

CLEAR STORAGE 1 ,008015,022026,030037,044,049,053053N000000N00001026 1
 CLEAR STORAGE 2 L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0& 2
 BOOTSTRAP ,008015,022029,036040,047054,061068,072/061039 ,0010011040 3

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
1401 AUTOCODER-PASS 2-PROCESS IOCS-MAIN 2 -VERSION 3 3722L PAGE 1											
101		001	JOB		1401 AUTOCODER-PASS 2-PROCESS IOCS-MAIN 2 -VERSION 3						
102			CTL		630 1						
103			SFX		1	I					
104			OTHER EQU	START		I		0101			
105			MINUS2 EQU	2		I		0002			
106			MINUS3 EQU	3		I		0003			
107			DIOCSB EQU	LABDIO-4		I		0576			
108			ORG	1		I			0001		
109			MAINX DA	1X86		I		0001	0086		ADDR
110			LMAINX EQU	*		I		0086			
111			* XINIT	INDEX1, INDEX2, INDEX3							
112			INDEX1 EQU	089		I		0089			
113			089 DCW	000		I	3	0089			4
114			091 DC	00		I	2	0091			4
115			INDEX2 EQU	094		I		0094			
116			094 DCW	000		I	3	0094			4
117			096 DC	00		I	2	0096			4
118			INDEX3 EQU	099		I		0099			
119			099 DCW	000		I	3	0099			4
120			100 DC	0		I	1	0100			4
121			*								
122			* START OF MAIN LINE								
123			*								
124			ORG	101		I			0101		
125			START RWD	4		I	5	0101	U %04 R		4
126			RWD	5		I	5	0106	U %05 R		4
127			RWD	6		I	5	0111	U %06 R		4
128			BSS	OVLAY2,B		I	5	0116	B P32 B		5
129			B	REDREC		I	4	0121	B 774		5
130			C	MAINX&17, @JOB@		I	7	0125	C 018 W05		5
131			BU	CMCTL		I	5	0132	B 157 /		5
132			CC	1		I	2	0137	F 1		5
133			MCW	80,280		I	7	0139	M 080 280		5
134			W			I	1	0146	2		5
135			CC	1		I	2	0147	F 1		6
136			B	WRTREC		I	4	0149	B 721		6
137			B	REDREC		I	4	0153	B 774		6
138			CMCTL C	MAINX&17, @CTL@		I	7	0157	C 018 W08		6
139			BU	FIND		I	5	0164	B 642 /		6
140			BCE	ROBIN,MAINX&23,1		I	8	0169	B 623 024 1		6
141			MN	MAINX&21,*&8		I	7	0177	D 022 191		6
142			BCE	ROBIN,@456@,		I	8	0184	B 623 W11		7
143			CHAIN	2		I				MACRO	
144			BCE			I	1	0192	B	GEN	7
145			BCE			I	1	0193	B	GEN	7
146			B	BLUE		I	4	0194	B 627		7
147			ORG	201		I			0201		

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
1401 AUTOCODER-PASS 2-PROCESS IOCS-MAIN 2 -VERSION 3 3722L PAGE 2											
148			DA	1X132		I		0201	0332		
149				6,6		I		0206		FIELD	
150			DTFTAB EQU	LABDTF-1		I		0349			
151			ORG	333		I			0333		
152			EITHER B	NEXREC		I	4	0333	B 681		8
153			*								
154			*	CONTROL CARD INFORMATION							
155			*								
156			SPECL DCW	@*@		I	1	0337			8
157			SYMNM DCW	#3		I	3	0340			8
158			*								
159			*	DTF MAJOR TABLE							
160			*								
161			DCW	@,@		I	1	0341			8
162			DCW	@,@	COBOL YES	I	1	0342			8
163			DCW	@,@	EXITS YES	I	1	0343			8
164			FILENM DCW	#6		I	6	0349			8
165			LABDTF DCW	@,@	1 INPUT 1	I	1	0350	FILETYPE		9
166			DCW	@,@	2 OUTPUT 2	I	1	0351			9
167			DCW	@,@	3 TAPE 3	I	1	0352			9
168			DCW	@,@	4 READER 4	I	1	0353			9
169			DCW	@,@	5 PUNCH 5	I	1	0354			9
170			DCW	@,@	6 PRINTER 6	I	1	0355			9
171			DCW	@,@	7 LOAD 7	I	1	0356	MODEPAR		9
172			DCW	@,@	8 CHECKPOINT 8	I	1	0357	FEATURES		10
173			DCW	@,@	9 NUMBER 9	I	1	0358	CHANDRIVE		10
174			DCW	@,@	10 NUMBER 10	I	1	0359	CARDPOC		10
175			DCW	@,@	11 NUMBER 11	I	1	0360	ALTTAPE		10
176			DCW	@,@	12 BLOCKED 12	I	1	0361	RECFORM		10
177			DCW	@,@	13 UNBLOCKED 13	I	1	0362			10
178			DCW	@,@	14 MIXED 14	I	1	0363			10
179			DCW	@,@	15 VARIABLE 15	I	1	0364			11
180			DCW	@,@	16-19 NUMBER 16	I	4	0368	SIZEREC		11
181			DCW	@,@	20 NUMBER 17	I	1	0369	PADDING		11
182			DCW	@,@	21-24 NUMBER 18	I	4	0373	BLOCKSIZE		11
183			DCW	@	@ 25-34 LABELS 19	I	10	0383	IOAREAS		11
184			DCW	@	@ 35-44 20	I	10	0393			11
185			DCW	@	@ 45-54 21	I	10	0403	WORKAREA		12
186			DCW	@,@	55 NUMBER 22	I	1	0404	INDEXREG		12
187			DCW	@	@ 56-65 LABEL 23	I	10	0414	EORADDR		12
188			DCW	@	@ 66-75 LABEL 24	I	10	0424	WLRADDR		12
189			DCW	@,@	76 RECORD 25	I	1	0425	TOTALS		12
190			DCW	@,@	77-80 HASH 26	I	4	0429			12
191			DCW	@,@	81 STANDARD 27	I	1	0430			12
192			DCW	@,@	82 NONSTANDARD 28	I	1	0431			13
193			DCW	@,@	83 TM 29	I	1	0432			13
194			DCW	@,@	84 ALL 30	I	1	0433			13
195			DCW	@,@	85 IDENT 31	I	1	0434			13
196			DCW	@	@	I	3	0437			13
197			DCW	@	@	I	5	0442			13

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
198			DCW	@	@			I 10	0452		13
199			DCW	@	@ 104-108	NUMBER	35	SERIALNUM	I 5	0457	14
200			DCW	@	@ 109-118		39	EX1ADDR	I 10	0467	14
201			DCW	@	@ 119-128		40	EX2ADDR	I 10	0477	14
202			DCW	@	@ 129-138		41	EX3ADDR	I 10	0487	14
203			DCW	@	@ 139-148		42	EX4ADDR	I 10	0497	15
204			DCW	@	@ 149-158		43	EX5ADDR	I 10	0507	15
205			DCW	@	@ 159-168		44	EX6ADDR	I 10	0517	15
206			DCW	@	@ 169-178		45	EX7ADDR	I 10	0527	16
207			DCW	@	@ 179-188		46	EX8ADDR	I 10	0537	16
208			DCW	@	@ 189-198		47	VARBUILD	I 10	0547	16
209			DCW	@	199 UNLOAD		37		I 1	0548	16
210			DCW	@	100 NOREWD		38		I 1	0549	16
211			DCW	@	9 201			OVERFLOW	I 1	0550	16
212			DCW	@	12 202				I 1	0551	16
213			DCW	@	@ 203-205	NUMBER		REELSEQP	I 3	0554	17
214			DCW	@	@ 206			FORMCNTL	I 1	0555	17
215			DCW	#9					I 9	0564	17
216			DCW	@	216 ADDRESS			OVERFLOW	I 1	0565	17
217			DCW	@	@				I 1	0566	17
218			ENDDTF	DCW	@	@			I 1	0567	17
219			*								
220			*		DIOCS MAJOR TABLE						
221			*								
222			DCW	@,@				I 1	0568		17
223			DIVIDE	EQU	*			I		0568	
224			DCW	@	40 PAR	OUT TAPEUSE		I 1	0569		18
225			DCW	@	39 PAR	INP TAPEUSE		I 1	0570		18
226			DCW	@	38 PAR	YES EXITS		I 1	0571		18
227			LABDIO	DCW	#9	DIOCSORG		I 9	0580		18
228			DCW	@	5			I 1	0581		18
229			DCW	@	6	OVERLAP FEATURES		I 1	0582		18
230			DCW	@	7	TAPE IODEVICES		I 1	0583		18
231			DCW	@	8	READER		I 1	0584		19
232			DCW	@	9	PUNCH		I 1	0585		19
233			DCW	@	10	PRINTER		I 1	0586		19
234			DCW	@	11	STANDARD LABELDEF		I 1	0587		19
235			DCW	@	12	NONSTANDARD		I 1	0588		19
236			DCW	@	13	MIXED		I 1	0589		19
237			DCW	@	14	CHECK		I 1	0590		19
238			DCW	@	15	IDENT		I 1	0591		20
239			DCW	@	16	TM		I 1	0592		20
240			DCW	@	17	YES ALTDRIIVE		I 1	0593		20
241			DCW	@	18	1 EXITS		I 1	0594		20
242			DCW	@	19	2		I 1	0595		20
243			DCW	@	20	3		I 1	0596		20
244			DCW	@	21	4		I 1	0597		20
245			DCW	@	22	5		I 1	0598		21
246			DCW	@	23	6		I 1	0599		21
247			DCW	@	24	7		I 1	0600		21

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
248			DCW	@	25 8			I 1	0601		21
249			DCW	@	RDLIN LABELDEF			I 1	0602		21
250			DCW	@	27 729	DRIVETYPE		I 1	0603		21
251			DCW	@	28 7330			I 1	0604		21
252			DCW	@	29 NORWD	RWDOPTION		I 1	0605		22
253			DCW	@	30 UNLOAD			I 1	0606		22
254			DCW	@	31 TAPE, #	READERERR		I 1	0607		22
255			DCW	@	32 SCAN			I 1	0608		22
256			DCW	@	33 PROCESS			I 1	0609		22
257			DCW	@	CLEAN	READERERR		I 1	0610		22
258			DCW	@	35 YES	INPVAR		I 1	0611		22
259			DCW	@	36 YES	INPFKNO		I 1	0612		23
260			DCW	@	37 RECORD	COUNTS		I 1	0613		23
261			DCW	@	38 HASH			I 1	0614		23
262			DCW	#5				I 5	0619		23
263			DCW	@	39-44	CHECKPOINT		I 1	0620		23
264			DCW	@	45 RELEASE	FEATURES		I 1	0621		23
265			ENDDIO	DCW	@	46 STORAGE		I 1	0622		23
266			*								
267			*								
268			ROBIN	S	SPECL			I 4	0623	S 337	24
269			BLUE	MCW	MAINX&25,NORDRL#1			I 7	0627	M 026 W12	24
270			THRU	B	WRTREC			I 4	0634	B 721	24
271				B	REDREC			I 4	0638	B 774	24
272			FIND	C	MAINX&19,KDIOCS			I 7	0642	C 020 V71	24
273				BE	GOTIT			I 5	0649	B 670 S	24
274			*								
275			*								
276			*		READ IN PHASE 2						
277			*								
278			*								
279			BCE		THRU,MAINX&5,*			I 8	0654	B 634 006 *	24
280			PREPS2	B	SAVCD			I 4	0662	B 098	25
281				B	PASS2			I 4	0666	B V06	25
282			GOTIT	MCW	@M@,LENGTH			I 7	0670	M W13 743	25
283			WHOM	B	WRTREC			I 4	0677	B 721	25
284			NEXREC	B	REDREC			I 4	0681	B 774	25
285			GAMMA	BCE	WHOM,MAINX&5,*			I 8	0685	B 677 006 *	25
286				C	MAINX&17,@DTF@			I 7	0693	C 018 W16	25
287				BE	DTFND			I 5	0700	B 713 S	26
288				B	WRTREC			I 4	0705	B 721	26
289				B	UPPER			I 4	0709	B 821	26
290			DTFND	B	SAVCD			I 4	0713	B 098	26
291				B	CRDOUT			I 4	0717	B J68	26
292			*								
293			*		WRITE ROUTINE						
294			*								
295			WRTREC	SBR	WRTEXT&3			I 4	0721	H 761	26
296				MCW	LMMAINX,LOPUT-1			I 7	0725	M 086 I97	26
297				SW	LOPUT			I 4	0732	, I98	27

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
398			*		DIOSORG						
399			*								
400			DIOSB	SBR	INDEX1	I	4	1147	H 089		40
401				MCW	2&X1, INDEX1	I	7	1151	M 0'2 089		40
402				B	SCANX	I	4	1158	B N55		40
403				LCA	MAINX&18&X3, 0&x1	I	7	1162	L 0A9 0'0		40
404				B	NEKREC	I	4	1169	B 681		40
405			*								
406			*		READERROR						
407			*								
408			REASB	SBR	CHAIR&3, CHTAP	I	7	1173	H 066 /87		40
409				B	OPDSCN	I	4	1180	B 014		40
410				DCW	&REATB	I	3	1186	G27		41
411			CHTAP	C	OPDAR, @TAP@	I	7	1187	C W26 W37		41
412				BU	LSTPAR	I	5	1194	B 075 /		41
413				B	SCANX	I	4	1199	B N55		41
414				BCE	LSTPAR, MAINX&18&X3,	I	8	1203	B 075 0A9		41
415				MCW	MAINX&18&X3, DIOSB&31	I	7	1211	M 0A9 607		41
416				B	LSTPAR	I	4	1218	B 075		41
417			*								
418			*		COMBINATION READ/ WRITE ROUTINE						
419			*								
420			CTAPE	SBR	INDEX2	I	4	1222	H 094		42
421				SBR	ICONPR&3	I	4	1226	H T43		42
422				MCW	3&X2, INDEX2	I	7	1230	M 013 094		42
423				MCW	8&X2, ITAPEC&7	I	7	1237	M 018 T01		42
424				MCW	0&X2, IEORC&3	I	7	1244	M 010 T13		42
425				SW	ICOMPR&4	I	4	1251	, T19		42
426				MCW	7&X2, ICOMPR&6	I	7	1255	M 017 T21		43
427				A	@12@, ICOMPR&6	I	7	1262	A W39 T21		43
428				CW	ICOMPR&4	I	4	1269	) T19		43
429				MN	ITAPEC&3, IHALT&6	I	7	1273	D S97 U28		43
430				MN	ITAPEC&7, IHALT&6	I	7	1280	D T01 U28		43
431				MCW	@9@, IERRCT#1	I	7	1287	M W40 W41		43
432			ITAPEC	RT	0, 0	I	8	1294	M %U0 000 R		44
433				BCE	IOMETS, ITAPEC&7, W	I	8	1302	B T35 T01 W		44
434			IEORC	BEF	0	I	5	1310	B 000 K		44
435			ICOMPR	BCE	ITAPEC, 0, }	I	8	1315	B S94 000 }	GMARK	44
436				CHAIN	12	I				MACRO	
437				BCE		I	1	1323	B	GEN	44
438				BCE		I	1	1324	B	GEN	44
439				BCE		I	1	1325	B	GEN	44
440				BCE		I	1	1326	B	GEN	45
441				BCE		I	1	1327	B	GEN	45
442				BCE		I	1	1328	B	GEN	45
443				BCE		I	1	1329	B	GEN	45
444				BCE		I	1	1330	B	GEN	45
445				BCE		I	1	1331	B	GEN	45
446				BCE		I	1	1332	B	GEN	45
447				BCE		I	1	1333	B	GEN	46

