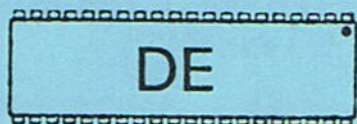
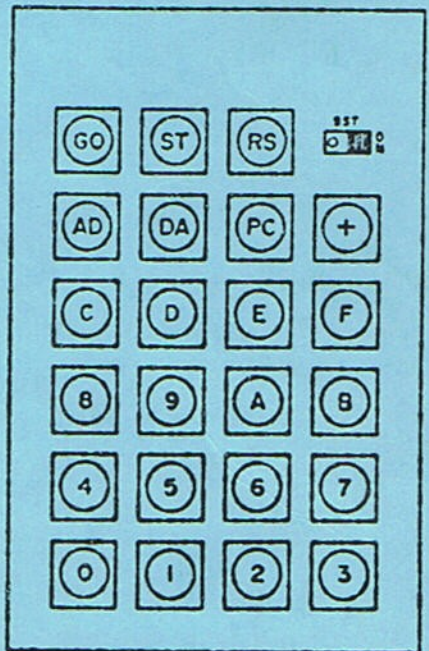
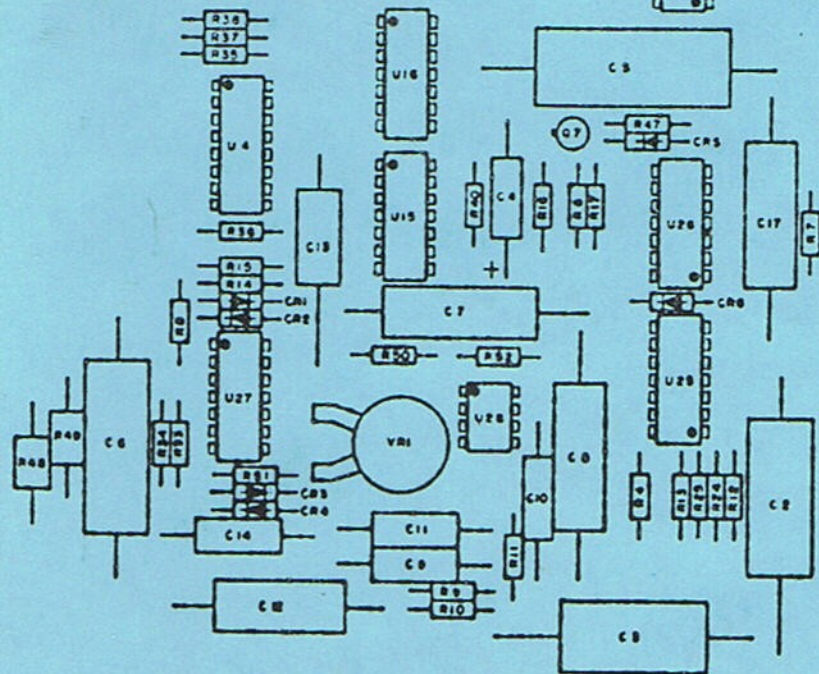
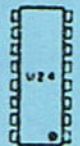
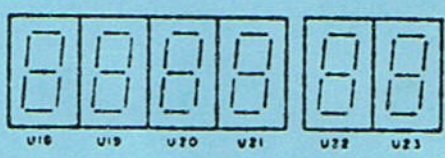
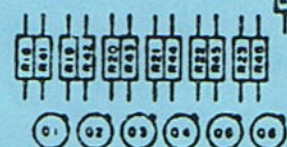
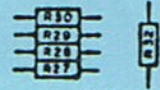
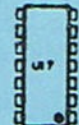
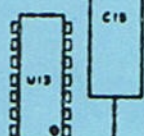
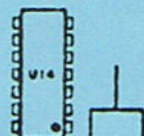
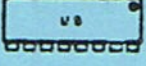
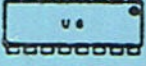
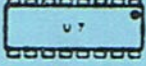
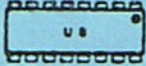
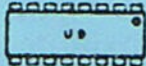
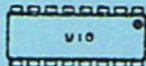
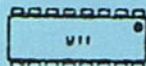
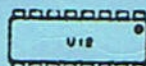
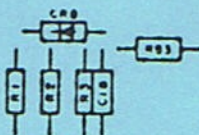


KIM GEBRUIKERS CLUB
 NEDERLAND
 2DE JAARGANG NR. 8
 20 AUGUSTUS 1979



8



KIM

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TARGET (1-column)

Nummer:

Blad: 1 van 5

Auteur:
Fer Weber
Gebr. Wienerstr. 139
5913 XS Venlo
Holland

Bij dit spelletje worden de horizontale streepjes van het KIM-display gebruikt als bewegend doel. Na starten gaat op de bovenste lijn een streepje lopen van links naar rechts. Toets 3 wordt gebruikt als schietknop. Geschoten wordt op digit 4 van het display.

Bij raak verdwijnt het streepje. Bij mis komt er een streepje bij. Maximaal dus drie streepjes onder elkaar.

.....

z-page use	0000	SEGPTR	=segmentpointer	
	0001	DIGPTR	=digitpointer	
	0002	SPEED		
	0003	SEG1	=segmentcode 1	
	0004	SEGOF1	=segment off	
	0005	SEG2		
	0006	SEGOF2		
	0007	SEG3		
	0008	SEGOF3		
	0009	MESPT1	=messagepointer 1	
	000A	MESPT2		
	000B	MESPT3		
	000C	MESPT4		
	000D	MESPT5		
	000E	CODEST	=segmentcode store	
	000F	REPEAT	=repeats message	
	0010	TEMPX	=(not used)	
	0011	LOOPCO	=loopcounter	
0200	D8	START	CLD	binary mode
0201	A9		LDA imm	initialization
0203	85		STA SEGOF1	
0205	85		STA SEGOF2	
0207	85		STA SEGOF3	
0209	A9		LDA imm	
020B	85		STA SEGPTR	
020D	A9		LDA imm	
020F	85		STA REPEAT	
0211	A9		LDA imm	
0213	85		STA SPEED	
0215	A9		LDA imm	
0217	85		STA SEG1	
0219	A9		LDA imm	
021B	85		STA SEG2	
021D	A9		LDA imm	

Datum ingang:

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TARGET (1-column)		Nummer:
		Blad:
		2 van 5
021F 85 07	STA SEG3	
0221 A9 3B	LDA imm	
0223 85 09	STA MESPT1	
0225 A9 41	LDA imm	
0227 85 0A	STA MESPT2	
0229 A9 47	LDA imm	
022B 85 0B	STA MESPT3	
022D A9 4D	LDA imm	
022F 85 0C	STA MESPT4	
0231 A9 53	LDA imm	
0233 85 0D	STA MESPT5	
0235 A9 07	STARTC LDA imm	initialize digitpointer
0237 85 01	STA DIGPTR	
0239 E6 01	CONTIN INC DIGPTR	next digit
023B E6 01	INC DIGPTR	
023D A5 01	LDA DIGPTR	
023F C9 15	CMP imm	digit "7"?
0241 F0 F2	BEQ STARTC	
0243 A6 00	TOSHOW LDX SEGPTR	
0245 B5 00	LDA z-p,X	get segmentcode
0247 85 0E	STA CODEST	and store
0249 20 54 02	LITEUP JSR SHOW	
024C A9 00	LDA imm	
024E 8D 42 17	STA abs	digit off
0251 4C 74 02	JMP ANYKEY	
0254 A9 7F	SHOW LDA imm	
0256 8D 41 17	STA abs	padd = 1
0259 A5 01	LDA DIGPTR	
025B 8D 42 17	STA abs	digit on
025E A5 0E	LDA CODEST	
0260 8D 40 17	STA abs	segments on
0263 A0 20	LDY imm	and wait
0265 88	LOOP DEY	
0266 D0 FD	BNE LOOP	
0268 60	RTS	
0269 A2 80	PAUSE LDX imm	
026B A0 FF	LOOP1 LDY imm	
026D 88	LOOP2 DEY	
026E D0 FD	BNE LOOP2	
0270 CA	DEX	
0271 D0 F8	BNE LOOP1	
0273 60	RTS	
0274 20 40 1F	ANYKEY JSR KEYIN	
0277 20 6A 1F	JSR GETKEY	
027A C9 15	CMP imm	no key?
027C D0 17	BNE GOKEY	
027E C6 02	NOKEY DEC SPEED	

Datum ingang:

18 juni 1979

Vervangt:

-

d.d.:

-

Ref.:

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TARGET (1-column)		Number:
		Blad: 3 van 5
0280 D0 C7	BNE LITEUP	
0282 A9 80	LDA imm	restore <u>speed</u>
0284 85 02	STA SPEED	
0286 A5 00	LDA SEGPTR	
0288 4A	LSR acc	segx or segofx?
0289 90 05	BCC NEXDIG	
028B E6 00	INC SEGPTR	
028D 4C 43 02	JMP TOSHOW	
0290 C6 00	NEXDIG DEC SEGPTR	
0292 4C 39 02	JMP CONTIN	
0295 C9 13	GOKEY CMP imm	key "GO"?
0297 D0 06	BNE KEY3	
0299 20 69 02	JSR PAUSE	
029C 4C 00 02	JMP START	
029F C9 03	KEY3 CMP imm	key "3"?
02A1 D0 42	BNE ILLKEY	no, then illegal key
02A3 20 69 02	JSR PAUSE	
02A6 A5 01	LDA DIGPTR	
02A8 C9 0F	CMP imm	also digit "4"?
02AA D0 0E	BNE MISS	
02AC A5 00	LDA SEGPTR	
02AE C9 03	CMP imm	seg1?
02B0 F0 54	BEQ WIN	
02B2 C9 05	CMP imm	seg2?
02B4 F0 3D	BEQ HIT	
02B6 C9 07	CMP imm	seg3?
02B8 F0 39	BEQ HIT	
02BA A5 00	MISS LDA SEGPTR	
02BC 48	PHA	save segmentpointer on stack
02BD A6 09	LDX MESPT1	
02BF 20 12 03	JSR MESSHO	
02C2 68	MISSCO PLA	return segmentpointer
02C3 85 00	STA SEGPTR	
02C5 E6 00	INC SEGPTR	
02C7 E6 00	INC SEGPTR	
02C9 A5 00	LDA SEGPTR	
02CB C9 09	CMP imm	lose?
02CD F0 07	BEQ LOSE	
02CF C9 0A	CMP imm	lose?
02D1 F0 03	BEQ LOSE	
02D3 4C 35 02	JMP STARTC	
02D6 A6 0D	LOSE LDX MESPT5	
02D8 20 12 03	JSR MESSHO	
02DB C6 0F	DEC REPEAT	
02DD D0 F7	BNE LOSE	
02DF 20 69 02	JSR PAUSE	
02E2 4C 00 02	JMP START	

Datum ingang:

18 juni 1979

Vervangt:

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d.d.:

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TARGET (1-column)		Number:
		Blad: 4 van 5

```

02E5 A5 00      ILLKEY LDA SEGPTR
02E7 48          PHA          save segmentpointer on stack
02E8 A6 0B      LDX MESPT3
02EA 20 12 03   JSR MESSHO
02ED 20 69 02   JSR PAUSE
02F0 4C C2 02   JMP MISSCO

02F3 A5 00      HIT      LDA SEGPTR
02F5 48          PHA          save segmentpointer on stack
02F6 A6 0A      LDX MESPT2
02F8 20 12 03   JSR MESSHO
02FB 68          HITCON PLA      return segmentpointer
02FC 85 00      STA SEGPTR
02FE C6 00      DEC SEGPTR
0300 20 69 02   JSR PAUSE
0303 4C 35 02   JMP STARTC

0306 A6 0C      WIN      LDX MESPT4
0308 20 12 03   JSR MESSHO
030B C6 0F      DEC REPEAT
030D D0 F7      BNE WIN
030F 4C 00 02   JMP START

0312 A9 80      MESSHO LDA imm      initialize loopcounter
0314 85 11      STA LOOPCO
0316 A9 07      DIGSTA LDA imm      initialize digitpointer
0318 85 01      STA DIGPTR
031A BD 0B 03   SEGSTA LDA abs,X    get segmentcode
031D 85 0E      STA CODEST
031F E6 01      INC DIGPTR      next digit
0321 E6 01      INC DIGPTR
0323 A5 01      LDA DIGPTR
0325 C9 15      CMP imm        digit "7"?
0327 F0 0C      BEQ MESSCO
0329 20 54 02   SRSHOW JSR SHOW
032C A9 00      LDA imm        segments off
032E 8D 40 17   STA abs
0331 E8          INX
0332 4C 1A 03   JMP SEGSTA

0335 CA CA CA   DEX DEX DEX    return Xregister to initial
0338 CA CA CA   DEX DEX DEX    state
033B C6 11      DEC LOOPCO
033D D0 04      BNE AGAIN
033F 20 69 02   JSR PAUSE
0342 60          RTS
0343 4C 16 03   AGAIN JMP DIGSTA

```

messages in Dutch:

```

0346 80 F1 BF BE F8 80
034C 80 9E BE 86 ED F8

```

Datum ingang: 18 juni 1979	Vervangt: -	d.d.: -	Ref.: Fer Weber
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TARGET (1-column)		<u>Nummer:</u>	
		<u>Blad:</u> 5 van 5	
<p>0352 80 F1 BF F9 86 80 0358 80 F6 BF F9 D0 F7 035E ED BE F1 F1 86 F9 -----e-----</p> <p>alternative messages in English: 0346 B7 BF 80 F4 86 F8 034C 80 F4 86 F8 80 80 0352 F1 BF BE B8 80 80 0358 F6 9C D0 D0 F7 EE 035E ED F8 9C F3 84 DE -----e-----</p>			
<u>Datum ingang:</u> 18 juni 1979	<u>Vervangt:</u> -	<u>d.d.:</u> -	<u>Ref.:</u> Fer Weber

