

DICTIONARY

LABEL	VALUE	LABEL	VALUE	LABEL	VALUE	LABEL	VALUE
.BINL	0216	.BINO	0496	.BUN.	1092	.CALA	0603
.DEFL	0122	.ERRO	0647	.FLG.	1091	.GETN	1086
.IG.	1689	.LDR.	0605	.LENG	0694	.M.	0276
.NEXC	0808	.NOP.	1093	.READ	0637	.REM.	0861
.REOP	0622	.TAB.	0132	.TRAN	0172	.WRIT	0159
.ZZZ.	1054	ABS	0655	ABSAD	0368	ACCUM	0606
ADD	0575	ADD1	0695	ADD12	0173	ADD8	0680
ADRES	0413	AHEAD	0271	ALOAD	0856	ALPH	0659
ATCD	1042	ATERM	0607	ATRAL	0672	ATRAN	0668
ATRA8	0682	BES	0703	BINLA	0176	BINOP	0465
BLANK	0294	BRNGN	0537	BSS	0713	BTOGO	0147
BTOTL	0152	BUMPL	0373	BUMPZ	0463	CALAD	0498
CALL	0732	CALRT	0597	CHKSP	0518	CKPTO	0089
CKSET	0949	CLOSE	0145	COUNT	0764	C1	0767
C2	0768	DCNT	0809	DCODE	0079	DEC	0754
DECOD	0358	DECPT	0771	DEFLA	0093	DELTA	1557
DLDR	0803	DNEG	1087	DOUT	0791	DUP	0812
EIGHT	0277	EJECT	0816	END	0824	ENDMS	0021
ENTRY	0000	EQU	0828	ERL1	0995	ERMES	0648
ERO1	0355	ERROR	0638	ERS3	0129	ERS4	0840
ERT1	0160	ERV1	0451	ERV2	0460	ERV3	0697
E400	0999	FIFTY	0811	FIXED	0789	FLAG	0308
GENIG	1668	GETNM	1055	GOON	1094	HOLDA	0609
HOLDB	0539	HOLDR	0610	IDMES	1691	INITL	1663
INSTR	0407	INTER	0217	IOBUF	1562	LABEL	0409
LAOK	0214	LENGT	0688	LIST	0404	LITCH	0540
LITOP	0442	LOAD	0843	LOADR	0512	LOCNT	1556
LODER	0720	LOOPN	0530	LOOPV	0338	LOOP1	0008
LOOP2	0248	LOPER	0608	MACRO	0858	MESP1	0027
MESP2	1089	MLDEF	0273	MODLO	0600	MUL	0572
MULER	0123	NAMOP	0876	NCNT	0810	NCONV	0528
NEXCH	0800	NEXR.	0653	NEXRC	0321	NEXSM	0509
NEXTC	1066	NEXT1	0056	NEXXX	0063	NINES	0025
NSIGN	0345	NULIN	0288	NUM	0534	NUPAG	0289
NXPAG	0419	ONECH	0580	OPCOD	0411	OPDEF	0862
OPER	0590	OPOK	0495	OPSOK	0898	OPSUM	0624
OPSYN	0889	OPTAB	1299	ORG	0900	OSIGN	1555
OUTAD	0310	OUTLA	0309	PAGCK	0400	PASS1	0044
PASS2	0313	PAUSE	0911	PREAD	0436	PSUDO	0449
PSUD1	0085	PTHLT	0311	PUNC.	0651	PUNCH	0377
P2TYP	0224	RDREC	0634	READ	0629	REDEF	0878
REL	0915	RELCK	0364	REM	0923	REMSP	0929
REOPT	0611	RESET	0002	RLOAD	0857	ROPEN	0625
RSTRT	1690	RTCD	1043	SAMPG	1023	SAVEA	1559
SAVEB	1560	SELF	0595	SEQOP	0489	SET	0931
SETIT	0937	SETSN	1078	SEX	0953	SIX	0702

LABEL	VALUE	LABEL	VALUE	LABEL	VALUE	LABEL	VALUE
SNEG	0347	SPAC	0962	SPACE	1012	SPACL	1000
SPACT	1662	SPCLG	0986	SPCOK	0974	SPCSZ	1095
SPRED	0254	STALY	1073	START	0031	SUB	0570
SWMES	1700	SYMBL	0526	SOMES	1748	S1	1083
S5MES	1710	S6MES	1717	S7MES	1723	S8MES	1733
S9MES	1740	TABLE	4999	TABLN	0026	TABSZ	1096
TAHED	0278	TALY1	0991	TALY3	0392	TALY4	0259
TCD	1030	TEMP1	1561	TRANL	0167	TRANS	0163
TRA12	0175	TYPCK	0780	TYPE.	0652	TYPER	0379
TYPIT	0013	TYPTA	0245	UNREF	0017	UNREL	0454
VALUE	0556	VAR	0410	VARNT	1558	VCONV	0333
WOPEN	0134	WRDCK	0265	WRITE	0140	WRTRC	0156
WUN	0343	ZONE8	1069	ZZZ	1044	01FLD	0701
04FLD	1097	1CR	0823	1INIT	0051	10E4	1098
101E0	0133	2XDFT	0497	21E8	0604	8SIGN	0920
8ZONE	0774						

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
					***** SUM = +5601656163 ***	
					S N A P	VERSION 1E 5/10/64
0000	6 0000040000			LOAD		0000
0000	0 0000301663	ENTRY		BUN	INITL	INITIALIZE...
0001	0 0000300031			BUN	START	RESTART PASS1
		TABLE		EQU	4999	TABLE ORIGIN
					* RESET --PRINTS LIST OF	
					* UNREFERENCED LABELS	
					* RESETS OPTAB	
					* INITIALIZES SYMBOL TABLE	
					* AND PASS 1 TRANSFER VECTOR	
0002	0 0000380004	RESET 0		BCS	*+2	SKIP IF *PTO*
0003	0 1008500000			1000MRW		REWIND TAPE 1
0004	0 0050090289			50SPO	NUPAG	SPACE 5 LINES
0005	0 0000101096			CAD	TABSZ	IF TABSZ=0
0006	0 0000360029			BFA	START-2	SKIP AHEAD...
0007	0 0001421096			LBC	TABSZ	B=-2(N-1)
0008	1 0000104998	LOOP1-		CAD	TABLE-1	CHECK FOR
0009	0 1101360013			1101BFA	TYPIT	UNREF FLAG
0010	0 0002200008			2IBB	LOOP1	AND GO AGAIN.
0011	0 0050090289			50SPO	NUPAG	SPACE 5 LINES
0012	0 0000300029			BUN	START-2	OK.GO OUT....
0013	0 0010090823	TYPIT		10SPO	1CR	DOUBLE SPACE.
0014	1 0010094999			- 10SPO	TABLE	PRINT LABEL
0015	0 0040090017			40SPO	UNREF	AND MESSAGE..
0016	0 0000300010			BUN	LOOP1+2	GO BACK...
0017	2 0000496200	UNREF		4ALPH		IS NOT REFERENCED%
0021	2 1616455544	ENDMS		4ALPH		%%END OF ASSEMBLY%%
0025	0 9999999999	NINES		DEC	9999999999	DUMMY ENTRY
0026	0 0000003072	TABLN		DEC	3072	MAX TABLE LGTH
0027	2 1516165741	MESP1		2ALPH		,%PASS 1%
0029	0 0040060021			40PWR	ENDMS	TYPE END MESS
0030	0 6996006996			6996HLT	6996	O-O HLT.....
0031	0 0000441094	START		STP	GOON	GOON=TRUE
0032	0 0000440622			STP	.REOP	RESET
0033	0 0000300611			BUN	REOPT	OP TABLE...
0034	0 0001420026			LBC	TABLN	CLEAR SYMBOL
0035	1 0000464998			- CLL	TABLE-1	TABLE AND
0036	0 0001200035			1IBB	*-1	ENTER THE
0037	0 0000100025			CAD	NINES	DUMMY

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
0038	0 0000404999			STA	TABLE	FIRST ENTRY..
0039	0 0000101093			CAD	.NOP.	INITIALIZE
0040	0 6210400651	6210		STA	PUNC.	PASS 1
0041	0 6210400652	6210		STA	TYPE.	TRANSFER
0042	0 6210400653	6210		STA	NEXR.	VECTOR...
0043	0 0020060027			20PWR	MESP1	TYPE *PASS 1*
* PASS1 --SYMBOL TABLE FORMING PASS						
0044	0 0000380051	PASS1	0	BCS	1INIT	*PTO* JUST GO.
0045	0 5000380049		5	BCS	*+4	INPUT ON MAG-T
0046	0 0000440159			STP	.WRIT	OPEN FILE 1
0047	0 0000300134			BUN	WOPEN	FOR WRITING.
0048	0 0000300051			BUN	1INIT	GO INITIALIZE.
0049	0 0000440637			STP	.READ	OPEN MAG-TAPE
0050	0 0000300625			BUN	ROPEN	FOR READING...
0051	0 0000461555	1INIT		CLL	OSIGN	SET ABSMOD.
0052	0 0000461556			CLL	LOCNT	LOCNT=0
0053	0 0000461095			CLL	SPCSZ	SPCSZ=0
0054	0 0000461096			CLL	TABSZ	SET
0055	0 0402261096		0402	IFL	TABSZ	TABSZ=2
0056	0 5000380089	NEXT1	5	BCS	CKPTO	SEE IF *PTO*
0057	0 1110030408		1110	PRD	LABEL-1	INPUT FROM PT.
0058	0 0000440172			STP	.TRAN	TRANSLATE *
0059	0 0000300163			BUN	TRANS	
0060	0 0000380063		0	BCS	NEXXX	SKIP IF *PTO*
0061	0 0000440159			STP	.WRIT	WRITE ON
0062	0 0000300140			BUN	WRITE	MAG-TAPE..
0063	0 0000100409	NEXXX		CAD	LABEL	CHECK FOR
0064	0 0000330217		0BSA		INTER	ABNORMAL*END*
0065	0 2214360056		2214	BFA	NEXT1	REMARK...
0066	0 6612401556		6610	STB	LOCNT	LOCNT MOD 10000
0067	0 0000461561			CLL	TEMP1	SET TEMP1
0068	0 1230261561		1230	IFL	TEMP1	SIGN=3
0069	0 0000100411			CAD	OPCOD	
0070	0 0000440496			STP	.BINO	CALL BINOP
0071	0 0000300465			BUN	BINOP	
0072	0 0000300079			BUN	DCODE	FOUND...
0073	0 1108360075		1108	BFA	*+2	NOT FOUND...
0074	0 0000300076			BUN	*+2	NOT LITERAL...
0075	0 3108360081		3108	BFA	DCODE+2	LITERAL OP-CODE
0076	0 0000440647			STP	.ERRO	CALL ERROR
0077	0 5681300638		5681	BUN	ERROR	01-UNDEF OP..
0078	0 0001450000			CLA		ASSUM MACH OP
0079	0 0001330085	DCODE	1BSA		PSUD1	DECODE PSEUDO
0080	0 1109360056		1109	BFA	NEXT1	NUM-ASSEM P/O

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
0081	0 0000440122			STP	.DEFL	DEFINE
0082	0 0000300093			BUN	DEFLA	THE LABEL
0083	0 0401261556		0401	IFL	LOCNT	BUMP LOCNT 1
0084	0 0000300056			BUN	NEXT1	AND CONTINUE.
0085	0 0410400088	PSUD1	0410	STA	*+3	GET BRANCH AD
0086	0 4210400087		4210	STA	*+1	AND REL ADRES
0087	0 0400260088		0400	IFL	*+1	CALC ENTRY PT
0088	0 0000300000			BUN	**	AND BRANCH...
0089	0 0000380057	CKPTO	0	BCS	NEXT1+1	*PTO* GO BACK
0090	0 0000440637			STP	.READ	INPUT IS FROM
0091	0 0000300629			BUN	READ	MAG-TAPE...
0092	0 0000300063			BUN	NEXXX	AND GO BACK..
* DEFULA --LABEL DEFINING SUBROUTINE						
0093	0 0000100409	DEFLA		CAD	LABEL	GET LABEL
0094	0 0000360122			BFA	.DEFL	RET. IF BLANK
0095	0 0000440216			STP	.BINL	SEARCH
0096	0 0000300176			BUN	BINLA	TABLE....
0097	0 0000300123			BUN	MULER	FOUND....
0098	0 0002210099			2DBB	*+1	NOT FOUND...
0099	0 0412400539		0410	STB	HOLDB	SAVE B
0100	0 0402261096		0402	IFL	TABSZ	BUMP TABSZ
0101	0 0000101096			CAD	TABSZ	COMPARE
0102	0 0410180026		0410	CFA	TABLN	WITH MAX....
0103	0 0000340129			BCH	ERS3	ERROR IF HIGH
0104	0 0000120539			ADD	HOLDB	SUB REL LOCTN
0105	0 0000460609			CLL	HOLDA	CLEAR HOLDA
0106	0 8210400609		8210	STA	HOLDA	KEEP HUNDREDS
0107	0 0000100132			CAD	.TAB.	GET (TABLE)
0108	0 0000120539			ADD	HOLDB	SUB REL LOCTN
0109	0 0000130609			SUB	HOLDA	SUB 100(N-1)
0110	0 0000130133			SUB	101E0	SUB =101
0111	0 0410400610		0410	STA	HOLDR	MODULO 10000
0112	0 0000420610			LDB	HOLDR	B=RESULT.
0113	1 0000290002	-		RTF	0002	MOVE LABELS
0114	0 8201270609		8201	DFL	HOLDA	BUMP TALLY..
0115	0 0000320113			BRP	*-2	AND GO AGAIN.
0116	0 0000420539			LDB	HOLDB	RESTORE B=LOC
0117	0 0000100409			CAD	LABEL	INSERT
0118	1 0000404999	-		STA	TABLE	THE LABEL...
0119	0 0000101556			CAD	LOCNT	AND ITS
0120	1 0000404998	-		STA	TABLE-1	VALUE....
0121	1 1101264998	-1101		IFL	TABLE-1	SET UNREF FLAG
0122	0 0000300000	.DEFL		BUN	**	RETURN.....
0123	0 0000010122	MULER		NOP	.DEFL	*SET*SWITCH