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
448				BCE		I	1	1334	B	GEN	46
449				IOMETS	BER	IRWRED	I	5	1335	B T44 L	46
450				ICONPR	B	0	I	4	1340	B 000	46
451				IRWRED	S	@1@, IERRCT	I	7	1344	S W31 W41	46
452				MN	ITAPEC&3, *&4	I	7	1351	D S97 T61		46
453				BSP	0	I	5	1358	U %U0 B		46
454				BCE	ITROW, ITAPEC&7, W	I	8	1363	B T83 T01 W		47
455				BM	IHALT, IERRCT	I	8	1371	V U22 W41 K		47
456				B	ITAPEC	I	4	1379	B S94		47
457				ITROW	A	@1@, IERASC#2	I	7	1383	A W31 W43	47
458				SKP	6	I	5	1390	U %U6 E		47
459				BCE	ICHALT, IERASC-1, 5	I	8	1395	B U07 W42 5		48
460				B	ITAPEC-7	I	4	1403	B S87		48
461				ICHALT	S	IERASC	I	4	1407	S W43	48
462				H	0, 202	I	7	1411	000 202		48
463				B	ITAPEC-7	I	4	1418	B S87		48
464				IHALT	H	0, 200	I	7	1422	. 000 200	48
465				BSS	ITAPEC-7, E	I	5	1429	B S87 E		48
466				MCW	ITAPEC&7, *&8	I	7	1434	M T01 U48		49
467				RT	0, 0	I	8	1441	M %U0 000 R		49
468				H	0, 201	I	7	1449	. 000 201		49
469				B	ICONPR	I	4	1456	B T40		49
470			PASS1	LCA	ENDDIO, ENDDTF	I	7	1460	L 622 567		49
471				LCA		I	1	1467	L		49
472				SBR	EITHER&3, DIFREC	I	7	1468	H 336 M06		50
473				MCW	&DTFTAB&X1, OPDFND&6	I	7	1475	M W46 093		50
474				LCA	186, LMAINX	I	7	1482	L 186 086		50
475				B	WRTREC	I	4	1489	B 721		50
476				B	DTFNM	I	4	1493	B L91		50
477			ALTB	B	BYPSS	I	4	1497	B C49		50
478				BSP	4	I	5	1501	U %U4 B		50
479			PASS2	RT	1, 3997	I	8	1506	M %U1 I97 R		51
480				RT	1, 3997	I	8	1514	M %U1 I97 R		51
481				SBR	TDF1&7, 341	I	7	1522	H P30 341		51
482				B	CTAPE	I	4	1529	B S22		51
483				NOP	TDF1	I	4	1533	N P23		51
484				B	OVLY3	I	4	1537	B 341		51
485			*								
486			NUMERC	SBR	INDEX1	I	4	1541	H 089		51
487				MCW	2&X1, INDEX1	I	7	1545	M 0'2 089		52
488				SW	MAINX&20	I	4	1552	, 021		52
489				MCW	MAINX&20, DTFTAB&X1	I	7	1556	M 021 309		52
490				B	DIFREC	I	4	1563	B M06		52
491			KDIOCS	DCW	@DIOCS@	I	5	1571			52
492			BLOB	B	SCANX	I	4	1572	B N55		52
493				A	MAINX&18&X3, BLOWA-1	I	7	1576	A 0A9 W01		52
494				LCA	BLOWA-1, DTFTAB&24	I	7	1583	L W01 373		53
495				S	BLOWA	I	4	1590	S W02		53
496				B	EITHER	I	4	1594	B 333		53
497			BLOWA	DCW	&00000	I	5	1602			53

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
498			LTORG	*		I			1603		
			DCW	@JOB@		I	3	1605		LIT	53
			DCW	@CTL@		I	3	1608		LIT	53
			DCW	@456@		I	3	1611		LIT	53
			NORDRL	DCW	#01	I	1	1612		AREA	54
			DCW	@M@		I	1	1613		LIT	54
			DCW	@DTF@		I	3	1616		LIT	54
			DCW	@W@		I	1	1617		LIT	54
			SCNSWI	DCW	#01	I	1	1618		AREA	54
			DCW	@7@		I	1	1619		LIT	54
			DCW	@\$@		I	1	1620		LIT	54
			DCW	@ @		I	3	1623		LIT	55
			OPDARI	DCW	#03	I	3	1626		AREA	55
			DCW	@ @		I	2	1628		LIT	55
			DCW	@52@		I	2	1630		LIT	55
			DCW	@1@		I	1	1631		LIT	55
			DCW	@YES@		I	3	1634		LIT	55
			DCW	@TAP@		I	3	1637		LIT	55
			DCW	@12@		I	2	1639		LIT	56
			DCW	@9@		I	1	1640		LIT	56
			IERRCT	DCW	#01	I	1	1641		AREA	56
			IERASC	DCW	#02	I	2	1643		AREA	56
			DCW	&DTFTAB&X		I	3	1646	3U9	ADCON	56
499			ORG	1649		I			1649		
500			OVER	DCW	@}@	I	1	1649		GMARK	57
501			EX			I			B 000		58

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
502			JOB		1401 AUTOCODER-PASS 2-PROCESS IOCS-MAIN 1 -VERSION 3	I					
503			ORG		1650	I			1650		
504			SFX		I	I					
505			*								
506			*		DTF TABLE OF BRANCHES						
507			*								
508			DTFINT	SBR	INDEX3,DTFLAB	I	7	1650	H 099 H03		61
509			SBR		CHAIR&3,LSTPAR	I	7	1657	H 066 075		61
510			BCE		DIFREC,MAINX&20,	I	8	1664	B M06 021		61
511			CW		SCNSW	I	4	1672	) W18		61
512			C		MAINX&6,@EX@	I	7	1676	C 007 H48		61
513			BE		EXIRB	I	5	1683	B 131 S		61
514			S		INDEX2&1	I	4	1688	S 095		62
515			SEEK	C	MAINX&7,0&X3	I	7	1692	C 008 070		62
516			SBR		INDEX3	I	4	1699	H 099		62
517			BE		AGREE	I	5	1703	B 235 S		62
518			BCE		DIFREC,0&X3,@	I	8	1708	B M06 070 @		62
519			A		@7@,INDEX2	I	7	1716	A H49 094		62
520			B		SEEK	I	4	1723	B W92		62
521			DTFBR	B	OPDSCN	I	4	1727	B 014		63
522			DCW		REWXX REWIND	I	3	1733	E00		63
523			B		ACTUAL	I	4	1734	B 189		63
524			DCW		&DTFTAB&205 REELSEQ	I	3	1740	554		63
525			B		ACTUAL	I	4	1741	B 189		63
526			DCW		&DTFTAB&108 SERIALNUM	I	3	1747	457		63
527			B		HEARB	I	4	1748	B N37		63
528			DCW		&DTFTAB&103	I	3	1754	452		64
529			B		OPDSCN	I	4	1755	B 014		64
530			DCW		&CHEXZ CHECKLABEL	I	3	1761	D87		64
531			B		OPDSCN	I	4	1762	B 014		64
532			DCW		&TYPXZ TYP LABEL	I	3	1768	D74		64
533			B		TOTRB	I	4	1769	B 281		64
534			DCW		#3 TOTALS	I	3	1775			64
535			B		ACTUAL	I	4	1776	B 189		65
536			DCW		&DTFTAB&75 WLRADDR	I	3	1782	424		65
537			B		ACTUAL	I	4	1783	B 189		65
538			DCW		&DTFTAB&65 EOFADDR	I	3	1789	414		65
539			B		INDRB	I	4	1790	B 171		65
540			DCW		#3 INDEXTREG	I	3	1796			65
541			B		ACTUAL	I	4	1797	B 189		65
542			DCW		&DTFTAB&54 WORKAREA	I	3	1803	403		66
543			B		IOARB	I	4	1804	B 247		66
544			DCW		&DTFTAB&44 IOAREAS	I	3	1810	393		66
545			B		BLORB	I	4	1811	B V72		66
546			DCW		&DTFTAB&24 BLOCKSIZE	I	3	1817	373		66
547			B		NUMERC	I	4	1818	B V41		66
548			DCW		@020@ PADDING	I	3	1824			66
549			B		ACTUAL	I	4	1825	B 189		67
550			DCW		&DTFTAB&19 SIXEREC	I	3	1831	368		67
551			B		OPDSCN	I	4	1832	B 014		67

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
552				DCW	&RECYZ			I 3 1838	D55		67
553				B	NUMERC			I 4 1839	B V41		67
554				DCW	@011@			I 3 1845			67
555				B	NUMERC			I 4 1846	B V41		67
556				DCW	@010@			I 3 1852			68
557				B	OPDSCN			I 4 1853	B 014		68
558				DCW	&MODXZ			I 3 1859	D30		68
559				B	OPDSCN			I 4 1860	B 014		68
560				DCW	&FILXZ			I 3 1866	D23		68
561				B	NUMERC			I 4 1867	B V41		68
562				DCW	@009@			I 3 1873			68
563				B	ACTUAL			I 4 1874	B 189		69
564				DCW	DTFTAB&198			I 3 1880	547		69
565				B	ACTSCN			I 4 1881	B /13		69
566				DCW	&DTFTAB-7			I 3 1887	342		69
567				B	NUMERC			I 4 1888	B V41		69
568				DCW	@206@			I 3 1894			69
569				B	OVERB			I 4 1895	B 106		69
570				DCW	#1			I 1 1899			70
571				ORG	1900			I	1900		
572				RTW	1,1			I 8 1900	L #U1 001 R		70
573				BER	HALT			I 5 1908	B Z21 L		70
574				CW	OVER			I 4 1913	) W49		70
575				B	OTHER			I 4 1917	B 101		70
576			HALT	BSP	1			I 5 1921	U #U1 B		70
577				NOP	288			I 4 1926	N 288		70
578				H				I 1 1930	.		71
579				B	1900			I 4 1931	B 200		71
580			*								
581			AGREE	S	INDEX3&1			I 4 1935	S 100		71
582				SW	MAINX&20			I 4 1939	, 021		71
583				B	DTFBR&X2			I 4 1943	B XK7		71
584			*		IOAREAS						
585			*								
586			IOARB	B	SCANX			I 4 1947	B N55		71
587				LCA	MAINX&18&X3,DTFTAB&44			I 7 1951	L 0A9 393		71
588				BW	EITHER,SCNSW			I 8 1958	V 333 W18 1		72
589				B	SCANX			I 4 1966	B N55		72
590				LCA	MAINX&18&X3,DTFTAB&34			I 7 1970	L 0A9 383		72
591				B	EITHER			I 4 1977	B 333		72
592			*								
593			*		TOTALS						
594			*								
595			TOTRB	SBR	CHAIR&3,TOTJK			I 7 1981	H 066 295		72
596				B	OPDSCN			I 4 1988	B 014		72
597				DCW	&TOTXZ			I 3 1994	E20		72
598			TOTJK	LCA	MAINX&18&X3,DTFTAB&80			I 7 1995	L 0A9 429		73
599				B	LSTPAR			I 4 2002	B 075		73
600			OVERB	SBR	CHAIR&3,OVEJK			I 7 2006	H 066 120		73
601				B	OPDSCN			I 4 2013	B 014		73

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
602				DCW	&OVEXZ			I 3 2019	E13		73
603			OVEJK	LCA	MAINX&18&X3,DTFTAB&216			I 7 2020	L 0A9 565		73
604				B	LSTPAR			I 4 2027	B 075		73
605			*								
606			*		EXITS ROUTINE						
607			*								
608			EXIRB	MCW	@1 8@,INDEX2			I 7 2031	M H52 094		74
609				MN	MAINX&7,INDEX2-1			I 7 2038	D 008 093		74
610				S	INDEX3&1			I 4 2045	S 100		74
611				B	SCANX			I 4 2049	B N55		74
612				LCA	MAINX&18&X3,DTFTAB&X2			I 7 2053	L 0A9 3M9		74
613				LCA	@\$,DTFTAB-6			I 7 2060	L H53 343		74
614				B	DIFREC			I 4 2067	B M06		75
615			*								
616			*		INDEX REGISTER						
617			*								
618			INDRB	MN	MAINX&21,DTFTAB&55			I 7 2071	D 022 404		75
619				MZ	@ @,DTFTAB&55			I 7 2078	Y H54 404		75
620				B	DIFREC			I 4 2085	B M06		75
621			*								
622			*		LOAD PARAMETERS - ACTUAL						
623			*								
624			ACTUAL	SBR	INDEX1			I 4 2089	H 089		75
625				BW	EITHER,SCNSW			I 8 2093	V 333 W18 1		75
626				MCW	2&X1,INDEX1			I 7 2101	M 0'2 089		76
627			SEARCH	B	SCANX			I 4 2108	B N55		76
628				LCA	MAINX&18&X3,0&X1			I 7 2112	L 0A9 0'0		76
629				SBR	INDEX1			I 4 2119	H 089		76
630				BW	DIFREC,SCNSW			I 8 2123	V M06 W18 1		76
631				B	SEARCH			I 4 2131	B J08		76
632			NEWVRT	SBR	WRTEXT&3			I 4 2135	H 761		76
633				MCW	LMAINX,LOPUT-1			I 7 2139	M 086 I97		77
634				SW	OUTPT&80			I 4 2146	, I92		77
635				MCW	GMMWRK,OUTPT&80			I 7 2150	M 773 I92		77
636			LONG	MCW	@*@,OUTPT&73			I 7 2157	M H55 I85		77
637				B	SHORT			I 4 2164	B 750		77
638			*								
639			*		OUTPUT MACRO STATEMENT FOR DIOC						
640			*								
641			CRDOUT	MN	@5@,TDF6&4			I 7 2168	D H56 768		77
642				CS	LMAINX			I 4 2175	/ 086		78
643				MCW	@55555@,MAINX&19			I 7 2179	M H61 020		78
644				SBR	INDEX3,ENDDIO			I 7 2186	H 099 622		78
645				B	GOOD&4			I 4 2193	B K01		78
646			GOOD	CS	LMAINX			I 4 2197	/ 086		78
647				SW	1			I 4 2201	, 001		78
648				SBR	INDEX1,MAINX&20			I 7 2205	H 089 021		78
649				MCW	@#@,MAINX&72			I 7 2212	M H62 073		79
650			LODPAR	MCW	0&X3,WKAREA-1			I 7 2219	M 070 L89		79
651				SBR	INDEX2			I 4 2226	H 094		79

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
652			MCW		INDEX1,SAVXL1#3	I	7	2230	M 089 H65		79
653			MCM		1&X2,0&X1	I	7	2237	P 011 0'0		79
654			SBR		INDEX1	I	4	2244	H 089		79
655			MCW		@, @,0&X1	I	7	2248	M H67 0'0		80
656			BCE		CONTIN,MAINX&72,'	I	8	2255	B L01 073		80
657			MCW		SAVXL1,INDEX1	I	7	2263	M H65 089		80
658			SW		0&X1	I	4	2270	, 0'0		80
659			MCW		@ @,MAINX&79	I	7	2274	M H69 080		80
660			MCW		MAINX&78	I	4	2281	M 079		80
661			CW		0&X1	I	4	2285	) 0'0		81
662			B		NEWWR	I	4	2289	B J35		81
663			CW		OUTPT&80	I	4	2293	) 192		81
664			B		GOOD	I	4	2297	B 397		81
665			CONTIN	MCW	0&X3,0&X3	I	7	2301	M 070 070		81
666			SBR		INDEX3	I	4	2308	H 099		81
667			COMBLK	C	0&X3,@ @	I	7	2312	C 070 H54		81
668			SAR		INDEX3	I	4	2319	Q 099		82
669			BE		COMBLK	I	5	2323	B L12 S		82
670			A		@1@,INDEX3	I	7	2328	A H70 099		82
671			B		ALLDIO,0&X3,,	I	8	2335	B L47 070		82
672			B		LODPAR	I	4	2343	B K19		82
673			ALLDIO	MCW	@ @,0&X1	I	7	2347	M H69 0'0		82
674			MCW		@ @,MAINX&72	I	7	2354	M H54 073		83
675			B		NEWWR	I	4	2361	B J35		83
676			CW		OUTPT&80	I	4	2365	) 192		83
677			MN		@6@,TDF6&4	I	7	2369	D H71 768		83
678			BETTER	B	PASSI	I	4	2376	B U60		83
679			WKAREA	DCW	@ @	I	11	2390			83
680			DTFNM	S	INDEX3&1	I	4	2391	S 100		84
681			B		SCANX	I	4	2395	B N55		84
682			LCA		MAINX&18&X3,FILENM	I	7	2399	L 0A9 349		84
683			DIFREC	B	REDREC	I	4	2406	B 774		84
684			DELTA	BCE	ALPHA,MAINX&5,*	I	8	2410	B M30 006	*	84
685			C		MAINX&19,@ @	I	7	2418	C 020 H76		84
686			BU		DTFOUT	I	5	2425	B M46 /		84
687			ALPHA	B	WRTRC	I	4	2430	B 721		85
688			BCE		DIFREC,MAINX&5,*	I	8	2434	B M06 006	*	85
689			B		DTFINT	I	4	2442	B W50		85
690			DTFOUT	MN	@5@,TDF6&4	I	7	2446	D H56 768		85
691			SBR		INDEX3,ENDDTF	I	7	2453	H 099 567		85
692			B		SAVCD	I	4	2460	B 098		85
693			SBR		WALK&3,ALTB	I	7	2464	H Q99 097		86
694			C		MAINX&17,@DTF@	I	7	2471	C 018 H79		86
695			CS		LMAINX	I	4	2478	/ 086		86
696			MCW		@33333@,MAINX&19	I	7	2482	M H84 020		86
697			BE		SETDSW	I	5	2489	B N05 S		86
698			RIVER	SBR	BETTER&3,PASS2	I	7	2494	H L79 V06		86
699			B		GOOD&4	I	4	2501	H K01		87
700			SETDSW	SBR	BETTER&3,RNDTF	I	7	2505	H L79 N16		87
701			B		GOOD&4	I	4	2512	B K01		87