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TARGET (6-column)			Nummer:																																																												
			Blad: 1 van 8																																																												
<p>Auteur: Fer Weber Gebr. Wienerstr. 139 5913 XS Venlo Holland</p> <p>Nadat TARGET 1-column draaiend was gekregen, dacht ik het even uit te breiden tot alle kolommen van het KIM-display.... Nou, mooi mis! Het werd een heel nieuw opgezet programma. Nu moest alles dat op het display komt gemultiplexed worden. Verder moest in het geheugen een "speelveld" (STATE) gemaakt worden waarin alle veranderingen gepleegd worden en waaruit de gegevens voor het display gehaald worden (SEGST). Nu ik toch bezig was werden er maar meteen twee spelletjes ineen gedraaid: zowel een "uit"schietspel als een "aan"schietspelletje. Verder werd er nu voor gezorgd dat pas na het loslaten van een toets het programma wordt vervolgd. Na het starten van het programma komt nu de vraag "a of b" op het display. Men kan nu met toets "A" kiezen voor het spelletje "uit"schietspel, of met toets "B" voor het spelletje "aan"schietspel. Schietknop is weer toets "3" en schietdoel is ook weer digit 4. Spel A: winst als alle streepjes uit, dus uitschietspel van aan-streepjes op digit 4. Spel B: winst als alle streepjes aan, dus aanschietspel van uit-streepjes op digit 4. Bv raak schieten op een kolom met al drie streepjes aan levert verlies op.</p> <p>.....</p> <p>z-page use</p> <table><tr><td>0000</td><td>DIGIPT</td><td>=digitpointer</td></tr><tr><td>0001</td><td>SEGMP</td><td>=segmentpointer</td></tr><tr><td>0002</td><td>STATPT</td><td>=statepointer</td></tr><tr><td>0003</td><td>STATST</td><td>=state store</td></tr><tr><td>0004</td><td>LOOPCO</td><td>=loopcounter</td></tr><tr><td>0005</td><td>REPEST</td><td>=repeat store</td></tr><tr><td>0006</td><td>ONOFST</td><td>=on/off store</td></tr><tr><td>0007</td><td>OFFPTR</td><td>=offpointer</td></tr><tr><td>0008</td><td>MESPT1</td><td>=messagepointer 1</td></tr><tr><td>0009</td><td>MESPT2</td><td></td></tr><tr><td>000A</td><td>MESPT3</td><td></td></tr><tr><td>000B</td><td>MESPT4</td><td></td></tr><tr><td>000E</td><td>PLAYST</td><td>=play a or b store</td></tr><tr><td>000F</td><td>TEMPPL</td><td>=temporary store play a or b</td></tr><tr><td>0010</td><td>SEGST1</td><td>=segmentcode store, digit 1</td></tr><tr><td>0011</td><td>SEGST2</td><td></td></tr><tr><td>0012</td><td>SEGST3</td><td></td></tr><tr><td>0013</td><td>SEGST4</td><td></td></tr><tr><td>0014</td><td>SEGST5</td><td></td></tr><tr><td>0015</td><td>SEGST6</td><td></td></tr></table>				0000	DIGIPT	=digitpointer	0001	SEGMP	=segmentpointer	0002	STATPT	=statepointer	0003	STATST	=state store	0004	LOOPCO	=loopcounter	0005	REPEST	=repeat store	0006	ONOFST	=on/off store	0007	OFFPTR	=offpointer	0008	MESPT1	=messagepointer 1	0009	MESPT2		000A	MESPT3		000B	MESPT4		000E	PLAYST	=play a or b store	000F	TEMPPL	=temporary store play a or b	0010	SEGST1	=segmentcode store, digit 1	0011	SEGST2		0012	SEGST3		0013	SEGST4		0014	SEGST5		0015	SEGST6	
0000	DIGIPT	=digitpointer																																																													
0001	SEGMP	=segmentpointer																																																													
0002	STATPT	=statepointer																																																													
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0006	ONOFST	=on/off store																																																													
0007	OFFPTR	=offpointer																																																													
0008	MESPT1	=messagepointer 1																																																													
0009	MESPT2																																																														
000A	MESPT3																																																														
000B	MESPT4																																																														
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TARGET (6-column)		Nummer:
		Blad: 2 van 8
	0016 STATE1 =state of playing field	
	0017 STATE2	
	0018 STATE3	
	0019 STATE4	
	001A STATE5	
	001B STATE6	
	001C STATE7	
	001D STATE8	
	001E STATE9	
	001F STATEA	
	0020 STATEB	
	0021 KEYSTO =temporary key store	
0030 20 40 1F	INKEY JSR KEYIN	this is subroutine that waits
0033 20 6A 1F	JSR GETKEY	till key is released
0036 85 21	STA KEYSTO	
0038 C9 15	CMP imm	no key?
003A F0 09	BEQ TORTS	
003C 20 6A 1F	INKEYC JSR GETKEY	
003F C5 21	CMP KEYSTO	
0041 F0 F9	BEQ INKEYC	
0043 A5 21	LDA KEYSTO	
0045 60	TORTS RTS	
0046 A2 0B	ISTATE LDX imm	this is subroutine that fills
0048 95 15	FSTATE STA z-p,X	STATE1 to STATEB in page 0
004A CA	DEX	with value in accumulator
004B D0 FB	BNE FSTATE	
004D 60	RTS	
004E 20 65 00	MESCON JSR PAUSE	
0051 20 A0 03	JSR MESSHO	
0054 A5 04	LOOPC LDA LOOPCO	get loopcounter
0056 F0 08	BEQ REPEAT	
0058 A6 01	LDX SEGMP	get segmentpointer
005A 20 6D 03	JSR DIGSTA	
005D 4C 54 00	JMP LOOPC	
0060 C6 05	REPEAT DEC REPEST	
0062 D0 EA	BNE MESCON	
0064 60	RTS	
0065 A2 80	PAUSE LDX imm	
0067 A0 FF	AA LDY imm	
0069 88	A DEY	
006A D0 FD	BNE A	
006C CA	DEX	
006D D0 F8	BNE AA	
006F 60	RTS	
0070 A4 02	TOSHOW LDY STATPT	get statepointer
0072 A6 01	LDX SEGMP	get segmentpointer

Datum ingang:

18 juni 1979

Vervangt:

-

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TARGET (6-column)		Nummer:
		Blad: 3 van 8
0074 20 57 03	JSR FILL	
0077 A6 01	SEGSTA LDX SEGMP	get segmentpointer
0079 20 63 03	JSR SHOW	
007C 60	RTS	
0080 A9 0F	RSTART LDA imm	initialize variables z-p
0082 85 01	STA SEGMP	
0084 A9 1A	LDA imm	
0086 85 03	STA STATST	
0088 A9 F9	LDA imm	
008A 85 07	STA OFFPTR	
008C A9 E1	LDA imm	
008E 85 08	STA MESPT1	
0090 A9 E7	LDA imm	
0092 85 09	STA MESPT2	
0094 A9 ED	LDA imm	
0096 85 0A	STA MESPT3	
0098 A9 F3	LDA imm	
009A 85 0B	STA MESPT4	
009C A9 80	LDA imm	
009E 20 46 00	JSR ISTATE	
00A1 A9 81	LDA imm	
00A3 85 1B	STA STATE6	
00A5 A9 0A	LDA imm	
00A7 85 05	STA REPEST	
00A9 60	RTS	
0200 20 80 00	START JSR RSTART	start and initialize
0203 EA EA EA	NOP NOP NOP	
0206 A5 08	PLAYAB LDA MESPT1	get messagepointer 1
0208 85 02	STA STATPT	to statepointer
020A 20 A4 03	JSR MESHOC	
020D 20 30 00	ANYKEY JSR INKEY	
0210 C9 15	CMP imm	no key?
0212 D0 12	BNE KEYA	
0214 A5 04	CONTIN LDA LOOPCO	get loopcounter
0216 F0 08	BEQ BACK	
0218 A6 01	LDX SEGMP	get segmentpointer
021A 20 6D 03	JSR DIGSTA	
021D 4C 0D 02	JMP ANYKEY	
0220 20 77 00	BACK JSR SEGSTA	
0223 4C 0D 02	JMP ANYKEY	
0226 C9 0A	KEYA CMP imm	key A?
0228 D0 05	BNE KEYB	
022A 85 0E	STA PLAYST	store play a
022C 4C 35 02	JMP ONCONT	
022F C9 0B	KEYB CMP imm	key B?
0231 D0 E1	BNE CONTIN	
0233 85 0E	STA PLAYST	store play b

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18 juni 1979

Vervangt:
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TARGET (6-column)		Nummer:
		Blad: 4 van 8
0235 A5 03	ONCONT LDA STATST	get state store
0237 C9 14	CMP imm	done?
0239 D0 02	BNE DONE	
023B A9 1A	LDA imm	statepointer to start
023D 85 03	DONE STA STATST	to state store
023F 85 02	STA STATPT	and to statepointer
0241 A9 01	LDA imm	initialize on
0243 85 06	STA ONOFST	to on/off store
0245 20 70 00	JSR TOSHOW	
0248 20 30 00	KEY JSR INKEY	
024B C9 15	CMP imm	no key?
024D D0 24	BNE GOKEY	
024F A5 04	LDA LOOPCO	get loopcounter
0251 F0 08	BEQ ONOFF	
0253 A6 01	LDX SEGMP1	get segmentpointer
0255 20 6D 03	JSR DIGSTA	
0258 4C 48 02	JMP KEY	
025B A5 06	ONOFF LDA ONOFST	get on/off
025D F0 D6	BEQ ONCONT	
025F A5 02	LDA STATPT	get statepointer
0261 85 03	STA STATST	to state store
0263 C6 03	DEC STATST	- 1
0265 A5 07	LDA OFFPTR	get offpointer
0267 85 02	STA STATPT	to statepointer
0269 A9 00	LDA imm	initialize off
026B 85 06	STA ONOFST	to on/off store
026D 20 A4 03	JSR MESHOC	
0270 4C 48 02	JMP KEY	
0273 C9 13	GOKEY CMP imm	key GO?
0275 D0 03	BNE KEY3	
0277 4C 00 02	JMP START	
027A C9 03	KEY3 CMP imm	key 3?
027C D0 1A	BNE ILLKEY	no, therefore illegal key
027E A5 13	LDA SEGST4	digit 4 lit?
0280 D0 43	BNE HIT	
0282 A5 0E	MISS LDA PLAYST	no, get play
0284 85 0F	STA TEMPPL	store temporarily
0286 C9 0A	CMP imm	play A?
0288 D0 04	BNE MISSC	
028A A9 0B	LDA imm	yes, change to play B
028C 85 0F	STA TEMPPL	and store temporarily
028E A4 03	MISSC LDY STATST	get state store
0290 A6 01	LDX SEGMP1	get segmentpointer
0292 20 57 03	JSR FILL	
0295 4C C9 02	JMP HITCON	
0298 A5 09	ILLKEY LDA MESPT2	get messagepointer 2
029A 85 02	STA STATPT	to statepointer

Datum ingang:

18 juni 1979

Vervangt:

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d.d.:

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Ref.:

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TARGET (6-column)		Nummer:
		Blad: 5 van 8
029C 20 4E 00	JSR MESCO	
029F A9 0A	LDA imm	restore repeat
02A1 85 05	STA REPEST	
02A3 A5 0E	LDA PLAYST	get playstore
02A5 C9 0A	CMP imm	play A?
02A7 D0 08	BNE ILCONT	
02A9 A9 C9	LDA imm	initialize 3segs
02AB 20 46 00	JSR ISTATE	
02AE 4C 35 02	JMP ONCONT	
02B1 A9 81	ILCONT LDA imm	initialize 1segs
02B3 20 46 00	JSR ISTATE	
02B6 A9 80	LDA imm	initialize 0segs (blank)
02B8 85 17	STA STATE2	fill even states
02BA 85 19	STA STATE4	
02BC 85 1B	STA STATE6	
02BE 85 1D	STA STATE8	
02C0 85 1F	STA STATEA	
02C2 4C 35 02	JMP ONCONT	
02C5 A5 0E	HIT LDA PLAYST	get play
02C7 85 0F	STA TEMPPL	store temporarily
02C9 A5 0F	HITCON LDA TEMPPL	
02CB C9 0A	CMP imm	play A?
02CD D0 36	BNE B3SEGS	
02CF A5 13	LDA SEGST4	yes, what's in digit 4?
02D1 C9 80	CMP imm	0segs (blank)?
02D3 F0 10	BEQ MAKE1S	
02D5 C9 81	CMP imm	1segs?
02D7 D0 08	BNE A2SEGS	
02D9 A0 80	LDY imm	yes, load 0segs (blank)
02DB 20 B7 03	JSR STATCH	and change playing field
02DE 4C F5 02	JMP ALLBLA	check if all blanks
02E1 C9 C1	A2SEGS CMP imm	2segs?
02E3 D0 08	BNE A3SEGS	
02E5 A0 81	MAKE1S LDY imm	yes, load 1segs
02E7 20 B7 03	JSR STATCH	and change playing field
02EA 4C 35 02	JMP ONCONT	
02ED A0 C1	A3SEGS LDY imm	load 3segs
02EF 20 B7 03	JSR STATCH	and change playing field
02F2 4C 35 02	JMP ONCONT	
02F5 A2 15	ALLBLA LDX imm	load state 1 -1
02F7 E8	LOOPA INX	
02F8 E0 21	CPX imm	all states done?
02FA F0 45	BEQ WIN	
02FC B5 00	LDA z-p,X	no, get state
02FE C9 80	CMP imm	0segs (blank)?
0300 F0 F5	BEQ LOOPA	
0302 4C 35 02	JMP ONCONT	

Datum ingang:

18 juni 1979

Vervangt:

-

d.d.:

-

Ref.:

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TARGET (6-column)		Nummer:	
		Blad: 6 van 8	
0305 A5 13	B3SEGS LDA SEGST4	what's in digit 4?	
0307 C9 C9	CMP imm	3segs?	
0309 F0 40	BEQ LOSE		
030B C9 C1	CMP imm	2segs?	
030D D0 0E	BNE B1SEGS		
030F A0 C9	LDY imm	load 3segs	
0311 20 B7 03	JSR STATCH	and change playing field	
0314 A5 0E	LDA PLAYST	get play	
0316 C9 0A	CMP imm	play A?	
0318 D0 17	BNE ALL3S	check if all segments lit	
031A 4C 35 02	JMP ONCONT		
031D C9 81	B1SEGS CMP imm	1segs?	
031F D0 08	BNE B0SEGS		
0321 A0 C1	LDY imm	load 2segs	
0323 20 B7 03	JSR STATCH	and change playing field	
0326 4C 35 02	JMP ONCONT		
0329 A0 81	B0SEGS LDY imm	load 1segs	
032B 20 B7 03	JSR STATCH	and change playing field	
032E 4C 35 02	JMP ONCONT		
0331 A2 15	ALL3S LDX imm	load state 1 -1	
0333 E8	LOOPB INX		
0334 E0 21	CPX imm	all states done?	
0336 F0 09	BEQ WIN		
0338 B5 00	LDA z-p,X	no, get next state	
033A C9 C9	CMP imm	3segs?	
033C F0 F5	BEQ LOOPB		
033E 4C 35 02	JMP ONCONT		
0341 A5 0A	WIN LDA MESPT3	get messagepointer 3	
0343 85 02	STA STATPT	to statepointer	
0345 20 4E 00	JSR MESCON		
0348 4C 00 02	JMP START		
034B A5 0B	LOSE LDA MESPT4	get messagepointer 4	
034D 85 02	STA STATPT	to statepointer	
034F 20 4E 00	JSR MESCON		
0352 4C 00 02	JMP START		
0357 C8	FILL INY	statepointer +1	
0358 B9 00 00	LDA abs,Y	get segmentcode	
035B E8	INX	segmentpointer +1	
035C 95 00	STA z-p,X	store segmentcode	
035E E0 15	CPX imm	done?	
0360 D0 F5	BNE FILL		
0362 60	RTS		
0363 A9 30	SHOW LDA imm	initialize loopcounter	
0365 85 04	STA LOOPCO	sets <u>speed</u>	
0367 A5 06	LDA ONOFST	get on/off	
0369 D0 02	BNE DIGSTA		

