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2 * MAINTAIN III TEST EXECUTIVE FOR CARD

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36 * *****
37 * *
38 * * AREAS RESERVED BY EXECUTIVE *
39 * *****
40 * ORG 0
41 * JMP EXECUTIVE
42 * ORG 040
43 * JMPM POWER DOWN ROUTINE
44 * JMP POWER UP ROUTINE
45 * NOTE: THE TEST EXECUTIVE ALSO RESERVES LOCATIONS 0400 TO 0477
46 * FOR A POINTER TABLE TO STANDARD ROUTINES, AND AS AN AREA
47 * FOR EXECUTIVE DATA. ALL TEST PROGRAMS WORKING WITH THE
48 * EXECUTIVE MUST PRESERVE THIS BLOCK.
49 * STANDARD ROUTINES WILL BE CALLED INDIRECTLY THRU
50 * THIS TABLE
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52 *****
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54 *****

Table with columns for address, assembly code, and routine name. Includes entries like '000000 A 55 R0 SET 0 B', '000000 001000 A 64 JMP ETOP CONSOLE INTERRUPT ENTRANCE', and '000400 016446 A 77 EX00 DATA OUTA OUTPUT ONE CHAR ROUTINE'.

000421	016040	A	94	EX21	DATA	SSWT	STANDARD SENSE SWITCH ROUTINE	
000422	014000	A	95	EX25	DATA	ELOC	LOWEST CORE LOCATION USED BY THE EXEC	
000423	015156	A	96	EX27	DATA	E3ZC	DETERMINE MEMORY SIZE	
000424	015553	A	97	EX30	DATA	M9G3	MEMORY SIZE IS ... MESSAGE	
000425	016431	A	98	EX31	DATA	INPH	SENSE TTY BFR RDY	
000426	016443	A	99	EX32	DATA	INPI	INIT TTY (INPUT CHAR W/OUT SENSE BFR RDY)	
000427	017173	A	100	EX33	DATA	EDEX	HIGHEST LOCATION USED BY THE EXEC	
000430	000000	A	101	V75	DATA	0	V75 CPU FLAG	B
000431	000000	A	102	E3R1	DATA	0	PSEUDO REGISTER 3	B
000432	000000	A	103	E4R1	DATA	0	PSEUDO REGISTER 4	B
000433	000000	A	104	E5R1	DATA	0	PSEUDO REGISTER 5	B
000434	000000	A	105	E6R1	DATA	0	PSEUDO REGISTER 6	B
000435	000000	A	106	E7R1	DATA	0	PSEUDO REGISTER 7	B

107 *
108 *
109 *
000440 110 ORG 0440
111 *
112 * EXECUTIVE DATA TABLE
113 *

000440	000000	A	114	SFLG	DATA	0	LOOP ON ERROR FLAG, 0=DON'T LOOP	1=LOOP
000441	000000	A	115	\$MEM	DATA	0	MEMORY SIZE (HIGHEST AVAIL CORE)	
000442	000000	A	116	\$CON	DATA	0	0=CONSOLE MODE	1=TTY MODE
000443	000000	A	118	EAR1	DATA	0	PSEUDO A REG	
000444	000000	A	119	EBR1	DATA	0	PSEUDO B REG	
000445	000000	A	120	EXR1	DATA	0	PSEUDO X REG	
000446			121	ETS1	BSS	6	TEMPORARY STORAGE	
000454	000240	A	122	EK00	DATA	0240	ASCII BLANK(SPACE)	
000455	000215	A	123	EK01	DATA	0215	ASCII CARRIAGE RETURN	
000456	000212	A	124	EK02	DATA	0212	ASCII LINE FEED	
000457	000040	A	125	K40	DATA	040		
000460	000100	A	126	K100	DATA	0100		
000461	000200	A	127	K200	DATA	0200		
000462			128	FRST	BSS	1	INITIAL PUNCH ADDRESS	
000463			129	LAST	BSS	1	LAST PUNCH ADDRESS	
000464	000000	A	130	CKSM	DATA	0	CHECKSUM	
000465	000000	A	131	EXEC	DATA	0	EXECUTION ADDRESS	
000466	000224	A	132	TAPN	DATA	0224	PUNCH OFF CODE	
000467	000222	A	133	TAPE	DATA	0222	PUNCH ON CODE	
000470	014024	A	134	LOAD	DATA	LODE	ADDRESS OF BINARY LOADER	
000471	000000	A	135	TS04	DATA	0	DIGIT COUNTER FOR INPG	
000472	000000	A	136	PWRK	DATA	0	POWER FAIL COUNTER	
000473	000001	A	137	STTY	DATA	1		
000474			138	OADR	BSS	1	OBJECT MEDIA DEVICE ADDRESS	
000475	000221	A	139	XON	DATA	0221	READER ON	
000476	000223	A	140	XOFF	DATA	0223	READER OFF	
000477	177700	A	141	MASK	DATA	0177700	I/O INSTRUCTION MASK	

142 *
143 *
144 *
145 *
146 *****

014000 147 *
148 ORG 014000
149 *
150 *****
151 *
152 *
153 *
154 *

014000 A 155 ELOC EQU * LOWEST CORE LOCATION USED BY THE EXEC

014000	007400	A	157	EBG0	ROF			B
014001	007411	A	158		DATA	07411	A V75 SYSTEM ?	B
014002	001001	A	159		JOF	NOV75		B
014003	014007	A						
014004	006010	A	160		LDAT	-1	YES	B
014005	177777	A						
014006	050430	A	161		STA	V75		B
014007	001000	A	162	NOV75	JMP	EBG1	COLD START ENTRY	B
014010	015166	A						

014011 000000 A 163 *
164 SET ENTR SET IN DEVICE ADDRESS
165 *

014012	025000	A	166		LDB	0,1		
014013	001020	A	167		JBZ*	SET		
014014	114011	A						
014015	016000	A	168		LDA	0,2		
014016	150477	A	169		ANA	MASK		
014017	110474	A	170		ORA	OADR		
014020	056000	A	171		STA	0,2		
014021	005144	A	172		IXR			
014022	001000	A	173		JMP	SET+1		
014023	014012	A						
014024		A	174	LODE	EQU	*		

175 *
176 * CARD BINARY LOADER
177 *

014024	006030	A	178	LOAC	EQU	*		
014025	014032	A	179		LDXI	CD00		
014026	002000	A	180		JMPM	SET		
014027	014011	A						
014030	001000	A	181		JMP	INC		

014031	014037	A							
014032	014043	A	182	CD00	DATA		CD01,CD02,CD03,CD04,0		
014033	014047	A							
014034	014135	A							
014035	014141	A							
014036	000000	A							
	000010	A	183	AZ	EQU	010		A REG ZERO	
	000020	A	184	BZ	EQU	020		B REG ZERO	
014037	005001	A	185	INC	TZA			INITIALIZE A REG	
014040	054104	A	186		STA	CNT		INITIALIZE COUNT	
014041	053464	A	187		STA	CKSM		INITIALIZE CHECK SUM	
014042	054103	A	188		STA	CYCLE			
014043	101630	A	189	CD01	SEN	0630,**4		READER READY	
014044	014047	A							
014045	001000	A	190		JMP	**2		WAIT UNTIL IT IS READY	
014046	014043	A							
014047	100230	A	191	CD02	EXC	0230		READ A CARD	
014050	002000	A	192		CALL	LOAI		GET COLUMN 1	
014051	014140	A							
014052	004244	A	193	LOAE	LRLA	4		POSITION TO HIGH ORDER	
014053	054073	A	194		STA	PART		SAVE TO INCLUDE NEXT COLUMN	
014054	002000	A	195		CALL	LOAI		GET NEXT COLUMN	
014055	014140	A							
014056	004550	A	196		LLBR	8		ONLY 4 BITS NEEDED NOW	
014057	002000	A	197		CALL	LOAH		PUT WORD AND GET NEXT COLUMN	
014060	014101	A							
014061	004544	A	198		LLBR	4		ONLY NEED 8 BITS NOW	
014062	002000	A	199		CALL	LOAH		PUT WORD AND GET NEXT COLUMN	
014063	014101	A							
014064	002000	A	200		CALL	LOAH		PUT WORD AND GET NEXT COLUMN	
014065	014101	A							
014066	001000	A	201		JMP	LOAE		DO AGAIN FOR NEXT THREE WORDS	
014067	014052	A							
014070	054054	A	202	LOAF	STA	CNT		SAVE COUNT	
014071	001010	A	203		JAZ	INC		BLANK CARD, IGNORE	
014072	014037	A							
014073	034044	A	204		LDX	LOAI		GET LAST WORD (LOAD/EXECUTION ADDR)	
014074	070465	A	205		STX	EXEC		SAVE FOR EXECUTION	
014075	044050	A	206	LOAG	INR	CYCLE		INCREMENT WORD IN RECORD COUNT	
014076	002000	A	207		CALL	LOAI		GET NEXT COLUMN	
014077	014140	A							
014100	001000	A	208		JMP	**		RETURN	
014101	114100	A							
	014101	A	209	LOAH	EQU	**1		ENTRY	
014102	114044	A	210		ORA	PART		COMPLETE WORD	
014103	064043	A	211		STB	PART		SAVE PARTIAL FOR NEXT WORD	
014104	054033	A	212		STA	LOAI		SAVE INPUT WORD FOR STORE	
014105	130464	A	213		ERA	CKSM		INCLUDE IN CHECKSUM	
014106	050464	A	214		STA	CKSM		SAVE CHECKSUM	
014107	024036	A	215		LDB	CYCLE			
014110	001020	A	216		JBZ	LOAF		FIRST WORD OF RECORD, GET NEXT COLUMN	
014111	014070	A							
014112	005322	A	217		DBR			DECREMENT SUB CYCLE INDICATOR FOR TEST	
014113	001020	A	218		JBZ	LOAF+3		SECOND WORD OF RECORD, GET NEXT COLUMN	
014114	014073	A							
014115	024027	A	219		LDB	CNT		GET COUNT	
014116	005122	A	220		ICR				
014117	001030	A	221		JIF	AZ+BZ,(EXEC)*		EXECUTION ADDRESS	
014120	100465	A							
014121	005322	A	222		DBR				
014122	001030	A	223		JIF	AZ+BZ,INC		GOOD END OF RECORD, READ NEXT CARD	
014123	014037	A							
014124	001020	A	224		JBZ	LOAH		BAD CHECKSUM	
014125	015406	A							
014126	005322	A	225		DBR			REDUCE COUNT	
014127	064015	A	226		STB	CNT		SAVE COUNT	
014130	014007	A	227		LDA	LOAI		GET WORD TO STORE	
014131	055000	A	228		STA	0,1		STORE WORD	
014132	005144	A	229		IXR			INCREMENT STORE POINTER	
014133	001000	A	230		JMP	LOAG		GO TO GET NEXT COLUMN	
014134	014075	A							
014135	102530	A	231	CD03	CIA	030		INPUT COLUMN	
014136	005002	A	232		TZB			CLEAR REG	
014137	001000	A	233		JMP	**		RETURN	
014140	114137	A							
	014140	A	234	LOAI	EQU	**1		ENTRY AND TEMPORARY SAVE	
014141	101130	A	235	CD04	SEN	0130,**4		CHAR READY	
014142	014135	A							
014143	001000	A	236		JMP	**2		WAIT FOR CHAR READY	
014144	014141	A							
014145	000000	A	237	CNT	DATA	0			
014146	000000	A	238	CYCLE	DATA	0			
014147	000000	A	239	PART	DATA	0			
			240	*					
			241	*	EPUN==OUTPUT AN OBJECT PROGRAM				
			242	*	BEGINNING, ENDING, AND EXECUTION ADDRESSES				
			243	*	ARE SPECIFIED BY USER				
			244	*					
			245	*					
			246	*					
			247	*					
014150	005300	A	248	EPUN	DECR	04		PRESFT EXEC ADDR TO -1	
014151	070450	A	249		STX	ETS1+2			
014152	006020	A	250		LDBI	ETS1		ADDRS FOR STORING INPUT PARAMETERS	
014153	000446	A							