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
702			RNDTF	RTW	1,341	I	8	2516	L \$U1 341 R		87
703			BSP		1	I	5	2524	U \$U1 B		87
704			CW		DTFGM	I	4	2529	) 568		87
705			B		PASSI	I	4	2533	B U60		87
706			HEARB	B	SCANX	I	4	2537	B N55		88
707			MCW		MAINX&18&X3,DTFTAB&103	I	7	2541	M 0A9 452		88
708			B		ACTUAL	I	4	2548	B 189		88
709			DCW		&DTFTAB&93	I	3	2554	442		88
710			*								
711			*		SCAN FOR A COMMA OR TWO BLANKS						
712			*								
713			SCANX	SBR	CLUBS&3	I	4	2555	H 013		88
714			SCANL	SW	MAINX&20	I	4	2559	C 021		88
715			C		MAINX&21&X3,@ @	I	7	2563	C 0B2 H69		88
716			A		@1@,INDEX3	I	7	2570	A H70 099		89
717			BE		SETIT	I	5	2577	B 002 S		89
718			BCE		SETWMS,MAINX&19&X3,,	I	8	2582	B 006 0B0	,	89
719			C		INDEX3,@52@	I	7	2590	C 099 H86		89
720			BU		SCANL	I	5	2597	B N59 /		89
721			SETIT	SW	SCNSW	I	4	2602	, W18		89
722			SETWMS	SW	MAINX&20&X3	I	4	2606	, 0B1		90
723			CLUBS	B	0	I	4	2610	B 000		90
724			*								
725			*		SCAN OPERAND TABLE						
726			*								
727			*								
728			OPDSCN	SBR	INDEX2	I	4	2614	H 094		90
729			MCW		2&X2,SAVX2	I	7	2618	M 012 H89		90
730			OPDRTN	B	NEWSCN	I	4	2625	B '06		90
731			MCW		SAVX2#3,INDEX2	I	7	2629	M H89 094		90
732			SEEKOP	C	OPDAR,0&X2	I	7	2636	C W26 010		90
733			SBR		INDEX2	I	4	2643	H 094		91
734			MCW		0&X2,INDEX1	I	7	2647	M 010 089		91
735			SAR		INDEX2	I	4	2654	Q 094		91
736			BE		OPDFND	I	5	2658	B 087 S		91
737			CHAIR	BCE	LSTPAR,0&X2,@	I	8	2663	B 075 010 @		91
738			B		SEEKOP	I	4	2671	B 036		91
739			LSTPAR	BW	EITHER,SCNSW	I	8	2675	V 333 W18 1		92
740			B		OPDRTN	I	4	2683	B 025		92
741			OPDFND	LCA	@\$@,DIOCSB&X1	I	7	2687	L H53 5X6		92
742			B		LSTPAR	I	4	2694	B 075		92
743			SAVCD	SBR	SVCDX&3	I	4	2698	H P20		92
744			CS		186	I	4	2702	/ 186		92
745			SW		101	I	4	2706	, 101		92
746			MCW		LMAINX,186	I	7	2710	M 086 186		93
747			SVCDX	B	0	I	4	2717	B 000		93
748			*								
749			*		READ IN OVERLAY TWO						
750			*								
751			TDF1	DCW	#3	I	3	2723			93

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
752				RTW	1,101	I	8	2724	L %U1 101 R		93
753			OVLAY2	SW	GMOVL2	I	4	2732	, 332		93
754				MCW	GMMVRK,GMOVL2	I	7	2736	M 773 332		93
755				RT	1,101	I	8	2743	M %U1 101 R		94
756				B	CTAPE	I	4	2751	B S22		94
757				NOP	TDF1	I	4	2755	N P23		94
758				B	PUNCH	I	4	2759	B 101		94
759			*								
760			*		ALTER PART OF IOCS						
761			*								
762			ALTER	B	CTAPE	I	4	2763	B S22		94
763				NOP	TDF4A	I	4	2767	N A35		94
764				MCW	OUTPT&7,SYMM	I	7	2771	M 119 340		94
765				BSS	OUTCL,C	I	5	2778	B 119 C		95
766				BSP	4	I	5	2783	U %U4 B		95
767				SBR	RIVER&6,TUNEL	I	7	2788	H N00 Q88		95
768				SBR	PREPS2&3	I	4	2795	H 665		95
769				R		I	1	2799	1		95
770				C	MAINX&17,@ALT@	I	7	2800	C 018 H92		95
771				BU	WALK	I	5	2807	B Q96 /		95
772			HOMAL	B	SAVXX	I	4	2812	B C19		96
773				B	PACKX	I	4	2816	B R43		96
774			NOALTB	B	CTAPE	I	4	2820	B S22		96
775				NOP	TDF4A	I	4	2824	N A35		96
776				C	OUTPT&83,HLDA1	I	7	2828	C 195 I02		96
777				BE	CHECK	I	5	2835	B ?05 S		96
778			PROPRE	C	OUTPT&17,@JOB@	I	7	2840	C 129 H95		96
779			ALTS1	BU	ALTS2E	I	5	2847	B Q60 /		97
780				B	NOPJB	I	4	2852	B 205		97
781				B	NOTER	I	4	2856	B 220		97
782			ALTS2E	C	OUTPT&17,@CTL@	I	7	2860	C 129 H98		97
783			ALTS2	BE	OUTCL	I	5	2867	B 119 S		97
784			SOLVED	MCW	OUTPT&85,LMAINX	I	7	2872	M 197 086		97
785				SW	READS	I	4	2879	, 110		97
786			ALTIO	BSS	REGEN,G	I	5	2883	B A44 G		98
787			TUNEL	BW	BSPT4,READS	I	8	2888	V R04 I10 1		98
788			WALK	B	SAVCD	I	4	2896	B O98		98
789				B	ALTBY	I	4	2900	B U97		98
790			BSPT4	BW	REGL,XCARDS	I	8	2904	V R27 I09 1		98
791				MN	@5@,TDF6&4	I	7	2912	D H56 768		98
792				B	NEWVRT	I	4	2919	B J35		99
793				B	REGL&5	I	4	2923	B R32		99
794			REGL	BSP	4	I	5	2927	U %U4 B		99
795				LCA	AREASV,186	I	7	2932	L 331 186		99
796				B	ALTBY	I	4	2939	B U97		99
797			PACKX	SBR	PACKS&3	I	4	2943	H ?04		99
798				SW	BALTR	I	4	2947	, I03		99
799				CW	SCNSW	I	4	2951	) W18		100
800				S	INDEX3&1	I	4	2955	S 100		100
801				B	SCANX	I	4	2959	B N55		100

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
802				ZA	MAINX&18&X3,HLDA1#4	I	7	2963	? 0A9 I02		100
803				BW	PARKS,SCNSW	I	8	2970	V R93 W18 1		100
804				B	SCANX	I	4	2978	B N55		100
805				ZA	MAINX&18&X3,HLDB	I	7	2982	? 0A9 I07		100
806				CW	BALTR#1	I	4	2989	) I03		101
807			PARKS	CS	LMAINX	I	4	2993	/ 086		101
808				SW	1	I	4	2997	, 001		101
809			PACKS	B	0	I	4	3001	B 000		101
810			*								
811			*		ALTER NUMBER COMPARES EQUAL						
812			*								
813			CHECK	BW	WRPAL,BALTR	I	8	3005	V ?37 I03 1		101
814			DBLAL	C	OUTPT&83,HLDB#4	I	7	3013	C 195 I07		101
815				BE	WRPAL	I	5	3020	B ?37 S		101
816				B	CTAPE	I	4	3025	B S22		102
817				NOP	TDF4A	I	4	3029	N A35		102
818				B	DBLAL	I	4	3033	B ?13		102
819			WRPAL	BLC	TUNEL	I	5	3037	B Q88 A		102
820				R		I	1	3042	1		102
821				C	MAINX&17,@ALT@	I	7	3043	C 018 H92		102
822				BE	HOMAL	I	5	3050	B Q12 S		102
823				C	MAINX&17,@JOB@	I	7	3055	C 018 H95		103
824			ALTS3	BU	ALTS4E	I	5	3062	B ?75 /		103
825				B	NOPJB	I	4	3067	B 205		103
826				B	RSOLV	I	4	3071	B 175		103
827			ALTS4E	C	MAINX&17,@CTL@	I	7	3075	C 018 H98		103
828			ALTS4	BE	CRDCL	I	5	3082	B 138 S		103
829				BW	TUFF,BALTR	I	8	3087	V A03 I03 1		104
830				CW	READS	I	4	3095	) I10		104
831				B	ALTIO	I	4	3099	B Q83		104
832			TUFF	B	SAVXX	I	4	3103	B C19		104
833				CW	XCARDS	I	4	3107	) I09		104
834				SBR	RSOLV&7,SOLVED	I	7	3111	H 182 Q72		104
835				SBR	CHUCK&3	I	4	3118	H 234		104
836				MCW	@N@,NOSOL	I	7	3122	M I08 131		105
837				B	PROPRE	I	4	3129	B Q40		105
838			*								
839			*		TDF FOR READING 86 CHARACTER RECORDS						
840			*								
841			TDF4A	DCW	TUNEL	I	3	3135	Q88		105
842				RT	4,OUTPT	I	8	3136	M %U4 I12 R		105
843			*								
844			*		REGENERATION OF DIOCS AND DTF						
845			*								
846			REGEN	BW	ORDN,XCARDS	I	8	3144	V A85 I09 1		105
847				SBR	NEKREC&3,SPCAS	I	7	3152	H 684 A74		105
848				SBR	ALDIO-1,SOFT	I	7	3159	H B02 B68		106
849				CW	READS	I	4	3166	) I10		106
850				B	FINN	I	4	3170	B 642		106
851			SPCAS	MCW	AREASV,LMAINX	I	7	3174	M 331 086		106

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
952				DCW	@@@	I	1	3521			119
953				DCW	-MINUS3&4	I	3	3524	I9C		119
954				DCW	@OUT@	I	3	3527			120
955				DCW	-MINUS2&4	I	3	3530	I9D		120
956			TAPT@	DCW	@INP@	I	3	3533			120
957				DCW	@@@	I	1	3534			120
958				DCW	@045@	I	3	3537			120
959				DCW	@REL@	I	3	3540			120
960				DCW	@046@	I	3	3543			120
961				DCW	@STO@	I	3	3546			121
962				DCW	@006@	I	3	3549			121
963			FEAT@	DCW	@OVT@	I	3	3552		OVERLAP	121
964				DCW	@@@	I	1	3553			121
965				DCW	@007@	I	3	3556			121
966				DCW	@TAP@	I	3	3559		TAPE	121
967				DCW	@008@	I	3	3562			121
968				DCW	@REA@	I	3	3565		READER	122
969				DCW	@009@	I	3	3568			122
970				DCW	@PUN@	I	3	3571		PUNCH	122
971				DCW	@010@	I	3	3574			122
972			IODT@	DCW	@PRI@	I	3	3577		PRINTER	122
973				DCW	@@@	I	1	3578			122
974				DCW	@011@	I	3	3581			122
975				DCW	@STA@	I	3	3584		STANDARD	123
976				DCW	@012@	I	3	3587			123
977				DCW	@NON@	I	3	3590		NONSTANDARD	123
978				DCW	@013@	I	3	3593			123
979				DCW	@MIX@	I	3	3596		MIXED	123
980				DCW	@014@	I	3	3599			123
981				DCW	@CHE@	I	3	3602		CHECK	123
982				DCW	@015@	I	3	3605			124
983				DCW	@IDE@	I	3	3608		IDENT	124
984				DCW	@026@	I	3	3611			124
985				DCW	@RDL@	I	3	3614			124
986				DCW	@016@	I	3	3617			124
987			LABT@	DCW	@TM @	I	3	3620		TM	124
988				DCW	@@@	I	1	3621			124
989				DCW	@018@	I	3	3624			125
990				DCW	@1 @	I	3	3627		EXIT 1	125
991				DCW	@019@	I	3	3630			125
992				DCW	@2 @	I	3	3633		EXIT 2	125
993				DCW	@020@	I	3	3636			125
994				DCW	@3 @	I	3	3639		EXIT 3	125
995				DCW	@021@	I	3	3642			125
996				DCW	@4 @	I	3	3645		EXIT 4	126
997				DCW	@022@	I	3	3648			126
998				DCW	@5 @	I	3	3651		EXIT 5	126
999				DCW	@023@	I	3	3654			126
1000				DCW	@6 @	I	3	3657		EXIT 6	126
1001				DCW	@024@	I	3	3660			126

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
1002				DCW	@7 @	I	3	3663		EXIT 7	126
1003				DCW	@025@	I	3	3666			127
1004			EXIT@	DCW	@8 @	I	3	3669		EXIT 8	127
1005				DCW	@@@	I	1	3670			127
1006				DCW	@027@	I	3	3673			127
1007				DCW	@729@	I	3	3676		729	127
1008				DCW	@028@	I	3	3679			127
1009			DRIT@	DCW	@733@	I	3	3682		7330	127
1010				DCW	@@@	I	1	3683			128
1011				DCW	@029@	I	3	3686			128
1012				DCW	@NOR@	I	3	3689		NO RWED	128
1013				DCW	@030@	I	3	3692			128
1014			RWDT@	DCW	@UNL@	I	3	3695		UNLOAD	128
1015				DCW	@@@	I	1	3696			128
1016				DCW	@037@	I	3	3699			128
1017				DCW	@REC@	I	3	3702		RECORD	129
1018				DCW	@038@	I	3	3705			129
1019			COU@	DCW	@HAS@	I	3	3708		HASH	129
1020				DCW	@@@	I	1	3709			129
1021				DCW	@034@	I	3	3712			129
1022				DCW	@CLE@	I	3	3715			129
1023				DCW	@033@	I	3	3718			129
1024				DCW	@PRO@	I	3	3721			130
1025				DCW	@032@	I	3	3724			130
1026			REAT@	DCW	@SCA@	I	3	3727			130
1027			*								
1028			*		DTF TABLE OF LABELS						
1029			*								
1030				DCW	@@@	I	1	3728			130
1031				DCW	@OVE@	I	3	3731		OVERFLOW	130
1032				DCW	@FOR@	I	3	3734		FORMSCTL	130
1033				DCW	@COB@	I	3	3737		COBOL	130
1034				DCW	@VAR@	I	3	3740		VARBUILD	131
1035				DCW	@CHA@	I	3	3743		CHANDRIVE	131
1036				DCW	@FIL@	I	3	3746		FILETYPE	131
1037				DCW	@MOD@	I	3	3749		MODEPAR	131
1038				DCW	@CAR@	I	3	3752		CARDPROC	131
1039				DCW	@ALT@	I	3	3755		ALTTAPE	131
1040				DCW	@REC@	I	3	3758		RECFORM	131
1041				DCW	@SIZ@	I	3	3761		SIZERC	132
1042				DCW	@PAD@	I	3	3764		PADDING	132
1043				DCW	@BLO@	I	3	3767		BLOCKSIZE	132
1044				DCW	@IOA@	I	3	3770		IOAREAS	132
1045				DCW	@WR@	I	3	3773		WORKAREA	132
1046				DCW	@IND@	I	3	3776		INDEXREC	132
1047				DCW	@E@	I	3	3779		EOFADDR	132
1048				DCW	@WLR@	I	3	3782		WRADDR	133
1049				DCW	@TOT@	I	3	3785		TOTALS	133
1050				DCW	@TYP@	I	3	3788		TYPELABEL	133
1051				DCW	@CHE@	I	3	3791		CHECKLABEL	133

