                                       LIST   *                                                        OVERFLOW.1
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                                            IDENT  3SA,03SA   SCHEDULE SUBSYSTEM.                        1SJ        2033
                         M_M                BASE   M                                                     1SJ        2034
                                            SST                                                          1SJ        2036
                                    COMMENT 82/02/26. 96/06/05. 1SJ - SCHEDULE SUBSYSTEM.                1SJ        2037
                                            COMMENT  COPYRIGHT CONTROL DATA SYSTEMS INC.  1992.          281L803       2
          4360                              ORG    03SA                                                  1SJ        2039
                                            QUAL   3SA                                                   1SJ        2040
                           1       QUAL$    SET    1                                                     1SJ        2041



                                  **        SSS - SCHEDULE SUBSYSTEM.                                    1SJ        2043
                                  *                                                                      1SJ        2044
                                  *         READ THE SYSTEM SECTOR OF THE INPUT FILE OR THE ROLLOUT      1SJ        2045
                                  *         FILE, DEPENDING ON WHETHER JOB STATUS IS *PRJS* OR *ROJS*,   1SJ        2046
                                  *         RESPECTIVELY.  OBTAIN THE SUBSYSTEM IDENTIFICATION NUMBER    1SJ        2047
                                  *         FROM THE SYSTEM SECTOR AND USE IT TO CHECK THE *SSCT* TABLE  1SJ        2048
                                  *         FOR A SPECIFIED CONTROL POINT TO WHICH THE SUBSYSTEM SHOULD  1SJ        2049
                                  *         BE SCHEDULED.  IF NO CONTROL POINT IS SPECIFIED, USE THE     271L716     466
                                  *         ONE INDICATED BY CELL *JC*.  IF INSUFFICIENT                 271L716     467
                                  *         MEMORY FOR THE SUBSYSTEM, CALL ROUTINE *CFL* TO INITIATE     1SJ        2052
                                  *         ROLLOUT OF LOWER PRIORITY JOBS.  IF THE CONTROL POINT AND    1SJ        2053
                                  *         MEMORY ARE AVAILABLE, CALL ROUTINE *ASJ* TO ASSIGN THE       1SJ        2054
                                  *         SUBSYSTEM TO THE CONTROL POINT AND CALL *1RI* OR *1AJ*.      1SJ        2055
                                  *                                                                      1SJ        2056
                                  *         ENTRY  (EO) = (EP) = EJT ORDINAL OF SUBSYSTEM.               1SJ        2057
                                  *                (SP) = SERVICE CLASS (*SSSC*).                        1SJ        2058
                                  *                (AM - AM+1) = AVAILABLE + ROLLING CM.                 1SJ        2059
                                  *                (AE) = AVAILABLE + ROLLING ECS.                       1SJ        2060
                                  *                (RM - RM+1) = ROLLING CM.                             1SJ        2061
                                  *                (JC) = NUMBER OF AVAILABLE CONTROL POINT.  ZERO IF    271L716     468
                                  *                       NONE AVAILABLE.                                271L716     469
                                  *                (JM) = REQUIRED CM FL.                                1SJ        2063
                                  *                (JE) = REQUIRED ECS.                                  1SJ        2064
                                  *                (JP) = SCHEDULING PRIORITY.                           1SJ        2065
                                  *                (TE) = LWA OF *TACP* TABLE.                           1SJ        2066
                                  *                (TM - TM+1) = SECONDS PORTION OF REAL TIME CLOCK.     1SJ        2067
                                  *                (NC) = SYSTEM CONTROL POINT NUMBER.                   1SJ        2068
                                  *                                                                      1SJ        2069
                                  *         EXIT   (A) = 0 IF THE SUBSYSTEM WAS SCHEDULED.               1SJ        2070
                                  *                    .NE. 0 IF SUBSYSTEM WAS NOT SCHEDULED.            271L716     470
                                  *                                                                      1SJ        2072
                                  *         USES   EO, JC, JE, JF, SI, SP, TP, AA - AA+4, BB - BB+4,     271L716     471
                                  *                CM - CM+4, EJ - EJ+4, T1 - T7.                        271L716     472
                                  *                                                                      1SJ        2075
                                  *         CALLS  ASJ, AST, CFL, EJA, IRR, IUT, RSS, SCI, SCP.          NS2707        1
                                  *                                                                      1SJ        2077
                                  *         MACROS ENDMS, MONITOR, SETMS.                                1SJ        2078
                                                                                                         1SJ        2079
                                                                                                         1SJ        2080
          4360          0100 4360          SSS      SUBR                ENTRY/EXIT                       1SJ        2081
          4362          1400                        LDK    /CPS/SFIN    SET EJT INTERLOCK                NS2707        2
          4363          0200 4676                   RJM    SCI                                           NS2707        3
          4365          0572                        NJN    SSSX         IF TIMEOUT OR ENTRY NOT IN USE   NS2707        4
          4366          0200 2507                   RJM    EJA          CALCULATE EJT ENTRY ADDRESS      1SJ        2082
                                                    ADK    JSNE                                          1SJ        2083
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 4370       6050                        CRD    EJ                                                1SJ        2084
 4371       1601                        ADN    SCHE-JSNE   READ *SCHE* SO THAT (T6) = LOGICAL TRACK    1SJ        2085
 4372       6005                        CRD    T5                                                1SJ        2086
 4373       1601                        ADN    PRFE-SCHE                                         1SJ42         1
 4374       6027                        CRD    BB                                                1SJ42         2
 4375       3054                        LDD    EJ+4        SAVE JOB STATUS                       1SJ30         1
 4376       1276                        LPN    76                                                1SJ30         2
                                        LMK    PRJS*2                                            1SJ30         3
 4377       5400 4473                   STM    SSSA                                              271L716     474
                                                                                                 1SJ        2087
                               *        READ SYSTEM SECTOR OF INPUT FILE OR ROLLOUT FILE.        1SJ        2088
                                                                                                 1SJ        2089
 4401       1400                        SETMS  IO                                                242L642      60
 4404       1400                        LDN    0                                                 1SJ        2091
 4405       3443                        STD    TP                                                271L716     475
 4406       0200 5160                   RJM    RSS         READ SYSTEM SECTOR                    1SJ        2092
 4410       0515                        NJN    SSS2        IF I/O ERROR                          271L716     476
 4411       0200 0535                   ENDMS                                                    1SJ        2094
 4413       5000 7137                   LDM    SISS                                              NS21000       7
 4415       2300 7764                   LMC    RDSI                                              NS21000       8
 4417       0504                        NJN    SSS1        IF NOT *RDF*                          271L716     477
 4420       1501                        LCN    7777-IFSI   TREAT AS *IAF*                        242L642      61
 4421       5400 7137                   STM    SISS                                              NS21000      11
 4423       0100 4463         SSS1      LJM    SSS4        CONTINUE                              271L716     478
                                                                                                 1SJ        2096
                               *        AN I/O ERROR OCCURRED WHILE READING THE SYSTEM SECTOR OR THE 1SJ        2097
                               *        SUBSYSTEM IS ALREADY ACTIVE OR THE REQUIRED CONTROL POINT IS 1SJ        2098
                               *        OCCUPIED BY ANOTHER SUBSYSTEM.  SET AN ERROR FLAG IN THE EJT 1SJ        2099
                               *        ENTRY AND CONTINUE.  THE JOB WILL BE ABORTED BY *1AJ*.   1SJ        2100
                                                                                                 1SJ        2101
 4425       3050              SSS2      LDD    EJ          SET *SSET* ERROR FLAG IN EJT          271L716     479
 4426       3413                        STD    CM+3                                              1SJ        2103
 4427       3051                        LDD    EJ+1                                              1SJ        2104
 4430       3414                        STD    CM+4                                              1SJ        2105
 4431       3034                        LDD    EO                                                1SJ        2106
 4432       3412                        STD    CM+2                                              1SJ        2107
 4433       2000 4032                   LDC    SSET+4000                                         1SJ        2108
 4435       3411                        STD    CM+1                                              1SJ        2109
 4436       1454                        MONITOR  CEFM                                            1SJ        2110
 4441       1401                        LDN    1           SELECT NO QFT OPTION ON *RJSM*        1SJ        2115
 4442       3411                        STD    CM+1                                              1SJ        2116
 4443       1474                        MONITOR  RJSM      GET JSN                               1SJ        2117
 4446       3013                        LDD    CM+3                                              1SJ        2118
 4447       5400 4656                   STM    SSSB+3                                            271L716     480
 4451       3014                        LDD    CM+4                                              1SJ        2120
 4452       5400 4657                   STM    SSSB+4                                            271L716     481
 4454       2001 4653                   LDC    SSSB+1*10000                                      271L716     482
 4456       0200 2642                   RJM    IUT         ISSUE *UTEM*                          1SJ        2123
 4460       1400                        LDN    0                                                 242L642      62
 4461       0100 4536         SSS3      LJM    SSS8        CONTINUE SCHEDULING                   271L716     483
                                                                                                 1SJ        2125
                               *        GET CP NUMBER (IF ANY) FROM SSCT AND CHECK SSAT TO SEE IF THE 1SJ        2126
                               *        SUBSYSTEM IS ALREADY ACTIVE.                             1SJ        2127
                               *        FOR *DSP* INITIATED SUBSYSTEMS, CP NUMBER AND SSID ARE TAKEN  NS22000     164
                               *        FROM THE SYSTEM SECTOR.                                  NS22000     165
                                                                                                 1SJ        2128
 4463       5000 7137         SSS4      LDM    SISS                                              271L716     484
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     4465         2177 0000                      SBK    DSSI                                         NS2181B      12
     4467         0471                           ZJN    SSS3         IF DEADSTART SEQUENCING JOB     271L716     485
     4470         1631                           SBK    LSSI+1-DSSI                                  NS2181B      14
     4471         0730                           MJN    SSS6         IF SUBSYSTEM NOT IN SSCT        271L716     486
     4472         2000 0000                      LDC    **           (JOB STATUS)                    1SJ30A       44
                             4473      SSSA      EQU    *-1                                          271L716     487
     4474         0517                           NJN    SSS5         IF NOT PRE-INITIAL JOB STATE    271L716     488
     4475         2004 0000                      LDC    FEAF*10000                                   1SJ        2133
     4477         5300 7137                      LMM    SISS                                         1SJ        2134
     4501         0200 4726                      RJM    AST          GET SSAT ENTRY                  1SJ        2135
     4503         0410                           ZJN    SSS5         IF SUBSYSTEM IS INACTIVE        271L716     489
     4504         2000 7750                      LDC    PLSI         CHECK FOR CYBIS                 NS2746        3
     4506         5300 7137                      LMM    SISS                                         NS2244       11
     4510         0403                           ZJN    SSS5         IF INITIATING CYBIS             NS2746        4
     4511         0100 4425                      LJM    SSS2         SET ERROR FLAG                  271L716     491
                                                                                                     271L716     492
     4513         5000 7137            SSS5      LDM    SISS                                         271L716     493
                                       *         LMK    FECF*10000                                   271L716     494
                               0                 ERRNZ  FECF         CODE DEPENDS ON VALUE           271L716     495
     4515         0200 4726                      RJM    AST          GET SSCT ENTRY                  1SJ        2141
     4517         1237                           LPN    37                                           1SJ        2142
     4520         3443                           STD    TP                                           271L716     496
     4521         5000 7140            SSS6      LDM    CPSS         CHECK SYSTEM SECTOR FOR CONTROL POINT 271L716 497
     4523         0411                           ZJN    SSS7         IF CONTROL POINT NOT SPECIFIED  NS2785        1
     4524         1177                           LMN    77                                           NS2785        2
     4525         0411                           ZJN    SSS8         IF ANY AVAILABLE CONTROL POINT SELECTED NS2785 3
     4526         1177                           LMN    77                                           NS2785        4
     4527         3266                           SBD    NC                                           1SJ30A       52
     4530         0717                           MJN    SSS10        IF CORRECT CONTROL POINT SPECIFIED NS2785     5
     4531         1400                           LDN    0            CLEAR INCORRECT CP NUMBER       NS2785        6
     4532         5400 7140                      STM    CPSS                                         1SJ30A       57
     4534         3043                 SSS7      LDD    TP                                           NS2785        7
     4535         0513                           NJN    SSS10.1      IF CONTROL POINT SPECIFIED IN SSCT NS2785     8
     4536         0200 2741            SSS8      RJM    SCP          SELECT CONTROL POINT            271L716     503
     4540         0520                           NJN    SSS11        IF CONTROL POINT AVAILABLE      271L716     504
     4541         1440                 SSS9      LDK    /CPS/CFIN    CLEAR EJT INTERLOCK             NS2707        5
     4542         0200 4676                      RJM    SCI                                          NS2707        6
     4544         1401                           LDN    1            INDICATE SUBSYSTEM NOT SCHEDULED NS2707       7
     4545         0100 4360                      LJM    SSSX         RETURN                          1SJ30A       66
                                                                                                     1SJ        2152
                                       *         SCHEDULE THE SUBSYSTEM TO THE SPECIFIED CONTROL POINT.   1SJ30  14
                                       *         IF IT IS OCCUPIED BY A ROLLABLE JOB WITH A LOWER PRIORITY, 1SJ30 15
                                       *         THAT JOB WILL BE ROLLED OUT.  IF IT IS OCCUPIED BY A ROLLABLE 1SJ30B 1
                                       *         JOB WITH A HIGHER PRIORITY OR BY A NON-ROLLABLE JOB, THE  NS2707 8
                                       *         SUBSYSTEM JOB STATE WILL BE SET TO *PWJS*, WAITING ON EVENT NS2707 9
                                       *         *SSWE*.                                             NS2707       10
                                                                                                     1SJ30        22
     4547         3166                 SSS10     ADD    NC                                           NS2785        9
     4550         3463                 SSS10.1   STD    JC                                           NS2785       10
     4551         1007                           SHN    7                                            1SJ        2154
     4552         1626                           ADN    JCIW                                         1SJ        2155
     4553         6020                           CRD    AA                                           1SJ        2156
     4554         1644                           ADN    TFSW-JCIW                                    1SJ        2157
     4555         6010                           CRD    CM                                           1SJ        2158
     4556         3010                           LDD    CM                                           1SJ        2159
     4557         0503                           NJN    SSS12        IF CONTROL POINT IS OCCUPIED    271L716     511
     4560         0100 4622            SSS11     LJM    SSS18        SCHEDULE JOB                    271L716     512
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                                                                                       271L716    513
4562     3434           SSS12    STD    EO          STORE EJT ORDINAL FOR *EJA*        271L716    514
4563     0200 2507               RJM    EJA         CALCULATE EJT ENTRY ADDRESS        1SJ       2162
4565     1601                    ADN    SCHE                                           1SJ       2163
4566     6010                    CRD    CM                                             1SJ       2164
4567     3067                    LDD    EP          RESTORE EJT ORDINAL                1SJ       2165
4570     3434                    STD    EO                                             1SJ       2166
4571     3022                    LDD    AA+2                                           NS2244      18
4572     0420                    ZJN    SSS16       IF ROLLOUT ALLOWED                 271L716    515
4573     1103                    LMN    ORSI                                           1SJ30B      10
4574     0416                    ZJN    SSS16       IF ROLLOUT NOT INHIBITED           271L716    516
4575     5000 7137               LDM    SISS                                           1SJ30B      12
4577     2300 7776               LMC    IFSI                                           271L716    517
4601     0503                    ZJP    SSS2        IF IAF                             271L716    518
4604     2002 4660               LDC    SSSD+SSSDL*10000                               NS2707      11
4606     0200 2642               RJM    IUT         SET SUBSYSTEM TO *PWJS*            NS2707      12
4610     0100 4541               UJP    SSS9        TERMINATE                          NS2707      13
                                                                                       271L716    522
4612     3062           SSS16    LDD    JP                                             271L716    523
4613     3214                    SBD    CM+4                                           1SJ       2170
4614     0704                    MJN    SSS17       IF JOB AT CP HAS HIGHER PRIORITY   271L716    524
4615     3063                    LDD    JC                                             1SJ       2172
4616     0200 2621               RJM    IRR         REQUEST ROLLOUT OF JOB             1SJ       2173
4620     0100 4541      SSS17    LJM    SSS9        TERMINATE                          271L716    525
                                                                                       1SJ       2175
4622     0200 2257      SSS18    RJM    CFL         COMMIT FIELD LENGTH                271L716    526
                                                                                       NS22000    189
                        *        ASSIGN JOB IF SUFFICIENT CM.                          NS22000    190
                                                                                       NS22000    191
4624     3037                    LDD    AM                                             NS22000    192
4625     3244                    SBD    RM                                             1SJ       2188
4626     1014                    SHN    14                                             1SJ       2189
4627     3340                    LMD    AM+1                                           1SJ       2190
4630     3245                    SBD    RM+1                                           1SJ       2191
4631     3264                    SBD    JM                                             1SJ       2192
4632     0765                    MJN    SSS17       IF INSUFFICIENT AVAILABLE CM       271L716    527
4633     1440                    LDK    /CPS/CFIN   CLEAR EJT INTERLOCK                NS2707      14
4634     0200 4676               RJM    SCI                                            NS2707      15
4636     0200 2507               RJM    EJA         CHECK FOR AN ERROR FLAG IN THE EJT ENTRY 1SJ21    1
4640     1602                    ADK    PRFE                                           1SJ21        2
4641     6010                    CRD    CM                                             1SJ21        3
4642     3011                    LDD    CM+1                                           1SJ21        4
4643     1132                    LMN    SSET                                           1SJ21        5
4644     0503                    NJN    SSS19       IF NOT A SUBSYSTEM ABORT ERROR FLAG 271L716   528
4645     1402                    LDN    BCSC        PREVENT AN UPDATE OF THE *SSAT* TABLE 1SJ21     7
4646     3461                    STD    SP                                             1SJ21        8
4647     0200 1257      SSS19    RJM    ASJ         ASSIGN JOB TO CONTROL POINT        271L716    529
4651     0100 4360               LJM    SSSX        RETURN                             NS2707      16
                                                                                       1SJ       2196
                        *        *UTEM* PARAMETERS FOR JSN CHANGE.                     1SJ       2197
                                                                                       1SJ       2198
4653     0030           SSSB     VFD    1/0,5/JSNE,6/24D                               271L716    531
4654     4400                    VFD    6/36D,6/0                                      1SJ       2200
4655     0000                    CON    0                                              1SJ       2201
4656     0000                    CON    0                                              1SJ       2202
4657     0000                    CON    0                                              1SJ       2203
                                                                                       NS2707      17
```

```
                                *       *UTEM* PARAMETERS TO SET *PWJS*.                                NS2707  18
                                                                                                        NS2707  19
 4660           0136             SSSD   VFD    1/0,5/SCHE,6/30D                                        NS2707  20
 4661           0000                    VFD    6/0,6/0                                                 NS2707  21
 4662           0000                    VFD    6/0,6/0                                                 NS2707  22
 4663           5000                    VFD    3/5,9/0                                                 NS2707  23
 4664           0035                    CON    SSWE        SUBSYSTEM WAITING EVENT                     NS2707  24
                                                                                                        NS2707  25
 4665           0005                    VFD    1/0,5/JSNE,6/5                                          NS2707  26
 4666           0100                    VFD    6/1,6/0                                                 NS2707  27
 4667           0000                    CON    0                                                       NS2707  28
 4670           0000                    CON    0                                                       NS2707  29
 4671           0014                    CON    PWJS                                                    NS2707  30
                                                                                                        NS2707  31
                                2       SSSDL  EQU    */5-SSSD/5                                      NS2707  32
                                                                                                        NS2707  33
                                                                                                        NS2707  34
                                **      SCI - SET/CLEAR EJT INTERLOCK.                                  NS2707  35
                                *                                                                       NS2707  36
                                *       ENTRY  (A) = INTERLOCK FUNCTION.                                NS2707  37
                                *                                                                       NS2707  38
                                *       EXIT   (A) = 0 IF SUCCESSFUL.                                   NS2707  39
                                *                                                                       NS2707  40
                                *       USES   T0, T1, T4.                                              NS2707  41
                                *                                                                       NS2707  42
                                *       CALLS  EJA, SFI.                                                NS2707  43
                                *                                                                       NS2707  44
                                *       MACROS DELAY, PAUSE.                                            NS2707  45
                                                                                                        NS2707  46
                                                                                                        NS2707  47
 4672           3704             SCI3   SOD    T4                                                      NS2707  48
 4673           0507                    NJN    SCI1        IF NOT TIMEOUT                              NS2707  49
 4674           1401             SCI4   LDN    1           INDICATE FAILURE                            NS2707  50
                                                                                                        NS2707  51
 4675           0100 4675        SCI    SUBR               ENTRY/EXIT                                  NS2707  52
 4677           3401                    STD    T1          SAVE INTERLOCK FUNCTION                     NS2707  53
 4700           1412                    LDK    10D         SET RETRY COUNTER                           NS2707  54
 4701           3404                    STD    T4                                                      NS2707  55
 4702           0200 2507        SCI1   RJM    EJA         GET EJT ADDRESS                             NS2707  56
 4704           0200 5235               RJM    SFI         SET/CLEAR INTERLOCK                         NS2707  57
 4706           0466                    ZJN    SCIX        IF REQUEST SUCCESSFUL                       NS2707  58
 4707           1702                    SBN    2                                                       NS2707  59
 4710           0663                    PJN    SCI4        IF ENTRY NOT IN USE                         NS2707  60
 4711           3071                    LDD    HN          DELAY FOR 128*64 MICROSECONDS               NS2707  61
 4712           3400                    STD    T0                                                      NS2707  62
 4713           5000 0255        SCI2   DELAY                                                          NS2707  63
 4717           1400                    PAUSE  NE                                                      NS2707  64
 4722           3700                    SOD    T0                                                      NS2707  65
 4723           0667                    PJN    SCI2        IF MORE DELAY                               NS2707  66
 4724           0345                    UJN    SCI3        CHECK FOR TIMEOUT
```

```
                                   *         COMMON DECKS.                                     1SJ       2205
                                                                                               1SJ       2206
                                                                                               1SJ       2207
                              1     SUB$      EQU    1            ASSEMBLE *SUBSYST* MACRO CALLS    V22L602     24
          4725                                CTEXT  COMSSSD - SUBSYSTEM DEFINITIONS.                COMSSSD      1
                              1     AST$      SET    1            ASSEMBLE ALL FUNCTIONS OF *COMPAST*    1SJ       2208
                                              LIST   X                                             1SJ       2209
```

```
4725                                CTEXT  COMPAST - ACCESS SUBSYSTEM TABLES.                    COMPAST      1


                                    IF     -DEF,QUAL$,1                                         COMPAST      3
                                    QUAL   COMPAST                                              COMPAST      4
                          M_M       BASE   M                                                    COMPAST      5
                            COMMENT 82/02/26. 96/06/05. COMPAST - ACCESS SUBSYSTEM TABLES.      COMPAST      6
                        *           COMMENT  COPYRIGHT CONTROL DATA SYSTEMS INC.  1992.         281L803      1



                        ***         AST - ACCESS SUBSYSTEM TABLES.                              COMPAST      9
                        *                                                                       COMPAST     10
                        *           R. M. DANISCH.     81/01/26.                                COMPAST     11
```