014154	002000	A	251	CALL	INPG	INPUT OCTAL PARAMETER	
014155	016342	A					
014156	001000	A	252	JMP	ETOP	TERMINATION EXIT VIA SS3	
014157	015225	A					
014160	001000	A	253	JMP	ETOP	ABORT	
014161	015225	A					
014162	001000	A	254	JMP	EPU1	COMMA EXIT--GET NEXT PARAMETER	
014163	014172	A					
			255 *			NORMAL RETURN FROM INPG	
014164	056000	A	256	STA	0,2		
014165	010446	A	257	LDA	ETS1	BEGINNING PUNCH ADDRESS	
014166	020447	A	258	LDB	ETS1+1	ENDING PUNCH ADDRESS	
014167	030450	A	259	LDX	ETS1+2	EXEC ADDR	
014170	001000	A	260	JMP	DUMP		
014171	016662	A					
			261 *				
014172	056000	A	262	EPU1	STA	0,2	
014173	005021	A	263	TBA			
014174	006140	A	264	SUBI	ETS1+2		
014175	000450	A					
014176	001010	A	265	JAZ	EXIT	ERROR--TOO MANY INPUTS	
014177	015344	A					
014200	005122	A	266	IBR			
014201	001000	A	267	JMP	EPUN+4	GET NEXT PARAMETER	
014202	014154	A					
			268 *				
			269 *				
			270 *				
			271 *				
			272 *				
			273 *			INIT--INITIALIZE MEMORY.	
			274 *			X=START ADDRESS	
			275 *			Y=FINAL ADDRESS	
			276 *			Z=INITIALIZING VALUE	
			277 *				
			278 *			FORMAT: IX,Y,Z.	
			279 *				
			280 *				
014203	006020	A	281	INIT	LDBI	ETS1	ADDRESS FOR STORING INPUT PARAMETERS
014204	000446	A					
014205	002000	A	282	CALL	INPG	GET OCTAL PARAMETER	
014206	016342	A					
014207	001000	A	283	JMP	ETOP	TERMINATION EXIT VIA SS3	
014210	015225	A					
014211	001000	A	284	JMP	ETOP	ABORT	
014212	015225	A					
014213	001000	A	285	JMP	INI3	COMMA EXIT--GET NEXT PARAMETER	
014214	014243	A					
			286 *				NORMAL RETURN FROM INPG--A REG CONTAINS THIRD PARAMETER
014215	030446	A	287	LDX	ETS1	START ADDRESS	
014216	050452	A	288	STA	ETS1+4	SAVE INITIALIZING VALUE	
014217	005021	A	289	TBA		TEST NO. PARAMETERS	
014220	006140	A	290	SUBI	ETS1+2	*	
014221	000450	A					
014222	001010	A	291	JAZ	**4	*	
014223	014226	A					
014224	001000	A	292	JMP	EXIT	*	
014225	015344	A					
014226	010447	A	293	LDA	ETS1+1	TEST PARAMETER	
014227	140446	A	294	SUB	ETS1	RANGE	
014230	001004	A	295	JAN	EXIT	***	
014231	015344	A					
014232	010452	A	296	INI2	LDA	ETS1+4	STORE VALUE Z
014233	055000	A	297	STA	0,1		
014234	005041	A	298	TXA			
014235	140447	A	299	SUB	ETS1+1	FINAL ADDRESS	
014236	001010	A	300	JAZ	ETOP	YES	
014237	015225	A					
014240	005144	A	301	IXR			
014241	001000	A	302	JMP	INI2	STORE Z AT NEXT LOCATION	
014242	014232	A					
			303 *				
014243	056000	A	304	INI3	STA	0,2	SAVE INPUT PARAMETER
014244	005122	A	305	IBR			
014245	001000	A	306	JMP	INIT+2	GET NEXT PARAMETER	
014246	014205	A					
			307 *				
			308 *				
			309 *				
			310 *				
			311 *				ETRP--TRAP TO LOCATION X STARTING FROM LOCATION Y.
			312 *				IF LOCATION X IS REACHED; RESTORE LOCATIONS X & X+1, PRINT
			313 *				THE CURRENT VALUES OF REGISTERS A,B,X, AND RETURN TO THE
			314 *				EXEC SUPERVISOR
			315 *				
			316 *				NOTE: CONTENTS OF LOCATIONS X AND X+1 MUST BE RESTORED BY
			317 *				USER IF TRAP IS NOT REACHED BY THIS ROUTINE
			318 *				
			319 *				FORMAT: TX,Y.
			320 *				
			321 *				
014247	006020	A	322	ETRP	LDBI	ETS1	(B) POINTS TO PARAMETER TBL
014250	000446	A					
014251	010446	A	323	LDA	ETS1	X = PREVIOUS Y	
014252	050447	A	324	STA	ETS1+1		

014253	002000	A	325	CALL	INPG	INPUT OCTAL NUMBER	
014254	016342	A					
014255	001000	A	326	JMP	ETOP	TERMINATION EXIT VIA 993	
014256	015225	A					
014257	001000	A	327	JMP	ETOP	ABORT	
014260	015225	A					
014261	001000	A	328	JMP	ETR1	COMMA EXIT--GET SECOND PARAMETER	
014262	014404	A					
			329 *	NORMAL RETURN FROM INPG			
014263	056000	A	330	STA	0,2	STORE PARAMETER	
014264	006030	A	331	LDXI	ETS1+2	TEMP STORE ADDRESS	
014265	000450	A					
014266	020446	A	332	LDB	ETS1	X PARAMETER (TRAP LOCATION)	
014267	016000	A	333	LDA	0,2		
014270	055000	A	334	STA	0,1	SAVE CONTENTS OF LOCATION X AT T902	
014271	016001	A	335	LDA	1,2		
014272	055001	A	336	STA	1,1	SAVE CONTENTS OF LOC. X+1 AT T903	
014273	006010	A	337	LDAI	02000	OP CODE FOR JMPM	
014274	002000	A					
014275	056000	A	338	STA	0,2	STORE JMPM AT LOC X	
014276	006010	A	339	LDAI	ETR2		
014277	014414	A					
014300	056001	A	340	STA	1,2	STORE TRAP RETURN ADDRESS AT X+1	
014301	001000	A	341	JMP	EG01	LOAD PSEUDO REGISTERS AND GOTO LOC Y	
014302	015000	A					
			342 *				
014303	050443	A	343	ETR3	STA	EAR1	PUT A CONTENTS INTO PSEUDO A REG
014304	060444	A	344		STB	EBR1	PUT B CONTENTS INTO PSEUDO B REG
014305	070445	A	345		STX	EXR1	PUT X CONTENTS INTO PSEUDO X REG
014306	010430	A	346		LDA	V75	
014307	001010	A	347		JAZ	ETR3A	
014310	014323	A					
014311	007130	A	348		ST,R3	E3R1	PUT R3 CONTENTS INTO PSEUDO R3
014312	000431	A					
014313	007140	A	349		ST,R4	E4R1	PUT R4 CONTENTS INTO PSEUDO R4
014314	000432	A					
014315	007150	A	350		ST,R5	E5R1	PUT R5 CONTENTS INTO PSEUDO R5
014316	000433	A					
014317	007160	A	351		ST,R6	E6R1	PUT R6 CONTENTS INTO PSEUDO R6
014320	000434	A					
014321	007170	A	352		ST,R7	E7R1	PUT R7 CONTENTS INTO PSEUDO R7
014322	000435	A					
014323	005001	A	353	ETR3A	TZA		
014324	005511	A	354		ADFA		
014325	054501	A	355		STA	EOV1	PUT OVERFLOW IN PSEUDO OV
014326	034065	A	356		LDX	ETR2	
014327	005344	A	357		DXR		
014330	005344	A	358		DXR		SET X REG TO TRAP LOCATION ADDRESS
014331	010450	A	359		LDA	ETS1+2	
014332	020451	A	360		LDB	ETS1+3	
014333	055000	A	361		STA	0,1	RESTORE CONTENTS OF LOC X
014334	065001	A	362		STB	1,1	RESTORE CONTENTS OF X+1
014335	002000	A	363		CALL	OUTC	OUTPUT CR & LF
014336	016512	A					
014337	005041	A	364		TXA		OUTPUT ADDR OF TRAP RETURN
014340	002000	A	365		CALL	OUTF	
014341	016564	A					
014342	010443	A	366		LDA	EAR1	
014343	002000	A	367		CALL	OUTE	PRINT CONTENTS OF PSEUDO A
014344	016524	A					
014345	010444	A	368		LDA	EBR1	
014346	002000	A	369		CALL	OUTE	PRINT CONTENTS OF PSEUDO B
014347	016524	A					
014350	010445	A	370		LDA	EXR1	
014351	002000	A	371		CALL	OUTE	PRINT CONTENTS OF PSEUDO X
014352	016524	A					
014353	010430	A	372		LDA	V75	
014354	001010	A	373		JAZ	ETR3B	
014355	014375	A					
014356	010431	A	374		LDA	E3R1	PRINT CONTENTS OF PSEUDO R3
014357	002000	A	375		CALL	OUTE	
014360	016524	A					
014361	010432	A	376		LDA	E4R1	PRINT CONTENTS OF PSEUDO R4
014362	002000	A	377		CALL	OUTE	
014363	016524	A					
014364	010433	A	378		LDA	E5R1	PRINT CONTENTS OF PSEUDO R5
014365	002000	A	379		CALL	OUTE	
014366	016524	A					
014367	010434	A	380		LDA	E6R1	PRINT CONTENTS OF PSEUDO R6
014370	002000	A	381		CALL	OUTE	
014371	016524	A					
014372	010435	A	382		LDA	E7R1	PRINT CONTENTS OF PSEUDO R7
014373	002000	A	383		CALL	OUTE	
014374	016524	A					
014375	014431	A	384	ETR3B	LDA	EOV1	
014376	006120	A	385		ADDI	' 0'	
014377	120260	A					
014400	002000	A	386		CALL	OUTB	PRINT CONTENTS OF OVERFLOW
014401	016477	A					
014402	001000	A	387		JMP	ETOP	RETURN TO EXEC SUPERVISOR
014403	015225	A					
			388 *				
014404	056000	A	389	ETR1	STA	0,2	STORE PARAMETER X
014405	005123	A	390		INCR	023	INC PARAMETER PTR
014406	006140	A	391		SUBI	ETS1+1	MORE THAN 1 X PARAMETER ?

014407	000447	A							
014410	001010	A	392	JAZ	ETRP+4			NO CONTINUE	
014411	014253	A							
014412	001000	A	393	JMP	EXIT			YES PRINT INVALID AND GO TO ETOP	
014413	015344	A							
			394 *						
014414	000000	A	395	ETR2	ENTR	0			
014415	001000	A	396	JMP	ETR3			PROCESS TRAP RETURN	
014416	014303	A							
			397 *						
			398 *						
			399 *						
			400 *	ESRC	--SEARCH MEMORY FOR SPECIFIED VALUE.				
			401 *		PRINT LOCATION AND CONTENTS WHEN MATCH IS FOUND				
			402 *						
			403 *		X=START ADDRESS				
			404 *		Y=FINAL ADDRESS				
			405 *		Z=SEARCH VALUE				
			406 *		M=MASK WORD				
			407 *						
			408 *		FORMAT: SX,Y,Z,M.				
			409 *						
			410 *						
014417	006020	A	411	ESRC	LDBI	ETS1		ADDRESS FOR STORING INPUT PARAMETERS	
014420	000446	A							
014421	002000	A	412		CALL	INPG		GET OCTAL PARAMETER	
014422	016342	A							
014423	001000	A	413		JMP	ETOP		TERMINATION EXIT VIA 993	
014424	015225	A							
014425	001000	A	414		JMP	ETOP		ABORT	
014426	015225	A							
014427	001000	A	415		JMP	ESR5		COMMA EXIT--GET NEXT PARAMETER	
014430	014500	A							
			416 *		NORMAL RETURN FROM INPG--A REG CONTAINS FOURTH PARAMETER				
014431	050451	A	417		STA	ETS1+3		SAVE MASK WORD	
014432	150450	A	418		ANA	ETS1+2		MASK SEARCH VALUE	
014433	050452	A	419		STA	ETS1+4		MASKED SEARCH VALUE	
014434	005021	A	420		TBA			TEST NO. OF PARAMETERS	
014435	006140	A	421		SUBI	ETS1+3		*	
014436	000451	A							
014437	001010	A	422		JAZ	**4		*	
014440	014443	A							
014441	001000	A	423		JMP	EXIT		***	
014442	015344	A							
014443	030446	A	424	ESR4	LDX	ETS1		START ADDRESS	
014444	015000	A	425		LDA	0,1			
014445	150451	A	426		ANA	ETS1+3		MASK IT	
014446	140452	A	427		SUB	ETS1+4			
014447	001010	A	428		JAZ	ESR2		GOOD COMPARE	
014450	014462	A							
014451	040446	A	429	ESR1	INR	ETS1		START ADDRESS	
014452	001400	A	430		JSS3	ETOP		RETURN TO SUPERVISOR	
014453	015225	A							
014454	005041	A	431		TXA				
014455	140447	A	432		SUB	ETS1+1		END ADDRESS	
014456	001002	A	433		JAP	ETOP		RETURN TO SUPERVISOR	
014457	015225	A							
014460	001000	A	434		JMP	ESR4		GET NEXT WORD	
014461	014443	A							
014462	002000	A	435	ESR2	CALL	OUTC		CR/LF	
014463	016512	A							
014464	010446	A	436		LDA	ETS1		ADDRS OF WORD	
014465	002000	A	437		CALL	OUTF		PRINT MEMORY ADDRESS	
014466	016564	A							
014467	006010	A	438		LDAI	'#'		EQUAL SIGN	
014470	000275	A							
014471	002000	A	439		CALL	OUTA			
014472	016446	A							
014473	015000	A	440		LDA	0,1		CONTENTS OF ADDRESS	
014474	002000	A	441		CALL	OUTE		PRINT CONTENTS	
014475	016524	A							
014476	001000	A	442		JMP	ESR1		CONTINUE	
014477	014451	A							
014500	056000	A	443	ESR5	STA	0,2			
014501	005122	A	444		IBR				
014502	001000	A	445		JMP	ESRC+2		GET NEXT PARAMETER	
014503	014421	A							
			446 *						
			447 *						
			448 *						
			449 *						
			450 *		DISPLAY/CHANGE THE PSEUDO A REGISTER				
			451 *						
014504	006010	A	452	EARG	LDAI	0240		ASCII SPACE	
014505	000240	A							
014506	002000	A	453		CALL	OUTA			
014507	016446	A							
014510	010443	A	454		LDA	EAR1		LOAD PSEUDO A	
014511	002000	A	455		CALL	OUTE		PRINT CONTENTS	
014512	016524	A							
014513	002000	A	456		CALL	INPG		INPUT OCTAL AND/OR PERIOD	
014514	016342	A							
014515	001000	A	457		JMP	ETOP		TERMINATION EXIT VIA 993	
014516	015225	A							
014517	001000	A	458		JMP	ETOP		ABORT EXIT	