Datum ingang:

18 juni 1979

Vervangt:

-

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-

Ref.:

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TARGET (6-column)		Number:
		Blad: 7 van 8
036B 46 04	LSR LOOPCO	make offperiod half onperiod
036D A9 07	DIGSTA LDA imm	initialize digitpointer
036F 85 00	STA DIGIPT	
0371 E6 00	DIGCON INC DIGIPT	digitpointer +2
0373 E6 00	INC DIGIPT	
0375 A5 00	LDA DIGIPT	get digitpointer
0377 C9 15	CMP imm	digit "7"?
0379 F0 1D	BEQ LOOPCN	
037B A9 7F	LITEUP LDA imm	
037D 8D 41 17	STA abs	padd =1
0380 A5 00	LDA DIGIPT	get digitpointer
0382 8D 42 17	STA abs	digit on
0385 E8	INX	segmentpointer +1
0386 B5 00	LDA z-p,X	get segmentcode
0388 8D 40 17	STA abs	segments on
038B A0 30	LDY imm	and wait
038D 88	WAIT DEY	
038E D0 FD	BNE WAIT	
0390 A9 00	LDA imm	segments off
0392 8D 40 17	STA abs	
0395 4C 71 03	JMP DIGCON	
0398 A9 00	LOOPCN LDA imm	digits off
039A 8D 42 17	STA abs	
039D C6 04	DEC LOOPCO	loopcounter -1
039F 60	RTS	
03A0 A9 01	MESSHO LDA imm	initialize on
03A2 85 06	STA ONOFST	to on/off store
03A4 A4 02	MESHOC LDY STATPT	get statepointer
03A6 A6 01	LDX SEGMP	get segmentpointer
03A8 C8	MESFIL INY	statepointer +1
03A9 B9 00 03	LDA abs,Y	get segmentcode
03AC E8	INX	segmentpointer +1
03AD 95 00	STA z-p,X	store segmentcode
03AF E0 15	CPX imm	done?
03B1 D0 F5	BNE MESFIL	
03B3 20 77 00	JSR SEGSTA	
03B6 60	RTS	
03B7 A6 03	STATCH LDX STATST	get state
03B9 E8 E8	INX INX	statepointer +4
03BB E8 E8	INX INX	
03BD EA	NOP	
03BE 94 00	STY z-p,X	load xsegs in state
03C0 E0 1E	CPX imm	
03C2 F0 15	BEQ TODEC	
03C4 E0 1D	CPX imm	
03C6 F0 11	BEQ TODEC	
03C8 E0 1C	CPX imm	
03CA F0 0D	BEQ TODEC	

Datum ingang:

18 juni 1979

Vervangt:

-

d.d.:

-

Ref.:

Fer Weber

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TARGET (6-column)

Nummer:

Blad:

8 van 8

03CC E0 1B	CPX imm	
03CE F0 11	BEQ RETURN	
03D0 E8 E8	INX INX	statepointer +6
03D2 E8 E8	INX INX	
03D4 E8 E8	INX INX	
03D6 94 00	STY z-p,X	load xsegs in state
03D8 60	RETURN RTS	
03D9 CA CA	TODEC DEX DEX	statepointer -6
03DB CA CA	DEX DEX	
03DD CA CA	DEX DEX	
03DF 94 00	STY z-p,X	load xsegs in state
03E1 60	RTS	

messages in Dutch:

03E2 F7 80 BF F1 80 FC	message 1
03E8 F1 BF F9 86 80 80	message 2
03EE 80 F6 BF F9 D0 F7	message 3
03F4 ED BE F1 F1 86 F9	message 4
03FA 00 00 00 00 00 00	off

alternative messages in English:

03E2 F7 80 BF D0 80 FC	message 1
03E8 F1 BF BE B8 80 80	message 2
03EE F6 BE D0 D0 F7 EE	message 3
03F4 FC BE ED F8 F9 DE	message 4
03FA 00 00 00 00 00 00	off

Datum ingang:

18 juni 1979

Vervangt:

-

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Ref.:

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AANVULLINGEN OP MICROCHESS 1.0

Nummer:

Blad:

1 van 6

Fer Weber, Gebr. Wienerstr. 139, 5913 XS Venlo, Holland.

Uitgekeken op de vijf gegeven openingen bij Microchess 1.0 voor de KIM-1? Ik heb er eens een aantal bijeengesprokkeld en gecoördereerd. Val niet direct over me heen als het bij tijd en wijle niet de meest ultramoderne versie is... ik ken ook alleen maar de spelregels. In ieder geval goed voor variaties.

	Nimzo-Indisch		Frans doorschuif		Caro-Kann doorschuif	
(00DB)	CC	43	CC	44	CC	44
1	14-34 0E 34 71-52	63-43 06 25 42	0F 33 53	0F 24 43	0F 33 55	0D 22 43
2	15-35 63-53	62-42 14-24	0E 34 44	0E 33 34	0E 34 44	0E 33 34
3	06-25 72-36	71-52 05-41	0F 43 45	0D 32 52	0F 43 42	05 35 42
4	13-23 65-45	64-54 12-32	0D 23 45	07 22 55	0D 35 35	0E 42 42
5	02-24 76-55	75-53 01-22	06 22 56	01 21 50	04 35 53	0F 24 52
6	01-22 64-44	76-55 13-33	09 27 35	0D 42 64	07 25 64	07 13 64
7	03-01r 73-71r	74-76r 04-06r	04 13 47	07 30 63	06 13 63	06 14 75
8	17-27 36-25	60-50 41-52	07 14 63	06 14 75	00 01 56	07 21 51
9	16-25 44-35	61-52 33-42	00 01 99	06 26 99	04 26 99	01 13 99
(00C0)	99	99	99	99	99	99

r = rokade, dus na gegeven zet nog een extra zet intoetsen (+ F!)
Eerste kolom speelt KIM met wit, tweede kolom speelt KIM met zwart.

Repertoire witspeler.

Datum ingang:

18 juni 1979

Vervangt:

-

d.d.:

-

Ref.:

Fer Weber

AANVULLINGEN OP MICROCHESS 1.0

Nummer:

Blad:

2 van 6

<u>Gesloten Siciliaan</u>	<u>Aljechinverdediging</u>	<u>Pirc-verdediging</u>
(00DB) CC 44	CC 44	CC 44
1 13-33 0F 06	13-33 0F 06	13-33 0F 06
65-45 33 25	71-52 33 25	64-54 33 25
45 52	06-25 0E 06	54 52
2 06-25 07 07	64-44 33 33	64-44 33 33
76-55 25 22	71-52 33 33	13-23 43 43
55 56	13-33 33 33	63-43 06 25
3 11-21 0A 0A	44-44 44 44	06-25 52 52
61-51 21 26	44-33 0F 06	71-52 0A 0A
51 66	25-33 33 33	16-26 26 26
4 02-11 04 04	02-35 04 06	75-64 04 04
72-61 11 16	44-56 35 21	05-16 16 16
61 61	75-42 51 51	67-47 07 07
5 14-24 0E 0E	42-51 0D 0D	01-22 22 22
64-54 24 23	65-45 26 32	01-22 22 22
54 45	04-40 01 0F	72-54 0F 0F
6 12-32 0C 0C	63-53 40 24	14-34 34 34
63-53 32 24	14-24 53 53	43-33 07 07
53 55	63-53 07 07	22-43 43 43
7 01-22 06 06	14-24 24 22	43 43
71-63 22 14	76-55 55 64	0F 0F
63 75	01-13 06 04	43 43
8 03-01r 00 00	72-63 13 14	54-43 0F 0F
73-71r 01 06	03-01r 00 00	34-43 43 43
72 63	73-71r 01 01	73-43 00 00
9 05-14 05 03	72-63 03 03	04-06r 06 06
77-76 14 01	00-01 01 99	
(00C0) 99 99		

Repertoire witspeler.

Datum ingang:

18 juni 1979

Vervangt:

d.d.:

Ref.:

Fer Weber

AANVULLINGEN OP MICROCHESS 1.0

Nummer:

Blad:

3 van 6

Frans doorschuif

13-33	0F	64-44	44
63-53	33	14-24	0F
	53		24
14-34	0E	63-43	43
64-44	34	13-33	0E
	44		33
33-43	0F	44-34	34
65-45	43	12-32	0D
	45		32
15-25	0D	62-52	52
76-55	25	01-22	07
	55		22
01-22	06	76-55	55
74-56	22	03-21	01
	56		21
02-24	04	75-53	53
45-34	24	32-43	0D
	34		43
25-34	0D	52-43	43
75-64	34	02-13	05
	64		13
03-01r	00	74-76r	75
55-34	01	22-43	07
	34		43
22-34	06	55-43	43
56-34	34	21-43	01
	99		43
			99

Repertoire zwartspeler.

Weens

64-44	0F	14-34	44
14-34	33		0F
	43		34
71-52	07	71-52	52
01-22	25	01-22	07
	55		22
75-42	04	75-42	42
05-32	35	05-32	04
	45		32
73-46	01	73-46	46
16-26	31	16-26	0A
	51		26
46-55	01	46-55	55
06-25	01	06-25	06
	22		25
76-64	52	76-64	64
13-23	06	13-23	0E
	13		23
63-53	54	63-53	53
02-46	0E	02-46	05
	24		46
55-56	31	55-56	56
17-27	01	17-27	08
	21		27
65-45	50	65-45	45
03-14	0C	03-14	01
	32		14
	99		99

Scandinavisch

64-44	0E	13-33	44
13-33	33		0E
	33		33
44-33	01	44-33	44
03-33	33	03-33	01
	52		33
71-52	01	71-52	52
33-30	30	33-30	01
	41		30
61-41	01	61-41	41
30-41	41	30-41	01
	71		41
70-71	01	70-71	71
41-23	23	41-23	01
	43		23
63-43	06	63-43	43
06-25	25	06-25	06
	55		25
76-55	0D	76-55	55
12-22	22	12-22	0D
	53		22
75-53	0B	75-53	53
11-21	21	11-21	0B
	64		21
52-64	05	52-64	64
02-46	46	02-46	05
	99		46
			99

Repertoire witspeler.

Datum ingang:

18 juni 1979

Vervangt:

d.d.:

Ref.:

Fer Weber

AANVULLINGEN OP MICROCHESS 1.0

Nummer:

Blad:

4 van 6

	Hollands (00DB)	Siciliaan Najdorf	Nimzo-Indisch
1	14-34 62-42	13-33 65-45	14-34 71-52
2	11-21 71-52	01-22 64-54	15-35 63-53
3	02-11 61-51	14-34 45-34	06-25 72-36
4	01-22 72-61	22-34 71-52	13-23 73-71r
5	03-01r 73-71r	06-25 67-57	02-24 65-45
6	15-35 64-54	05-41 63-53	01-22 64-44
7	06-25 76-55	12-32 72-63	03-01r 76-55
8	34-44 55-47	04-22 74-65	17-27 44-35
9	22-14 65-45	03-05r 76-64	24-35 36-47
	43 0C 35 56 06 25 66 0A 26 55 04 16 75 00 06 42 0E 23 52 07 25 55 0E 35 54 07 25 55 0E 44 47 06 14 99	44 0D 32 55 0E 23 43 0D 43 43 06 25 52 09 20 36 0F 24 45 04 55 0C 32 63 01 22 65 00 05 99	43 06 25 42 0F 24 52 04 41 54 00 06 53 0D 32 55 0E 33 75 07 22 50 0E 33 75 07 22 50 0E 42 42 04 30 99

Repertoire zwartspeler

Datum ingang:

18 juni 1979

Vervangt:

d.d.:

Ref.:

Fer Weber

AANVULLINGEN OP MICROCHESS 1.0

Nummer:

Blad:

5 van 6

Neo-Cunningham

CC	13-33	63-43	12-32	43-32	01-22	72-63	02-35	71-52	06-25	52-33	25-33	64-44	35-24	44-33	24-33	73-71r	14-34	63-54	44	0F	34	45	0F	45	55	04	14	42	06	25	52	06	44	44	0E	33	53	0E	44	44	00	06	43	04	23	99					
	64-44	14-34	65-45	34-45	76-55	05-14	75-42	06-25	71-52	25-44	52-44	13-33	42-53	33-44	53-44	04-06r	63-43	14-23																																	

Spaans Engelse aanval

CC	13-33	63-43	01-22	76-55	02-46	67-57	46-37	71-52	04-13	66-46	37-26	72-63	03-01r	73-71r	15-25	64-44	33-44	75-31	44	0F	34	55	07	22	31	09	20	40	06	25	64	0E	31	51	04	14	75	00	06	52	0E	33	33	05	46	99								
	64-44	14-34	76-55	01-22	75-31	10-20	31-40	06-25	73-64	11-31	40-51	05-14	74-76r	04-06r	62-52	13-33	44-33	02-46																																				

Spaans Tsjigorin

(00DB)	CC	13-33	63-43	01-22	76-55	02-46	67-57	46-37	71-52	03-01r	72-63	02-03	66-46	37-26	64-54	15-25	73-71r	14-34	55-47	(00C0)	44	0F	34	55	07	22	31	09	20	40	06	25	75	04	14	74	0E	31	51	0E	23	52	00	06	43	07	30	99								
1		64-44	14-34	76-55	01-22	75-31	10-20	31-40	06-25	74-76r	05-14	75-74	11-31	40-51	13-23	62-52	04-06r	63-43	22-30																																					

Repertoire zwartspeler

Datum ingang:

18 juni 1979

Vervangt:

1

d.d.:

1

Ref.:

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AANVULLINGEN OP MICROCHESS 1.0	<u>Nummer:</u>
	<u>Blad:</u> 6 van 6

Orang Oetan (English)	CC	41
(00DB)	CC	41
1 16-36	0A	0F
63-43	36	34
	43	61
2 05-16	05	0C
62-52	16	25
	52	44
3 13-33	0F	04
72-36	33	41
	36	42
4 02-35	04	06
71-63	35	14
	63	45
5 12-32	0C	0E
64-44	32	33
	44	33
6 33-44	0F	04
36-54	44	23
	54	34
7 32-43	0C	0C
52-43	43	34
	43	37
8 04-40	01	06
63-51	40	26
	51	55
9 01-22	06	07
76-64	22	13
(00C0)	99	99

IS ER IEMAND DIE AAN KIM MICROCHESS 1.0 HEEFT ZITTEN
KNUTSELEN (LIEFST MET SUCCES NATUURLIJK) ????????????

SCHRIJF HET MIJ DAN EENS... FER WEBER
GEBR. WIENERSTR. 139
5913 XS VENLO

<u>Datum ingang:</u> 18 juni 1979	<u>Vervangt:</u> -	<u>d.d.:</u> -	<u>Ref.:</u> Fer Weber
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***** FILE 01 *****

PATCHES MICRO-ADE DEEL 6.

 AUTHOR S T WOLDRINGH
 KLIEVERINK 619
 AMSTERDAM.