```
                                   **        *AST* PROVIDES THE CALLER WITH A MEANS OF ACCESSING            COMPASS      13
                                   *         THE SSCT AND SSAT SUBSYSTEM TABLES. AN ENTRY FOR A PARTICULAR COMPASS      14
                                   *         SUBSYSTEM MAY BE READ OR MODIFIED.  MODIFICATION IS PERFORMED COMPASS      15
                                   *         VIA THE *UTEM* MONITOR FUNCTION WITH PRIOR VERIFICATION       COMPASS      16
                                   *         PERFORMED FOR SSAT UPDATES. USE OF ANY OF THE MODIFICATION    COMPASS      17
                                   *         FUNCTIONS (FUNCTIONS *SECF*, *CSCF*, *SSCF*, *CEAF*, AND      COMPASS      18
                                   *         *SEAF*) REQUIRES DEFINITION OF *AST$*.                        COMPASS      19
                                   *                                                                       COMPASS      20
                                   *         *AST* PERFORMS THE FOLLOWING FUNCTIONS -                      COMPASS      21
                                   *                FECF        FETCH SSCT ENTRY.                          COMPASS      22
                                   *                SECF        STORE CP NUMBER IN SSCT ENTRY.             COMPASS      23
                                   *                CSCF        CLEAR SUBSYSTEM ACCESS FLAG (BIT 11D)      COMPASS      24
                                   *                            OF SSCT ENTRY.                             COMPASS      25
                                   *                SSCF        SET SUBSYSTEM ACCESS FLAG (BIT 11D) OF     COMPASS      26
                                   *                            SSCT ENTRY.                                COMPASS      27
                                   *                FEAF        FETCH SSAT ENTRY.                          COMPASS      28
                                   *                CEAF        CLEAR SSAT ENTRY (RELEASE EJT ASSIGNMENT). COMPASS      29
                                   *                SEAF        CREATE SSAT ENTRY (ASSIGN EJT).            COMPASS      30
                                   *                                                                       COMPASS      31
                                   *         ENTRY  (A) = 6/ FC,12/ SSID                                   COMPASS      32
                                   *                     FC     FUNCTION CODE.                             COMPASS      33
                                   *                     SSID   SUBSYSTEM IDENTIFICATION NUMBER.           COMPASS      34
                                   *                (T1) = CONTROL POINT NUMBER (FUNCTION *SECF*).         COMPASS      35
                                   *                     = EJT ORDINAL (FUNCTION *SEAF*).                  COMPASS      36
                                   *                                                                       COMPASS      37
                                   *         EXIT   (A) = SSCT ENTRY (FUNCTION *FECF*).                    COMPASS      38
                                   *                (A) .NE. 0 IF SUBSYSTEM ACCESSIBLE FLAG IS ALEADY      COMPASS      39
                                   *                          CLEAR (FUNCTION *CSCF*).                     COMPASS      40
                                   *                (A) .NE. 0 IF SUBSYSTEM ACCESSIBLE FLAG IS ALREADY     COMPASS      41
                                   *                          SET (FUNCTION *SSCF*).                       COMPASS      42
                                   *                (A) = SSAT ENTRY (FUNCTION *FEAF*).                    COMPASS      43
                                   *                (A) .NE. 0 IF SSAT ENTRY IS ALREADY CLEAR              COMPASS      44
                                   *                          (FUNCTION *CEAF*).                           COMPASS      45
                                   *                (A) .NE. 0 IF SSAT ENTRY IS ALREADY NON-ZERO           COMPASS      46
                                   *                          (FUNCTION *SEAF*).                           COMPASS      47
                                   *                                                                       COMPASS      48
                                   *         USES   T1 - T4, CM - CM+4.                                    COMPASS      49
                                   *                                                                       COMPASS      50
                                   *         MACROS MONITOR.                                               COMPASS      51
                                   *                                                                       COMPASS      52
                                   *         HANG CONDITIONS -                                             COMPASS      53
                                   *                ATTEMPT TO EXECUTE TABLE UPDATE FUNCTION WITHOUT       COMPASS      54
                                   *                *AST$* DEFINED.                                        COMPASS      55
                                   *                INVALID FUNCTION CODE.                                 COMPASS      56
                                                                                                           COMPASS      57
                                                                                                           COMPASS      58
          4725          0100 4725           AST      SUBR                ENTRY/EXIT                        COMPASS      59
          4727          3403                         STD    T3           SAVE SUBSYSTEM IDENTIFICATION NUMBER COMPASS   60
          4730          1063                         SHN    -14          SAVE FUNCTION CODE                COMPASS      61
          4731          3402                         STD    T2                                             COMPASS      62
          4732          2000 7776                    LDC    MXSI         SAVE SUBSYSTEM INDEX              COMPASS      63
          4734          3203                         SBD    T3                                             COMPASS      64
          4735          3403                         STD    T3                                             COMPASS      65
                                                                                                           COMPASS      66
                                            AST$     IF     DEF,AST$                                       COMPASS      67
          4736          1400                         LDN    0                                              COMPASS      68
          4737          5400 5073                    STM    ASTA                                           COMPASS      69
```

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                                    AST$    ENDIF                                                   COMPAST    70
                                                                                                    COMPAST    71
                                    *       COMPUTE SSCT CM WORD AND BYTE OFFSET.                   COMPAST    72
                                                                                                    COMPAST    73
 4741       1500                            LCN     0                                               COMPAST    74
 4742       3404                            STD     T4                                              COMPAST    75
 4743       3604                    AST1    AOD     T4          INCREMENT CM WORD OFFSET            COMPAST    76
 4744       1505                            LCN     5                                               COMPAST    77
 4745       3503                            RAD     T3                                              COMPAST    78
 4746       0674                            PJN     AST1        IF COMPUTATION INCOMPLETE           COMPAST    79
 4747       1605                            ADN     5                                               COMPAST    80
 4750       3403                            STD     T3          SET BYTE OFFSET                     COMPAST    81
                                                                                                    COMPAST    82
                                    *       DETERMINE IF SSAT ACCESS REQUIRED.                      COMPAST    83
                                                                                                    COMPAST    84
 4751       3002                            LDD     T2                                              COMPAST    85
 4752       1704                            SBN     MNAF                                            COMPAST    86
 4753       0703                            MJN     AST2        IF NO SSAT ACCESS REQUIRED          COMPAST    87
 4754       1405                            LDN     SSCTL       POSITION AT SSAT                    COMPAST    88
 4755       3504                            RAD     T4                                              COMPAST    89
                                                                                                    COMPAST    90
                                    *       READ SSCT/SSAT WORD CONTAINING THE TARGET ENTRY.        COMPAST    91
                                                                                                    COMPAST    92
 4756       2000 0135               AST2    LDC     SSCP                                            COMPAST    93
 4760       6010                            CRD     CM                                              COMPAST    94
 4761       3012                            LDD     CM+2                                            COMPAST    95
 4762       1014                            SHN     14                                              COMPAST    96
 4763       3313                            LMD     CM+3                                            COMPAST    97
 4764       3104                            ADD     T4                                              COMPAST    98
 4765       6170 5140                       CRM     ASTD,ON                                         COMPAST    99
 4767       3002                            LDD     T2                                              COMPAST   100
 4770       1707                            SBN     MAXF                                            COMPAST   101
 4771       0604                            PJN     AST3        INVALID FUNCTION CODE               COMPAST   102
 4772       5002 5145                       LDM     TAST,T2                                         COMPAST   103
 4774       0505                            NJN     AST4        IF VALID FUNCTION CODE              COMPAST   104
 4775       1422                    AST3    MONITOR HNGM        HANG PP                             COMPAST   105
 5000       0300                            UJN     *                                               COMPAST   106
                                                                                                    COMPAST   107
 5001       3410                    AST4    STD     CM                                              COMPAST   108
 5002       0110 0000                       LJM     0,CM        GO TO FUNCTION PROCESSOR            COMPAST   109
                                                                                                    COMPAST   110
                                    *       PROCESS *FECF*/*FEAF* FUNCTIONS. FETCH SSCT/SSAT ENTRY. COMPAST   111
                                                                                                    COMPAST   112
 5004       5003 5140               AST5    LDM     ASTD,T3     FETCH SSCT/SSAT ENTRY               COMPAST   113
 5006       0100 4725                       LJM     ASTX        RETURN                              COMPAST   114
                                                                                                    COMPAST   115
                                    .A      IF      DEF,AST$                                        COMPAST   116
                                                                                                    COMPAST   117
                                    *       PROCESS *SECF* FUNCTION. STORE CP NUMBER IN SSCT ENTRY. COMPAST   118
                                                                                                    COMPAST   119
 5010       3001                    AST6    LDD     T1          STORE CP NUMBER IN *UTEM* PARAMETERS COMPAST   120
 5011       5400 5137                       STM     ASTC+4                                          COMPAST   121
 5013       5003 5140                       LDM     ASTD,T3     STORE VERIFY VALUE IN *UTEM* PARAMETERS COMPAST 122
 5015       5400 5132                       STM     ASTB+4                                          COMPAST   123
 5017       1405                            LDN     5           SET FIELD SIZE                      COMPAST   124
 5020       0336                            UJN     AST12       GO TO COMMON CODE                   COMPAST   125
                                                                                                    COMPAST   126
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                                *       PROCESS *CSCF*/*SSCF* FUNCTIONS. CLEAR/SET SUBSYSTEM ACCESS   COMPAST   127
                                *       FLAG.                                                         COMPAST   128
                                                                                                      COMPAST   129
 5021           3002            AST7    LDD     T2          STORE INTENDED VALUE IN *UTEM* PARAMETERS COMPAST   130
 5022           1702                    SBN     CSCF                                                  COMPAST   131
 5023           5400 5137               STM     ASTC+4                                                COMPAST   132
 5025           1101                    LMN     1           STORE VERIFY VALUE IN *UTEM* PARAMETERS   COMPAST   133
 5026           5400 5132               STM     ASTB+4                                                COMPAST   134
 5030           1413                    LDN     11D         BIAS LOW ORDER BIT POSITION               COMPAST   135
 5031           5400 5073               STM     ASTA                                                  COMPAST   136
 5033           1401                    LDN     1           STORE FIELD SIZE IN *UTEM* PARAMETERS     COMPAST   137
 5034           0322                    UJN     AST12       GO TO COMMON CODE                         COMPAST   138
                                                                                                      COMPAST   139
                                *       PROCESS *CEAF* FUNCTION. CLEAR SSAT ENTRY.                    COMPAST   140
                                                                                                      COMPAST   141
 5035           1400            AST8    LDN     0                                                     COMPAST   142
 5036           3401                    STD     T1                                                    COMPAST   143
 5037           5003 5140               LDM     ASTD,T3                                               COMPAST   144
 5041           0507                    NJN     AST11       IF SSAT ENTRY NOT ALREADY CLEAR           COMPAST   145
 5042           1401                    LDN     1           INDICATE POSSIBLE ERROR CONDITION         COMPAST   146
 5043           0100 4725       AST9    LJM     ASTX        RETURN                                    COMPAST   147
                                                                                                      COMPAST   148
                                *       PROCESS *SEAF* FUNCTION. CREATE SSAT ENTRY.                   COMPAST   149
                                                                                                      COMPAST   150
 5045           5003 5140       AST10   LDM     ASTD,T3                                               COMPAST   151
 5047           0573                    NJN     AST9        IF SSAT ENTRY ALREADY NON-ZERO            COMPAST   152
 5050           5400 5132       AST11   STM     ASTB+4      STORE VERIFY VALUE IN *UTEM* PARAMETERS   COMPAST   153
 5052           3001                    LDD     T1          STORE INTENDED VALUE IN *UTEM* PARAMETERS COMPAST   154
 5053           5400 5137               STM     ASTC+4                                                COMPAST   155
 5055           1414                    LDN     12D         STORE FIELD SIZE IN *UTEM* PARAMETER BLOCK COMPAST   156
 5056           5400 5133       AST12   STM     ASTC                                                  COMPAST   157
 5060           2100 4000               ADC     4000        SET VERIFY BIT                            COMPAST   158
 5062           5400 5126               STM     ASTB                                                  COMPAST   159
 5064           1404                    LDN     4           CALCULATE LOW ORDER BIT OF BYTE           COMPAST   160
 5065           3203                    SBD     T3                                                    COMPAST   161
 5066           3403                    STD     T3                                                    COMPAST   162
 5067           1001                    SHN     1                                                     COMPAST   163
 5070           3503                    RAD     T3                                                    COMPAST   164
 5071           1002                    SHN     2                                                     COMPAST   165
 5072           2100 0000               ADC     **                                                    COMPAST   166
                       5073      ASTA    EQU     *-1         (LOW ORDER BIT BIAS)                      COMPAST   167
 5074           1006                    SHN     6                                                     COMPAST   168
 5075           5400 5127               STM     ASTB+1                                                COMPAST   169
 5077           5400 5134               STM     ASTC+1                                                COMPAST   170
 5101           1402                    LDN     2           FINISH SETTING UP *UTEM* CALL AND ISSUE IT COMPAST   171
 5102           3411                    STD     CM+1                                                  COMPAST   172
 5103           3012                    LDD     CM+2                                                  COMPAST   173
 5104           1014                    SHN     14                                                    COMPAST   174
 5105           3313                    LMD     CM+3                                                  COMPAST   175
 5106           3104                    ADD     T4                                                    COMPAST   176
 5107           3414                    STD     CM+4                                                  COMPAST   177
 5110           1063                    SHN     -14                                                   COMPAST   178
 5111           3413                    STD     CM+3                                                  COMPAST   179
 5112           1400                    LDN     0                                                     COMPAST   180
 5113           3412                    STD     CM+2                                                  COMPAST   181
 5114           3077                    LDD     MA                                                    COMPAST   182
 5115           6311 5126               CWM     ASTB,CM+1                                             COMPAST   183
```

```
 5117         2000 0115                 MONITOR UTEM                                      COMPASS    184
 5123         3011                      LDD    CM+1                                       COMPASS    185
 5124         0100 4725                 LJM    ASTX        RETURN                         COMPASS    186
                                                                                          COMPASS    187
                                                                                          COMPASS    188
                                 *      *UTEM* PARAMETER BLOCK.                           COMPASS    189
                                                                                          COMPASS    190
 5126         4000               ASTB   VFD    1/1,5/0,6/0 VERIFY ENTRY                   COMPASS    191
 5127         0000                      VFD    6/0,6/0                                    COMPASS    192
 5130         0000                      CON    0                                          COMPASS    193
 5131         0000                      CON    0                                          COMPASS    194
 5132         0000                      CON    0                                          COMPASS    195
                                                                                          COMPASS    196
 5133         0000               ASTC   VFD    1/0,5/0,6/0 CHANGE ENTRY                   COMPASS    197
 5134         0000                      VFD    6/0,6/0                                    COMPASS    198
 5135         0000                      CON    0                                          COMPASS    199
 5136         0000                      CON    0                                          COMPASS    200
 5137         0000                      CON    0                                          COMPASS    201
                                                                                          COMPASS    202
                                 .A     ELSE                                              COMPASS    203
                                                                                          COMPASS    204
                                 AST6   EQU    AST3        DISABLE FUNCTIONS ISSUING *UTEM* COMPASS  205
                                 AST7   EQU    AST3                                       COMPASS    206
                                 AST8   EQU    AST3                                       COMPASS    207
                                 AST10  EQU    AST3                                       COMPASS    208
                                                                                          COMPASS    209
                                 .A     ENDIF                                             COMPASS    210
                                                                                          COMPASS    211
 5140                      5     ASTD   BSS    5           SSCT/SSAT WORD                 COMPASS    212



                                 **     TAST - TABLE OF FUNCTION PROCESSORS.              COMPASS    214
                                 *                                                        COMPASS    215
                                 *      EACH ENTRY CONTAINS THE ADDRESS OF THE CORRESPONDING FUNCTION COMPASS    216
                                 *      PROCESSOR.                                        COMPASS    217
                                                                                          COMPASS    218
                                                                                          COMPASS    219
 5145                            TAST   BSS    0                                          COMPASS    220
L    0                                  LOC    0                                          COMPASS    221
                                                                                          COMPASS    222
L    0        5004               FECF   CON    AST5                                       COMPASS    223
L    1        5010               SECF   CON    AST6                                       COMPASS    224
L    2        5021               CSCF   CON    AST7                                       COMPASS    225
L    3        5021               SSCF   CON    AST7                                       COMPASS    226
                                                                                          COMPASS    227
L    4                           MNAF   BSS    0           MINIMUM SSAT FUNCTION          COMPASS    228
                                                                                          COMPASS    229
L    4        5004               FEAF   CON    AST5                                       COMPASS    230
L    5        5035               CEAF   CON    AST8                                       COMPASS    231
L    6        5045               SEAF   CON    AST10                                      COMPASS    232
                                                                                          COMPASS    233
L    7                           MAXF   BSS    0           MAXIMUM VALID FUNCTION         COMPASS    234
                                                                                          COMPASS    235
 5154                                   LOC    *O                                         COMPASS    236
```

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                                   M_M                 BASE   *                                            COMPASS    238
                                           QUAL$       IF     -DEF,QUAL$                                   COMPASS    239
                                                       QUAL   *                                            COMPASS    240
                                           AST         EQU    /COMPAST/AST                                 COMPAST    241
                                           FECF        EQU    /COMPAST/FECF                                COMPAST    242
                                           SECF        EQU    /COMPAST/SECF                                COMPAST    243
                                           CSCF        EQU    /COMPAST/CSCF                                COMPAST    244
                                           SSCF        EQU    /COMPAST/SSCF                                COMPAST    245
                                           FEAF        EQU    /COMPAST/FEAF                                COMPAST    246
                                           CEAF        EQU    /COMPAST/CEAF                                COMPAST    247
                                           SEAF        EQU    /COMPAST/SEAF                                COMPAST    248
                                           QUAL$       ENDIF                                               COMPAST    249
                                                       ENDX                                                COMPAST    250
                                                       LIST   *                                            271L716    532
             5154                                      CTEXT  COMPRSS - READ SYSTEM SECTOR.                COMPRSS      1
                                     1     SFI$        EQU    1            SELECT IMMEDIATE RETURN FROM *SFI*  NS2707     67
             5234                                      CTEXT  COMPSFI - SET FILE INTERLOCK.                COMPSFI      1


                                          **           TSCI - SUBSYSTEM CPU PRIORITIES.                    1SJ       2214
                                          *            ENTRY = 1 WORD.                                     1SJ       2215
                                          *            INDEXED BY SUBSYSTEM IDENTIFICATION NUMBER.         1SJ       2216
                                          *                                                                1SJ       2217
                                          *T           12/  PR                                             1SJ       2218
                                          *            PR     CPU PRIORITY TO BE ASSIGNED TO SUBSYSTEM.    1SJ       2219
                                                                                                           1SJ       2220
                                                                                                           1SJ       2221
             5251                          TSCI        INDEX                                               1SJ       2222
                                                       LIST   D                                            V22L602     26
                                           .SUB        HERE                                                V22L602     27
           L     0          0076                       INDEX  (MXSI-IFSI),IACS                             .SUB     .1
           L     1          0074                       INDEX  (MXSI-RFSI),RFCS                             .SUB     .1
           L     2          0072                       INDEX  (MXSI-I1SI),I1CS                             .SUB     .1
           L     3          0072                       INDEX  (MXSI-I2SI),I2CS                             .SUB     .1
           L     4          0072                       INDEX  (MXSI-TRSI),TACS                             .SUB     .1
           L     5          0072                       INDEX  (MXSI-MPSI),MPCS                             .SUB     .1
           L     6          0077                       INDEX  (MXSI-NMSI),NMCS                             .SUB     .1
           L     7          0074                       INDEX  (MXSI-NVSI),MLCS                             .SUB     .1
           L    10          0072                       INDEX  (MXSI-CDSI),CZCS                             .SUB     .1
           L    11          0072                       INDEX  (MXSI-MCSI),MCCS                             .SUB     .1
           L    13          0072                       INDEX  (MXSI-MFSI),MFCS                             .SUB     .1
           L    14          0072                       INDEX  (MXSI-RBSI),RBCS                             .SUB     .1
           L    15          0000                       INDEX  (MXSI-BISI),BICS                             .SUB     .1
           L    16          0076                       INDEX  (MXSI-MTSI),MTCS                             .SUB     .1
           L    17          0060                       INDEX  (MXSI-STSI),TSCS                             .SUB     .1
           L    20          0072                       INDEX  (MXSI-MSSI),MFCS                             .SUB     .1
           L    21          0072                       INDEX  (MXSI-SMSI),SMCS                             .SUB     .1
           L    22          0074                       INDEX  (MXSI-SSSI),SSCS                             .SUB     .1
           L    23          0072                       INDEX  (MXSI-ASSI),AFCS                             .SUB     .1
           L    24          0072                       INDEX  (MXSI-TLSI),TLCS                             .SUB     .1
           L    25          0072                       INDEX  (MXSI-NJSI),NJCS                             .SUB     .1
           L    26          0074                       INDEX  (MXSI-PLSI),PLCS                             .SUB     .1
           L    27          0072                       INDEX  (MXSI-ATSI),ATCS                             .SUB     .1
           L    30          0072                       INDEX  (MXSI-C1SI),C1CS                             .SUB     .1
                                                       LIST   *                                            V22L602     28
```

```
 5302                                     INDEX  MXSI-LSSI                                                     1SJ       2236


                           *              OVERFLOW CHECKS.                                                     1SJ       2238
                                                                                                               1SJ       2239
                                                                                                               1SJ       2240
                                          USE    OVERFLOW                                                      1SJ       2241
                                          OVERFLOW O3SA,TJSC                                                   1SJ       2242

                                                                                                               OVERFLOW.1
                      267                 ERRNG  .2-.1+5-.3/500B*500B   BYTES LEFT AFTER LAST SECTOR           OVERFLOW.1
                      251                 ERRNG  .3/500B*500B-*+.1-5    BYTES LEFT IN LAST SECTOR              OVERFLOW.1
                      251                 ERRNG  .4/500B*500B-*+.1-5    BYTES CAN BE ADDED TO OVERLAY          OVERFLOW.1
                        2                 ERRNG  .3/500B                SECTORS NEEDED FOR OVERLAY             OVERFLOW.1
                                                                                                               OVERFLOW.1
                                          LIST   *                                                             OVERFLOW.1




                                          QUAL                                                                 1SJ       2244
```

```
                                              IDENT  3SB,O3SB    SCHEDULE INPUT FILES TO EJT.          271L716     534
                              M_M             BASE   M                                                 1SJ        3246
                                              SST                                                      1SJ        3248
                                      COMMENT 82/02/26. 96/06/05. 1SJ - SCHEDULE INPUT FILES TO EJT.   1SJ        3249
                                              COMMENT  COPYRIGHT CONTROL DATA SYSTEMS INC.  1992.      281L803       3
          4360                                ORG    O3SB                                              271L716     535
                                              QUAL   3SB                                               271L716     536
                                1     QUAL$   SET    1                                                 1SJ        3253