014520	015225	A							
014521	001000	A	459	JMP	**2		COMMA EXIT==ACCEPT IT		
014522	014523	A							
			460 *	NORMAL RETURN FROM INPG					
014523	050446	A	461	STA	ETS1		SAVE INPUT		
014524	010471	A	462	LDA	TS04		TS04=DIGIT COUNTER FOR INPG		
014525	001010	A	463	JAZ	ETOP		0=NO OCTAL INPUT,RETURN TO SUPERVISOR		
014526	015225	A							
014527	010446	A	464	LDA	ETS1				
014530	050443	A	465	STA	EAR1		STORE NEW VALUE IN PSEUDO A		
014531	001000	A	466	JMP	ETOP		RETURN TO SUPERVISOR		
014532	015225	A							
			467 *						
			468 *						
			469 *	DISPLAY/CHANGE THE PSEUDO B REGISTER					
			470 *						
			471 *						
014533	010454	A	472	EBRG	LDA	EK00	ASCII BLANK(SPACE)		
014534	002000	A	473		CALL	OUTA			
014535	016446	A							
014536	010444	A	474	LDA	EBR1		LOAD PSEUDO B		
014537	002000	A	475		CALL	OUTE	PRINT CONTENTS		
014540	016524	A							
014541	002000	A	476		CALL	INPG	INPUT OCTAL AND/OR PERIOD		
014542	016342	A							
014543	001000	A	477	JMP	ETOP		TERMINATION EXIT VIA 893		
014544	015225	A							
014545	001000	A	478	JMP	ETOP		ABORT EXIT		
014546	015225	A							
014547	001000	A	479	JMP	**2		COMMA EXIT==ACCEPT IT		
014550	014551	A							
			480 *	NORMAL RETURN FROM INPG					
014551	050446	A	481	STA	ETS1		SAVE INPUT		
014552	010471	A	482	LDA	TS04		TS04=DIGIT COUNTER FOR INPG		
014553	001010	A	483	JAZ	ETOP		0=NO OCTAL INPUT,RETURN TO SUPERVISOR		
014554	015225	A							
014555	010446	A	484	LDA	ETS1				
014556	050444	A	485	STA	EBR1		STORE NEW VALUE IN PSEUDO B		
014557	001000	A	486	JMP	ETOP		RETURN TO SUPERVISOR		
014560	015225	A							
			487 *						
			488 *						
			489 *	DISPLAY/CHANGE THE PSEUDO X REGISTER					
			490 *						
			491 *						
014561	010454	A	492	EXRG	LDA	EK00	ASCII BLANK(SPACE)		
014562	002000	A	493		CALL	OUTA			
014563	016446	A							
014564	010445	A	494	LDA	EXR1		LOAD PSEUDO X		
014565	002000	A	495		CALL	OUTE	PRINT CONTENTS		
014566	016524	A							
014567	002000	A	496		CALL	INPG	INPUT OCTAL AND/OR PERIOD		
014570	016342	A							
014571	001000	A	497	JMP	ETOP		TERMINATION EXIT VIA 893		
014572	015225	A							
014573	001000	A	498	JMP	ETOP		ABORT		
014575	001000	A	499	JMP	**2		COMA EXIT==ACCEPT IT		
014576	014577	A							
			500 *	NORMAL RETURN FROM INPG					
014577	050446	A	501	STA	ETS1		SAVE INPUT		
014600	010471	A	502	LDA	TS04		TS04=DIGIT COUNTER FOR INPG		
014601	001010	A	503	JAZ	ETOP		0=NO OCTAL INPUT,RETURN TO SUPERVISOR		
014602	015225	A							
014603	010446	A	504	LDA	ETS1				
014604	050445	A	505	STA	EXR1		STORE NEW VALUE IN PSEUDO X		
014605	001000	A	506	JMP	ETOP		RETURN TO SUPERVISOR		
014606	015225	A							
			507 *	DISPLAY/CHANGE THE PSEUDO R3 REGISTER					
014607	010454	A	508	E3RG	LDA	EK00	ASCII SPACE		B
014610	002000	A	509		CALL	OUTA			B
014611	016446	A							B
014612	010431	A	510	LDA	E3R1		LOAD PSEUDO R3		B
014613	002000	A	511		CALL	OUTE	PRINT CONTENTS		B
014614	016524	A							B
014615	002000	A	512		CALL	INPG	INPUT OCTAL AND/OR PERIOD		B
014616	016342	A							B
014617	001000	A	513	JMP	ETOP		TERMINATION EXIT VIA 893		B
014620	015225	A							B
014621	001000	A	514	JMP	ETOP		ABORT EXIT		B
014622	015225	A							B
014623	001000	A	515	JMP	**2		COMMA EXIT==ACCEPT IT		B
014624	014625	A							B
			516 *	NORMAL RETURN FROM INPG					
014625	050446	A	517	STA	ETS1		SAVE INPUT		B
014626	010471	A	518	LDA	TS04		TS04=DIGIT COUNTER FOR INPG		B
014627	001010	A	519	JAZ	ETOP		0=NO OCTAL INPUT,RETURN TO SUPERVISOR		B
014630	015225	A							B
014631	010446	A	520	LDA	ETS1				B
014632	050431	A	521	STA	E3R1		STORE NEW VALUE IN PSEUDO R3		B
014633	001000	A	522	JMP	ETOP		RETURN TO SUPERVISOR		B
014634	015225	A							B
			523 *	DISPLAY/CHANGE THE PSEUDO R4 REGISTER					
014635	010454	A	524	E4RG	LDA	EK00	ASCII SPACE		B
014636	002000	A	525		CALL	OUTA			B

014637	016446	A							B
014640	010432	A	526	LDA	E4R1	LOAD PSEUDO R4			B
014641	002000	A	527	CALL	OUTE	PRINT CONTENTS			B
014642	016524	A							
014643	002000	A	528	CALL	INPG	INPUT OCTAL AND/OR PERIOD			B
014644	016342	A							
014645	001000	A	529	JMP	ETOP	TERMINATION EXIT VIA SS3			B
014646	015225	A							
014647	001000	A	530	JMP	ETOP	ABORT EXIT			B
014650	015225	A							
014651	001000	A	531	JMP	**2	COMMA EXIT--ACCEPT IT			B
014652	014653	A							
			532 *			NORMAL RETURN FROM INPG			B
014653	050446	A	533	STA	ETS1	SAVE INPUT			B
014654	010471	A	534	LDA	T804	T804=DIGIT COUNTER FOR INPG			B
014655	001010	A	535	JAZ	ETOP	0=NO OCTAL INPUT,RETURN TO SUPERVISOR			B
014656	015225	A							
014657	010446	A	536	LDA	ETS1				B
014660	050432	A	537	STA	E4R1	STORE NEW VALUE IN PSEUDO R4			B
014661	001000	A	538	JMP	ETOP	RETURN TO SUPERVISOR			B
014662	015225	A							
			539 *			DISPLAY/CHANGE THE PSEUDO R5 REGISTER			B
014663	010454	A	540	ESRG	LDA	EK00	ASCII SPACE		B
014664	002000	A	541	CALL	OUTA				B
014665	016446	A							
014666	010433	A	542	LDA	ESR1	LOAD PSEUDO R5			B
014667	002000	A	543	CALL	OUTE	PRINT CONTENTS			B
014670	016524	A							
014671	002000	A	544	CALL	INPG	INPUT OCTAL AND/OR PERIOD			B
014672	016342	A							
014673	001000	A	545	JMP	ETOP	TERMINATION EXIT VIA SS3			B
014674	015225	A							
014675	001000	A	546	JMP	ETOP	ABORT EXIT			B
014676	015225	A							
014677	001000	A	547	JMP	**2	COMMA EXIT--ACCEPT IT			B
014700	014701	A							
			548 *			NORMAL RETURN FROM INPG			B
014701	050446	A	549	STA	ETS1	SAVE INPUT			B
014702	010471	A	550	LDA	T804	T804=DIGIT COUNTER FOR INPG			B
014703	001010	A	551	JAZ	ETOP	0=NO OCTAL INPUT,RETURN TO SUPERVISOR			B
014704	015225	A							
014705	010446	A	552	LDA	ETS1				B
014706	050433	A	553	STA	ESR1	STORE NEW VALUE IN PSEUDO R5			B
014707	001000	A	554	JMP	ETOP	RETURN TO SUPERVISOR			B
014710	015225	A							
			555 *			DISPLAY/CHANGE THE PSEUDO R6 REGISTER			B
014711	010454	A	556	E6RG	LDA	EK00	ASCII SPACE		B
014712	002000	A	557	CALL	OUTA				B
014713	016446	A							
014714	010434	A	558	LDA	E6R1	LOAD PSEUDO R6			C
014715	002000	A	559	CALL	OUTE	PRINT CONTENTS			B
014716	016524	A							
014717	002000	A	560	CALL	INPG	INPUT OCTAL AND/OR PERIOD			B
014720	016342	A							
014721	001000	A	561	JMP	ETOP	TERMINATION EXIT VIA SS3			B
014722	015225	A							
014723	001000	A	562	JMP	ETOP	ABORT EXIT			B
014724	015225	A							
014725	001000	A	563	JMP	**2	COMMA EXIT--ACCEPT IT			B
014726	014727	A							
			564 *			NORMAL RETURN FROM INPG			B
014727	050446	A	565	STA	ETS1	SAVE INPUT			B
014730	010471	A	566	LDA	T804	T804=DIGIT COUNTER FOR INPG			B
014731	001010	A	567	JAZ	ETOP	0=NO OCTAL INPUT,RETURN TO SUPERVISOR			B
014732	015225	A							
014733	010446	A	568	LDA	ETS1				B
014734	050434	A	569	STA	E6R1	STORE NEW VALUE IN PSEUDO R6			B
014735	001000	A	570	JMP	ETOP	RETURN TO SUPERVISOR			B
014736	015225	A							
			571 *			DISPLAY/CHANGE THE PSEUDO R7 REGISTER			B
014737	010454	A	572	E7RG	LDA	EK00	ASCII SPACE		B
014740	002000	A	573	CALL	OUTA				B
014741	016446	A							
014742	010435	A	574	LDA	E7R1	LOAD PSEUDO R7			B
014743	002000	A	575	CALL	OUTE	PRINT CONTENTS			B
014744	016524	A							
014745	002000	A	576	CALL	INPG	INPUT OCTAL AND/OR PERIOD			B
014746	016342	A							
014747	001000	A	577	JMP	ETOP	TERMINATION EXIT VIA SS3			B
014750	015225	A							
014751	001000	A	578	JMP	ETOP	ABORT EXIT			B
014752	015225	A							
014753	001000	A	579	JMP	**2	COMMA EXIT--ACCEPT IT			B
014754	014755	A							
			580 *			NORMAL RETURN FROM INPG			B
014755	050446	A	581	STA	ETS1	SAVE INPUT			B
014756	010471	A	582	LDA	T804	T804=DIGIT COUNTER FOR INPG			B
014757	001010	A	583	JAZ	ETOP	0=NO OCTAL INPUT,RETURN TO SUPERVISOR			B
014760	015225	A							
014761	010446	A	584	LDA	ETS1				B
014762	050435	A	585	STA	E7R1	STORE NEW VALUE IN PSEUDO R7			B
014763	001000	A	586	JMP	ETOP	RETURN TO SUPERVISOR			B
014764	015225	A							
			587 *						
			588 *						