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
0124	0 0100100124		100CAD		*	GET FLAG
0125	1 2110404998		-2110STA		TABLE-1	SET MLDEF FLG
0126	0 0000440647		STP		.ERRO	MUL-DEF SYMBOL
0127	0 6282300638		6282BUN		ERROR	ER S2....
0128	0 0000300122		BUN		.DEFL	AND GO HOME..
0129	0 0000440647	ERS3	STP		.ERRO	ER S3-SYMBOL
0130	0 6283300638		6283BUN		ERROR	TABLE FULL...
0131	0 0000300002		BUN		RESET	TERMINATE....
0132	0 0000004999	.TAB.	HLT		TABLE	(TABLE)
0133	0 0000000101	101E0	DEC		101	=101
<p>* WRITE --MAG-TAPE WRITE SUBROUTINE</p> <p>* BLOCKS TAPE AS NEEDED</p> <p>* (MUST BE EDITED UPON LOADING)</p>						
0134	0 1008501562	WOPEN	1000MRW		IOBUF	PREPARE TAPE1
0135	0 0000420152		LDB		BTOTL	SET BTOGO
0136	0 0412400147		0410STB		BTOGO	= BTOTL
0137	0 0000100159		CAD		.WRIT	GET =9 (44 F)
0138	0 4410400144		4410STA		CLOSE-1	SET TALY=9.
0139	0 0000300157		BUN		WRTRC+1	AND GO ON..
0140	0 0000420134	WRITE	LDB		WOPEN	HOLD BUF ADDR
0141	0 0100290409		100RTF		LABEL	MOVE RECORD
0142	0 0412400134		0410STB		WOPEN	HOLD BUF ADDR
0143	0 4101270144		4101DFL		*+1	BUMP TALLY
0144	0 0009320159		9BRP		.WRIT	IS IT TENTH..
0145	0 0401270147	CLOSE	0401DFL		BTOGO	ANY BLKS LEFT
0146	0 0000320156		BRP		WRTRC	YES.WRITE....
0147	0 1002580000	BTOGO	1000MPE		0000	NO.SET AND
0148	0 1000541562		1000MIW		IOBUF	WRITE 10 BLKS
0149	0 1000590151		1000MIB		*+2	DELAY UNTIL
0150	0 0000300149		BUN		*-1	TAPE STOPS...
0151	0 1001590160		1000MIE		ERT1	T1-E.O.T.
0152	0 1001580000	BTOTL	1000MPB		0000	BACKSPACE 10.
0153	0 0410260147		0410IFL		BTOGO	BUMP BTOGO 10
0154	0 0000310155		BOF		*+1	RESET OVFLOW.
0155	0 0410260152		0410IFL		BTOTL	BUMP BTOTL 10
0156	0 1100561562	WRTRC	1100MOW		IOBUF	WRITE BUFFER.
0157	0 0000420156		LDB		WRTRC	RESET BUFFER
0158	0 0412400134		0410STB		WOPEN	ADDRESS.
0159	0 0009300000	.WRIT	9BUN		**	AND GO HOME..
0160	0 0000440647	ERT1	STP		.ERRO	ER T1-INSUFFICNT
0161	0 6381300638		6381BUN		ERROR	MAG-TAPE...
0162	0 0000300029		BUN		START-2	TERMINATE...

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
* TRANS-ASTERISK TRANSLATION SUBROUTINE						
0163	0 4400280174	TRANS	4400DLB		ADD12+1	SET B=9
0164	1 0000100409	-	CAD		LABEL	GET A WORD
0165	0 0000360171		BFA		ADD12-2	SKIP IF BLANK
0166	0 0500210167		500DBB		TRANL	SET LOOP TALLY
0167	0 0202360173	TRANL	0202BFA		ADD12	IF 02 ADD 12.
0168	0 0001480002		SRT		2	GET NEXT CHAR
0169	0 0100200167		100IBB		TRANL	(CHAR LOOP)
0170	1 0011400409	-	10STR		LABEL	REPLACE WORD.
0171	0 0001210164		1DBB		TRANS+1	(WORD LOOP)
0172	0 0000300000	.TRAN	BUN		**	RETURN..
0173	0 0000120175	ADD12	ADD		TRA12	ADD TWELVE
0174	0 0009300168		9BUN		TRANL+1	AND GO BACK..
0175	0 0000000012	TRA12	DEC		0000000012	=12

* BINLA--BINARY LABEL TABLE						
* SEARCH SUBROUTINE						
0176	0 0004450000	BINLA	CLB			B=0
0177	1 0010183975	-	10CFA		TABLE-1024	IS IT IN
0178	0 0000340183		BCH		*+5	TOP 1/3...
0179	0 1024210180		1024DBB		*+1	NO.DECREASE B
0180	1 0010183975	-	10CFA		TABLE-1024	IS IT IN
0181	0 0000340183		BCH		*+2	THIS HALF...
0182	0 1024210183		1024DBB		*+1	NO.DECREASE B
0183	1 0010184487	-	10CFA		TABLE-512	IS IT IN
0184	0 0000340186		BCH		*+2	THIS HALF...
0185	0 0512210186		512DBB		*+1	NO.DECREASE B
0186	1 0010184743	-	10CFA		TABLE-256	IS IT IN
0187	0 0000340189		BCH		*+2	THIS HALF...
0188	0 0256210189		256DBB		*+1	NO.DECREASE B
0189	1 0010184871	-	10CFA		TABLE-128	IS IT IN
0190	0 0000340192		BCH		*+2	THIS HALF...
0191	0 0128210192		128DBB		*+1	NO.DECREASE B
0192	1 0010184935	-	10CFA		TABLE-64	IS IT IN
0193	0 0000340195		BCH		*+2	THIS HALF...
0194	0 0064210195		64DBB		*+1	NO.DECREASE B
0195	1 0010184967	-	10CFA		TABLE-32	IS IT IN
0196	0 0000340198		BCH		*+2	THIS HALF...
0197	0 0032210198		32DBB		*+1	NO.DECREASE B
0198	1 0010184983	-	10CFA		TABLE-16	IS IT IN
0199	0 0000340201		BCH		*+2	THIS HALF...
0200	0 0016210201		16DBB		*+1	NO.DECREASE B
0201	1 0010184991	-	10CFA		TABLE-8	IS IT IN

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
0202	0 0000340204			BCH	*+2	THIS HALF...
0203	0 0008210204			8DBB	*+1	NO.DECREASE B
0204	1 0010184995	-	10CFA		TABLE-4	IS IT IN
0205	0 0000340207			BCH	*+2	THIS HALF...
0206	0 0004210207			4DBB	*+1	NO.DECREASE B
0207	1 0010184997	-	10CFA		TABLE-2	IS IT IN
0208	0 0000340210			BCH	*+2	THIS HALF...
0209	0 0002210210			2DBB	*+1	NO.DECREASE B
0210	1 0010184999	-	10CFA		TABLE	IS THE LABEL
0211	0 0000350214			BCE	LAOK	FOUND...
0212	0 0401260216		0401IFL		.BINL	NO. SET UP
0213	0 0000300216			BUN	.BINL	ERROR RETURN.
0214	1 0000104998	LAOK -		CAD	TABLE-1	YES.GET VALUE
0215	1 1112404998		-1110STB		TABLE-1	CLR UNREF FLG
0216	0 0000300000	.BINL		BUN	**	AND RETURN...
* INTER --INTERLUDE PASS...						
* SETS TRANSFER VECTOR AND						
* INITIALIZES MAG-TAPE... THEN						
* PUNCHES SPAC CALL-IN SEQUENCE						
0217	0 0402271096	INTER	0402DFL		TABSZ	TABSZ=2(N-1)
0218	0 0000101094			CAD	GOON	CHECK ERROR
0219	0 0000360029			BFA	START-2	FLAG...
0220	0 0000380311		0	BCS	PTHLT	SKIP MAG-TAPE
0221	0 0000440159			STP	.WRIT	INITIALIZATN
0222	0 0000300145			BUN	CLOSE	IF PAPER
0223	0 1008500000		1000MRW			TAPE ONLY...
0224	0 0020061089	P2TYP	20PWR		MESP2	TYPE *PASS 2*
0225	0 0000101092			CAD	.BUN.	INITIALIZE
0226	0 6210400651		6210STA		PUNC.	TRANSFER
0227	0 6210400652		6210STA		TYPE.	VECTOR FOR
0228	0 6210400653		6210STA		NEXR.	PASS TWO...
0229	0 0000101091			CAD	.FLG.	INITIALIZE
0230	0 0000400408			STA	LABEL-1	LIST FLAG FLD
0231	0 0000101095			CAD	SPCSZ	SPCSZ=NUM SUB
0232	0 0000360238			BFA	TYPTA-7	SKIP IF ZERO.
0233	0 6000380238		6	BCS	*+5	SW 6 OMITTS PCH
0234	0 1120061000		1120PWR		SPACL	PUNCH CALL-IN
0235	0 0000421095			LDB	SPCSZ	B=SPCSZ
0236	1 1010061662		-1010PWR		SPACT	PUNCH ENTRY
0237	0 0001210236			1DBB	*-1	AND GO AGAIN.
0238	0 4412400400		4410STB		PAGCK	SET PAGCK=0
0239	0 0000101096			CAD	TABSZ	IF TABSZ=0
0240	0 0400360313		0400BFA		PASS2	OMIT TABLE...
0241	0 9000380313		9	BCS	PASS2	SUPPRESS TABL

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
0242	0 2290260400		2290IFL		PAGCK	SET PAGCK=90
0243	0 4412400265		4410STB		WRDCK	SET WRDCK
0244	0 4275260265		4275IFL		WRDCK	=75.
* TYPTA -- SYMBOL TABLE TYPED						
0245	0 0100090278	TYPTA	100SPO		TAHED	TYPE INIT HED
0246	0 0140090294		140SPO		BLANK	WRITE HEADING
0247	0 0001421096		LBC		TABSZ	B=2(N-1)
0248	0 0000100294	LOOP2	CAD		BLANK	N=NO. OF ENTR
0249	0 0000400308		STA		FLAG	SET FLAG TO
0250	1 0000104999		- CAD		TABLE	BLANK. MOVE
0251	0 0000400309		STA		OUTLA	LABEL
0252	1 0000104998		- CAD		TABLE-1	GET VALUE
0253	0 2101360273		2101BFA		MLDEF	
0254	0 0001480004	SPRED	SRT		4	NUM TO ALPH
0255	0 0001450000		CLA			REMOVE JUNK
0256	0 0000490001		SLA		1	
0257	0 0001490001		SLT		1	
0258	0 4225270259		4225DFL		TALY4	
0259	0 0075320256	TALY4	75BRP		SPRED+2	GO 4 TIMES
0260	0 0000120277		ADD		EIGHT	ZONE DIGITS
0261	0 0002430000		2LSA			ADD ALPH FLAG
0262	0 0000400310		STA		OUTAD	TO OUTPUT LOC
0263	0 0030090308		30SPO		FLAG	OUTPUT A SET
0264	0 4225270265		4225DFL		WRDCK	4 SETS TO LIN
0265	0 0075320271	WRDCK	75BRP		AHEAD	TALLY
0266	0 0010090288		10SPO		NULIN	CR B B B B
0267	0 2202270400		2202DFL		PAGCK	46 LINES PER
0268	0 0000320271		BRP		AHEAD	PAGE
0269	0 2208270400		2208DFL		PAGCK	SET TO 90
0270	0 0190090289		190SPO		NUPAG	
0271	0 0002200248	AHEAD	2IBB		LOOP2	NEXT ENTRY
0272	0 0000300313		BUN		PASS2	
0273	0 0000410276	MLDEF	LDR		.M.	
0274	0 0001400308		STR		FLAG	
0275	0 0000300254		BUN		SPRED	
0276	2 0000135413	.M.	ALPH		+M+	B B +M+
0277	0 0080808080	EIGHT	DEC		0080808080	ZONE DIGITS
0278	2 1600000000	TAHED	6ALPH		%	
0284	2 0000444943		4ALPH		DICTIONARY%	%
0288	2 1600000000	NULIN	ALPH		%	CR B B B B
0289	2 0000000016	NUPAG	5ALPH		% % %	%, %
0294	2 0000000000	BLANK	2ALPH		LABEL	
0296	2 0065415364		6ALPH		VALUE LABEL	VALUE LABEL
0302	2 0065415364		6ALPH		VALUE LABEL	VALUE% %

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
0308	2 0000000000	FLAG		ALPH		
0309	2 0000000000	OUTLA		ALPH		
0310	2 0000000000	OUTAD		ALPH		
0311	0 0766004740	PTHLT	766HLT		4740	P-T HALT
0312	0 0000300224		BUN		P2TYP	CONTINUE...