                                     **       SIE - SCHEDULE INPUT FILES TO EJT.                       1SJ        3255
                                     *                                                                 1SJ        3256
                                     *        SCHEDULE AS MANY INPUT FILES TO THE EJT AS POSSIBLE, UP TO A 1SJ    3257
                                     *        LIMIT OF *TIOOL*.  AN INPUT FILE QFT ENTRY IS CONSIDERED 1SJ        3258
                                     *        ELIGIBLE FOR SCHEDULING ONLY IF THE FOLLOWING CONDITIONS ARE 1SJ    3259
                                     *        MET -                                                    1SJ        3260
                                     *               1. THE FILE TYPE IS INPUT.                        1SJ        3261
                                     *               2. THE QFT ENTRY IS NOT ASSIGNED TO AN EJT ENTRY. 1SJ        3262
                                     *               3. SCHEDULING THE INPUT FILE TO THE EJT WOULD NOT 1SJ        3263
                                     *                  INCREASE THE SERVICE CLASS JOB COUNT ABOVE THE 1SJ        3264
                                     *                  ALLOWABLE MAXIMUM.                             1SJ        3265
                                     *               4. THE QFT ENTRY TIME FIELD IS NON-ZERO.          1SJ        3266
                                                                                                       1SJ        3267
                                                                                                       1SJ        3268
          4360          0100 4360     SIE     SUBR                ENTRY/EXIT                           1SJ        3269
          4362          0200 5457             RJM    PRS          PRESET *3SB*                         271L716     538
          4364          0410                  ZJN    SIE2         IF QFT SCHEDULING SHOULD NOT BE PERFORMED 1SJ   3278
          4365          0200 5002             RJM    SIQ          SCAN QFT                             1SJ        3279
          4367          3007                  LDD    T7                                                1SJ        3280
          4370          1120                  LMN    TIOOL                                             1SJ        3281
          4371          0403                  ZJN    SIE2         IF *TIOO* TABLE IS EMPTY             1SJ        3282
          4372          0200 4452             RJM    CEE          CREATE EJT ENTRIES                   NS2181B      17
                                                                                                       1SJ        3284
                                     *        UPDATE THE JOB COUNTS IN THE JOB CONTROL AREA.           1SJ        3285
                                                                                                       1SJ        3286
          4374          1423          SIE2    LDN    MXJC         INITIALIZE JCB INDEX                 1SJ        3287
          4375          3401                  STD    T1                                                1SJ        3288
          4376          3701          SEI3    SOD    T1           DECREMENT JCB INDEX                  1SJ        3289
          4377          0503                  ZJP    SIE5         IF ALL JCB-S WERE UPDATED            NS22000     499
          4402          0200 4332             RJM    RJC          CALCULATE JCB ADDRESS                1SJ        3291
          4404          1603                  ADN    SVJT                                              NS22000     500
          4405          6027                  CRD    BB                                                NS22000     501
          4406          1607                  ADN    JCTT-SVJT                                         NS22000     502
          4407          6020                  CRD    AA                                                1SJ        3293
          4410          3020                  LDD    AA                                                NS22000     503
          4411          3232                  SBD    BB+3                                              NS22000     504
          4412          0707                  MJN    SIE4         IF JOB COUNT WAS LESS THAN JOB LIMIT NS22000     505
          4413          5001 6455             LDM    TJCT,T1                                           NS22000     506
          4415          3232                  SBD    BB+3                                              NS22000     507
          4416          0603                  PJN    SIE4         IF NEW JOB COUNT NOT BELOW JOB LIMIT NS22000     508
          4417          5600 4436             AOM    SIEA         INDICATE TO ISSUE EVENT              NS22000     509
          4421          5001 6455     SIE4    LDM    TJCT,T1                                           NS22000     510
          4423          3420                  STD    AA                                                1SJ        3295
          4424          3021                  LDD    AA+1                                              NS2285        1
          4425          0402                  ZJN    SIE4.1       IF NO JOBS WAITING                   NS2285        2
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4426          3721                    SOD    AA+1         DECREMENT QFT TIME-OUT                  NS2285       3
4427          3001              SIE4.1  LDD    T1                                                   NS2285       4
4430          0200 4332               RJM    RJC          CALCULATE JCB ADDRESS                   1SJ       3297
4432          1612                    ADN    JCTT                                                 1SJ       3298
4433          6220                    CWD    AA           UPDATE JOB COUNT                        1SJ       3299
4434          0341                    UJN    SEI3         CONTINUE UPDATING JOB COUNTS            1SJ       3300
4435          2000 0000         SIE5    LDC    0                                                    NS22000    511
                        4436    SIEA    EQU    *-1          (NONZERO IF TO ISSUE EVENT)             NS22000    512
4437          0410                    ZJN    SIE6         IF TO NOT ISSUE EVENT                   NS22000    513
4440          1466                    LDN    ZERL         ISSUE JOB COUNT BELOW SERVICE LIMIT EVENT NS22000    514
4441          6010                    CRD    CM                                                   NS22000    515
4442          1427                    LDN    SCFE                                                 NS22000    516
4443          3414                    STD    CM+4                                                 NS22000    517
4444          1462                    MONITOR  EATM                                               NS22000    518
4447          0100 4360         SIE6    LJM    SIEX         RETURN                                  NS22000    519
                                                                                                  NS22000    520


                               **      CEE - CREATE EJT ENTRIES.                                  1SJ       3302
                               *                                                                  1SJ       3303
                               *       BUILD AN EJT ENTRY FOR EACH ENTRY IN THE *TIOO* TABLE.     1SJ       3304
                               *                                                                  1SJ       3305
                               *       ENTRY  (T7) = INDEX OF FIRST *TIOO* ENTRY.                 1SJ       3306
                               *                                                                  1SJ       3307
                               *       USES   T1, T7, CM - CM+4, AA - AA+4, BB - BB+4, EJ - EJ+4, 1SJ       3308
                               *              EO, IO, SC.                                         1SJ       3309
                               *                                                                  1SJ       3310
                               *       CALLS  CET, EJA, IOA, IUT.                                 1SJ       3311
                               *                                                                  1SJ       3312
                               *       MACROS MONITOR.                                            1SJ       3313
                                                                                                  1SJ       3314
                                                                                                  1SJ       3315
4451          0100 4451          CEE     SUBR                ENTRY/EXIT                            1SJ       3316
                                                                                                  1SJ       3317
                               *       GET THE ORDINAL OF THE NEXT AVAILABLE EJT SLOT.            1SJ       3318
                                                                                                  1SJ       3319
4453          1400              CEE1    LDN    0            GET EJT ENTRY                           1SJ       3320
4454          3411                    STD    CM+1                                                 1SJ       3321
4455          3434                    STD    EO                                                   1SJ17        1
4456          3077                    LDD    MA           SET INITIAL EJT DATA                    1SJ17        2
4457          6370 4730               CWM    CEEA,ON                                              1SJ17        3
4461          1404                    LDN    /CPS/PEJT                                            1SJ       3322
4462          3412                    STD    CM+2                                                 1SJ       3323
4463          5007 6113               LDM    TIOO+2*TIOOL,T7  CHECK SERVICE CLASS                 1SJ36        1
4465          1101                    LMN    SYSC                                                 1SJ       3326
4466          0405                    ZJN    CEE1.1       IF SYSTEM JOB                           1SJ       3327
4467          1122                    LMN    SYSC&DSSC                                            1SJ       3328
4470          0403                    ZJN    CEE1.1       IF DEADSTART SEQUENCING JOB             1SJ       3329
4471          1124                    LMN    DSSC&SSSC                                            1SJ       3330
4472          0504                    NJN    CEE1.2       IF NOT SUBSYSTEM                        1SJ       3331
4473          2000 4000         CEE1.1  LDC    4000         SET SYSTEM ORIGIN FLAG                  1SJ       3332
4475          3512                    RAD    CM+2                                                 1SJ       3333
4476          1466              CEE1.2  MONITOR  MTRM                                               1SJ       3334
4501          3011                    LDD    CM+1                                                 1SJ       3335
4502          0417                    ZJN    CEE4         IF NO EJT ENTRY AVAILABLE               1SJ       3336
```

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                                                                                                    1SJ       3337
                                         *         USE THE *UTEM* MONITOR FUNCTION TO SET THE QFT ENTRY 1SJ   3338
                                         *         INTERLOCK AND VERIFY THE ENTRY IS STILL ACCEPTABLE FOR 1SJ 3339
                                         *         SCHEDULING.                                      1SJ       3340
                                                                                                    1SJ       3341
          4503       3434                 CEE2     STD   EO              SAVE EJT ORDINAL           1SJ       3342
          4504       5007 6053            CEE2.1   LDM   TIOO,T7         GET QFT ORDINAL FROM *TIOO* TABLE 1SJ17 4
          4506       3435                          STD   IO                                         1SJ       3344
          4507       5007 6113                     LDM   TIOO+2*TIOOL,T7  SAVE SERVICE CLASS        1SJ36        2
          4511       3441                          STD   SC                                         1SJ36        3
          4512       2040 0000                     LDC   0*10000+1S17D                              1SJ       3345
          4514       0200 2642                     RJM   IUT             ISSUE *UTEM* MONITOR FUNCTION 1SJ    3346
          4516       0424                          ZJN   CEE5            IF INTERLOCK GOTTEN        1SJ       3347
          4517       5741 6455            CEE3     SOM   TJCT,SC         DECREMENT JOB COUNT        1SJ       3348
          4521       3607                 CEE4     AOD   T7                                         1SJ       3349
          4522       1120                          LMN   TIOOL                                      1SJ       3350
          4523       0405                          ZJN   CEE4.1          IF *TIOO* SCAN COMPLETE    1SJ17        5
          4524       3034                          LDD   EO                                         1SJ17        6
          4525       0556                          NJN   CEE2.1          IF UNUSED EJT ENTRY PRESENT 1SJ17       7
          4526       0100 4453                     LJM   CEE1            GET ANOTHER EJT ENTRY      1SJ17        8
                                                                                                    1SJ17        9
          4530       3034                 CEE4.1   LDD   EO                                         1SJ17       10
          4531       0407                          ZJN   CEE4.2          IF NO EJT ENTRY TO RETURN  1SJ17       11
          4532       3411                          STD   CM+1            RETURN EJT ENTRY           1SJ17       12
          4533       1404                          LDN   /CPS/PEJT                                  1SJ17       13
          4534       3412                          STD   CM+2                                       1SJ17       14
          4535       1466                          MONITOR  MTRM                                    1SJ17       15
          4540       0100 4451            CEE4.2   LJM   CEEX            RETURN                     1SJ17       16
                                                                                                    1SJ       3353
          4542       0200 4773            CEE5     RJM   IOA             CALCULATE QFT ENTRY ADDRESS 1SJ      3354
                                                   ADK   JSNQ                                       1SJ       3355
          4544       6050                          CRD   EJ                                         1SJ       3356
          4545       1601                          ADN   ENTQ-JSNQ                                  1SJ       3357
          4546       6020                          CRD   AA                                         1SJ       3358
          4547       1601                          ADN   INSQ-ENTQ                                  NS22000    521
          4550       6010                          CRD   CM                                         NS22000    522
          4551       1601                          ADN   SCLQ-INSQ                                  NS22000    523
          4552       6027                          CRD   BB                                         1SJ       3360
          4553       3013                          LDD   CM+3            SAVE ACCESS LEVEL LIMITS   NS22000    524
          4554       2200 0777                     LPC   777                                        NS2202       1
          4556       5400 4735                     STM   CEEB                                       NS22000    526
                                                                                                    1SJ       3361
                                         *         VERIFY ENTRY.                                    1SJ       3362
                                                                                                    1SJ       3363
          4560       3027                          LDD   BB                                         1SJ       3364
          4561       1071                          SHN   -6                                         1SJ       3365
          4562       3341                          LMD   SC                                         1SJ       3366
          4563       0505                          NJN   CEE6            IF SERVICE CLASS CHANGED   1SJ       3367
          4564       3054                          LDD   EJ+4                                       1SJ       3368
                                      0            ERRNZ INQF            CODE ASSUMES *INQF* = 0    1SJ       3369
          4565       2200 7002                     LPC   7002                                       1SJ       3370
          4567       0407                          ZJN   CEE7            IF *TYPE* AND *STAT* FIELDS ARE OK 1SJ 3371
          4570       2060 0000            CEE6     LDC   0*10000+1S17D+1S16D  CLEAR INTERLOCK       1SJ       3372
          4572       0200 2642                     RJM   IUT             ISSUE *UTEM* MONITOR FUNCTION 1SJ    3373
          4574       0100 4517                     LJM   CEE3            CONTINUE PROCESSING *TIOO* TABLE 1SJ 3379
                                                                                                    1SJ       3380
                                         *         CREATE EJT ENTRY.                                1SJ       3381
```