IN DE 30 FILES WORDEN DE VOLGENDE PATCHES
 OF MICRO-ADE BESCHREVEN.

1. BY DE CASSETTE-LOAD ROUTINES WERD 1 CHARACTER VAN DE BUFFER VERLOREN , ZOWEL BY HET H-COMMANDO ALS OOK BY DE G NN,MM.
2. IN DE EDITOR IS HET ADRES VAN DE ROUTINE BUFIN VERKEERD GEWEEST.
3. BY HET T3 COMMANDO WORDT NU ZOWEL DE NIEUWE ALS OOK DE OUDE GRENZEN UITGEPRINT.
4. NA EEN CARRIAGE RETURN WORDEN 3 'NULL' CHARACTERS GEPRINT , OM DE TTY DE TYD TE GEVEN NAAR HET BEGIN VAN DE REGEL TERUG TE KEREN.
5. BY HET STARTEN VAN MICRO-ADE WORDT OM DE DATUM GEVRAAGD ; DEZE WORDT BY DE PASS-2 EN DE SYMBOL-TABLE PRINTS IN DE KOP GEPLAATST.
6. BY T EN T1 WORDEN PAGINA'S GEPRINT, MET PAGINA-NUMMERS ED.
7. AAN HET EINDE VAN PASS-2 EN NA HET PRINTEN VAN DE SYMBOL-TABLES WORDT DE PAGINA AFGEMAAKT MET BLANCO REGELS (KOST SOMS WEL WAT PAPIER).
8. INDIEN BY PASS-2 PRINT? N GEGEVEN WORDT, WORDT BY BEEINDIGING VAN PASS-2 EEN '.' GEPRINT OM AAN TE DUIDEN , DAT ER WEER ID'S INGETIKT KUNNEN WORDEN.
9. DE 24K RAM WERKGEBIED HEEFT EEN NIEUWE VERDELING GEKREGEN TUSSEN SOURCE, TABLES EN OBJECT RUIMTE.
10. DE PAGINAGROOTTE VAN DE PASS-2 LISTING EN INDELING ERVAN ZYN GEWYZIGD (0A 2 CRLF'S NA DE KOP ; 60 REGELS/BLAD EN 4 CRLF'S VOOR DE VOLGENDE KOP).
11. TOEVOEGEN VAN HET T4 EN T5 COMMANDO, ZOWEL MET HET T4 (GESORTEERD OP DE NAAM VAN DE SYMBOLS) ALS OOK MET HET T5 (GESORTEERD OP DE ADRESSEN VAN DE SYMBOLS)

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0610:      ;   WORDT NAAST HET SYMBOL EN ZYN ADRES OOK
0620:      ;   DE FILENR + REGELNR GEPRINT , WAAR HET
0630:      ;   SYMBOL GEDEFINIEERD IS EN DAARNA ALLE
0640:      ;   FILENR'S + REGELNR'S , WAAR HET SYMBOL
0650:      ;   GEBRUIKT WORDT.
0660:      ;
0670:      ; 12. BY PASS-2 WORDT DE VRAAG 'XREF?'
0680:      ;   GESTELD ; INDIEN Y GEANTWOORD WORDT,
0690:      ;   WORDEN DE XREF-ENTRIES AAN DE XRE-TABLE
0700:      ;   TOEGEVOEGD, ANDERS NIET. OM DUS ALLEN DE
0710:      ;   ID'S-REGELNR'S TE VERKRYGEN , WAAR EEN
0720:      ;   EEN SYMBOL GEDEFINIEERD IS , MOET N GEGEVEN
0730:      ;   WORDEN. WORDT EEN PASS-2 HERHAALD ZONDER
0740:      ;   PASS-1 , DAN MOET OOK N GEANTWOORD
0750:      ;   WORDEN , OMDAT ANDERS ALLE XREF'S VAN
0760:      ;   PASS-2 DUBBEL IN TABEL Zouden KOMEN,
0770:      ;
0780:      ; OPMERKINGEN.
0790:      ; - DE SYMBOLTABLE ENTRIES ZYN 8 BYTES
0800:      ;   LANG GEWORDEN TEGEN VROEGER 6 BYTES.
0810:      ; - PER XREF-ENTRY WORDEN 5 BYTES GEBRUIKT
0820:      ; - BY DE NU GEBRUIKTE VERDELING VAN HET RAM
0830:      ;   (5K SYMBOL EN 14K XREF) KUNNEN 640 SYMBOLS
0840:      ;   EN 2867 XREF-ENTRIES OPGENOMEN WORDEN.
0850:      ; - MOCHT DE XREF-TABLE OVERLOPEN DAN WORDT DIT
0860:      ;   NIET GEMELD , DOCH WEL VOORKOMEN.
0870:      ;
0880:      ; - BY ALLE PATCHES IS ER VAN UIT GEGAAN, DAT
0890:      ;   DE PATCHES OP MICRO-ADE DEEL 1 TM DEEL 5
0900:      ;   AANGEBRACHT ZYN (ZIE VORIGE KIMKENNERS)
0910:      ;   IS DIT NIET GEBEURD , DAN ZAL GEANALISEERD
0920:      ;   MOETEN WORDEN WAAR DEZE PATCHES
0930:      ;   PRECIES AANGEBRACHT DIENEN TE WORDEN.
0940:      ;
0010:      ;   ***** FILE 02 *****
0020:      ;
0030:      ;   IN PATCHES USED FIELDS AND
0040:      ;   SUBROUTINES.
0050:      ;
0060:      15 00 NLO      *      $0015
0070:      16 00 NHI      *      NLO      +01
0080:      1A 00 LOPAR    *      $001A
0090:      1D 00 HIPAR    *      $001D
0100:      31 00 YCOM     *      $0031
0110:      3F 00 SLO      *      $003F
0120:      40 00 SHI      *      SLO      +01
0130:      41 00 ELO      *      SHI      +01
0140:      42 00 EHI      *      ELO      +01
0150:      4C 00 PASS     *      $004C
0160:      4D 00 PRFLAG   *      PASS     +01
0170:      54 00 CNT      *      $0054
0180:      55 00 XLO      *      CNT      +01
0190:      55 00 PAGE     *      XLO
0200:      56 00 XHI      *      PAGE     +01
0210:      56 00 PGN      *      XHI
0220:      62 00 ID       *      $0062
0230:      63 00 PMODE    *      ID       +01
0240:      6D 00 SYMID    *      $006D
0250:      6F 00 SSLO     *      SYMID    +02
0260:      70 00 SSHI     *      SSLO     +01

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0270:      71 00  SXLO  *    SSHI  +01
0280:      72 00  SXHI  *    SXLO  +01
0290:      73 00  EXLO  *    SXHI  +01
0300:      74 00  EXHI  *    EXLO  +01
0310:      75 00  DATE  *    EXHI  +01
0320:      7B 00  PAGE2 *    DATE  +06
0330:      7C 00  PGN2  *    PAGE2  +01
0340:      7D 00  XRFIND *    PGN2  +01
0350:      7E 00  SAVE  *    XRFIND +01
0360:      00 01  BUFFER *    $0100
0370:      31 20  RESTRT *    $2031
0380:      A4 25  PRSYM  *    $25A4
0390:      E6 25  SETSY  *    $25E6
0400:      97 27  YSN02 *    $2797
0410:      A0 27  MESSY  *    $27A0
0420:      C1 27  DADS   *    $27C1
0430:      37 28  FNDSYM *    $2837
0440:      8B 29  GETARG *    $298B
0450:      0A 2C  MESSG  *    $2C0A
0460:      C9 2D  HEXAX  *    $2DC9
0470:      CD 2D  HEXOUT *    $2DCD
0480:      E7 2D  CRLF   *    $2DE7
0490:      EB 2D  HEXSP  *    $2DEB
0500:      EE 2D  OUTSP  *    $2DEE
0510:      F0 2D  OUTCH  *    $2DF0
0520:      41 2E  BUFIN  *    $2E41
0530:      A0 2E  OUTPUT *    $2EA0
0540:      ;
0010:      ; ***** FILE 03 *****
0020:      ;
0030: 2000      ;      ORG      $2000
0040:      ;
0050: 2000 20 47 25 ;      JSR      GETDAY TYPE IN THE DATE
0060: 2003 EA      ;      NOP
0070: 2004 20 3E 25 ;      JSR      CLDCRL CLD AND CRLF (C)
0080: 2007 EA      ;      NOP
0090:      ;
0010:      ; ***** FILE 04 *****
0020:      ;
0030: 2050      ;      ORG      $2050
0040:      ;
0050: 2050 20 41 2E ;      JSR      BUFIN  CORRECT WRONG JSR
0060:      ;
0010:      ; ***** FILE 05 *****
0020:      ;
0030: 217B      ;      ORG      $217B
0040:      ;
0050: 217B 4C 04 20 ;      JMP      COLD   GOTO NEW CLEAR-POINT
0060:      ;
0010:      ; ***** FILE 06 *****
0020:      ;
0030: 232F      ;      ORG      $232F
0040:      ;
0050: 232F 4C 3C 35 ;      JMP      TABLE GOTO NEW TABLE-ROUTINES
0060:      ;
0010:      ; ***** FILE 07 *****
0020:      ;
0030: 2514      ;      ORG      $2514
0040:      ;
0050:      ; USE THE OLD SPACE OF TABLE FOR

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0060:          ; NEW SUBROUTINES.
0070:          ;
0080:          ;
0090:          ; ROUTINES TO RESET THE XREF-POINTERS
0100:          ;
0110: 2514 A9 00   SETSY2 LDAIM $00
0120: 2516 85 6F   STAZ  SSLO
0130: 2518 85 54   STAZ  CNT
0140: 251A A9 05   LDAIM $05
0150: 251C 85 71   STAZ  SXLO
0160: 251E AD A9 2E LDA  SYMXRF
0170: 2521 85 70   STAZ  SSHI
0180: 2523 85 72   STAZ  SXHI
0190: 2525 60      RTS
0200:          ;
0210:          ;
0220:          ; ROUTINES TO ADD A TO XREF-POINTERS.
0230:          ;
0240: 2526 A2 00   DADS2 LDXIM $00
0250: 2528 A9 05   DADX2 LDAIM $05   ADD LENGTH OF ENTRY
0260: 252A 18      DADA2 CLC
0270: 252B 75 6F   ADCZX SSLO
0280: 252D 95 6F   STAZX SSLO
0290: 252F B5 70   LDAZX SSHI
0300: 2531 69 00   ADCIM $00
0310: 2533 95 70   STAZX SSHI
0320: 2535 B5 6F   LDAZX SSLO
0330: 2537 C5 73   CMPZ  EXLO
0340: 2539 B5 70   LDAZX SSHI
0350: 253B E5 74   SBCZ  EXHI
0360: 253D 60      RTS
0370:          ;
0380:          ;
0390:          ; ROUTINE TO CLEAR DEC-MODE
0400:          ; AND TO DO A CRLF
0410:          ;
0420: 253E D8      CLDCRL CLD
0430: 253F 20 E7 2D JSR   CRLF
0440: 2542 A9 FF   LDAIM $FF   RESET PAGE-MODE
0450: 2544 85 63   STAZ  PMODE
0460: 2546 60      RTS
0470:          ;
0480:          ;
0490:          ; ROUTINE TO ACCEPT THE DATE
0500:          ; AND TO STORE IT IN ZERO-PAGE.
0510:          ;
0520: 2547 20 3E 25 GETDAY JSR   CLDCRL MAKE SURE OF CLD
0530: 254A A0 00   LDYIM $00   TYPE 'ENTER DATE'
0540: 254C B9 67 25 GETDY1 LDAAY TEKST GET A CHAR
0550: 254F 20 F0 2D JSR   OUTCH PRINT IT
0560: 2552 C8      INY
0570: 2553 C0 14   CPYIM $14   ALL DONE ?
0580: 2555 D0 F5   BNE   GETDY1 IF NOT NEXT
0590: 2557 20 41 2E JSR   BUFIN ACCEPT DATE VIA BUFIN
0600: 255A A2 00   LDXIM $00
0610: 255C BD 00 01 GETDY2 LDAAX BUFFER TRANSFER DATE
0620: 255F 95 75   STAZX DATE TO ZERO-PAGE
0630: 2561 E8      INX
0640: 2562 E0 06   CPXIM $06   ALL DONE
0650: 2564 D0 F6   BNE   GETDY2 IF NOT , NEXT

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0660: 2566 60          RTS          FINISHED.
0670:                §
0680:                §
0690:                § TABLE OF DATE TEXT
0700:                §
0710: 2567 45          TEKST      =      'E
0720: 2568 4E          =          'N
0730: 2569 54          =          'T
0740: 256A 45          =          'E
0750: 256B 52          =          'R
0760: 256C 20          =          '
0770: 256D 44          =          'D
0780: 256E 41          =          'A
0790: 256F 54          =          'T
0800: 2570 45          =          'E
0810: 2571 20          =          '
0820: 2572 28          =          '('
0830: 2573 44          =          'D
0840: 2574 44          =          'D
0850: 2575 4D          =          'M
0860: 2576 4D          =          'M
0870: 2577 59          =          'Y
0880: 2578 59          =          'Y
0890: 2579 29          =          ')'
0900: 257A 20          =          '
0910:                §
0920:                §
0930:                § ROUTINE TO FILL THE LAST
0940:                § PAGE OF THE PASS-2 IN ORDER
0950:                § TO GET A FULL PAGE AS LAST ONE.
0960:                §
0970: 257B A5 4D          ENDPAG  LDAZ  PRFLAG WAS THERE A PKT
0980: 257D D0 0D          BNE    ENDPG3
0990: 257F E6 56          ENDPG1  INCZ  PGN
1000: 2581 10 06          BPL    ENDPG2
1010: 2583 20 E7 2D          JSR    CRLF  PRINT A DUMMY LINE
1020: 2586 4C 7F 25          JMP    ENDPG1
1030: 2589 20 8F 25          ENDPG2  JSR    4CRLF  JUST 4 MORE LINES
1040: 258C 4C 31 20          ENDPG3  JMP    RESTRT AND FINISHED
1050:                §
1060:                §
1070:                § ROUTINE TO PRINT 4 CRLF'S
1080:                §
1090: 258F A0 03          4CRLF  LDYIM $03  SET Y TO 4 TIMES
1100: 2591 20 E7 2D          4CRLF1 JSR    CRLF
1110: 2594 88                DEY
1120: 2595 D0 FA          BNE    4CRLF1 ALL DONE ?
1130: 2597 60                RTS      YES.
1140:                §
1150:                §
1160:                § ROUTINE OF SOME LOST
1170:                § INSTRUCTIONS.
1180:                §
1190: 2598 20 CD 2D          PRTID  JSR    HEXOUT PRINT IT
1200: 259B 20 EE 2D          JSR    OUTSP  AND A SPACE
1210: 259E 60                RTS
1220:                §
1230:                §
1240:                § TEXT FOR XREF QUESTION.
1250:                §