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
* PASS2 --INSTRUCTION GENERATING PASS						
0313	0 0000380318	PASS2	0	BCS	*+5	SKIP IF *PTO*
0314	0 0000440622			STP	.REOP	RESET
0315	0 0000300611			BUN	REOPT	OP TABLE...
0316	0 0000440637			STP	.READ	PREPARE
0317	0 0000300625			BUN	ROPEM	MAG-TAPE
0318	0 0000461555			CLL	OSIGN	SET ABSMOD
0319	0 0000461556			CLL	LOCNT	LOCNT=0
0320	0 0000300816			BUN	EJECT	START LISTING
0321	0 0000380436	NEXRC	0	BCS	PREAD	IF P.T.ONLY
0322	0 0000440637			STP	.READ	CALL READ
0323	0 0000300629			BUN	READ	FOR A RECORD
0324	0 0000100409			CAD	LABEL	CHECK FOR
0325	0 0000330002		0	BSA	RESET	ABNORMAL*END*
0326	0 2214360923		2214	BFA	REM	REMARK...
0327	0 6612401556		6610	STB	LOCNT	LOCNT MOD 10000
0328	0 0000461561			CLL	TEMP1	SET TEMP1
0329	0 1230261561		1230	IFL	TEMP1	SIGN = 3....
0330	0 0000460407			CLL	INSTR	CLEAR INSTR..
0331	0 6212400373		6210	STB	BUMPL	RESET
0332	0 6201260373		6201	IFL	BUMPL	SWITCH...
* VCONV --VARIANT CONVERSION ROUTINE						
0333	0 0000100410	VCONV		CAD	VAR	CAD VAR FIELD
0334	0 0000461558			CLL	VARNT	CLEAR VARNT
0335	0 0000360350			BFA	SNEG+3	EXIT IF BLANK
0336	0 0006450000			CRB		CLEAR R AND B
0337	0 0003200338			3IBB	LOOPV	SET B=3
0338	0 0001480001	LOOPV		SRT	1	GET NUMBER
0339	0 0000480001			SRA	1	INTO R-REG.
0340	0 0001210338			1DBB	LOOPV	
0341	0 0220360347		0220	BFA	SNEG	IS SIGN -
0342	0 9108360345		9108	BFA	NSIGN	IS SIGN NUM..
0343	0 0001450001	WUN		CLA	1	NO. S=0
0344	0 0000300348			BUN	SNEG+1	
0345	0 0000170343	NSIGN		EXT	WUN	YES.SAVE NUM.
0346	0 0000300348			BUN	SNEG+1	
0347	0 0000100343	SNEG		CAD	WUN	YES. S=1
0348	0 0001490009			SLT	9	
0349	0 0010401558		0010	STA	VARNT	AND STASH IT.
* DECOD --OP-CODE DECODER AND						
* MACHINE INSTRUCTION FORMER						
0350	0 0000100411			CAD	OPCOD	GET OP CODE

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
0351	0 0000440496			STP	.BINO	CALL
0352	0 0000300465			BUN	BINOP	BINOP...
0353	0 0000300358			BUN	DECOD	FOUND...
0354	0 1108360442		1108BFA	LITOP		NOT FOUND...
0355	0 0000440647	ERO1		STP	.ERRO	CALL ERROR
0356	0 5681300638		5681BUN		ERROR	01-UNDEF OP
0357	0 0001450000			CLA		SET OP = 00..
0358	0 0001330449	DECOD	1BSA		PSUDO	1=PSEUDO-OP
0359	0 1109360463		1109BFA		BUMPZ	NUM-ASSEM P/O
0360	0 8100360362		8100BFA		*+2	USE (4/1) DIG
0361	0 5112401558		5110STB		VARNT	SET (4/1)=0
0362	0 0000121558			ADD	VARNT	ADD IN VARNT
0363	0 0000310451			BOF	ERV1	BAD VARNT..
0364	0 9101360454	RELCK	9101BFA		UNREL	NG IN RELMOD.
0365	0 0101360368		0101BFA		ABSAD	ABSOL ADDRESS
0366	0 0000121555			ADD	OSIGN	REL IF RELMOD
0367	0 0000310460			BOF	ERV2	ILLEGAL SIGN
0368	0 0002490001	ABSAD		SLS	1	LINE UP INSTR
0369	0 0000400407			STA	INSTR	AND STORE IT.
0370	0 0000440603			STP	.CALA	CALL CALAD
0371	0 0000300498			BUN	CALAD	FOR ADDRESS..
0372	0 0410400407		0410STA		INSTR	AND STORE IT.
0373	0 0000010377	BUMPL		NOP	PUNCH	BUMPZ SWITCH..
0374	0 0401261556		0401IFL		LOCNT	BUMP LOCNT
0375	0 0000461557			CLL	DELTA	SET DELTA
0376	0 0401261557		0401IFL		DELTA	EQUAL TO ONE.

\* PUNCH AND TYPER --PASS 2 NORMAL  
\* OUTPUT ROUTINES

0377	0 6000380379	PUNCH	6	BCS	TYPER	SW 6 OMITTS PCH
0378	0 1010060407		1010PWR		INSTR	PUNCH INSTR..
0379	0 0000101556	TYPER		CAD	LOCNT	GET LOCNT
0380	0 0000131557			SUB	DELTA	SET FOR LIST.
0381	0 0001480004			SRT	4	PUT NUM IN R
0382	0 0000420392			LDB	TALY3	B=3
0383	0 0000490001			SLA	1	SPREAD THE
0384	0 0001490001			SLT	1	NUMBER....
0385	0 0001210383		1DBB		*-2	GO 4 TIMES...
0386	0 0000120277			ADD	EIGHT	ZONE DIGITS..
0387	0 0810400405		0810STA		LIST+1	AND STORE IT.
0388	0 0000100407			CAD	INSTR	
0389	0 0002480006			SRS	6	GET SIGN DIG.
0390	0 6110400406		6110STA		LIST+2	AND STORE IT.
0391	0 0000100407			CAD	INSTR	GET INSTR
0392	0 0000430003	TALY3	OLSA		3	CLEAR SIGN

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE FIELD					
0393	0 0000400407			STA	INSTR					AND STORE IT.
0394	0 0000100294			CAD	BLANK					RESET SPACER
0395	0 0000400412			STA	ADRES-1					FIELD.....
0396	0 0150090404		150SPO		LIST					PRINT A LINE.
0397	0 0000101091			CAD	.FLG.					RESET
0398	0 0000400408			STA	LABEL-1					ERROR FLAG..
0399	0 2202270400		2202DFL		PAGCK					ALLOW 46
0400	0 9000320321	PAGCK	9000BRP		NEXRC					LINES/PAGE...
0401	0 2208270400		2208DFL		PAGCK					TALLY=90
0402	0 0170090419		170SPO		NXPAG					START NEW PAG
0403	0 0000300321			BUN	NEXRC					EXIT...
0404	2 1614141414	LIST		ALPH	%****					CR 4(IG)
0405	2 1480808080			ALPH	*0000					IG 0 0 0 0
0406	2 0000801414			ALPH	0**					B B 0 IG IG
0407	0 0000000000	INSTR		DEC						
0408	2 0000000000			ALPH						FLAG FIELD
0409	2 0000000000	LABEL		ALPH						LABEL FIELD
0410	2 0000000000	VAR		ALPH						VARIANT FIELD
0411	2 0000000000	OPCOD		ALPH						OP CODE FIELD
0412	2 0000000000			ALPH						(5 BLANKS)
0413	2 0000000000	ADRES		6ALPH						
0419	2 0000000016	NXPAG		5ALPH	%	%	%	%	,%	
0424	2 4144594562			6ALPH						

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE FIELD	%
0430	2 0000565700		6ALPH			

\* OPTIONAL PAPER TAPE INPUT FOR PASS 2

0436	0 1110030408	PREAD 1110	PRD	LABEL-1	READ PT REC.	
0437	0 0000440172		STP	.TRAN	CALL TRANS	
0438	0 0000300163		BUN	TRANS	TO FIX *...	
0439	0 0000101091		CAD	.FLG.	RESET LISTING	
0440	0 0000400408		STA	LABEL-1	FLAG FIELD...	
0441	0 0000300324		BUN	NEXRC+3	AND CONTINUE.	

\* NON IN-LINE SEGMENTS OF DECODER

0442	0 3108360444	LITOP 3108	BFA	*+2	SEE IF LITERAL	
0443	0 0000300355		BUN	ERO1	NO. ERROR 01	
0444	0 0002490002		SLS	2	GET TWO	
0445	0 0000490001		SLA	1	OP-CODE	
0446	0 0002480009		SRS	9	DIGITS...	
0447	0 0000490003		SLA	3	LINE UP...	
0448	0 0000300362		BUN	DECOD+4	AND RETURN.	
0449	0 0410400450	PSUDO 0410	STA	*+1	STORE BRANCH	
0450	0 0000300000		BUN	**	AD.AND DO IT.	
0451	0 0000440647	ERV1	STP	.ERRO	ER V1-ILLEGAL	

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
0452	0 6581300638		6581	BUN	ERROR	SIGN OR VARIANT
0453	0 0000300364			BUN	RELCK	BUT CONTINUE.
0454	0 4400281555	UNREL	4400	DLB	OSIGN	CHECK OSIGN
0455	0 1000210457		1000	DBB	*+2	IS IT ZERO...
0456	0 0000300368			BUN	ABSAD	YES.ABSMOD...
0457	0 0000440647			STP	.ERRO	CALL ERROR
0458	0 5683300638		5683	BUN	ERROR	O3-ILL.IN REL
0459	0 0000300368			BUN	ABSAD	TREAT AS ABS.
0460	0 0000440647	ERV2		STP	.ERRO	CALL ERROR V2
0461	0 6582300638		6582	BUN	ERROR	ILLEGAL SIGN...
0462	0 0000300368			BUN	ABSAD	BUT CONTINUE.
0463	0 6229260373	BUMPZ	6229	IFL	BUMPL	SET SWITCH...
0464	0 0000300360			BUN	DECOD+2	

\* BINOP --BINARY (AND SEQUENTIAL)  
 \* OPTAB SEARCH SUBROUTINE

0465	0 0004450000	BINOP		CLB		B=0
0466	1 0010181427		-	10CFA	OPTAB+128	IS IT IN THIS
0467	0 0001340469			BCL	*+2	HALF..
0468	0 0128200469			128IBB	*+1	NO.INCREASE B
0469	1 0010181363		-	10CFA	OPTAB+64	IS IT IN THIS
0470	0 0001340472			BCL	*+2	HALF..
0471	0 0064200472			64IBB	*+1	NO.INCREASE B
0472	1 0010181331		-	10CFA	OPTAB+32	IS IT IN THIS
0473	0 0001340475			BCL	*+2	HALF..
0474	0 0032200475			32IBB	*+1	NO.INCREASE B
0475	1 0010181315		-	10CFA	OPTAB+16	IS IT IN THIS
0476	0 0001340478			BCL	*+2	HALF..
0477	0 0016200478			16IBB	*+1	NO.INCREASE B
0478	1 0010181307		-	10CFA	OPTAB+8	IS IT IN THIS
0479	0 0001340481			BCL	*+2	HALF..
0480	0 0008200481			8IBB	*+1	NO.INCREASE B
0481	1 0010181303		-	10CFA	OPTAB+4	IS IT IN THIS
0482	0 0001340484			BCL	*+2	HALF..
0483	0 0004200484			4IBB	*+1	NO.INCREASE B
0484	1 0010181301		-	10CFA	OPTAB+2	IS IT IN THIS
0485	0 0001340487			BCL	*+2	HALF..
0486	0 0002200487			2IBB	*+1	NO.INCREASE B
0487	1 0010181299		-	10CFA	OPTAB	IS IT EQUAL..
0488	0 0000350495			BCE	OPOK	YES.GO OUT.
0489	0 0001420497	SEQOP		LBC	2XDFT	NO.SEQ-SEARCH
0490	1 0010181299		-	10CFA	OPTAB	IS THIS IT..
0491	0 0000350495			BCE	OPOK	YES.GO OUT.
0492	0 0002200490			2IBB	SEQOP+1	NOPE.GO ON..
0493	0 0401260496			0401IFL	.BINO	SET UP NOT-

