

PARSEC
DISASSEMBLED


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1          TITLE PARSEC
2          GROM 3
3          ORG 0
4          *****
5          *
6          *           P A R S E C           *
7          *
8          *           BY:   JIM DRAMIS      *
9          *                   PAUL URBANUS  *
10         *           DATE: 02/17/82       *
11         *
12         *
13         *****
14         ***
15         *** GROM READ ADDRESSES TO PLUG IN ROM CODE
16         ***
17         *** VELOC ABOUT LINE #750
18         ***
19         *** SPEECH PHRASES AVAILABLE IN GAME
20         ***
21         *PRESS FIRE TO BEGIN             1
22         *GOOD SHOT                       2
23         *COUNTDOWN                     3
24         *FIVE..                          4
25         *FOUR..                         5
26         *THREE..                        6
27         *TWO..                          7
28         *ONE..                          8
29         *ADVANCE TO NEXT LEVEL           9
30         *NICE SHOOTING                  10
31         *GREAT SHOT ...PILOT            11
32         *ENEMY DESTROYED                12
33         *LASER ON TARGET                13
34         *WARNING ...TIME TO REFUEL      14
35         *LASER OVERHEATED               15
36         *SORRY ...YOU ARE OUT OF FUEL   16
37         *EXTRA SHIP                    17
38         *CAUTION: ASTEROID BELT         18
39         *ALERT, ALIEN CRAFT ADVANCING   19
40         *ALERT, SHIPS ATTACKING         20
41         *CONGRATULATIONS!              21
42         *NICE FLYING                    22
43
44         *****
45         *           CPU     EQUATES       *
46         *****
0000      47     BESTSC EQU >00
0004      48     YOURSC EQU >04
0008      49     K      EQU >08      2 BYTE INDEX
0010      50     I      EQU >10      2 BYTES INDEX
0012      51     CHARS  EQU >12      1 BYTE INDEX
0013      52     J      EQU >13      1 BYTE INDEX
0013      53     INDX   EQU J          1 BYTE INDEX
0014      54     SOUND  EQU >14      2 BYTES - SOUND POINTER
0016      55     KEYFLG EQU >16      1 BYTE KEY PRESSED FLAG

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0018      56  DEMCNT      EQU   >18      1 BYTE DEMO TIME-OUT COUNTER
0020      57  TEMP20     EQU   >20      4 BYTE BUFFER
0074      58  KEYBRD     EQU   >74      KEY BOARD TO SCAN FROM
0075      59  KEY        EQU   >75      KEY CODE RETURNED
0076      60  JOYY       EQU   >76
0077      61  JOYX       EQU   >77
0078      62  GAMFLG     EQU   >78      GAME FLAG
0079      63  TIMER      EQU   >79
007A      64  MOTION     EQU   >7A
007C      65  STATUS     EQU   >7C
007E      66  SHFSAV     EQU   >7E      TEMP SAVE LOCATION FOR SHIFT COUNTS
0086      67  FRMPTR     EQU   >86      POINTER INTO SCREEN DATA
0088      68  PXL CNT    EQU   >88      DOWN COUNTER FOR MAX HORIZ PIXELS
0088      69  ***LASSAY  EQU   >8A
0088      70  TUNPAG     EQU   >8B
008C      71  INCSHP     EQU   >8C
008E      72  ATKFLG     EQU   >8E      1 BYTE
008F      73  INITAK     EQU   >8F      1 BYTE
0090      74  YXLOC1     EQU   >90
0094      75  YXLOC2     EQU   >94
0098      76  SPADR      EQU   >98
009C      77  CYCLE      EQU   >9C      1 BYTE: GAME CYCLE NUMBER
009E      78  FIRPNT     EQU   >9E      1 BYTE
009F      79  SHTFLG     EQU   >9F      1 BYTE: 0 NO ERASE, 1 ERASE LINE THAT WAS
00A0      80  SHFTBL     EQU   SHFT1    URB EQUATE
00A0      81  SHFT1     EQU   >A0      SHIFT CIRCULAR COUNT FOR SCENERY SCROLL
00A2      82  SHFT2     EQU   >A2      SHIFT CIRCULAR COUNT FOR SCENERY SCROLL
00A4      83  SAVR1     EQU   >A4      SAVED ADDR(R1) TO RETURN TO GPL INTERPRET
00A6      84  XOFF       EQU   >A6      X COORDINATE VDP OFFSET FOR STAR FIELD
00A8      85  ADRSAV     EQU   >A8      SAVED ADDRESS FOR LASER SHOT PIXEL SET/RES
00AA      86  RND        EQU   >AA      RANDOM NUMBER HOPEFULLY BETWEEN 0 - 7
00AC      87  SABCNT     EQU   >AC      # OF SPRITES BYTES TO READ/WRITE FOR ATTAC
00AE      88  HITNUM     EQU   >AE      1 BYTE: # OF HITS(COLOR NYBBLE) TO DESTROY
00AF      89  CLOCK1     EQU   >AF      CLOCK INTERVAL TIMER FOR ASTEROID BELT
00B0      90  RNDVEL     EQU   >B0      RANDOM NUMBER POINTER TO VELOCITY TABLE
00B1      91  PHOTFG     EQU   >B1      PHOTON BOOM FLAG: 0 = NOT SHOT, 1 = SHOT A
00B2      92  SCNCNT     EQU   >B2      SCREEN SUCCESS COUNT: #1 - 5
00B3      93  ATKSET     EQU   >B3      TABLE POINTER FOR NEXT ATTACK FLAG NUMBER
00B4      94  VELVAR     EQU   >B4      UP AND DOWN VELS FOR PLAYER SHIP
00B6      95  SHOTCT     EQU   >B6      COUNTER FOR NUMBER OF LASER SHOTS
00B7      96  HOTCHK     EQU   >B7      COUNTER TO CHECK AGAINST NUMBER OF LASER S
00B8      97  HOTFLG     EQU   >B8      TABLE POINTER AND HEAT SENSOR
00B9      98  SHIPS      EQU   >B9      NUMBER OF YOUR SHIPS LEFT
00BA      99  POINTS     EQU   >BA      NUMBER OF POINTS JUST SCORED IN HEX
00BC      100 FULCNT     EQU   >BC      SYSTEM COUNTER FOR OUT OF FUEL GAGE
00BD      101 FULPNT     EQU   >BD      POINTER TO FUEL CHARACTERS
00BE      102 SCRPNP     EQU   >BE      VDP SCREEN POSITIONS FOR FUEL CHARACTERS
00BF      103 MSGFLG     EQU   >BF      MESSAGE FLAG: 0 = NO MSG TO PUT OUT
00D6      104 CLRSCN     EQU   >D6      SCREEN TIME-OUT COUNTER
105
106      *****
107      *          COLOR EQUATES          *
108      *****
0011      109 BLACK      EQU   >11
110