589 *					
590 *					
591 *					
592 *					
593 *					
594 *					
595 *					
596 *					
597 *					
014765	002000	A	598	EGOT CALL INPG	INPUT OCTAL NUMBER
014766	016342	A			
014767	001000	A	599	JMP ETOP	TERMINATION EXIT VIA 993
014770	015225	A			
014771	001000	A	600	JMP ETOP	ABORT
014772	015225	A			
014773	001000	A	601	JMP **2	COMMA EXIT--ACCEPT IT
014774	014775	A			
			602 *	NORMAL RETURN FROM INPG	
014775	050447	A	603	STA ETS1+1	
014776	002000	A	604	CALL OUTC	DQ A CR & LF
014777	016512	A			
015000	010443	A	605	EGO1 LDA EAR1	LOAD PSEUDO A REG.
015001	020444	A	606	LDB EBR1	LOAD PSEUDO B REG.
015002	030430	A	607	LDX V75	V75 SYSTEM ?
015003	001040	A	608	JXZ RESOF	NO
015004	015017	A			
015005	007030	A	609	LD,R3 E3R1	YES, LOAD THE PSEUDO R3,
015006	000431	A			
015007	007040	A	610	LD,R4 E4R1	R4,
015010	000432	A			
015011	007050	A	611	LD,R5 E5R1	R5,
015012	000433	A			
015013	007060	A	612	LD,R6 E6R1	R6,
015014	000434	A			
015015	007070	A	613	LD,R7 E7R1	AND R7
015016	000435	A			
015017	007400	A	614	RESOF ROF	
015020	030006	A	615	LDX EOVI	
015021	001040	A	616	JXZ **3	SET/RESET OVERFLOW
015022	015024	A			
015023	007401	A	617	SOF	
015024	030445	A	618	LDX EXR1	LOAD PSEUDO X REG.
015025	001000	A	619	JMP* ETS1+1	
015026	100447	A			
015027	000000	A	620	EOVI DATA 0	PSEUDO OVERFLOW
			621 *	DUMP CORE MEMORY TO TTY PRINTER	
			622 *		
015030	002000	A	623	EDUM CALL INPG	INPUT START LOCATION (OCTAL)
015031	016342	A			
015032	001000	A	624	JMP ETOP	TERMINATION EXIT VIA 993
015033	015225	A			
015034	001000	A	625	JMP ETOP	ABORT
015035	015225	A			
015036	001000	A	626	JMP **2	COMMA EXIT--ACCEPT IT
015037	015040	A			
			627 *	NORMAL RETURN FROM INPG	
015040	050446	A	628	STA ETS1	
015041	002000	A	629	CALL OUTC	OUTPUT CR & LF
015042	016512	A			
015043	010446	A	630	LDA ETS1	
015044	005014	A	631	TAX	
015045	002000	A	632	EDU1 CALL OUTC	OUTPUT MEMORY ADDRESS
015046	016564	A			
015047	010454	A	633	LDA EK00	ASCII BLANK(SPACE)
015050	002000	A	634	CALL OUTA	
015051	016446	A			
015052	015000	A	635	EDU2 LDA 0,1	
015053	002000	A	636	CALL OUTC	PRINT LOCATION CONTENTS
015054	016524	A			
015055	001400	A	637	JSS3 ETOP	
015056	015225	A			
015057	005145	A	638	INCR 045	INCREMENT X AND PUT INTO A&X
015060	005002	A	639	TZB	
015061	004543	A	640	LLSR 3	LINE LENGTH IS 8 LOCATIONS
015062	001020	A	641	JBZ EDU4	NEXT LINE
015063	015066	A			
015064	001000	A	642	JMP EDU2	NEXT WORD
015065	015052	A			
			643 *		
015066	002000	A	644	EDU4 CALL OUTC	OUTPUT CR & LF
015067	016512	A			
015070	002000	A	645	CALL INPI	
015071	016443	A			
015072	006140	A	646	SUBI 0377	
015073	000377	A			
015074	001010	A	647	JAZ ETOP	
015075	015225	A			
015076	005041	A	648	TXA	
015077	001000	A	649	JMP EDU1	
015100	015045	A			
650 *					
651 *					
652 *					
653 *					
654 *					

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655 * PRINT/CHANGE CONTENTS OF MEMORY LOCATION SPECIFIED BY USER
656 *
657 *
015101 002000 A 658 ECNG CALL INPG INPUT OCTAL MEMORY ADDRESS
015102 016342 A
015103 001000 A 659 JMP ETOP TERMINATION EXIT VIA SS3
015104 015225 A
015105 001000 A 660 JMP ETOP ABORT
015106 015225 A
015107 001000 A 661 JMP **2 COMMA EXIT--ACCEPT IT
015110 015111 A
662 * NORMAL RETURN FROM INPG
015111 005014 A 663 TAX
015112 006010 A 664 ECN3 LDA '3' EQUAL SIGN
015113 000275 A
015114 002000 A 665 CALL OUTA
015115 016446 A
015116 015000 A 666 LDA 0,1
015117 002000 A 667 CALL OUTE OUTPUT OCTAL WORD
015120 016524 A
015121 002000 A 668 CALL INPG INPUT OCTAL WORD
015122 016342 A
015123 001000 A 669 JMP ETOP TERMINATION EXIT VIA SS3
015124 015225 A
015125 001000 A 670 JMP ETOP ABORT
015126 015225 A
015127 001000 A 671 JMP ECN2 COMMA EXIT--PRINT NEXT LOCATION & CONTENTS
015130 015141 A
672 * NORMAL RETURN FROM INPG WITH PERIOD
015131 050446 A 673 STA ETS1 SAVE INPUT
015132 010471 A 674 LDA TS04 TS04=DIGIT COUNTER FOR INPG
015133 001010 A 675 JAZ **4
015134 015137 A
015135 010446 A 676 LDA ETS1 GET LAST INPUT
015136 055000 A 677 STA 0,1
015137 001000 A 678 JMP ETOP
015140 015225 A
679 *
015141 050446 A 680 ECN2 STA ETS1 SAVE INPUT
015142 010471 A 681 LDA TS04 TS04=DIGIT COUNTER FOR INPG
015143 001010 A 682 JAZ **4
015144 015147 A
015145 010446 A 683 LDA ETS1 GET LAST INPUT
015146 055000 A 684 STA 0,1 STORE NEW VALUE IN LOCATION
015147 002000 A 685 CALL OUTC CR & LF
015150 016512 A
015151 005145 A 686 INCR 045 INCREMENT X AND PUT INTO A AND X
015152 002000 A 687 CALL OUTF PRINT NEXT MEMORY ADDRESS
015153 016564 A
015154 001000 A 688 JMP ECN3 PRINT CONTENTS
015155 015112 A
689 *
015156 000000 A 690 ESZC ENTR 0 DETERMINE MEMORY SIZE
015157 002000 A 691 CALL ESZA *
015160 015616 A
015161 050441 A 692 STA SMEM *
015162 002000 A 693 CALL ESZB *
015163 015652 A
015164 001000 A 694 JMP (ESZC)* ***** EXIT
015165 115156 A
015166 005101 A 695 EBG1 INCR 01 TTY MODE
015167 050442 A 696 STA $CON * $CON = 01
015170 002000 A 697 CALL ESZC * $TTY = 01, UNLESS SET
015171 015156 A
015172 005101 A 698 INCR 01 * BY
015173 000000 A 699 HLT * OPERATOR
015174 006030 A 700 LDXI $TTY
015175 000473 A
015176 055000 A 701 STA 0,1
015177 002000 A 702 EBG2 CALL OUTH,0201 PRINT ENABLE
015200 016630 A
015201 000201 A
015202 002000 A 703 CALL OUTC OUTPUT CR&LF
015203 016512 A
015204 010430 A 704 LDA V75 B
015205 001010 A 705 JAZ DOMSG1 B
015206 015215 A
015207 006030 A 706 LDXI MSG6 THIS IS THE V75 TEST EXECUTIVE B
015210 015574 A
015211 002000 A 707 CALL OUTD OUTPUT MESSAGE B
015212 016553 A
015213 001000 A 708 JMP DOMSG3 GO OUTPUT MSG3 B
015214 015221 A
015215 006030 A 709 DOMSG1 LDXI MSG1 THIS IS THE V70/620 TEST EXECUTIVE B
015216 015514 A
015217 002000 A 710 CALL OUTD OUTPUT MESSAGE
015220 016553 A
015221 006030 A 711 DOMSG3 LDXI MSG3 MEMORY SIZE IS ==K B
015222 015553 A
015223 002000 A 712 CALL OUTD OUTPUT MESSAGE
015224 016553 A
713 *
714 *
715 *
716 * TEST EXECUTIVE SUPERVISOR

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015225	006010	A	717 *							
	718	ETOP	LDAI	0207	TTY BELL					
015226	000207	A								
015227	002000	A	719	CALL	OUTA	OUTPUT				
015230	016446	A								
015231	002000	A	720	CALL	OUTH,0201	PRINT ENABLE				
015232	016630	A								
015233	000201	A								
015234	002000	A	721	CALL	INPI	INIT TTY				
015235	016443	A								
015236	002000	A	722	CALL	OUTC					
015237	016512	A								
015240	002000	A	723	CALL	INPB	INPUT ONE CHARACTER				
015241	016073	A								
015242	001000	A	724	JMP	ETOP	ABORT EXIT				
015243	015225	A								
015244	054011	A	725	STA	ETQ4+1	SAVE INPUT				
015245	006140	A	726	SUBI	0212	LINE FEED CODE				
015246	000212	A								
015247	001010	A	727	JAZ	ETOP	YES				
015250	015225	A								
015251	006140	A	728	SUBI	3	CARRIAGE RETURN(0215)				
015252	000003	A								
015253	001010	A	729	JAZ	ETOP	YES				
015254	015225	A								
015255	006010	A	730	ETQ4	LDAI	0	GET ORIGINAL INPUT			
015256	000000	A								
015257	006140	A	731	SUBI	'A'					
015260	000301	A								
015261	001004	A	732	JAN	EXIT	INVALID INPUT				
015262	015344	A								
015263	006140	A	733	SUBI	032	Z CHAR				
015264	000032	A								
015265	001002	A	734	JAP	EXIT	INVALID INPUT				
015266	015344	A								
015267	006120	A	735	ADDI	(ETBL+032)*	INDIRECT ADDRESS POINTER FOR UTILITY TABLE				
015270	115344	A								
015271	054017	A	736	STA	PETBL+2					B
015272	030430	A	737	LDX	V75	IF				B
015273	001040	A	738	JXZ	PETBL					B
015274	015307	A								
015275	007443	A	739	LDI,R3	0	V75 SYSTEM				B
015276	000000	A								
015277	007444	A	740	LDI,R4	0	CLEAR R3				B
015300	000000	A								
015301	007445	A	741	LDI,R5	0	R4				B
015302	000000	A								
015303	007446	A	742	LDI,R6	0	R5				B
015304	000000	A								
015305	007447	A	743	LDI,R7	0	R6,AND R7				B
015306	000000	A								
015307	005007	A	744	PETBL	ZERO	7	CLEAR REGISTERS A,B,X ANYWAY			B
015310	001000	A	745	JMP	*					
015311	015310	A								
015312	014504	A	746	ETBL	DATA	EARG	A PRINT/CHANGE PSEUDO A REG			
015313	014533	A	747	DATA	EBRG	B	PRINT/CHANGE PSEUDO B REG			
015314	015101	A	748	DATA	ELNG	C	PRINT/CHANGE MEMORY LOCATION			
015315	015030	A	749	DATA	EDUM	E	DUMP CORE TO TTY PRINTER			
015316	015344	A	750	DATA	EOF	U	WRITE END OF FILE			
015317	015344	A	751	DATA	FIL	F	FILE POSITION			
015320	014765	A	752	DATA	EGOT	G	TRANSFER TO SPECIFIED LOCATION			
015321	015344	A	753	DATA	EXIT	H	NOT USED			
015322	014203	A	754	DATA	INIT	I	INITIALIZE CORE			
015323	015344	A	755	DATA	EXIT	J	NOT USED			
015324	015344	A	756	DATA	EXIT	K	NOT USED			
015325	015401	A	757	DATA	ELOD	L	LOAD OBJECT TAPE AND TRANSFER TO PROGRAM			
015326	015344	A	758	DATA	EXIT	M	NOT USED			
015327	015344	A	759	DATA	EXIT	N	NOT USED			
015330	015344	A	760	DATA	EXIT	O	NOT USED			
015331	014150	A	761	DATA	EPUN	P	CREATE OBJECT			
015332	015344	A	762	DATA	EXIT	Q	NOT USED			
015333	015350	A	763	DATA	V75REG					B
015334	014417	A	764	DATA	ESRC	S	SEARCH MEMORY			
015335	014247	A	765	DATA	ETRP	T	TRAP			
015336	015344	A	766	DATA	EXIT	U	NOT USED			
015337	015344	A	767	DATA	EXIT	V	NOT USED			
015340	015344	A	768	DATA	EXIT	W	NOT USED			
015341	014561	A	769	DATA	EXRG	X	PRINT/CHANGE PSEUDO X REG			
015342	015344	A	770	DATA	EXIT	Y	NOT USED			
015343	015344	A	771	DATA	EXIT	Z	NOT USED			
			772 *							
			773 *							
			774 *							
			775 *							
015344	002000	A	776	EXIT	CALL	OUTG	PRINT INVALID & CR/LF			
015345	016603	A								
015346	001000	A	777	JMP	ETOP	RETURN TO TOP OF SUPERVISOR				
015347	015225	A								
	015344	A	778	FIL	EQU	EXIT				
	015344	A	779	EOF	EQU	EXIT				
			780 *							
015350	010430	A	781	V75REG	LDA	V75				B
015351	001010	A	782	JAZ	EXIT	NO V75 HERE				B
015352	015344	A								
015353	002000	A	783	CALL	INPB	GRAB THE REGISTER NUMBER				B