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1260: 259F 58      TEXT      =      'X
1270: 25A0 52      -      'R
1280: 25A1 45      =      'E
1290: 25A2 46      =      'F
1300: 25A3 3F      =      '?'
1310:              §
0010:              §      ***** FILE 08 *****
0020:              §
0030: 25EC              ORG      $25EC
0040:              §
0050: 25EC A9 08      LDAIM $08      XLO = SLO + 08
0060:              §
0010:              §      ***** FILE 09 *****
0020:              §
0030: 25F8              ORG      $25F8
0040:              §
0050: 25F8 4C 90 33  MAIN    JMP      RESSYM RESET SYMBOL-ADR
0060: 25FB EA      MAINR   NOP
0070:              §
0010:              §      ***** FILE 0A *****
0020:              §
0030: 2622              ORG      $2622
0040:              §
0050: 2622 20 A4 33      JSR      SPECIN GOTO SPECIAL BUFIN
0060:              §
0010:              §      ***** FILE 0B *****
0020:              §
0030: 26FB              ORG      $26FB
0040:              §
0050: 26FB 20 45 37      JSR      QUEST  ASK XREF AND SAVE-ID
0060:              §
0010:              §      ***** FILE 0C *****
0020:              §
0030: 271D              ORG      $271D
0040:              §
0050: 271D 4C 7B 25      JMP      ENDPAG GOTO MAKE THE PAGE FULL
0060:              §
0010:              §      ***** FILE 0D *****
0020:              §
0030: 272F              ORG      $272F
0040:              §
0050: 272F 20 B5 33      JSR      GTARG  GOTO SPECIAL GETARG
0060:              §
0010:              §      ***** FILE 0E *****
0020:              §
0030: 27C3              ORG      $27C3
0040:              §
0050: 27C3 A9 08      DADX   LDAIM $08      ADD 8
0060:              §
0010:              §      ***** FILE 0F *****
0020:              §
0030: 2837              ORG      $2837
0040:              §
0050: 2837 A9 F8      FNDSBL LDAIM $F8      LENTGH IS 8
0060:              §
0010:              §      ***** FILE 10 *****
0020:              §
0030: 287F              ORG      $287F
0040:              §
0050: 287F 20 B5 33      JSR      GTARG  GET ARG WITHOUT

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0060:          §  STORING A XREF
0070:          §
0010:          §  ***** FILE 11 *****
0020:          §
0030: 2894          §  ORG    $2894
0040:          §
0050: 2894 4C FD 33  ADTABL JMP   INSID  ALSO INSERT THE
0060: 2897 EA          ADTBLR NOP           SYMID IN SYMBOL-ENTRY
0070:          §
0010:          §  ***** FILE 12 *****
0020:          §
0030: 29B0          §  ORG    $29B0
0040:          §
0050: 29B0 4C 5C 34  JMP    STRXRF STORE XREF-ENTRY
0060: 29B3 EA          OKS1  NOP
0070: 29B4 EA          NOP
0080:          §
0010:          §  ***** FILE 13 *****
0020:          §
0030: 29FD          §  ORG    $29FD
0040:          §
0050: 29FD 20 E4 33  JSR    M4CRLF AT THE END OF A PAGE
0060: 2A00 EA          NOP           4 SPACE LINES FOR CUTTING
0070: 2A01 EA          NOP           (IF PRFLAG IS ON)
0080: 2A02 EA          NOP
0090: 2A03 EA          NOP
0100: 2A04 EA          NOP
0110:          §
0010:          §  ***** FILE 14 *****
0020:          §
0030: 2A12          §  ORG    $2A12
0040:          §
0050: 2A12 20 00 35  JSR    TOPPRT PRINT NEW SORT OF
0060: 2A15 EA          NOP           HEADER OF THE PAGE
0070: 2A16 EA          NOP
0080: 2A17 EA          NOP
0090: 2A18 EA          NOP
0100:          §
0010:          §  ***** FILE 15 *****
0020:          §
0030: 2A2D          §  ORG    $2A2D
0040:          §
0050: 2A2D A0 02      LDYIM $02   THREE CRLF AFTER HEADER
0060:          §
0010:          §  ***** FILE 16 *****
0020:          §
0030: 2A35          §  ORG    $2A35
0040:          §
0050: 2A35 A9 C4      LDAIM $C4   CORRECT NUMBERS OF LINES
0060:          §  DUE TO THE 4 CRLF'S
0070:          §
0010:          §  ***** FILE 17 *****
0020:          §
0030: 2C4E          §  ORG    $2C4E
0040:          §
0050: 2C4E 40          =     $40   NO 'PAGE' YET
0060:          §
0010:          §  ***** FILE 18 *****
0020:          §
0030: 2E11          §  ORG    $2E11

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0040: ;
0050: 2E11 20 EC 33 JSR OUT-0D OUTPUT 0D + 3 * 00
0060: ;
0010: ; ***** FILE 19 *****
0020: ;
0030: 2EA3 ORG $2EA3
0040: ;
0050: ; NEW RAM-DIVISIONS
0060: ;
0070: 2EA3 53 SOURCM = $53 SOURCE-TABLE - 1
0080: 2EA4 54 SOURCE = $54 START OF SOURCE-TABLE
0090: 2EA5 64 SOURCF = $64 END OF SOURCE-TABLE
0100: 2EA6 40 SYMBOL = $40 START OF SYMBOL-TABLE
0110: 2EA7 54 SYMF = $54 END OF SYMBOL-TABLE
0120: 2EA8 9C OBJECT = $9C START OF OBJECT-BUFFER
0130: 2EA9 64 SYMXRF = $64 START OF XREF-TABLE
0140: 2EAA 9C SYMMAX = $9C END OF XREF-TAB
0150: 2EAB EA NOP
0160: 2EAC 20 98 25 ERID JSR PRTID REPLACE INSTRUCTIONS
0170: ;
0010: ; ***** FILE 1A *****
0020: ;
0030: 2EE9 ORG $2EE9
0040: ;
0050: 2EE9 D0 C1 BNE ERID JUMP TO NEW ERID
0060: ;
0010: ; ***** FILE 1B *****
0020: ;
0030: 30D9 ORG $30D9
0040: ;
0050: 30D9 E9 06 SBCIM $06 CORRECT SMALL ERROR
0060: ;
0010: ; ***** FILE 1C *****
0020: ;
0030: 3390 ORG $3390
0040: ;
0050: ;
0060: ; ROUTINE TO RESET THE ADDRESS-
0070: ; POINTERS OF THE XREF-TABLE AND
0080: ; TO RESET THE SYMID
0090: ;
0100: 3390 A0 00 RESSYM LDYIM $00
0110: 3392 84 7D STYZ XRFIND CLEAR XRF-FLAG
0120: 3394 84 41 STYZ ELO ALSO RESET ELO
0130: 3396 84 6D STYZ SYMID
0140: 3398 84 6E STYZ SYMID +01
0150: 339A 84 71 STYZ SXLO
0160: 339C AD A9 2E LDA SYMXRF
0170: 339F 85 72 STAZ SXHI
0180: 33A1 4C FB 25 JMP MAINR AND RETURN
0190: ;
0200: ;
0210: ; ROUTINE TO PRINT A POINT DURING PASS-2
0220: ; IF THE PRINT IS OFF , TO RECOGNISE THE
0230: ; END OF THE PASS-2.
0240: ;
0250: 33A4 A5 4C SPECIN LDAZ PASS CHECK IF PASS-2
0260: 33A6 D0 09 BNE NOPUNT IF NOT, NO POINT
0270: 33A8 A5 4D LDAZ PRFLAG CHECK IF PRT IS OFF
0280: 33AA F0 05 BEQ NOPUNT IF NOT , NO POINT

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0290: 33AC A9 2E          LDAIM '
0300: 33AE 20 F0 2D        JSR   OUTCH
0310: 33B1 20 41 2E        NOPUNT JSR   BUFIN   GET ID'S
0320: 33B4 60              RTS
0330:                      ;
0340:                      ;
0350:                      ; ROUTINE TO GET A ARGUMENT
0360:                      ; WITHOUT STORING A XREF
0370:                      ;
0380: 33B5 20 BE 33        GTARG  JSR   PSSXLO  SAVE SXLO ETC
0390: 33B8 20 8B 29        JSR   GETARG  FIND SYMBOL
0400: 33BB 20 D1 33        JSR   PLSXLO  RESTORE SXLO ETC
0410:                      ;
0420:                      ;
0430:                      ; ROUTINE TO SAVE SXLO , SXHI,
0440:                      ; EXLO AND EXHI
0450:                      ;
0460: 33BE 48              PSSXLO PHA          SAVE ACCUM
0470: 33BF A5 71          LDAZ  SXLO
0480: 33C1 85 7E          STAZ  SAVE
0490: 33C3 A5 72          LDAZ  SXHI
0500: 33C5 85 7F          STAZ  SAVE   +01
0510: 33C7 A5 73          LDAZ  EXLO
0520: 33C9 85 80          STAZ  SAVE   +02
0530: 33CB A5 74          LDAZ  EXHI
0540: 33CD 85 81          STAZ  SAVE   +03
0550: 33CF 68              PLA          RESTORE ACCUM
0560: 33D0 60              RTS
0570:                      ;
0580:                      ;
0590:                      ; ROUTINE TO RESTORE SXLO,
0600:                      ; SXHI, EXLO, EXHI.
0610:                      ;
0620: 33D1 48              PLSXLO PHA          SAVE ACCUM
0630: 33D2 A5 81          LDAZ  SAVE   +03
0640: 33D4 85 74          STAZ  EXHI
0650: 33D6 A5 80          LDAZ  SAVE   +02
0660: 33D8 85 73          STAZ  EXLO
0670: 33DA A5 7F          LDAZ  SAVE   +01
0680: 33DC 85 72          STAZ  SXHI
0690: 33DE A5 7E          LDAZ  SAVE
0700: 33E0 85 71          STAZ  SXLO
0710: 33E2 68              PLA          RESTORE ACCUM, ...
0720: 33E3 60              RTS
0730:                      ;
0740:                      ;
0750:                      ; ROUTINE TO CHECK IF PRFLAG IS OFF
0760:                      ; IF NOT , TO PRINT 4 CRLF'S
0770:                      ;
0780: 33E4 A5 4D          M4CRLF LDAZ  PRFLAG CHECK FLAG
0790: 33E6 D0 03          BNE   M4CRL1
0800: 33E8 20 8F 25        JSR   4CRLF  PRINT THEM
0810: 33EB 60              M4CRL1 RTS          NO PRINT
0820:                      ;
0830:                      ;
0840:                      ; ROUTINE TO PRINT A CARRIAGE RETURN
0850:                      ; AND 3 TIMES A NULL TO GIVE THE TTY
0860:                      ; TIME TO RETURN TO THE BEGINNING OF
0870:                      ; THE LINE.
0880:                      ;

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0890: 33EC 20 A0 2E OUT-0D JSR OUTPUT A CR
0900: 33EF A9 03 LDAIM $03 SET COUNT TO 3
0910: 33F1 85 7E STAZ SAVE USE SAVE-FIELD
0920: 33F3 A9 00 OUTOD1 LDAIM $00
0930: 33F5 20 A0 2E JSR OUTPUT
0940: 33F8 C6 7E DECZ SAVE COUNT - 1
0950: 33FA D0 F7 BNE OUTOD1 NOT FINISHED YET
0960: 33FC 60 RTS READY.
0970: ;
0980: ;
0990: ; ROUTINE TO INSERT THE SYMID
1000: ; IN THE SYMBOL-TABLE AND TO
1010: ; PLACE TO FIRST XREF OF THIS
1020: ; SYMBOL IN THE XREF-TABLE
1030: ;
1040: 33FD A2 00 INSID LDXIM $00 FOR THE IX-INSTR
1050: 33FF 91 41 STAIY ELO STORE PC
1060: 3401 C8 INY Y ON SYMID-PLACE
1070: 3402 A5 6D LDAZ SYMID GET SYMID
1080: 3404 91 41 STAIY ELO AND STORE IT
1090: 3406 09 80 ORAIM $80 MAKE BIT ' = 1
1100: 3408 81 71 STAIX SXLO
1110: 340A 20 4A 34 JSR INSXLO ADD 1 TO SXLO
1120: 340D C8 INY
1130: 340E A5 6E LDAZ SYMID +01
1140: 3410 91 41 STAIY ELO THE SECOND PART OF IT
1150: 3412 81 71 STAIX SXLO
1160: 3414 20 29 34 JSR STRRST AND STORE THE REST
1170: 3417 18 CLC ADD 1 TO SYMID
1180: 3418 A5 6E LDAZ SYMID +01
1190: 341A 69 01 ADCIM $01
1200: 341C 85 6E STAZ SYMID +01
1210: 341E A5 6D LDAZ SYMID
1220: 3420 69 00 ADCIM $00
1230: 3422 85 6D STAZ SYMID
1240: 3424 A2 02 LDXIM $02 RESTORE INSTRUCTIONS
1250: 3426 4C 97 28 JMP ADTBLR AND GO BACK
1260: ;
1270: ;
1280: ; ROUTINE TO STORE THE ID AND
1290: ; THE LINE-NUMBERS IN THE XREF-TABLE
1300: ;
1310: 3429 20 4A 34 STRRST JSR INSXLO ADD 1 TO SXLO
1320: 342C A5 62 LDAZ ID GET ID
1330: 342E 81 71 STAIX SXLO AND STORE IT
1340: 3430 20 4A 34 JSR INSXLO
1350: 3433 A5 16 LDAZ NHI HIGH-ORDER NUMBER
1360: 3435 81 71 STAIX SXLO AND STORE IT
1370: 3437 20 4A 34 JSR INSXLO
1380: 343A A5 15 LDAZ NLO GET LOW-ORDER NUMBER
1390: 343C 81 71 STAIX SXLO AND STORE IT
1400: 343E 20 4A 34 JSR INSXLO
1410: 3441 A5 71 LDAZ SXLO AJUST MAX-POINTERS
1420: 3443 85 73 STAZ EXLO
1430: 3445 A5 72 LDAZ SXHI
1440: 3447 85 74 STAZ EXHI
1450: 3449 60 RTS
1460: ;
1470: ;
1480: ; ROUTINE TO ADD 1 TO SXLO