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                                                                                                 1SJ       3382
         4576         3027           CEE7     LDD    BB                                          1SJ       3383
         4577         1217                    LPN    17                                          1SJ       3384
         4600         1103                    LMK    IAOT                                        NS2134      35
         4601         3401                    STD    T1                                          NS2117       1
         4602         0402                    ZJN    CEE8         IF INTERACTIVE JOB             1SJ       3386
         4603         1402                    LDN    NICS&OLCS                                   1SJ       3387
         4604         1102           CEE8     LMN    OLCS         SET CONNECTION STATUS          1SJ       3388
         4605         1007                    SHN    7                                           1SJ       3389
                                              LMK    PRJS*2       SET JOB STATUS                 1SJ       3390
         4606         3454                    STD    EJ+4                                        1SJ       3391
         4607         1400                    LDN    0                                           1SJ       3392
         4610         3422                    STD    AA+2                                        1SJ       3393
         4611         3432                    STD    BB+3                                        1SJ       3394
         4612         3001                    LDD    T1                                          NS2117       2
         4613         0404                    ZJN    CEE8.1       IF INTERACTIVE SERVICE CLASS   NS2117       3
         4614         3041                    LDD    SC                                          1SJ       3395
         4615         1107                    LMN    SSSC                                        1SJ       3396
         4616         0504                    NJN    CEE9         IF NOT A SUBSYSTEM             1SJ       3397
         4617         2000 4000      CEE8.1   LDC    4000         SET NO-RERUN FLAG              NS2117       4
         4621         3522                    RAD    AA+2                                        1SJ       3399
                                                                                                 1SJ       3400
                                     *        CALCULATE INITIAL SCHEDULING PRIORITY.             1SJ       3401
                                                                                                 1SJ       3402
         4622         5041 6753      CEE9     LDM    TEPB+3*MXJC,SC  SAVE INITIAL PRIORITY FOR *CET*  271L716    539
         4624         3401                    STD    T1                                          1SJ       3404
         4625         3041                    LDD    SC                                          1SJ       3405
         4626         1014                    SHN    14                                          1SJ       3406
         4627         1101                    LMN    EXQT                                        1SJ       3407
         4630         0200 5405               RJM    CET          CALCULATE ENTRY TIME           1SJ       3408
         4632         3001                    LDD    T1           SAVE CALCULATED ENTRY TIME IN *SCHE* IMAGE 1SJ  3409
         4633         3423                    STD    AA+3                                        1SJ       3410
         4634         3002                    LDD    T2                                          1SJ       3411
         4635         3424                    STD    AA+4                                        1SJ       3412
         4636         1445                    LDN    AFFL+DNFL    SET INITIAL CM FL              1SJ       3413
         4637         3433                    STD    BB+4                                        1SJ       3414
         4640         1400           CEEC     LDN    **           (SYSTEM SECURITY MODE)         NS2134      36
         4641         3401                    STD    T1                                          NS2134      37
         4642         0423                    ZJN    CEE10        IF UNSECURED SYSTEM            NS2134      38
         4643         5000 4735               LDM    CEEB         CHECK ACCESS LEVEL LIMITS      NS2134      39
         4645         1014                    SHN    -6+22                                       NS2202       2
         4646         3414                    STD    CM+4         LOWER ACCESS LEVEL LIMIT       NS2134      41
         4647         1063                    SHN    -22+6                                       NS2202       3
         4650         1207                    LPN    7                                           NS2202       4
         4651         3413                    STD    CM+3         UPPER ACCESS LEVEL LIMIT       NS2134      43
         4652         3027                    LDD    BB           SET ORIGIN TYPE                NS2134      44
         4653         1217                    LPN    17                                          NS2134      45
         4654         3412                    STD    CM+2                                        NS2134      46
         4655         1406                    LDN    /CPS/VJLS    VALIDATE JOB LIMITS            NS2134      47
         4656         3411                    STD    CM+1                                        NS2134      48
         4657         2000 0120               MONITOR  VSAM                                      NS2134      49
         4663         3011                    LDD    CM+1                                        NS2134      50
         4664         3401                    STD    T1           SAVE RETURN STATUS             NS2134      51
         4665         1466           CEE10    LDK    ZERL                                        NS2134      52
         4666         6010                    CRD    CM                                          NS2134      53
         4667         5000 4735               LDM    CEEB         SET ACCESS LEVEL LIMITS        NS2134      54
         4671         1207                    LPN    7                                           NS2202       5
```

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4672          3412                     STD    CM+2                              NS2202       6
4673          5000 4735                LDM    CEEB                              NS2202       7
4675          1377                     SCN    77                                NS2202       8
4676          1074                     SHN    -3                                NS2202       9
4677          3512                     RAD    CM+2                              NS2202      10
4700          3001                     LDD    T1                                NS2134      56
4701          0403                     ZJN    CEE11        IF LIMITS ARE VALID  NS2134      57
4702          1443                     LDK    SYET         SET ERROR FLAG       NS2134      58
4703          3411                     STD    CM+1                              NS2134      59
                                                                                1SJ       3417
                             *         WRITE EJT ENTRY TO CM.                   1SJ       3418
                                                                                1SJ       3419
4704          0200 2507      CEE11     RJM    EJA          CALCULATE EJT ENTRY ADDRESS  NS2134  60
4706          1601                     ADN    SCHE                              1SJ       3421
4707          6220                     CWD    AA                                1SJ       3422
4710          1601                     ADN    PRFE-SCHE                         1SJ       3423
4711          6210                     CWD    CM                                1SJ       3424
4712          1601                     ADN    SCLE-PRFE                         1SJ       3425
4713          6227                     CWD    BB                                1SJ       3426
4714          1703                     SBN    SCLE-JSNE                         1SJ       3427
4715          6250                     CWD    EJ                                1SJ       3428
                                                                                1SJ       3429
                             *         RETURN QFT ENTRY.                        1SJ       3430
                                                                                1SJ       3431
4716          3035                     LDD    IO                                1SJ       3432
4717          3411                     STD    CM+1                              1SJ       3433
4720          1403                     LDN    /CPS/PQFT                         1SJ       3434
4721          3412                     STD    CM+2                              1SJ       3435
4722          1466                     MONITOR  MTRM                            1SJ       3436
4725          3434                     STD    EO           CLEAR EJT ORDINAL    1SJ17       17
4726          0100 4521                LJM    CEE4         CONTINUE PROCESSING *TIOO* TABLE  1SJ  3437
                                                                                1SJ17       18
                                                                                1SJ17       19
4730          4747           CEEA      VFD    24/4L****,36/1  INITIAL EJT DATA  1SJ20        1
4731          4747
4732          0000
4733          0000
4734          0001
4735          0000           CEEB      CON    0            ACCESS LEVEL LIMITS  NS2134      61
```

```
                                  **        FLP - FIND LOWEST PRIORITY JOB.                    1SJ        3439
                                  *                                                            1SJ        3440
                                  *         SCAN THE *TIOO* TABLE TO FIND THE LOWEST PRIORITY JOB. 1SJ    3441
                                  *                                                            1SJ        3442
                                  *         ENTRY  (A) = 0 IF THE LOWEST PRIORITY JOB OF THE ENTIRE    1SJ        3443
                                  *                        *TIOO* TABLE IS TO BE FOUND.        1SJ        3444
                                  *                (A) .NE. 0 IF THE LOWEST PRIORITY JOB OF SERVICE CLASS 1SJ     3445
                                  *                        *SC* IS TO BE FOUND.                1SJ        3446
                                  *                (SC) = SERVICE CLASS IF (A) .NE. 0.         1SJ        3447
                                  *                (T7) = CURRENT *TIOO* INDEX.                1SJ        3448
                                  *                                                            1SJ        3449
                                  *         EXIT   (A) = *TIOO* INDEX OF LOWEST PRIORITY JOB.  1SJ        3450
                                  *                (A) = 7777 IF CALLER REQUESTED LOWEST PRIORITY JOB OF 1SJ  3451
                                  *                        A SERVICE CLASS BUT *TIOO* TABLE CONTAINS NO   1SJ  3452
                                  *                        ENTRIES FOR JOBS OF THE SPECIFIED SERVICE     1SJ  3453
                                  *                        CLASS; OR THE *TIOO* TABLE IS EMPTY.          1SJ  3454
                                  *                (T4) = PRIORITY.                            1SJ        3455
                                  *                (T5) = *TIOO* INDEX.                        1SJ        3456
                                  *                                                            1SJ        3457
                                  *         USES   T3 - T5.                                    1SJ        3458
                                                                                               1SJ        3459
                                                                                               1SJ        3460
          4736        3005                 FLP4     LDD    T5                                  1SJ        3461
                                                                                               1SJ        3462
          4737        0100 4737            FLP      SUBR               ENTRY/EXIT              1SJ        3463
          4741        5400 4753                     STM    FLPA        SET/CLEAR SERVICE CLASS FLAG    1SJ 3464
          4743        1500                          LCN    0           INITIALIZE LOWEST PRIORITY      1SJ 3465
          4744        3404                          STD    T4                                  1SJ        3466
          4745        3405                          STD    T5          PRESET EXIT CONDITION   1SJ        3467
          4746        3007                          LDD    T7          INITIALIZE *TIOO* INDEX 1SJ        3468
          4747        3403                          STD    T3                                  1SJ        3469
          4750        1120                 FLP1     LMN    TIOOL                               1SJ        3470
          4751        0464                          ZJN    FLP4        IF *TIOO* SCAN IS COMPLETE      1SJ 3471
          4752        2000 0000                     LDC    **                                  1SJ        3472
                                4753       FLPA     EQU    *-1         (SERVICE CLASS FLAG)    1SJ        3473
          4754        0405                          ZJN    FLP2        IF ALL SERVICE CLASSES WILL BE CONSIDERED 1SJ 3474
          4755        5003 6113                     LDM    TIOO+2*TIOOL,T3                     1SJ        3475
          4757        3341                          LMD    SC                                  1SJ        3476
          4760        0510                          NJN    FLP3        IF WRONG SERVICE CLASS  1SJ        3477
          4761        5003 6073            FLP2     LDM    TIOO+1*TIOOL,T3                     1SJ        3478
          4763        3204                          SBD    T4                                  1SJ        3479
          4764        0604                          PJN    FLP3        IF PRIORITY .GE. CURRENT LOWEST 1SJ 3480
          4765        3504                          RAD    T4          SET NEW LOWEST PRIORITY 1SJ        3481
          4766        3003                          LDD    T3          SAVE *TIOO* INDEX       1SJ        3482
          4767        3405                          STD    T5                                  1SJ        3483
          4770        3603                 FLP3     AOD    T3          INCREMENT *TIOO* INDEX  1SJ        3484
          4771        0356                          UJN    FLP1        CONTINUE SCAN           1SJ        3485
```

```
                                   **       IOA - CALCULATE QFT ENTRY ADDRESS.                   1SJ       3487
                                   *                                                             1SJ       3488
                                   *        ENTRY  (IO) = QFT ORDINAL.                           1SJ       3489
                                   *                                                             1SJ       3490
                                   *        EXIT   (A) = QFT ADDRESS.                            1SJ       3491
                                   *                                                             1SJ       3492
                                   *        MACROS CFI.                                          1SJ       3493
                                                                                                 1SJ       3494
                                                                                                 1SJ       3495
          4772         0100 4772            IOA      SUBR                ENTRY/EXIT              1SJ       3496
          4774         3035                          CFI    QFT,IO       CALCULATE ENTRY OFFSET  1SJ       3497
          4776         2100 0000                     ADC    **                                   1SJ       3498
                                  4777      IOAA     EQU    *-1          (IOQT FWA)              1SJ       3499
          5000         0371                          UJN    IOAX         RETURN                  1SJ       3500


                                   **       SIQ - SCAN QFT.                                      1SJ       3604
                                   *                                                             1SJ       3605
                                   *        SCAN THE QFT LOOKING FOR SCHEDULABLE INPUT FILES.  BUILD 1SJ   3606
                                   *        *TIOO* TABLE ENTRIES FOR THE *N* HIGHEST PRIORITY INPUT  1SJ   3607
                                   *        FILES, WHERE *N* = MIN(*TP*,*TIOOL*).  *TP* IS THE NUMBER OF 1SJ 3608
                                   *        AVAILABLE EJT ENTRIES AND *TIOOL* IS AN ASSEMBLY CONSTANT. 1SJ   3609
                                   *        IF AN INPUT QFT ENTRY CONTAINS A DESTINATION LID (*DLID*), NS21000 16
                                   *        *1SJ* WILL ONLY SCHEDULE THE JOB IF THE *DLID* HAS THE   NS21000   17
                                   *        ATTRIBUTES *HOST* AND *ENABLED*.                         NS21000   18
                                   *                                                             1SJ       3610
                                   *        ENTRY  (A) .LT. 0, ONLY SCHEDULE SYSTEM JOBS.         1SJ15       10
                                   *               (TP) = NUMBER OF AVAILABLE EJT ENTRIES.        1SJ15       11
                                   *               (IO) = LARGEST QFT ORDINAL.                    1SJ       3612
                                   *                                                             1SJ       3613
                                   *        EXIT   (T7) = CURRENT *TIOO* INDEX.                   1SJ       3614
                                   *                                                             1SJ       3615
                                   *        USES   EO, IO, SC, TP, AA - AA+4, BB - BB+4, CM - CM+4,  NS2242     1
                                   *               T1 - T7.                                      NS2242     2
                                   *                                                             1SJ       3617
                                   *        CALLS  CPR, FLP, IOA.                                1SJ       3618
                                   *                                                             1SJ       3619
                                   *        MACROS CFI.                                          1SJ       3620
                                                                                                 1SJ       3621
                                                                                                 1SJ       3622
          5001         0100 5001            SIQ      SUBR                ENTRY/EXIT              1SJ       3623
          5003         0604                          PJN    SIQ0         IF NOT EJT THRESHOLD    1SJ15       12
          5004         2000 1101                     LDC    LMNI+SYSC                            1SJ15       13
          5006         0303                          UJN    SIQ0.1       CONTINUE                1SJ15       14
                                                                                                 1SJ15       15
          5007         2000 0306            SIQ0     LDC    UJNI+SIQ3.0-SIQE  SET NORMAL SCHEDULING 1SJ15    16
                                    31               ERRNG  37-SIQ3.0+SIQE  IF JUMP OUT OF RANGE  1SJ15       17
          5011         5400 5054            SIQ0.1   STM    SIQE                                 1SJ15       18
          5013         1420                          LDN    TIOOL        INITIALIZE *TIOO* INDEX 1SJ       3624
          5014         3407                          STD    T7                                   1SJ       3625
          5015         1701                          SBN    1            INITIALIZE INDEX OF LOWEST PRIORITY JOB 1SJ 3626
          5016         3405                          STD    T5                                   1SJ       3627
          5017         1500                          LCN    0            INITIALIZE LOWEST *TIOO* ENTRY PRIORITY 1SJ 3628
          5020         3404                          STD    T4                                   1SJ       3629
          5021         3035                          LDD    IO                                   1SJ       3630
```

```
5022         1002                SIQ1     CFI    QFT,,IO     GET QFT ENTRY OFFSET                          1SJ        3631
5023         2100 0000                    ADC    **                                                        1SJ        3632
                          5024   SIQA     EQU    *-1         (QFT FWA)                                     1SJ        3633
                                          ADK    JSNQ                                                      1SJ        3634
5025         6010                         CRD    CM                                                        1SJ        3635
5026         3010                         LDD    CM                                                        1SJ        3636
5027         0504                         NJN    SIQ3        IF NOT AN EMPTY ENTRY                         1SJ        3637
5030         3735                SIQ2     SOD    IO                                                        1SJ        3638
5031         0570                         NJN    SIQ1        IF QFT SCAN NOT COMPLETE                      1SJ        3639
5032         0346                         UJN    SIQX        RETURN                                        1SJ        3640
                                                                                                           1SJ        3641
5033         3014                SIQ3     LDD    CM+4                                                      1SJ        3642
                            0             ERRNZ  INQF        CODE ASSUMES *INQF* = 0                       1SJ        3643
5034         2200 7003                    LPC    7003                                                      1SJ        3644
5036         0571                         NJN    SIQ2        IF FILE NOT ELIGIBLE FOR SCHEDULING           NS21000      20
5037         1401                         LDN    1           SET NOT ABORTED INPUT FILE                    NS2242       3
5040         3434                         STD    EO                                                        NS2242       4
5041         0200 4773                    RJM    IOA         CALCULATE QFT ENTRY ADDRESS                   1SJ        3646
5043         1601                         ADN    ENTQ                                                      1SJ        3647
5044         6010                         CRD    CM                                                        1SJ        3648
5045         1601                         ADN    INSQ-ENTQ   READ DESTINATION LID                         NS21000      21
5046         6027                         CRD    BB                                                        NS21000      22
5047         1601                         ADN    SCLQ-INSQ                                                 NS21000      23
5050         6020                         CRD    AA                                                        1SJ        3650
5051         3020                         LDD    AA          GET SERVICE CLASS                             1SJ        3651
5052         1071                         SHN    -6                                                        1SJ        3652
5053         3441                         STD    SC                                                        1SJ        3653
5054         0306                SIQE     UJN    SIQ3.0      CONTINUE                                      1SJ15        19
                                 *        LMN    SYSC        (EJT FULL, ONLY SCHEDULE SYSTEM JOBS)         1SJ15        20
5055         0405                         ZJN    SIQ3.0      IF SYSTEM JOB                                 1SJ15        21
5056         1122                         LMN    DSSC&SYSC                                                 1SJ15        22
5057         0403                         ZJN    SIQ3.0      IF DEADSTART SEQUENCING JOB                   1SJ15        23
5060         1124                         LMN    SSSC&DSSC                                                 1SJ15        24
5061         0546                         NJN    SIQ2        IF NOT A SUBSYSTEM                            1SJ15        25
5062         3041                SIQ3.0   LDD    SC                                                        1SJ15        26
5063         1723                         SBN    DSSC                                                      1SJ15        27
5064         0515                         NJN    SIQ3.1      IF NOT DEADSTART SEQUENCING JOB               NS21000      24
5065         1417                         LDN    TIOOL-1     RESET *TIOO* INDEX                            1SJ        3656
5066         3407                         STD    T7                                                        1SJ        3657
                            0             ERRNZ  LJMI-100                                                  1SJ        3658
5067         3071                         LDD    HN          STORE *LJM* INSTRUCTION                       1SJ        3659
5070         5400 5232                    STM    SIQC                                                      1SJ        3660
5072         2000 5001                    LDC    SIQX                                                      1SJ        3661
5074         5400 5233                    STM    SIQC+1                                                    1SJ        3662
5076         1500                         LCN    0           SET PRIORITY TO MAXIMUM                       1SJ        3663
5077         0100 5221                    LJM    SIQ8        BUILD *TIOO* ENTRY                            1SJ        3664
                                                                                                           1SJ        3665
                                 *        THIS INPUT FILE IS SCHEDULABLE.                               NS21000      25
                                 *        DETERMINE IF DESTINATION LID IS HOST LID.                     NS21000      26
                                                                                                           NS21000      27
5101         3031                SIQ3.1   LDD    BB+2        CHECK IF DLID PRESENT IN QFT                  NS21000      28
5102         1377                         SCN    77                                                        NS21000      29
5103         3130                         ADD    BB+1                                                      NS21000      30
5104         0425                         ZJN    SIQ4        IF NO DLID                                    NS21000      31
5105         2000 0000                    LDC    **          INITIALIZE *THLD* TABLE INDEX                 NS21000      32
                          5106   SIQD     EQU    *-1         (2*NUMBER OF HOST LIDS)                       V23L617      98
5107         0503                         ZJP    SIQ2        IF NO HOST LIDS PRESENT                       NS2285       5
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5112         1702                      SBN    2                                       V23L617    100
5113         3406                      STD    T6                                      NS21000     34
5114         3030             SIQ3.2   LDD    BB+1        CHECK NEXT LID              NS21000     35
5115         5306 6133                 LMM    THLD,T6                                 NS21000     36
5117         0506                      NJN    SIQ3.3      IF NOT A MATCH              NS21000     37
5120         3031                      LDD    BB+2                                    NS21000     38
5121         5306 6134                 LMM    THLD+1,T6                               NS21000     39
5123         1377                      SCN    77                                      NS21000     40
5124         0405                      ZJN    SIQ4        IF A MATCH                  NS21000     41
5125         1502             SIQ3.3   LCN    2                                       NS21000     42
5126         3506                      RAD    T6                                      NS21000     43
5127         0664                      PJN    SIQ3.2      IF NOT END OF TABLE         NS21000     44
5130         0331                      UJN    SIQ5        CHECK NEXT QFT ENTRY        NS21000     45
                                                                                      NS21000     46
5131         3013             SIQ4     LDD    CM+3        SAVE ENTRY TIME             NS2285A      1
5132         3401                      STD    T1                                      NS2285A      2
5133         3014                      LDD    CM+4                                    NS2285A      3
5134         3402                      STD    T2                                      NS2285A      4
5135         3041                      LDD    SC                                      NS2285A      5
5136         0200 4332                 RJM    RJC                                     NS2285       7
5140         1612                      ADK    JCTT                                    NS2285       8
5141         6027                      CRD    BB                                      NS2285       9
5142         3030                      LDD    BB+1                                    NS2285      10
5143         0516                      NJN    SIQ5        IF JOBS WAITING FOR THIS SERVICE CLASS  NS2285      11
                                                                                      NS2285      12
                              *        CALCULATE QUEUE PRIORITY OF SELECTED INPUT FILE.  NS21000     47
                                                                                      NS21000     48
5144         3002                      LDD    T2                                      NS2285A      6
5145         0406                      ZJN    SIQ4.1      IF NOT POSSIBLE ABORTED INPUT FILE  NS2242       6
5146         1101                      LMN    1           CHECK FOR ENTRY TIME OF 1   NS2242       7
5147         0504                      NJN    SIQ4.1      IF NOT ABORTED INPUT FILE   NS2242       8
5150         3001                      LDD    T1                                      NS2242       9
5151         0502                      NJN    SIQ4.1      IF NOT ABORTED INPUT FILE   NS2242      10
5152         3734                      SOD    EO          SET ABORTED INPUT FILE      NS2242      11
5153         3041             SIQ4.1   LDD    SC                                      NS2242      12
5154         1014                      SHN    14                                      1SJ       3674
                                       LMK    INQT                                    1SJ       3675
5155         0200 5311                 RJM    CPR         CALCULATE QUEUE PRIORITY    1SJ       3676
5157         0702                      MJN    SIQ5        IF NO JCB FOR SERVICE CLASS 1SJ       3677
5160         0503                      NJN    SIQ6        IF NON-ZERO ENTRY TIME      1SJ       3678
5161         0100 5030        SIQ5     LJM    SIQ2        CONTINUE QFT SCAN           1SJ       3679
                                                                                      1SJ       3680
                              *        CHECK JOB COUNT LIMIT.                         1SJ       3681
                                                                                      1SJ       3682
5163         3402             SIQ6     STD    T2          SAVE CALCULATED PRIORITY    1SJ       3683
5164         3034                      LDD    EO                                      NS2242      13
5165         0504                      NJN    SIQ6.1      IF NOT ABORTED INPUT FILE   NS2242      14
5166         1500                      LCN    0           SET PRIORITY MAXIMUM        NS2242      15
5167         3402                      STD    T2                                      NS2242      16
5170         0326                      UJN    SIQ7        SKIP JOB COUNT CHECK        NS2242      17
                                                                                      NS2242      18
5171         5041 6455        SIQ6.1   LDM    TJCT,SC                                 NS2242      19
5173         5241 6500                 SBM    TJAM,SC                                 1SJ2         2
5175         0721                      MJN    SIQ7        IF JOB COUNT LIMIT NOT REACHED  1SJ2         3
5176         3041                      LDD    SC                                      1SJ       3687
5177         1105                      LMN    DISC                                    1SJ       3688
5200         0416                      ZJN    SIQ7        IF DETACHED JOB             1SJ       3689
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5201       3020                   LDD   AA                                          1SJ       3690
5202       1217                   LPN   17                                          1SJ       3691
5203       1103                   LMK   IAOT                                        NS2134      62
5204       0412                   ZJN   SIQ7          IF INTERACTIVE JOB            1SJ       3693
5205       0200 4740              RJM   FLP           FIND LOWEST PRIORITY JOB OF SERVICE CLASS  1SJ  3694
5207       1006                   SHN   6                                           1SJ       3695
5210       0750                   MJN   SIQ5          IF NO JOBS OF SERVICE CLASS IN *TIOO*  1SJ  3696
5211       3004                   LDD   T4                                          1SJ       3697
5212       3202                   SBD   T2                                          1SJ       3698
5213       0645                   PJN   SIQ5          IF PRIORITY OF NEW JOB .LE. LOWEST  1SJ  3699
5214       0100 5263              LJM   SIQ13         CREATE *TIOO* ENTRY FOR CURRENT QFT ENTRY  1SJ  3700
                                                                                    1SJ       3701
                          *       BUILD *TIOO* ENTRY.                               1SJ       3702
                                                                                    1SJ       3703
5216       3707            SIQ7   SOD   T7            DECREMENT *TIOO* INDEX        1SJ       3704
5217       3743                   SOD   TP            DECREMENT AVAILABLE EJT ENTRY COUNT  1SJ  3705
                          *       LJM   SIQ12         (IF NO NEW *TIOO* SLOTS SHOULD BE USED)  1SJ  3706
                 5216      SIQB   EQU   *-2                                         1SJ       3707
5220       3002                   LDD   T2                                          1SJ       3708
5221       5407 6073       SIQ8   STM   TIOO+1*TIOOL,T7                             1SJ       3709
5223       3035                   LDD   IO            PLACE QFT ORDINAL IN *TIOO* ENTRY  1SJ  3710
5224       5407 6053              STM   TIOO,T7                                     1SJ       3711
5226       3041                   LDD   SC            PLACE SERVICE CLASS IN *TIOO* ENTRY  1SJ  3712
5227       5407 6113              STM   TIOO+2*TIOOL,T7                             1SJ       3713
5231       3034                   LDD   EO            0= ABORTED INPUT FILE, 1=NORMAL INPUT FILE NS2242  20
5232       5541 6455              RAM   TJCT,SC       INCREMENT JOB COUNT           NS2242      21
                          *       LJM   SIQX          (IF DEADSTART SEQUENCING JOB FOUND)  1SJ  3715
                 5232      SIQC   EQU   *-2                                         1SJ       3716
5234       3002                   LDD   T2                                          1SJ       3717
5235       3204                   SBD   T4                                          1SJ       3718
5236       0605                   PJN   SIQ9          IF JOB-S PRIORITY NOT NEW LOWEST OF *TIOO* 1SJ 3719
5237       3007                   LDD   T7            SAVE INDEX OF NEW LOWEST PRIORITY JOB  1SJ  3720
5240       3405                   STD   T5                                          1SJ       3721
5241       3002                   LDD   T2            SAVE PRIORITY OF NEW LOWEST JOB  1SJ    3722
5242       3404                   STD   T4                                          1SJ       3723
5243       3007            SIQ9   LDD   T7                                          1SJ       3724
5244       0403                   ZJN   SIQ10         IF *TIOO* TABLE IS FULL       1SJ       3725
5245       3043                   LDD   TP                                          1SJ       3726
5246       0510                   NJN   SIQ11         IF MORE AVAILABLE EJT ENTRIES EXIST  1SJ  3727
5247       2000 5260       SIQ10  LDC   SIQ12         PREVENT USE OF NEW *TIOO* SLOTS  1SJ    3728
5251       5400 5217              STM   SIQB+1                                      1SJ       3729
5253       3071                   LDD   HN            STORE *LJM*                   1SJ       3730
5254       5400 5216              STM   SIQB                                        1SJ       3731
5256       0100 5030       SIQ11  LJM   SIQ2          CONTINUE QFT SCAN             1SJ       3732
                                                                                    1SJ       3733
                          *       NO NEW *TIOO* SLOTS MAY BE USED.  SEE IF THE CURRENT QFT    1SJ  3734
                          *       ENTRY HAS A HIGHER QUEUE PRIORITY THAN THE LOWEST PRIORITY  1SJ  3735
                          *       *TIOO* ENTRY.  IF SO, REPLACE THAT JOB-S *TIOO* ENTRY WITH A 1SJ 3736
                          *       NEW ONE FOR THE CURRENT QFT ENTRY.                1SJ       3737
                                                                                    1SJ       3738
5260       3004            SIQ12  LDD   T4                                          1SJ       3739
5261       3202                   SBD   T2                                          1SJ       3740
5262       0673                   PJN   SIQ11         IF NEW JOB-S PRIORITY .LE. *TIOO* LOWEST  1SJ  3741
5263       5005 6113       SIQ13  LDM   TIOO+2*TIOOL,T5   GET SERVICE CLASS OF CURRENT LOWEST  1SJ  3742
5265       3403                   STD   T3                                          1SJ       3743
5266       5703 6455              SOM   TJCT,T3       DECREMENT JOB COUNT FOR OLD *TIOO* LOWEST  1SJ  3744
5270       5641 6455              AOM   TJCT,SC       INCREMENT JOB COUNT FOR NEW JOB  1SJ    3745
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5272          3035                        LDD    IO          SAVE QFT ORDINAL IN *TIOO* ENTRY          1SJ       3746
5273          5405 6053                   STM    TIOO,T5                                               1SJ       3747
5275          3002                        LDD    T2          SAVE QUEUE PRIORITY IN *TIOO* ENTRY       1SJ       3748
5276          5405 6073                   STM    TIOO+1*TIOOL,T5                                       1SJ       3749
5300          3041                        LDD    SC          SAVE SERVICE CLASS IN *TIOO* ENTRY        1SJ       3750
5301          5405 6113                   STM    TIOO+2*TIOOL,T5                                       1SJ       3751
                                                                                                        1SJ       3752
                                  *         SCAN THE *TIOO* TABLE TO FIND THE NEW LOWEST PRIORITY JOB.  1SJ       3753
                                                                                                        1SJ       3754
5303          1400                        LDN    0                                                     1SJ       3755
5304          0200 4740                   RJM    FLP         FIND LOWEST PRIORITY JOB                  1SJ       3756
5306          0347                        UJN    SIQ11       CONTINUE QFT SCAN                         1SJ       3757


                                  *         COMMON DECKS.                                               1SJ       3759
                                                                                                        1SJ       3760
                                                                                                        1SJ       3761
                        1     CPR$        SET    1           ASSEMBLE ROUTINE *CPR* OF *COMPCPE*       1SJ       3762
                        1     CET$        SET    1           ASSEMBLE ROUTINE *CET* OF *COMPCPE*       1SJ       3763
                        1     IOQ$        SET    1           ENABLE ZERO ENTRY TIME CHECK              1SJ22        1
                                          LIST   X                                                     1SJ       3764
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5307                                    CTEXT  COMPCPE - CALCULATE PRIORITY OR ENTRY TIME.           COMPCPE      1


                                        IF     -DEF,QUAL$,1                                         COMPCPE      3
                                        QUAL   COMPCPE                                              COMPCPE      4
                              M_M       BASE   M                                                    COMPCPE      5
                                COMMENT 82/02/26. 96/06/05. COMPCPE - CALCULATE PRIORITY OR ENTRY TIMECOMPCPE      6
                               *        COMMENT  COPYRIGHT CONTROL DATA SYSTEMS INC.  1992.         281L803      1



                               ***      CPE - CALCULATE PRIORITY OR ENTRY TIME.                     COMPCPE      9
                               *                                                                    COMPCPE     10
                               *        R. M. DANISCH      81/02/05.                                COMPCPE     11


                               ***            *CPE* CONTAINS ROUTINES TO CALCULATE A PRIORITY FROM A COMPCPE     13
                               *        GIVEN ENTRY TIME AND CONVERT A PRIORITY TO AN ENTRY TIME.    COMPCPE     14
                               *        ASSEMBLY OF ROUTINES WITHIN THIS COMMON DECK IS CONTROLLED BY COMPCPE     15
                               *        SELECTIVELY DEFINING THE FOLLOWING SYMBOLS -                 COMPCPE     16
                               *              CPR$       CAUSES ASSEMBLY OF SUBROUTINE *CPR*        COMPCPE     17
                               *              CET$       CAUSES ASSEMBLY OF SUBROUTINE *CET*        COMPCPE     18
                               *              IOQ$       CAUSES ASSEMBLY OF QUEUE PRIORITY CODE IN  COMPCPE     19
                               *                         SUBROUTINE *CPR*                           COMPCPE     20
                                                                                                    COMPCPE     21
                                .CPR     IF     DEF,CPR$                                            COMPCPE     22
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                                **        CPR - CALCULATE PRIORITY.                                 COMPCPE     24
                                *                                                                   COMPCPE     25
                                *                *CPR* CALCULATES QUEUE AND SCHEDULING PRIORITIES VIA   COMPCPE     26
                                *         THE FOLLOWING FORMULA -                                   COMPCPE     27
                                *                                                                   COMPCPE     28
                                *                PR = LB + (CT - ET) / WF                           COMPCPE     29
                                *                                                                   COMPCPE     30
                                *                  WHERE    PR = CALCULATED PRIORITY                COMPCPE     31
                                *                           LB = LOWER BOUND PRIORITY OF SERVICE CLASS COMPCPE  32
                                *                           WF = WEIGHTING FACTOR FROM JCB          COMPCPE     33
                                *                           CT = CURRENT TIME (SECONDS PORTION OF WORD COMPCPE  34
                                *                                *RTCL*)                            COMPCPE     35
                                *                           ET = ENTRY TIME FROM EJT OR IOQT ENTRY  COMPCPE     36
                                *                                                                   COMPCPE     37
                                *         ENTRY  (A) = 6/  SC,12/  QT.                              COMPCPE     38
                                *                      SC    SERVICE CLASS (MUST BE .LT. *MXJC*).   COMPCPE     39
                                *                      QT    QUEUE TYPE (*INQT*, *EXQT* OR *OTQT*). COMPCPE     40
                                *                (T1 - T2) = ENTRY TIME.                            COMPCPE     41
                                *                                                                   COMPCPE     42
                                *         EXIT   (A) = QUEUE PRIORITY OR SCHEDULING PRIORITY.       COMPCPE     43
                                *                    = 0 IF *IOQ$* IS DEFINED AND ENTRY TIME = 0.   COMPCPE     44
                                *                    .LT. 0 IF NO JCB IS DEFINED FOR SERVICE CLASS. COMPCPE     45
                                *                                                                   COMPCPE     46
                                *         USES   CM - CM+4.                                         COMPCPE     47
                                *                                                                   COMPCPE     48
                                *         CALLS  RJC.                                               COMPCPE     49
                                *                                                                   COMPCPE     50
                                *         XREF   COMPRJC, COMSPIM.                                  COMPCPE     51
                                *                                                                   COMPCPE     52
                                *         NOTE   THE LARGEST RESOLVED CLOCK DIFFERENCE IS           COMPCPE     53
                                *                377777.  ANYTHING OVER THAT IS ASSUMED TO BE       COMPCPE     54
                                *                EQUAL TO UPPER BOUND PRIORITY.                     COMPCPE     55
                                                                                                    COMPCPE     56
                                                                                                    COMPCPE     57
  5307          1500             CPR3     LCN    0            INDICATE NO JCB FOR SERVICE CLASS     COMPCPE     58
                                                                                                    COMPCPE     59
  5310          0100 5310        CPR      SUBR                ENTRY/EXIT                            COMPCPE     60
  5312          5400 5326                 STM    CPRA         SAVE QUEUE TYPE                       COMPCPE     61
  5314          1063                      SHN    -14                                                COMPCPE     62
  5315          0471                      ZJN    CPR3         IF NO SERVICE CLASS                   PCPE2        1
  5316          1123                      LMN    DSSC                                               PCPE1        1
  5317          0502                      NJN    CPR0         IF NOT DEADSTART SEQUENCING SERVICE CLASS  PCPE1   2
  5320          1124                      LMN    SSSC&DSSC    USE JCB FOR SUBSYSTEM SERVICE CLASS   PCPE1        3
  5321          1123             CPR0     LMN    DSSC                                               PCPE1        4
  5322          0200 4332                 RJM    RJC          CALCULATE JCB ADDRESS                 COMPCPE     63
  5324          0462                      ZJN    CPR3         IF NO JCB FOR SERVICE CLASS           COMPCPE     64
  5325          2100 0000                 ADC    **           READ QUEUE CONTROL WORD FROM JCB      COMPCPE     65
                           5326  CPRA     EQU    *-1          (QUEUE TYPE - USED AS JCB WORD INDEX) COMPCPE     66
  5327          6010                      CRD    CM                                                 COMPCPE     67
                                                                                                    COMPCPE     68
                                 .IOQ     IF     DEF,IOQ$                                           COMPCPE     69
                                                                                                    COMPCPE     70
  5330          3001                      LDD    T1                                                 COMPCPE     71
  5331          3102                      ADD    T2                                                 COMPCPE     72
  5332          0455                      ZJN    CPRX         IF ENTRY TIME = 0                     COMPCPE     73
                                                                                                    COMPCPE     74
                                 .IOQ     ENDIF                                                     COMPCPE     75
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                                                                                        COMPCPE     76
5333          2000 1077                 LDC    SHNI+77     USE WEIGHTING FACTOR AS SHIFT COUNT    COMPCPE     77
5335          3213                      SBD    CM+3                                     COMPCPE     78
5336          5400 5370                 STM    CPRB                                     COMPCPE     79
5340          3011                      LDD    CM+1        SAVE LOWER AND UPPER BOUNDS  COMPCPE     80
5341          5400 5372                 STM    CPRC                                     COMPCPE     81
5343          3012                      LDD    CM+2                                     COMPCPE     82
5344          5400 5400                 STM    CPRD                                     COMPCPE     83
5346          2000 0106                 LDC    RTCL        READ REAL-TIME CLOCK         COMPCPE     84
5350          6010                      CRD    CM                                       COMPCPE     85
5351          3710                      SOD    CM                                       COMPCPE     86
5352          3011                      LDD    CM+1                                     COMPCPE     87
5353          2101 0000                 ADC    10000                                    COMPCPE     88
5355          3202                      SBD    T2                                       COMPCPE     89
5356          3414                      STD    CM+4                                     COMPCPE     90
5357          1063                      SHN    -14                                      COMPCPE     91
5360          3110                      ADD    CM                                       COMPCPE     92
5361          3201                      SBD    T1                                       COMPCPE     93
5362          3413                      STD    CM+3                                     COMPCPE     94
5363          1337                      SCN    37                                       COMPCPE     95
5364          0512                      NJN    CPR1        IF .GT. MAXIMUM VALUE        COMPCPE     96
5365          3013                      LDD    CM+3                                     COMPCPE     97
5366          1014                      SHN    14                                       COMPCPE     98
5367          3314                      LMD    CM+4                                     COMPCPE     99
5370          1000               CPRB   SHN    **                                       COMPCPE    100
5371          2100 0000                 ADC    **                                       COMPCPE    101
                        5372     CPRC   EQU    *-1         (LOWER BOUND PRIORITY)       COMPCPE    102
5373          5200 5400                 SBM    CPRD                                     COMPCPE    103
5375          0702                      MJN    CPR2        IF PRIORITY .LT. UPPER BOUND COMPCPE    104
5376          1400               CPR1   LDN    0                                        COMPCPE    105
5377          2100 0000          CPR2   ADC    **                                       COMPCPE    106
                        5400     CPRD   EQU    *-1         (UPPER BOUND PRIORITY)       COMPCPE    107
5401          0100 5310                 LJM    CPRX        RETURN                       COMPCPE    108
                                                                                        COMPCPE    109
                                 .CPR   ENDIF                                           COMPCPE    110
                                                                                        COMPCPE    111
                                 .CET   IF     DEF,CET$                                 COMPCPE    112
```

```
                                 **        CET - CALCULATE ENTRY TIME.                                   COMPCPE    114
                                 *                                                                       COMPCPE    115
                                 *                *CET* CALCULATES ENTRY TIME VIA THE FOLLOWING          COMPCPE    116
                                 *         FORMULA -                                                     COMPCPE    117
                                 *                                                                       COMPCPE    118
                                 *                ET = CT - (PR - LB) * WF                               COMPCPE    119
                                 *                                                                       COMPCPE    120
                                 *                   WHERE    ET = ENTRY TIME                            COMPCPE    121
                                 *                            CT = CURRENT TIME (SECONDS PORTION OF WORD COMPCPE    122
                                 *                                 *RTCL*)                               COMPCPE    123
                                 *                            PR = QUEUE OR SCHEDULING PRIORITY          COMPCPE    124
                                 *                            LB = LOWER BOUND PRIORITY OF SERVICE CLASS COMPCPE    125
                                 *                            WF = WEIGHTING FACTOR FROM JCB             COMPCPE    126
                                 *                                                                       COMPCPE    127
                                 *                IF PR = 0 THEN ET = 0.                                 COMPCPE    128
                                 *                IF PR .LT. LB THEN ET = CT.                            COMPCPE    129
                                 *                                                                       COMPCPE    130
                                 *         ENTRY  (A) = 6/  SC,12/  QT.                                  COMPCPE    131
                                 *                      SC    SERVICE CLASS (MUST BE .LT. *MXJC*).       COMPCPE    132
                                 *                      QT    QUEUE TYPE (*INQT*, *EXQT*, OR *OTQT*).    COMPCPE    133
                                 *                (T1) = QUEUE PRIORITY OR SCHEDULING PRIORITY.          COMPCPE    134
                                 *                                                                       COMPCPE    135
                                 *         EXIT   (T1 - T2) = ENTRY TIME.                                COMPCPE    136
                                 *                          = 0 IF PRIORITY = 0.                         COMPCPE    137
                                 *                                                                       COMPCPE    138
                                 *         USES   T1, T2, CM - CM+4.                                     COMPCPE    139
                                 *                                                                       COMPCPE    140
                                 *         CALLS  RJC.                                                   COMPCPE    141
                                 *                                                                       COMPCPE    142
                                 *         XREF   COMPRJC, COMSPIM.                                      COMPCPE    143
                                 *                                                                       COMPCPE    144
                                 *         NOTE   *CET* DOES NOT CONSIDER THE CASE WHERE THE DESIRED     COMPCPE    145
                                 *                PRIORITY IS GREATER THAN THE UPPER BOUND FOR THE       COMPCPE    146
                                 *                SERVICE CLASS. *CPR* WILL ADJUST THE PRIORITY          COMPCPE    147
                                 *                APPROPRIATELY WHEN IT IS BEING CALCULATED.             COMPCPE    148
                                 *                                                                       COMPCPE    149
                                 *                THE MINIMUM *RTCL* VALUE MUST EXCEED 377740            COMPCPE    150
                                 *                AS PRESET BY *SET* AND MAINTAINED BY *MTR*.            COMPCPE    151
                                                                                                         COMPCPE    152
                                                                                                         COMPCPE    153
               5403      3402             CET2     STD    T2                                             COMPCPE    154
                                                                                                         COMPCPE    155
               5404      0100 5404        CET      SUBR               ENTRY/EXIT                         COMPCPE    156
               5406      3402                      STD    T2          SAVE QUEUE TYPE                    COMPCPE    157
               5407      1063                      SHN    -14                                            COMPCPE    158
               5410      1123                      LMN    DSSC                                           PCPE1        5
               5411      0502                      NJN    CET0        IF NOT DEADSTART SEQUENCING SERVICE CLASS PCPE1        6
               5412      1124                      LMN    SSSC&DSSC   USE JCB FOR SUBSYSTEM SERVICE CLASS PCPE1        7
               5413      1123             CET0     LMN    DSSC                                           PCPE1        8
               5414      0200 4332                 RJM    RJC         CALCULATE JCB ADDRESS              COMPCPE    159
               5416      3102                      ADD    T2          READ QUEUE CONTROL WORD FROM JCB   COMPCPE    160
               5417      6010                      CRD    CM                                             COMPCPE    161
               5420      3013                      LDD    CM+3        USE WEIGHTING FACTOR AS SHIFT COUNT COMPCPE    162
               5421      3172                      ADD    TH          *SHNI* INSTRUCTION                 COMPCPE    163
                                      0            ERRNZ  SHNI-1000                                      COMPCPE    164
               5422      5400 5431                 STM    CETA                                           COMPCPE    165
               5424      3001                      LDD    T1                                             COMPCPE    166
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5425          0455                        ZJN    CET2         IF PRIORITY = 0                             COMPCPE    167
5426          3211                        SBD    CM+1                                                     COMPCPE    168
5427          0602                        PJN    CET1         IF PRIORITY .GE. LOWER BOUND                COMPCPE    169
5430          1400                        LDN    0                                                        COMPCPE    170
5431          1000                CET1    SHN    **                                                       COMPCPE    171
                         5431     CETA    EQU    *-1                                                      COMPCPE    172
5432          3402                        STD    T2                                                       COMPCPE    173
5433          1063                        SHN    -14                                                      COMPCPE    174
5434          3401                        STD    T1                                                       COMPCPE    175
5435          2000 0106                   LDC    RTCL         READ REAL-TIME CLOCK                        COMPCPE    176
5437          6010                        CRD    CM                                                       COMPCPE    177
5440          3710                        SOD    CM                                                       COMPCPE    178
5441          3011                        LDD    CM+1                                                     COMPCPE    179
5442          2101 0000                   ADC    10000                                                    COMPCPE    180
5444          3202                        SBD    T2                                                       COMPCPE    181
5445          3402                        STD    T2           SET ENTRY TIME                              COMPCPE    182
5446          1063                        SHN    -14                                                      COMPCPE    183
5447          3110                        ADD    CM                                                       COMPCPE    184
5450          3201                        SBD    T1                                                       COMPCPE    185
5451          3401                        STD    T1                                                       COMPCPE    186
5452          0100 5404                   LJM    CETX         RETURN                                      COMPCPE    187
                                                                                                          COMPCPE    188
                                  .CET    ENDIF                                                           COMPCPE    189


                          M_M             BASE   *                                                        COMPCPE    191
                                  QUAL$   IF     -DEF,QUAL$                                               COMPCPE    192
                                          QUAL   *                                                        COMPCPE    193
                                  CPR$    IF     DEF,CPR$                                                 COMPCPE    194
                                  CPR     EQU    /COMPCPE/CPR                                             COMPCPE    195
                                  CPR$    ENDIF                                                           COMPCPE    196
                                  CET$    IF     DEF,CET$                                                 COMPCPE    197
                                  CET     EQU    /COMPCPE/CET                                             COMPCPE    198
                                  CET$    ENDIF                                                           COMPCPE    199
                                  QUAL$   ENDIF                                                           COMPCPE    200
                                          ENDX                                                            COMPCPE    201
                                          LIST   *                                                        1SJ       3767
                                                                                                          NS2437       1
                                                                                                          NS2437       2
                         1001             ERRNG  TJCT-*       OVERFLOW INTO *TJCT*                        NS2437       3
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                                            USE    TABLES                                             NS2437       4

                                     **     PRS - PRESET *3SB*.                                       271L716    540
                                     *                                                                1SJ       3773
                                     *      BUILDS THE *THLD* TABLE OF HOST-ENABLED LIDS.  IF         V23L617    101
                                     *      DEADSTART SEQUENCING JOB IS ACTIVE, OR IF THE LDT         V23L617    102
                                     *      HAS NOT BEEN CREATED YET DUE TO A *CLDT* ABORT,           V23L617    103
                                     *      THEN NO *THLD* TABLE WILL BE CREATED, AND NO INPUT        V23L617    104
                                     *      FILES CONTAINING A DESTINATION LID IN THE QFT ENTRY       V23L617    105
                                     *      WILL BE SCHEDULED.                                        V23L617    106
                                     *                                                                NS21000     51
                                     *      EXIT   (A) = RESPONSE FROM *SEJ*.                         1SJ50        1
                                     *                                                                1SJ50        2
                                     *      USES   IO, T6, T9, AA - AA+4, BB - BB+4, CM - CM+4,       1SJ50        3
                                     *             T1 - T1+4.                                         V23L617    108
                                     *                                                                1SJ       3775
                                     *      CALLS  AST, SEJ.                                          1SJ50        4
                                     *                                                                NS21000     55
                                     *      MACROS ISTORE, MONITOR.                                   NS2134      63
                                                                                                      1SJ       3777
                                                                                                      1SJ       3778
 5454         2000 0000              PRS8   LDC    **          RETURN RESPONSE FROM *SEJ*             1SJ50        5
                           5455      PRSA   EQU    *-1                                                1SJ50        6
 5456         0100 5456              PRS    SUBR               ENTRY/EXIT                             1SJ       3779
 5460         2000 7776                     LDC    IFSI+FECF*10000  CHECK *IAF* ACCESSIBILITY         1SJ50        7
 5462         0200 5653                     RJM    AST         GET *IAF* SSCT ENTRY                   1SJ50        8
 5464         1006                          SHN    21-13                                              1SJ50        9
 5465         0705                          MJN    PRS0        IF *IAF* ACCESSIBLE                    1SJ50       10
 5466         2000 0333                     LDC    UJNI+SEJ8-SEJB  DISABLE SUSPENSION TIME-OUT        1SJ50       11
 5470         5400 6052                     STM    SEJB                                               1SJ50       12
                              4             ERRNG  37-SEJ8+SEJB  JUMP OVERFLOW                        1SJ50       13
 5472         1422                   PRS0   LDN    MXJC-1      INITIALIZE *TJCT* TABLE                1SJ50       14
 5473         3401                          STD    T1                                                 1SJ50       15
 5474         1400                   PRS0.1 LDN    0                                                  1SJ50       16
 5475         5401 6455                     STM    TJCT,T1                                            1SJ50       17
 5477         3701                          SOD    T1          DECREMENT TABLE INDEX                  1SJ50       18
 5500         0673                          PJN    PRS0.1      IF NOT DONE                            1SJ50       19
 5501         0200 5750                     RJM    SEJ         SCAN EJT                               1SJ50       20
 5503         5400 5455                     STM    PRSA        SAVE RESPONSE                          1SJ50       21
 5505         1063                          SHN    -14                                                1SJ50       22
 5506         5500 5454                     RAM    PRSA-1                                             1SJ50       23
 5510         2000 0140                     LDK    LIDP        GET FWA OF LDT                         V23L617    109
 5512         6001                          CRD    T1                                                 V23L617    110
 5513         3001                          LDD    T1          GET PID COUNT                          V23L617    111
 5514         1014                          SHN    14                                                 V23L617    112
 5515         3302                          LMD    T2                                                 V23L617    113
 5516         6020                          CRD    AA                                                 V23L617    114
 5517         1401                          LDN    1           INITIALIZE LDT INDEX                   V23L617    115
 5520         3406                          STD    T6                                                 V23L617    116
 5521         3024                          LDD    AA+4        SAVE PID COUNT                         V23L617    117
 5522         3403                          STD    T3                                                 V23L617    118
 5523         1400                          LDN    0           INITIALIZE *THLD* POINTER              V23L617    119
 5524         3417                          STD    T9                                                 1SJ50       24
 5525         3703                   PRS1   SOD    T3          DECREMENT PID COUNT                    V23L617    121
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5526          0603                 PJN    PRS2         IF MORE PIDS                 V23L617     122
5527          0100 5624            LJM    PRS7         SET *QFT* FWA                1SJ50        25
                                                                                    V23L617     124
5531          3001          PRS2   LDD    T1           READ FIRST WORD OF PID ENTRY V23L617     125
5532          1014                 SHN    14                                        V23L617     126
5533          3302                 LMD    T2                                        V23L617     127
5534          3106                 ADD    T6                                        V23L617     128
5535          6020                 CRD    AA                                        V23L617     129
5536          1601                 ADN    1            SECOND WORD OF PID ENTRY     V23L617     130
5537          6027                 CRD    BB                                        V23L617     131
5540          1601                 ADN    1            THIRD WORD OF PID ENTRY      V23L617     132
5541          6010                 CRD    CM                                        V23L617     133
5542          3021                 LDD    AA+1                                      V23L617     134
5543          1014                 SHN    21-5                                      V23L617     135
5544          0704                 MJN    PRS3         IF HOST PID                  V23L617     136
5545          3033                 LDD    BB+4         POINT TO NEXT PID ENTRY      V23L617     137
5546          3506                 RAD    T6                                        V23L617     138
5547          0355                 UJN    PRS1         CHECK NEXT PID               V23L617     139
                                                                                    V23L617     140
5550          1402          PRS3   LDN    3-1          FWA-1 OF LID ENTRY           V23L617     141
5551          3506                 RAD    T6                                        V23L617     142
5552          3714          PRS4   SOD    CM+4         DECREMENT LID SLOT COUNT     V23L617     143
5553          0603                 MJP    PRS5         IF ALL LID SLOTS CHECKED     241L630     149
5556          3606                 AOD    T6           POINT TO NEXT LID ENTRY      V23L617     145
5557          3001                 LDD    T1           READ LID ENTRY               V23L617     146
5560          1014                 SHN    14                                        V23L617     147
5561          3302                 LMD    T2                                        V23L617     148
5562          3106                 ADD    T6                                        V23L617     149
5563          6020                 CRD    AA                                        V23L617     150
5564          3020                 LDD    AA                                        V23L617     151
5565          0464                 ZJN    PRS4         IF HOLE IN LDT               V23L617     152
                                                                                    V23L617     153
                            *      ADD ONLY HOST LIDS THAT ARE ENABLED AND ARE NOT  V23L617     154
                            *      LINKED OR STORE-AND-FORWARD TO THE HOST LID TABLE.  V23L617     155
                                                                                    V23L617     156
5566          3022                 LDD    AA+2                                      V23L617     157
5567          1006                 SHN    21-13                                     V23L617     158
5570          0661                 PJN    PRS4         IF LID NOT ENABLED           V23L617     159
5571          1003                 SHN    21-10-21+13                               V23L617     160
5572          0757                 MJN    PRS4         IF LID LINKED (LOOPBACK SET) V23L617     161
5573          1020                 SHN    21-12-21+10+22                            V23L617     162
5574          0755                 MJN    PRS4         IF STOREF SET                V23L617     163
5575          3020                 LDD    AA           ADD LID TO HOST LID TABLE    V23L617     164
5576          5417 6133            STM    THLD,T9                                   1SJ50        26
5600          3021                 LDD    AA+1                                      V23L617     166
5601          5417 6134            STM    THLD+1,T9                                 1SJ50        27
5603          1402                 LDN    2            INCREMENT *THLD* INDEX       V23L617     168
5604          3517                 RAD    T9                                        1SJ50        28
5605          2177 7455            ADC    -THLDL                                    NS2250        1
5607          0742                 MJN    PRS4         IF ROOM FOR MORE HOST LIDS   V23L617     171
5610          1400                 LDN    0                                         241L630     150
5611          3412                 STD    CM+2         SET NO ERROR FLAG            241L630     151
5612          2000 5612            LDC    *                                         241L630     152
5614          3411                 STD    CM+1         ADDRESS WHERE ERROR DETECTED 241L630     153
5615          1421                 MONITOR  CHGM       CONDITIONAL HANG FOR NO ROOM 241L630     154
                                                                                    V23L617     174
5620          3017          PRS5   LDD    T9                                        1SJ50        29
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5621          0403                          ZJN     PRS7        IF NO HOST LIDS DEFINED                          1SJ50       30
5622          5400 5106                     STM     SIQD        SAVE LENGTH OF HOST LID TABLE                    V23L617    177
5624          1475                  PRS7    LDK     QFTP        PRESET QFT FWA                                   V23L617    180
5625          6010                          CRD     CM                                                           1SJ        3792
5626          3010                          LDD     CM                                                           1SJ        3793
5627          5500 4776                     RAM     IOAA-1                                                       1SJ        3794
5631          5400 5023                     STM     SIQA-1                                                       1SJ        3795
5633          3011                          LDD     CM+1                                                         1SJ        3796
5634          5400 4777                     STM     IOAA                                                         1SJ        3797
5636          5400 5024                     STM     SIQA                                                         1SJ        3798
5640          3712                          SOD     CM+2        PRESET QFT ORDINAL FOR BACKWARD SCAN             1SJ3          1
5641          3435                          STD     IO                                                           1SJ        3800
5642          1442                          LDK     SSML        SET SYSTEM SECURITY MODE                         NS2134       65
5643          6010                          CRD     CM                                                           NS2134       66
5644          3010                          LDD     CM                                                           NS2134       67
5645          1207                          LPN     7                                                            NS2134       68
5646          5500 4640                     RAM     CEEC                                                         NS2134       69
5650          0100 5454                     LJM     PRS8        RETURN                                           1SJ50       31


                                    *       PRESET  COMMON DECKS.                                                NS2437        6
                                                                                                                 NS2437        7
                                                                                                                 NS2437        8
5652                                        CTEXT   COMPAST - ACCESS SUBSYSTEM TABLES.                           COMPAST       1
                                                                                                                 NS2437       10
                                                                                                                 NS2437       11
                              165           ERRNG   THLD-*      OVERFLOW INTO *THLD*                             NS2437       12
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                                   *         CODE OVERWRITTEN BY *PRS*.                                          1SJ50        33


                                   **        SEJ - SCAN EJT.                                                     1SJ50        35
                                   *                                                                             1SJ50        36
                                   *         SCAN THE EJT TO PERFORM THE FOLLOWING FUNCTIONS -                   1SJ50        37
                                   *                                                                             1SJ50        38
                                   *                1. COUNT THE NUMBER OF EXECUTING JOBS IN EACH SERVICE        1SJ50        39
                                   *                   CLASS.  JOBS IN TIMED/EVENT ROLLOUT WAITING TO            1SJ50        40
                                   *                   CHANGE INTO ANOTHER SERVICE CLASS ARE NOT COUNTED.        1SJ50        41
                                   *                2. DETERMINE IF THERE ARE ANY AVAILABLE EJT ENTRIES.         1SJ50        42
                                   *                3. PERFORM SUSPENSION TIME-OUT PROCESSING AS REQUIRED.       1SJ50        43
                                   *                4. CHECK FOR THE EXISTENCE OF THE DEADSTART SEQUENCING       1SJ50        44
                                   *                   JOB.                                                      1SJ50        45
                                   *                                                                             1SJ50        46
                                   *         ENTRY  (SFJS) = LARGEST EJT ORDINAL.                                1SJ50        47
                                   *                (TM - TM+1) = SECONDS PORTION OF REAL-TIME CLOCK.            1SJ50        48
                                   *                                                                             1SJ50        49
                                   *         EXIT   (A) .LT. 0, IF TO SCHEDULE ONLY SYSTEM JOBS.                 1SJ50        50
                                   *                (A) = 0, IF DEADSTART SEQUENCING JOB.                        1SJ50        51
                                   *                (A) .GT. 0, SCHEDULE ANY JOB.                                1SJ50        52
                                   *                (TP) = NUMBER OF AVAILABLE EJT ENTRIES.                      1SJ50        53
                                   *                                                                             1SJ50        54
                                   *         USES   CM - CM+4, AA - AA+4, BB - BB+4, EJ - EJ+4, EO, SC,          1SJ50        55
                                   *                TP.                                                          1SJ50        56
                                   *                                                                             1SJ50        57
                                   *         CALLS  EJA.                                                         1SJ50        58
                                   *                                                                             1SJ50        59
                                   *         MACROS CFI, MONITOR.                                                1SJ50        60
                                                                                                                 1SJ50        61
                                                                                                                 1SJ50        62
          5746          1401                SEJ10     LDN    1             ALLOW SCHEDULING                      1SJ50        63
                                                                                                                 1SJ50        64
          5747          0100 5747           SEJ       SUBR                 ENTRY/EXIT                            1SJ50        65
          5751          1400                          LDN    0             INITIALIZE EMPTY EJT ENTRY COUNT      1SJ50        66
          5752          3443                          STD    TP                                                  1SJ50        67
          5753          5000 2512                     LDM    EJAA-1        PRESET EJT FWA                        1SJ50        68
          5755          5400 5773                     STM    SEJA-1                                              1SJ50        69
          5757          5400 6117                     STM    SEJC-1                                              1SJ50        70
          5761          5000 2513                     LDM    EJAA                                                1SJ50        71
          5763          5400 5774                     STM    SEJA                                                1SJ50        72
          5765          5400 6120                     STM    SEJC                                                1SJ50        73
          5767          5000 3122                     LDM    SFJS          PRESET EJT ORDINAL FOR BACKWARD SCAN  1SJ50        74
          5771          3434                          STD    EO                                                  1SJ50        75
          5772          1002                SEJ1      CFI    EJT,,EO       GET EJT ENTRY OFFSET                  1SJ50        76
          5773          2100 0000                     ADC    **                                                  1SJ50        77
                                  5774      SEJA      EQU    *-1           (EJT FWA)                             1SJ50        78
                                                      ADK    JSNE                                                1SJ50        79
          5775          6050                          CRD    EJ                                                  1SJ50        80
          5776          1601                          ADK    SCHE-JSNE                                           1SJ50        81
          5777          6020                          CRD    AA                                                  1SJ50        82
          6000          1601                          ADK    PRFE-SCHE                                           1SJ50        83
          6001          6027                          CRD    BB                                                  1SJ50        84
          6002          1601                          ADK    SCLE-PRFE                                           1SJ50        85
          6003          6010                          CRD    CM                                                  1SJ50        86
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6004         3050                          LDD    EJ                                             1SJ50        87
6005         0524                          NJN    SEJ4         IF NOT AN EMPTY ENTRY             1SJ50        88
6006         3643                          AOD    TP           INCREMENT EMPTY ENTRY COUNT       1SJ50        89
6007         3734                    SEJ2  SOD    EO           DECREMENT EJT ORDINAL             1SJ50        90
6010         0561                          NJN    SEJ1         IF EJT SCAN NOT COMPLETE          1SJ50        91
6011         3043                          LDD    TP                                             1SJ50        92
6012         1706                          SBN    /CPS/EJTR+1                                    1SJ50        93
6013         0703                          PJP    SEJ10        IF NOT ABOVE THRESHOLD            1SJ50        94
6016         1400                          LDN    0                                              1SJ50        95
6017         3411                          STD    CM+1         SELECT *EATM* ENTER EVENT OPTION  1SJ50        96
6020         3413                          STD    CM+3         STORE EVENT DESCRIPTOR            1SJ50        97
6021         1404                          LDN    EJJE                                           1SJ50        98
6022         3414                          STD    CM+4                                           1SJ50        99
6023         1462                          MONITOR  EATM                                         1SJ50       100
6026         1501                          LCN    1            FLAG EJT THRESHOLD                1SJ50       101
6027         0100 5747               SEJ3  LJM    SEJX         RETURN                            1SJ50       102
                                                                                                 1SJ50       103
6031         3010                    SEJ4  LDD    CM                                             1SJ50       104
6032         1071                          SHN    -6                                             1SJ50       105
6033         3441                          STD    SC                                             1SJ50       106
6034         1724                          SBN    MXSC                                           1SJ50       107
6035         0651                          PJN    SEJ2         IF INVALID SERVICE CLASS          1SJ50       108
6036         1601                          ADN    MXSC-DSSC                                      1SJ50       109
6037         0467                          ZJN    SEJ3         IF DEADSTART SEQUENCING JOB       1SJ50       110
                                           IFNE   DSSC,MXJC,1                                    1SJ50       111
                                           ADK    DSSC-MXJC                                      1SJ50       112
6040         0612                          PJN    SEJ6         IF NO JCB FOR SERVICE CLASS       1SJ50       113
6041         3054                          LDD    EJ+4                                           1SJ50       114
6042         1277                          LPN    77                                             1SJ50       115
6043         1112                          LMN    TOJS*2                                         1SJ50       116
6044         0504                          NJN    SEJ5         IF NOT TIMED/EVENT                1SJ50       117
6045         3024                          LDD    AA+4                                           1SJ50       118
6046         1127                          LMN    SCFE                                           1SJ50       119
6047         0403                          ZJN    SEJ6         IF WAITING FOR FULL SERVICE CLASS 1SJ50       120
6050         5641 6455               SEJ5  AOM    TJCT,SC      INCREMENT ACTIVE JOB COUNT        1SJ50       121
                                                                                                 1SJ50       122
                                    *      PERFORM SUSPENSION TIME-OUT PROCESSING IF *IAF* IS    1SJ50       123
                                    *      ACCESSIBLE.                                           1SJ50       124
                                                                                                 1SJ50       125
6052         3054                    SEJ6  LDD    EJ+4                                           1SJ50       126
                                    *      UJN    SEJ8         (IF SUSPENSION TIME-OUT DISABLED) 1SJ50       127
                          6052       SEJB  EQU    *-1                                            1SJ50       128
6053         2200 3776                     LPC    3776         MASK JOB/CONNECTION STATUS AND ADVANCE 1SJ50  129
6055         2300 0220                     LMC    SUJS*2+DTCS*200                                1SJ50       130
6057         0526                          NJN    SEJ8         IF NOT DETACHED SUSPENDED JOB OR ROLLING 1SJ50 131
6060         3023                          LDD    AA+3                                           1SJ50       132
6061         3225                          SBD    TM                                             1SJ50       133
6062         0705                          MJN    SEJ7         IF SUSPENSION TIME-OUT            1SJ50       134
6063         0522                          NJN    SEJ8         IF NOT SUSPENSION TIME-OUT        1SJ50       135
6064         3024                          LDD    AA+4                                           1SJ50       136
6065         3226                          SBD    TM+1                                           1SJ50       137
6066         0617                          PJN    SEJ8         IF NOT SUSPENSION TIME-OUT        1SJ50       138
                                                                                                 1SJ50       139
                                    *      SET *STET* ERROR FLAG.                                1SJ50       140
                                                                                                 1SJ50       141
6067         3030                    SEJ7  LDD    BB+1                                           1SJ50       142
6070         0517                          NJN    SEJ9         IF ERROR FLAG ALREADY SET         1SJ50       143
```