015461	001010	A	859	JAZ	ABX				
015462	015475	A							
015463	007030	A	860	LD,R3	SAVR3	RETURN R3,			
015464	015505	A							
015465	007040	A	861	LD,R4	SAVR4	R4,			
015466	015506	A							
015467	007050	A	862	LD,R5	SAVR5	R5,			
015470	015507	A							
015471	007060	A	863	LD,R6	SAVR6	R6,			
015472	015510	A							
015473	007070	A	864	LD,R7	SAVR7	R7			
015474	015511	A							
015475	014004	A	865	ABX LDA	SAVA	RETURN A,B,X REGISTERS			
015476	024004	A	866	LDB	SAVB				
015477	034004	A	867	LDX	SAVX				
015500	001000	A	868	JMP*	PWDN	RETURN TO LOCATION INTERRUPTED FROM			
015501	115420	A							
015502	000000	A	869 *	SAVA	DATA	0			
015503	000000	A	871	SAVB	DATA	0			
015504	000000	A	872	SAVX	DATA	0			
015505	000000	A	873	SAVR3	DATA	0			
015506	000000	A	874	SAVR4	DATA	0			
015507	000000	A	875	SAVR5	DATA	0			
015510	000000	A	876	SAVR6	DATA	0			
015511	000000	A	877	SAVR7	DATA	0			
015512	000000	A	878	SAVO	DATA	0			
015513	000000	A	879	HLTF	DATA	0			
			880 *						
			881 *						
			882 *						
			883 *						
			884 *						
			885 *	MESSAGE TABLE					
			886 *						
015514	106612	A	887	MSG1	DATA	0106612,"THIS IS THE V70/620 TEST EXECUTIVE",0106612,0			
015515	152310	A							
015516	144723	A							
015517	120311	A							
015520	151640	A							
015521	152310	A							
015522	142640	A							
015523	153267	A							
015524	130257	A							
015525	133262	A							
015526	130240	A							
015527	152305	A							
015530	151724	A							
015531	120305	A							
015532	154305	A							
015533	141725	A							
015534	152311	A							
015535	153305	A							
015536	106612	A							
015537	000000	A							
015540	141710	A	888	MSG2	DATA	"CHECKSUM ERROR X = ",0			
015541	142705	A							
015542	145723	A							
015543	152715	A							
015544	120305	A							
015545	151322	A							
015546	147722	A							
015547	120240	A							
015550	154240	A							
015551	136640	A							
015552	000000	A							
015553	146705	A	889	MSG3	DATA	"MEMORY SIZE IS "			
015554	146717	A							
015555	151331	A							
015556	120323	A							
015557	144732	A							
015560	142640	A							
015561	144723	A							
015562	120240	A							
015563	126655	A	890	MSG4	DATA	"==K",0			
015564	145640	A							
015565	000000	A							
015566	120240	A	891	MSG5	DATA	" INVALID",0			
015567	144716	A							
015570	153301	A							
015571	146311	A							
015572	142240	A							
015573	000000	A							
015574	106612	A	892	MSG6	DATA	0106612,"THIS IS THE V75 TEST EXECUTIVE",0106612,0			
015575	152310	A							
015576	144723	A							
015577	120311	A							
015600	151640	A							
015601	152310	A							
015602	142640	A							
015603	153267	A							
015604	132640	A							
015605	152305	A							
015606	151724	A							
015607	120305	A							

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015610 154305 A
015611 141725 A
015612 152311 A
015613 153305 A
015614 106812 A
015615 000000 A
      893 *
      894 *
      895 *   ROUTINE FOR DETERMINING CORE SIZE
      896 *
015616 000000 A 897 ESZA ENTR 0
015617 100545 A 898 EXC 0545 DISABLE MEMORY PARITY INT.
015620 006010 A 899 LDAI 014000 DISABLE
015621 014000 A
015622 103146 A 900 OAR 046 CACHE
015623 010000 A 901 LDA 0
015624 050002 A 902 STA 2 SAVE CONTENTS OF LOCATION ZERO
015625 005001 A 903 TZA
015626 050000 A 904 STA 0
015627 005311 A 905 DAR A=1
015630 006120 A 906 ESZ1 ADDI 4096 NEXT 4K MEMORY ADDRESS
015631 010000 A
015632 005014 A 907 TAX
015633 025001 A 908 LDB 1,1 SAVE MEMORY CELL IN B REG
015634 055001 A 909 STA 1,1
015635 015001 A 910 LDA 1,1
015636 130000 A 911 ERA 0
015637 001010 A 912 JAZ ESZ2 JUMP IF END OF MEMORY
015640 015645 A
015641 065001 A 913 STB 1,1 RESTORE MEMORY CELL
015642 005041 A 914 TXA
015643 001000 A 915 JMP ESZ1
015644 015630 A
015645 010002 A 916 ESZ2 LDA 2 RESTORE CONTENTS OF
015646 050000 A 917 STA 0 LOCATION ZERO
015647 005041 A 918 TXA
015650 001000 A 919 JMP* ESZA
015651 115616 A
      920 *
      921 *
      922 *
      923 *   CONVERT MEMORY SIZE FOR ASCII PRINTOUT
      924 *
015652 000000 A 925 ESZB ENTR 0
015653 010441 A 926 LDA $MEM GET CORE SIZE(X7777)
015654 004354 A 927 LSRA 12 TRUNCATE 7777
015655 006120 A 928 ADDI ETAB ADDRESS OF THE ASCII EQUIV TABLE
015656 015666 A
015657 005014 A 929 TAX
015660 015000 A 930 LDA 0,1 GET ASCII EQUIV FROM TABLE ETAB
015661 006020 A 931 LDBI MSG4 SET MEMORY SIZE(04,08,ETC) INTO MSG4
015662 015563 A
015663 056000 A 932 STA 0,2
015664 001000 A 933 JMP* ESZB RETURN
015665 115652 A
015666 120264 A 934 ETAB DATA 0120264 ASCII 04
015667 120270 A 935 DATA 0120270
015670 130662 A 936 DATA 0130662
015671 130666 A 937 DATA 0130666
015672 131260 A 938 DATA 0131260
015673 131264 A 939 DATA 0131264
015674 131270 A 940 DATA 0131270
015675 131662 A 941 DATA 0131662
      942 *
      943 *
      944 *
      945 *
      946 *
      947 *
      948 *****
      949 *
      950 *   SENSE SWITCH SUBROUTINE
      951 *   THIS SUBROUTINE PROVIDES A STANDARD SENSE SWITCH INTERFACE.
      952 *   THE CALLING SEQUENCE IS AS FOLLOWS
      953 *   THE A, B, AND X REGISTERS CONTAIN ERROR HALT VALUES.
      954 *   CALL SSWT
      955 *   DATA (U REGISTER VALUE)
      956 *   DATA (ERROR MESSAGE ADDRESS) (IF NEG. ERROR SUB.)
      957 *   DATA (TERMINATION EXIT)
      958 *   DATA (LOOP ON ERROR EXIT)
      959 *   * NORMAL EXIT RETURN
      960 *
      961 *   STANDARD SENSE SWITCH SETTINGS
      962 *   SS1 (SET) SUPPRESS ERROR PRINTOUT
      963 *   (RESET) ALLOW ERROR PRINTOUTS
      964 *   SS2 (SET) HALT ON ERROR
      965 *   (IF SET AFTER HALT - CONTINUE )
      966 *   (RESET) DO NOT HALT ON ERROR
      967 *   (IF HALT ON ERROR SET FIRST THEN RESET ON
      968 *   (IF HALT CONDITION - LOOP UNTIL SET )
      969 *   SS3 (SET) TERMINATE TEST - RETURN TO BEGINING OF TEST
      970 *   (RESET) CONTINUE TEST
      971 *****
      972 *
015676 054125 A 973 SSWP STA SSWS SAVE VOLATILE REGISTERS

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015677	064125	A	974	STB	SSWS+1		
015700	074125	A	975	STX	SSWS+2		
015701	001400	A	976	JSS3	SSWE	IF SS3 SET	RETURN THROUGH TERMINATION EXIT
015702	016027	A					
015703	001100	A	977	JSS1	SSW1	CHECK IF TTY	SUPPRESSED
015704	015726	A					
015705	024132	A	978	LDB	SSWT	GET 2ND	PARAMETER
015706	005122	A	979	IBR			
015707	016000	A	980	LDA	0,2		
015710	001010	A	981	JAZ	SSW1		
015711	015726	A					
015712	005012	A	982	TAB		CHECK IF BIT 15	SET
015713	006150	A	983	ANAI	0100000		
015714	100000	A					
015715	005014	A	984	TAX			
015716	005021	A	985	TBA			
015717	001040	A	986	JXZ	**4		
015720	015723	A					
015721	001000	A	987	JMP	SSWR	CALL ERROR	SUBROUTINE
015722	016012	A					
015723	005014	A	988	TAX		PRINT ERROR	MESSAGE
015724	002000	A	989	CALL	OUTD		
015725	016553	A					
015726	001400	A	990	SSW1	JSS3	SSWE	IF SS3 SET - RETURN THROUGH TERMINATION EXT
015727	016027	A					
015730	010440	A	991	LDA	SFLG	CHECK IF	LOOPING
015731	001010	A	992	JAZ	SSW4		
015732	015763	A					
015733	001200	A	993	SSW2	JSS2	SSW3	LOOPING - CHECK IF TERMINATE LOOPING.
015734	015750	A					
015735	024102	A	994	SSWL	LDB	SSWT	RETURN THROUGH LOOP EXIT
015736	005122	A	995	IBR			
015737	005122	A	996	IBR			
015740	005122	A	997	IBR			
015741	016000	A	998	LDA	0,2		
015742	054004	A	999	STA	**5		
015743	014060	A	1000	LDA	SSWS	RETURN VOLATILE	REGISTERS.
015744	024060	A	1001	LDB	SSWS+1		
015745	034060	A	1002	LDX	SSWS+2		
015746	001000	A	1003	JMP	*		
015747	015746	A					
015750	005001	A	1004	SSW3	TZA	RETURN TO NORMAL	EXIT (CONTINUATION EXIT)
015751	050440	A	1005	STA	SFLG	CLEAR LOOP	FLAG.
015752	014065	A	1006	LDA	SSWT		
015753	006120	A	1007	ADDI	4		
015754	000004	A					
015755	054004	A	1008	STA	**5		
015756	014045	A	1009	LDA	SSWS	RETURN VOLATILE	REGISTERS.
015757	024045	A	1010	LDB	SSWS+1		
015760	034045	A	1011	LDX	SSWS+2		
015761	001000	A	1012	JMP	*		
015762	015761	A					
015763	001200	A	1013	SSW4	JSS2	SSW5	CHECK IF HALT ON ERROR
015764	015767	A					
015765	001000	A	1014	JMP	SSW3	RETURN TO NORMAL	EXIT LOC.
015766	015760	A					
015767	024050	A	1015	SSW5	LDB	SSWT	GET FIRST PARAMETER
015770	016000	A	1016	LDA	0,2		
015771	054003	A	1017	STA	**4		
015772	014031	A	1018	LDA	SSWS	RETURNED SAVED	PARAMETERS.
015773	024031	A	1019	LDB	SSWS+1		
015774	034031	A	1020	LDX	SSWS+2		
015775	005000	A	1021	NOF		1ST PARAMETER	STORED HERE AND EXECUTED.
015776	001400	A	1022	SSW6	JSS3	SSWE	IF SS3 SET RETURN THROUGH TERMINATION EXIT
015777	016027	A					
016000	010440	A	1023	LDA	SFLG	CHECK IF	LOOPING
016001	001010	A	1024	JAZ	**4		
016002	016005	A					
016003	001000	A	1025	JMP	SSW2		
016004	015733	A					
016005	001200	A	1026	JSS2	SSW3	LOOP FLAG ZERO -	CHECK IF LOOP REQUEST
016006	015750	A					
016007	040440	A	1027	INR	SFLG	INCREMENT LOOP	FLAG
016010	001000	A	1028	JMP	SSWL	JUMP THROUGH	LOOP EXIT
016011	015735	A					
016012	006150	A	1029	SSWR	ANAI	077777	ERROR SUBROUTINE MASK OUT BIT 15
016013	077777	A					
016014	054004	A	1030	STA	**5		
016015	014006	A	1031	LDA	SSWS		
016016	024006	A	1032	LDB	SSWS+1		
016017	034006	A	1033	LDX	SSWS+2		
016020	002000	A	1034	JMPM	*	CALL ERROR	SUBROUTINE
016021	016020	A					
016022	001000	A	1035	JMP	SSW1		
016023	015726	A					
016024	1036	SSWS		BSS	3		
016027	005001	A	1037	SSWE	TZA	JUMP THROUGH	TERMINATION EXIT.
016030	050440	A	1038	STA	SFLG	CLEAR LOOP	FLAG.
016031	024006	A	1039	LDB	SSWT		
016032	005122	A	1040	IBR		SET UP	TERMINATION EXIT
016033	005122	A	1041	IBR			
016034	016000	A	1042	LDA	0,2		
016035	054001	A	1043	STA	**2		
016036	001000	A	1044	JMP	*		
016037	016036	A					