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
0494	0 0000300496			BUN	.BINO	FOUND RETURN.
0495	1 0000101300	OPOK -		CAD	OPTAB+1	CAD DEFINITIO
0496	0 0000300000	.BINO		BUN	**	AND RETURN...
0497	0 0000000200	2XDFT		DEC	0000000200	=2(MAX. NO.)
* CALAD --ADDRESS FIELD EXPRESSION						
* EVALUATING SUBROUTINE PART 1						
0498	0 0000100605	CALAD		CAD	.LDR.	INITIALIZE
0499	0 0000400512			STA	LOADR	TALLIES...
0500	0 0000460607			CLL	ATERM	ATERM=0
0501	0 0000460606			CLL	ACCUM	ACCUM=0
0502	0 0000460608			CLL	LOPER	SET LOPER
0503	0 0213260608		0213IFL		LOPER	=13 (+)
0504	0 0001450000			CLA		AC=0
0505	0 0000410413			LDR	ADRES	GET FRST WORD
0506	0 2200370603		2200BFR		.CALA	BLNK=ALL DONE
0507	0 2220370526		2220BFR		SYMBL	- GO ON...
0508	0 2213370526		2213BFR		SYMBL	+ GO ON...
0509	0 0001490002	NEXSM		SLT	2	SHIFT 1 CHAR.
0510	0 4102270512		4102DFL		LOADR	BUMP CHAR TAL
0511	0 0000320518			BRP	CHKSP	BRANCH IF MOR
0512	0 0058410414	LOADR	58LDR		ADRES+1	(TALLIES)
0513	0 0401260512		0401IFL		LOADR	BUMP ADDRESS
0514	0 3101270512		3101DFL		LOADR	AND WORD TALY
0515	0 0000320518			BRP	CHKSP	BRANCH IF MOR
0516	0 0002450000			CLR		SET R BLANK
0517	0 0000300526			BUN	SYMBL	END OF REC...
0518	0 2211180604	CHKSP	2210CFR		21E8	COMPARE WITH
0519	0 0000340509			BCH	NEXSM	=21. BR IF HI
0520	0 0000350526			BCE	SYMBL	=21..(/)
0521	0 2200370526		2200BFR		SYMBL	=00..( )
0522	0 2213370526		2213BFR		SYMBL	=13..(+)
0523	0 2220370526		2220BFR		SYMBL	=20..(-)
0524	0 2214370526		2214BFR		SYMBL	=14..(*)
0525	0 0000300509			BUN	NEXSM	NOT SP. GO ON
0526	0 0001400610	SYMBL		STR	HOLDR	SAVE R-REG
0527	0 0214360595		0214BFA		SELF	*=SELF SYMBOL
* NCONV --CALAD PURE NUMBER						
* CONVERSION ROUTINE						
0528	0 0000400609	NCONV		STA	HOLDA	SAVE ACCUM
0529	0 0006450000			CRB		
0530	0 9108360534	LOOPN	9108BFA		NUM	RT. CHAR. IS
0531	0 0200360537		0200BFA		BRNGN	DG./BLANK

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
0532	0 0000100609			CAD	HOLDA	RESTORE ACCUM
0533	0 0000300541			BUN	LITCH+1	AND GO ON...
0534	0 0001480001	NUM		SRT	1	DIG TO R-REG
0535	0 0000480001			SRA	1	DROP ZONE DIG
0536	0 0001200530			1IBB	LOOPN	KEEP SCORE.
0537	0 0001450000	BRNGN		CLA		DUMP RESIDUE
0538	1 0001490000		-	SLT	0	SHIFT IT BACK
0539	0 0000430000	HOLDB		OLSA		MAKE IT +
* CALAD --PART 2						
0540	0 0000330557	LITCH		OBSA	VALUE+1	=LITERAL...
0541	0 2200360543		2200	BFA	*+2	NOT LITERAL..
0542	0 0000300545			BUN	*+3	NORMALIZE THE
0543	0 0000490002			SLA	2	SYMBOL....
0544	0 0000300541			BUN	*-3	TIL DONE...
0545	0 0000440216			STP	.BINL	SEARCH
0546	0 0000300176			BUN	BINLA	TABLE.....
0547	0 0000300556			BUN	VALUE	FOUND...
0548	0 0000440647			STP	.ERRO	CALL ERROR S1
0549	0 6281300638		6281	BUN	ERROR	UNDEF SYMBOL.
0550	0 7000380554		7	BCS	*+4	HALT IF ERROR
0551	0 0001450000			CLA		VALUE=0....
0552	0 0000461094			CLL	GOON	ABANDN PASS2.
0553	0 0000300600			BUN	MODLO	ALL DONE....
0554	0 7777007777		7777	HLT	7777	HLT FOR VALUE
0555	0 0000300600			BUN	MODLO	ALL DONE....
0556	0 0000171097	VALUE		EXT	04FLD	ONLY USE VALUE.
0557	0 0000410608			LDR	LOPER	GET LAST OPER
0558	0 0213370575		0213	BFR	ADD	=13..(+)
0559	0 0220370570		0220	BFR	SUB	=20..(-)
0560	0 0214370572		0214	BFR	MUL	=14..(*)
0561	0 0000400609			STA	HOLDA	=21..(/)
0562	0 0000100607			CAD	ATERM	S(AC)=S(ATERM)
0563	0 0001480010			SRT	10	LOAD DIVIDEND
0564	0 0000150609			DIV	HOLDA	DIVIDE...
0565	0 0000310567			BOF	*+2	OVFLOW...
0566	0 0000300568			BUN	*+2	NO OVFLOW...
0567	0 0001450000			CLA		DIV BY 0=0.
0568	0 0000400607			STA	ATERM	KEEP QUOTIENT
0569	0 0000300580			BUN	ONECH	GO ON....
0570	0 0001430000	SUB		1LSA		SET SIGN -
0571	0 0000300575			BUN	ADD	AND ADD..
0572	0 0000140607	MUL		MUL	ATERM	MULTIPLY..
0573	0 0001400607			STR	ATERM	AND KEEP PROD
0574	0 0000300580			BUN	ONECH	GO ON...

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
0575	0 0001480010	ADD		SRT	10	SAVE A-REG.
0576	0 0000100607			CAD	ATERM	GET ATERM
0577	0 0001400607			STR	ATERM	ATERM=(A-REG)
0578	0 0000190606			ADL	ACCUM	ADD TERM ON..
0579	0 0000310580			BOF	*+1	RESET OVFLOW..
0580	0 0000410610	ONECH		LDR	HOLDR	RESTORE R-REG
0581	0 0001490002			SLT	2	SHIFT 1 CHAR.
0582	0 4102270512		4102	DFL	LOADR	BUMP TALLY...
0583	0 0000320590			BRP	OPER	GO ON IF MORE
0584	0 0000420512			LDB	LOADR	SET B AND
0585	1 0000410000		-	LDR	0000	GET NEXT WORD
0586	0 0401260512		0401	IFL	LOADR	BUMP ADDRESS.
0587	0 3101270512		3101	DFL	LOADR	BUMP WORD TAL
0588	0 0000320590			BRP	OPER	GO ON IF MORE
0589	0 0002450000			CLR		R=BLANK
0590	0 0200360597	OPER	0200	BFA	CALRT	BLNK=ALL DONE
0591	0 0210400608		0210	STA	LOPER	SAVE OPERATOR
0592	0 0001450000			CLA		AC=0
0593	0 2200370526		2200	BFR	SYMBL	IF NEXT=BLANK
0594	0 0000300509			BUN	NEXSM	GO AGAIN....
0595	0 0000101556	SELF		CAD	LOCNT	GET LOCNT
0596	0 0000300556			BUN	VALUE	AND GO BACK..
0597	0 0000100606	CALRT		CAD	ACCUM	GET RESULT
0598	0 0000120607			ADD	ATERM	ADD FINAL TERM
0599	0 0000310600			BOF	*+1	RESET OVFLOW.
0600	0 0000171097	MODLO		EXT	04FLD	MODULO
0601	0 0000121098			ADD	10E4	10000
0602	0 0000171097			EXT	04FLD	FINAL RESULT.
0603	0 0000300000	.CALA		BUN	**	RETURN.....
0604	0 2100000000	21E8		DEC	2100000000	=21 X E8
0605	0 0058410414	.LDR.	58	LDR	ADRES+1	(TALLY RESET)
0606	0 0000000000	ACCUM		DEC		DUMMY ACCUM
0607	0 0000000000	ATERM		DEC		DUMY TERM ACUM
0608	0 0000000000	LOPER		DEC		OPERATOR STOR
0609	0 0000000000	HOLDA		DEC		TEMP STORAGE
0610	0 0000000000	HOLDR		DEC		TEMP STORAGE

* REOPT --OP TABLE RESETTING SUBROUTINE						
0611	0 0001450000	REOPT		CLA		SET FOR RETURN
0612	0 0000380622		0	BCS	.REOP	SKIP IF *PTO*
0613	0 1018500000		1010	MRW		SET ODD LANE
0614	0 1014500000		1010	MLS		AND BE SURE...
0615	0 1300521299		1300	MRD	OPTAB	RESET OPTAB..
0616	0 1008500255		1000	MRW	255	READY TAPE 1
0617	0 0000420616			LDB	*-1	B=255

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
0618	0 0000100624			CAD	OPSUM	GET OPTAB SUM
0619	1 0000121299	-		ADD	OPTAB	SUMMING LOOP.
0620	0 0000310621			BOF	*+1	RESET OVFLOW.
0621	0 0001210619			1DBB	*-2	GO TIL FINISH
0622	0 0000360000	.REOP		BFA	**	GO HOME IF OK
0623	0 0000300611			BUN	REOPT	N.G. TRY OVER
0624	1 8903503619	OPSUM		DEC	-8903503619	OPTAB CK SUM.
* READ -- MAG-TAPE READ SUBROUTINE						
0625	0 1008500409	ROPEN	1000MRW		LABEL	PREPARE TAPE1
0626	0 0000100637			CAD	.READ	GET =9 (44 F)
0627	0 4410400633		4410STA		RDREC-1	SET TALY=9.
0628	0 0000300634			BUN	RDREC	GO READ BLOK.
0629	0 0000420625	READ		LDB	ROPEN	GET (LABEL)
0630	0 0100291562		100RTF		IOBUF	MOVE RECORD
0631	0 0410260630		0410IFL		READ+1	BUMP BUF ADDR
0632	0 4101270633		4101DFL		*+1	BUMP TALLY
0633	0 0009320637		9BRP		.READ	IS IT TENTH..
0634	0 1100521562	RDREC	1100MRD		IOBUF	READ A BLOCK.
0635	0 0000420634			LDB	RDREC	GET (IOBUF)
0636	0 0412400630		0410STB		READ+1	RESET BUF ADR
0637	0 0009300000	.READ	9BUN		**	AND GO HOME..
* ERROR --ERROR SUBROUTINE						
0638	0 0000420647	ERROR		LDB	.ERRO	WHO CALLED..
0639	1 4400289999		-4400DLB		-1	GET MESSAGE
0640	0 0412400649		0410STB		ERMES+1	STORE IT...
0641	0 0412400408		0410STB		LABEL-1	AND FLAG LIST
0642	0 8000380647		8	BCS	.ERRO	SUPRES TYPING
0643	0 0030060648		30PWR		ERMES	WRITE MESS
0644	0 0100060409		100PWR		LABEL	AND OFFENDER
0645	0 4100280646		4100DLB		*+1	DELAY FOR
0646	0 0001210646			1DBB	*	150 MS....
0647	0 0000300000	.ERRO		BUN	**	AND CONTINUE.
0648	2 1600000016	ERMES	3ALPH		% %ER %	
* TRANSFER VECTOR FOR PSEUDO-OP EXITS						
0651	0 0000010377	PUNC.		NOP	PUNCH	(BUN DUR P2)
0652	0 0000010379	TYPE.		NOP	TYPER	(BUN DUR P2)
0653	0 0000010321	NEXR.		NOP	NEXRC	(BUN DUR P2)
0654	0 0000300056			BUN	NEXT1	PASS 1 EXIT..