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111 *****
112 *           TI SUBROUTINE EQUATES           *
113 *****
004A 114 FAC      EQU   >4A      2 BYTES: POINTER TO SMALL CHARS S
115
116 *****
117 *           PROGRAM BEGINS                 *
118 *****
119
6000 AA0101 120          DATA >AA,1,1,0,0,#0,0,#HEADER,0,0,0,0,0 GROM HEADER
6003 000000
6006 601000
6009 000000
600C 000000
600F 00
6010 000060 121  HEADER  DATA  #0,0,#BEGIN,0,0,0,0,0: 1ST USER PRO
6013 1D0650
6016 415253
6019 4543
122 *** UNLM UNLIST MULTI
6019 6347 123 ROMLNK DATA #RENTRY GROM READ ADR FOR GROM ENT
124 ***
125 ***
126 *** HIGH VDP AREA
127 ***
128 *** SOUND LISTS: >3800 - >3B00 RESERVE
129 *** FREE DATA: >3B00 - >3C00 RESERVE
130 *** AUTO MOTION: >3C00 - >3C80 RESERVE
131 *** SCROLL WRAP: >3C80 - >3D00 RESERVE(OVERFLOW BUFFER,SCRO
132 *** FREE DATA: >3D00 - >3FE0 RESERVE(TEMP STORE,NEW HIGH
133 *** HIGH SCORE: >3FE0 - >3FE5 HIGH SCORE SAVE AREA(6 ASCII
134 *** VARIABLE >3FF0 - >3FF1 R11 SAVED IN ROM CODE OF GPL
135 ***
6010 310006 136 BEGIN MOVE 6 FROM ROM(#ZEROS) TO RAM(>3FE0) ZERO OUT HIG
6020 AF3FE0
6023 6BBE
6025 350008 137 MOVE 8 FROM RAM(>850) TO RAM(>12B8) SAVE @COPYRI
6028 AF12B8
602B A850
6020 390008 138 BACK MOVE 8 FROM ROM(#VDPNOR) TO VDP(0) 2X+UNMAG+NOR
6030 006A53
6033 BF4A09 139 DST >0900,0FAC LOAD IN LARG
6036 00
6037 060016 140 CALL >16 GET THE CHAR
141 ***
142 *** TITLE SCREEN BEGIN
143 ***
603A 0411 144 BACK >11
603C 0720 145 ALL >20
603E 310020 146 MOVE 32 FROM ROM(#COLORS) TO RAM(>0380)
6041 A3806A
6044 8B
6045 08FE03 147 FMT YPT=3,XPT=10,':P A R S E C:'
6048 FF0A0A
604B 502041

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604E 205220
6051 532045
6054 2043FB
6057 08FE12      148      FMT      YPT=1B,XPT=4,':PRESS ANY KEY TO BEGIN:'
605A FF0415
605D 505245
6060 535320
6063 414E59
6066 204845
6069 592054
606C 4F2042
606F 454749
6072 4EFB
6074 350008      149      MOVE     B FROM RAM(>12B8) TO RAM(>850)      RES
6077 A850AF
607A 12B8
607C 08FE15      150      FMT      YPT=21,XPT=3,'>0A','':1982  TEXAS INSTRUMENTS:'
607F FF0300
6082 0A1631
6085 393832
6088 202054
608B 455841
608E 532049
6091 4E5354
6094 52554D
6097 454E54
609A 53FB
609C 8674      151      CLR      @KEYBRD
609E 8679      152      CLR      @TIMER
60A0 BE180A      153      ST       10,@DEMCNT      INIT TIME-OUT
60A3 CA793C      154      SCANTL  CHE      60,@TIMER      1      SECOND PAST?
60A6 40B1      155      BR       NODEC
60A8 8679      156      CLR      @TIMER      RE-INIT TIMER
60AA 9218      157      DEC      @DEMCNT      DECREASE 30 SEC COUNTER
60AC 40B1      158      BR       NODEC
60AE 0560B0      159      B        GOGAME      START UP "DEMO MODE"
60B1 03      160      NODEC   SCAN
60B2 8680D6      161      CLR      @>D6
60B5 40A3      162      BR       SCANTL      NO KEYS PRESSED YET
60B7 D67505      163      CEQ     5,@KEY      FUNCTION "QUIT" PRESSED?
60BA 40B0      164      BR       GOGAME      NO, SO FALL THROUGH AND START GAME
60BC 0B      165      EXIT    QUIT OUT(INTERPRETER DOES A BL @D)
60BD 390007      166      GOGAME  MOVE     7 FROM ROM(#VDPBIT) TO VDP(1)      2X+UNMAG+BIT
60C0 016A4C
60C3 350008      167      MOVE     B FROM RAM(>988) TO RAM(>12A8)      1  LARGE
60C6 AF12A8
60C9 A988
60CB 350008      168      ***     MOVE     B FROM ROM(#DONE) TO RAM(>12B0)      1  LARGE SPEC
60CE AF1328      169      MOVE     B FROM RAM(>990) TO RAM(>1328)      2  LARGE
60D1 A990
60D3 350008      170      ***     MOVE     B FROM ROM(#DTW0) TO RAM(>1330)      2  LARGE SPEC
60D6 AF13A8      171      MOVE     B FROM RAM(>998) TO RAM(>13A8)      3  LARGE
60D9 A998
    
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60DB 310008 172 MOVE 8 FROM ROM(#ENDARR) TO RAM(>12B0) END ARROW PA
60DE AF12B0
60E1 6BC4
60E3 310008 173 MOVE 8 FROM ROM(#MIDARR) TO RAM(>11F8) MIDDLE ARROW
60E6 AF11F8
60E9 6BCC
60EB 310008 174 MOVE 8 FROM ROM(#FNTARR) TO RAM(>1238) FRONT ARROW
60EE AF1238
60F1 6BD4
60F3 310008 175 MOVE 8 FROM ROM(#PNTARR) TO RAM(>1330) POINT ARROW
60F6 AF1330
60F9 6BDC
60FB BF4A09 176 DST >0900,0FAC LOAD IN LOWE
60FE 00
60FF 06004A 177 CALL >4A GET THE CHAR
6102 3500D8 178 MOVE 216 FROM RAM(>903) TO RAM(>900) MOVE UP CHAR
6105 A900A9
6108 03
6109 06648E 179 CALL PIXOUT CLEAR OUT 3
610C 350020 180 MOVE 32 FROM RAM(>908) TO RAM(>1260) a,b,c,d
610F AF1260
6112 A908
6114 350020 181 MOVE 32 FROM RAM(>928) TO RAM(>12E0) e,f,g,h
6117 AF12E0
611A A928
611C 350020 182 MOVE 32 FROM RAM(>948) TO RAM(>1360) i,j,k,l
611F AF1360
6122 A948
6124 350020 183 MOVE 32 FROM RAM(>968) TO RAM(>13E0) m,n,o,p
6127 AF13E0
612A A968
612C 350020 184 MOVE 32 FROM RAM(>988) TO RAM(>1460) q,r,s,t
612F AF1460
6132 A988
6134 350020 185 MOVE 32 FROM RAM(>9A8) TO RAM(>14E0) u,v,w,x
6137 AF14E0
613A A9A8
613C 350010 186 MOVE 16 FROM RAM(>9C8) TO RAM(>1560) y,z
613F AF1560
6142 A9C8
6144 310010 187 MOVE 16 FROM ROM(#SOLID) TO RAM(>1570) solid space
6147 AF1570
614A 6B44
614C BF4A09 188 DST >0900,0FAC LOAD SMALL C
614F 00
6150 060018 189 CALL >18 TI SUBROUTIN
6153 0411 190 BACK >11
191 ***
192 *** DEFINE CHARS FOR TOP AND MIDDLE
193 *** BOTTOM SCREEN PNT TO BE DATA ZEROS
194 *** AND ZERO OUT SCREEN AREA WHILE
195 *** YOUR AT IT
196 ***
6155 BF1010 197 DST >1000,0I
6158 00