016040	000000	A	1045	SSWT	ENTR		SENSE SWITCH SUBROUTINE ENTRANCE
016041	001000	A	1046		JMP	SSWP	
016042	015676	A					
			1047	*			
			1048	*			INPUT ONE CHARACTER FROM TTY TO (A) REGISTER
			1049	*			
016043	002000	A	1050	INA1	CALL	INPH,INA2	SENSE BFR RDV
016044	016431	A					
016045	016052	A					
016046	001400	A	1051		JSS3	INA3	
016047	016056	A					
016050	001000	A	1052		JMP	INA1	
016051	016043	A					
016052	002000	A	1053	INA2	CALL	INPI	INPUT CHARACTER
016053	016443	A					
016054	044002	A	1054		INR	INPA	NORMAL EXIT
016055	044001	A	1055		INR	INPA	
016056	001000	A	1056	INA3	JMP	000	
016057	000000	A					
016057			1057	INPA	BES	0	ENTER
016060	001000	A	1058		JMP	INA1	
016061	016043	A					
			1059	*			
			1060	*			INPUT ONE CHARACTER + PRINT FROM TTY TO A REGISTER
			1061	*			
016062	002000	A	1062	INB1	CALL	INPA	INPUT ONE CHARACTER
016063	016057	A					
016064	001000	A	1063		JMP*	INPB	TERMINATE EXIT
016065	116073	A					
016066	002000	A	1064		CALL	OUTA	OUTPUT ONE CHARACTER
016067	016446	A					
016070	044002	A	1065		INR	INPB	
016071	044001	A	1066		INR	INPB	
016072	001000	A	1067		JMP*	0	EXIT
016073	100000	A					
016073			1068	INPB	BES	0	
016074	001000	A	1069		JMP	INB1	
016075	016062	A					
			1070	*			
			1071	*			
			1072	*			INPUT ONE CHARACTER (EDITED)
			1073	*			
016076	002000	A	1074	INC3	CALL	INPB	
016077	016073	A					
016100	001000	A	1075		JMP*	INPC	TERMINATE EXIT
016101	116125	A					
016102	006130	A	1076		ERAI	'\'	BACKSLASH
016103	000334	A					
016104	001010	A	1077		JAZ	INC2	ABORT INPUT EXIT
016105	016122	A					
016106	006130	A	1078		ERAI	'\'	RESTORE A
016107	000334	A					
016110	006130	A	1079		ERAI	0337	BACKARROW
016111	000337	A					
016112	001010	A	1080		JAZ	INC1	DELETE ONE CHARACTER EXIT
016113	016120	A					
016114	006130	A	1081		ERAI	0337	RESTORE A
016115	000337	A					
016116	044006	A	1082		INR	INPC	
016117	044005	A	1083		INR	INPC	
016120	044004	A	1084	INC1	INR	INPC	
016121	044003	A	1085		INR	INPC	
016122	044002	A	1086	INC2	INR	INPC	
016123	044001	A	1087		INR	INPC	
016124	001000	A	1088		JMP*	0	EXIT
016125	100000	A					
016125			1089	INPC	BES	0	
016126	001000	A	1090		JMP	INC3	
016127	016076	A					
			1091	*			
			1092	*			INPUT ONE ALPHA CHARACTER FROM TTY KEYBOARD TO A REG
			1093	*			
016130	002000	A	1094	IND4	CALL	INPC	INPUT ONE CHAR
016131	016125	A					
016132	001000	A	1095		JMP*	INPD	TERMINATE EXIT
016133	116161	A					
016134	001000	A	1096		JMP	IND2	ABORT INPUT EXIT
016135	016156	A					
016136	001000	A	1097		JMP	IND1	DELETE PREVIOUS CHARACTER EXIT
016137	016154	A					
016140	006140	A	1098		SUBI	0301	CHAR A
016141	000301	A					
016142	001004	A	1099		JAN	IND3	INVALID INPUT
016143	016164	A					
016144	006140	A	1100		SUBI	032	CHAR Z
016145	000032	A					
016146	001002	A	1101		JAP	IND3	INVALID INPUT
016147	016164	A					
016150	006120	A	1102		ADDI	0333	RESTORE A
016151	000333	A					
016152	044006	A	1103		INR	INPD	NORMAL EXIT
016153	044005	A	1104		INR	INPD	
016154	044004	A	1105	IND1	INR	INPD	DELETE PREVIOUS CHARACTER EXIT
016155	044003	A	1106		INR	INPD	
016156	044002	A	1107	IND2	INR	INPD	ABORT INPUT EXIT

016157	044001	A	1108	INR	INPD			
016160	001000	A	1109	JMP*	0	EXIT		
016161	100000	A						
016161			1110	INPD	BES	0		
016162	001000	A	1111	JMP	IND4			
016163	016130	A						
016164	002000	A	1112	IND3	CALL	OUTG	INVALID INPUT--PRINT MESSAGE	
016165	016603	A						
016166	001000	A	1113	JMP	IND2	ABORT		
016167	016156	A						
			1114 *					
			1115 *					
			1116 *	INPUT TWO LETTER CHARACTERS FROM TTY				
			1117 *					
016170	002000	A	1118	INE3	CALL	INPD	INPUT ALPHA CHAR	
016171	016161	A						
016172	001000	A	1119	JMP*	INPE		TERMINATE EXIT	
016173	116222	A						
016174	001000	A	1120	JMP	INE2		ABORT INPUT EXIT	
016175	016217	A						
016176	001000	A	1121	JMP	INE1		DELETE PREVIOUS CHARACTER EXIT	
016177	016215	A						
016200	004250	A	1122	LRLA	8			
016201	054453	A	1123	STA	T802			
016202	002000	A	1124	CALL	INPD		INPUT ALPHA CHAR	
016203	016161	A						
016204	001000	A	1125	JMP*	INPE		TERMINATE EXIT	
016205	116222	A						
016206	001000	A	1126	JMP	INE2		ABORT INPUT EXIT	
016207	016217	A						
016210	001000	A	1127	JMP	INE3		DELETE PREVIOUS CHARACTER EXIT	
016211	016170	A						
016212	114442	A	1128	DRA	T802			
016213	044006	A	1129	INR	INPE		NORMAL EXIT	
016214	044005	A	1130	INR	INPE			
016215	044004	A	1131	INE1	INR	INPE	DELETE PREVIOUS CHARACTER EXIT	
016216	044003	A	1132	INR	INPE			
016217	044002	A	1133	INE2	INR	INPE	ABORT INPUT EXIT	
016220	044001	A	1134	INR	INPE			
016221	001000	A	1135	JMP*	0	EXIT		
016222	100000	A						
016222			1136	INPE	BES	0		
016223	001000	A	1137	JMP	INE3			
016224	016170	A						
			1138 *					
			1139 *	INPUT PERIOD, COMMA FOR MESSAGE TERMINATOR				
			1140 *					
016225	002000	A	1141	INF5	CALL	INPC	INPUT ONE CHARACTER	
016226	016125	A						
016227	001000	A	1142	JMP*	INPF		TERMINATE EXIT	
016230	116262	A						
016231	001000	A	1143	JMP	INF2		ABORT INPUT EXIT	
016232	016257	A						
016233	001000	A	1144	JMP	INF1		DELETE PREVIOUS CHARACTER EXIT	
016234	016255	A						
016235	006140	A	1145	SUBI	0254	COMMA		
016236	000254	A						
016237	001010	A	1146	JAZ	INF3	COMMA	EXIT	
016240	016253	A						
016241	006140	A	1147	SUBI	02	PERIOD		
016242	000002	A						
016243	001010	A	1148	JAZ	INF4	PERIOD	EXIT	
016244	016251	A						
016245	002000	A	1149	CALL	OUTG		PRINT INVALID MESSAGE	
016246	016603	A						
016247	001000	A	1150	JMP	INF2	ABORT		
016250	016257	A						
016251	044010	A	1151	INF4	INR	INPF	NORMAL EXIT	
016252	044007	A	1152	INR	INPF			
016253	044006	A	1153	INF3	INR	INPF	COMMA EXIT	
016254	044005	A	1154	INR	INPF			
016255	044004	A	1155	INF1	INR	INPF	DELETE PREVIOUS CHARACTER EXIT	
016256	044003	A	1156	INR	INPF			
016257	044002	A	1157	INF2	INR	INPF	ABORT INPUT EXIT	
016260	044001	A	1158	INR	INPF			
016261	001000	A	1159	JMP*	0	EXIT		
016262	100000	A						
016262			1160	INPF	BES	0		
016263	001000	A	1161	JMP	INF5			
016264	016225	A						
			1162 *					
			1163 *	INPUT OCTAL NUMBER FROM TTY KEYBOARD				
			1164 *	ASSEMBLE AS 16 BIT NUMBER IN A REG				
			1165 *	ONLY OCTAL NUMBERS ACCEPTED				
			1166 *					
016265	005001	A	1167	ING7	TZA			
016266	054366	A	1168	STA	T802		TEMP STORAGE FOR OCTAL NUMBER	
016267	050471	A	1169	STA	T804		TEMP STORAGE FOR DIGIT COUNTER	
016270	064370	A	1170	STB	T807			
016271	005002	A	1171	TZB				
016272	002000	A	1172	ING5	CALL	INPC	INPUT ONE CHARACTER	
016273	016125	A						
016274	001000	A	1173	JMP*	INPG		TERMINATE EXIT	
016275	116342	A						
016276	001000	A	1174	JMP	ING2		ABORT INPUT EXIT	

016277	016335	A							
016300	001000	A	1175	JMP	ING1			DELETE PREVIQS CHARACTER EXIT	
016301	016370	A							
016302	054354	A	1176	STA	TS05			SAVE INPUT	
016303	006140	A	1177	SUBI	0260				
016304	000260	A							
016305	001004	A	1178	JAN	ING6			INVALID IF NOT OCTAL NUMBER	
016306	016347	A							
016307	006140	A	1179	SUBI	010				
016310	000010	A							
016311	001002	A	1180	JAP	ING6			INVALID IF NOT OCTAL NUMBER	
016312	016347	A							
016313	006120	A	1181	ADDI	010			RESTORE DIGIT	
016314	000010	A							
016315	054340	A	1182	STA	TS03			SAVE CHARACTOR	
016316	014336	A	1183	LDA	TS02			INSERT CHARACTOR	
016317	004443	A	1184	LLRL	3			INTO	
016320	114335	A	1185	DRA	TS03			OCTAL NUMBER	
016321	001020	A	1186	JBZ	**4			TOD MANY BITS ?	
016322	016325	A							
016323	001000	A	1187	JMP	ING8			YES	
016324	016364	A							
016325	054327	A	1188	STA	TS02			NO	
016326	040471	A	1189	INR	TS04			INCR # DIGITS	
016327	001000	A	1190	JMP	ING5			GET NEXT DIGIT	
016330	016272	A							
016331	044010	A	1191	ING3	INR	INPG		NORMAL EXIT	
016332	044007	A	1192		INR	INPG			
016333	044006	A	1193	ING4	INR	INPG		COMMA EXIT	
016334	044005	A	1194		INR	INPG			
016335	044004	A	1195	ING2	INR	INPG		ABORT INPUT EXIT	
016336	044003	A	1196		INR	INPG			
016337	024321	A	1197	LDB	TS07				
016340	014314	A	1198	LDA	TS02			GET ASSEMBLED OCTAL NUMBER	
016341	001000	A	1199	JMP	0			EXIT	
016342	000000	A							
016342		A	1200	INGP	BES	0			
016343	002000	A	1201	CALL	INPI			INIT TTY BFR	
016344	016443	A							
016345	001000	A	1202	JMP	ING7				
016346	016265	A							
016347	014307	A	1203	ING6	LDA	TS05		GET LAST INPUT	
016350	006140	A	1204	SUBI	0254			IS IT A COMMA	
016351	000254	A							
016352	001010	A	1205	JAZ	ING4			YES	
016353	016333	A							
016354	006140	A	1206	SUBI	02			IS IT A PERIOD	
016355	000002	A							
016356	001010	A	1207	JAZ	ING3			YES	
016357	016331	A							
016360	006140	A	1208	SUBI	0256-0215				
016361	000041	A							
016362	001010	A	1209	JAZ	ING3			RETURN IS AS GOOD AS PERIOD	
016363	016331	A							
016364	002000	A	1210	ING8	CALL	OUTG		PRINT INVALID MESSAGE	
016365	016603	A							
016366	001000	A	1211	JMP	ING2			ABORT	
016367	016335	A							
		A	1212 *						
016370	014264	A	1213	ING1	LDA	TS02		DELETE LAST CHARACTOR	
016371	004343	A	1214	LSRA	3				
016372	054262	A	1215	STA	TS02				
016373	010471	A	1216	LDA	TS04				
016374	005311	A	1217	DAR				REDUCE DIGIT COUNT	
016375	050471	A	1218	STA	TS04				
016376	001000	A	1219	JMP	ING5				
016377	016272	A							
		A	1220 *						
016400	000000	A	1221	INN	ENTR			INPUT TO TERMINATOR	
		A	1222 *						
016401	002000	A	1223	CALL	INPG				
016402	016342	A							
016403	001000	A	1224	JMP	ETOP				
016404	015225	A							
016405	001000	A	1225	JMP	ETOP				
016406	015225	A							
016407	001000	A	1226	JMP*	INN				
016410	116400	A							
016411	001000	A	1227	JMP*	INN				
016412	116400	A							
		A	1228 *						
		A	1229 *						
		A	1230 *						
016413	054020	A	1231	INH1	STA	INH2		SAVE A	
016414	014014	A	1232	LDA	INPH			MODIFY RETURN	
016415	006110	A	1233	ORAI	0100000				
016416	100000	A							
016417	054006	A	1234	STA	INH3+1				
016420	010473	A	1235	LDA	STY			ADJ SBR	
016421	006110	A	1236	ORAI	0101200				
016422	101200	A							
016423	054001	A	1237	STA	**2				
016424	014007	A	1238	LDA	INH2			RESTORE A	
016425	101000	A	1239	INH3	SEN	0,*			
016426	016425	A							