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
		*			PSEUDO-OPERATION SUBROUTINES	
		*				
		*			(ENTERED AT NAME DURING PASS 2 --	
		*			ENTERED AT NN REL TO NAME IN PASS 1)	
0655	0 0000101556	ABS		CAD	LOCNT	SET DELTA
0656	0 0000401557			STA	DELTA	=LOCNT
		*			PASS 1 ENTRY POINT	
0657	0 0000461555			CLL	OSIGN	OSIGN=0
0658	0 0000300652			BUN	TYPE.	EXIT...
0659	0 0000440694	ALPH		STP	.LENG	FIND
0660	0 0000300688			BUN	LENGT	LENGTH...
0661	0 0000401557			STA	DELTA	DELTA=LENGTH
0662	0 6000380666		6	BCS	*+4	SW 6 OMITTS PCH
0663	0 0000490007			SLA	7	SHIFT IT..
0664	0 3110400665		3110	STA	*+1	STORE IT AND
0665	0 1000060413		1000	PWR	ADRES	PUNCH L WORDS
0666	0 0000100413			CAD	ADRES	MOVE 1 WORD
0667	0 0000400407			STA	INSTR	FOR LISTING..
		*			TRANSLATE CARRIAGE-CONTROL CHARACTERS FOR LISTING	
0668	0 4400280681	ATRAN	4400	DLB	ADD8+1	B=5
0669	1 0000100413		-	CAD	ADRES	GET A WORD
0670	0 0000360678			BFA	ADD8-2	SKIP IF BLANK
0671	0 0500210672			500	DBB	*+1
0672	0 0216360680	ATRAL	0216	BFA	ADD8	CR=PHI
0673	0 0226360680			0226	BFA	ADD8
0674	0 0215360680			0215	BFA	ADD8
0675	0 0001480002			SRT	2	GET NEXT CHAR.
0676	0 0100200672			100	IBB	ATRAL
0677	1 0011400413		-	10	STR	ADRES
0678	0 0001210669			1	DBB	ATRAN+1
0679	0 0000300379			BUN	TYPER	PASS 2 EXIT..
0680	0 0000120682	ADD8		ADD	ATRA8	ADD 8
0681	0 0005300675			5	BUN	ATRAL+3
0682	0 0000000008	ATRA8		DEC	8	=8
		*			PASS 1 ENTRY POINT	
0683	0 0000440122			STP	.DEFL	DEFINE
0684	0 0000300093			BUN	DEFLA	LABEL..
0685	0 0000440694			STP	.LENG	BUMP LOCNT
0686	0 0000300688			BUN	LENGT	BY LENGTH...
0687	0 0000300056			BUN	NEXT1	PASS 1 EXIT..
0688	0 0000100410	LENGT		CAD	VAR	GET LENGTH
0689	0 0000170701			EXT	01FLD	DIGIT..

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
0690	0 0000360695			BFA	ADD1	ADD 1 IF=0
0691	0 0000180702			CFA	SIX	SEE IF
0692	0 0000340697			BCH	ERV3	TOO LARGE...
0693	0 0000191556			ADL	LOCNT	BUMP LOCNT
0694	0 0000300000	.LENG		BUN	**	RETURN....
0695	0 0000120701	ADD1		ADD	01FLD	ADD 1
0696	0 0000300693			BUN	.LENG-1	GO BACK...
0697	0 0000440647	ERV3		STP	.ERRO	ER V3-ALPH VARIANT
0698	0 6583300638		6583	BUN	ERROR	GR THAN 6...
0699	0 0000100702			CAD	SIX	ASSUME=6
0700	0 0000300693			BUN	.LENG-1	AND GO BACK..
0701	0 0000000001	01FLD		DEC	0000000001	0/1 FLD MASK
0702	0 0000000006	SIX		DEC	6	=6
0703	0 0000461557	BES		CLL	DELTA	DELTA=0
0704	0 0000440603			STP	.CALA	CALCULATE
0705	0 0000300498			BUN	CALAD	LENGTH...
0706	0 0000300716			BUN	BSS+3	PASS 2 EXIT..
		*		PASS 1 ENTRY POINT		
0707	0 0000440603			STP	.CALA	CALCULATE
0708	0 0000300498			BUN	CALAD	LENGTH...
0709	0 0000191556			ADL	LOCNT	BUMP LOCNT..
0710	0 0000440122			STP	.DEFL	DEFINE
0711	0 0000300093			BUN	DEFLA	LABEL...
0712	0 0000300056			BUN	NEXT1	PASS 1 EXIT..
0713	0 0000440603	BSS		STP	.CALA	CALCULATE
0714	0 0000300498			BUN	CALAD	LENGTH...
0715	0 0000401557			STA	DELTA	DELTA=LENGTH
		*		BES ENTERS HERE IN PASS 2		
0716	0 0000191556			ADL	LOCNT	BUMP LOCNT..
0717	0 0000411555			LDR	OSIGN	SEE IF
0718	0 0000100857			CAD	RLOAD	RELMOD...
0719	0 1108370721		1108	BFR	*+2	YES. BRANCH..
0720	0 0000100856	LODER		CAD	ALOAD	NO.ABSMOD...
0721	0 0002490001			SLS	1	LINE PRD UP..
0722	0 0000400407			STA	INSTR	AND STORE IT.
0723	0 0000101556			CAD	LOCNT	GET LOCNT
0724	0 0410400407		0410	STA	INSTR	AND STORE IT.
0725	0 0000300377			BUN	PUNCH	PASS 2 EXIT..
		*		PASS 1 ENTRY POINT		
0726	0 0000440122			STP	.DEFL	DEFINE
0727	0 0000300093			BUN	DEFLA	LABEL...
0728	0 0000440603			STP	.CALA	CALCULATE

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
0729	0 0000300498			BUN	CALAD	LENGTH...
0730	0 0000191556			ADL	LOCNT	BUMP LOCNT
0731	0 0000300056			BUN	NEXT1	PASS 1 EXIT..
0732	0 0000101558	CALL		CAD	VARNT	GET VARIANT
0733	0 0002490001			SLS	1	LINE IT UP..
0734	0 4510400407		4510	STA	INSTR	AND STORE IT.
0735	0 6244260407		6244	IFL	INSTR	SET UP STP
0736	0 0000440603			STP	.CALA	CALCULATE
0737	0 0000300498			BUN	CALAD	ADDRESS...
0738	0 0410400407		0410	STA	INSTR	AND STORE IT.
0739	0 0000100407			CAD	INSTR	GET COMPLETE
0740	0 0000401559			STA	SAVEA	INSTRUCTION..
0741	0 6214271559		6214	DFL	SAVEA	SET UP BUN
0742	0 0401261559		0401	IFL	SAVEA	BUMP ADRES 1
0743	0 6000380746		6	BCS	*+3	SW 6 OMITTS PCH
0744	0 1010060407		1010	PWR	INSTR	PUNCH
0745	0 1010061559		1010	PWR	SAVEA	INSTRUCTIONS.
0746	0 0402261556		0402	IFL	LOCNT	BUMP LOCNT 2
0747	0 0000461557			CLL	DELTA	SET DELTA
0748	0 0402261557		0402	IFL	DELTA	=2.....
0749	0 0000300379			BUN	TYPER	PASS 2 EXIT..
		*			PASS 1 ENTRY POINT	
0750	0 0000440122			STP	.DEFL	DEFINE
0751	0 0000300093			BUN	DEFLA	THE LABEL...
0752	0 0402261556		0402	IFL	LOCNT	BUMP LOCNT 2
0753	0 0000300056			BUN	NEXT1	PASS 1 EXIT..
0754	0 0000100605	DEC		CAD	.LDR.	RESET NEXCH
0755	0 0000400803			STA	DLDR	TALLIES....
0756	0 0000461560			CLL	SAVEB	CLEAR SOME
0757	0 0000460809			CLL	DCNT	WORKING
0758	0 0000460810			CLL	NCNT	SPACE.....
0759	0 6212400775		6212	STB	8ZONE+1	RESET FIRST
0760	0 6237260775		6237	IFL	8ZONE+1	DIGIT FINDER.
0761	0 0000410413			LDR	ADRES	GET FIRST WRD
0762	0 2220370768		2220	BFR	C2	SIGN IS -
0763	0 2213370768		2213	BFR	C2	SIGN IS +
0764	0 2200370780	COUNT	2200	BFR	TYPCK	A BLANK.GO ON
0765	0 0401261560		0401	IFL	SAVEB	(DCNT COUNT)
0766	0 2203370771		2203	BFR	DECPT	FOUND A .
0767	0 1108370774	C1	1108	BFR	8ZONE	IF NUMERIC...
0768	0 0000440808	C2		STP	.NEXC	NOPE.GET
0769	0 0000300800			BUN	NEXCH	NEXT CHAR...

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
0770	0 0000300764			BUN	COUNT	AND GO AGAIN.
0771	0 0000421560	DECPT		LDB	SAVEB	GET . COUNT
0772	0 0002400809			STB	DCNT	AND SAVE IT..
0773	0 0000300767			BUN	C1	GO BACK...
0774	0 4401261560	8ZONE	4401	IFL	SAVEB	KEEP N COUNT.
0775	0 2100370768		2100	BFR	C2	=0.GO AGAIN..
0776	0 6112400775		6110	STB	*-1	SAVE ONLY 1CE
0777	0 4400281560		4400	DLB	SAVEB	NOT 0.SAVE
0778	0 0002400810			STB	NCNT	N COUNT....
0779	0 0000300768			BUN	C2	GO TIL BLANK.
0780	0 0000441086	TYPCK		STP	.GETN	GET FIRST 10
0781	0 0000301055			BUN	GETNM	DIGITS AND SN
0782	0 0001480010			SRT	10	SAVE IT....
0783	0 0000100809			CAD	DCNT	GET COUNT..
0784	0 0200360789		0200	BFA	FIXED	FIXED PT NUMB
0785	0 0000130810			SUB	NCNT	FLOATING.GET
0786	0 0000120811			ADD	FIFTY	EXPONENT...
0787	0 0001490008			SLT	8	LINE IT UP..
0788	0 0000300791			BUN	DOUT	LETS GO HOME..
0789	0 0001490010	FIXED		SLT	10	RETRIEVE N...
0790	1 0001480001		-	SRT	1	RT.JUSTIFY IT
0791	0 0000400407	DOUT		STA	INSTR	AND STORE IT.
0792	0 0401261556		0401	IFL	LOCNT	BUMP LOCNT...
0793	0 0000461557			CLL	DELTA	DELTA
0794	0 0401261557		0401	IFL	DELTA	=ONE...
0795	0 0000300377			BUN	PUNCH	PASS 2 EXIT..
		*			PASS 1 ENTRY POINT	
0796	0 0000440122			STP	.DEFL	DEFINE THE
0797	0 0000300093			BUN	DEFLA	LABEL...
0798	0 0401261556		0401	IFL	LOCNT	BUMP LOCNT...
0799	0 0000300056			BUN	NEXT1	PASS 1 EXIT..
		*			NEXCH --SUBROUTINE FOR FETCHING ONE	
		*			CHARACTER AT A TIME INTO A-REG.	
0800	0 0001490002	NEXCH		SLT	2	SHIFT 1 CHAR.
0801	0 4102270803		4102	DFL	DLDR	BUMP TALLY..
0802	0 0000320808			BRP	.NEXC	EXIT IF MORE.
0803	0 0058410414	DLDR	0058	LDR	ADRES+1	(TALLIES)
0804	0 0401260803		0401	IFL	DLDR	BUMP ADRES...
0805	0 3101270803		3101	DFL	DLDR	BUMP TALLY
0806	0 0000320808			BRP	.NEXC	EXIT IF MORE.
0807	0 0002450000			CLR		THATS ALL.R=0
0808	0 0000300000	.NEXC		BUN	**	RETURN...
0809	0 0000000000	DCNT		DEC		DECPT COUNTER
0810	0 0000000000	NCNT		DEC		1ST DIG COUNT
0811	0 0000000050	FIFTY		DEC	50	CONSTANT=50

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
0812	0 0000300923	DUP		BUN	REM	PASS 2 EXIT..
		*			PASS 1 ENTRY POINT	
0813	0 0000440122			STP	.DEFL	DEFINE
0814	0 0000300093			BUN	DEFLA	THE LABEL...
0815	0 0000300056			BUN	NEXT1	PASS 1 EXIT..
0816	0 0010090823	EJECT	10SPO		1CR	SPACE 1...
0817	0 4304270818		4304DFL		*+1	94 MS. TIME
0818	0 0998320817		0998BRP		*-1	DELAY...
0819	0 2202270400		2202DFL		PAGCK	BUMP TALLY
0820	0 0000320816			BRP	EJECT	AND GO AGAIN.
0821	0 0000300401			BUN	PAGCK+1	GO RESET TALY
		*			PASS 1 ENTRY POINT	
0822	0 0000300056			BUN	NEXT1	PASS 1 EXIT..
0823	2 1414141416	1CR		ALPH	****%	4(IG) AND CR
0824	0 0020090929	END	20SPO		REMSP	SPACE OVER..
0825	0 0100090409		100SPO		LABEL	PRINT RECORD.
0826	0 0000300002			BUN	RESET	PASS 2 EXIT..
		*			PASS 1 ENTRY POINT	
0827	0 0000300217			BUN	INTER	PASS 1 EXIT..
0828	0 0000300923	EQU		BUN	REM	PASS 2 EXIT..
		*			PASS 1 ENTRY POINT	
0829	0 0000100409			CAD	LABEL	SKIP IF LABEL
0830	0 0000360840			BFA	ERS4	IS BLANK...
0831	0 0000440603			STP	.CALA	CALCULATE
0832	0 0000300498			BUN	CALAD	ADDRESS..
0833	0 0000401559			STA	SAVEA	SAVE IT...
0834	0 0000440122			STP	.DEFL	DEFINE
0835	0 0000300093			BUN	DEFLA	THE LABEL....
0836	0 2101360056		2101BFA		NEXT1	QUIT IF MUL-DEF
0837	0 0000101559			CAD	SAVEA	AND THEN
0838	1 0410404998		-0410STA		TABLE-1	RE-DEFINE IT.
0839	0 0000300056			BUN	NEXT1	PASS 1 EXIT..
0840	0 0000440647	ERS4		STP	.ERRO	ER S4-EQU LABEL
0841	0 6284300638		6284BUN		ERROR	LEFT BLANK...
0842	0 0000300056			BUN	NEXT1	CONTINUE...
0843	0 0000411555	LOAD		LDR	OSIGN	SEE IF
0844	0 0000100857			CAD	RLOAD	RELMOD...
0845	0 1108370847		1108BFR		*+2	YES.BRANCH...