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GPL ASSEMBLER	PARSEC	PAGE	6
6159 31001E 198 MOVEHL MOVE 30 FROM ROM(#HILLA1) TO RAM(@I)		GET HILL DAT	
615C B01074			
615F 15			
6160 A31000 199 DADD >001E,@I			
6163 1E			
6164 310002 200 MOVE 2 FROM ROM(#HILFIL) TO RAM(@I)		GET HILL DAT	
6167 B0106B			
616A A4			
616B A31000 201 DADD >0022,@I			
616E 22			
616F 31001E 202 MOVE 30 FROM ROM(#HILLA2) TO RAM(@I)		GET HILL DAT	
6172 B01074			
6175 33			
6176 A31000 203 DADD >001E,@I			
6179 1E			
617A 310002 204 MOVE 2 FROM ROM(#HILFIL) TO RAM(@I)		GET HILL DAT	
617D B0106B			
6180 A4			
6181 A31000 205 DADD >0022,@I			
6184 22			
6185 31001E 206 MOVE 30 FROM ROM(#HILLA3) TO RAM(@I)		GET HILL DAT	
6188 B01074			
618B 51			
618C A31000 207 DADD >001E,@I			
618F 1E			
6190 310002 208 MOVE 2 FROM ROM(#HILFIL) TO RAM(@I)		GET HILL DAT	
6193 B0106B			
6196 A4			
6197 A31000 209 DADD >0022,@I			
619A 22			
619B 31001E 210 MOVE 30 FROM ROM(#HILLA4) TO RAM(@I)		GET HILL DAT	
619E B01074			
61A1 6F			
61A2 A31000 211 DADD >001E,@I			
61A5 1E			
61A6 310002 212 MOVE 2 FROM ROM(#HILFIL) TO RAM(@I)		GET HILL DAT	
61A9 B0106B			
61AC A4			
61AD A31000 213 DADD >0022,@I			
61B0 22			
61B1 31001E 214 MOVE 30 FROM ROM(#HILLA5) TO RAM(@I)		GET HILL DAT	
61B4 B01074			
61B7 8D			
61B8 A31000 215 DADD >001E,@I			
61BB 1E			
61BC 310002 216 MOVE 2 FROM ROM(#HILFIL) TO RAM(@I)		GET HILL DAT	
61BF B0106B			
61C2 A4			
61C3 A31000 217 DADD >0022,@I			
61C6 22			
61C7 31001E 218 MOVE 30 FROM ROM(#HILLA6) TO RAM(@I)		GET HILL DAT	
61CA B01074			
61CD AB			
61CE A31000 219 DADD >001E,@I			
61D1 1E			


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61D2 310002 220      MOVE  2 FROM ROM(#HILFIL) TO RAM(@I)      GET HILL DAT
61D5 B0106B
61D8 A4
61D9 A31000 221      DADD  >0022,@I
61DC 22
61DD 31001E 222      MOVE  30 FROM ROM(#HILLA7) TO RAM(@I)      GET HILL DAT
61E0 B01074
61E3 C9
61E4 A31000 223      DADD  >001E,@I
61E7 1E
61E8 310002 224      MOVE  2 FROM ROM(#HILFIL) TO RAM(@I)      GET HILL DAT
61EB B0106B
61EE A4
61EF A31000 225      DADD  >0022,@I
61F2 22
61F3 31001E 226      MOVE  30 FROM ROM(#HILLA8) TO RAM(@I)      GET HILL DAT
61F6 B01074
61F9 E7
61FA A31000 227      DADD  >001E,@I
61FD 1E
61FE 310002 228      MOVE  2 FROM ROM(#HILFIL) TO RAM(@I)      GET HILL DAT
6201 B0106B
6204 A4
6205 A31000 229      DADD  >0022,@I
6208 22
6209 D71018 230      DCEQ  >1800,@I
620C 00
620D 4159 231      BR    MOVEHL
620F 350020 232      MOVE  32 FROM RAM(>A08) TO RAM(>1060)      A,B,C,D
6212 AF1060
6215 AA08
6217 350020 233      MOVE  32 FROM RAM(>A28) TO RAM(>10A0)      E,F,G,H
621A AF10A0
621D AA28
621F 350020 234      MOVE  32 FROM RAM(>A48) TO RAM(>10E0)      I,J,K,L
6222 AF10E0
6225 AA48
6227 350020 235      MOVE  32 FROM RAM(>A68) TO RAM(>1120)      M,N,O,P
622A AF1120
622D AA68
622F 350020 236      MOVE  32 FROM RAM(>A88) TO RAM(>1160)      Q,R,S,T
6232 AF1160
6235 AA88
6237 310008 237      MOVE  8 FROM ROM(#DT) TO RAM(>1178)      OVERRIDE T
623A AF1178
623D 6B2B
623F 350008 238      MOVE  8 FROM RAM(>AAD) TO RAM(>1230)
6242 AF1230
6245 AAA0
6247 350020 239      MOVE  32 FROM RAM(>AAB) TO RAM(>11A0)      U,V,W,X
624A AF11A0
624D AAA8
624F 310008 240      MOVE  8 FROM ROM(#DX) TO RAM(>11B8)      X
6252 AF11B8
6255 6B23

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GPL ASSEMBLER		PARSEC	PAGE	8
6257 350010	241	MOVE 16 FROM RAM(>AC8) TO RAM(>11E0)		Y,Z
625A AF11E0				
625D AAC8				
625F 350008	242	MOVE 8 FROM RAM(>900) TO RAM(>11F0)		SPACE
6262 AF11F0				
6265 A900				
6267 BF0809	243	DST >980,0K		
626A 80				
626B BF1012	244	DST >1220,0I		
626E 20				
626F 350008	245	MOR09 MOVE 8 FROM RAM(@K) TO RAM(@I)		0 -- 9
6272 B010B0				
6275 08				
6276 A30800	246	DADD >0008,0K		
6279 08				
627A A31000	247	DADD >0080,0I		
627D 80				
627E D71017	248	DCE0 >1720,0I		
6281 20				
6282 426F	249	BR MOR09		
6284 310020	250	MOVE 32 FROM ROM(#FUEL1) TO RAM(>1760)		FUEL DATA
6287 AF1760				
628A 6B54				
628C 310020	251	MOVE 32 FROM ROM(#FUEL5) TO RAM(>17A0)		FUEL DATA
628F AF17A0				
6292 6B74				
6294 310008	252	MOVE 8 FROM ROM(#FUEL9) TO RAM(>17E0)		FUEL DATA
6297 AF17E0				
629A 6B94				
629C 310010	253	MOVE 16 FROM ROM(#LEFTCH) TO RAM(>18E0)		BAR DATA
629F AF18E0				
62A2 6BA6				
62A4 310260	254	MOVE 608 FROM ROM(#DSPLT) TO RAM(>1C00)		GET SAB DATA
62A7 AF1C00				
62AA 668C				
62AC 310020	255	MOVE 32 FROM ROM(#SHPCHR) TO RAM(>1720)		SHIP >E4,>E5
62AF AF1720				
62B2 6B03				
62B4 310060	256	MOVE 96 FROM ROM(#DPHOT) TO RAM(>1E80)		GET SAB DATA
62B7 AF1E80				
62BA 68EC				
62BC 310100	257	MOVE 256 FROM ROM(#AST1) TO RAM(>1F00)		GET 8 ASTERI
62BF AF1F00				
62C2 694C				
62C4 3103E8	258	MOVE 1000 FROM ROM(#SHPSND) TO RAM(>3800)		GET ALL
62C7 AF3800				
62CA 70FD				
	259	***		
	260	***		
	261	***		
	262	DST >1800,0I		
62CC BF1018				
62CF 00				
62D0 066665	263	CALL SUBCHR		
62D3 BF1019	264	DST >1900,0I		
62D6 00				

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62D7 066665 265      CALL  SUBCHR
62DA BF101A 266      DST   >1A00,0I
62DD 00
62DE 066665 267      CALL  SUBCHR
62E1 310060 268      MOVE  96 FROM ROM(#MSG1) TO RAM(>1AAD)  REST OF BTM
62E4 AF1AA0
62E7 6A5B
62E9 350006 269      MOVE  6 FROM RAM(>3FED) TO RAM(>1AF8)  RESTORE HIGH
62PC AF1AF8
62EF AF3FED