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6071          3050                                LDD    EJ           SAVE JSN FOR *CEFM*                     1SJ50       144
6072          3413                                STD    CM+3                                                 1SJ50       145
6073          3051                                LDD    EJ+1                                                 1SJ50       146
6074          3414                                STD    CM+4                                                 1SJ50       147
6075          3034                                LDD    EO           SAVE EJT ORDINAL FOR *CEFM*             1SJ50       148
6076          3412                                STD    CM+2                                                 1SJ50       149
6077          2000 4027                           LDC    STET+4000                                            1SJ50       150
6101          3411                                STD    CM+1                                                 1SJ50       151
6102          1454                                MONITOR  CEFM                                               1SJ50       152
6105          0100 6007                  SEJ8     LJM    SEJ2         CONTINUE EJT SCAN                       1SJ50       153
                                                                                                              1SJ50       154
6107          3050                       SEJ9     LDD    EJ           SET FORCED ROLLIN FLAG                  1SJ50       155
6110          5400 6141                           STM    SEJD+3                                               1SJ50       156
6112          3051                                LDD    EJ+1                                                 1SJ50       157
6113          5400 6142                           STM    SEJD+4                                               1SJ50       158
6115          3034                                LDD    EO                                                   1SJ50       159
6116          1002                                CFI    EJT,,EO      GET EJT ADDRESS                         1SJ50       160
6117          2100 0000                           ADC    **                                                   1SJ50       161
                              6120       SEJC     EQU    *-1                                                  1SJ50       162
6121          3414                                STD    CM+4                                                 1SJ50       163
6122          1063                                SHN    -14                                                  1SJ50       164
6123          3413                                STD    CM+3                                                 1SJ50       165
6124          1402                                LDN    2                                                    1SJ50       166
6125          3411                                STD    CM+1                                                 1SJ50       167
6126          3077                                LDD    MA                                                   1SJ50       168
6127          6311 6136                           CWM    SEJD,CM+1                                            1SJ50       169
6131          2000 0115                           MONITOR  UTEM                                               1SJ50       170
6135          0347                                UJN    SEJ8         CONTINUE EJT SCAN                       1SJ50       171
                                                                                                              1SJ50       172
                                                                                                              1SJ50       173
6136          4030                       SEJD     VFD    6/40+JSNE,6/24D,6/36D,42/0                           1SJ50       174
6137          4400
6140          0000
6141          0000
6142          0000
6143          0301                                VFD    6/SCLE,6/1,6/52D,42/1                                1SJ50       175
6144          6400
6145          0000
6146          0000
6147          0001
                                                                                                              1SJ50       176
                               305                ERRNG  TJCT-*       OVERFLOW INTO *TJCT*                    1SJ50       177
                                                                                                              1SJ50       178