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1490: ;
1500: 344A E6 71 INSXLO INCZ SXLO
1510: 344C D0 0D BNE INSXLR
1520: 344E E6 72 INCZ SXHI ALSO 1 BY HIGH-ORDER
1530: 3450 A5 72 LDAZ SXHI CHECK IF NOT TOO FAR
1540: 3452 CD AA 2E CMP SYMMAX
1550: 3455 D0 04 BNE INSXLR NOT TOO FAR
1560: 3457 C6 71 DECZ SXLO FORCE SXLO AND SXHI
1570: 3459 C6 72 DECZ SXHI TO MAX - 1
1580: 345B 60 INSXLR RTS
1590: ;
1600: ;
1610: ; ROUTINE TO STORE A XREF
1620: ; ENTRY IN THE TABLE WITH
1630: ; SYMID FROM FOUND SYMBOL
1640: ;
1650: 345C A5 7D STRXRF LDAZ XRFIND CHECK IF BLOCKED
1660: 345E D0 12 BNE STRXF1
1670: 3460 A2 00 LDXIM $00
1680: 3462 C8 INY
1690: 3463 B1 3F LDAIY SLO GET SYMID
1700: 3465 B1 71 STAIX SXLO AND STORE IT
1710: 3467 20 4A 34 JSR INSXLO
1720: 346A C8 INY
1730: 346B B1 3F LDAIY SLO GET LAST PART
1740: 346D B1 71 STAIX SXLO AND STORE IT
1750: 346F 20 29 34 JSR STRRST
1760: 3472 A4 31 STRXF1 LDYZ YCOM RESTORE INSTR.
1770: 3474 B9 00 01 LDAAY BUFFER
1780: 3477 4C B3 29 JMP OKS1 AND RETURN
1790: ;
0010: ; ***** FILE 1D *****
0020: ;
0030: ; THE AREA OF 3480-3500 MUST BE KEPT FREE
0040: ; BECAUSE IT IS USED BY THE V-COMMAND
0050: ; TO MAKE SHURE OF THAT THIS FILE WILL BE
0060: ; GIVEN A ORG OF 3500.
0070: ;
0080: 3500 ORG $3500
0090: ;
0100: ; ROUTINE TO PRINT THE TOP OF
0110: ; A PASS-2 ASSEMBLYLIST.
0120: ;
0130: 3500 A5 4D TOPPRT LDAZ PRFLAG CHECK IF NO PRINT
0140: 3502 D0 35 BNE TOPPTS
0150: 3504 A0 23 LDYIM $23 PRINT FIRST PART
0160: 3506 B9 0A 2C TOPPT1 LDAAY MESSG GET A CHAR
0170: 3509 C9 40 CMPIM $40 END-CHAR ?
0180: 350B F0 06 BEQ TOPPT2 IF SO, STOP
0190: 350D 20 F0 2D JSR OUTCH IF NOT PRINT IT
0200: 3510 C8 INY NEXT ONE
0210: 3511 D0 F3 BNE TOPPT1
0220: 3513 20 EE 2D TOPPT2 JSR OUTSP TWO SPACE
0230: 3516 20 EE 2D JSR OUTSP
0240: 3519 A2 00 LDXIM $00 PRINT THE DATE
0250: 351B B5 75 TOPPT3 LDAZX DATE GET A DATE-NUMB
0260: 351D 20 F0 2D JSR OUTCH PRINT IT
0270: 3520 E8 INX NEXT ONE
0280: 3521 E0 06 CPXIM $06 DONE ?
0290: 3523 D0 F6 BNE TOPPT3 IF NOT, GO ON

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0300: 3525 20 EE 2D      JSR  OUTSP
0310: 3528 20 EE 2D      JSR  OUTSP
0320: 352B C8            TOPPT4 INY          GET NEXT CHAR
0330: 352C B9 0A 2C      LDAAY MESSG        OF HEADER
0340: 352F C9 40            CMPIM $40
0350: 3531 F0 06            BEQ  TOPPT5
0360: 3533 20 F0 2D      JSR  OUTCH
0370: 3536 4C 2B 35      JMP  TOPPT4        GOTO NEXT ONE
0380: 3539 A9 00      TOPPT5 LDAIM $00    FORCE BEQ ON RETURN
0390: 353B 60            RTS
0400:
0410:
0420: ; ROUTINE TO DETERMEN WHAT KIND OF
0430: ; TABLE PROCESSING IS WANTED AND
0440: ; TO EXECUTE THE DESIRED COMMAND
0450: ;
0460: 353C A6 1A      TABLE LDXZ  LOPAR
0470: 353E E0 02      CPXIM $02      ONLY ADDRESSES ?
0480: 3540 F0 04      BEQ  TABLE1
0490: 3542 E0 03      CPXIM $03      A COMPLETE TABLEPRINT ????
0500: 3544 D0 1D      BNE  TABLE3   IF SO , ANALYSE IT
0510: 3546 20 F9 36      TABLE1 JSR  PRTS1   PRINT ADDRESSES
0520: 3549 A6 1A      LDXZ  LOPAR    ONLY A PRINT ?
0530: 354B E0 02      CPXIM $02
0540: 354D F0 11      BEQ  TABLE2   YES, THEN FINITO
0550: 354F A5 1B      LDAZ  LOPAR    +01 NO, ALSO A CHANGE
0560: 3551 85 41      STAZ  ELO
0570: 3553 A5 1E      LDAZ  HIPAR    +01
0580: 3555 85 42      STAZ  EHI
0590: 3557 20 E7 2D      JSR  CRLF
0600: 355A A2 02      LDXIM $02      FORCE A NEW PRINT
0610: 355C 86 1A      STXZ  LOPAR    OF THE ADDRESSES
0620: 355E D0 E6      BNE  TABLE1
0630: 3560 4C 31 20      TABLE2 JMP  RESTRT   AND RETURN TO EDITOR
0640: 3563 A9 00      TABLE3 LDAIM $00   SET COUNTER
0650: 3565 85 7B      STAZ  PAGE2   TO INITIAL VALUES
0660: 3567 85 7C      STAZ  PGN2
0670: 3569 20 85 35      JSR  SORT1    SORT SYMBOLTABLE
0680: 356C A6 1A      LDXZ  LOPAR
0690: 356E E0 03      CPXIM $03
0700: 3570 30 09      BMI  TABLE4   ONLY SYMBOLPRT
0710: 3572 20 CD 35      JSR  SORT2    SORT XREFTABLE
0720: 3575 20 03 36      JSR  PRTXRF   PRINT XREF
0730: 3578 4C 7E 35      JMP  TABLE5   AND RETURN
0740: 357B 20 B7 36      TABLE4 JSR  PRNT    PRINT SYMBOLS
0750: 357E A5 7C      TABLE5 LDAZ  PGN2   FORCE ENDPG1 TO
0760: 3580 85 56      STAZ  PGN     FILL UP THE PAGE
0770: 3582 4C 7F 25      JMP  ENDPG1
0780:
0790:
0800: ; ROUTINE TO SORT THE SYMBOL-TABLE
0810: ; ON ADDRESSES IF LOPAR IS ODD
0820: ; OR ON SYMBOLS IF LOPAR IS EVEN
0830: ;
0840: 3585 20 E6 25      SORT1 JSR  SETSY   RSET SYMBOLPOINTERS
0850: 3588 A5 1A      LOOPT LDAZ  LOPAR   ADDRESSES OR SYMB
0860: 358A 4A            LSRA
0870: 358B B0 11      BCS  LOOPB
0880: 358D A0 00      LDYIM $00
0890: 358F B1 55      NEXTY LDAIY XLO   COMPARE

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0900: 3591 D1 3F          CMPIY SLO      FOR
0910: 3593 90 16          BCC  MOVEX    ALFA
0920: 3595 D0 27          BNE  LESS     SORT
0930: 3597 C8              INY
0940: 3598 C0 04          CPYIM $04     ALL CHAR COMPARED
0950: 359A D0 F3          BNE  NEXTY    IF NOT, NEXT
0960: 359C F0 20          BEQ  LESS     IF SO , NO MOVE
0970: 359E A0 04          LOOPB LDYIM $04
0980: 35A0 B1 55          LDAIY XLO     COMPARE
0990: 35A2 D1 3F          CMPIY SLO
1000: 35A4 C8              INY           FOR ADDRES
1010: 35A5 B1 55          LDAIY XLO     SORT
1020: 35A7 F1 3F          SBCIY SLO
1030: 35A9 B0 13          BCS  LESS
1040: 35AB A0 07          MOVEX LDYIM $07 EXCHANGE ENTRIES
1050: 35AD B1 3F          MOVET LDAIY SLO GET ONE OF SLO
1060: 35AF 48              PHA          SAVE IT
1070: 35B0 B1 55          LDAIY XLO     AND ONE OF XLO
1080: 35B2 91 3F          STAIY SLO     STORE IT IN SLO
1090: 35B4 68              PLA          GET SAVED SLO
1100: 35B5 91 55          STAIY XLO     AND STORE IT IN XLO
1110: 35B7 88              DEY          NEXT ONE
1120: 35B8 10 F3          BPL  MOVET    IF STILL ANY
1130: 35BA A9 01          LDAIM $01     INDICATE A MOVE
1140: 35BC 85 54          STAZ CNT
1150: 35BE 20 C1 27      LESS JSR  DADS     SLO = SLO +8
1160: 35C1 A2 16          LDXIM $16
1170: 35C3 20 C3 27      JSR  DADX     XLO = XLO + 8
1180: 35C6 90 C0          BCC  LOOPT    IF STILL ENTRIES, GO ON
1190: 35C8 A6 54          LDXZ CNT     ANY CHANGES ?
1200: 35CA D0 B9          BNE  SORT1    IF SO, FROM THE START
1210: 35CC 60          RTS          IF NOT READY
1220:
;
0010:          ; ***** FILE 1E *****
0020:          ;
0030:          ; ROUTINE TO SORT THE XREFTABLE ON
0040:          ; SYMID , ID , LINE-NUMBERS.
0050:          ;
0060: 35CD 20 14 25      SORT2 JSR  SETSY2 RESET XREFPOINTERS
0070: 35D0 A0 00          LOOPT2 LDYIM $00
0080: 35D2 B1 71          NEXTY2 LDAIY SXLO
0090: 35D4 D1 6F          CMPIY SSLO
0100: 35D6 90 09          BCC  MOVX2    IF SSLO < SXLO
0110: 35D8 D0 1A          BNE  LESS2    IF SSLO > SXLO
0120: 35DA C8              INY           COMPARE NEXT ENTRY
0130: 35DB C0 05          CPYIM $05     ALL CHAR HAD ?
0140: 35DD D0 F3          BNE  NEXTY2   IF NOT NEXT ONE
0150: 35DF F0 13          BEQ  LESS2    IF YES , A EQUAL ONE
0160: 35E1 A0 04          MOVX2 LDYIM $04 EXCHANGE SSLO
0170: 35E3 B1 6F          MOVET2 LDAIY SSLO AND SXLO
0180: 35E5 48              PHA
0190: 35E6 B1 71          LDAIY SXLO
0200: 35E8 91 6F          STAIY SSLO
0210: 35EA 68              PLA
0220: 35EB 91 71          STAIY SXLO
0230: 35ED 88              DEY
0240: 35EE 10 F3          BPL  MOVET2
0250: 35F0 A9 01          LDAIM $01     INDICATE A MOVE
0260: 35F2 85 54          STAZ CNT
0270: 35F4 20 26 25      LESS2 JSR  DADS2    SSLO = SSLO + 5

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0280: 35F7 A2 02          LDXIM $02      SXLO = SXLO + 5
0290: 35F9 20 28 25      JSR  DADX2
0300: 35FC 90 D2          BCC  LOOPT2    STILL ENTRIES
0310: 35FE A6 54          LDXZ  CNT      NO CHANGES ?
0320: 3600 D0 CB          BNE  SORT2    YES
0330: 3602 60            RTS           NO
0340:
0350:
0360:
0370:
0380:
0390:
0400:
0410:
0420: 3603 20 E6 25      PRTXRF JSR     SETSY  RESET SYMBOLPOINTERS
0430: 3606 20 EB 36      JSR     PRTSO    PRINT FIRST HEADER
0440: 3609 20 A4 25      PRTXF1 JSR     PRSYM  PRINT THE SYMBOL
0450: 360C A0 04          LDYIM $04
0460: 360E B1 3F          LDAIY SLO
0470: 3610 AA            TAX
0480: 3611 C8            INY
0490: 3612 B1 3F          LDAIY SLO
0500: 3614 20 C9 2D      JSR     HEXAX   AND ITS ADDRESS
0510: 3617 20 14 25      JSR     SETSY2  SET XREFPOINTERS
0520: 361A C8            INY
0530: 361B B1 3F          LDAIY SLO      GET SYMID
0540: 361D 09 80          DRAIM $80      MAKE BIT7 = 1
0550: 361F 85 6D          STAZ  SYMID    SAVE IT
0560: 3621 C8            INY
0570: 3622 B1 3F          LDAIY SLO
0580: 3624 85 6E          STAZ  SYMID    +01
0590: 3626 20 6F 36      JSR     FNDXRF  SEARCH FOR IT
0600: 3629 20 98 36      JSR     PRSYM   PRINT IT
0610: 362C 20 14 25      JSR     SETSY2  RESET XREFPOINTERS
0620: 362F A5 6D          LDAZ  SYMID
0630: 3631 29 7F          ANDIM $7F      MAKE BIT7 = 0
0640: 3633 85 6D          STAZ  SYMID
0650: 3635 20 6F 36      JSR     FNDXRF  FIND IT
0660: 3638 F0 0A          BEQ   PRTXF2   ONE IS FOUND
0670: 363A 20 DF 36      JSR     PRTLIN  PRINT THE LINE
0680: 363D 20 C1 27      JSR     DADS    GOTO NEXT SYMBOL
0690: 3640 90 C7          BCC   PRTXF1   STILL ONE IN THE TABLE
0700: 3642 B0 2A          BCS   PRTXF7   ALL DONE
0710: 3644 A9 FB          PRTXF2 LDAIM  $FB   FOUR XREF ON A LINE
0720: 3646 85 54          STAZ  CNT
0730: 3648 E6 54          PRTXF3 INCZ  CNT   SPACE LEFT ?
0740: 364A 30 0D          BMI   PRTXF5   YES
0750: 364C 20 DF 36      JSR     PRTLIN  NO, PRINT LINE
0760: 364F A0 18          LDYIM $18      PRINT 24 SPACES
0770: 3651 20 EE 2D      PRTXF4 JSR     OUTSP
0780: 3654 88            DEY
0790: 3655 D0 FA          BNE   PRTXF4
0800: 3657 F0 EB          BEQ   PRTXF2
0810: 3659 20 98 36      PRTXF5 JSR     PRSYM  PRINT XREF-ENTRY
0820: 365C 20 26 25      JSR     DADS2   GOTO NEXT ONE
0830: 365F B0 05          BCS   PRTXF6   NO MORE LEFT
0840: 3661 20 6F 36      JSR     FNDXRF  SEARCH FOR NEXT
0850: 3664 F0 E2          BEQ   PRTXF3   IF ONE PRT IT
0860: 3666 20 DF 36      PRTXF6 JSR     PRTLIN  FINISH LAST LINE
0870: 3669 20 C1 27      JSR     DADS    GOTO NEXT SYMBOL