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
0846	0 0000100856			CAD	ALOAD	NO.ABSMOD...
0847	0 0002490001			SLS	1	LINE PRB UP..
0848	0 0000400407			STA	INSTR	AND STORE IT.
0849	0 0000440603			STP	.CALA	CALCULATE
0850	0 0000300498			BUN	CALAD	ADDRESS...
0851	0 0410400407	0410		STA	INSTR	AND STORE IT.
0852	0 0000401556			STA	LOCNT	SET LOCNT...
0853	0 0000461557			CLL	DELTA	DELTA=0
0854	0 0000300377			BUN	PUNCH	PASS 2 EXIT..
		*			PASS 1 ENTRY POINT	
0855	0 0000300905			BUN	ORG+5	PASS 1 EXIT..
0856	0 6000004000	ALOAD		DEC	6000004000	ABSMOD PRB
0857	0 7000804000	RLOAD		DEC	7000804000	RELMOD PRB
0858	0 0000100861	MACRO		CAD	.REM.	GET REM
0859	0 0000401561			STA	TEMP1	DEFINITION
0860	0 0000300862			BUN	OPDEF	GO TO OPDEF..
0861	1 0005000923	.REM.-		5HLT	REM	REM DEFINITION
0862	0 0000101556	OPDEF		CAD	LOCNT	SET DELTA
0863	0 0000401557			STA	DELTA	=LOCNT
0864	0 0000100409			CAD	LABEL	GET LABEL FLD
0865	0 0000440496			STP	.BINO	SEARCH OP
0866	0 0000300465			BUN	BINOP	CODE TABLE...
0867	0 0000300878			BUN	REDEF	FOUND..
0868	0 0000401559			STA	SAVEA	NOT FOUND.
0869	0 0001450000			CLA		NEW OPCODE..
0870	0 0000440496			STP	.BINO	LOOK FOR
0871	0 0000300489			BUN	SEQOP	A BLANK...
0872	0 0000300876			BUN	NAMOP	FOUND..
0873	0 0000440647			STP	.ERRO	ER O2-OPDEF
0874	0 5682300638		5682	BUN	ERROR	TABLE FULL....
0875	0 0000300652			BUN	TYPE.	AND GO ON...
0876	0 0000101559	NAMOP		CAD	SAVEA	RETRIEVE OP
0877	1 0000401299	-		STA	OPTAB	AND STORE IT.
0878	0 0002401560	REDEF		STB	SAVEB	SAVE B-REG.
0879	0 0000101561			CAD	TEMP1	IS TEMP1 USED
0880	0 0003330882		3BSA		*+2	NO.USE GETNM.
0881	0 0000300885			BUN	*+4	YES.USE TEMP1
0882	0 0000441086			STP	.GETN	CALCULATE VAL
0883	0 0000301055			BUN	GETNM	OF ADRES FLD.
0884	1 0001480001	-		SRT	1	RT. JUSTIFY..
0885	0 0000421560			LDB	SAVEB	RESTORE B-REG
0886	1 0000401300	-		STA	OPTAB+1	STORE DEFINIT

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
0887	0 0000400407			STA	INSTR	AND LIST IT
0888	0 0000300652			BUN	TYPE.	AND GO ON...
0889	0 0000101556	OPSYN		CAD	LOCNT	SET DELTA
0890	0 0000401557			STA	DELTA	=LOCNT
0891	0 0000100413			CAD	ADRES	GET DEF. NAME
0892	0 0000440496			STP	.BINO	GET NUMERIC
0893	0 0000300465			BUN	BINOP	DEFINITION..
0894	0 0000300898			BUN	OPSOK	FOUND.
0895	0 0000440647			STP	.ERRO	CALL ERROR
0896	0 5681300638		5681	BUN	ERROR	O1.UNDEF. OP.
0897	0 0000300652			BUN	TYPE.	AND GO ON...
0898	0 0000401561	OPSOK		STA	TEMP1	DEF TO TEMP1
0899	0 0000300862			BUN	OPDEF	GO TO OPDEF..
0900	0 0000440603	ORG		STP	.CALA	CALCULATE
0901	0 0000300498			BUN	CALAD	ADRES...
0902	0 0000401556			STA	LOCNT	AND SET LOCNT
0903	0 0000461557			CLL	DELTA	DELTA=0
0904	0 0000300379			BUN	TYPER	PASS 2 EXIT..
		*			PASS 1 ENTRY POINT	
0905	0 0000440603			STP	.CALA	CALCULATE
0906	0 0000300498			BUN	CALAD	ADRES...
0907	0 0000401556			STA	LOCNT	AND SET LOCNT
0908	0 0000440122			STP	.DEFL	DEFINE
0909	0 0000300093			BUN	DEFLA	LABEL...
0910	0 0000300056			BUN	NEXT1	PASS 1 EXIT...
0911	0 0000380913	PAUSE 0		BCS	*+2	PAUSE IF PAPR
0912	0 0000300321			BUN	NEXRC	TAPE *ONLY*.
		*			PASS 1 ENTRY POINT	
0913	0 0474004740		474	HLT	4740	T-T HALT
0914	0 0000300653			BUN	NEXR.	EXIT...
0915	0 0000101556	REL		CAD	LOCNT	SET DELTA
0916	0 0000401557			STA	DELTA	=LOCNT
		*			PASS 1 ENTRY POINT	
0917	0 0000100920			CAD	8SIGN	SET
0918	0 0000401555			STA	OSIGN	OSIGN = 8..
0919	0 0000300652			BUN	TYPE.	EXIT...
0920	0 8000000000	8SIGN		DEC	8000000000	

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
0921	0 0000100294			CAD	BLANK	UNLIST THE
0922	0 0000400411			STA	OPCOD	*REM*...
0923	0 0020090929	REM	20	SPO	REMSP	SPACE OVER..
0924	0 0100090409		100	SPO	LABEL	PRINT REMARKS
0925	0 2202270400		2202	DFL	PAGCK	BUMP PAGE TALY
0926	0 0000320321			BRP	NEXRC	STILL THIS PAG
0927	0 0000300401			BUN	PAGCK+1	GET NEW PAGE.
		*			PASS 1 ENTRY POINT	
0928	0 0000300056			BUN	NEXT1	PASS 1 EXIT..
0929	2 1600000000	REMSP		ALPH	%	CR B B B B
0930	2 2626000000			ALPH	' '	T T B B B
0931	0 0000100409	SET		CAD	LABEL	GET LABEL
0932	0 0000461557			CLL	DELTA	SET DELTA=0
0933	0 0000360950			BFA	CKSET+1	ER S5 IF BLANK
0934	0 0000440216			STP	.BINL	SEARCH FOR THE
0935	0 0000300176			BUN	BINLA	LABEL...
0936	0 0000300949			BUN	CKSET	FOUND...
0937	0 0000440603	SETIT		STP	.CALA	NOT FOUND SO
0938	0 0000300498			BUN	CALAD	CALC VALUE AND
0939	0 0000401559			STA	SAVEA	SAVE IT...
0940	0 6229260123		6229	IFL	MULER	FLIP SWTCH AND
0941	0 0000440122			STP	.DEFL	GO DEFINE THE
0942	0 0000300093			BUN	DEFLA	NEW LABEL...
0943	0 6229270123		6229	DFL	MULER	RESET SWITCH..
0944	0 0000101559			CAD	SAVEA	RETRIEVE VALUE
0945	1 0000404998		-	STA	TABLE-1	AND STORE IT
0946	1 1101264998		-1101	IFL	TABLE-1	MAKE UNREF FLG
0947	1 3101264998		-3101	IFL	TABLE-1	SET *SET* FLAG
0948	0 0000300652			BUN	TYPE.	EXIT.....
0949	0 3101360937	CKSET	3101	BFA	SETIT	OK/*SET* SYMBL
0950	0 0000440647			STP	.ERRO	ER S5-NON *SET*
0951	0 6285300638		6285	BUN	ERROR	TYPE LABEL...
0952	0 0000300652			BUN	TYPE.	EXIT.....
0953	0 8901270407	SEX	8901	DFL	INSTR	SET = 9....9
0954	0 0000461557			CLL	DELTA	SET DELTA=0
		*			PASS 1 ENTRY POINT	
0955	0 0000440603			STP	.CALA	CALCULATE
0956	0 0000300498			BUN	CALAD	SECTION....
0957	0 0310400407		0310	STA	INSTR	AND STORE IT.
0958	0 0000490002			SLA	2	MULT BY 100
0959	0 0000461556			CLL	LOCNT	AND SET
0960	0 8210401556		8210	STA	LOCNT	LOCNT....

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
0961	0 0000300651			BUN	PUNC.	EXIT.....
0962	0 0000101558	SPAC		CAD	VARNT	GET LENGTH
0963	0 0002480005			SRS	5	LINE IT UP
0964	0 0000171097			EXT	04FLD	DUMP SIGN AND
0965	0 0000191556			ADL	LOCNT	BUMP LOCNT
0966	0 0410401557		0410	STA	DELTA	DELTA=LENGTH
0967	0 0000300720			BUN	LODER	PASS 2 EXIT..
		*			PASS 1 ENTRY POINT	
0968	0 0000101555			CAD	OSIGN	SEE IF
0969	0 0000360974			BFA	SPCOK	RELMOD...
0970	0 0000440647			STP	.ERRO	CALL ERROR
0971	0 5684300638		5684	BUN	ERROR	04-SPAC N.G.
0972	0 0000461094			CLL	GOON	PASS 2 ABANDON
0973	0 0000300056			BUN	NEXT1	TO NEXT REC..
0974	0 0000440122	SPCOK		STP	.DEFL	NO.ABSMOD...
0975	0 0000300093			BUN	DEFLLA	DEFINE LABEL.
0976	0 0000440603			STP	.CALA	CALCULATE
0977	0 0000300498			BUN	CALAD	SPAC NUMBER..
0978	0 0401261095		0401	IFL	SPCSZ	BUMP SPCSZ
0979	0 0000421095			LDB	SPCSZ	B=SPCSZ
0980	0 0000490004			SLA	4	SHIFT NUMBER.
0981	1 0000401662		-	STA	SPACT	PUT IN SPACT
0982	0 0000101556			CAD	LOCNT	GET LOCNT
0983	1 0410401662		-0410	STA	SPACT	AND ENTER IT.
0984	0 0410180999		0410	CFA	E400	ERROR IF
0985	0 0001340995			BCL	ERL1	UNDER 400...
0986	0 0000100410	SPCLG		CAD	VAR	GET LENGTH
0987	0 0000420991			LDB	TALY1	B=3
0988	0 0001480001			SRT	1	ALPH TO NUM
0989	0 0000480001			SRA	1	CONVERSION...
0990	0 0001210988			1DBB	*-2	(4 DIGITS)
0991	0 0001450003	TALY1		CLA	3	DUMP RESIDUE
0992	0 0001490004			SLT	4	LINE LENGTH UP
0993	0 0000191556			ADL	LOCNT	BUMP LOCNT...
0994	0 0000300056			BUN	NEXT1	PASS 1 EXIT..
0995	0 0000440647	ERL1		STP	.ERRO	CALL ERROR
0996	0 5381300638		5381	BUN	ERROR	L1-SPAC UNDER 400...
0997	0 0000461094			CLL	GOON	KILL PASS 2..
0998	0 0000300986			BUN	SPCLG	AND GO ON..
0999	0 0000000400	E400		DEC	400	
1000	0 0000040350	SPACL		PRB	350	SPAC SUBR CALL-IN...
1001	0 2008500000		2000	MRW		FIRST AND LAST
1002	0 0007450000			CLT		INSTRUCTIONS OF
1003	0 2309520000		2309	MRD	0	CALL-IN WILL