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
1052			DCW	@HEA@	HEADER	I	3	3794			133
1053			DCW	@SER@	SERIALNUM	I	3	3797			133
1054			DCW	@REE@	REELSER	I	3	3800			133
1055			DTFLAB	DCW	@REW@	I	3	3803			134
1056			*								
1057			*								
1058			*		LABEL TABLE						
1059			*								
1060			DCW	@@@@		I	1	3804			134
1061			DCW	@TAP@	TAPEUSE	I	3	3807			134
1062			DCW	@CHE@	CHECKPOINT	I	3	3810			134
1063			DCW	@DIO@	DIOCSORG	I	3	3813			134
1064			DCW	@FEA@	FEATURES	I	3	3816			134
1065			DCW	@IOD@	IODEVICES	I	3	3819			134
1066			DCW	@LAB@	LABELDEF	I	3	3822			135
1067			DCW	@ALT@	ALTAPE	I	3	3825			135
1068			DCW	@EXI@	EXITS	I	3	3828			135
1069			DCW	@VAR@	VARBULLD	I	3	3831			135
1070			DCW	@COU@	COUNTS	I	3	3834			135
1071			DCW	@DRI@	DRIVETYPE	I	3	3837			135
1072			DCW	@RWD@	RWDOPTION	I	3	3840			135
1073			DCW	@REA@	READERROR	I	3	3843			136
1074			LBLTBL	DCW	@INP@	I	3	3846			136
1075			LTORG	*		I			3847		
			DCW	@EX@		I	2	3848		LIT	136
			DCW	@7@		I	1	3849		LIT	136
			DCW	@1 8@		I	3	3852		LIT	136
			DCW	@\$@		I	1	3853		LIT	136
			DCW	@ @		I	1	3854		LIT	136
			DCW	@*@		I	1	3855		LIT	137
			DCW	@5@		I	1	3856		LIT	137
			DCW	@55555@		I	5	3861		LIT	137
			DCW	@'@		I	1	3862		LIT	137
			SAVXLL	DCW	#03	I	3	3865		AREA	137
			DCW	@, @		I	2	3867		LIT	137
			DCW	@ @		I	2	3869		LIT	137
			DCW	@1@		I	1	3870		LIT	138
			DCW	@6@		I	1	3871		LIT	138
			DCW	@ @ @		I	5	3876		LIT	138
			DCW	@DTF@		I	3	3879		LIT	138
			DCW	@33333@		I	5	3884		LIT	138
			DCW	@52@		I	2	3886		LIT	138
			SAVX2I	DCW	#03	I	3	3889		AREA	138
			DCW	@ALT@		I	3	3892		LIT	139
			DCW	@JOB@		I	3	3895		LIT	139
			DCW	@CTL@		I	3	3898		LIT	139
			HLDAL1	DCW	#04	I	4	3902		AREA	139
			BALTRI	DCW	#01	I	1	3903		AREA	139
			HLDBI	DCW	#04	I	4	3907		AREA	139
			DCW	@N@		I	1	3908		LIT	139

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
			XCARDS	DCW	#01	I	1	3909		AREA	140
			READSI	DCW	#01	I	1	3910		AREA	140
1076			*								
1077			*		OUTPUT AREA						
1078			*								
1079			ORG		3912	I			3912		
1080			OUTPT	DA	1X86,G	I			3912 3997		
1080			DCW	@*@		I	1	3998		GMARK	141
1081			LOPUT	EQU	*	I			3998		
1082			EX			I			B 000		142

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
1083				JOB	1401 AUTOCODER-PASS 2-COPY DTF TABLE						
1084				SFX	I						
1085				ORG	341				0341		
1086				DCW	@,@			I 1	0341		145
1087				DCW	@ @			I 1	0342		145
1088				DCW	@ @			I 1	0343		145
1089				DCW	#6			I 6	0349		145
1090				DCW	@ @			I 1	0350		145
1091				DCW	@ @	1	INPUT	I 1	0351		145
1092				DCW	@ @	2	OUTPUT	I 1	0352		145
1093				DCW	@ @	3	TAPE	I 1	0352		145
1094				DCW	@ @	4	READER	I 1	0353		146
1095				DCW	@ @	5	PUNCH	I 1	0354		146
1096				DCW	@ @	6	PRINTER	I 1	0355		146
1097				DCW	@ @	7	LOAD	I 1	0356		146
1098				DCW	@ @	8	CHECKPOINT	I 1	0357		146
1099				DCW	@ @	9	NUMBER	I 1	0358		146
1100				DCW	@ @	10	NUMBER	I 1	0359		146
1101				DCW	@ @	11	NUMBER	I 1	0360		147
1102				DCW	@ @	12	BLOCKED	I 1	0361		147
1103				DCW	@ @	13	UNBLOCKED	I 1	0362		147
1104				DCW	@ @	14	MIXED	I 1	0363		147
1105				DCW	@ @	15	VARIABLE	I 1	0364		147
1106				DCW	@ @	16-19	NUMBER	I 4	0368		147
1107				DCW	@ @	29	NUMBER	I 1	0369		147
1108				DCW	@ @	21-24	NUMBER	I 4	0373		148
1109				DCW	@ @	25-34	LABELS	I 10	0383		148
1110				DCW	@ @	35-44		I 10	0393		148
1111				DCW	@ @	45-54	LABEL	I 10	0403		148
1112				DCW	@ @	55	NUMBER	I 1	0404		148
1113				DCW	@ @	56-65	LABEL	I 10	0414		149
1114				DCW	@ @	66-75	LABEL	I 10	0424		149
1115				DCW	@ @	76	RECORD	I 1	0425		149
1116				DCW	@ @	77-80	HASH	I 4	0429		149
1117				DCW	@ @	81	STANDARD	I 1	0430		149
1118				DCW	@ @	82	NONSTANDARD	I 1	0431		149
1119				DCW	@ @	83	TM	I 1	0432		149
1120				DCW	@ @	84	ALL	I 1	0433		150
1121				DCW	@ @	85	IDENT	I 1	0434		150
1122				DCW	@ @			I 3	0437		150
1123				DCW	@ @			I 5	0442		150
1124				DCW	@ @	104-108	NUMBER	I 10	0452		150
1125				DCW	@ @	109-118		I 5	0457		150
1126				DCW	@ @	109-118	NUMBER	I 10	0467		150
1127				DCW	@ @	119-128		I 10	0477		151
1128				DCW	@ @	129-138		I 10	0487		151
1129				DCW	@ @	139-148		I 10	0497		151
1130				DCW	@ @	149-158		I 10	0507		152
1131				DCW	@ @	159-168		I 10	0517		152
1132				DCW	@ @	169-178		I 10	0527		152
1133				DCW	@ @	179-188		I 10	0537		153

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
1133				DCW	@ @	189-198		I 10	0547		153
1134				DCW	@ @	199	UNLOAD	I 1	0548		153
1135				DCW	@ @	200	NOREWD	I 1	0549		153
1136				DCW	@ @	9	201	I 1	0550		153
1137				DCW	@ @	12	202	I 1	0551		153
1138				DCW	@ @	203-205	NUMBER	I 3	0554		153
1139				DCW	@ @	206		I 1	0555		154
1140				DCW	#9			I 9	0564		154
1141				DCW	@ @	216	ADDRESS	I 1	0565		154
1142				DCW	@ @			I 1	0566		154
1143				DCW	@ @			I 1	0567		154
1144			DTFGM	DCW	@ }@			I 1	0568	GMARK	154
1145				EX				I		B 000	155

1401 AUTOCODER-PASS 2-ALTER OVERLAY			-VERSION 3	3724L	PAGE	25	
SEQ PG LIN	LABEL OP	OPERANDS	SFX CT	LOCN	INSTRUCTION	TYPE	CARD
1146	JOB	1401 AUTOCODER-PASS 2-ALTER OVERLAY	-VERSION 3	I			
1147	SFX	I					
1148	ORG	101				0101	
1149	*						
1150	*						
1151	*	CTL CARD ON TAPE 4					
1152	*						
1153	PUNCH	CW GMOV L2		I 4	0101	) 332	158
1154	BSP	1		I 5	0105	U %U1 B	158
1155	BSP	1		I 5	0110	U %U1 B	158
1156	B	ALTER		I 4	0115	B P63	158
1157	OUTCL	MCW OUTPT&85,LMAINX		I 7	0119	M 197 086	158
1158	BSS	PREPS2,C		I 5	0126	B 662 C	158
1159	NOSOL	SBR RSOLV&7,NOALTB		I 7	0131	H 182 Q20	158
1160	*						
1161	*	CTL CARD FROM CARDS					
1162	*						
1163	CRDCL	BCE LEAVE,MAINX&23,1		I 8	0138	B 167 024 1	159
1164	MN	MAINX&21,*&8		I 7	0146	D 022 160	159
1165	BCE	LEAVE,@456@,		I 8	0153	B 167 237	159
1166	CHAIN	2					MACRO
1167	BCE			I 1	0161	B	GEN 159
1168	BCE			I 1	0162	B	GEN 159
1169	B	LETBE		I 4	0163	B 171	159
1170	LEAVE	S SPECL		I 4	0167	S 337	159
1171	LETBE	B NOPCL		I 4	0171	B 183	160
1172	RSOLV	B WRTRC		I 4	0175	B 721	160
1173	B	WRTAL		I 4	0179	B ?37	160
1174	*						
1175	NOPCL	SBR NPCLX&3		I 4	0183	H 204	160
1176	MCW	@N@,ALTS2		I 7	0187	M 238 Q67	160
1177	MCW	@N@,ALTS4		I 7	0194	M 238 ?82	160
1178	NPCLX	B 0		I 4	0201	B 000	160
1179	NOPJB	SBR NPJBX&3		I 4	0205	H 219	161
1180	SW	ALTS1&4,ALTS3&4		I 7	0209	, Q51 ?66	161
1181	NPJBX	B 0		I 4	0216	B 000	161
1182	NOTER	MCW OUTPT&85,LMAINX		I 7	0220	M 197 086	161
1183	B	WRTRC		I 4	0227	B 721	161
1184	CHUCK	B NOALTB		I 4	0231	B Q20	161
1185	LTORG	*		I		0235	
	DCW	@456@		I 3	0237		LIT 161
	DCW	@N@		I 1	0238		LIT 162
1186	ORG	246				0246	
1187	DA	1X86				0331	
1188	AREASV	EQU *		I		0331	
1189	GMOV L2	DCW @} @		I 1	0332		GMARK 163
1190	EX			I		B 000	164

1401 AUTOCODER - PASS 2 - END OVERLAY			-VERSION 3	3725L	PAGE	26	
SEQ PG LIN	LABEL OP	OPERANDS	SFX CT	LOCN	INSTRUCTION	TYPE	CARD
1191	JOB	1401 AUTOCODER - PASS 2 - END OVERLAY	-VERSION 3	I			
1192	SFX	I					
1193	ORG	341				0341	
1194	OVLY3	MN @5@,TDF6&4		I 7	0341	D 432 768	167
1195	SBR	LONG&3,@N@		I 7	0348	H J60 433	167
1196	LCA	186,LMAINX		I 7	0355	L 186 086	167
1197	B	NEWWR		I 4	0362	B J35	167
1198	CW	OUTPT&80		I 4	0366	) 192	167
1199	SW	GMOV L4		I 4	0370	, 606	167
1200	MCW	GMMMRK,GMOV L4		I 7	0374	M 773 606	168
1201	B	CTAPE		I 4	0381	B S22	168
1202	NOP	TDF9		I 4	0385	N 412	168
1203	CW	GMOV L4		I 4	0389	) 606	168
1204	RWD	5		I 5	0393	U %U5 R	168
1205	B	CTAPE		I 4	0398	B S22	168
1206	NOP	TDFSYS		I 4	0402	N 423	168
1207	B	1900		I 4	0406	B 200	169
1208	TDF9	DCW #3		I 3	0412		169
1209	WTW	5,OVLY4		I 8	0413	L %U5 434 W	169
1210	TDFSYS	DCW #3		I 3	0423		169
1211	RTW	1,1650		I 8	0424	L %U1 W50 R	169
1212	*						
1213	LTORG	*		I		0432	
	DCW	@5@		I 1	0432		LIT 169
	DCW	@N@		I 1	0433		LIT 169
1214	OVLY4	EQU *&1		I		0434	
1215	SFX	X		X			
1216	*	END OF JOB					
1217	*						
1218	C	CALLTX,BLANKS-2		X 7	0434	C 173 W14	170
1219	BE	STENDX		X 5	0441	B 450 S	170
1220	B	SUREXX		X 4	0446	B T08	170
1221	STENDX	B SBROTX		X 4	0450	B O33	170
1222	RWD	5		X 5	0454	U %U5 R	170
1223	BSP	1		X 5	0459	U %U1 B	170
1224	BSP	1		X 5	0464	U %U1 B	170
1225	WTM	6		X 5	0469	U %U6 M	171
1226	RWD	6		X 5	0474	U %U6 R	171
1227	MCW	SYMMX,MAINX&2		X 7	0479	M W01 003	171
1228	LCA	LOPUT&1,MAINX&35		X 7	0486	L 198 036	171
1229	WT	5,MAINX		X 8	0493	M %U5 001 W	171
1230	WTM	5		X 5	0501	U %U5 M	171
1231	RWD	4		X 5	0506	U %U4 R	172
1232	CW	LIPUT&1,MAINX&35		X 7	0511	) 187 036	172
1233	CW	100		X 4	0518	) 100	172
1234	BYPASK	RT 1,3997		X 8	0522	M %U1 I97 R	172
1235	SW	LOPUT&1		X 4	0530	, I98	172
1236	BEF	CBSPX		X 5	0534	B 543 K	172
1237	B	BYPASK		X 4	0539	B 522	172
1238	CBSPX	RT 1,3997		X 8	0543	M %U1 I97 R	173

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
1239			SW		LOPUT&1	X	4	0551	, I98		173
1240			S		&1,CBSP1X	X	7	0555	S 605 604		173
1241			BM		CBSP3X,CBSP1X	X	8	0562	V 574 604 K		173
1242			B		CBSP2X	X	4	0570	B 543		173
1243			*								
1244			*		LOAD PASS 3						
1245			*								
1246			CBSP3X	CS	PARTB	X	4	0574	/ 466		173
1247				CS		X	1	0578	/		173
1248				CS		X	1	0579	/		174
1249			B		CTAPE	X	4	0580	B W50		174
1250			NOP		TDFE0J	X	4	0584	N 594		174
1251			B		2465	X	4	0588	B M65		174
1252			TDFE0J	DCW	CCHALT	X	3	0594	Y34		174
1253				RTW	1,2210	X	8	0595	L \$U1 K10 R		174
1254			CBSP1X	DCW	@11@	X	2	0604			174
1255			*								
1256			LTORG	*		X			0605		
1257			DCW	&1		X	1	0605		LIT	175
1257			GMOVL4	DCW	@j@	X	1	0606		GMARK	175
1258			EX			X			B 000		176

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
1259					JOB 1401 AUTOCODER - PASS 2 - ALTER ASSEMBLY - VERSION 3 X						
1260			*								
1261			*		AREA DEFINITIONS						
1262			*								
1263				SFX	B	B					
1264				ORG	1	B			0001		
1265				DA	1X86 MAIN	B		0001	0086		ADDR
1266				EQU	* LMAIN	B			0086		
1267				ORG	87	B			0087		
1268				DCW	000 INDEX1	B	3	0089			179
1269				DC	00	B	2	0091			179
1270				DCW	000 INDEX2	B	3	0094			179
1271				DC	00	B	2	0096			179
1272				DCW	000 INDEX3	B	3	0099			179
1273				DC	00	B	2	0101			179
1274				ORG	100	B			0100		
1275				DC	@j@	B	1	0100		GMARK	180
1276				DA	1X86 INPUT	B		0101	0186		
1277				DC	@j@ LINPUT&1	B	1	0187		GMARK	181
1278				DC	0 ZEROX	B	1	0188			181
1279				DC	0 CARDSX	B	1	0189			181
1280				DCW	@***@ HLDSBX	B	3	0192			181
1281			*								
1282			*		INITIALIZATION						
1283			*								
1284				ORG	101	B			0101		
1285			VOICE	CS	CALLTX	B	4	0101	/ 173		182
1286				CS		B	1	0105	/		182
1287			IOCALT	CS	LMAINX	B	4	0106	/ 086		182
1288				B	CTAPEX	B	4	0110	B W50		182
1289				NOP	TDFIO5	B	4	0114	N 132		182
1290				BCE	IOCEOF,MAINXX&73,N	B	8	0118	B 141 074 N		182
1291				B	YOURS	B	4	0126	B 541		182
1292			TDFIO5	DCW	&IOCEOF	B	3	0132	141		183
1293				RT	5,MAINXX	B	8	0133	M \$U5 001 R		183
1294			IOCEOF	MCW	@1@,HAPPYX&4	B	7	0141	M 172 N74		183
1295				MCW	@/086@	B	4	0148	M 176		183
1296				B	OKAY	B	4	0152	B 467		183
1297			STRING	CS	LMAINX	B	4	0156	/ 086		183
1298				B	CTAPEX	B	4	0160	B W50		183
1299				NOP	TDFIO5	B	4	0164	N 132		184
1300				B	HAPPYX&5	B	4	0168	B N75		184
1301				LTORG	*	B			0172		
1302				DCW	@1@	B	1	0172		LIT	184
1303				DCW	@/086@	B	4	0176		LIT	184
1304			*		PARAMETER TABLE						
1305				ORG	201	B			0201		
1306				DA	1X266	B		0201	0466		