016427	044001	A	1240	INR	INPH		
016430	001000	A	1241	JMP	0		
016431	000000	A					
016431		A	1242	INPH	BES	0	ENTER
016432	001000	A	1243	JMP	INM1		
016433	016413	A					
016434	000000	A	1244	INM2	DATA	0	
			1245	*			
			1246	*	INPUT CHARACTER FROM TTY W/OUT SENSING BFR RDY		
			1247	*			
016435	010473	A	1248	INI1	LDA	STTY	ADJ. CIA
016436	006110	A	1249		ORAI	0102500	
016437	102500	A					
016440	054000	A	1250		STA	**1	
016441	102500	A	1251		CIA	0	INPUT
016442	001000	A	1252		JMP	0	
016443	000000	A					
016443		A	1253	INPI	BES	0	ENTER
016444	001000	A	1254		JMP	INI1	
016445	016435	A					
			1255	*			
			1256	*	OUTPUT ONE CHARACTER FROM A REG TO TTY		
			1257	*			
016446	000000	A	1258	OUTA	ENTR	0	
016447	074204	A	1259		STX	TS01	SAVE X
016450	005014	A	1260		TAX		
016451	010473	A	1261		LDA	STTY	
016452	006110	A	1262		ORAI	0101100	ADJUST TTY DA
016453	101100	A					
016454	054006	A	1263		STA	**7	
016455	006120	A	1264		ADDI	002000	
016456	002000	A					
016457	054013	A	1265		STA	OUT1	
016460	005041	A	1266		TXA		
016461	006030	A	1267		LDXI	-1	TIME - OUT CONSTANT
016462	177777	A					
016463	101000	A	1268		SEN	0,OUT1	WRITE REGISTER READY
016464	016473	A					
016465	002000	A	1269		CALL	TOUT	
016466	016651	A					
016467	005011	A	1270		MERG	011	
016470	000115	A	1271		HLT	77	
016471	001000	A	1272		JMP	**6	
016472	016463	A					
016473	103100	A	1273	OUT1	OAR	0	
016474	034157	A	1274		LDX	TS01	RESTORE X
016475	001000	A	1275		JMP*	OUTA	RETURN
016476	116446	A					
			1276	*			
			1277	*			
			1278	*	OUTPUT TWO CHARACTERS FROM A REG TO TTY (HIGH ORDER FIRST)		
			1279	*	ENTER WITH CHARACTERS IN A REG		
			1280	*			
016477	000000	A	1281	OUTB	ENTR	0	
016500	064157	A	1282		STB	TS06	SAVE B
016501	004550	A	1283		LLSR	8	
016502	002000	A	1284		CALL	OUTA	OUTPUT FIRST CHAR
016503	016446	A					
016504	004450	A	1285		LLRL	8	
016505	002000	A	1286		CALL	OUTA	OUTPUT SECOND CHAR
016506	016446	A					
016507	024150	A	1287		LDB	TS06	RESTORE B
016510	001000	A	1288		JMP*	OUTB	RETURN
016511	116477	A					
			1289	*			
			1290	*	OUTPUT CARRIAGE RETURN AND LINE FEED TO TTY		
			1291	*			
016512	000000	A	1292	OUTC	ENTR	0	
016513	054005	A	1293		STA	**6	SAVE A
016514	006010	A	1294		LDAI	0106612	CR AND LF
016515	106612	A					
016516	002000	A	1295		CALL	OUTB	OUTPUT 2 CHAR
016517	016477	A					
016520	006010	A	1296		LDAI	0	RESTORE A
016521	000000	A					
016522	001000	A	1297		JMP*	OUTC	RETURN
016523	116512	A					
			1298	*			
			1299	*	OUTPUT OCTAL WORD AND A SPACE TO TTY		
			1300	*			
016524	000000	A	1301	OUTE	ENTR	0	
016525	064022	A	1302		STB	**19	SAVE B
016526	005002	A	1303		TZB		
016527	004557	A	1304		LLSR	15	
016530	005122	A	1305		IBR		
016531	006110	A	1306	OUT2	ORAI	'0'	MAKE DIGIT
016532	000260	A					
016533	002000	A	1307		CALL	OUTA	OUTPUT ONE DIGIT
016534	016446	A					
016535	005001	A	1308		TZA		
016536	004443	A	1309		LLRL	3	
016537	001020	A	1310		JBZ	**4	OCTAL OUTPUT COMPLETE
016540	016543	A					
016541	001000	A	1311		JMP	OUT2	
016542	016531	A					

016543	006010	A	1312	LDAI	0240	ASCII BLANK CODE
016544	000240	A				
016545	002000	A	1313	CALL	OUTA	OUTPUT SPACE
016546	016446	A				
016547	006020	A	1314	LDBI	0	RESTORE B
016550	000000	A				
016551	001000	A	1315	JMP*	OUTE	RETURN
016552	116524	A				
			1316	*		
			1317	*	OUTPUT MESSAGE TO TTY (X REG CONTAINS ADDRESS OF MESSAGE)	
			1318	*		
016553	000000	A	1319	OUTD	ENTR	0
016554	015000	A	1320	LDA	0,1	
016555	001010	A	1321	JAZ*	OUTD	
016556	116553	A				
016557	002000	A	1322	CALL	OUTB	
016560	016477	A				
016561	005144	A	1323	IXR		
016562	001000	A	1324	JMP	OUTD+1	
016563	016554	A				
			1325	*		
			1326	*	OUTPUT OCTAL MEMORY ADDRESS TO TTY PRINTER	
			1327	*		
016564	000000	A	1328	OUTF	ENTR	0
016565	054067	A	1329	STA	TS02	SAVE WORD
016566	006010	A	1330	LDAI	'('	PAREN SPACE
016567	124240	A				
016570	002000	A	1331	CALL	OUTB	PRINT CHAR
016571	016477	A				
016572	014062	A	1332	LDA	TS02	
016573	002000	A	1333	JMPM	OUTE	OUTPUT OCTAL WORD
016574	016524	A				
016575	006010	A	1334	LDAI	')'	RIGHT PARENTHESIS AND SPACE
016576	124640	A				
016577	002000	A	1335	CALL	OUTB	
016600	016477	A				
016601	001000	A	1336	JMP*	OUTF	
016602	116564	A				
			1337	*		
			1338	*	INVALID INPUT--PRINT MESSAGE	
			1339	*		
016603	000000	A	1340	OUTG	ENTR	0
016604	006030	A	1341	LDXI	MSG5	INVALID MESSAGE
016605	015566	A				
016606	002000	A	1342	CALL	OUTD	OUTPUT MESSAGE
016607	016553	A				
016610	001000	A	1343	JMP*	OUTG	
016611	116603	A				
			1344	*		
			1345	*	OUTPUT CONTROL CHARACTER SUBROUTINE	
			1346	*		
016612	054020	A	1347	OUT3	STA	OUTH+3
016613	074020	A	1348		STX	OUTH+4
016614	034013	A	1349	LDX	OUTH	A=CONTROL
016615	015000	A	1350	LDA	0,1	CHARACTER
016616	002000	A	1351	CALL	OUTA	OUTPUT CHARACTER
016617	016446	A				
016620	006030	A	1352	LDXI	077777	INIT
016621	077777	A				
016622	002000	A	1353	CALL	TDLY	TIME DELAY
016623	016635	A				
016624	044003	A	1354	INR	OUTH	SET RETURN
016625	014005	A	1355	LDA	OUTH+3	RESTORE A
016626	034005	A	1356	LDX	OUTH+4	RESTORE X
016627	001000	A	1357	JMP	0	RETURN
016630	000000	A				
016630			1358	OUTH	BES	0
016631	001000	A	1359	JMP	OUT3	ENTRY LOOP
016632	016612	A				
016633			1360	BSS	2	STORAGE FOR A + X
			1361	*		
			1362	*	TIME DELAY SUBROUTINE	
			1363	*		
016635	000000	A	1364	TDLY	ENTR	0
016636	005344	A	1365	DXR		
016637	001040	A	1366	JXZ*	TDLY	RETURN
016640	116635	A				
016641	001000	A	1367	JMP	*=3	
016642	016636	A				
			1368	*		
			1369	*	I/O TIME-OUT SUBROUTINE	
			1370	*		
016643	005344	A	1371	TOU1	DXR	
016644	001040	A	1372	JXZ*	TOUT	TIME-OUT RETURN
016645	116651	A				
016646	044002	A	1373	INR	TOUT	SET UP FOR
016647	044001	A	1374	INR	TOUT	NORMAL EXIT
016650	001000	A	1375	JMP	0	
016651	000000	A				
016651			1376	TOU1	BES	0
016652	001000	A	1377	JMP	TOU1	
016653	016643	A				
			1378	*		
			1379	*	DATA TABLE	
			1380	*		

			1381 *					
016654	000000	A	1382	TS01	DATA	0		TEMPORARY STORAGE
016655	000000	A	1383	TS02	DATA	0		TEMPORARY STORAGE
016656	000000	A	1384	TS03	DATA	0		TEMPORARY STORAGE
016657	000000	A	1385	TS05	DATA	0		TEMPORARY STORAGE
016660	000000	A	1386	TS06	DATA	0		TEMPORARY STORAGE
016661	000000	A	1387	TS07	DATA	0		TEMPORARY STORAGE
	015225	A	1388	END	EQU	ETOP		
			1389 *					
	016662	A	1390	PCHC	EQU	*		
	016662	A	1391	DUMP	EQU	*		
016662	050462	A	1392		STA	FRST		
016663	060463	A	1393		STB	LAST		
016664	070465	A	1394		STX	EXEC		
016665	006030	A	1395		LDXI	C000		
016666	016756	A						
016667	040474	A	1396		INR	QADR		
016670	002000	A	1397		CALL	SET		
016671	014011	A						
016672	010474	A	1398		LDA	QADR		
016673	005311	A	1399		DAR			
016674	050474	A	1400		STA	QADR		
016675	100000	A	1401	C004	EXC	0		
016676	001000	A	1402		JMP	WR12		
016677	016776	A						
016700	000000	A	1403	CPO	ENTR			
016701	006020	A	1404		LDBI	-20		SET 4WORD COUNTER
016702	177754	A						
016703	064166	A	1405		STB	CNTR		
016704	015000	A	1406	CPO1	LDA	0,1		
016705	004344	A	1407		LSRA	4		
016706	002000	A	1408		CALL	CPOU		
016707	016736	A						
016710	015000	A	1409		LDA	0,1		
016711	025001	A	1410		LDB	1,1		
016712	004450	A	1411		LLRL	8		
016713	002000	A	1412		CALL	CPOU		
016714	016736	A						
016715	015001	A	1413		LDA	1,1		
016716	025002	A	1414		LDB	2,1		
016717	004444	A	1415		LLRL	4		
016720	002000	A	1416		CALL	CPOU		
016721	016736	A						
016722	015002	A	1417		LDA	2,1		
016723	002000	A	1418		CALL	CPOU		
016724	016736	A						
016725	005144	A	1419		IXR			
016726	005144	A	1420		IXR			
016727	005144	A	1421		IXR			
016730	044141	A	1422		INR	CNTR		
016731	014140	A	1423		LDA	CNTR		
016732	001010	A	1424		JAZ*	CPO		
016733	116700	A						
016734	001000	A	1425		JMP	CPO1		
016735	016704	A						
016736	000000	A	1426	CPOU	ENTR			
016737	101000	A	1427	CPO1	SEN	0,0000		
016740	016745	A						
016741	101100	A	1428	C002	SEN	0100,MTI4		
016742	016750	A						
016743	001000	A	1429		JMP	C001		
016744	016737	A						
016745	103100	A	1430	C003	QAR	0		
016746	001000	A	1431		JMP*	CPOU		
016747	116736	A						
016750	006010	A	1432	MTI4	LDAI	0336		
016751	000336	A						
016752	002000	A	1433		CALL	QUTA		
016753	016446	A						
016754	001000	A	1434		JMP	END		
016755	015225	A						
016756	016737	A	1435	C000	DATA	C001,C002,C003,C004		
016757	016741	A						
016760	016745	A						
016761	016675	A						
016762	000000	A	1436		DATA	0		
016763	000000	A	1437	CBUF	ENTR			
016764	024106	A	1438		LDB	BUFR		
016765	005001	A	1439	CBU1	TZA			
016766	056000	A	1440		STA	0,2		
016767	005123	A	1441		INCR	023		
016770	006140	A	1442		SUBI	MTBF+64		
016771	017174	A						
016772	001010	A	1443		JAZ*	CBUF		
016773	116763	A						
016774	001000	A	1444		JMP	CBU1		
016775	016765	A						
016776	005001	A	1445	WR12	TZA			
016777	054072	A	1446		STA	CNTR		RESET COUNTER
017000	002000	A	1447		CALL	CBUF		
017001	016763	A						
017002	030462	A	1448		LDX	FRST		
017003	074071	A	1449		STX	MTBF+1		SET ADDRESS CONTROL
017004	024066	A	1450		LDB	BUFR		BUFFER ADDRESS
017005	070464	A	1451		STX	CKSM		