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0880: 366C 90 9B          BCC   PRTXF1 IF STILL LEFT
0890: 366E 60          PRTXF7 RTS      ALL DONE
0900:
0910:
0920:          ; ROUTINE TO FIND A XREF WITH
0930:          ; THE SAME ID AS SYMID
0940:
0950: 366F A0 01      FNDXRF LDYIM $01
0960: 3671 B1 6F          LDAIY SSLO
0970: 3673 C5 6E          CMPZ  SYMID  +01
0980: 3675 88            DEY
0990: 3676 B1 6F          LDAIY SSLO
1000: 3678 E5 6D          SBCZ  SYMID
1010: 367A B0 07          BCS   MAYBE  EITHER > OR =
1020: 367C 20 26 25      FNDXF1 JSR   DADS2  GOTO NEXT ONE
1030: 367F 90 EE          BCC   FNDXRF
1040: 3681 B0 12          BCS   NOGO   NONE FOUND
1050: 3683 A0 00          MAYBE LDYIM $00
1060: 3685 A5 6D          LDAZ  SYMID
1070: 3687 D1 6F          CMPIY SSLO
1080: 3689 D0 0A          BNE   NOGO
1090: 368B A5 6E          LDAZ  SYMID  +01
1100: 368D C8            INY
1110: 368E D1 6F          CMPIY SSLO
1120: 3690 D0 03          BNE   NOGO
1130: 3692 A9 00          GOGO  LDAIM $00
1140: 3694 60            RTS
1150: 3695 A9 FF          NOGO  LDAIM $FF
1160: 3697 60            RTS
1170:
0010:          ;
0020:          ; ***** FILE 1F *****
0030:          ; ROUTINE TO PRINT THE XREF-ENTRY.
0040:          ;
0050: 3698 20 EE 2D      PRTSYM JSR   OUTSP  FIRST TWO SPACES
0060: 369B 20 EE 2D          JSR   OUTSP
0070: 369E A0 02          LDYIM $02
0080: 36A0 B1 6F          LDAIY SSLO  GET TAPE-ID
0090: 36A2 20 CD 2D      JSR   HEXOUT PRINT IT
0100: 36A5 A9 2D          LDAIM '-'
0110: 36A7 20 FO 2D      JSR   OUTCH
0120: 36AA C8            INY
0130: 36AB B1 6F          LDAIY SSLO  GET LINENUMB
0140: 36AD 48            PHA
0150: 36AE C8            INY
0160: 36AF B1 6F          LDAIY SSLO
0170: 36B1 AA            TAX
0180: 36B2 68            PLA
0190: 36B3 20 C9 2D      JSR   HEXAX
0200: 36B6 60            RTS
0210:
0220:
0230:          ; ROUTINE TO PRINT THE
0240:          ; SYMBOL-TABLE.
0250:          ;
0260: 36B7 20 E6 25      PRNT  JSR   SETSY  RESET POINTERS
0270: 36BA 20 EB 36          JSR   PRTSO  PRINT HEADER
0280: 36BD A9 FB          PRNT1 LDAIM $FB  FOUR ENTRIES / LINE
0290: 36BF 85 54          STAZ  CNT
0300: 36C1 E6 54          PRNT2 INCZ  CNT

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0310: 36C3 30 06          BMI   PRNT3  SPACE LEFT
0320: 36C5 20 DF 36      JSR   PRTLIN NO PRINT LINE
0330: 36C8 4C BD 36      JMP   PRNT1
0340: 36CB 20 A4 25      PRNT3 JSR   PRSYM
0350: 36CE A0 04          LDYIM $04   PRINT ADDRESS
0360: 36D0 B1 3F          LDAIY SLO
0370: 36D2 AA            TAX
0380: 36D3 C8            INY
0390: 36D4 B1 3F          LDAIY SLO
0400: 36D6 20 C9 2D      JSR   HEXAX
0410: 36D9 20 C1 27      JSR   DADS   TO NEXT ONE
0420: 36DC 90 E3          BCC   PRNT2  STILL ANY LEFT
0430: 36DE 60            RTS        NO
0440:                      ;
0450:                      ;
0460:                      ; ROUTINE TO PRINT A LINE AND
0470:                      ; TO KEEP TRACK OF PAGE-SIZE
0480:                      ;
0490: 36DF E6 7C          PRTLIN INCZ  PGN2
0500: 36E1 30 04          BMI   OKLIN
0510: 36E3 20 EB 36      JSR   PRTS0  PRINT HEADER
0520: 36E6 60            RTS
0530: 36E7 20 E7 2D      OKLIN JSR   CRLF  FINISH LINE
0540: 36EA 60            RTS
0550:                      ;
0560:                      ;
0570:                      ; ROUTINE TO PRINT HEADER
0580:                      ;
0590: 36EB 20 8F 25      PRTS0 JSR   4CRLF
0600: 36EE 20 F9 36      JSR   PRTS1
0610: 36F1 20 0E 37      JSR   PRTS2
0620: 36F4 A9 C4          LDAIM $C4
0630: 36F6 85 7C          STAZ  PGN2   RESET LINE COUNT
0640: 36F8 60            RTS
0650:                      ;
0660:                      ;
0670:                      ; ROUTINE TO PRINT FIRST PART OF
0680:                      ; THE HEADER LINE
0690:                      ;
0700: 36F9 A0 4B          PRTS1 LDYIM $4B
0710: 36FB 20 A0 27      JSR   MESSY
0720: 36FE AD A6 2E      LDA   SYMBOL PRINT ADDRESSES
0730: 3701 A2 00          LDXIM $00
0740: 3703 20 EB 2D      JSR   HEXSF
0750: 3706 A5 42          LDZ   EHI
0760: 3708 A6 41          LDXZ  ELO
0770: 370A 20 C9 2D      JSR   HEXAX
0780: 370D 60            RTS
0790:                      ;
0800:                      ;
0810:                      ; ROUTINE TO PRINT SECOND PART
0820:                      ; OF THE HEADER
0830:                      ;
0840: 370E 20 EE 2D      PRTS2 JSR   OUTSP
0850: 3711 20 EE 2D      JSR   OUTSP
0860: 3714 A2 00          LDXIM $00   PRINT DATE
0870: 3716 B5 75          PRTS2A LDAZX DATE
0880: 3718 20 F0 2D      JSR   OUTCH
0890: 371B EB            INX
0900: 371C E0 06          CPXIM $06   ALL DONE ?

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0910: 371E D0 F6          BNE  PRTS2A NO
0920: 3720 20 EE 2D      JSR  OUTSP
0930: 3723 A0 45          LDYIM $45  PRINT 'PAGE'
0940: 3725 B9 0A 2C      PRTS2B LDAAY MESSG
0950: 3728 C9 40          CMPIM $40  END ?
0960: 372A F0 06          BEQ  PRTS2C YES
0970: 372C 20 F0 2D      JSR  OUTCH  NO
0980: 372F C8            INY      NEXT ONE
0990: 3730 D0 F3          BNE  PRTS2B
1000: 3732 20 EE 2D      PRTS2C JSR  OUTSP
1010: 3735 A5 7B          LDAZ  PAGE2  PRINT PAGE-NUMB
1020: 3737 F8            SED
1030: 3738 18            CLC
1040: 3739 69 01          ADCIM $01  ADD 1 TO PAGE2
1050: 373B D8            CLD
1060: 373C 85 7B          STAZ  PAGE2
1070: 373E 20 CD 2D      JSR  HEXOUT
1080: 3741 20 BF 25      JSR  4CRLF
1090: 3744 60            RTS
1100:
1110: 3745 20 EE 2D      ; QUEST JSR  OUTSP  PRT ' XREF?'
1120: 3748 A0 00          LDYIM $00
1130: 374A B9 9F 25      QUEST1 LDAAY TEXT  GET A CHAR
1140: 374D 20 F0 2D      JSR  OUTCH  PRINT IT
1150: 3750 C8            INY
1160: 3751 C0 05          CPYIM $05  ALL DONE
1170: 3753 D0 F5          BNE  QUEST1 NO
1180: 3755 20 EE 2D      JSR  OUTSP
1190: 3758 20 97 27      JSR  YSNO2  GET ANSWER
1200: 375B D0 02          BNE  QUEST2 NO XREF
1210: 375D A9 00          LDAIM $00
1220: 375F 85 7D          QUEST2 STAZ  XRFIND
1230: 3761 A0 18          LDYIM $18  PRINT 'SAVE-ID?'
1240: 3763 20 A0 27      JSR  MESSY
1250: 3766 60            RTS      AND RETURN
1260:

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ADTABL	2894	11-0050				
ADTBLR	2897	11-0060	1C-1250			
BUFFER	0100	02-0360	07-0610	1C-1770		
BUFIN	2E41	02-0520	04-0050	07-0590	1C-0310	
CLDCRL	253E	07-0420	03-0070	07-0520		
CNT	0054	02-0170	02-0180	07-0130	1D-1140	1D-1190
			1E-0260	1E-0310	1E-0720	1E-0730
			1F-0290	1F-0300		
COLD	2004	03-0070	05-0050			
CRLF	2DE7	02-0480	07-0430	07-1010	07-1100	1D-0590
			1F-0530			
DADAR	252A	07-0260				
DADS	27C1	02-0420	1D-1150	1E-0680	1E-0870	1F-0410
DADSR	2526	07-0240	1E-0270	1E-0820	1E-1020	
DADX	27C3	0E-0050	1D-1170			
DADXR	2528	07-0250	1E-0290			
DATE	0075	02-0310	02-0320	07-0620	1D-0250	1F-0870
EHI	0042	02-0140	1D-0580	1F-0750		
ELO	0041	02-0130	02-0140	1C-0120	1C-1050	1C-1080
			1C-1140	1D-0560	1F-0760	
ENDPAG	257B	07-0970	0C-0050			
ENDPGQ	257F	07-0990	07-1020	1D-0770		
ENDPGR	2589	07-1030	07-1000			
ENDPGS	258C	07-1040	07-0980			
ERID	2EAC	19-0160	1A-0050			
EXHI	0074	02-0300	02-0310	07-0350	1C-0530	1C-0640
			1C-1440			
EXLO	0073	02-0290	02-0300	07-0330	1C-0510	1C-0660
			1C-1420			
FNDSBL	2837	0F-0050				
FNDSYM	2837	02-0430				
FNDXFR	367C	1E-1020				
FNDXRF	366F	1E-0950	1E-0590	1E-0650	1E-0840	1E-1030
GETARG	298B	02-0440	1C-0390			
GETDAY	2547	07-0520	03-0050			
GETDYQ	254C	07-0540	07-0580			
GETDYR	255C	07-0610	07-0650			
GOGO	3692	1E-1130				
GTARG	33B5	1C-0380	0D-0050	10-0050		
HEXAX	2DC9	02-0460	1E-0500	1F-0190	1F-0400	1F-0770
HEXOUT	2DCD	02-0470	07-1190	1F-0090	1F-1070	
HEXSP	2DEB	02-0490	1F-0740			
HIPAR	001D	02-0090	1D-0570			
ID	0062	02-0220	02-0230	1C-1320		
INSID	33FD	1C-1040	11-0050			
INSXLO	344A	1C-1500	1C-1110	1C-1310	1C-1340	1C-1370
			1C-1400	1C-1710		
INSXLR	345B	1C-1580	1C-1510	1C-1550		
LESS	35BE	1D-1150	1D-0920	1D-0960	1D-1030	
LESSR	35F4	1E-0270	1E-0110	1E-0150		
LOOPB	359E	1D-0970	1D-0870			
LOOPTR	3588	1D-0850	1D-1180			
LOOPTR	35D0	1E-0070	1E-0300			
LOPAR	001A	02-0080	1D-0460	1D-0520	1D-0550	1D-0610
			1D-0680	1D-0850		
MAIN	25F8	09-0050				
MAINR	25FB	09-0060	1C-0180			
MAYBE	3683	1E-1050	1E-1010			
MESSG	2C0A	02-0450	1D-0160	1D-0330	1F-0940	
MESSY	27A0	02-0410	1F-0710	1F-1240		

MOVET	35AD	1D-1050	1D-1120			
MOVETR	35E3	1E-0170	1E-0240			
MOVEX	35AB	1D-1040	1D-0910			
MOVXR	35E1	1E-0160	1E-0100			
MTCRLF	33E4	1C-0780	13-0050			
MTCRLQ	33EB	1C-0810	1C-0790			
NEXTY	358F	1D-0890	1D-0950			
NEXTYR	35D2	1E-0080	1E-0140			
NHI	0016	02-0070	1C-1350			
NLD	0015	02-0060	02-0070	1C-1380		
NOGO	3695	1E-1150	1E-1040	1E-1080	1E-1120	
NOFUNT	33B1	1C-0310	1C-0260	1C-0280		
OBJECT	2EA8	19-0120				
OKLIN	36E7	1F-0530	1F-0500			
OKSQ	29B3	12-0060	1C-1780			
OUTCH	2DF0	02-0510	07-0550	1C-0300	1D-0190	1D-0260
			1D-0360	1F-0110	1F-0880	1F-0970
			1F-1140			
OUTPUT	2EA0	02-0530	1C-0890	1C-0930		
OUTSP	2DEE	02-0500	07-1200	1D-0220	1D-0230	1D-0300
			1D-0310	1E-0770	1F-0050	1F-0060
			1F-0840	1F-0850	1F-0920	1F-1000
			1F-1110	1F-1180		
OUTMPD	33EC	1C-0890	18-0050			
OUTPDQ	33F3	1C-0920	1C-0950			
PAGE	0055	02-0190	02-0200			
PAGER	007B	02-0320	02-0330	1D-0650	1F-1010	1F-1060
PASS	004C	02-0150	02-0160	1C-0250		
PGN	0056	02-0210	07-0990	1D-0760		
PGNR	007C	02-0330	02-0340	1D-0660	1D-0750	1F-0490
			1F-0630			
PLSXLO	33D1	1C-0620	1C-0400			
PMODE	0063	02-0230	07-0450			
PRFLAG	004D	02-0160	07-0970	1C-0270	1C-0780	1D-0130
PRNT	36B7	1F-0260	1D-0740			
PRNTQ	36BD	1F-0280	1F-0330			
PRNTR	36C1	1F-0300	1F-0420			
PRNTS	36CB	1F-0340	1F-0310			
PRSYM	25A4	02-0380	1E-0440	1F-0340		
PRTID	2598	07-1190	19-0160			
PRTLIN	36DF	1F-0490	1E-0670	1E-0750	1E-0860	1F-0320
PRTSP	36EB	1F-0590	1E-0430	1F-0270	1F-0510	
PRTSQ	36F9	1F-0700	1D-0510	1F-0600		
PRTSR	370E	1F-0840	1F-0610			
PRTSRA	3716	1F-0870	1F-0910			
PRTSRB	3725	1F-0940	1F-0990			
PRTSRC	3732	1F-1000	1F-0960			
PRTSYM	3698	1F-0050	1E-0600	1E-0810		
PRTXFQ	3609	1E-0440	1E-0690	1E-0880		
PRTXFR	3644	1E-0710	1E-0660	1E-0800		
PRTXFS	3648	1E-0730	1E-0850			
PRTXFT	3651	1E-0770	1E-0790			
PRTXFU	3659	1E-0810	1E-0740			
PRTXFV	3666	1E-0860	1E-0830			
PRTXFW	366E	1E-0890	1E-0700			
PRTXRF	3603	1E-0420	1D-0720			
PSSXLO	33BE	1C-0460	1C-0380			
QUEST	3745	1F-1110	0B-0050			
QUESTQ	374A	1F-1130	1F-1170			
QUESTR	375F	1F-1220	1F-1200			