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
1004	0 1210260298		1210	IFL	298	HAVE SIGNS SET TO
1005	0 0000420353			LDB	353	SIX BY INITL.....
1006	1 0000120000	-		ADD	0	SUBROUTINE CALL-IN
1007	0 0000310357			BOF	357	OPERATION IS NOT
1008	0 0001210355		1	DBB	355	DEPENDENT ON SWITCH
1009	0 0000360019			BFA	19	SETTINGS....
1010	0 0000300350			BUN	350	SUM CK FAILED.RETRY..
1011	0 0000300350			BUN	350	(LAST INSTR)
1012	0 0000440603	SPACE		STP	.CALA	CALL CALAD
1013	0 0000300498			BUN	CALAD	FOR N...
1014	0 0000401559			STA	SAVEA	STORE IT..
1015	0 0000361018			BFA	*+3	BLANK = 1...
1016	0 0000191559			ADL	SAVEA	DOUBLE IT..
1017	0 0202271559		0202	DFL	SAVEA	SUB 2...
1018	0 0000100400			CAD	PAGCK	GET PAGE TALLY
1019	0 0000480008			SRA	8	LINE IT UP..
1020	0 0210181559		0210	CFA	SAVEA	AND COMPARE
1021	0 0000341023			BCH	SAMPG	SAME PAGE...
1022	0 0000300816			BUN	EJECT	NEW PAGE...
1023	0 0000421559	SAMPG		LDB	SAVEA	LOAD 2(N-1)
1024	0 0010090823			10SPO	1CR	SPACE ONCE..
1025	0 4304271026		4304	DFL	*+1	94 MS. TIME
1026	0 0998321025			998BRP	*-1	DELAY...
1027	0 2202270400		2202	DFL	PAGCK	ADJUST TALLY
1028	0 0002211024			2DBB	*-4	AND GO AGAIN.
		*		PASS 1 ENTRY POINT		
1029	0 0000300653			BUN	NEXR.	EXIT....
1030	0 0000101556	TCD		CAD	LOCNT	SET DELTA
1031	0 0000401557			STA	DELTA	=LOCNT
1032	0 0000411555			LDR	OSIGN	SEE IF
1033	0 0000101043			CAD	RTCD	RELMOD...
1034	0 1108371036		1108	BFR	*+2	YES.BRANCH...
1035	0 0000101042			CAD	ATCD	NO.ABSMOD....
1036	0 0002490001			SLS	1	LINE BUN UP..
1037	0 0000400407			STA	INSTR	AND STORE IT.
1038	0 0000440603			STP	.CALA	CALCULATE
1039	0 0000300498			BUN	CALAD	ADDRESS...
1040	0 0410400407		0410	STA	INSTR	AND STORE IT.
		*		PASS 1 ENTRY POINT		
1041	0 0000300651			BUN	PUNC.	EXIT....
1042	0 6000030000	ATCD		DEC	6000030000	ABSMOD BUN
1043	0 7000030000	RTCD		DEC	7000030000	RELMOD BUN

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
1044	0 0000101054	ZZZ		CAD	.ZZZ.	GET DEFINITION
1045	0 0002490001			SLS	1	LINE IT UP
1046	0 0000400407			STA	INSTR	AND STORE IT.
1047	0 0000101558			CAD	VARNT	GET VARIANT
1048	0 0000490001			SLA	1	LINE IT UP
1049	0 4410400407	4410		STA	INSTR	AND STORE IT.
1050	0 0000440603			STP	.CALA	CALCULATE
1051	0 0000300498			BUN	CALAD	SECTION....
1052	0 0210400407		0210	STA	INSTR	AND STORE IT.
		*			PASS 1 ENTRY POINT	
1053	0 0000300651			BUN	PUNC.	EXIT.....
1054	0 9000090900	.ZZZ.		DEC	9000090900	ZZZ DEFINITION
		*			GETNM --SIGNIFICANT DIGIT STRIPPING	
		*			SUBROUTINE FOR DEC AND OPDEF.	
1055	0 0000461559	GETNM		CLL	SAVEA	SAVEA=0
1056	0 0000421085			LDB	.GETN-1	B=9
1057	0 0000101077			CAD	SETSN-1	RESET ZERO
1058	0 0410401069	0410		STA	ZONE8	SKIPPER...
1059	0 0000100605			CAD	.LDR.	INITIALIZE
1060	0 0000400803			STA	DLDR	NEXCH....
1061	0 1112401073	1110		STB	STALY	SET STALY
1062	0 1101261073	1101		IFL	STALY	=ONE
1063	0 0000410413			LDR	ADRES	GET FIRST WRD
1064	0 1108371069	1108		BFR	ZONE8	A NUMBER...
1065	0 2200371078	2200		BFR	SETSN	A BLANK.DONE.
1066	0 0000440808	NEXTC		STP	.NEXC	GET NEXT
1067	0 0000300800			BUN	NEXCH	CHARACTER...
1068	0 0000301064			BUN	NEXTC-2	AND GO AGAIN.
1069	0 2100371066	ZONE8	2100	BFR	NEXTC	SKIP LEAD 0..
1070	0 0000101070			CAD	*	DISABLE ZERO
1071	0 0410401069	0410		STA	ZONE8	SKIPPER...
1072	1 0001490002	-		SLT	2	MOVE IT OVER
1073	0 1110401559	STALY	1110	STA	SAVEA	STORE DIGIT
1074	1 0001480002	-		SRT	2	MOVE IT BACK.
1075	0 1101261073	1101		IFL	STALY	BUMP STALY..
1076	0 0000311077			BOF	*+1	RESET OVFLOW.
1077	0 0001211066			1DBB	NEXTC	GO TIL TEN...
1078	0 0000100413	SETSN		CAD	ADRES	SEE IF SIGN
1079	0 2220361087	2220		BFA	DNEG	IS MINUS...
1080	0 0000100410			CAD	VAR	GET VAR..
1081	0 2220361087	2220		BFA	DNEG	IS IT -...
1082	0 0000480002			SRA	2	GET SIGN

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
1083	0 4110401085	S1	4110	STA	*+2	SAVE IT...
1084	0 0000101559			CAD	SAVEA	GET NUMBER
1085	0 0000430009			OLSA	9	LOAD SIGN...
1086	0 0000300000	.GETN		BUN	**	AND RETURN...
1087	0 0000101088	DNEG		CAD	*+1	SET SIGN=1
1088	0 0001301083			1BUN	S1	AND GO BACK..
1089	2 1616165741	MESP2	2	ALPH	%%PASS 2%	PASS2 MESSAGE
1091	2 1414140000	.FLG.		ALPH	***	IG IG IG B B
1092	0 0000300000	.BUN.		DEC	0000300000	(30 OP CODE)
1093	0 0000010000	.NOP.		DEC	0000010000	(01 OP CODE)
1094	0 0000000001	GOON		DEC	1	PASS 2 ABANDON FLAG
1095	0 0000000000	SPCSZ		DEC		VARIABLE
1096	0 0000000000	TABSZ		DEC		VARIABLE
1097	1 0000001111	04FLD		DEC	-0000001111	0/4 FLD MASK
1098	0 0000010000	10E4		DEC	10000	TEN THOUS.

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
1099	6 0000041299			BSS	200	OPDEF TABLE
		*		OPTAB	--OP-CODE	NAME/DEFINITION TABLE
		*			128	MAX ENTRIES IN ALPH ORDER
1299	2 0000000000	OPTAB		ALPH		BLANK ENTRY
1300	0 0000000000			DEC		BLANK = HLT
1301	2 0000000000			ALPH		DUMMY ENTRY
1302	0 0000000000			DEC		DUMMY ENTRY
1303	2 0000000000			ALPH		DUMMY ENTRY
1304	0 0000000000			DEC		DUMMY ENTRY
1305	2 4142620000			ALPH	ABS	PSEUDO-OP
1306	1 0002000655	-	2	HLLT	ABS	
1307	2 4144410000			ALPH	ADA	
1308	0 0000112100			DEC	0000112100	ADA
1309	2 4144440000			ALPH	ADD	
1310	0 0000012100			DEC	0000012100	ADD
1311	2 4144530000			ALPH	ADL	
1312	0 0000019000			DEC	0000019000	ADL
1313	2 4153574800			ALPH	ALPH	PSEUDO-OP
1314	1 0024000659	-	2	4HLLT	ALPH	
1315	2 4164670000			ALPH	AUX	NUM-ASSEM P/O
1316	0 9000081010			DEC	9000081010	AUX
1317	2 4243450000			ALPH	BCE	
1318	0 0000035100			DEC	0000035100	BCE
1319	2 4243480000			ALPH	BCH	
1320	0 0000034100			DEC	0000034100	BCH
1321	2 4243530000			ALPH	BCL	
1322	0 0000134100			DEC	0000134100	BCL
1323	2 4243620000			ALPH	BCS	
1324	0 0000038000			DEC	0000038000	BCS
1325	2 4243640000			ALPH	BCU	
1326	0 0000135100			DEC	0000135100	BCU
1327	2 4245620000			ALPH	BES	PSEUDO-OP
1328	1 0004000703	-	4	HLLT	BES	
1329	2 4246410000			ALPH	BFA	
1330	0 0000036000			DEC	0000036000	BFA
1331	2 4246590000			ALPH	BFR	
1332	0 0000037000			DEC	0000037000	BFR
1333	2 4256460000			ALPH	BOF	
1334	0 0000031000			DEC	0000031000	BOF
1335	2 4259560000			ALPH	BRO	NUM-ASSEM P/O
1336	0 9000096010			DEC	9000096010	BRO
1337	2 4259570000			ALPH	BRP	
1338	0 0000032000			DEC	0000032000	BRP
1339	2 4259640000			ALPH	BRU	NUM-ASSEM P/O
1340	0 9000095010			DEC	9000095010	BRU
1341	2 4259690000			ALPH	BRZ	NUM-ASSEM P/O

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
1342	0 9000097010			DEC	9000097010	BRZ
1343	2 4262410000			ALPH	BSA	
1344	0 0000033000			DEC	0000033000	BSA
1345	2 4262620000			ALPH	BSS	PSEUDO-OP
1346	1 0013000713	-	13	HLLT	BSS	
1347	2 4264550000			ALPH	BUN	
1348	0 0000030000			DEC	0000030000	BUN
1349	2 4341410000			ALPH	CAA	
1350	0 0000110100			DEC	0000110100	CAA
1351	2 4341420000			ALPH	CAB	
1352	0 0000545100			DEC	0000545100	CAB
1353	2 4341440000			ALPH	CAD	
1354	0 0000010100			DEC	0000010100	CAD
1355	2 4341535300			ALPH	CALL	PSEUDO-OP
1356	1 0018000732	-	18	HLLT	CALL	
1357	2 4341590000			ALPH	CAR	
1358	0 0000345100			DEC	0000345100	CAR
1359	2 4346410000			ALPH	CFA	
1360	0 0000018100			DEC	0000018100	CFA
1361	2 4346590000			ALPH	CFR	
1362	0 0000118100			DEC	0000118100	CFR
1363	2 4348410000			ALPH	CHA	NUM-ASSEM P/O
1364	0 9000093010			DEC	9000093010	CHA
1365	2 4353410000			ALPH	CLA	
1366	0 0000145100			DEC	0000145100	CLA
1367	2 4353420000			ALPH	CLB	
1368	0 0000445100			DEC	0000445100	CLB
1369	2 4353530000			ALPH	CLL	
1370	0 0000046000			DEC	0000046000	CLL
1371	2 4353590000			ALPH	CLR	
1372	0 0000245100			DEC	0000245100	CLR
1373	2 4353630000			ALPH	CLT	
1374	0 0000745100			DEC	0000745100	CLT
1375	2 4359420000			ALPH	CRB	
1376	0 0000645100			DEC	0000645100	CRB
1377	2 4362410000			ALPH	CSA	
1378	0 0000111100			DEC	0000111100	CSA
1379	2 4362640000			ALPH	CSU	
1380	0 0000011100			DEC	0000011100	CSU
1381	2 4442420000			ALPH	DBB	
1382	0 0000021000			DEC	0000021000	DBB
1383	2 4445430000			ALPH	DEC	PSEUDO-OP
1384	1 0042000754	-	42	HLLT	DEC	
1385	2 4445530000			ALPH	DEL	NUM-ASSEM P/O
1386	0 9000092010			DEC	9000092010	DEL
1387	2 4446530000			ALPH	DFL	