270      ***
271      ***   SET CHARACTER COLORS FOR BOTTOM THIRD OF SCREEN
272      ***
62F2 BF1030 273      DST   >3000,0I
62F5 00
62F6 310008 274      LOOPCL MOVE  8 FROM ROM(#COLA1) TO RAM(0I)
62F9 B0106A
62FC DB
62FD A31000 275      DADD  8,0I
6300 08
6301 CB1038 276      DCHE  >3808,0I
6304 08
6305 42F6 277      BR    LOOPCL
278      ***
279      ***   SET CHARACTER COLORS FOR A - Z, 0 - 9, ETC,
280      ***   AT BOTTOM THIRD OF SCREEN
281      ***
6307 BF1030 282      DST   >3080,0I
630A 60
630B 310020 283      MORCOL MOVE  32 FROM ROM(#COLORS) TO RAM(0I)
630E B0106A
6311 BB
6312 A31000 284      DADD  >0040,0I
6315 40
6316 CB1038 285      DCHE  >3820,0I
6319 20
631A 430B 286      BR    MORCOL
287      ***
288      ***   SET CHARACTER COLORS FOR a - z
289      ***   AT BOTTOM THIRD OF SCREEN
290      ***
631C BF1032 291      DST   >3260,0I
631F 60
6320 310020 292      MORSM L MOVE  32 FROM ROM(#COL1A) TO RAM(0I)
6323 B0106A
6326 E3
6327 A31000 293      DADD  >0080,0I
632A 80
632B CB1035 294      DCHE  >35E0,0I
632E E0
632F 4320 295      BR    MORSM L
6331 0665EA 296      CALL  COLSET      SET COLOR FOR SPECIFIC CHR
6334 BE7803 297      ST   3,0GAMFLG   MAKE SURE TITLE SCREEN FLAG
6337 0664B4 298      CALL  SET000     TPNT AND MPNT = ALL ZERO DAT
633A 066464 299      CALL  INITS      DO INITS FOR ROM CODE

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633D 310020 300 MOVE 32 FROM ROM(#MSGBLK) TO RAM(>1A80) BLANK OUT AL
6340 AF1A80
6343 6EFD
6345 0F70 301 ASSBLY XML >70 EXECUTE 9900 CODE
      6347 302 RENTRY EQU * RETURN FROM 9900 CODE PROGRA
      303 ***
      304 *** EXPLODE 16 SPRITES
      305 ***
6347 CE808B 306 CGT 3,@TUNPAG PILOT ERROR IN 2ND HALF OF T
634A 03
634B 4351 307 BR NOTSEC NO
634D BE808B 308 ST 3,@TUNPAG YES, SO POINT TO 1ST HALF OF
6350 03
6351 BD20AF 309 NOTSEC DST RAM(>1B00),@TEMP20 GET Y,X OF SHIP
6354 1B00
6356 8D2244 310 DST @>44,@TEMP20+2 GET CHAR & COLOR(ALREADY PRE
6359 BF101B 311 DST >1B00,@I
635C 00
635D 350004 312 MOREX1 MOVE 4 FROM @TEMP20+0 TO RAM(@I) SET UP SAB'S OF
6360 B01020
6363 A31000 313 DADD >0004,@I
6366 04
6367 D7101B 314 DCEQ >1B40,@I
636A 40
636B 435D 315 BR MOREX1
636D 310040 316 MOVE 64 FROM ROM(#VELEXP) TO RAM(>3C00) GET VELS FOR
6370 AF3C00
6373 6DDD
6375 BE7A10 317 ST >10,@MOTION
6378 8679 318 CLR @TIMER
637A 066414 319 DELAY2 CALL REDBAK
637D CA7939 320 CHE >39,@TIMER
6380 437A 321 BR DELAY2
6382 BE2AA0 322 ST >A0,@TEMP20+10
6385 06644A 323 CALL EXPSUB
6388 BE2AA4 324 ST >A4,@TEMP20+10
638D 06644A 325 CALL EXPSUB
638E BE2AA8 326 ST >A8,@TEMP20+10
6391 06644A 327 CALL EXPSUB
6394 BE2AAC 328 ST >AC,@TEMP20+10
6397 06644A 329 CALL EXPSUB
639A 8679 330 CLR @TIMER
639C 066414 331 DELEXP CALL REDBAK
639F CA7908 332 CHE >08,@TIMER
63A2 439C 333 BR DELEXP
63A4 867A 334 CLR @MOTION
63A6 BEAF1B 335 ST >D0, RAM(>1B00)
63A9 00D0
63AB BF101B 336 DST >1B04,@I
63AE 04
63AF BEB010 337 MORECO ST >C0, RAM(@I)
63B2 C0
63B3 A31000 338 DADD 4,@I
63B6 04
63B7 D7101B 339 DCEQ >1B44,@I

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63BA 44
63BB 43AF      340          BR      MORECO
63BD 8679      341          CLR      @TIMER
63BF 066414    342  DELINT  CALL    REDBAK
63C2 CA7930    343          CHE      >30,@TIMER
63C5 43BF      344          BR      DELINT
63C7 8E80B9    345          CZ      @SHIPS          ANY PLAYER SHIPS LEFT?
63CA 63DC      346          BS      QUIT              NO, SO QUIT
63CC 9280B9    347          DEC      @SHIPS
63CF 310020    348          MOVE   32 FROM ROM(#MSGBLK) TO RAM(>1A80)  BLANK OUT A
63D2 AF1A80
63D5 6EFD
63D7 BE7801    349          ST      1,@GAMFLG          INIT TO GAME STARTED EVEN IF
63DA 0F70      350  GOSTR  XML      >70          GO TO EXPSTR TO INIT CURRENT
63DC 867A      351  QUIT   CLR      @MOTION
63DE BEAF1B    352          ST      >D0,RAM(>1B00)
63E1 00D0
      63E3      353  LEAVE  EQU      $
63E3 D67802    354          CEQ     2,@GAMFLG          2 = REDO
63E6 43F1      355          BR      CHKBAC
63E8 0664B4    356  REDO   CALL    SETD00
63EB 066464    357          CALL   INITS
63EE 056345    358          B      ASSBLY
63F1 D67803    359  CHKBAC CEQ     3,@GAMFLG          3 = BACK
63F4 602D      360          BS      BACK
      361  ***
      362  ***  GAME OVER - ALL SHIPS GONE(GAMFLG = 1)
      363  ***
63F6 310020    364          MOVE   32 FROM ROM(#MSGEND) TO RAM(>1A80)  REDO OR BACK
63F9 AF1A80
63FC 6F3D
63FE 0664C8    365          CALL   TOPSC          CHECK FOR HIGH SCORE, IF ANY
6401 BE181E    366          ST      30,@DEMCNT      SET TIMER FOR DEMO
6404 06652E    367          CALL   GAMEOV          GAME OVER MESSAGE FLASH
6407 D67802    368          CEQ     2,@GAMFLG          REDO PRESSED?
640A 63E8      369          BS      REDO
640C D67803    370          CEQ     3,@GAMFLG          BACK PRESSED?
640F 602D      371          BS      BACK
6411 056411    372  LOOPIT B      LOOPIT
      373
      374
      375  *****
      376  *****
      377  *****
      378
      379
      380  *****
      381  *  DELAY SUBRT TO CHECK FOR REDO AND BACK  *
      382  *****
6414 8674      383  REDBAK CLR      @KEYBRD
6416 8680D6    384          CLR      @>D6
6419 03        385          SCAN
641A D67506    386          CEQ     6,@KEY          REDO?
641D 642A      387          BS      REOUT
641F D6750F    388          CEQ     >DF,@KEY          BACK?