SEQ PG LIN	LABEL OP	OPERANDS	SFX CT	LOCN	INSTRUCTION	TYPE	CARD
1307		261,266 PARTBB	B	0466		FIELD	
1308	*						
1309	*	PROCESS EX					
1310	*						
1311	OKAY	SBR SWITCH&3,CMALTB	B	7	0467	H L04 510	185
1312	EXSET	C CALLTX,BLANKS-2 Q. ANY CALLS	B	7	0474	C 173 W14	185
1313		BE PREEM	B	5	0481	B 506 S	185
1314	AL TSA	B SUREXX	B	4	0486	B T08	185
1315		B PREEM	B	4	0490	B 506	185
1316	LOGRS	C CALLTX,BLANKS-2 Q. ANY CALLS	B	7	0494	C 173 W14	185
1317		BU HAULT	B	5	0501	B S64 /	185
1318		B CARDS	B	4	0506	B 525	186
1319							
1320	*	INPUT ROUTINE					
1321	*						
1322	CMALT	BSS LSTCD,C Q. NO ALTERS	B	5	0510	B 686 C	186
1323		BSS LSTCD,A Q. NO MORE ALTERS	B	5	0515	B 686 A	186
1324		CS LMAINX	B	4	0520	/ 086	186
1325		R	B	1	0524	1	186
1326	CARDS	SBR PREEM&3,SBROTX	B	7	0525	H 509 O33	186
1327		MCW @SCR@,CHARCR	B	7	0532	M '15 U62	186
1328		MCW	B	1	0539	M	187
1329		MCW	B	1	0540	M	187
1330	YOURS	C MAINXX&17,@ALT@	B	7	0541	C 018 '18	187
1331		BCE TREAD,MAINXX&5,*	B	8	0548	B 697 006 *	187
1332		BU TREAD	B	5	0556	B 697 /	187
1333		S INDE X1&1	B	4	0561	S 090	187
1334		B SCANXX	B	4	0565	B M19	187
1335		ZA MAINXX&18&X1,HLDA1#4	B	7	0569	? 0/9 '22	188
1336	ALTR4	B CTAPEX GET NEXT RECORD	B	4	0576	B W50	188
1337		NOP TDFRAL	B	4	0580	N 922	188
1338		MCW @R@,OUTPTX&84	B	7	0584	M '23 I96	188
1339		SW LOPUTX&1	B	4	0591	, I98	188
1340		C OUTPTX&83,HLDA1	B	7	0595	C I95 '22	188
1341	CALTR	BE ALTR3 Q. ALTER NUMBER EQUAL TO	B	5	0602	B 631 S	188
1342		C OUTPTX&17,@END@ NUMBER ON ALTER CARD	B	7	0607	C I29 '26	189
1343		BE ENDST NO. WRITE TAPE	B	5	0614	B '02 S	189
1344		B CTAPEX	B	4	0619	B W50	189
1345		SFX X	X				
1346	NOP	TDF6	X	4	0623	N O24	189
1347	SFX	B	B				
1348		B ALTR4	B	4	0627	B 576	189
1349	ALTR3	BCE ALTR5,MAINXX&19&X1,,	B	8	0631	B 651 0S0 ,	189
1350		B CTAPEX Q. DELETION	B	4	0639	B W50	189
1351		SFX X	X				
1352	NOP	TDF6	X	4	0643	N O24	190
1353	SFX	B	B				
1354		B SWITCH	B	4	0647	B L01	190
1355	ALTR5	B SCANXX	B	4	0651	B M19	190
1356		ZA MAINXX&18&X1,HLDA1	B	7	0655	? 0/9 '22	190

SEQ PG LIN	LABEL OP	OPERANDS	SFX CT	LOCN	INSTRUCTION	TYPE	CARD
1357	ALTR6	C OUTPTX&83,HLDA1	B	7	0662	C I95 '22	190
1358		BE MACRO DELETE UNTIL SECOND ALTER	B	5	0669	B 931 S	190
1359		B CTAPEX NUMBER IS REACHED	B	4	0674	B W50	190
1360		NOP TDFRAL	B	4	0678	N 922	191
1361		B ALTR6	B	4	0682	B 662	191
1362	LSTCD	MCW @N@,CALTR	B	7	0686	M '27 602	191
1363		B ALTR4	B	4	0693	B 576	191
1364	*						
1365	*	MAJOR PROCESSING					
1366	*						
1367	TREAD	SW 1	B	4	0697	, 001	191
1368		SBR BRNCHX&3, SWITCH	B	7	0701	H 099 L01	191
1369		BCE HOMEXX,MAINXX&5,*	B	8	0708	B 048 006 *	191
1370		C MAINXX&17,@MLC@	B	7	0716	C 018 '30	192
1371		BE HOMEXX	B	5	0723	B 048 S	192
1372		C MAINXX&17,@CHA@	B	7	0728	C 018 '33	192
1373		BE CHAINK	B	5	0735	B H11 S	192
1374		C MAINXX&17,@ENT@ Q. ENTER CARD	B	7	0740	C 018 '36	192
1375		BE ENTST	B	5	0747	B 879 S	192
1376	SWMA1	C MAINXX&17,@MA @ Q. MODIFY ADDRESS MACRO	B	7	0752	C 018 '39	193
1377	SWMA2	BE MASETX	B	5	0759	B U33 S	193
1378		C MAINXX&17,@EX @ Q. EX CARD	B	7	0764	C 018 '42	193
1379		BE EXSET	B	5	0771	B 474 S	193
1380		C MAINXX&17,@END@ Q. END CARD	B	7	0776	C 018 '26	193
1381		BE ENDSTX	B	5	0783	B U78 S	193
1382		C MAINXX&18,WHOOPS Q. CALL STATEMENT	B	7	0788	C 019 W05	194
1383		BE CALLNX	B	5	0795	B J51 S	194
1384		C MAINXX&19,INCLDX	B	7	0800	C 020 U59	194
1385		BE CALLNX	B	5	0807	B J51 S	194
1386		C MAINXX&19,LITORG-1	B	7	0812	C 020 T57	194
1387		BE LOGRS	B	5	0819	B 494 S	194
1388		SBR INDEX3, TABLEI Q. GET, PUT, OPEN OR CLOSE	B	7	0824	H 099 T74	195
1389		C MAINXX&17,0&X3	B	7	0831	C 018 070	195
1390	COMIOC	SBR INDEX3	B	4	0838	H 099	195
1391		BE MSUBTX	B	5	0842	B P00 S	195
1392		BCE OUTIOC,0&X3,#	B	8	0847	B 859 070 #	195
1393		B COMIOC	B	4	0855	B 831	195
1394	OUTIOC	BCE HOMEXX,MAINXX&19,	B	8	0859	B 048 020	196
1395		BCE HOMEXX,MAINXX&15,	B	8	0867	B 048 016	196
1396		B MSUBTX NO, MACRO	B	4	0875	B P00	196
1397	*						
1398	*	PROCESS FIXED FORM RECORD					
1399	*						
1400	ENTST	B SBROTX	B	4	0879	B O33	196
1401		R	B	1	0883	1	196
1402		BCE ENTST,MAINXX&7,*	B	8	0884	B 879 008 *	196
1403		C MAINXX&15,@END@ Q. END CARD	B	7	0892	C 016 '26	197
1404		BE ENDSTX	B	5	0899	B U78 S	197
1405		C MAINXX&15,@ENT@ Q. NEW MODE	B	7	0904	C 016 '36	197
1406		BU ENTST	B	5	0911	B 879 /	197

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
1407				B	PREEM	B	4	0916	B 506		197
1408			TDFRAL	DCW	000	B	3	0922			197
1409				DCW	@M%U4I12R@	B	8	0930			197
1410			*								
1411			*	DELETE	ENTIRE MACRO						
1412			*								
1413			MACRO	BCE	OUTMC,OUTPTX&74,R	B	8	0931	B 943 I86 R		198
1414				B	SWITCH	B	4	0939	B L01		198
1415			OUTMC	B	CTAPEX	B	4	0943	B W50		198
1416				NOP	TDFRAL	B	4	0947	N 922		198
1417				C	OUTPTX&19,BLANKS	B	7	0951	C I31 W16		198
1418			MCOUT	BE	OUTMC	B	5	0958	B 943 S		198
1419				MCW	@N@,MCOUT	B	7	0963	M '27 958		198
1420				BCE	OUTMC,OUTPTX&74,S	B	8	0970	B 943 I86 S		199
1421				BCE	OUTMC,OUTPTX&74,C	B	8	0978	B 943 I86 C		199
1422				BSP	4	B	5	0986	U 804 B		199
1423				MCW	OUTMC,MCOUT	B	7	0991	M 943 958		199
1424				B	CMALT	B	4	0998	B 510		199
1425			*								
1426			*	PROCESS	END CARD						
1427			*								
1428			ENDST	MCW	LOPUTX,LMAINX	B	7	1002	M I97 086		199
1429				B	ENDSTX	B	4	1009	B U78		200
1430				LTORG	*	B			1013		
				DCW	@SCR@	B	3	1015		LIT	200
				DCW	@ALT@	B	3	1018		LIT	200
			HLDALB	DCW	#04	B	4	1022		AREA	200
				DCW	@R@	B	1	1023		LIT	200
				DCW	@END@	B	3	1026		LIT	200
				DCW	@N@	B	1	1027		LIT	200
				DCW	@MLC@	B	3	1030		LIT	201
				DCW	@CHA@	B	3	1033		LIT	201
				DCW	@ENT@	B	3	1036		LIT	201
				DCW	@MA @	B	3	1039		LIT	201
				DCW	@EX @	B	3	1042		LIT	201
1431			GM2XXX	DCW	@}@	B	1	1043		GMARK	201
1432			NUORIG	EQU	*&1	B		1044			
1433				EX		B			B 000		202

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
1434				JOB	1401 AUTOCODER - PASS 2 - INITIAL ASSEMBLY VERSION 3 B						
1435			*								
1436			*	AREA	DEFINITION						
1437			*								
1438				SFX	A	A					
1439				ORG	1	A			0001		
1440			MAINXX	DA	1X86	A		0001	0086		ADDR
1441				ORG	87	A			0087		
1442				DCW	@000@	A	3	0089			205
1443				DC	00	A	2	0091			205
1444				DCW	@000@	A	3	0094			205
1445				DC	00	A	2	0096			205
1446				DCW	@000@	A	3	0099			205
1447				DC	00	A	2	0101			205
1448				ORG	101	A			0101		
1449				DA	1X86 INPUTX	A			0101 0186		
1450			LIPUTX	EQU	*	A			0186		
1451				DC	@}@	A	1	0187		GMARK	206
1452			ZEROXX	DC	0	A	1	0188			206
1453			CARDSX	DC	0	A	1	0189			206
1454			HLD5BX	DCW	@***@	A	3	0192			206
1455			*								
1456			*	INITIALIZATION							
1457			*								
1458				ORG	100	A			0100		
1459				DC	@}@	A	1	0100		GMARK	207
1460			START	CS	CALLTX	A	4	0101	/ 173		207
1461				CS		A	1	0105	/		207
1462				BCE	*&5,CARDSX,1	A	8	0106	B 118 189 1		207
1463				B	RED	A	4	0114	B 132		207
1464				MCW	@N@,RHO&1	A	7	0118	M 959 764		208
1465				MCW	@N@,TSTEN&5	A	7	0125	M 959 780		208
1466			RED	SW	NTPER&4	A	4	0132	, 885		208
1467				SW	TSTEN&4	A	4	0136	, 779		208
1468				SW	OUTS2&4	A	4	0140	, 762		208
1469				BCE	READT,IOCSAV-3,*	A	8	0144	B 467 H07 *		208
1470				MCW	@N@,SWMA1	A	7	0152	M 959 526		209
1471				MCW	@N@,SWMA2	A	7	0159	M 959 533		209
1472				B	READT	A	4	0166	B 467		209
1473				ORG	201	A			0201		
1474				DA	1X266	A			0201 0466		
1475			PARTBX		261,266	A			0466		FIELD
1476			*								
1477			*	MAJOR	PROCESSING						
1478			*								
1479			READT	B	TWEDB GET NEXT RECORD	A	4	0467	B 653		210
1480			TREAD	SW	1	A	4	0471	, 001		210
1481				SBR	BRNCH&3,READT	A	7	0475	H 099 467		210
1482				BCE	OUTS2,MAINXX&5,* Q, COMMENTS CARD	A	8	0482	B 758 006 *		210
1483				C	MAINXX&19,@CHAIN@	A	7	0490	C 020 964		210

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
1484				BE	CHAINX	A	5	0497	B H11 S		210
1485				C	MAINXX&19,@MLCWA@	A	7	0502	C 020 969		211
1486				BE	OUTS2	A	5	0509	B 758 S		211
1487				C	MAINXX&17,@ENT@	Q.	7	0514	C 018 972		211
1488				BE	ENTST	A	5	0521	B 795 S		211
1489			SWMA1	C	MAINXX&19,@MA @	Q.	7	0526	C 020 977		211
1490			SWMA2	BE	MASETX	A	5	0533	B 033 S		211
1491				C	MAINXX&19,@EX @	Q.	7	0538	C 020 982		212
1492				BE	EXSET	A	5	0545	B 857 S		212
1493				C	MAINXX&17,@END@	Q.	7	0550	C 018 985		212
1494				BE	ENDSTX	A	5	0557	B 078 S		212
1495				C	MAINXX&18,WHOOPS	A	7	0562	C 019 W05		212
1496				BE	CALLNX	Q.	5	0569	B 351 S		212
1497				C	MAINXX&19,INCLDX	A	7	0574	C 020 U59		213
1498				BE	CALLNX	A	5	0581	B 351 S		213
1499				C	MAINXX&19,@LTORG@	A	7	0586	C 020 990		213
1500				BE	LORGS	Q.	5	0593	B 918 S		213
1501				SBR	INDEX3, TABLEI	A	7	0598	H 099 T74		213
1502			FEW	C	MAINXX&17,0&X3	A	7	0605	C 018 070		213
1503				SBR	INDEX3	A	4	0612	H 099		214
1504				BE	MSUBTX	A	5	0616	B P00 S		214
1505				BCE	MANY,0&X3,#	A	8	0621	B 633 070 #		214
1506				B	FEW	A	4	0629	B 605		214
1507			MANY	BCE	OUTS2,MAINXX&19,	A	8	0633	B 758 020		214
1508				BCE	OUTS2,MAINXX&15,	A	8	0641	B 758 016		214
1509				B	MSUBTX	NO.	4	0649	B P00		215
1510				*							
1511				*	INPUT ROUTINE						
1512				*							
1513			TWEDB	SBR	TWDB1&3	A	4	0653	H 696		215
1514				CS	LMAINX	A	4	0657	/ 086		215
1515				B	RTWED	A	4	0661	B 677		215
1516			CHART	C		A	1	0665	C		215
1517				BSS	EOF4,A	Q.	5	0666	B 934 A		215
1518				R		A	1	0671	1		215
1519				SSB	TWDB1,1	A	5	0672	K 693 1		216
1520			RTWED	B	CTAPEX	A	4	0677	B W50		216
1521				NOP	TDF4	A	4	0681	N 699		216
1522				BCE	CHANGE,MAINXX&73,N	A	8	0685	B 708 074 N		216
1523			TWDB1	B	TREAD	A	4	0693	B 471		216
1524			TDF4	DCW	&EOF4	A	3	0699	934		216
1525				DCW	@M%U5001R@	A	8	0707			216
1526			CHANGE	CW	CHART,TSTEN&4	A	7	0708	) 665 779		217
1527				MN	@4@,TDF4&4	A	7	0715	D 991 703		217
1528				CW	OUTS2&4,NTPER&4	A	7	0722	) 762 885		217
1529				C	CALLTX,BLANK	A	7	0729	C 173 999		217
1530				BE	HOOHA	A	5	0736	B 745 S		217
1531				B	SUREXX	A	4	0741	B T08		217
1532			HOOHA	MCW	@SCR@,CHARCR	A	7	0745	M 994 U62		218
1533				MCW		A	1	0752	M		218