                                         *        *3SB* TABLE DEFINITIONS.                                    271L716     541
                                                                                                              1SJ        3805
                                                                                                              1SJ        3806
                                23       TJCTL    EQU    MXJC*1       LENGTH OF *TJCT* TABLE                  NS2437       13
                                20       TIOOL    EQU    20           NUMBER OF *TIOO* TABLE ENTRIES          NS2437A       1
                               322       THLDL    EQU    MXHLD*2      LENGTH OF *THLD* TABLE                  NS2437       15
                                                                                                              NS2437       16
                                                                                                              NS2437       18
6150                                     BEGIN    BSSN   TJAM-TJCTL-TIOOL*3-THLDL  BEGINNING OF TABLES        NS2437A       2
```

```
                                *       TIOO - SCHEDULABLE QFT ENTRIES.                                 1SJ       3818
                                *       ENTRY = 3 WORDS.                                                1SJ       3819
                                *                                                                       1SJ       3820
                                *T      12/ IO,12/ QP,12/ SC                                            1SJ       3821
                                *       IO     QFT ORDINAL                                              1SJ       3822
                                *       QP     QUEUE PRIORITY.                                          1SJ       3823
                                *       SC     SERVICE CLASS.                                           1SJ       3824
                                                                                                        1SJ       3825
                                                                                                        1SJ       3826
        L 6053                   TIOO   BSSN   TIOOL*3                                                 NS2437A      3


                                **      THLD - SCHEDULABLE HOST LID-S.                                  NS2437      27
                                *       ENTRY = 2 WORDS.                                                NS21000    129
                                *                                                                       NS21000    130
                                *T      18/ LID, 6/ 0                                                   NS21000    131
                                *       LID    MAINFRAME LOGICAL ID.                                    NS21000    132
                                                                                                        NS21000    133
                                                                                                        NS21000    134
        L 6133                   THLD   BSSN   THLDL                                                  NS2437      28
                                                                                                        NS2437      29
                                                                                                        NS2437      30


                                **      TJCT - JOB COUNTS.                                              1SJ50     180
                                *       ENTRY = 1 WORD.                                                 1SJ50     181
                                *       INDEXED BY SERVICE CLASS.                                       1SJ50     182
                                *                                                                       1SJ50     183
                                *T      12/ CT                                                          1SJ50     184
                                *                                                                       1SJ50     185
                                *       CT     NUMBER OF EXECUTING JOBS (JOBS ASSIGNED TO EJT)          1SJ50     186
                                *              IN SERVICE CLASS.                                        1SJ50     187
                                                                                                        1SJ50     188
                                                                                                        1SJ50     189
        L 6455                     TJCT   BSSN   TJCTL                                                  1SJ50     190
        L 6500                     TTEND  BSSN   0           END OF LAST TABLE                          NS2437      31
        L 6500                     END    BSSN                                                          NS2437      32


                                *       OVERFLOW CHECKS.                                                1SJ       3830
                                                                                                        1SJ       3831
                                                                                                        1SJ       3832
                          0             ERRNZ  TJAM-TTEND  TABLE OVERFLOW                               NS2437      35
```

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                                    OVERFLOW O3SB,TJAM                                                  271L716    542

                                                                                                        OVERFLOW.1
                          225       ERRNG  .2-.1+5-.3/500B*500B   BYTES LEFT AFTER LAST SECTOR        OVERFLOW.1
                          103       ERRNG  .3/500B*500B-*+.1-5    BYTES LEFT IN LAST SECTOR           OVERFLOW.1
                          103       ERRNG  .4/500B*500B-*+.1-5    BYTES CAN BE ADDED TO OVERLAY       OVERFLOW.1
                            3       ERRNG  .3/500B                SECTORS NEEDED FOR OVERLAY          OVERFLOW.1
                                                                                                        OVERFLOW.1
                                    LIST   *                                                            OVERFLOW.1
```

```
6150                                END                                                                 1SJ       3839

                      76200B CM  STORAGE USED          16454 STATEMENTS     4233 SYMBOLS      000106 INVENTED SYMBOLS
                        PARALLEL CPU ASSEMBLY          7.075 SECONDS        3241 REFERENCES
```

SYMBOLIC REFERENCE TABLE.

```
AA              20                  16/06 D   27/44 S   31/26     45/09 S   50/19     77/46 S   80/34 S   94/30
                                    24/42 S   27/46 S   31/29     45/20     50/21     77/47     81/15     94/36
                                    26/23     27/50 S   31/42     46/55     50/23     77/55 S   84/24 S   94/43
                                    26/43 S   27/52     31/44     47/01     62/18 S   77/56     84/25     94/45
                                    26/54     29/49 S   31/47     48/48 S   62/25     78/01 S   86/01     96/53 S
                                    26/56     30/03     40/57     48/49 S   62/27     78/05     93/50 S   97/32
                                    27/09 S   30/18     44/47 S   48/51 S   62/29     79/34 S   93/53     97/46
                                    27/11 S   30/20     44/49 S   49/45 S   62/31     80/13 S   94/08 S   97/50
                                    27/14     30/38 S   45/05     49/47 S   66/52 S   80/21 S   94/13
                                    27/18 S   31/24     45/07     50/18 S   67/08     80/32 S   94/29 S
ACML            22    NOSTEXT       21/29
ADCI          2100                  61/20
AE              42                  16/14 D   21/31     21/41 S   34/52     35/05     42/24 S   47/39     51/10
AFCS            72                   7/37 D   75/51
AFFL            40    NOSTEXT       80/35
AM              37                  16/12 D   21/36 S   34/48     42/20 S   47/33     67/30
                                    21/30 S   21/39 S   35/01     42/22 S   51/06     67/33
                                    21/31     34/46     35/03     47/31     51/08
ARET             3    NOSTEXT       52/45     52/45
ASJ           1257                  22/48     24/26 D   67/47
ASJA          1303                  24/46 D   41/29     50/50 S
ASJB          1474                  26/31 D   46/26 S
ASJC          1531                  26/21 S   27/08 D
ASJX          1256                  24/26 L   24/34     25/08     28/03
ASJ10         1500                  26/33     26/41 L
ASJ10.1       1530                  26/53     27/07 L
ASJ10.2       1532                  27/05     27/09 L
ASJ11         1556                  27/22     27/26 L
ASJ11.1       1602                  27/34     27/39 L
ASJ12         1612                  27/28     27/31     27/38     27/44 L
ASJ13         1615                  27/24     27/46 L
```

SYMBOLIC REFERENCE TABLE.

ASJ2.1	1316		24/51	24/56 L						
ASJ3	1321		24/49	25/01 L	25/21					
ASJ5	1336		24/57	25/12 L						
ASJ5.1	1345		25/17 L							
ASJ6	1355		25/13	25/16	25/23 L					
ASJ6.1	1404		25/33	25/43 L						
ASJ7	1452		26/03	26/07	26/12	26/16 L				
ASJ8	1461		25/54	26/21 L						
ASSI	7753		10/35 D							
ATCS	72		7/49 D	75/55						
ATSI	7747		10/39 D							
BB	27		16/08 D	25/57 S	45/19 S	47/30 S	49/06	51/20	79/38 S	85/06
			24/44 S	26/15 S	45/21 S	47/34	49/09	51/23	79/45	85/22 S
			24/52	26/19 S	45/40	47/40	49/33	51/31	80/02	85/23
			24/54	26/25	45/56	47/45	49/54	62/22 S	80/14 S	94/10 S
			25/35 S	26/45 S	46/15 S	48/07	50/27	62/35	80/36 S	94/16
			25/38	26/47 S	46/17 S	48/12	50/30 S	62/37	80/46	96/55 S
			25/40	27/16	47/08 S	48/15	50/33	62/39	81/19	97/56
			25/45 S	29/51 S	47/14 S	48/21	50/36 S	65/05 S	84/22 S	
			25/48 S	29/52	47/15	48/23	50/37	77/44 S	84/51	
			25/50 S	45/13 S	47/27 S	48/25	50/41	77/48	84/53	
			25/52 S	45/14	47/28 S	48/27	50/44 S	77/51	85/03	
BCSC	2		67/45							
BFMS	6776	NOSTEXT	18/23							
BICS	0		7/22 D	75/45						
BISI	7761		10/29 D							
BST	1642		21/25	28/30 D						
BSTA	2157		30/11 S	32/16 D	32/18					
BSTB	1673		28/57 D	61/24 S						
BSTX	1641		28/30 L	29/01						
BST1	1645		28/36 L	28/41						
BST10	2101		31/12	31/19 L						
BST11	2124		31/25	31/31	31/32	31/42 L				
BST12	2130		31/23	31/28	31/46 L					
BST13	2140		31/40	32/02 L						
BST14	2156		32/15 L							
BST14.1	2162		31/43	31/46	31/49	31/50	32/18 L			
BST15	2170		32/25 L	32/31						
BST16	2203		32/38 L	32/42						
BST17	2211		32/27	32/48 L						
BST18	2216		32/19	32/53 L						
BST2	1666		28/52 L	28/54	29/42	31/03	32/53			
BST4	1737		29/37	29/40 L						
BST5	1742		29/35	29/39	29/42 L					
BST6	1744		29/32	29/44 L						
BST7	1765		29/57	30/03 L						
BST8	1777		30/07	30/11 L						
BST8.1	2023		30/15	30/32 L						
BST8.2	2035		30/17	30/41 L						
BST8.3	2047		30/46	30/49 L						
BST8.4	2052		30/44	30/48	30/51 L					
BST8.5	2063		30/53	31/03 L	31/20					
BST9	2065		30/41	31/10 L						
CCA	2223		29/03	29/26	30/34	33/12 D				
CCAA	2230		33/17 L	61/18 S	61/21 S					
CCAM	52	NOSTEXT	24/32	25/06	28/01					
CCAX	2222		33/12 L	33/18						

SYMBOLIC REFERENCE TABLE.

	CCA1	2220		33/09 L	33/14	33/15						
	CCP	2234		29/38	30/47	33/31 D	41/35	41/40	42/13	42/26	47/53	
	CCPX	2233		33/31 L	33/33	33/36						
	CDSI	7766		10/24 D								
	CEFM	54	NOSTEXT	65/39	98/09							
U	CET$			60/15 F								
	CFL	2257		22/04	22/46	34/45 D	67/26					
	CFLA	2314		21/56 S	35/25 D	37/02	38/52 S					
	CFLB	2453		37/01 L	38/51							
	CFLC	2313		22/03 S	35/22 D							
	CFLX	2256		34/35	34/45 L	34/55	35/44					
	CFL0	2272		34/51	34/56 L							
	CFL1	2302		35/12 L	35/17	35/20	35/23	35/29	35/36	37/03		
	CFL10	2440		36/31	36/48 L							
	CFL11	2242		34/33 L	34/37	34/42	36/10					
	CFL2	2333		35/14	35/38 L							
	CFL3	2341		35/44 L	35/53							
	CFL4	2343		35/42	35/46 L							
	CFL5	2353		35/51	35/55 L							
	CFL6	2361		36/07 L	36/13	36/21	36/27	36/56				
	CFL7	2364		36/01	36/10 L							
	CFL8	2366		36/09	36/12 L							
	CFL9	2401		36/21 L	36/36	36/42						
	CHGM	21	NOSTEXT	94/55								
	CM	10	NOSTEXT	22/07 S	30/08	40/04	54/16	62/02	73/53 S	84/05 S	94/22 S	
				22/12 S	30/10	40/08 S	57/49 S	62/07	73/55 S	84/06	94/52 S	
				23/02 S	30/36 S	40/10 S	58/03	62/20 S	73/57	84/12	94/54 S	
				23/04 S	30/39	40/11	58/05	62/33	74/02	84/20 S	95/04 S	
				23/06	30/51	40/14	58/07	65/32 S	78/11 S	85/15	95/05	
				24/29 S	36/22 S	40/16	58/10 S	65/34 S	78/13 S	85/17	95/08	
				24/31 S	36/24 S	40/18 S	58/11 S	65/36 S	78/40 S	89/49 S	95/11 S	
				24/33	36/28 S	40/20 S	58/12	65/38 S	78/45 S	90/03	95/14 S	
				25/02 S	36/37 S	40/22	58/15 S	65/41 S	78/54 S	90/05	95/15	
				25/05 S	36/39 S	40/47 S	58/17	65/43	78/56	90/07	96/57 S	
				25/24 S	36/44	40/49 S	58/19 S	65/45	79/24 S	90/10 S	97/10 S	
				25/26 S	36/46	40/56 S	58/22	66/54 S	79/26 S	90/11 S	97/11 S	
				25/28	36/48	41/01 S	58/24	66/55	79/36 S	90/12	97/13 S	
				25/37 S	36/50	41/03	61/13 S	67/05 S	79/39	90/15 S	97/18	
				25/42	36/52	43/36 S	61/14	67/20	80/42 S	90/17	98/02 S	
				25/46 S	37/30 S	43/37	61/16	67/41 S	80/45 S	90/19 S	98/04 S	
				26/05 S	37/31	45/11 S	61/22	67/42	80/48 S	90/22	98/06 S	
				26/27	37/34	45/22	61/26 S	72/25 S	80/50 S	90/24	98/08 S	
				27/54 S	37/37 S	45/37	61/27	72/26	80/52	91/52 S	98/20 S	
				27/57 S	37/38	45/43	61/30	72/28	80/55 S	91/53	98/22 S	
				29/05 S	39/16 S	45/46	61/34 S	72/39 S	81/01 S	92/02	98/24 S	
				29/11	39/19 S	46/34	61/37 S	72/40	81/05 S	92/11 S	98/26	
				29/12	39/24	47/09	61/38	73/46 S	81/09 S	92/12 S		
				29/28 S	39/55 S	49/02	61/49 S	73/47	81/17	92/13		
				30/02 S	40/01 S	54/13 S	61/50	73/49	81/26 S	92/18		
				30/05	40/03 S	54/14	62/01 S	73/51 S	81/28 S	94/12 S		
	CP	74	NOSTEXT	26/22	61/45							
	CPET	7	NOSTEXT	52/49	52/49							
	CPR	4241		27/04	30/25	60/13 D						
	CPR$	1		55/29 D	56/31 F	60/12 F						
	CPSS	7140		66/23	66/31 S							
	CS	57		16/20 D	32/06 S	36/34	36/47 S	50/22 S				
				32/04 S	36/32	36/45 S	50/20 S					

SYMBOLIC REFERENCE TABLE.