017006	005122	A	1452		IBR		
017007	005122	A	1453	WRI3	IBR		
017010	015000	A	1454		LDA	0,1	PICK UP WORD
017011	056000	A	1455		STA	0,2	PUT IN BUFFER
017012	130464	A	1456		ERA	CKSM	
017013	050464	A	1457		STA	CKSM	
017014	044055	A	1458		INR	CNTR	INCREMENT WORD COUNT
017015	005041	A	1459		TXA		
017016	140463	A	1460		SUB	LAST	END OF RECORD
017017	005144	A	1461		IXR		
017020	001010	A	1462		JAZ	WRI4	YES
017021	017027	A					
017022	014047	A	1463		LDA	CNTR	
017023	006140	A	1464		SUBI	071	RECORD FULL
017024	000071	A					
017025	001004	A	1465		JAN	WRI3	NO
017026	017007	A					
017027	070462	A	1466	WRI4	STX	FRST	SAVE POINTER
017030	005122	A	1467		IBR		
017031	010464	A	1468		LDA	CKSM	
017032	134037	A	1469		ERA	CNTR	
017033	056000	A	1470		STA	0,2	
017034	024035	A	1471		LDB	CNTR	
017035	064036	A	1472		STB	MTRF	SET RECORD LENGTH
017036	005122	A	1473		IBR		
017037	005122	A	1474		IBR		
017040	034032	A	1475		LDX	BUFR	
017041	002000	A	1476		CALL	CPD	
017042	016700	A					
	017042	A	1477	MCO1	EQU	**=1	
017043	002000	A	1478		CALL	CBUF	
017044	016763	A					
017045	010462	A	1479		LDA	FRST	
017046	005311	A	1480		DAR		
017047	140463	A	1481		SUB	LAST	
017050	001004	A	1482		JAN	WRI2	MORE
017051	016776	A					
017052	054021	A	1483		STA	MTBF	SET FOR EXECUTION RECORD
017053	010465	A	1484		LDA	EXEC	
017054	001004	A	1485		JAN	END	NO EXECUTION RECORD
017055	015225	A					
017056	054016	A	1486		STA	MTBF+1	
017057	005301	A	1487		DECR	1	
017060	054013	A	1488		STA	MTBF	
017061	134013	A	1489		ERA	MTBF+1	
017062	054013	A	1490		STA	MTBF+2	
017063	005102	A	1491		INCR	2	
017064	005122	A	1492		IBR		
017065	034005	A	1493		LDX	BUFR	
017066	002000	A	1494		CALL	CPD	
017067	016700	A					
	017067	A	1495	MCO2	EQU	**=1	
017070	001000	A	1496		JMP	END	
017071	015225	A					
017072			1497	CNTR	BSS	1	
017073	017074	A	1498	BUFR	DATA	MTBF	
017074			1499	MTBF	BSS	64	
			1500	*			
	017173	A	1501	EDEX	EQU	**=1	
	014000	A	1502		END	EBG0	

ENTRY NAMES

EXTERNAL NAMES

SYMBOLS

000442	A	\$CON	000440	A	\$FLG	000441	A	\$MEM	000473	A	\$TTY
015475	A	ABX	000010	A	AZ	017073	A	BUFR	000020	A	BZ
016756	A	C000	016737	A	C001	016741	A	C002	016745	A	C003
016675	A	C004	016765	A	CBU1	016763	A	CBUF	014032	A	C000
014043	A	CD01	014047	A	CD02	014135	A	CD03	014141	A	CD04
000464	A	CKSM	014145	A	CNT	017072	A	CNTR	016700	A	CPD
016704	A	CPD1	016736	A	CPOU	014146	A	CYCLE	015215	A	DOMSG1
015221	A	DOMSG3	016662	A	DUMP	000431	A	E3R1	014607	A	E3RG
000432	A	E4R1	014635	A	E4RG	000433	A	E5R1	014663	A	E5RG
000434	A	E6R1	014711	A	E6RG	000435	A	E7R1	014737	A	E7RG
000443	A	EAR1	014504	A	EARG	014000	A	EBG0	015166	A	EBG1
015177	A	EBG2	000444	A	EBR1	014533	A	EBRG	015141	A	ECN2
015112	A	ECN3	015101	A	ECNG	017173	A	EDEX	015045	A	EDU1
015052	A	EDU2	015066	A	EDU4	015030	A	EDUM	015000	A	EG01
014765	A	EGOT	000454	A	EK00	000455	A	EK01	000456	A	EK02
014000	A	ELOC	015401	A	ELOD	015225	A	END	015344	A	EOF
015027	A	EDV1	014172	A	EPU1	014150	A	EPUN	014451	A	ESR1
014462	A	ESR2	014443	A	ESR4	014500	A	ESR5	014417	A	ESRC
015630	A	ESZ1	015645	A	ESZ2	015616	A	ESZA	015652	A	ESZB
015156	A	ESZC	015666	A	ETAB	015312	A	ETBL	015255	A	ETO4
015225	A	ETOP	014404	A	ETR1	014414	A	ETR2	014303	A	ETR3
014323	A	ETRS1	014375	A	ETRS3	014247	A	ETRP	000446	A	ETS1
000400	A	EX00	000401	A	EX01	000402	A	EX02	000403	A	EX03
000404	A	EX04	000405	A	EX05	000406	A	EX06	000407	A	EX07
000410	A	EX10	000411	A	EX11	000412	A	EX12	000413	A	EX13
000414	A	EX14	000415	A	EX15	000416	A	EX16	000417	A	EX17
000420	A	EX20	000421	A	EX21	000422	A	EX26	000423	A	EX27
000424	A	EX30	000425	A	EX31	000426	A	EX32	000427	A	EX33
000465	A	EXEC	015344	A	EXIT	000445	A	EXR1	014561	A	EXRG
015344	A	FIL	000462	A	FRST	015513	A	HLTF	016043	A	INA1
016052	A	INA2	016056	A	INA3	016062	A	INB1	014037	A	INC
016120	A	INC1	016122	A	INC2	016076	A	INC3	016154	A	IND1

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016156 A IND2 016164 A IND3 016130 A IND4 016215 A INE1
016217 A INE2 016170 A INE3 016255 A INF1 016257 A INF2
016253 A INF3 016251 A INF4 016225 A INF5 016370 A ING1
016335 A ING2 016331 A ING3 016333 A ING4 016272 A INGS
016347 A ING6 016265 A ING7 016364 A INGB 016413 A INH1
016434 A INH2 016425 A INH3 016435 A INI1 014232 A INI2
014243 A INI3 014203 A INIT 016400 A INN 016057 A INPA
016073 A INPB 016125 A INPC 016161 A INPD 016222 A INPE
016262 A INPF 016342 A INPG 016431 A INPH 016443 A INP1
000460 A K100 000461 A K200 000457 A K40 000463 A LAST
014024 A LOAC 000470 A LOAD 014052 A LOAE 014070 A LOAF
014075 A LOAG 014101 A LOAH 014140 A LOAI 015406 A LOAW
014024 A LODE 000477 A MASK 017042 A MCO1 017067 A MCO2
015514 A MSG1 015540 A MSG2 015553 A MSG3 015563 A MSG4
015566 A MSG5 015574 A MSG6 017074 A MTBF 016750 A MTI4
014007 A NOV75 000474 A OADR 016473 A OUT1 016531 A OUT2
016612 A OUT3 016446 A OUTA 016477 A OUTB 016512 A OUTC
016553 A OUTD 016524 A OUTE 016564 A OUTF 016603 A OUTG
016630 A OUTH 014147 A PART 016662 A PCHC 015307 A PETBL
015446 A PHLT 015420 A PWDN 015441 A PWDN1 000472 A PRK
015447 A PRU 000000 A R0 000001 A R1 000002 A R2
000003 A R3 000004 A R4 000005 A R5 000006 A R6
000007 A R7 015366 A REGJMP 015370 A REGTBL 015017 A RESOF
015502 A SAVA 015503 A SAVB 015512 A SAVO 015505 A SAVR3
015506 A SAVR4 015507 A SAVR5 015510 A SAVR6 015511 A SAVR7
015504 A SAVX 014011 A SET 015726 A SSW1 015733 A SSW2
015750 A SSW3 015763 A SSW4 015767 A SSW5 015776 A SSW6
016027 A SSWE 015735 A SSWL 015676 A SSWP 016012 A SSWR
016024 A SSW8 016040 A SSWT 000467 A TAPE 000466 A TAPN
016635 A TDLY 016643 A TOUT 016651 A TOUT 016654 A T801
016655 A T802 016656 A T803 000471 A T804 016657 A T805
016660 A T806 016661 A T807 000430 A V75 015350 A V75REG
016776 A WRI2 017007 A WRI3 017027 A WRI4 000476 A XOFF
000475 A XON
0 ERRORS ASSEMBLY COMPLETE

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LITERALS
POINTERS

* * UNREFERENCED SYMBOLS * *

702	EBG2	123	EK01	124	EK02	77	EX00	78	EX01	79	EX02
80	EX03	81	EX04	82	EX05	83	EX06	84	EX07	85	EX10
86	EX11	87	EX12	88	EX13	89	EX14	90	EX15	91	EX16
92	EX17	93	EX20	94	EX21	95	EX26	96	EX27	97	EX30
98	EX31	99	EX32	100	EX33	126	K100	127	K200	125	K40
178	LOAC	134	LOAD	1477	MCO1	1495	MCO2	1390	PCHC	55	R0
56	R1	57	R2	1022	SSW6	133	TAPE	132	TAPN	140	XOFF
139	XON										

* * PROGRAM / SUBROUTINE ENTRY POINTS * *

1437	CBUF	-LD-	1443	1447	1478										
1403	CPO	-LD-	1424	1476	1494										
1426	CPQU	-LD-	1408	1412	1416	1418	1431								
897	ESZA	-LD-	691	919											
925	ESZB	-LD-	693	933											
690	ESZC	-LD-	96	694	697										
1057	INPA	-ST-	1054	1055	-LD-	85	1062								
1068	INPB	-ST-	1065	1066	-LD-	86	723	783	1063	1074					
1089	INPC	-ST-	1082	1083	1084	1085	1086	1087	-LD-	87	1075	1094	1141	1172	
1110	INPD	-ST-	1103	1104	1105	1106	1107	1108	-LD-	88	1095	1118	1124		
1200	INPG	-ST-	1191	1192	1193	1194	1195	1196	-LD-	91	251	282	325	412	456
1242	INPH	-ST-	476	496	512	528	544	560	576	598	623	658	668	1173	1223
1253	INPI	-LD-	1240	-LD-	98	1050	1232								
209	LOAH	-LD-	99	645	721	1053	1201								
234	LOAI	-LD-	197	199	200										
1258	OUTA	-LD-	212	-LD-	192	195	204	207	227						
1281	OUTB	-LD-	77	439	453	473	493	509	525	541	557	573	634	665	719
1281	OUTB	-LD-	1064	1275	1284	1286	1307	1313	1351	1433					
1292	OUTC	-LD-	78	386	1268	1295	1322	1331	1335						
1319	OUTD	-LD-	79	363	435	604	629	644	685	703	722	1297			
1301	OUTE	-LD-	80	707	710	712	811	989	1321	1324	1342				
1328	OUTF	-LD-	81	367	369	371	375	377	379	381	383	441	455	475	495
1340	OUTG	-LD-	511	527	543	559	575	636	667	813	1315	1333			
1358	OUTH	-ST-	82	365	437	632	687	1336							
826	PWDN	-LD-	83	776	1112	1149	1210	1343							
164	SET	-LD-	1347	1348	1354	-LD-	84	702	720	1349	1355	1356			
1364	TDLY	-LD-	66	868											
1376	TOUT	-ST-	167	173	180	1397									
		-LD-	93	1353	1366										
		-LD-	1373	1374	-LD-	92	1269	1372							

* * REFERENCED SYMBOLS * *

116	\$CON	-ST-	696								
114	\$FLG	-ST-	1005	1027	1038	-LD-	991	1023			
115	\$MEM	-ST-	692	-LD-	926						
137	\$TTY	-LD-	700	1235	1248	1261					
865	ABX	-LD-	859								
183	AZ	-LD-	221	223							
1498	BUFR	-LD-	1438	1450	1475	1493					
184	RZ	-LD-	221	223							
1435	C000	-LD-	1395								
1427	C001	-LD-	1429	1435							
1428	C002	-LD-	1435								