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6422 6430      389      BS   BAOUT
6424 D67505    390      CEQ  >D5,@KEY          QUIT?
6427 6436      391      BS   QUOUT
6429 00        392      RTN
642A BE7802    393      REOUT ST   2,@GAMFLG
642D 05643D    394      B    OUTNOW
6430 BE7803    395      BAOUT ST   3,@GAMFLG
6433 05643D    396      B    OUTNOW
6436 390008    397      QUOUT MOVE 8 FROM ROM(#VDPNOR) TO VDP(0)      2X+UNMAG+NOR
6439 006A53
643C 0B        398
643D 867A      399      OUTNOW CLR  @MOTION
643F BEAF1B    400      ST   >D0, RAM(>1B00)
6442 00D0
6444 BE737E    401      ST   >7E,@>73          RESET SUBRTN STACK POINTER TO
6447 0563E3    402      B    LEAVE
403
404 *****
405 * LOAD IN DIFFERENT EXPLOSION DATA *
406 *****
644A BF101B    407      EXPSUB DST  >1B02,@I
644D 02
644E BC8010    408      MOREXD ST   @TEMP20+10, RAM(@I)
6451 2A
6452 A31000    409      DADD  4,@I
6455 04
6456 D7101B    410      DCEQ  >1B42,@I
6459 42
645A 444E      411      BR    MOREXD
645C 8679      412      CLR  @TIMER
645E CA7910    413      DELAYD CHE  >10,@TIMER
6461 445E      414      BR    DELAYD
6463 00        415      RTN
416
417 *****
418 *** INITIALIZATIONS FOR ROM CODE ***
419 *****
6464 86809E    420      INITS CLR  @FIRPNT          INIT TO 1ST OF 8 FIRE PATTERN
6467 86809F    421      CLR  @SHTFLG          SET TO NO PHOTON SHOT FIRED
646A 8780AA    422      DCLR @RND             INIT RANDOM NUMBER
646D 86808E    423      CLR  @ATKFLG          INIT TO NO ATTACK WAVES YET
6470 BE80AE    424      ST   1,@HITNUM        INIT TO ONE HIT TO KILL ATTA
6473 01
6474 86809C    425      CLR  @CYCLE           INIT TO 1ST GAME CYCLE
6477 BE80B9    426      ST   4,@SHIPS         INIT TO FOUR PLAYER SHIPS IN
647A 04
647B 310005    427      MOVE 5 FROM ROM(#ZEROS) TO RAM(>1AB8)      ZERO OUT P
647E AF1AB8
6481 6BBE
6483 BF80B4    428      DST  >E41C,@VELVAR    INIT UP/DOWN LIFT FOR PLAYER
6486 E41C
6488 BEAF1A    429      ST   >75, RAM(>1AF1)  WRITE THE 3 LIFT NUMBER TO T
6488 F175
430 ***
648D 00        431      ST   1,@LASSAY        INIT "LASER OVERHEATED" PHRA
RTN

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```

432
433 *****
434 * CLEAT OUT 3 PIXELS OF THE *
435 * SMALL CHAR SET HERE *
436 *****
648E BF1009 437 PIXOUT DST >090E, @I
6491 0E
6492 BF8010 438 MORCLR DST >FFFF, RAM(@I) CLEAR OUT B
6495 FFFF
6497 A31000 439 DADD B, @I
649A 08
6496 D71009 440 DCEQ >09DE, @I
649E DE
649F 4492 441 BR MORCLR
64A1 BF1009 442 DST >090D, @I
64A4 0D
64A5 BE8010 443 MORCLL ST >FF, RAM(@I) CLEAR OUT 1
64A8 FF
64A9 A31000 444 DADD B, @I
64AC 08
64AD D71009 445 DCEQ >09DD, @I
64B0 DD
64B1 44A5 446 BR MORCLL
64B3 00 447 RTN
448
449 *****
450 *** DEFINE CHARS FOR TOP AND MIDDLE *
451 *** SCREEN TO BE DATA ZEROS *
452 *****
64B4 8710 453 SETOOD DCLR @I
64B6 310020 454 DEFCHR MOVE 32 FROM ROM(#DFIRS) TO RAM(@I)
64B9 B01067
64BC 0C
64BD A31000 455 DADD >0020, @I
64C0 20
64C1 CB1010 456 DCHE >1000, @I
64C4 00
64C5 44B6 457 BR DEFCHR
64C7 00 458 RTN
459
460 *****
461 * COMPARE YOUR SCORE WITH BEST SCORE *
462 *****
64C8 BF001A 463 TOPSC DST >1AFB, @BESTSC
64CB FB
64CC BF041A 464 DST >1ABB, @YOURSC
64CF B8
64D0 C4B000 465 CHKTOP CH RAM(@YOURSC), RAM(@BESTSC)
64D3 B004
64D5 6524 466 BS NOTOP
64D7 C46004 467 CH RAM(@BESTSC), RAM(@YOURSC)
64DA B000
64DC 451B 468 BR NODIFF
64DE 350006 469 MOVE 6 FROM RAM(>1ABB) TO RAM(>3D00) SAVE TEMP AREA
64E1 AF3D00

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64E4 AF1AB8
64E7 066684 470          CALL  WAIT0A
64EA BE1303 471          ST    3,@INDX
64ED 310006 472 MORFLH MOVE  6 FROM ROM(#SLEFT1) TO RAM(>1AB8)  FLASH BLANKS
64F0 AF1AB8
64F3 6D8D
64F5 066684 473          CALL  WAIT0A
64F8 350006 474          MOVE  6 FROM RAM(>3D00) TO RAM(>1AB8)  FLASH SAVED YOU
64FB AF1AB8
64FE AF3D00
6501 BF1473 475          DST   #SNDREW,@SOUND  REWARD BELL
6504 16
6505 F61400 476          I/O   @SOUND,0  TURN ON
6508 066684 477          CALL  WAIT0A
650B 9213 478          DEC   @INDX
650D 44ED 479          BR    MORFLH
650F 350006 480          MOVE  6 FROM RAM(>3D00) TO RAM(>1AF8)  NOW YOUR SCORE
6512 AF1AF8
6515 AF3D00
6518 056524 481          B     NOTOP
651B 9100 482 MODIFF DINC  @BESTSC
651D 9104 483          DINC  @YOURSC
651F D600FC 484          CEQ  >1AFC,@BESTSC
6522 44D0 485          BR    CHKTOP
6524 350006 486 NOTOP MOVE  6 FROM RAM(>1AF8) TO RAM(>3FED)  PUT NEW HIGH SC
6527 AF3FED
652A AF1AF8
6520 00 487          RTN  AREA
488
489 *****
490 * PUT UP GAME OVER MESSAGE AND *
491 * CHECK FOR REDO AND BACK KEYS *
492 *****
652E 350008 493 GAMEOV MOVE  8 FROM RAM(>10B0) TO RAM(>0A08)  GET "G" FROM
6531 AA08AF
6534 10B0
6536 350008 494          MOVE  8 FROM RAM(>10B0) TO RAM(>0A88)  GET "A" FROM
6539 AA88AF
653C 10B0
653E 350008 495          MOVE  8 FROM RAM(>1120) TO RAM(>0B08)  GET "M" FROM
6541 AB08AF
6544 1120
6546 350008 496          MOVE  8 FROM RAM(>10A0) TO RAM(>0B88)  GET "E" FROM
6549 AB88AF
654C 10A0
654E 350008 497          MOVE  8 FROM RAM(>1130) TO RAM(>0C48)  GET "O" FROM
6551 AC48AF
6554 1130
6556 350008 498          MOVE  8 FROM RAM(>11A8) TO RAM(>0CC8)  GET "V" FROM
6559 ACC8AF
655C 11A8
655E 350008 499          MOVE  8 FROM RAM(>10A0) TO RAM(>0D48)  GET "E" FROM
6561 AD48AF
6564 10A0
6566 350008 500          MOVE  8 FROM RAM(>1168) TO RAM(>0DC8)  GET "R" FROM