RESSYM	3390	1C-0100	09-0050			
RESTR	2031	02-0370	07-1040	1D-0630		
SAVE	007E	02-0350	1C-0480	1C-0500	1C-0520	1C-0540
			1C-0630	1C-0650	1C-0670	1C-0690
			1C-0910	1C-0940		
SETSY	25E6	02-0390	1D-0840	1E-0420	1F-0260	
SETSYR	2514	07-0110	1E-0060	1E-0510	1E-0610	
SHI	0040	02-0120	02-0130			
SLO	003F	02-0110	02-0120	1C-1690	1C-1730	1D-0900
			1D-0990	1D-1020	1D-1050	1D-1080
			1E-0460	1E-0490	1E-0530	1E-0570
			1F-0360	1F-0390		
SORTQ	3585	1D-0840	1D-0670	1D-1200		
SORTR	35CD	1E-0060	1D-0710	1E-0320		
SOURCE	2EA4	19-0080				
SOURCEF	2EA5	19-0090				
SOURCEM	2EA3	19-0070				
SPECIN	33A4	1C-0250	0A-0050			
SSHI	0070	02-0260	02-0270	07-0170	07-0290	07-0310
			07-0340			
SSLO	006F	02-0250	02-0260	07-0120	07-0270	07-0280
			07-0320	1E-0090	1E-0170	1E-0200
			1E-0960	1E-0990	1E-1070	1E-1110
			1F-0080	1F-0130	1F-0160	
STRRST	3429	1C-1310	1C-1160	1C-1750		
STRXFQ	3472	1C-1760	1C-1660			
STRXRF	345C	1C-1650	12-0050			
SXHI	0072	02-0280	02-0290	07-0180	1C-0170	1C-0490
			1C-0680	1C-1430	1C-1520	1C-1530
			1C-1570			
SXLO	0071	02-0270	02-0280	07-0150	1C-0150	1C-0470
			1C-0700	1C-1100	1C-1150	1C-1330
			1C-1360	1C-1390	1C-1410	1C-1500
			1C-1560	1C-1700	1C-1740	1E-0080
			1E-0190	1F-0220		
SYMBOL	2EA6	19-0100	1F-0720			
SYMF	2EA7	19-0110				
SYMID	006D	02-0240	02-0250	1C-0130	1C-0140	1C-1070
			1C-1130	1C-1180	1C-1200	1C-1210
			1C-1230	1E-0550	1E-0580	1E-0620
			1E-0640	1E-0970	1E-1000	1E-1060
			1E-1090			
SYMMAX	2EAA	19-0140	1C-1540			
SYMRF	2EA9	19-0130	07-0160	1C-0160		
TABLE	353C	1D-0460	06-0050			
TABLEQ	3546	1D-0510	1D-0480	1D-0620		
TABLER	3560	1D-0630	1D-0540			
TABLES	3563	1D-0640	1D-0500			
TABLET	357B	1D-0740	1D-0700			
TABLEU	357E	1D-0750	1D-0730			
TEKST	2567	07-0710	07-0540			
TEXT	259F	07-1260	1F-1130			
TOPPRT	3500	1D-0130	14-0050			
TOPPTQ	3506	1D-0160	1D-0210			
TOPPTR	3513	1D-0220	1D-0180			
TOPPTS	351B	1D-0250	1D-0290			
TOPPTT	352B	1D-0320	1D-0370			
TOPPTU	3539	1D-0380	1D-0140	1D-0350		
XHI	0056	02-0200	02-0210			
XLO	0055	02-0180	02-0190	1D-0890	1D-0980	1D-1010

			1D-1070	1D-1100		
XRFIND	007D	02-0340	02-0350	1C-0110	1C-1650	1F-1220
YCOM	0031	02-0100	1C-1760			
YSNOR	2797	02-0400	1F-1190			
TCRLF	258F	07-1090	07-1030	1C-0800	1F-0590	1F-1080
TCRLFQ	2591	07-1100	07-1120			

NLO	0015	02-0060	02-0070	1C-1380		
NHI	0016	02-0070	1C-1350			
LDPAR	001A	02-0080	1D-0460	1D-0520	1D-0550	1D-0610
		1D-0680	1D-0850			
HIPAR	001D	02-0090	1D-0570			
YCOM	0031	02-0100	1C-1760			
SLO	003F	02-0110	02-0120	1C-1690	1C-1730	1D-0900
			1D-0990	1D-1020	1D-1050	1D-1080
			1E-0460	1E-0490	1E-0530	1E-0570
			1F-0360	1F-0390		
SHI	0040	02-0120	02-0130			
ELO	0041	02-0130	02-0140	1C-0120	1C-1050	1C-1080
			1C-1140	1D-0560	1F-0760	
EHI	0042	02-0140	1D-0580	1F-0750		
PASS	004C	02-0150	02-0160	1C-0250		
PRFLAG	004D	02-0160	07-0970	1C-0270	1C-0780	1D-0130
CNT	0054	02-0170	02-0180	07-0130	1D-1140	1D-1190
			1E-0260	1E-0310	1E-0720	1E-0730
			1F-0290	1F-0300		
PAGE	0055	02-0190	02-0200			
XLO	0055	02-0180	02-0190	1D-0890	1D-0980	1D-1010
			1D-1070	1D-1100		
PGN	0056	02-0210	07-0990	1D-0760		
XHI	0056	02-0200	02-0210			
ID	0062	02-0220	02-0230	1C-1320		
PMODE	0063	02-0230	07-0450			
SYMID	006D	02-0240	02-0250	1C-0130	1C-0140	1C-1070
			1C-1130	1C-1180	1C-1200	1C-1210
			1C-1230	1E-0550	1E-0580	1E-0620
			1E-0640	1E-0970	1E-1000	1E-1060
			1E-1090			
SSLO	006F	02-0250	02-0260	07-0120	07-0270	07-0280
			07-0320	1E-0090	1E-0170	1E-0200
			1E-0960	1E-0990	1E-1070	1E-1110
			1F-0080	1F-0130	1F-0160	
SSHI	0070	02-0260	02-0270	07-0170	07-0290	07-0310
			07-0340			
SXLO	0071	02-0270	02-0280	07-0150	1C-0150	1C-0470
			1C-0700	1C-1100	1C-1150	1C-1330
			1C-1360	1C-1390	1C-1410	1C-1500
			1C-1560	1C-1700	1C-1740	1E-0080
			1E-0190	1E-0220		
SXHI	0072	02-0280	02-0290	07-0180	1C-0170	1C-0490
			1C-0680	1C-1430	1C-1520	1C-1530
			1C-1570			
EXLO	0073	02-0290	02-0300	07-0330	1C-0510	1C-0660
			1C-1420			
EXHI	0074	02-0300	02-0310	07-0350	1C-0530	1C-0640
			1C-1440			
DATE	0075	02-0310	02-0320	07-0620	1D-0250	1F-0870
PAGER	007B	02-0320	02-0330	1D-0650	1F-1010	1F-1060
PGNR	007C	02-0330	02-0340	1D-0660	1D-0750	1F-0490
			1F-0630			
XRFIND	007D	02-0340	02-0350	1C-0110	1C-1650	1F-1220
SAVE	007E	02-0350	1C-0480	1C-0500	1C-0520	1C-0540
			1C-0630	1C-0650	1C-0670	1C-0690
			1C-0910	1C-0940		
BUFFER	0100	02-0360	07-0610	1C-1770		
COLD	2004	03-0070	05-0050			
RESTR	2031	02-0370	07-1040	1D-0630		

SETSYR	2514	07-0110	1E-0060	1E-0510	1E-0610	
DADSR	2526	07-0240	1E-0270	1E-0820	1E-1020	
DADX	2528	07-0250	1E-0290			
DADAR	252A	07-0260				
CLDCRL	253E	07-0420	03-0070	07-0520		
GETDAY	2547	07-0520	03-0050			
GETDYQ	254C	07-0540	07-0580			
GETDYR	255C	07-0610	07-0650			
TEKST	2567	07-0710	07-0540			
ENDPAG	257B	07-0970	0C-0050			
ENDPGQ	257F	07-0990	07-1020	1D-0770		
ENDPGR	2589	07-1030	07-1000			
ENDPGS	258C	07-1040	07-0980			
TCRLF	258F	07-1090	07-1030	1C-0800	1F-0590	1F-1080
TCRLFQ	2591	07-1100	07-1120			
PRTID	2598	07-1190	19-0160			
TEXT	259F	07-1260	1F-1130			
PRSYM	25A4	02-0380	1E-0440	1F-0340		
SETSY	25E6	02-0390	1D-0840	1E-0420	1F-0260	
MAIN	25F8	09-0050				
MAINR	25FB	09-0060	1C-0180			
YSNOR	2797	02-0400	1F-1190			
MESSY	27A0	02-0410	1F-0710	1F-1240		
DADS	27C1	02-0420	1D-1150	1E-0680	1E-0870	1F-0410
DADX	27C3	0E-0050	1D-1170			
FNDSBL	2837	0F-0050				
FNDSYM	2837	02-0430				
ADTABL	2894	11-0050				
ADTBLR	2897	11-0060	1C-1250			
GETARG	298B	02-0440	1C-0390			
OKSQ	29B3	12-0060	1C-1780			
MESSG	2C0A	02-0450	1D-0160	1D-0330	1F-0940	
HEXAX	2DC9	02-0460	1E-0500	1F-0190	1F-0400	1F-0770
HEXOUT	2DCD	02-0470	07-1190	1F-0090	1F-1070	
CRLF	2DE7	02-0480	07-0430	07-1010	07-1100	1D-0590
			1F-0530			
HEXSP	2DEB	02-0490	1F-0740			
OUTSP	2DEE	02-0500	07-1200	1D-0220	1D-0230	1D-0300
			1D-0310	1E-0770	1F-0050	1F-0060
			1F-0840	1F-0850	1F-0920	1F-1000
			1F-1110	1F-1180		
OUTCH	2DF0	02-0510	07-0550	1C-0300	1D-0190	1D-0260
			1D-0360	1F-0110	1F-0880	1F-0970
			1F-1140			
BUFIN	2E41	02-0520	04-0050	07-0590	1C-0310	
OUTPUT	2EA0	02-0530	1C-0890	1C-0930		
SOURCM	2EA3	19-0070				
SOURCE	2EA4	19-0080				
SOURCE	2EA5	19-0090				
SYMBOL	2EA6	19-0100	1F-0720			
SYMF	2EA7	19-0110				
OBJECT	2EAB	19-0120				
SYMRF	2EA9	19-0130	07-0160	1C-0160		
SYMMAX	2EAA	19-0140	1C-1540			
ERID	2EAC	19-0160	1A-0050			
RESSYM	3390	1C-0100	09-0050			
SPECIN	33A4	1C-0250	0A-0050			
NOFUNT	33B1	1C-0310	1C-0260	1C-0280		
GTARG	33B5	1C-0380	0D-0050	10-0050		
PSSXLD	33BE	1C-0460	1C-0380			

PLSXLD	33D1	1C-0620	1C-0400			
MTCRLF	33E4	1C-0780	13-0050			
MTCRLQ	33EB	1C-0810	1C-0790			
OUTMPD	33EC	1C-0890	18-0050			
OUTPDQ	33F3	1C-0920	1C-0950			
INSID	33FD	1C-1040	11-0050			
STRRST	3429	1C-1310	1C-1160	1C-1750		
INSXLD	344A	1C-1500	1C-1110	1C-1310	1C-1340	1C-1370
			1C-1400	1C-1710		
INSXLR	345B	1C-1580	1C-1510	1C-1550		
STRXRF	345C	1C-1650	12-0050			
STRXFQ	3472	1C-1760	1C-1660			
TOPPRT	3500	1D-0130	14-0050			
TOPPTQ	3506	1D-0160	1D-0210			
TOPPTR	3513	1D-0220	1D-0180			
TOPPTS	351B	1D-0250	1D-0290			
TOPPTT	352B	1D-0320	1D-0370			
TOPPTU	3539	1D-0380	1D-0140	1D-0350		
TABLE	353C	1D-0460	06-0050			
TABLEQ	3546	1D-0510	1D-0480	1D-0620		
TABLER	3560	1D-0630	1D-0540			
TABLES	3563	1D-0640	1D-0500			
TARLET	357B	1D-0740	1D-0700			
TABLEU	357E	1D-0750	1D-0730			
SORTQ	3585	1D-0840	1D-0670	1D-1200		
LOOPTR	3588	1D-0850	1D-1180			
NEXTY	358F	1D-0890	1D-0950			
LOOPB	359E	1D-0970	1D-0870			
MOVEX	35AB	1D-1040	1D-0910			
MOVET	35AD	1D-1050	1D-1120			
LESS	35BE	1D-1150	1D-0920	1D-0960	1D-1030	
SORTR	35CD	1E-0060	1D-0710	1E-0320		
LOOPTR	35D0	1E-0070	1E-0300			
NEXTYR	35D2	1E-0080	1E-0140			
MOVXR	35E1	1E-0160	1E-0100			
MOVETR	35E3	1E-0170	1E-0240			
LESSR	35F4	1E-0270	1E-0110	1E-0150		
PRTXRF	3603	1E-0420	1D-0720			
PRTXFQ	3609	1E-0440	1E-0690	1E-0880		
PRTXFR	3644	1E-0710	1E-0660	1E-0800		
PRTXFS	3648	1E-0730	1E-0850			
PRTXFT	3651	1E-0770	1E-0790			
PRTXFU	3659	1E-0810	1E-0740			
PRTXFV	3666	1E-0860	1E-0830			
PRTXFW	366E	1E-0890	1E-0700			
FNDXRF	366F	1E-0950	1E-0590	1E-0650	1E-0840	1E-1030
FNDXFQ	367C	1E-1020				
MAYBE	3683	1E-1050	1E-1010			
GOGO	3692	1E-1130				
NOGO	3695	1E-1150	1E-1040	1E-1080	1E-1120	
PRTSYM	3698	1F-0050	1E-0600	1E-0810		
PRNT	36B7	1F-0260	1D-0740			
PRNTQ	36BD	1F-0280	1F-0330			
PRNTR	36C1	1F-0300	1F-0420			
PRNTS	36CB	1F-0340	1F-0310			
PRTLIN	36DF	1F-0490	1E-0670	1E-0750	1E-0860	1F-0320
OKLIN	36E7	1F-0530	1F-0500			
PRTSP	36EB	1F-0590	1E-0430	1F-0270	1F-0510	
PRTSQ	36F9	1F-0700	1D-0510	1F-0600		
PRTSR	370E	1F-0840	1F-0610			

PRTSRA	3716	1F-0870	1F-0910
PRTSRB	3725	1F-0940	1F-0990
PRTSRC	3732	1F-1000	1F-0960
QUEST	3745	1F-1110	0B-0050
QUESTQ	374A	1F-1130	1F-1170
QUESTR	375F	1F-1220	1F-1200