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
1534				MCW		A	1	0753	M		218
1535				B	TWDB1	A	4	0754	B 693		218
1536				*							
1537				*	READ RELEASE						
1538				*							
1539				OUTS2	BSS OUTSBX,C	A	5	0758	B 041 C		218
1540			RHO	NOP		A	1	0763	N		218
1541				MCW	@8@,RHO	A	7	0764	M 995 763		218
1542				B	OUTSBX	A	4	0771	B 041		219
1543				*							
1544				*	FIXED FORM RECORDS						
1545				*							
1546				TSTEN	BSS ENTST,C	Q.	5	0775	B 795 C		219
1547				SRF		NO.	1	0780	8		219
1548				SBR	NOSIR&3,ANTST	A	7	0781	H 917 803		219
1549				MCW	@N@,BUTLIX	A	7	0788	M 959 037		219
1550				ENTST	B SBROTX	A	4	0795	B 033		219
1551				B	TWEDB	A	4	0799	B 653		219
1552				ANTST	MCW @B@,BUTLIX	A	7	0803	M 996 037		220
1553				SBR	NOSIR&3,TREAD	A	7	0810	H 917 471		220
1554				BCE	TSTEN,MAINXX&7,*	A	8	0817	B 775 008 *		220
1555				C	MAINXX&15,@END@	Q.	7	0825	C 016 985		220
1556				BE	ENDSTX	A	5	0832	B U78 S		220
1557				C	MAINXX&15,@ENT@	Q.	7	0837	C 016 972		221
1558				BU	TSTEN	A	5	0844	B 775 /		221
1559				B	SBROTX	A	4	0849	B 033		221
1560				B	READT	A	4	0853	B 467		221
1561				*							
1562				*	PROCESS EX						
1563				*							
1564				EXSET	C CALLTX,BLANK#3	Q.	7	0857	C 173 999		221
1565				BE	OUTS2	A	5	0864	B 758 S		221
1566				B	SUREXX	A	4	0869	B T08		221
1567				B	SBROTX	A	4	0873	B 033		222
1568				B	READT	A	4	0877	B 467		222
1569				*							
1570				*	READ RELEASE REDUNDANCY ROUTINE						
1571				*							
1572				NTPER	BSS YESIR,C	Q.	5	0881	B 896 C		222
1573				R		A	1	0886	1		222
1574				SS	1	A	2	0887	K 1		222
1575				MCW	@N@,RHO	A	7	0889	M 959 763		222
1576				YESIR	SBR COMETS&3,CRWRED	A	7	0896	H X65 X71		222
1577				SBR	CCONPR&3,NOSIR	A	7	0903	H X70 914		223
1578				B	CRWRED	A	4	0910	B X71		223
1579				NOSIR	B TREAD	A	4	0914	B 471		223
1580				*							
1581				*	PROCESS LTORG						
1582				*							
1583				LORGS	C CALLTX,BLANK	Q.	7	0918	C 173 999		223

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
1584				BU	HAULIT	A	5	0925	B S64 /		223
1585				B	OUTS2	A	4	0930	B 758		223
1586			EOF4	CS	LMAINX	A	4	0934	/ 086		223
1587				SW	1	A	4	0938	, 001		224
1588				MCW	@END\$\$\$@,MAINX&18	A	7	0942	M '05 019		224
1589				B	ENDSTX	A	4	0949	B U78		224
1590			ANTPER	DCW	&NTPERA	A	3	0955	881		224
1591			ACRWED	DCW	&CRWRED	A	3	0958	X71		224
1592				LTORG	*	A			0959		
				DCW	@N@	A	1	0959		LIT	224
				DCW	@CHAIN@	A	5	0964		LIT	224
				DCW	@MLCWA@	A	5	0969		LIT	225
				DCW	@ENT@	A	3	0972		LIT	225
				DCW	@RA @	A	5	0977		LIT	225
				DCW	@EX @	A	5	0982		LIT	225
				DCW	@END@	A	3	0985		LIT	225
				DCW	@LTORG@	A	5	0990		LIT	225
				DCW	@4@	A	1	0991		LIT	225
				DCW	@SCR@	A	3	0994		LIT	226
				DCW	@8@	A	1	0995		LIT	226
				DCW	@B@	A	1	0996		LIT	226
			BLANKA	DCW	#03	A	3	0999		AREA	226
				DCW	@END\$\$\$@	A	6	1005		LIT	226
1593			*								
1594			*	MAIN LINE	PROCESSING ANNEX						
1595			*								
1596				SFX	X	X					
1597				ORG	NUORIG	X			1044		
1598			EOF1B	RWD	1	X	5	1044	U %01 R		227
1599				S	PREVS	X	4	1049	S H72		227
1600				B	SWITCH	X	4	1053	B L01		227
1601			*								
1602			*	PROCESS	LOZENGED FIELD 6 - 20						
1603			*								
1604			LOZENG	BM	MLBLZ,MAINX&2&X1 Q. INTERNAL LEVEL	X	8	1057	V D68 0'3 K		227
1605				B	LABEL	X	4	1065	B /19		227
1606				MCW	BLANKS,MAINX&4&X1	X	7	1069	M W16 0'5		227
1607				MCW	INDEX1,SAVX1#3	X	7	1076	M 089 W11		227
1608				MCW	INDEX3,INDEX2	X	7	1083	M 099 094		228
1609				B	SBRD	X	4	1090	B G46		228
1610				A	SAVX1,INDEX1	X	7	1094	A W11 089		228
1611				MCW	0&X3,MAINX&X1	X	7	1101	M 070 0'1		228
1612				MCW	SAVX1,INDEX1	X	7	1108	M W11 089		228
1613				B	UPENGL	X	4	1115	B A48		228
1614			*								
1615			*	LOCATE	PARAMETERS						
1616			*								
1617			LABEL	SBR	LEXIT&3	X	4	1119	H S63		229
1618				MCW	BLANKS#5,INDEX3	X	7	1123	M W16 099		229
1619				MCW	BLANKS,CNTP	X	7	1130	M W16 W19		229

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
1620				MN	MAINX&1&X1,CNTP	X	7	1137	D 0'2 W19		229
1621			CIRCL	S	&1,CNTP	X	7	1144	S W17 W19		229
1622				BM	TENSR,CNTP	X	8	1151	V /70 W19 K		230
1623				A	@3@,INDEX3	X	7	1159	A W18 099		230
1624				B	CIRCL	X	4	1166	B /44		230
1625			TENSR	BCE	CHZON,DECTB-2&X3,0	X	8	1170	B 174 UI0 0		230
1626				MCW	BLANKS,CNTP#1	X	7	1178	M W16 W19		230
1627				MCW	DECTB&X3,INDEX3	X	7	1185	M UI2 099		231
1628				MN	MAINX&2&X1,CNTP	X	7	1192	D 0'3 W19		231
1629			MOVINP	S	&1,CNTP	X	7	1199	S W17 W19		231
1630				MCW	0&X3,0&X3	X	7	1206	M 070 070		231
1631				SAR	WAREA#3	X	4	1213	Q W22		231
1632			BCE	CHZON,0&X3,,	Q. MISSING PARAMETER	X	8	1217	B 174 070 ,		232
1633			BM	PUTIN,CNTP	Q. PARAMETER LOCATED	X	8	1225	V S44 W19 K		232
1634				MCW	WAREA,INDEX3	X	7	1233	M W22 099		232
1635				B	MOVINP	X	4	1240	B /99		232
1636			PUTIN	BCE	CHZON,0&X3,;	X	8	1244	B 174 070 ;		232
1637				BWZ	DELET,MAINX&2&X1,S	X	8	1252	V D41 0'3 S		233
1638			LEXIT	B	0	X	4	1260	B 000		233
1639			*								
1640			*	PROCESS	LTORG						
1641			*								
1642			HAULIT	MCW	@ORG @,MAINX&19 REPLACE LTORG WITH ORG	X	7	1264	M W27 020		233
1643				MCW	@L@,MAINX&74	X	7	1271	M W28 075		233
1644				B	SBR0T	X	4	1278	B 033		233
1645				B	EXITC	X	4	1282	B D79		233
1646				CS	LMAIN	X	4	1286	/ 086		233
1647				MCW	LITORG,MAINX&20 GENERATE LTORG*	X	7	1290	M T58 021		234
1648				MCW	CHARCC,MAINX&74	X	7	1297	M U61 075		234
1649				B	WHYYY	X	4	1304	B K97		234
1650			*								
1651			*		PREPARATION FOR LTORG,EX,EX OR IOCS						
1652			*								
1653			SUREX	SBR	SIMPLE&3	X	4	1308	H T41		234
1654				SW	1	X	4	1312	, 001		234
1655				CS	LIPUTX	X	4	1316	/ 186		234
1656				LCA	LMAINX,LIPUTX	X	7	1320	L 086 186		234
1657				B	EXITCX	X	4	1327	B D79		235
1658				LCA	LIPUTX,LMAINX	X	7	1331	L 186 086		235
1659			SIMPLE	B	0	X	4	1338	B 000		235
1660			TDFEXT	DCW	&RWDEXT	X	3	1344	D83		235
1661				DCW	@%UI001R@	X	8	1352			235
1662			LITORG	DCW	@LTORG*@	X	6	1358			235
1663			*								
1664			*	IOCS	TABLE						
1665			*								
1666				DCW	@#@	X	1	1359			235
1667				DCW	@RLS@	X	3	1362			236
1668				DCW	@GET@	X	3	1365			236
1669				DCW	@PUT@	X	3	1368			236

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
1670				DCW	@DTF@	X	3	1371			236
1671			TABLEI	DCW	@OPE@	X	3	1374			236
1672			*								
1673			*	GENERATE	UNKNOWN MACRO CARD						
1674			*								
1675			NOROT	SBR	NROTC&3	X	4	1375	H U14		236
1676				CS	LMAINX	X	4	1379	/ O86		236
1677				MCW	@B@,MAINX&85	X	7	1383	M W29 O86		237
1678				MCW	@UNKNOWN@,MAINX&19	X	7	1390	M W36 O20		237
1679				MCW	CHARCC,MAINX&74	X	7	1397	M U61 O75		237
1680				MCW	@*@,MAINX&5	X	7	1404	M W37 O06		237
1681			NROTC	B	O	X	4	1411	B O00		237
1682			POTS	MCW	@B@,SWITCH	X	7	1415	M W29 L01		237
1683				MCW	@N@,NEXTCD	X	7	1422	M W38 N66		238
1684				B	COOKER	X	4	1429	B E90		238
1685			*								
1686			*	MODIFY	ADDRESS MACRO						
1687			*								
1688			MASET	MCW	CHARCR,MAINX&74	X	7	1433	M U62 O75		238
1689				B	SBROTX	X	4	1440	B O33		238
1690				MCW	@D@,MAINX&17	X	7	1444	M W39 O18		238
1691				B	SGC	X	4	1451	B P18		238
1692			INCLDX	DCW	@INCLD@	X	5	1459			238
1693			CHARCS	DCW	@Z@	X	1	1460			239
1694			CHARCC	DCW	@Y@	X	1	1461			239
1695			CHARCR	DCW	@W@	X	1	1462			239
1696			KINGS	B	NOROT	X	4	1463	B T75		239
1697				MCW	HLDSB,MAINX&10	X	7	1467	M 192 O11		239
1698				B	WHYYY	X	4	1474	B K97		239
1699			ENDSTX	B	CTAPE	X	4	1478	B W50		239
1700				NOP	TDF5	X	4	1482	N V89		240
1701				B	OVLY4I	X	4	1486	B 434		240
1702			DECTB	DCW	&PARTB	X	3	1492	466		240
1703				DA	9X3	X		1493	1519		
1704			ENDDC	EQU	*	X		1519			
1705			MOVEC	LCA	@;@,O&X3 ??? BLANK OR GROUP MARK ???	X	7	1520	L W40 O70		241
1706				SBR	INDEX3	X	4	1527	H O99		241
1707				A	@3@,INDEX2&1	X	7	1531	A W18 O95		242
1708				BCE	MIDDLE,INDEX2&1,3	X	8	1538	B H22 O95 3		242
1709			LOWER	A	@1@,INDEX1	X	7	1546	A W41 O89		242
1710				SW	MAINX&20&X1	X	4	1553	, OS1		242
1711				BCE	MOVEC,MAINX&20&X1,,	X	8	1557	B V20 OS1 ,		242
1712			WEEDD	MCW	INDEX2&1,IOCSAV	X	7	1565	M O95 H10		243
1713				B	WEEDBX	X	4	1572	B N39		243
1714				MCW	IOCSAV,INDEX2&1	X	7	1576	M H10 O95		243
1715				B	COMSN	X	4	1583	B P79		243
1716			TDF5	DCW	#3	X	3	1589			243
1717				RTW	#5,OVLY4I	X	8	1590	L \$U5 434 R		243
1718			NEWEST	DC	O	X	1	1598			243
1719			SYMM	DCW	@000@	X	3	1601			243

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
1720			WHOOPS	DCW	@CALL@	X	4	1605			244
1721			ADDCAL	DCW	&CALLTX	X	3	1608	'73		244
1722			LTORG	*		X			1609		
			SAVX1X	DCW	#03	X	3	1611		AREA	244
			BLANKS	DCW	#05	X	5	1616		AREA	244
				DCW	&1	X	1	1617		LIT	244
				DCW	@3@	X	1	1618		LIT	244
			CNTPX	DCW	#01	X	1	1619		AREA	244
			WAREAX	DCW	#03	X	3	1622		AREA	245
				DCW	@ORG @	X	5	1627		LIT	245
				DCW	@L@	X	1	1628		LIT	245
				DCW	@B@	X	1	1629		LIT	245
				DCW	@UNKNOWN@	X	7	1636		LIT	245
				DCW	@*@	X	1	1637		LIT	245
				DCW	@N@	X	1	1638		LIT	245
				DCW	@D@	X	1	1639		LIT	246
				DCW	@;@	X	1	1640		LIT	246
				DCW	@1@	X	1	1641		LIT	246
1723				ORG	1649	X			1649		
1724			GM1	DCW	@j@	X	1	1649		GMARK	247
1725				EX		X			B 000		248

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
1726			JOB		1401 AUTOCODER - PASS 2 - MACRO-GENERATOR- VERSION 3	X					
1727			SFX		X	X					
1728			*								
1729			*		GENERALIZED TAPE INPUT/OUTPUT ROUTINE						
1730			*								
1731			ORG		1650	X			1650		
1732			CTAPEX	SBR	INDEX2	X	4	1650	H 094		251
1733			SBR		CCONPR&3	X	4	1654	H X70		251
1734			MCW		3&X2,INDEX2	X	7	1658	M 013 094		251
1735			MCW		8&X2,CTAPEC&7	X	7	1665	M 018 X29		251
1736			MCW		0&X2,CEORC&3	X	7	1672	M 010 X41		251
1737			SW		CCOMPR&4	X	4	1679	, X47		251
1738			MCW	A	7&X2,CCOMPR&6	X	7	1683	M 017 X49		252
1739			A		@1@,CCOMPR&6	X	7	1690	A Y93 X49		252
1740			CW		CCOMPR&4	X	4	1697	) X47		252
1741			MN		CTAPEC&3,CHALT&6	X	7	1701	D X25 Y55		252
1742			MN		CTAPEC&7,CHALT&6	X	7	1708	D X29 Y55		252
1743			MCW		@9@,CERRCT#1	X	7	1715	M Y94 Y95		252
1744			CTAPEX	RT	0,0	X	8	1722	M \$U0 000 R		253
1745			BCE		COMETS,CTAPEC&7,W	X	8	1730	B X62 X29 W		253
1746			CEORC	BEF	0	X	5	1738	B 000 K		253
1747			CCOMPR	BCE	CTAPEC,0,}	X	8	1743	B X22 000 } GMARK		253
1748			B			X	1	1751	B		253
1749			B			X	1	1752	B		253
1750			B			X	1	1753	B		253
1751			B			X	1	1754	B		254
1752			B			X	1	1755	B		254
1753			B			X	1	1756	B		254
1754			B			X	1	1757	B		254
1755			B			X	1	1758	B		254
1756			B			X	1	1759	B		254
1757			B			X	1	1760	B		254
1758			B			X	1	1761	B		255
1759			COMETS	BER	CRWRED	X	5	1762	B X71 L		255
1760			CCONPR	B	0	X	4	1767	B 000		255
1761			CRWRED	S	@1@,CERRCT	X	7	1771	S Y96 Y95		255
1762			MN		CTAPEC&3,*&4	X	7	1778	D X25 X88		255
1763			BSP		0	X	5	1785	U \$U0 B		255
1764			BCE		CTROW,CTAPEC&7,W	X	8	1790	B Y10 X29 W		255
1765			EM		CHALT,CERRCT	X	8	1798	V Y49 Y95 K		256
1766			B		CTAPEC	X	4	1806	B X22		256
1767			CTROW	A	@1@,CERASC#2	X	7	1810	A Y96 Y98		256
1768			SKP		6	X	5	1817	U \$U6 E		256
1769			BCE		CCHALT,CERASC-1,5	X	8	1822	B Y34 Y97 5		256
1770			B		CTAPEC-7	X	4	1830	B X15		256
1771			CCHALT	S	CERASC	X	4	1834	S Y98		257
1772			H		0,202	X	7	1838	. 000 202		257
1773			B		CTAPEC-7	X	4	1845	B X15		257
1774			CHALT	H	0,200	X	7	1849	. 000 200		257
1775			BSS		CTAPEC-7,E	X	5	1856	B X15 E		257