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6569 ADC8AF
656C 1168
656E 8678      501      CLR   @GAMFLG
6570 0665C1    502      CALL  PAUSE1      DELAY AND CHE
6573 8E78      503      CZ    @GAMFLG
6575 45C0      504      BR    LEAVE1
6577 310008     505      MOVE  B FROM ROM(#DFIRS) TO RAM(>0A0B) ZERO OUT DATA
657A AA0867
657D 0C
657E 310008     506      MOVE  B FROM ROM(#DFIRS) TO RAM(>0A8B) ZERO OUT DATA
6581 AA8867
6584 0C
6585 310008     507      MOVE  B FROM ROM(#DFIRS) TO RAM(>0B0B) ZERO OUT DATA
6588 AB0867
658B 0C
658C 310008     508      MOVE  B FROM ROM(#DFIRS) TO RAM(>0B8B) ZERO OUT DATA
658F AB8867
6592 0C
6593 310008     509      MOVE  B FROM ROM(#DFIRS) TO RAM(>0C4B) ZERO OUT DATA
6596 AC4867
6599 0C
659A 310008     510      MOVE  B FROM ROM(#DFIRS) TO RAM(>0CCB) ZERO OUT DATA
659D ACC867
65A0 0C
65A1 310008     511      MOVE  B FROM ROM(#DFIRS) TO RAM(>0D4B) ZERO OUT DATA
65A4 AD4867
65A7 0C
65A8 310008     512      MOVE  B FROM ROM(#DFIRS) TO RAM(>0DCB) ZERO OUT DATA
65AB ADC867
65AE 0C
65AF 0665C1    513      CALL  PAUSE1      DELAY AND CHE
65B2 8E78      514      CZ    @GAMFLG
65B4 45C0      515      BR    LEAVE1
65B6 8680D6     516      CLR   @>D6
65B9 9218      517      DEC   @DEMCNT     DECREASE TIMER
65BB 452E      518      BR    GAMEOV
65BD BE7803     519      ST    3,@GAMFLG   FORCE TO DO A "BACK"
65C0 00      520      LEAVE1 RTN
521
522 *****
523 * DELAY AND CHECK FOR KEYS PRESSED *
524 *****
65C1 8679      525      PAUSE1 CLR   @TIMER
65C3 8674      526      CLR   @KEYBRD
65C5 03      527      STALL1 SCAN
65C6 D67506     528      CEQ   >06,@KEY   REDO?
65C9 65DC      529      BS    REDOUT
65CB D6750F     530      CEQ   >0F,@KEY   BACK?
65CE 65E0      531      BS    BACOUT
65D0 D67505     532      CEQ   >05,@KEY   QUIT?
65D3 45E4      533      BR    STAYIN
65D5 390008     534      MOVE  B FROM ROM(#VDPNOR) TO VDP(0) 2X+UNMAG+NOR
65D8 006A53
65DB 0B      535      EXIT
65DC BE7802     536      REDOUT ST    2,@GAMFLG SET REDO FLAG

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65DF 00          537          RTN
65E0 BE7803     538    BACOUT ST      3,@GAMFLG          SET BACK FLAG
65E3 00          539          RTN
65E4 CA7920     540    STAYIN CHE    >20,@TIMER
65E7 45C5       541          BR      STALL1
65E9 00          542          RTN
643
644 *****
645 * SUBROUTINE TO SET SPECIFIC CHARS TO *
646 * SPECIFIC COLORS *
647 *****
65EA BF1037     548    COLSET DST    >3720,@I
65ED 20
65EE 310001     549    MOR71  MOVE   1 FROM ROM(#H71) TO RAM(@I)          SET COLOR F0
65F1 B0106B
65F4 33
65F5 9110       550          DINC  @I
65F7 D71037     551          DCEQ  >3740,@I
65FA 40
65FB 45EE       552          BR      MOR71
65FD BF1032     553          DST    >3220,@I
6600 20
6601 310008     554    MORWHT MOVE   8 FROM ROM(#WHITE) TO RAM(@I)          SET COLORS FOR SM
6604 B0106B
6607 34
6608 A31000     555          DADD  >0080,@I
660B 80
660C D71037     556          DCEQ  >3720,@I
660F 20
6610 4601       557          BR      MORWHT
6612 310008     558    MOVE   8 FROM ROM(#COLA1) TO RAM(>3570)          SET COLORS F
6615 AF3570
6618 6ADB
661A 310008     559          MOVE   8 FROM ROM(#XCL) TO RAM(>31B8)          SET COLORS F
661D AF31B8
6620 6B3C
6622 310008     560    MOVE   8 FROM ROM(#BARCOL) TO RAM(>36E0)          SET COLORS F
6625 AF36E0
6628 6BB6
662A 310008     561          MOVE   8 FROM ROM(#BARCOL) TO RAM(>36E8)          SET COLORS F
662D AF36E8
6630 6BB6
6632 BF1037     562          DST    >3760,@I
6635 60
6636 310008     563    CLFUL1 MOVE   8 FROM ROM(#FUELCL) TO RAM(@I)          FUEL COLOR D
6639 B0106B
663C 7C
663D A31000     564          DADD  8,@I
6640 08
6641 D71037     565          DCEQ  >3780,@I
6644 80
6645 4636       566          BR      CLFUL1
6647 BF1037     567          DST    >37A0,@I
664A A0
664B 310008     568    CLFUL2 MOVE   8 FROM ROM(#FUELCL) TO RAM(@I)          FUEL COLOR D

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```

664E B0106B
6651 9C
6652 A31000      569          DADD  B, @I
6655 08
6656 D71037      570          DCEQ  >37C0, @I
6659 C0
665A 464B        571          BR    CLFUL2
665C 310008      572          MOVE  B FROM ROM(#FUELCL) TO RAM(>37E0)      FUEL COLOR
665F AF37E0
6662 6B9C
6664 00          573          RTN
                    574
                    575 *****
576 * SUBROUTINE TO FORMAT A 3RD OF *
577 * A SECTION OF SCREEN AREA *
578 *****
6665 8613        579          SUBCHR CLR @J
6667 8612        580          CLR @CHARS
6669 BC8010      581          MORCHL ST @CHARS, RAM(@I)
666C 12
666D A21208      582          ADD  B, @CHARS
6670 9110        583          DINC @I
6672 9013        584          INC  @J
6674 CA1320      585          CHE  32, @J
6677 4669        586          BR    MORCHL
6679 8613        587          CLR @J
667B A612FF      588          SUB  255, @CHARS
667E D61208      589          CEQ  B, @CHARS
6681 4669        590          BR    MORCHL
6683 00          591          RTN
                    592
                    593 *****
594 * DELAY SUBROUTINE *
595 *****
6684 8679        596          WAITOA CLR @TIMER
                    597          $REPEAT
6686 C6790A      598          $UNTIL @TIMER .H. >0A
6689 4686
668B 00          599          RTN
                    600
                    601 *****
602 * SET UP PATTERN COLOR TABLE *
603 *****
604
605 *****
606 * DATA AREA FOR SPRITES *
607 *****
668C 011400      608          DSPLT DATA >01, >14, >00, >25, >10, >80, >0A, >00      SPLAT SHIP:
668F 251080
6692 0A00
6694 A50012      609          DATA >A5, >00, >12, >00, >42, >10, >01, >04
6697 004210
669A 0104
669C 001044      610          DATA >00, >10, >44, >10, >02, >40, >04, >20
669F 100240