CSCS	74		8/01 D								
CSJT	7	NOSTEXT	25/36								
CWQW	21	NOSTEXT	26/24	26/26							
CZCS	72		7/38 D	75/41							
C1CS	72		7/50 D	75/56							
C1SI	7746		10/40 D								
DALL	12	NOSTEXT	37/36								
DDA	2457		22/21	37/20 D							
DDAX	2456		37/20 L								
DDA1	2464		37/25 L	37/33	37/40						
DDA2	2454		37/18 L	37/27							
DISC	5		85/56								
DLER	15		6/08 L								
DNFL	5	NOSTEXT	80/35								
DOJS	7		4/35 D	53/44	53/44						
DPPM	61	NOSTEXT	22/57								
DRET	37	NOSTEXT	53/03	53/03							
DSSC	23		22/31	57/41	78/49	84/33	89/43	91/48	97/25 F		
			48/01	57/43	78/51	84/36	89/44	91/49			
			50/54	57/44	84/31	89/41	91/46	97/23			
DSSI	7777		10/15 D								
DTCS	1		5/05 D	45/35	97/44						
DTEJ	1		5/29 L								
EATM	62	NOSTEXT	78/14	97/14							
ECET	30	NOSTEXT	53/10	53/10							
ECSW	25	NOSTEXT	29/06								
EICS	72		7/43 D								
EJ	50		16/19 D	29/30 S	31/19	45/30	65/01 S	79/49	97/28	98/14	
			24/40 S	29/31	40/50	50/49	65/06	80/11 S	97/40		
			24/47	29/47 S	44/46 S	62/24 S	65/31	81/21	98/01		
			26/48	30/12	44/50	62/41	65/33	96/51 S	98/03		
			27/19	30/32 S	44/52	62/43	79/32 S	97/01	98/12		
EJA	2507		24/38	27/12	37/54 D	64/56	67/39	81/13			
			26/41	29/45	40/25	67/03	68/41				
EJAA	2513		37/57 D	61/28 S	61/31 S	96/39	96/42				
EJAX	2506		37/54 L	38/01							
EJJE	4		97/12								
EJPB	7		5/42 D								
EJTE	4	NOSTEXT	37/55	44/42	96/47	98/17					
EJTP	74	NOSTEXT	61/25								
ENEJ	2		5/30 L								
ENER	11		6/04 L								
ENTQ	1	NOSTEXT	79/33	79/35	84/19	84/21					
EO	34		16/09 D	27/39	43/56 S	65/35	79/18	85/46	98/05		
			22/29 S	29/44 S	44/04 S	67/02 S	79/22	86/25	98/16		
			24/30	32/11	44/42	67/07 S	81/30 S	96/46 S	98/17		
			25/25	37/55	46/25	78/41 S	84/17 S	96/47			
			26/32	43/48 S	50/45	79/06 S	85/34 S	97/04 S			
EP	67		16/27 D	22/27	32/12 S	38/22 S	38/45	44/08	50/46 S	67/06	
EQDE	0	NOSTEXT	37/29								
ERER	7		6/02 L								
ERJS	12		4/41 D	53/47	53/47						
ES	47		16/18 D	32/03 S	36/40	36/43 S	50/24 S				
ESMX	1000	NOSTEXT	17/28								
ESTP	72	NOSTEXT	37/21								
EXJS	1		4/29 D	30/14	30/16	53/38	53/38				
EXQT	1	NOSTEXT	27/03	30/24	62/17	62/19	80/29				

SYMBOLIC REFERENCE TABLE.

EXR	462	NOSTEXT	21/16	22/39						
FJEJ	3		5/31 L							
FLET	16	NOSTEXT	52/53	52/53						
FLIW	65	NOSTEXT	30/37							
FLSW	23	NOSTEXT	29/04	29/06						
FSET	22	NOSTEXT	52/56	52/56						
FTN	165	NOSTEXT	22/13	25/03	28/01	41/02	68/49	78/14	80/51	97/14
			22/57	25/06	39/23	65/39	72/36	78/55	81/29	98/09
			24/32	27/55	40/21	65/42	74/01	79/27	94/55	98/27
FZSI	4		10/45 D							
HEER	12		6/05 L							
HN	71	NOSTEXT	68/46	84/41	86/42					
HNGM	22	NOSTEXT	72/36							
IACS	76		8/15 D	75/33						
IAOT	3	NOSTEXT	80/04	86/03						
IDCS	1		7/25 D							
IDET	25	NOSTEXT	53/01	53/01						
IEER	1		5/53 L							
IFSI	7776		10/16 D	93/28						
INQF	0		79/50	84/13						
INQT	0	NOSTEXT	85/37							
INSQ	2	NOSTEXT	79/35	79/37	84/21	84/23				
INT	2522		21/20	38/18 D						
INTX	2521		38/18 L	38/57						
INT1	2515		38/15 L	38/29						
INWL	124	NOSTEXT	61/48							
IO	35		16/10 D	81/25	83/57	84/08 S	87/01			
			79/08 S	83/11	84/01	86/21	95/12 S			
IOER	3		5/55 L							
IOJS	6		4/34 D	53/43	53/43					
IPER	5		5/57 L							
IR	50	NOSTEXT	61/43							
IRR	2621		34/41	39/15 D	42/34	67/23				
IRRX	2620		39/15 L	39/25						
IRSI	1		10/47 D							
ISCS	75		8/09 D							
ISER	2		5/54 L							
ITET	4	NOSTEXT	52/46	52/46						
IUT	2642		39/51 D	49/15	65/48	67/16	79/12	79/54		
IUTA	2663		40/05 S	40/07 D						
IUTB	2673		39/52 S	40/15 D						
IUTC	2710		40/04	40/25 L						
IUTX	2641		39/51 L	40/23						
IUT1	2674		40/12	40/16 L						
I1CS	72		7/51 D	75/35						
I1SI	7774		10/18 D							
I2CS	72		7/52 D	75/36						
I2SI	7773		10/19 D							
JACM	63	NOSTEXT	25/03							
JC	63		16/23 D	22/11	27/10	32/10 S	38/21 S	66/49 S		
			21/47	24/27	27/49	35/16	41/26 S	67/22		
JCBE	14	NOSTEXT	25/51							
JCIW	26	NOSTEXT	26/26	26/28	29/27	29/29	66/51	66/53		
JCTT	12	NOSTEXT	77/45	78/04	85/21					
JDER	13		6/06 L							
JE	65		16/25 D	24/53 S	25/12	31/39 S	31/56 S	34/53	35/50	50/38 S
JFER	6		6/01 L							

SYMBOLIC REFERENCE TABLE.

JM	64		16/24	D	24/55	S	26/46	32/01	S	35/41	50/34	S			
			24/50		26/34	S	31/37	S 34/49		50/31	67/35				
JOER	22		6/13	L											
JP	62		16/22	D	32/08	S	38/20	S 47/46		50/28	S				
			31/22		35/18		42/10	50/25		67/19					
JSCL	43	NOSTEXT	23/01		23/05										
JSET	41	NOSTEXT	53/12		53/12										
JSNE	0	NOSTEXT	24/39		29/46		44/45	52/25		64/57	67/52		81/20	96/52	
			24/41		29/48		45/08	52/30		65/02	68/09		96/50	98/31	
JSNQ	0	NOSTEXT	79/31		79/33		84/04								
JS0S	0	NOSTEXT	38/16	S	43/46	S	54/12	55/07	S	55/11	S 55/19				
			43/44	S	54/10		54/17	55/09	S	55/13	55/20				
JS1S	1	NOSTEXT	39/20	S	39/22	S	54/34	S 54/36	S						
JS2S	2	NOSTEXT	54/40	S	54/42	S	54/48	S 54/50	S						
JS3S	3	NOSTEXT	54/10		54/12		54/54	S 54/56	S	55/02	S 55/04	S	55/20		
LCCS	76		8/11	D											
LDDI	3000		38/45		38/49										
LDRC	1		6/25	L											
LIDP	140	NOSTEXT	93/45												
LJCS	2		7/27	D											
LJMI	100		84/40												
LMNI	1100		83/45												
LOSL	112	NOSTEXT	25/23		25/27		61/36								
LSCS	70		7/31	D	25/47										
LSSI	7745		10/41	D	10/43		11/01	26/06		27/30					
LTCS	72		7/41	D											
MA	77	NOSTEXT	27/51		40/13		73/56	78/42		98/25					
MAER	4		5/56	L											
MCCS	72		7/39	D	75/42										
MCMT	4	NOSTEXT	62/21		62/23										
MCSI	7765		10/25	D											
MCTP	134	NOSTEXT	61/23												
MECT	5	NOSTEXT	62/23												
MFCS	72		7/36	D	75/43		75/48								
MFSI	7763		10/27	D											
MLCS	74		7/55	D	75/40										
MLET	14	NOSTEXT	52/51		52/51										
MNFL	12	NOSTEXT	46/14		49/05										
MPCS	72		7/45	D	75/38										
MPRS	100	NOSTEXT	8/19	D											
MPSI	7771		10/21	D											
MRCS	76		8/14	D											
MSCS	0		7/23	D											
MSSI	7756		10/32	D											
MTCS	76		8/12	D	75/46										
MTRM	66	NOSTEXT	78/55		79/27		81/29								
MTSI	7760		10/30	D											
MVCS	75		8/06	D											
MXCS	3		5/08	D											
MXDT	7		6/31	L											
MXEJ	11		5/37	L											
MXET	47	NOSTEXT	45/44		53/17										
MXHLD	151	NOSTEXT	98/53												

SYMBOLIC REFERENCE TABLE.

MXJC	23		17/42	28/38 S	47/04	49/28	62/14	62/38 S	80/25	
			18/23	31/11	47/07	49/31	62/28 S	62/40 S	93/35	
			18/44	31/14 S	48/55	49/32	62/30 S	62/42 S	97/25 F	
			26/20	46/42	49/04	49/52	62/32 S	62/44 S	98/51	
			28/34	46/52	49/08	60/43	62/36 S	77/38		
MXJS	16		4/45 D	53/52						
MXPR	7777		15/18 D	45/17	45/18					
MXSC	24		97/21	97/23						
MXSI	7776		10/16 D	10/43	11/01	26/08				
NC	66		16/26 D	27/56	28/55	30/43	33/13	42/07	66/28	
			25/04	28/53	29/34	33/09	33/35	61/47 S	66/48	
NDER	10		6/03 L							
NICS	0		5/04 D	80/07						
NJCS	72		7/48 D	75/53						
NJSI	7751		10/37 D							
NMCS	77		8/17 D	75/39						
NMSI	7770		10/22 D							
NOER	0		5/52 L							
NOPE	5	NOSTEXT	37/23							
NRER	14		6/07 L							
NSCS	74		7/57 D							
NSER	17		6/10 L							
NTER	16		6/09 L							
NVCS	74		8/02 D							
NVJS	13		4/42 D	53/48	53/48					
NVSI	7767		10/23 D							
ODET	24	NOSTEXT	45/38	52/57	52/57					
OKET	35	NOSTEXT	53/05	53/05						
OLCS	2		5/06 D	45/33	45/35	80/07	80/08			
ON	70	NOSTEXT	72/30	78/43						
ORET	46	NOSTEXT	47/12	53/16	53/16					
ORSI	3		10/46 D							
O3SA	4360		60/34 D	64/01	64/06	76/10				
O3SB	4360		60/35 D	77/01	77/06	100/01				
PCET	10	NOSTEXT	52/50	52/50						
PCJS	11		4/37 D	30/16	41/31	47/50	53/46			
			26/52	40/53	47/21	53/46				
PCPP	134	NOSTEXT	61/12	61/23						
PDRC	5		6/29 L							
PEET	44	NOSTEXT	53/11	53/11						
PFCS	72		7/46 D							
PIDL	6		6/30 L							
PLCS	74		8/04 D	75/54						
PLSI	7750		10/38 D	27/32						
PPAL	52	NOSTEXT	43/35							
PPET	6	NOSTEXT	52/48	52/48						
PPFW	1100	NOSTEXT	21/04	63/15						
PPR	257	NOSTEXT	23/07							
PRCS	75		8/08 D							
PRFE	2	NOSTEXT	45/10	45/12	65/04	67/40	81/16	81/18	96/54	96/56
PRJS	0		4/28 D	53/37	65/08	80/10				
PRS	4354		21/07	61/11 D						
PRSA	4555		62/05	62/51 L						
PRSB	4556		61/55	62/56 L						
PRSX	4353		61/11 L	62/49						
PRS0	4455		61/54	61/57 L						
PRS0.1	4466		62/04	62/07 L						

SYMBOLIC REFERENCE TABLE.

	PRS1	4475		62/09	62/14 L						
	PRS2	4477		62/16 L	62/47						
	PRS3	4553		62/46	62/49 L						
	PSET	5	NOSTEXT	52/47	52/47						
	PSNI	77		21/55	22/02						
	PWJS	14		4/43 D	53/49	53/49	68/13				
	QFCS	71		7/34 D							
	QFTE	4	NOSTEXT	83/11	84/01						
	QFTP	75	NOSTEXT	95/03							
U	QUAL$			56/06 F	60/10 F						
	RAET	40	NOSTEXT	53/14	53/14						
	RBCS	72		7/40 D	75/44						
	RBSI	7762		10/28 D							
	RCEJ	4		5/32 L							
	RCJS	11		4/39 D							
	RDSI	7764		10/26 D							
	RE	46		16/17 D	21/40	31/02 S	38/25 S				
	REER	24		6/15 L							
	RFCS	74		7/56 D	75/34						
	RFSI	7775		10/17 D							
	RJC	4332		25/32	57/45	62/16	77/42	78/03	85/20	89/45	91/50
	RJSM	74	NOSTEXT	65/42							
	RM	44		16/16 D	21/38	30/57 S	38/24 S	67/34			
				21/35	30/55 S	38/23 S	67/31				
	ROCM	76	NOSTEXT	39/23							
	ROJS	2		4/30 D	53/39	53/39					
	RPPM	100	NOSTEXT	27/55							
	RRET	34	NOSTEXT	53/02	53/02						
	RSEJ	5		5/33 L							
	RST	2713		24/56	25/15	25/18	25/20	40/46 D			
	RSTM	17	NOSTEXT	41/02							
	RSTX	2712		40/46 L	41/04						
	RST1	2731		40/54	41/02 L						
	RTCL	106	NOSTEXT	38/26	58/09	61/41	90/09	92/10			
	RTEJ	6		5/34 L							
	RTER	20		6/11 L							
	RXCS	75		8/07 D							
	SAEJ	7		5/35 L							
	SARC	3		6/27 L							
	SC	41		16/13 D	31/18	47/03	49/08	49/53	80/17	85/19	86/26
				29/55 S	32/13	47/04	49/28	50/47	80/25	85/35	86/57
				30/22	38/49	47/07	49/29	51/34	80/27	85/52	87/05
				31/10	45/16 S	47/57	49/31	79/10 S	82/38	85/53	97/20 S
				31/14	46/41	48/52	49/32	79/14	84/27 S	85/55	97/35
				31/16	46/52	49/04	49/52	79/47	84/35	86/23	
	SCCS	71		7/33 D							
	SCFE	27		78/12	97/33						
	SCHE	1	NOSTEXT	24/41	26/44	29/48	45/10	67/04	81/16		
				24/43	27/13	29/50	65/02	68/03	96/52		
				26/42	27/15	45/08	65/04	81/14	96/54		
	SCJ	1100		1/47	21/06 L						
	SCJA	1102		21/10 D	61/44 S						
	SCJB	1104		21/13 D	22/18	22/33	61/52 S				
	SCJC	1233		22/51 D	38/28	38/34 S	43/41 S				
	SCJD	1151		21/57	22/09 D	32/17 S					
	SCJ1	1113		21/11	21/15	21/20 L	22/14	22/53			
	SCJ10	1237		22/40	22/44	22/47	22/55 L				

SYMBOLIC REFERENCE TABLE.

SCJ11	1242		22/16	22/52	22/57 L			
SCJ12	1254		22/41	23/07 L				
SCJ2	1143		22/01	22/04 L				
SCJ3	1162		22/05	22/06	22/10	22/16 L	22/20	
SCJ4	1164		21/48	22/18 L				
SCJ5	1211		22/32	22/39 L				
SCJ6	1217		22/38	22/43 L				
SCJ7	1221		22/28	22/44 L				
SCJ8	1225		22/35	22/47 L				
SCJ9	1235		22/45	22/53 L				
SCLE	3	NOSTEXT	24/43	27/15	45/12	81/20	98/36	
			26/44	29/50	81/18	96/56		
SCLQ	3	NOSTEXT	79/37	84/23				
SCP	2741		22/43	41/28 D	66/34			
SCPA	2773		29/36	38/38 S	41/37 S	44/24	54/57	
			29/41 S	41/34	41/45 D	47/52		
SCPB	2776		30/45	30/50 S	38/39 S	41/39	41/42 S	41/48 D
SCPC	3007		41/38 S	41/43 S	41/57 D			
SCPX	2740		41/28 L	42/04				
SCP1	2761		41/36	41/39 L				
SCP2	2772		41/33	41/41	41/44 L			
SCP3	3004		41/52 L	42/08	42/16			
SCP3.1	3007		41/55 L	42/11				
SCP3.2	3014		42/01	42/04 L				
SCP3.3	3016		41/54	42/06 L				
SCP4	3033		42/14	42/17 L				
SCP5	3053		42/27	42/32 L				
SCP6	3055		42/30	42/33 L				
SCP7	3060		42/35 L					
SCP8	2736		41/25 L	41/49	42/35			
SCP9	2737		41/26 L	41/46				
SDAP	102	NOSTEXT	54/12					
SFER	21		6/12 L					
SFJ	3102		22/26	43/43 D				
SFJA	4004		43/47	43/53 S	44/03 S	52/01 L	61/39 S	
SFJB	3131		38/46 S	44/10 D	44/33 S	52/04	54/37	
SFJC	3132		38/54 S	44/13 D	50/13 S	52/14	52/19	
SFJD	3170		44/44 D	61/29 S	61/33 S			
SFJE	3356		46/53 S	47/02 L				
SFJF	3370		47/11 D	62/06 S	62/52			
SFJG	3461		38/43 S	48/06 D	50/39	50/42 S		
SFJH	3530		38/48 S	44/35 S	48/43 D			
SFJI	3536		38/50 S	44/37 S	48/54 D	52/09		
SFJJ	3626		50/03 D	50/52 S	51/05 S			
SFJK	3467		38/40 S	48/11 D	48/24 S			
SFJL	3502		38/41 S	48/20 D	48/28 S			
SFJM	3063		38/44 S	43/29 D	48/16	48/26 S		
SFJN	4005		44/32	52/03 L	54/38			
SFJO	4006		44/36	52/08 L				
SFJP	4007		50/12	52/13 L				
SFJQ	4010		38/53	52/18 L				
SFJR	3115		38/56 S	43/55 D	46/27	46/28	46/29 S	
SFJS	3122		44/02 D	61/35 S	96/45			
SFJT	3127		44/06 D	61/40 S				
SFJU	4011		45/04 S	49/14	52/25 L			
SFJV	3267		45/47 L	61/56 S	62/57			
SFJW	3133		44/26 D	62/10	62/10 S			

SYMBOLIC REFERENCE TABLE.

SFJX	3101	43/31	43/40	44/27	46/28	62/10	
		43/38	43/43 L	46/27	50/55		
SFJY	3405	42/02 S	47/25 D				
SFJ10	3325	46/03	46/06	46/34 L			
SFJ10.1	3326	46/35 L					
SFJ10.2	3333	46/39 L					
SFJ10.3	3335	46/38	46/41 L				
SFJ10.5	3336	46/42 L					
SFJ11	3337	46/35	46/43 L				
SFJ11.1	3365	47/05	47/07 L				
SFJ12	3370	46/07	46/43	46/46	47/09 L		
SFJ12.1	3374	47/13	47/15 L				
SFJ12.2	3400	47/16	47/19 L	62/53			
SFJ12.3	3415	47/22	47/31 L				
SFJ12.4	3426	47/37	47/39 L				
SFJ12.5	3435	46/30	47/41	47/45 L			
SFJ12.6	3453	47/51	47/57 L				
SFJ13	3456	48/03 L					
SFJ13.0	3460	48/02	48/05 L				
SFJ13.1	3465	47/48	47/54	48/09 L			
SFJ13.2	3466	47/47	48/08	48/10 L	50/56		
SFJ13.3	3472	48/14 L					
SFJ13.4	3505	48/13	48/17	48/23 L			
SFJ14	3517	48/14	48/18	48/22	48/29 L	49/13	
SFJ15	3521	48/09	48/35 L				
SFJ15.1	3522	48/03	48/36 L				
SFJ16	3527	48/41 L					
SFJ18	3531	48/40	48/47 L	51/25			
SFJ19	3541	48/57 L	49/03	52/10			
SFJ2	3115	43/53 L	44/38	45/52	47/17	47/55	51/27
		44/34	44/55	46/39	47/26	48/29	
SFJ20	3543	48/56	49/02 L				
SFJ21	3556	49/07	49/11 L				
SFJ21.2	3572	49/10	49/28 L				
SFJ22	3615	49/34	49/52 L				
SFJ23	3625	49/39	50/01 L				
SFJ24	3627	49/16	50/12 L	51/04			
SFJ25	3635	49/57	50/18 L				
SFJ26	3636	48/57	49/55	50/19 L			
SFJ27	3703	50/14	50/51 L				
SFJ29	3716	38/47	48/41	50/01	50/51	51/04 L	
SFJ2.1	3126	43/57	44/05 L				
SFJ2.2	3163	44/11	44/40 L	52/05	52/15	52/20	
SFJ3	3165	43/49	44/07	44/42 L			
SFJ30	3732	51/14 L	51/32	51/56			
SFJ30.1	3747	51/21	51/24	51/27 L			
SFJ31	3751	51/16	51/29 L				
SFJ32	3772	51/35	51/50 L				
SFJ33	3062	43/28 L	44/40				
SFJ34	3077	43/34	43/41 L				
SFJ4	3202	44/51	44/55 L	45/01			
SFJ5	3204	44/54	44/57 L				
SFJ5.1	3262	45/29	45/36	45/39	45/43 L		
SFJ6	3273	45/26	45/34	45/42	45/45	45/47	45/52 L 46/01 63/01
SFJ7	3275	45/23	45/56 L	53/06	53/07		

SYMBOLIC REFERENCE TABLE.

SFJ8	3306		46/07 L	52/47	52/50	52/53	52/56	53/02	53/09		
			52/45	52/48	52/51	52/54	52/57	53/04	53/10		
			52/46	52/49	52/52	52/55	53/01	53/05	53/11		
SFJ9	3310		46/14 L	53/03	53/08	53/12	53/13	53/14	53/15	53/16	
SFLM	10	NOSTEXT	22/13								
SHNI	1000		46/51	58/02	90/02	91/55					
SIJS	3		4/31 D	46/45	53/40	53/40					
SISS	7137		26/04	27/29	27/35	65/19	65/57	66/13	67/12		
			26/09	27/33	27/41	65/23 S	66/09	66/17			
SMCS	72		7/44 D	75/49							
SMSI	7755		10/33 D								
SOJS	4		4/32 D	53/41	53/41						
SOMI	5700		38/55								
SP	61		16/21 D	22/36	26/01	27/01	32/14 S	50/48 S	67/46 S		
			22/30	25/31	26/20	27/26	36/30	50/53			
SPST	4213		38/16 S	43/44 S	54/36 S	54/48 S	54/56 S	55/07 S	55/13		
			39/20 S	43/46 S	54/40 S	54/50 S	55/02 S	55/09 S	55/19 D		
			39/22 S	54/34 S	54/42 S	54/54 S	55/04 S	55/11 S			
SRET	20	NOSTEXT	52/55	52/55							
SSA	4111		38/15	54/09 D	55/12						
SSAX	4110		54/09 L	54/18							
SSCP	135	NOSTEXT	72/24								
SSCS	74		8/03 D	75/50							
SSCTL	5		11/02 D								
SSER	23		6/14 L								
SSET	32	NOSTEXT	53/09	53/09	65/37	67/43					
SSML	42	NOSTEXT	95/13								
SSSC	7		22/37	26/02	57/43	80/18	89/43				
			25/51	27/27	78/51	84/33	91/48				
SSSI	7754		10/34 D								
SSTL	45	NOSTEXT	61/57								
SSWE	35		68/07								
STET	27	NOSTEXT	53/04	53/04	98/07						
STSI	7757		10/31 D								
STSW	20	NOSTEXT	30/35	30/37							
U SUB$			11/03 F								
SUJS	10		4/36 D	45/28	53/45	53/45	97/44				
SVET	42	NOSTEXT	53/08	53/08							
SVJT	3	NOSTEXT	25/34	25/36	62/19	62/21	77/43	77/45			
SWET	45	NOSTEXT	53/15	53/15							
SWJS	15		4/44 D	52/34	53/50	53/50					
SYCS	76		8/13 D								
SYET	43	NOSTEXT	53/13	53/13	81/08						
SYSC	1		78/47	78/49	83/45	84/31					
TACP	6407		19/19 D	19/33	28/42	28/45 S	32/23				
TACPE	1		19/18 D								
TACS	72		7/42 D	75/37							
TAET	2	NOSTEXT	53/07	53/07							
TDAC	4353		17/14 L	37/18 S	48/07	48/25	50/41				
			17/28	37/39 S	48/15	50/40 S					
TDACE	1		17/15 D								
TE	36		16/11 D	28/46 I	32/50 S	34/56	51/12				
			28/43 S	32/36	32/52 I	41/50					
TEFP	4023		45/46	52/44 L	52/44						
TEPB	6662		18/23 D	26/20	47/03	47/07	62/28 S	62/32 S			
			18/44	46/52	47/04	62/26 S	62/30 S	80/25			
TEPBE	4		18/22 D	18/23							

SYMBOLIC REFERENCE TABLE.