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
1776			MCW		CTAPEC&7,*&8	X	7	1861	M X29 Y75		257
1777			RT		0,0	X	8	1868	M \$U0 000 R		258
1778			H		0,201	X	7	1876	. 000 201		258
1779			B		CCONPR	X	4	1883	B X67		258
1780			HEADR	DCW	@HEADR@	X	5	1891			258
1781			LTORG		*	X			1892		
			DCW		@12@	X	2	1893		LIT	258
			DCW		@9@	X	1	1894		LIT	258
			CERRCT	DCW	#01	X	1	1895		AREA	258
			DCW		@1@	X	1	1896		LIT	259
			CERASC	DCW	#02	X	2	1898		AREA	259
1782			*		INITIALIZATION						
1783			*								
1784			ORG		1900	X			1900		
1785			STARTX	MCW	340,IOCSAV	X	7	1900	M 340 H10		260
1786			MCW			X	1	1907	M		260
1787			MCW		NORDRL,HOLE#1	X	7	1908	M W12 155		260
1788			B		CTAPE	X	4	1915	B W50		260
1789			NOP		TDFSS	X	4	1919	N Z68		260
1790			CW		GMI	X	4	1923	) W49		260
1791			SW		3998	X	4	1927	, I98		260
1792			MCW		LIPUT&1,3998	X	7	1931	M 187 I98		261
1793			CW		3995,3997	X	7	1938	) I95 I97		261
1794			BSS		ALTERX,B	X	5	1945	B Z77 B		261
1795			RWD		1	X	5	1950	U \$U1 R		261
1796			MCW		HOLE,CARDSX	X	7	1955	M 155 189		261
1797			B		STARTA	X	4	1962	B 101		261
1798			TDFSS	DCW	&CCHALT	X	3	1968	Y34		261
1799			DCW		@L\$U1001R@	X	8	1976			262
1800			ALTERX	B	CTAPEX	X	4	1977	B W50		262
1801			NOP		TDFSS	X	4	1981	N Z68		262
1802			CW		GM2XXX	X	4	1985	) '43		262
1803			RWD		1	X	5	1989	U \$U1 R		262
1804			MCW		IOCSAV,SYMMN	X	7	1994	M H10 W01		262
1805			MCW		&IOCALT,SWITCh&3	X	7	2001	M 158 L04		262
1806			SBR		HAPPY&3,STRING	X	7	2008	H N73 156		263
1807			MCW		@N@,OUTSB	X	7	2015	M 159 041		263
1808			MCW		@N@,BUT1X	X	7	2022	M 159 037		263
1809			MCW		@N@,BUT2X	X	7	2029	M 159 089		263
1810			BCE		VOICEB,IOCSAV-3,*	X	8	2036	B 101 H07 *		263
1811			MCW		@N@,SWMA2B	X	7	2044	M 159 759		264
1812			B		VOICEB	X	4	2051	B 101		264
1813			LTORG		*	X			2055		
1814			HOLEX	DCW	#01	X	1	2055		AREA	264
			DCW		&IOCALT	X	3	2058	106	ADCON	264
			DCW		@N@	X	1	2059		LIT	264
1815			ORG		1900	X			1900		
1816			DA		1X174	X			2073		
1817			CALLT	EQU	*	X			2073		

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
1818			*								
1819			*	PROCESS	MISSING PARAMETERS WITH REGARD TO ZONE						
1820			*								
1821			CHZON	BWZ	SLASH,MAINX&2&X1,S	X	8	2074	V J08 0'3 S		265
1822				BWZ	DELETE,MAINX&2&X1,B	X	8	2082	V D41 0'3 B		265
1823				MCW	@B@,MAINX&85	X	7	2090	M H44 086		265
1824			ZONBR	CW	MAINX&X1,MAINX&3&X1	X	7	2097	) 0'1 0'4		265
1825			ZONCH	B	DEFND	X	4	2104	B ?41		265
1826			SLASH	MCW	BLANKS-2,MAINX&2&X1	X	7	2108	M W14 0'3		266
1827				B	ZONBR	X	4	2115	B !97		266
1828			SUBSET	MCW	@N@,SWITCH	X	7	2119	M H45 L01		266
1829				MCW	@B@,NEXTCD	X	7	2126	M H44 N66		266
1830				MCW	CHARCS,MAINX&74	X	7	2133	M U60 075		266
1831				B	CALIT	X	4	2140	B J58		266
1832			MASKS	MCW	@B@,NOCAL	X	7	2144	M H44 K20		267
1833			*								
1834			*	PROCESSING CALL STATEMENT							
1835			*								
1836			CALLN	MCW	CHARCR,MAINX&74	X	7	2151	M U62 075		267
1837			CALIT	MCW	ADDCAL,INDEX2 BEGIN SCAN OF CALL TABLE	X	7	2158	M W08 094		267
1838				SW	MAINXX&20	X	4	2165	, 021		267
1839			YSCALX	BCE	XXXX,INDEX2-2,Y Q. CALL TABLE EXCEEDED	X	8	2169	B K90 092 Y		267
1840				C	0&X2,@ @	X	7	2177	C 010 H48		268
1841				BE	SPADEX	X	5	2184	B K09 S		268
1842				C	0&X2,MAINX&22	X	7	2189	C 010 023		268
1843				SAR	INDEX2	X	4	2196	Q 094		268
1844				BE	QUEEN	X	5	2200	B K16 S		268
1845				B	YSCALX	X	4	2205	B J69		268
1846			SPADEX	MCW	MAINX&22,0&X2	X	7	2209	M 023 010		268
1847				QUEEN	CW	MAINXX&20	X	4	2216	) 021	269
1848			NOCALX	NOP	SKELCX	X	4	2220	N R17		269
1849				B	SBROT	X	4	2224	B O33		269
1850				BCE	SWITCH,MAINX&19,D Q. INCLD STATEMENT	X	8	2228	B L01 020 D		269
1851			*								
1852			*	LOAD PARAMETES INTO TABLE							
1853			*								
1854				MCW	MAINX&10,PARTB	X	7	2236	M 011 466		269
1855				SBR	INDEX3	X	4	2243	H 099		269
1856				S	INDEX1&1	X	4	2247	S 090		269
1857			DIMNDX	B	SCANXX	X	4	2251	B M19		270
1858				SW	1	X	4	2255	, 001		270
1859				LCA	MAINX&18&X1,0&X3	X	7	2259	L 0/9 070		270
1860				SBR	INDEX3	X	4	2266	H 099		270
1861				BCE	HEARTX,MAINX&19&X1,	X	8	2270	B L09 080		270
1862				BCE	WEEDBX,MAINX&19&X1,,	X	8	2278	B N39 080 ,		270
1863				B	DIMNDX	X	4	2286	B K51		270
1864			XXXX	MCW	@7@,MAINX&85	X	7	2290	M H49 086		271
1865			WHYY	B	SBROT	X	4	2297	B O33		271
1866			SWITCH	B	READTA	X	4	2301	B 467		271
1867				B	POTS	X	4	2305	B U15		271

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
1868			*								
1869			*	GENERATE BRANCH AND DCW,S							
1870			*								
1871			HEARTX	LCA	@ @,0&X3	X	7	2309	L H50 070		271
1872				CS	LMAINX	X	4	2316	/ 086		271
1873				MCW	PARTB,MAINX&10	X	7	2320	M 466 011		271
1874				MCW	PARTB-6,MAINX&24	X	7	2327	M 460 025		272
1875				SAR	INDEX3	X	4	2334	Q 099		272
1876				MCW	@B@,MAINX&15	X	7	2338	M H44 016		272
1877			SLAM	MCW	CHARCC,MAINX&74	X	7	2345	M U61 075		272
1878				MCW	INDEX3,SAVXL2#3	X	7	2352	M 099 H53		272
1879				MCW	SAVXL2,INDEX3	X	7	2359	M H53 099		272
1880				CW	MAINX&23	X	4	2366	) 024		273
1881				B	SBROT	X	4	2370	B O33		273
1882				CS	LMAINX	X	4	2374	/ 086		273
1883				BCE	SWITCH,0&X3,	X	8	2378	B L01 070		273
1884				MCW	@DCW@,MAINX&17	X	7	2386	M H56 018		273
1885				MCW	INDEX3,INDEX2	X	7	2393	M 099 094		273
1886				B	SBGRDX	X	4	2400	B G46		273
1887				MCW	0&X3,MAINX&20&X1	X	7	2404	M 070 051		274
1888				SAR	INDEX3	X	4	2411	Q 099		274
1889				B	SLAM	X	4	2415	B L45		274
1890			*								
1891			*	SCAN FOR COMMA, TWO BLANKS, OR AN @							
1892			*								
1893			SCANXX	SBR	CLUBS&3	X	4	2419	H N12		274
1894			SCANL	SW	MAINX&20	X	4	2423	, 021		274
1895				BCE	SCNAT,MAINX&20&X1,@	X	8	2427	B N13 0S1 @		274
1896				BCE	CETWMS,MAINX&20&X1,,	X	8	2435	B M98 0S1 ,		274
1897				C	MAINX&20&X1,@ @	X	7	2443	C 0S1 H58		275
1898				BE	CLUBS	X	5	2450	B N09 S		275
1899			CXIT1	A	@1@,INDEX1	X	7	2455	A H59 089		275
1900				C	INDEX1,@52@	X	7	2462	C 089 H61		275
1901				BU	SCANL	X	5	2469	B M23 /		275
1902				C	MAINX&71,@ @	X	7	2474	C 072 H58		275
1903				BE	CLUBS	X	5	2481	B N09 S		276
1904				BCE	CLUBS,MAINX&71,	X	8	2486	B N09 072		276
1905				B	CXIT	X	4	2494	B N02		276
1906				CETWMS	SW	MAINX&21&X1	X	4	2498	, 0S2	276
1907				CXIT	A	@1@,INDEX1	X	7	2502	A H59 089	276
1908				CLUBS	B	0	X	4	2509	B 000	276
1909				SCNAT	ZA	@510@,INDEX1&1	X	7	2513	? H64 090	276
1910				ATLOK	BCE	CXIT1,MAINX&20&X1,@	X	8	2520	B M55 0S1 @	277
1911				S	&10,INDEX1&1	X	7	2528	S H66 090		277
1912				B	ATLOK	X	4	2535	B N20		277
1913			*								
1914			*	OBTAIN MORE PARAMETERS FROM ADDITIONAL RECORDS							
1915			*								
1916			WEEDBX	SBR	WEDXT&3	X	4	2539	H 021		277
1917				B	NEWED	X	4	2543	B N54		277

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
1918			WEDDBX	A	@1@,INDEX1	X	7	2547	A H59 089		277
1919			NEWEEED	C	INDEX1,@52@	X	7	2554	C 089 H61		278
1920				BU	LOOPW	X	5	2561	B 006 /		278
1921			NEXTCD	NOP	CALLCD	X	4	2566	N G80		278
1922			HAPPY	B	TWEDBA READ NEXT RECORD	X	4	2570	B 653		278
1923				NOP		X	1	2574	N		278
1924				MCW	CHARCR,MAINX&74	X	7	2575	M U62 075		278
1925			THRU	B	SBROTX	X	4	2582	B 033		278
1926				BCE	HAPPY,MAINX&5,*	X	8	2586	B N70 006 *		279
1927				S	INDEX1&1	X	4	2594	S 090		279
1928				BCE	MOVEC,MAINX&20,, Q. FIRST PARAMETER MISSING	X	8	2598	B V20 021 ,		279
1929			LOOPW	BCE	WEDDBX,MAINX&20&X1,	X	8	2606	B N47 051		279
1930				SW	MAINX&20&X1	X	4	2614	, 051		279
1931			WEDXT	B	0	X	4	2618	B 000		279
1932			TDF6	DCW	&CCHALT	X	3	2624	Y34		279
1933				DCW	@M%U6I12W@	X	8	2632			280
1934			*								
1935			*	OUTPUT ROUTINE							
1936			*								
1937			SBROTX	SBR	BRNCH&3	X	4	2633	H 099		280
1938			BUT1X	B	HOMEX	X	4	2637	B 048		280
1939			OUTSB	MCW	ANTPER,COMETS&3	X	7	2641	M 955 X65		280
1940			HOMEX	MCW	LMAIN,LOPUT	X	7	2648	M 086 I97		280
1941				BCE	BUT2X,OUTPT&73,*	X	8	2655	B 089 I85 *		280
1942				MCW	BLANKS-3,OUTPT&73	X	7	2663	M W13 I85		281
1943				SW	LOPUT&1	X	4	2670	, I98		281
1944				MCW	LIPUT&1,LOPUT&1	X	7	2674	M 187 I98		281
1945				B	CTAPEX	X	4	2681	B W50		281
1946				NOP	TDF6	X	4	2685	N 024		281
1947			BUT2X	MCW	ACRWED,COMETS&3	X	7	2689	M 958 X65		281
1948			BRNCH	B	0	X	4	2696	B 000		281
1949			*								
1950			*	PROCESS PARAMETERS FOR SUBSTITUTION							
1951			*								
1952			MSUBTX	MCW	@R@,MAINX&74	X	7	2700	M H67 075		282
1953				B	SBROTX	X	4	2707	B 033		282
1954				A	@1@,SYMMN	X	7	2711	A H59 W01		282
1955			SGC	MCW	MAINX&17,HLDSB	X	7	2718	M 018 192		282
1956				S	ENDDC	X	4	2725	S V19		282
1957				CHAIN	8	X				MACRO	
1958				S		X	1	2729	S	GEN	282
1959				S		X	1	2730	S	GEN	282
1960				S		X	1	2731	S	GEN	283
1961				S		X	1	2732	S	GEN	283
1962				S		X	1	2733	S	GEN	283
1963				S		X	1	2734	S	GEN	283
1964				S		X	1	2735	S	GEN	283
1965				S		X	1	2736	S	GEN	283
1966				S	INDEX2&2	X	4	2737	S 096		283
1967				A	@3@,INDEX2&1	X	7	2741	A H68 095		284

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
1968				MCW	MAINX&10,PARTE	X	7	2748	M 011 466		284
1969				SBR	INDEX3	X	4	2755	H 099		284
1970				S	INDEX1&1	X	4	2759	S 090		284
1971				BCE	BTREND,MAINX&20,	X	8	2763	B Q25 021		284
1972				BCE	MOVEC,MAINX&20,,	X	8	2771	B V20 021 ,		284
1973			COMSN	A	@3@,INDEX2&1	X	7	2779	A H68 095		285
1974				BCE	ABOVE,INDEX2&1,3	X	8	2786	B H33 095 3		285
1975			BELOW	B	SCANXX	X	4	2794	B M19		285
1976				LCA	MAINX&18&X1,0&X3	X	7	2798	L 0/9 070		285
1977				SBR	INDEX3	X	4	2805	H 099		285
1978				BCE	MOVEC,MAINX&20&X1,,	X	8	2809	B V20 051 ,		285
1979				BCE	WEEDD,MAINX&19&X1,,	X	8	2817	B V65 050 ,		286
1980			BTREND	LCA	@,,0&X3	X	7	2825	L H69 070		286
1981				C	LMAINX	X	4	2832	/ 086		286
1982				C	PREV#3,HLDSB	X	7	2836	C H72 192		286
1983				MCW	@999@,PREVS	X	7	2843	M H75 H72		286
1984				BE	HARMN	X	5	2850	B R65 S		286
1985				BH	RDTP1	X	5	2855	B Q65 U		287
1986			EOF1	RWD	1	X	5	2860	U %U1 R		287
1987			*								
1988			*	SUBSTITUTIONS							
1989			*								
1990			RDTP1	SW	100	X	4	2865	, 100		287
1991				B	CTAPE	X	4	2869	B W50		287
1992				NOP	TDFLIB	X	4	2873	N B18		287
1993				C	MAINX&19,HEADR	X	7	2877	C 020 Y91		287
1994				BU	RDTP1	X	5	2884	B Q65 /		287
1995				C	MAINX&7,@999@	X	7	2889	C 008 H75		288
1996				BE	KINGS	X	5	2896	B U63 S		288
1997				C	MAINX&7,HLDSB	X	7	2901	C 008 192		288
1998				BU	RDTP1	X	5	2908	B Q65 /		288
1999				B	HARMN	X	4	2913	B R65		288
2000			SKELC	MCW	@N@,NOCAL	X	7	2917	M H45 K20		288
2001				MCW	CHARCS,MAINX&74	X	7	2924	M U60 075		289
2002				B	SBROT	X	4	2931	B 033		289
2003				BCE	HARMN,MAINX&19,D	X	8	2935	B R65 020 D		289
2004				MCW	@B @,MAINX&19	X	7	2943	M H80 020		289
2005			BOUTS	CW	ZEROX	X	4	2950	) 188		289
2006				MCW	CHARCC,MAINX&74	X	7	2954	M U61 075		289
2007				B	SBROTX	X	4	2961	B 033		290
2008			HARMN	CS	LMAINX	X	4	2965	/ 086		290
2009				SW	1,100	X	7	2969	, 001 100		290
2010				MCW	LIPUT&1,100	X	7	2976	M 187 100		290
2011				B	CTAPEX	X	4	2983	B W50		290
2012				NOP	TDFLIB2	X	4	2987	N B29		290
2013				C	MAINX&19,HEADR	X	7	2991	C 020 Y91		290
2014				MCW	MAINX&7,PREVS	X	7	2998	M 008 H72		291
2015				BE	SWITCH	X	5	3005	B L01 S		291
2016				C	MAINX&7,@)00@	X	7	3010	C 008 H83		291
2017				BU	LZFPND	X	5	3017	B ?26 /		291