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```

66A2 0420
66A4 025004 611 DATA >02, >50, >04, >42, >00, >24, >10, >40
66A7 420024
66AA 1040
66AC 00003E 612 DSHIP DATA >00, >00, >3E, >11, >08, >FF, >80, >47 YOUR SHIP:
66AF 1108FF
66B2 8047
66B4 641820 613 DATA >64, >18, >20, >FF, >00, >00, >00, >00
66B7 FF0000
66BA 0000
66BC 000000 614 DATA >00, >00, >00, >00, >80, >F0, >38, >9C
66BF 0080F0
66C2 389C
66C4 077C80 615 DATA >07, >7C, >80, >00, >00, >00, >00, >00
66C7 000000
66CA 0000
66CC 000000 616 DFIRN1 DATA >00, >00, >00, >00, >00, >00, >00, >00 NORMAL FIRE:
66CF 000000
66D2 0000
66D4 010200 617 DATA >01, >02, >00, >00, >00, >00, >00, >00
66D7 000000
66DA 0000
66DC 000000 618 DATA >00, >00, >00, >00, >00, >00, >00, >04
66DF 000000
66E2 0004
66E4 209224 619 DATA >20, >92, >24, >00, >00, >00, >00, >00
66E7 000000
66EA 0000
66EC 000000 620 DFIRF1 DATA >00, >00, >00, >00, >00, >00, >00, >00 FAST FIRE:
66EF 000000
66F2 0000
66F4 124802 621 DATA >12, >48, >02, >00, >00, >00, >00, >00
66F7 000000
66FA 0000
66FC 000000 622 DATA >00, >00, >00, >00, >00, >00, >00, >04
66FF 000000
6702 0004
6704 508A22 623 DATA >50, >8A, >22, >00, >00, >00, >00, >00
6707 000000
670A 0000
670C 000000 624 DFIRS DATA >00, >00, >00, >00, >00, >00, >00, >00 SLOW FIRE:
670F 000000
6712 0000
6714 000000 625 DATA >00, >00, >00, >00, >00, >00, >00, >00
6717 000000
671A 0000
671C 000000 626 DATA >00, >00, >00, >00, >00, >00, >00, >00
671F 000000
6722 0000
6724 000000 627 DATA >00, >00, >00, >00, >00, >00, >00, >00
6727 000000
672A 0000
672C 004200 628 DEXPL1 DATA >00, >42, >00, >10, >81, >00, >04, >20 EXPLOSION:
672F 108100
6732 0420
    
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```

6734 000012      629          DATA  >00, >00, >12, >00, >40, >01, >20, >04
6737 004001
673A 2004
673C 400008      630          DATA  >40, >00, >08, >00, >01, >10, >00, >04
673F 000110
6742 0004
6744 800021      631          DATA  >80, >00, >21, >00, >08, >00, >20, >02
6747 000800
674A 2002
674C 000000      632  DFIRN2  DATA  >00, >00, >00, >00, >00, >00, >00, >00          NORMAL FIRE:
674F 000000
6752 0000
6754 020100      633          DATA  >02, >01, >00, >00, >00, >00, >00, >00
6757 000000
675A 0000
675C 000000      634          DATA  >00, >00, >00, >00, >00, >00, >00, >0A
675F 000000
6762 000A
6764 51A40A      635          DATA  >51, >A4, >0A, >00, >00, >00, >00, >00
6767 000000
676A 0000
676C 000000      636  DFIRF2  DATA  >00, >00, >00, >00, >00, >00, >00, >00          FAST FIRE:
676F 000000
6772 0000
6774 0A5114      637          DATA  >0A, >51, >14, >00, >00, >00, >00, >00
6777 000000
677A 0000
677C 000000      638          DATA  >00, >00, >00, >00, >00, >00, >00, >82
677F 000000
6782 0082
6784 280452      639          DATA  >28, >04, >52, >00, >00, >00, >00, >00
6787 000000
678A 0000
678C 004200      640  DEXP2   DATA  >00, >42, >00, >00, >01, >00, >00, >20          EXPLOSION:
678F 000100
6792 0020
6794 000012      641          DATA  >00, >00, >12, >00, >00, >00, >20, >04
6797 000000
679A 2004
679C 000008      642          DATA  >00, >00, >08, >00, >01, >10, >00, >00
679F 000110
67A2 0000
67A4 800021      643          DATA  >80, >00, >21, >00, >00, >00, >20, >02
67A7 000000
67AA 2002
67AC 004200      644  DEXP3   DATA  >00, >42, >00, >00, >01, >00, >00, >20          EXPLOSION:
67AF 000100
67B2 0020
67B4 000002      645          DATA  >00, >00, >02, >00, >00, >00, >20, >00
67B7 000000
67BA 2000
67BC 000008      646          DATA  >00, >00, >08, >00, >00, >00, >00, >00
67BF 000000
67C2 0000
67C4 000021      647          DATA  >00, >00, >21, >00, >00, >00, >00, >02

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67C7 000000
67CA 0002
67CC 004000  648  DEXP4  DATA  >00, >40, >00, >00, >01, >00, >00, >20  EXPLOSION:
67CF 000100
67D2 0020
67D4 000000  649          DATA  >00, >00, >00, >00, >00, >00, >20, >00
67D7 000000
67DA 2000
67DC 000008  650          DATA  >00, >00, >08, >00, >00, >00, >00, >00
67DF 000000
67E2 0000
67E4 000020  651          DATA  >00, >00, >20, >00, >00, >00, >00, >00
67E7 000000
67EA 0000
67EC 000000  652  DEXP5  DATA  >00, >00, >00, >00, >00, >00, >00, >20  EXPLOSION:
67EF 000000
67F2 0020
67F4 000000  653          DATA  >00, >00, >00, >00, >00, >00, >20, >00
67F7 000000
67FA 2000
67FC 000080  654          DATA  >00, >00, >80, >00, >00, >00, >00, >00
67FF 000000
6802 0000
6804 000000  655          DATA  >00, >00, >00, >00, >00, >00, >00, >00
6807 000000
680A 0000
680C 000000  656  DSHP1  DATA  >00, >00, >00, >01, >02, >04, >3F, >FE  ATTACK SHIP:
680F 010204
6812 3FFE
6814 040F00  657          DATA  >04, >0F, >00, >00, >00, >00, >00, >00
6817 000000
681A 0000
681C 0000FC  658          DATA  >00, >00, >FC, >08, >00, >FC, >08, >10
681F 0800FC
6822 0810
6824 20C000  659          DATA  >20, >C0, >00, >00, >00, >00, >00, >00
6827 000000
682A 0000
682C 000000  660  DSHP2  DATA  >00, >00, >00, >00, >00, >01, >03, >1C  ATTACK SHIP:
682F 000001
6832 031C
6834 FF0100  661          DATA  >FF, >01, >00, >00, >00, >00, >00, >00
6837 000000
683A 0000
683C 000000  662          DATA  >00, >00, >00, >3C, >78, >F0, >F0, >E0
683F 3C78F0
6842 F0E0
6844 E0F078  663          DATA  >E0, >F0, >78, >3C, >00, >00, >00, >00
6847 3C0000
684A 0000
684C 000000  664  DSHP3  DATA  >00, >00, >00, >00, >00, >07, >0F, >1A  ATTACK SHIP:
684F 000007
6852 0F1A
6854 3F1F00  665          DATA  >3F, >1F, >00, >0A, >02, >01, >00, >00
6857 0A0201

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685A 0000
685C 000000    666      DATA  >00, >00, >00, >00, >00, >F0, >F8, >AC
685F 0000F0
6862 F8AC
6864 FEFC00    667      DATA  >FE, >FC, >00, >A8, >50, >40, >00, >00
6867 A85040
686A 0000
686C 000000    668      DPHOTC DATA  >00, >00, >00, >00, >00, >00, >20, >70      PHOTON SPECI
686F 000000
6872 2070
6874 F97020    669      DATA  >F9, >70, >20, >00, >00, >00, >00, >00
6877 000000
687A 0000
687C 000000    670      DATA  >00, >00, >00, >00, >00, >00, >00, >80
687F 000000
6882 0080
6884 CD8000    671      DATA  >CD, >80, >00, >00, >00, >00, >00, >00
6887 000000
688A 0000
688C 000003    672      DSHP5  DATA  >00, >00, >03, >04, >7F, >20, >10, >3F      ATTACK SHIP:
688F 047F20
6892 103F
6894 FF1020    673      DATA  >FF, >10, >20, >7F, >00, >00, >00, >00
6897 7F0000
689A 0000
689C 0000FF    674      DATA  >00, >00, >FF, >01, >D2, >26, >5A, >DA
689F 01D226
68A2 5ADA
68A4 DA267F    675      DATA  >DA, >26, >7F, >00, >00, >00, >00, >00
68A7 000000
68AA 0000
68AC 03070D    676      DSHP6  DATA  >03, >07, >0D, >1A, >35, >6A, >FF, >6A      ATTACK SHIP:
68AF 1A356A
68B2 FF6A
68B4 351A0D    677      DATA  >35, >1A, >0D, >07, >03, >00, >00, >00
68B7 070300
68BA 0000
68BC FFFC50    678      DATA  >FF, >FC, >50, >42, >45, >8A, >F5, >8A
68BF 42458A
68C2 F58A
68C4 454250    679      DATA  >45, >42, >50, >FC, >FF, >00, >00, >00
68C7 FCFF00
68CA 0000
68CC 000000    680      DSHP7  DATA  >00, >00, >00, >00, >03, >04, >1F, >20      ATTACK SHIP:
68CF 000304
68D2 1F20
68D4 7FF57F    681      DATA  >7F, >F5, >7F, >20, >1F, >04, >03, >00
68D7 201F04
68DA 0300
68DC 000000    682      DATA  >00, >00, >00, >3C, >C4, >04, >FF, >02
68DF 3CC404
68E2 FF02
68E4 FF54FF    683      DATA  >FF, >54, >FF, >02, >FF, >04, >C4, >3C
68E7 02FF04
68EA C43C
    