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
1388	0 0000027000			DEC	0000027000	DFL
1389	2 4449650000			ALPH	DIV	
1390	0 0000015000			DEC	0000015000	DIV
1391	2 4453420000			ALPH	DLB	
1392	0 0000028000			DEC	0000028000	DLB
1393	2 4464570000			ALPH	DUP	PSEUDO-OP
1394	1 0001000812	-	1	HLT	DUP	
1395	2 4551454363			ALPH	EJECT	PSEUDO-OP
1396	1 0006000816	-	6	HLT	EJECT	
1397	2 4555440000			ALPH	END	PSEUDO-OP
1398	1 0003000824	-	3	HLT	END	
1399	2 4558640000			ALPH	EQU	PSEUDO-OP
1400	1 0001000828	-	1	HLT	EQU	
1401	2 4567630000			ALPH	EXT	
1402	0 0000017000			DEC	0000017000	EXT
1403	2 4641410000			ALPH	FAA	
1404	0 0000122100			DEC	0000122100	FAA
1405	2 4641440000			ALPH	FAD	
1406	0 0000022100			DEC	0000022100	FAD
1407	2 4644650000			ALPH	FDV	
1408	0 0000025000			DEC	0000025000	FDV
1409	2 4654640000			ALPH	FMU	
1410	0 0000024000			DEC	0000024000	FMU
1411	2 4662410000			ALPH	FSA	
1412	0 0000123100			DEC	0000123100	FSA
1413	2 4662640000			ALPH	FSU	
1414	0 0000023100			DEC	0000023100	FSU
1415	2 4853630000			ALPH	HLT	
1416	0 0000000000			DEC	0000000000	HLT
1417	2 4942420000			ALPH	IBB	
1418	0 0000020000			DEC	0000020000	IBB
1419	2 4946530000			ALPH	IFL	
1420	0 0000026000			DEC	0000026000	IFL
1421	2 4955620000			ALPH	INS	NUM-ASSEM P/O
1422	0 9000091010			DEC	9000091010	INS
1423	2 4956540000			ALPH	IOM	
1424	0 0000239100			DEC	0000239100	IOM
1425	2 5241440000			ALPH	KAD	
1426	0 0000008000			DEC	0000008000	KAD
1427	2 5342430000			ALPH	LBC	
1428	0 0000142100			DEC	0000142100	LBC
1429	2 5344420000			ALPH	LDB	
1430	0 0000042100			DEC	0000042100	LDB
1431	2 5344590000			ALPH	LDR	
1432	0 0000041000			DEC	0000041000	LDR
1433	2 5356414400			ALPH	LOAD	PSEUDO-OP

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
1434	1 0012000843	-	12	HLT	LOAD	
1435	2 5362410000			ALPH	LSA	
1436	0 0000043000			DEC	0000043000	LSA
1437	2 5441435956			ALPH	MACRO	PSEUDO-OP
1438	1 0000000858	-		HLT	MACRO	
1439	2 5444410000			ALPH	MDA	
1440	0 0000950100			DEC	0000950100	MDA
1441	2 5446430000			ALPH	MFC	
1442	0 4000051010			DEC	4000051010	MFC
1443	2 5446620000			ALPH	MFS	
1444	0 4000050110			DEC	4000050110	MFS
1445	2 5449420000			ALPH	MIB	
1446	0 0000059100			DEC	0000059100	MIB
1447	2 5449450000			ALPH	MIE	
1448	0 0000159100			DEC	0000159100	MIE
1449	2 5449590000			ALPH	MIR	
1450	0 0000055000			DEC	0000055000	MIR
1451	2 5449660000			ALPH	MIW	
1452	0 0000054000			DEC	0000054000	MIW
1453	2 5453620000			ALPH	MLS	
1454	0 0000450100			DEC	0000450100	MLS
1455	2 5456590000			ALPH	MOR	
1456	0 0000057000			DEC	0000057000	MOR
1457	2 5456660000			ALPH	MOW	
1458	0 0000056000			DEC	0000056000	MOW
1459	2 5457420000			ALPH	MPB	
1460	0 0000158100			DEC	0000158100	MPB
1461	2 5457450000			ALPH	MPE	
1462	0 0000258100			DEC	0000258100	MPE
1463	2 5457460000			ALPH	MPF	
1464	0 0000058100			DEC	0000058100	MPF
1465	2 5459440000			ALPH	MRD	
1466	0 0000052000			DEC	0000052000	MRD
1467	2 5459590000			ALPH	MRR	
1468	0 0000053000			DEC	0000053000	MRR
1469	2 5459660000			ALPH	MRW	
1470	0 0000850100			DEC	0000850100	MRW
1471	2 5462590000			ALPH	MSR	NUM-ASSEM P/O
1472	0 9000080010			DEC	9000080010	MSR
1473	2 5463430000			ALPH	MTC	
1474	0 0000051000			DEC	0000051000	MTC
1475	2 5463620000			ALPH	MTS	
1476	0 0000050100			DEC	0000050100	MTS
1477	2 5464530000			ALPH	MUL	
1478	0 0000014000			DEC	0000014000	MUL
1479	2 5556570000			ALPH	NOP	

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
1480	0 0000001000			DEC	0000001000	NOP
1481	2 5657444546			ALPH	OPDEF	PSEUDO-OP
1482	1 0000000862	-		HLT	OPDEF	
1483	2 5657626855			ALPH	OPSYN	PSEUDO-OP
1484	1 0000000889	-		HLT	OPSYN	
1485	2 5659470000			ALPH	ORG	PSEUDO-OP
1486	1 0005000900	-	5	HLT	ORG	
1487	2 5741646245			ALPH	PAUSE	PSEUDO-OP
1488	1 0002000911	-	2	HLT	PAUSE	
1489	2 5759420000			ALPH	PRB	
1490	0 0000004000			DEC	0000004000	PRB
1491	2 5759440000			ALPH	PRD	
1492	0 0000003000			DEC	0000003000	PRD
1493	2 5759490000			ALPH	PRI	
1494	0 0000005000			DEC	0000005000	PRI
1495	2 5762590000			ALPH	PSR	NUM-ASSEM P/O
1496	0 9000082010			DEC	9000082010	PSR (82 VER.)
1497	2 5766490000			ALPH	PWI	
1498	0 0000007000			DEC	0000007000	PWI
1499	2 5766590000			ALPH	PWR	
1500	0 0000006000			DEC	0000006000	PWR
1501	2 5945460000			ALPH	REF	NUM-ASSEM P/O
1502	0 9000098010			DEC	9000098010	REF
1503	2 5945530000			ALPH	REL	PSEUDO-OP
1504	1 0002000915	-	2	HLT	REL	
1505	2 5945540000			ALPH	REM	PSEUDO-OP
1506	1 0007000921	-	7	HLT	REM-2	
1507	2 5955440000			ALPH	RND	
1508	0 0000016000			DEC	0000016000	RND
1509	2 5963460000			ALPH	RTF	
1510	0 0000029000			DEC	0000029000	RTF
1511	2 6245430000			ALPH	SEC	NUM-ASSEM P/O
1512	0 9000094010			DEC	9000094010	SEC
1513	2 6245630000			ALPH	SET	PSEUDO-OP
1514	1 0000000931	-		HLT	SET	
1515	2 6245670000			ALPH	SEX	NUM-ASSEM P/O
1516	1 0002000953	-	2	HLT	SEX	
1517	2 6253410000			ALPH	SLA	
1518	0 0000049101			DEC	0000049101	SLA
1519	2 6253620000			ALPH	SLS	
1520	0 0000249101			DEC	0000249101	SLS
1521	2 6253630000			ALPH	SLT	
1522	0 0000149101			DEC	0000149101	SLT
1523	2 6256480000			ALPH	SOH	
1524	0 0000139100			DEC	0000139100	SOH
1525	2 6256590000			ALPH	SOR	

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
1526	0 0000039100			DEC	0000039100	SOR
1527	2 6257414300			ALPH	SPAC	PSEUDO-OP
1528	1 0006000962	-	6	HLT	SPAC	
1529	2 6257414345			ALPH	SPACE	PSEUDO-OP
1530	1 0017001012	-	17	HLT	SPACE	
1531	2 6257560000			ALPH	SPO	
1532	0 0000009000			DEC	0000009000	SPO
1533	2 6259410000			ALPH	SRA	
1534	0 0000048101			DEC	0000048101	SRA
1535	2 6259620000			ALPH	SRS	
1536	0 0000248101			DEC	0000248101	SRS
1537	2 6259630000			ALPH	SRT	
1538	0 0000148101			DEC	0000148101	SRT
1539	2 6263410000			ALPH	STA	
1540	0 0000040100			DEC	0000040100	STA
1541	2 6263420000			ALPH	STB	
1542	0 0000240100			DEC	0000240100	STB
1543	2 6263570000			ALPH	STP	
1544	0 0000044000			DEC	0000044000	STP
1545	2 6263590000			ALPH	STR	
1546	0 0000140100			DEC	0000140100	STR
1547	2 6264410000			ALPH	SUA	
1548	0 0000113100			DEC	0000113100	SUA
1549	2 6264420000			ALPH	SUB	
1550	0 0000013100			DEC	0000013100	SUB
1551	2 6343440000			ALPH	TCD	PSEUDO-OP
1552	1 0011001030	-	11	HLT	TCD	
1553	2 6969690000			ALPH	ZZZ	NUM-ASSEM P/O
1554	1 0009001044	-	9	HLT	ZZZ	
1555	0 0000000000	OSIGN		DEC		MODE SIGN
1556	0 0000000000	LOCNT		DEC		VARIABLE
1557	0 0000000000	DELTA		DEC		VARIABLE
1558	0 0000000000	VARNT		DEC		VARIABLE
1559	0 0000000000	SAVEA		DEC		TEMP STORAGE
1560	0 0000000000	SAVEB		DEC		TEMP STORAGE
1561	0 0000000000	TEMP1		DEC		TEMP STORAGE
1562	6 0000041662	IOBUF		BSS	100	I-O BUFFER
1662	0 0000000000	SPACT		DEC	0000000000	SPAC TABLE

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
		*		INITL	--DOES ONE-SHOT	INITIALIZATION
		*			AND PRINTS TITLE	AND OPTIONS.
		*			(OVERWRITTEN BY	SPACT)
1663	0 0000381668	INITL	0	BCS	GENIG	SKIP IF *PTO*
1664	0 1018500000			1010MRW		SET ODD LANE
1665	0 1002580000			1000MPE		READY FOR MIW
1666	0 1386541299			1386MIW	OPTAB	SAVE OPTAB
1667	0 1008500000			1000MRW		READY TAPE 1
1668	0 0000101689	GENIG		CAD	.IG.	GET
1669	0 0810400404			0810STA	LIST	ALL
1670	0 2210400405			2210STA	LIST+1	THE
1671	0 0410400406			0410STA	LIST+2	(IG) CODES...
1672	0 6610401091			6610STA	.FLG.	WHERE
1673	0 8810400823			8810STA	1CR	NEEDED....
1674	0 1260261000			1260IFL	SPACL	SET SPAC CALL-
1675	0 1260261011			1260IFL	SPACL+11	IN SIGN=6....
1676	0 0000101690			CAD	RSTRT	BURN BRIDGE AND
1677	0 0000400000			STA	ENTRY	SET FOR RESTART...
1678	0 0090091691			90SPO	IDMES	PRINT I.D.
1679	0 0100091700			100SPO	SWMES	PRINT
1680	0 0070091710			70SPO	S5MES	THE
1681	0 0060091717			60SPO	S6MES	HEADING AND
1682	0 0100091723			100SPO	S7MES	THE
1683	0 0070091733			70SPO	S8MES	LIST
1684	0 0080091740			80SPO	S9MES	OF
1685	0 0080091748			80SPO	S0MES	OPTIONS....
1686	0 0050090289			50SPO	NUPAG	GET NEW PAGE.
1687	0 6996006996			6996HLT	6996	O-O HALT...
1688	0 0000300034			BUN	START+3	GO ASSEMBLE..
1689	0 0202020202	.IG.		DEC	0202020202	PSEUDO (IG)S
1690	0 2000380220	RSTRT	2	BCS	INTER+3	RESTART PASS 2...
1691	2 6200550041	IDMES		6ALPH	S N A P	VER. 1E 5/10/64%
1697	2 0000000016			3ALPH	% % %	3(B B B B CR)
1700	2 6266496343	SWMES		6ALPH	SWITCH OPTIONS MUST BE SET DUR	
1706	2 4955470056			4ALPH	ING O-O HALT.% %	
1710	2 6266008500	S5MES		6ALPH	SW 5 ON IF INPUT IS ON MAG-TAP	
1716	2 4500000016			ALPH	E %	
1717	2 6266008600	S6MES		6ALPH	SW 6 ON SUPPRESSES PUNCHING %	
1723	2 6266008700	S7MES		6ALPH	SW 7 ON TO INSERT VALUE IN AC	
1729	2 4656590064			4ALPH	FOR UNDEFINED ADRES%	
1733	2 6266008800	S8MES		6ALPH	SW 8 ON SUPPRESSES ERROR TYPIN	
1739	2 4700000016			ALPH	G % CR AT END	
1740	2 6266008900	S9MES		6ALPH	SW 9 ON SUPPRESSES DICTIONARY	
1746	2 5759495563			2ALPH	PRINTING % CR AT END	
1748	2 6266008000	S0MES		6ALPH	SW 0 ON INDICATES PAPER-TAPE-O	
1754	2 5553680054			2ALPH	NLY MODE % CR AT END	

ADRES	INSTRUCTION	LABEL	VAR	OP	VARIABLE	FIELD
0000	6	0000300000		TCD	ENTRY	
				END		

NCONV IS NOT REFERENCED

PASS1 IS NOT REFERENCED

VCONV IS NOT REFERENCED