TFSW	72	NOSTEXT	29/29	66/53							
TH	72	NOSTEXT	26/14	91/54							
TIET	1	NOSTEXT	53/06	53/06							
TJAM	6500		18/44 D	49/08	49/52	62/38 S	62/44 S	98/56			
			19/19	49/28	62/34 S	62/40 S	63/09	99/49			
			49/04	49/31	62/36 S	62/42 S	85/53	100/01			
TJAME	6		18/43 D	18/44							
TJCM	6224		19/47 D	29/13 S	36/20	42/19	51/50				
			20/10	35/30	36/35	51/40					
TJCME	1		19/46 D								
TJEC	6315		19/33 D	29/20 S	36/26	42/23	51/54				
			19/47	35/34	36/41	51/44					
TJECE	1		19/32 D								
TJEJ	10		5/36 L								
TJPR	6133		20/10 D	30/04 S	31/21	32/29	35/19	51/30			
			20/24	30/26 S	32/07	32/30	42/09				
TJPRE	1		20/09 D								
TJSC	6042		20/24 D	29/54 S	36/29	51/33	60/43	76/10			
TJSCE	1		20/23 D								
TJST	4072		27/20	45/24	46/04	46/36	49/11	53/36 L	53/36		
TKET	17	NOSTEXT	52/54	52/54							
TLCS	72		7/47 D	75/52							
TLET	15	NOSTEXT	52/52	52/52							
TLSI	7752		10/36 D								
TM	25		16/07 D	38/27 S	46/54	46/57	61/42 S	97/47	97/51		
TOJS	5		4/33 D	53/42	53/42	97/30					
TORC	2		6/26 L								
TP	43		16/15 D	29/20	30/04	31/21	34/33 S	35/27 I	65/15 S	96/38 S	
			28/47 S	29/25	30/26	32/07	34/34	36/05	66/22 S	97/03 S	
			28/52 S	29/33	30/33	32/09	34/57 S	51/13 S	66/32	97/06	
			29/02	29/40	30/42	32/30	35/12 S	51/14 S	86/16 S		
			29/13	29/54	30/49	32/48	35/13	51/15	86/38		
TRSI	7772		10/20 D								
TSCS	60		7/29 D	75/47							
TSCW	122	NOSTEXT	26/28								
TTCU	5353		17/28 D	17/42	28/37 S	28/38 S	31/14 S	31/16 S	49/29	49/32	
TTCUE	2		17/29 D	17/42							
TTUE	5421		17/42 D	28/39 S	31/18 S	49/53	60/43				
TTUEE	1		17/43 D								
T0	0	NOSTEXT	25/55	29/07 S	29/19	41/32 S	42/15	68/47 S	68/50 S		
T1	1	NOSTEXT	25/30 S	32/24 S	37/26	48/39	62/26	72/51	80/38 S	93/38	
			25/39 S	32/25 S	37/28	51/29 S	62/28	73/17 S	80/53 S	93/39 S	
			25/41 S	32/26	37/39	51/30	62/30	73/28	81/06	93/46 S	
			26/29	32/41	38/16	51/33	62/32	77/39 S	85/16 S	93/47	
			26/55 S	32/49 I	41/51 S	51/40	62/34	77/40 S	85/32	94/04	
			27/40 S	35/15 S	41/52 S	51/44	62/36	77/50	89/53	94/25	
			28/35 S	35/19	41/53	51/50	62/38	77/54	90/18		
			28/37	35/30	42/18 I	51/54	62/40	78/02	91/57		
			28/38	35/34	45/49 S	54/11 S	62/42	80/05 S	92/09 S		
			28/39	37/22 S	45/50	55/13	62/44	80/15	92/19		
			28/40 S	37/24 S	47/36 S	58/18	62/45 S	80/26 S	92/20 S		
			30/19 S	37/25 S	47/44 S	62/15 S	68/38 S	80/31	93/36 S		

SYMBOLIC REFERENCE TABLE.

T2	2	NOSTEXT	26/57 S	42/06 S	45/24	50/26 S	71/50 S	85/45 S	89/54	93/49
			30/21 S	42/09	45/27	50/29	72/16	85/49 S	90/14	94/06
			32/28 S	42/12	46/04	50/32 S	72/31	86/09	91/41 S	94/27
			32/29	42/19	46/36	50/35	72/34	86/19	91/44 S	
			32/37 S	42/23	46/44	51/09 S	73/04	86/29	91/51	
			32/38	42/25	47/20	51/17	80/33	86/34	92/07 S	
			32/39 I	42/33	47/49	51/53 S	85/18 S	86/52	92/15	
			32/40 S	45/03 S	49/11	58/14	85/28	87/03	92/16 S	
T3	3	NOSTEXT	26/51 S	36/26	51/07 S	71/52	72/44	73/35	82/37	86/55 S
			27/20	36/29	51/19	71/53 S	72/53	73/36 S	82/40	86/56
			36/16 S	36/35	51/51 S	72/09 S	73/18	73/38 S	82/44	93/54 S
			36/20	36/41	71/48 S	72/12 S	73/25	82/31 S	82/46 S	93/57 S
T4	4	NOSTEXT	36/06 S	36/55 I	51/55 S	72/06 S	72/29	82/41	86/08	86/51
			36/07 S	51/11 S	68/33 S	72/07 S	73/50	82/43 S	86/30	
			36/08	51/22	68/40 S	72/20 S	82/28 S	83/56 S	86/35 S	
T5	5	NOSTEXT	29/14 S	31/30	35/38	36/17	49/36	82/23	83/54 S	87/02
			30/54	35/02 S	35/48 S	36/49 S	51/43 S	82/29 S	86/33 S	87/04
			31/13	35/33 S	35/56	48/36 S	65/03 S	82/45 S	86/54	87/06
T6	6	NOSTEXT	25/43 S	29/21 S	35/04 S	35/57	49/38	85/07	94/17 S	
			25/53	31/01	35/31 S	36/19	51/41 S	85/11 S	94/21 S	
			26/13 S	31/17	35/40	36/51 S	85/02 S	93/52 S	94/24 S	
			26/16	31/48	35/46 S	48/37 S	85/04	94/07	94/28	
T7	7	NOSTEXT	26/10 S	35/49	48/38 S	78/46	82/30	86/20	86/36	
			26/11	35/55 S	49/56	79/07	83/52 S	86/22		
			35/06 S	36/25	51/45 S	79/09	84/39 S	86/24		
			35/35 S	36/53 S	77/31	79/15 S	86/15 S	86/32		
T8	16		16/04 D							
T9	17		16/05 D	93/56 S	94/44	94/46	94/48 S	94/57		
UDRC	4		6/28 L							
UJNI	300		46/27	83/48	93/32					
UJSI	0		10/48 D							
USD	4123		22/49	22/56	54/32 D					
USDA	4146		38/35 S	44/29 S	47/38 S	54/47 D				
USDB	4155		38/36 S	44/30 S	47/43 S	54/53 D				
USDC	4174		38/37 S	44/31 S	47/19 S	55/06 D				
USDX	4122		54/32 L	55/14						
USD1	4145		54/33	54/45 L						
USD2	4173		54/39	54/43	55/01	55/05 L				
UTEM	115	NOSTEXT	40/21	74/01	98/27					
VSAM	120	NOSTEXT	80/51							
ZERL	66	NOSTEXT	25/29	25/44	27/17	78/10	80/54			
(3SA)	0		22/39 D							
(3SB)	0		21/16 D							
.A	35		11/01 D	11/02						
.DLY	255	NOSTEXT	68/48							
.EMS	535	NOSTEXT	65/18							
.EST	245	NOSTEXT	37/28							
.SMS	475	NOSTEXT	65/13							

SYMBOLIC REFERENCE TABLE.

.V	2000	53/37 D	53/38 D	53/40 D	53/41 D	53/43 D	53/46 D	53/47 D	53/50 D
		53/37	53/38	53/40	53/41	53/43	53/46	53/47	53/50
		53/37 D	53/39 D	53/40 D	53/41 D	53/44 D	53/46 D	53/48 D	53/50 D
		53/37	53/39	53/40	53/41	53/44	53/46	53/48	53/50
		53/37 D	53/39 D	53/40 D	53/42 D	53/45 D	53/46 D	53/49 D	
		53/37	53/39	53/40	53/42	53/45	53/46	53/49	
		53/37 D	53/39 D	53/40 D	53/42 D	53/45 D	53/47 D	53/49 D	
		53/37	53/39	53/40	53/42	53/45	53/47	53/49	
		53/37 D	53/39 D	53/41 D	53/42 D	53/46 D	53/47 D	53/49 D	
		53/37	53/39	53/41	53/42	53/46	53/47	53/49	

SYMBOL QUALIFIER = CPS

CCPS	1	25/01							
CFIN	40	66/36	67/37						
EJTR	5	97/07							
ENRS	4000	24/28							
PEJT	4	78/44	79/25						
PQFT	3	81/27							
RCPS	2000	24/28							
ROPR	20	42/32							
ROSR	0	34/40	42/29						
SFIN	0	64/53							
VJLS	6	80/49							

SYMBOL QUALIFIER = DSL

NCPS	34	19/19	19/33	19/47	20/10	20/24
NPPS	34	19/19	19/33	19/47	20/10	20/24

SYMBOL QUALIFIER = MACRO$

CFI	6116	37/55 D	44/42 D	83/11 D	84/01 D	96/47 D	98/17 D		
DELAY	4713	68/48 D							
ENDMS	5227	65/18 D							
EXECUTE	1211	21/16 D	22/39 D						
ISTORE	4471	62/10 D							
MONITOR	6131	22/13 D	25/03 D	28/01 D	41/02 D	68/49 D	78/14 D	80/51 D	97/14 D
		22/57 D	25/06 D	39/23 D	65/39 D	72/36 D	78/55 D	81/29 D	98/09 D
		24/32 D	27/55 D	40/21 D	65/42 D	74/01 D	79/27 D	94/55 D	98/27 D
OVERFLOW	6150	63/15 D	76/10 D	100/01 D					
PAUSE	4717	68/49 D							
SETMS	4401	65/13 D							
SFA	2467	37/28 D							

SYMBOL QUALIFIER = 3SA

ASSI	7753	75/51	75/51						
AST	4726	27/37	27/43	66/10	66/20	71/47 D			
ASTA	5073	71/57 S	73/10 S	73/41 D					
ASTB	5126	72/54 S	73/08 S	73/27 S	73/33 S	73/43 S	73/57	74/08 L	
ASTC	5133	72/52 S	73/06 S	73/29 S	73/31 S	73/44 S	74/14 L		
ASTD	5140	72/30 S	72/44	72/53	73/18	73/25	74/29 L		
ASTX	4725	71/47 L	72/45	73/21	74/03				
AST1	4743	72/07 L	72/10						
AST10	5045	73/25 L	74/52						
AST11	5050	73/19	73/27 L						
AST12	5056	72/56	73/12	73/31 L					
AST2	4756	72/18	72/24 L						
AST3	4775	72/33	72/36 L						
AST4	5001	72/35	72/39 L						
AST5	5004	72/44 L	74/43	74/50					
AST6	5010	72/51 L	74/44						
AST7	5021	73/04 L	74/45	74/46					
AST8	5035	73/16 L	74/51						
AST9	5043	73/21 L	73/26						
AST$	1	69/06 D	71/55 F	72/47 F					
ATSI	7747	75/55	75/55						
BISI	7761	75/45	75/45						
CDSI	7766	75/41	75/41						
CEAF	5	74/51 L							
CSCF	2	73/05	74/45 L						
C1SI	7746	75/56	75/56						
DSSI	7777	66/01	66/03						
FEAF	4	27/36	66/08	74/50 L					
FECF	0	66/19	74/43 L						
IFSI	7776	65/22	67/13	75/33					
I1SI	7774	75/35	75/35						
I2SI	7773	75/36	75/36						
LSSI	7745	66/03	76/01						
MAXF	7	72/32	74/54 L						
MCSI	7765	75/42	75/42						
MFSI	7763	75/43	75/43						
MNAF	4	72/17	74/48 L						
MPSI	7771	75/38	75/38						
MSSI	7756	75/48	75/48						
MTSI	7760	75/46	75/46						
MXSI	7776	71/51	75/36	75/40	75/43	75/47	75/50	75/54	
		75/33	75/37	75/40	75/44	75/47	75/51	75/54	
		75/34	75/37	75/41	75/44	75/48	75/51	75/55	
		75/34	75/38	75/41	75/45	75/48	75/52	75/55	
		75/35	75/38	75/42	75/45	75/49	75/52	75/56	
		75/35	75/39	75/42	75/46	75/49	75/53	75/56	
		75/36	75/39	75/43	75/46	75/50	75/53	76/01	
NJSI	7751	75/53	75/53						
NMSI	7770	75/39	75/39						
NVSI	7767	75/40	75/40						
ORSI	3	67/10							
PLSI	7750	66/12	75/54	75/54					
QUAL$	1	64/08 D	70/06 F	75/02 F					
RBSI	7762	75/44	75/44						

RDSI	7764	65/20					
RFSI	7775	75/34		75/34			
RSS	5160	65/16					
SCI	4676	64/54		66/37	67/38	68/37	D
SCIX	4675	68/37	L	68/43			
SCI1	4702	68/34		68/41	L		
SCI2	4713	68/48	L	68/51			
SCI3	4672	68/33	L	68/52			
SCI4	4674	68/35	L	68/45			
SEAF	6	27/42		74/52	L		
SECF	1	74/44	L				
SFI	5235	68/42					
SFI$	1	75/16	D				
SMSI	7755	75/49		75/49			
SSCF	3	74/46	L				
SSCTL	5	72/19					
SSS	4361	64/52	D				
SSSA	4473	65/09	S	66/06	D		
SSSB	4653	65/44	S	65/46	S	65/47	67/52 L
SSSD	4660	67/15		68/03	L	68/15	
SSSDL	2	67/15		68/15	D		
SSSI	7754	75/50		75/50			
SSSX	4360	64/52	L	64/55		66/39	67/48
SSS1	4423	65/21		65/24	L		
SSS10	4547	66/29		66/48	L		
SSS10.1	4550	66/33		66/49	L		
SSS11	4560	66/35		66/57	L		
SSS12	4562	66/56		67/02	L		
SSS16	4612	67/09		67/11		67/19	L
SSS17	4620	67/21		67/24	L	67/36	
SSS18	4622	66/57		67/26	L		
SSS19	4647	67/44		67/47	L		
SSS2	4425	65/17		65/31	L	66/15	67/14
SSS3	4461	65/50	L	66/02			
SSS4	4463	65/24		65/57	L		
SSS5	4513	66/07		66/11		66/14	66/17 L
SSS6	4521	66/04		66/23	L		
SSS7	4534	66/24		66/32	L		
SSS8	4536	65/50		66/26		66/34	L
SSS9	4541	66/36	L	67/17		67/24	
STSI	7757	75/47		75/47			
SUB$	1	69/04	D				
TAST	5145	72/34		74/40	L		
TLSI	7752	75/52		75/52			
TRSI	7772	75/37		75/37			
TSCI	5251	26/11		75/30	L	75/30	
.IO	0	65/13	D	65/13			
.4	1467	76/10	D	76/15			

SYMBOL QUALIFIER = 3SB

AST	5653	93/29					
CEE	4452	77/34		78/35	D		

CEEA	4730	78/43		81/34	L			
CEEB	4735	79/41	S	80/40		80/56	81/02	81/39 L
CEEC	4640	80/37	L	95/17	S			
CEEX	4451	78/35	L	79/28				
CEE1	4453	78/39	L	79/20				
CEE10	4665	80/39		80/54	L			
CEE11	4704	81/07		81/13	L			
CEE1.1	4473	78/48		78/50		78/53 L		
CEE1.2	4476	78/52		78/55	L			
CEE2	4503	79/06	L					
CEE2.1	4504	79/07	L	79/19				
CEE3	4517	79/14	L	79/55				
CEE4	4521	78/57		79/15	L	81/31		
CEE4.1	4530	79/17		79/22	L			
CEE4.2	4540	79/23		79/28	L			
CEE5	4542	79/13		79/30	L			
CEE6	4570	79/48		79/53	L			
CEE7	4576	79/52		80/02	L			
CEE8	4604	80/06		80/08	L			
CEE8.1	4617	80/16		80/20	L			
CEE9	4622	80/19		80/25	L			
CET	5405	80/30		91/43	D			
CETA	5431	91/56	S	92/06	D			
CETX	5404	91/43	L	92/21				
CET0	5413	91/47		91/49	L			
CET1	5431	92/03		92/05	L			
CET2	5403	91/41	L	92/01				
CET$	1	87/21	D	90/37	F			
CPR	5311	85/38		89/37	D			
CPRA	5326	89/38	S	89/48	D			
CPRB	5370	90/04	S	90/25	L			
CPRC	5372	90/06	S	90/27	D			
CPRD	5400	90/08	S	90/28		90/32 D		
CPRX	5310	89/37	L	89/55		90/33		
CPR0	5321	89/42		89/44	L			
CPR1	5376	90/21		90/30	L			
CPR2	5377	90/29		90/31	L			
CPR3	5307	89/35	L	89/40		89/46		
CPR$	1	87/20	D	88/31	F			
FECF	0	93/28						
FLP	4740	82/25	D	86/05		87/11		
FLPA	4753	82/26	S	82/35	D			
FLPX	4737	82/25	L					
FLP1	4750	82/32	L	82/47				
FLP2	4761	82/36		82/40	L			
FLP3	4770	82/39		82/42		82/46 L		
FLP4	4736	82/23	L	82/33				
IOA	4773	40/26		79/30		83/10 D	84/18	
IOAA	4777	83/13	D	95/06	S	95/09 S		
IOAX	4772	83/10	L	83/14				
IOQ$	1	87/22	D	89/51	F			
PRS	5457	77/28		93/27	D			
PRSA	5455	93/26	D	93/42	S	93/44 S		
PRSX	5456	93/27	L					
PRS0	5472	93/31		93/35	L			
PRS0.1	5474	93/37	L	93/40				
PRS1	5525	93/57	L	94/18				

PRS2	5531	94/01	94/04 L						
PRS3	5550	94/15	94/20 L						
PRS4	5552	94/22 L	94/31	94/38	94/40	94/42	94/50		
PRS5	5620	94/23	94/57 L						
PRS7	5624	94/02	95/01	95/03 L					
PRS8	5454	93/25 L	95/18						
QUAL$	1	77/08 D	88/06 F	92/29 F					
SEI3	4376	77/40 L	78/06						
SEJ	5750	93/41	96/36 D						
SEJA	5774	96/40 S	96/43 S	96/49 D					
SEJB	6052	93/32	93/33 S	93/34	97/42 D				
SEJC	6120	96/41 S	96/44 S	98/19 D					
SEJD	6136	98/13 S	98/15 S	98/26	98/31 L				
SEJX	5747	96/36 L	97/16						
SEJ1	5772	96/47 L	97/05						
SEJ10	5746	96/34 L	97/08						
SEJ2	6007	97/04 L	97/22	98/10					
SEJ3	6027	97/16 L	97/24						
SEJ4	6031	97/02	97/18 L						
SEJ5	6050	97/31	97/35 L						
SEJ6	6052	97/27	97/34	97/40 L					
SEJ7	6067	97/48	97/56 L						
SEJ8	6105	93/32	93/34	97/45	97/49	97/52	98/10 L	98/28	
SEJ9	6107	97/57	98/12 L						
SIE	4361	77/27 D							
SIEA	4436	77/53 S	78/08 D						
SIEX	4360	77/27 L	78/15						
SIE2	4374	77/29	77/33	77/38 L					
SIE4	4421	77/49	77/52	77/54 L					
SIE4.1	4427	77/57	78/02 L						
SIE5	4435	77/41	78/07 L						
SIE6	4447	78/09	78/15 L						
SIQ	5002	77/30	83/43 D						
SIQA	5024	84/03 D	95/07 S	95/10 S					
SIQB	5216	86/18 D	86/41 S	86/43 S					
SIQC	5232	84/42 S	84/44 S	86/28 D					
SIQD	5106	84/56 D	95/02 S						
SIQE	5054	83/48	83/49	83/50 S	84/28 L				
SIQX	5001	83/43 L	84/10	84/43					
SIQ0	5007	83/44	83/48 L						
SIQ0.1	5011	83/46	83/50 L						
SIQ1	5022	84/01 L	84/09						
SIQ10	5247	86/37	86/40 L						
SIQ11	5256	86/39	86/44 L	86/53	87/12				
SIQ12	5260	86/40	86/51 L						
SIQ13	5263	86/11	86/54 L						
SIQ2	5030	84/08 L	84/15	84/34	84/57	85/41	86/44		
SIQ3	5033	84/07	84/12 L						
SIQ3.0	5062	83/48	83/49	84/28	84/30	84/32	84/35 L		
SIQ3.1	5101	84/37	84/51 L						
SIQ3.2	5114	85/03 L	85/12						
SIQ3.3	5125	85/05	85/10 L						
SIQ4	5131	84/54	85/09	85/15 L					
SIQ4.1	5153	85/29	85/31	85/33	85/35 L				
SIQ5	5161	85/13	85/24	85/39	85/41 L	86/07	86/10		
SIQ6	5163	85/40	85/45 L						
SIQ6.1	5171	85/47	85/52 L						

	SIQ7	5216	85/50	85/54	85/57	86/04	86/15 L	
	SIQ8	5221	84/46	86/20 L				
	SIQ9	5243	86/31	86/36 L				
	THLD	6133	85/04	85/07	94/44 S	94/46 S	95/29	99/22 L
	THLDL	322	94/49	98/53 D	98/56	99/22		
	TIOO	6053	78/46	79/09	82/40	86/22 S	86/54	87/04 S 99/10 L
			79/07	82/37	86/20 S	86/24 S	87/02 S	87/06 S
	TIOOL	20	77/32	79/16	82/40	86/20 S	87/04 S	98/56
			78/46	82/32	83/51	86/24 S	87/06 S	99/10
			79/09	82/37	84/38	86/54	98/52 D	
	TJCT	6455	77/50	79/14 S	86/26 S	86/57 S	93/38 S	98/42
			77/54	85/52	86/56 S	92/42	97/35 S	99/39 L
	TJCTL	23	98/51 D	98/56	99/39			
	TTEND	6500	99/40 L	99/49				
	.3	2274	100/01 D	100/04	100/05	100/07		
	.4	2125	100/01 D	100/06				

SYMBOL QUALIFIER = COMPCPE

U	CET$		58/37 F			
	CPR	4241	57/37 D	60/13		
	CPRA	4256	57/38 S	57/48 D		
	CPRB	4315	58/04 S	58/25 L		
	CPRC	4317	58/06 S	58/27 D		
	CPRD	4325	58/08 S	58/28	58/32 D	
	CPRX	4240	57/37 L	58/33		
	CPR0	4251	57/42	57/44 L		
	CPR1	4323	58/21	58/30 L		
	CPR2	4324	58/29	58/31 L		
	CPR3	4237	57/35 L	57/40	57/46	
U	IOQ$		57/51 F			

15.48.58.UCLP, 17, 031,   8.000KLNS.