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
2118				BU	TPRD1	X	5	3518	B D92 /		305
2119			SOLUT	C	MAINX&7,@999@	X	7	3523	C 008 H75		305
2120				BE	EOF1A	X	5	3530	B F56 S		306
2121			OPPENT	MCW	ADDCAL,INDEX1	X	7	3535	M W08 089		306
2122			PRTNER	BCE	TPRD1,INDEX1-2,Y	X	8	3542	B D92 087 Y		306
2123				SW	MAINX&5	X	4	3550	, 006		306
2124				C	0&X1,MAINX&7	X	7	3554	C 0'0 008		306
2125				SAR	INDEX1	X	4	3561	Q 089		306
2126				BU	PRTNER	X	5	3565	B E42 /		307
2127				BW	TPRD1,1&X1	X	8	3570	V D92 0'1 1		307
2128				CW	MAINX&5	X	4	3578	) 006		307
2129				SW	1&X1	X	4	3582	, 0'1		307
2130				SW	NEWEST	X	4	3586	, V98		307
2131			COOKER	B	CTAPEX	X	4	3590	B W50		307
2132				NOP	TDPEXT	X	4	3594	N T44		307
2133				C	MAINX&18,WHOOFS	X	7	3598	C 019 W05		308
2134				BE	SUBSET	X	5	3605	B J19 S		308
2135				C	MAINX&19,INCLD	X	7	3610	C 020 U59		308
2136				BE	SUBSET	X	5	3617	B J19 S		308
2137				C	MAINX&19,HEADR	X	7	3622	C 020 Y91		308
2138				BE	SOLUT	X	5	3629	B E23 S		308
2139				MCW	CHARCC,MAINX&74	X	7	3634	M U61 075		309
2140				LCA	LOPUT&1,100	X	7	3641	L 198 100		309
2141				B	SBROT	X	4	3648	B O33		309
2142				B	COOKER	X	4	3652	B E90		309
2143			EOF1A	MCW	ADDCAL,INDEX1	X	7	3656	M W08 089		309
2144			COMBL	BCE	CEXIT,INDEX1-2,Y	X	8	3663	B G26 087 Y		309
2145				C	0&X1,@ @	X	7	3671	C 0'0 H48		310
2146				SAR	INDEX1	X	4	3678	Q 089		310
2147				BE	CEXIT	X	5	3682	B G26 S		310
2148				BW	COMBL,1&X1	X	8	3687	V F63 0'1 1		310
2149				BW	RWDEXT,NEWEST	X	8	3695	V D83 V98 1		310
2150				*							
2151				*	CREATE COMMENTS CARD FOR UNKNOWN SUBROUTINES						
2152				*							
2153			UNKNWN	B	NOROT	X	4	3703	B T75		310
2154				SW	1&X1	X	4	3707	, 0'1		311
2155				MCW	3&X1,MAINX&10	X	7	3711	M 0'3 011		311
2156				B	SBROT	X	4	3718	B O33		311
2157				B	COMBL	X	4	3722	B F63		311
2158			CEXIT	CS	CALLT	X	4	3726	/ 173		311
2159				CS		X	1	3730	/		311
2160				CW	100	X	4	3731	) 100		311
2161				MCW	@999@,PREVS	X	7	3735	M H75 H72		312
2162			CEXIT1	B	0	X	4	3742	B 000		312
2163			SBGRD	SBR	GRAND&3	X	4	3746	B 057		312
2164				S	INDEX1&1	X	4	3750	S 090		312
2165			GRAND	BW	0,0&X2	X	8	3754	V 000 010 1		312
2166				S	@10@,INDEX2&1	X	7	3762	S 108 095		312
2167				A	@1@,INDEX1	X	7	3769	A H59 089		313

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
2168				B	GRAND	X	4	3776	B G54		313
2169			CALLCD	CS	LMAINX	X	4	3780	/ 086		313
2170				B	CTAPE	X	4	3784	B W50		313
2171				NOP	TDPEXT	X	4	3788	N T44		313
2172				MCW	CHARCS,MAINX&74	X	7	3792	M U60 075		313
2173				SW	1	X	4	3799	, 001		313
2174				B	THRU	X	4	3803	B N82		314
2175			IOCSAV	DCW	#4	X	4	3810			314
2176			CHAINX	MCW	@R@,MAINX&74	X	7	3811	M H67 075		314
2177				B	WHYYY	X	4	3818	B K97		314
2178			MIDLE	MCW	INDEX3,DECTB&X2	X	7	3822	M 099 UR2		314
2179				B	LOWER	X	4	3829	B V46		314
2180			ABOVE	MCW	INDEX3,DECTB&X2	X	7	3833	M 099 UR2		314
2181				B	BELOW	X	4	3840	B P94		315
2182				LTORG	*	X			3844		
				DCW	@B@	X	1	3844		LIT	315
				DCW	@N@	X	1	3845		LIT	315
				DCW	@ @	X	3	3848		LIT	315
				DCW	@7@	X	1	3849		LIT	315
				DCW	@ @	X	1	3850		LIT	315
			SAVXL2	DCW	#03	X	3	3853		AREA	315
				DCW	@DCW@	X	3	3856		LIT	316
				DCW	@ @	X	2	3858		LIT	316
				DCW	@1@	X	1	3859		LIT	316
				DCW	@52@	X	2	3861		LIT	316
				DCW	@510@	X	3	3864		LIT	316
				DCW	&10	X	2	3866		LIT	316
				DCW	@R@	X	1	3867		LIT	316
				DCW	@3@	X	1	3868		LIT	317
				DCW	@,@	X	1	3869		LIT	317
			PREVSX	DCW	#03	X	3	3872		AREA	317
				DCW	@999@	X	3	3875		LIT	317
				DCW	@B @	X	5	3880		LIT	317
				DCW	@)00@	X	3	3883		LIT	317
				DCW	@690@	X	3	3886		LIT	317
				DCW	@15@	X	2	3888		LIT	318
				DCW	@51@	X	2	3890		LIT	318
				DCW	@015@	X	3	3893		LIT	318
				DCW	@04@	X	2	3895		LIT	318
			SAVX3X	DCW	#03	X	3	3898		AREA	318
				DCW	@I99@	X	3	3901		LIT	318
				DCW	@I@	X	1	3902		LIT	318
				DCW	@I9F@	X	3	3905		LIT	319
				DCW	@M@	X	1	3906		LIT	319
				DCW	@10@	X	2	3908		LIT	319
2183				*							
2184				*	OUTPUT AREA						
2185				*							
2186				ORG	3912	X			3912		
2187			OUTPT	DA	1X86,G	X			3912 3997		

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
2187				DCW	@*@	X	1	3998		GMARK	320
2188			LOPUT	EQU	*-1	X		3997			
2189				EX		X			B 000		321
2190				END	START	X			/ 200 080		

SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
ABOVEX	3833	ACRWED	958	ACTOUT	1143	ACTSCN	1113	ACTUAL	2089	ADDCAL	1608	AGREEI	1935
ALDIOI	3203	ALDTFI	3308	ALLDIO	2347	ALPHAI	2430	ALTBVI	1497	ALTERI	2763	ALTERX	1977
ALTOIO	2883	ALTR3B	631	ALTR4B	576	ALTR5B	651	ALTR6B	662	ALTS1I	2847	ALTS2E	2860
ALTS2I	2867	ALTS3I	3062	ALTS4E	3075	ALTS4I	3082	ALTSAB	486	ANTPER	955	ANTSTA	803
AREASV	331	ATLOKX	2520	B	86	BALTRI	3903	BELOWX	2794	BETTER	2376	BLANKA	999
BLANKS	1616	BLKFDI	1097	BLORBI	1572	BLOWAI	1602	BLUEI	627	BOUTSX	2950	BRNCHX	2696
BRTBLI	886	BSPT4I	2904	BTREND	2825	BUT1XX	2637	BUT2XX	2689	BYPASX	522	BYPSSI	3349
BYPSXI	3377	CALITX	2158	CALLCD	3780	CALLNX	2151	CALLTX	2073	CALTRB	602	CARDSB	525
CARDSX	189	CBSPIX	604	CBSP2X	543	CBSP3X	574	CCHALT	1834	CCOMPR	1743	CCONPR	1767
CEORCX	1738	CERASC	1898	CERRCT	1895	CETWMS	2498	CEXIT1	3742	CEXITX	3726	CHAINX	3811
CHAIRI	2663	CHALTX	1849	CHANGE	708	CHARCC	1461	CHARCR	1462	CHARCS	1460	CHARTA	665
CHECKI	3005	CHEXZI	3487	CHTAPI	1187	CHUCKI	231	CHZONX	2074	CIRCLX	1144	CLEANC	3064
CLUBSI	2610	CLUBSX	2509	CMALTB	510	CMCTLI	157	CNTFX	1619	COMBLK	2312	COMBLX	3663
COMEQI	984	COMETS	1762	COMIOC	831	COMPRI	851	COMSNX	2779	CONTIN	2301	COOKER	3590
COUTBI	3708	CRDCLI	138	CRDOUT	2168	CRWRBD	1771	CTAPBC	1722	CTAPEI	1222	CTAPEX	1650
CTROWX	1810	CWPRCX	3488	CXIT1X	2455	CXITX	2502	DBLALI	3013	DBLCKI	3272	DECTBX	1492
DEFNDX	3041	DELETX	3441	DELTAI	2410	DIFREC	2406	DIMNDX	2251	DIOCSB	576	DIOSBI	1147
DIVIDE	568	DRITBI	3682	DTFBR1	1727	DTFGMI	568	DTFINT	1650	DTFLAB	3803	DTFNDI	713
DTFNMI	2391	DTFOUT	2446	DTFTAB	349	EITHER	333	ENDCLN	3126	ENDDCX	1519	ENDDIO	622
ENDDTF	567	ENDSTB	1002	ENDSTX	1478	ENGL0Z	3140	ENTSTA	795	ENTSTB	879	EOP1AX	3656
EOP1BX	1044	EOP1X	2860	EOP4A	934	EXIRBI	2031	EXISBI	992	EXITBI	3669	EXITCX	3479
EXSETA	857	EXSETB	474	FDBLKI	1090	FEATBI	3552	FEWA	605	FILENM	349	FILXZI	3423
FINAL2	3261	FINALI	3252	FINDI	642	FOUNDI	1105	GAMMAI	685	GM1X	1649	GM2XXX	1043
GM0VL2	332	GM0VL4	606	GMWRKR	773	GOODI	2197	GOTITI	670	GRANDX	3754	HALTI	1921
HAPPYX	2570	HARMNX	2965	HAULIT	1264	HEADRX	1891	HEARBI	2537	HEARTX	2309	HLD1A1B	1022
HLD1A1	3902	HLD1B1	3907	HLD5BX	192	HOLEX	2055	HOMALI	2812	HOMEXX	2648	HOHAA	745
HOUSEX	3422	ICHALT	1407	ICONPR	1315	ICONPR	1340	IEORCI	1310	IERASC	1643	IERRCT	1641
IHALTI	1422	INCLDX	1459	INDEX1	89	INDEX2	94	INDEX3	99	INDRBI	2071	IOARBI	1947
IOCALT	106	IOCEOF	141	IOCSAV	3810	IODTBI	3577	IOMETX	1335	IRWRED	1344	ITAPEC	1294
ITROWI	1383	KDIOCS	1571	KINGSX	1463	LABDIO	580	LABDTF	350	LABELX	1119	LABTBI	3620
LBLMVX	3453	LBLTBL	3846	LEAVEI	167	LENGTH	743	LETTBI	171	LEXITX	1260	LIPUTI	186
LITORG	1358	LMAINX	86	LMNX	3330	L0DPA1	2219	LONGI	2157	LOOPWX	2606	LOPUTI	3998
LOPUTX	3997	LORGSX	918	LORGSB	494	LOWERX	1546	LOZENG	1057	LOZSCX	3033	LSTCDB	686
LSTPAR	2675	LUNETI	3334	LZCNTX	3238	LZFNDX	3026	MACROB	931	MAINXI	1	MAINXX	1
MANYA	633	MASSETX	1433	MASKSX	2144	MCOUTB	958	MIDLEX	3822	MINUS2	2	MINUS3	3
MLBLZX	3468	MODXZI	3430	MOVE3X	3341	MOVECX	1520	MOVINT	1199	MSUBTX	2700	NEWEED	2554
NEWEST	1598	NEWSCN	1006	NEWWR1	2135	NEXRCX	681	NEXTCD	2566	NOALTB	2820	NOCALX	2220
NOPLCI	183	NOPJBI	205	NORDRL	1612	NOROTX	1375	NOSIRA	914	NOSOLI	131	NOTERI	220
NPCLXI	201	NPJRXI	216	NPTOCX	1411	NTPERA	881	NUMERC	1541	NUORIG	1044	NWEXTI	1101
NWSCNL	1021	OKAYB	467	OPDARI	1626	OPDFND	2687	OPDRTN	2625	OPDSCN	2614	OPPNTI	3535
ORDNI	3185	OTHERI	101	OUTCLI	119	OUTIOC	859	OUTMCB	943	OUTPTI	3912	OUTPTX	3912
OUTS2A	758	OUTSBX	2641	OUTSDX	3167	OVEJKI	2020	OVERBI	2006	OVERI	1649	OVEXZI	3513
OVLAY2	2732	OVL3I1	341	OVL4I1	434	PACKSI	3001	PACKSI	2943	PARKSI	2993	PARTBX	466
PASS2I	1506	PASSI1	1460	POTSX	1415	PREEMB	506	PREPS2	662	PREVSX	3872	PROPRE	2840
PRTNER	3542	PUNCHI	101	PUNTX	1244	QUEENX	2216	RDT4AI	3241	RDTPI1X	2865	READSI	3910
READTA	467	REASBI	1173	REATBI	3727	REXZI1	3455	REDA	132	REDEXT	806	REDREC	774
REGENI	3144	REGLI	2927	REWXZI	3500	RHOA	763	RIVERI	2494	RNDTFI	2516	ROBINI	623
RSOLVI	175	RWEDA	677	RWEDI	798	RWDEXT	3483	RWDTBI	3695	SAVCDI	2698	SAVLX	1611
SAVKZ1	3889	SAVK3X	3898	SAVKLI	3865	SAVKL2	3853	SAVXTI	3330	SAVXXI	3319	SBGRDX	3746
SBROTX	2633	SCANLI	2559	SCANLX	2423	SCANXI	2555	SCANXX	2419	SCNATX	2513	SCNSWI	1618
SEARCH	2108	SEEKI	1692	SEKOP	2636	SETDSW	2505	SETITI	2602	SETWMS	2606	SGCX	2718
SHIFTL	3174	SHORTI	750	SIMPLE	1338	SKELCY	2917	SLAMY	2345	SLASHX	2108	SOFTI	3268
SOLUTX	3523	SOLVED	2872	SPEDEX	2209	SFCAI1	3174	SPECLI	337	SPOUTX	3433	SPTYPX	3378
STARTA	101	STARTI	101	STARTX	1900	STENDX	450	STRING	156	SUBSET	2119	SUREXX	1308
SVCDXI	2717	SWITCX	2301	SWMA1A	526	SWMA1B	752	SWMA2A	533	SWMA2B	759	SYMMMI	340
SYMMNX	1601	SYSTMX	3356	TABLEI	1374	TAPTBI	3533	TDF1I	2723	TDF4A	699	TDF4AI	3135
TDF4I	812	TDF5X	1589	TDF6I	764	TDF6X	2624	TDF9I	412	TDFE0J	594	TDFEXT	1344
TDFIO5	132	TDFL1B	3229	TDFLIB	3218	TDFRAL	922	TDFSSX	1968	TDFSYS	423	TENSRX	1170
THRU1	634	THRUX	2582	TOTJKI	1995	TOTRBI	1981	TOTXZI	3520	TPRDI1X	3492	TREADA	471

TREADB	697	TRPCKI	3284	TSTENA	775	TUFFI	3103	TUNELI	2888	TWDB1A	693	TWEDBA	653
TYPXZI	3474	UNKNWN	3703	UPENGL	3148	UPPERI	821	VOICEB	101	WALKI	2896	WAREAX	1622
WEDDBX	2547	WEDXTX	2618	WEEDBX	2539	WEEDDX	1565	WHOMI	677	WHOOPS	1605	WHYYXX	2297
WKAREA	2390	WRTALI	3037	WRTEXT	758	WRTREC	721	XCARDS	3909	XXXXX	2290	YESIRA	896
YOURS	541	YSCALX	2169	ZEROXX	188	ZONBRX	2097	ZONCHX	2104				

***** **

3 Errors

ERROR