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68EC 000000 684  DPHOT  DATA  >00, >00, >00, >00, >14, >49, >90, >4A      PHOTON SHOT:
68EF 001449
68F2 904A
68F4 802400 685      DATA  >80, >24, >00, >00, >00, >00, >00, >00
68F7 000000
68FA 0000
68FC 000000 686      DATA  >00, >00, >00, >00, >00, >40, >15, >88
68FF 000040
6902 1588
6904 400000 687      DATA  >40, >00, >00, >00, >00, >00, >00, >00
6907 000000
690A 0000
690C 000000 688  DPHTA  DATA  >00, >00, >00, >AA, >00, >00, >00, >00      PHOTON SHOT:
690F AA0000
6912 0000
6914 000000 689      DATA  >00, >00, >00, >00, >00, >00, >00, >AA
6917 000000
691A 00AA
691C 000000 690      DATA  >00, >00, >00, >A0, >00, >00, >00, >00
691F A00000
6922 0000
6924 000000 691      DATA  >00, >00, >00, >00, >00, >00, >00, >A0
6927 000000
692A 00A0
692C 000000 692  DPHTB  DATA  >00, >00, >00, >00, >00, >00, >00, >00      PHOTON SHOT:
692F 000000
6932 0000
6934 00FF00 693      DATA  >00, >FF, >00, >00, >00, >00, >00, >00
6937 000000
693A 0000
693C 000000 694      DATA  >00, >00, >00, >00, >00, >00, >00, >00
693F 000000
6942 0000
6944 00FF00 695      DATA  >00, >FF, >00, >00, >00, >00, >00, >00
6947 000000
694A 0000
694C 070D19 696  AST1  DATA  >07, >0D, >19, >10, >32, >43, >49, >64      (>1F00) CHAR
694F 103243
6952 4964
6954 504C23 697      DATA  >50, >4C, >23, >10, >0C, >07, >00, >00
6957 100C07
695A 0000
695C 0000E0 698      DATA  >00, >00, >E0, >30, >50, >10, >98, >CC
695F 305010
6962 98CC
6964 127294 699      DATA  >12, >72, >94, >1C, >F0, >00, >00, >00
6967 1CF000
696A 0000
696C 000001 700  AST1A DATA  >00, >00, >01, >0D, >12, >10, >12, >14      CHAR
696F 0D1210
6972 1214
6974 10181C 701      DATA  >10, >18, >1C, >13, >11, >0D, >03, >00
6977 13110D
697A 0300
697C 0000F0 702      DATA  >00, >00, >F0, >08, >10, >48, >44, >CC

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697F	081048						
6982	44CC						
6984	9A1264	703		DATA	>9A, >12, >64, >84, >18, >60, >00, >00		
6987	841860						
698A	0000						
698C	000000	704	AST2	DATA	>00, >00, >00, >01, >02, >05, >09, >18	CHAR	
698F	010205						
6992	0918						
6994	1F1010	705		DATA	>1F, >10, >10, >0E, >07, >00, >00, >00		
6997	0E0700						
699A	0000						
699C	000000	706		DATA	>00, >00, >00, >F0, >28, >04, >E4, >06		
699F	F02804						
69A2	E406						
69A4	3EE202	707		DATA	>3E, >E2, >02, >0C, >F0, >00, >00, >00		
69A7	0CF000						
69AA	0000						
69AC	000000	708	AST2A	DATA	>00, >00, >00, >00, >03, >1C, >38, >2E	CHAR	
69AF	00031C						
69B2	382E						
69B4	212018	709		DATA	>21, >20, >18, >07, >00, >00, >00, >00		
69B7	070000						
69BA	0000						
69BC	000000	710		DATA	>00, >00, >00, >70, >88, >8C, >52, >62		
69BF	70888C						
69C2	5262						
69C4	828C90	711		DATA	>82, >8C, >90, >E0, >00, >00, >00, >00		
69C7	E00000						
69CA	0000						
69CC	000000	712	AST3	DATA	>00, >00, >00, >00, >07, >18, >2F, >25	CHAR	
69CF	000718						
69D2	2F25						
69D4	24150E	713		DATA	>24, >15, >0E, >00, >00, >00, >00, >00		
69D7	000000						
69DA	0000						
69DC	000000	714		DATA	>00, >00, >00, >00, >E0, >10, >78, >C4		
69DF	00E010						
69E2	78C4						
69E4	042CDB	715		DATA	>04, >2C, >DB, >00, >00, >00, >00, >00		
69E7	000000						
69EA	0000						
69EC	000000	716	AST3A	DATA	>00, >00, >00, >00, >00, >0F, >18, >28	CHAR	
69EF	00000F						
69F2	1828						
69F4	2F2831	717		DATA	>2F, >28, >31, >1E, >00, >00, >00, >00		
69F7	1E0000						
69FA	0000						
69FC	000000	718		DATA	>00, >00, >00, >00, >E0, >58, >44, >C4		
69FF	00E058						
6A02	44C4						
6A04	3C0428	719		DATA	>3C, >04, >28, >F0, >00, >00, >00, >00		
6A07	F00000						
6A0A	0000						
6A0C	000000	720	AST4	DATA	>00, >00, >00, >00, >03, >04, >04, >1D	CHAR	
6A0F	000304						

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6A12 041D
6A14 161414 721 DATA >16,14,14,18,11,08,07,00
6A17 181108
6A1A 0700
6A1C 000000 722 DATA >00,00,00,00,78,94,12,72
6A1F 007894
6A22 1272
6A24 9A0602 723 DATA >9A,06,02,44,38,C0,80,00
6A27 4438C0
6A2A 8000
6A2C 000000 724 AST4A DATA >00,00,00,00,03,04,04,1D CHAR
6A2F 000304
6A32 041D
6A34 161414 725 DATA >16,14,14,18,11,08,07,00
6A37 181108
6A3A 0700
6A3C 000000 726 DATA >00,00,00,00,78,94,12,72
6A3F 007894
6A42 1272
6A44 9A0602 727 DATA >9A,06,02,44,38,C0,80,00
6A47 4438C0
6A4A 8000
728
729 *****
730 * DATA AREA *
731 *****
6A4C A206FF 732 VDPBIT DATA >A2,6,FF,3,36,3,00 VDP REGI
6A4F 033603
6A52 00
6A53 00E200 733 VDPNOR DATA >00,E2,0,0E,1,06,0,00 VDP REGI
6A56 0E0106
6A59 0000
6A5B 3E3E3E 734 MSG1 DATA >3E,3E,3E,15,34,14,1F,DC
6A5E 153414
6A61 1FDC
6A63 ECECEC 735 DATA >EC,EC,EC,EC,EC,EC,EC,EC
6A66 ECECEC
6A69 ECEC
6A6B ECECDD 736 DATA >EC,EC,DD,3E,56,3F,47,66
6A6E 3E563F
6A71 4766
6A73 444444 737 DATA >44,44,44,44,44,44,3E,3E
6A76 444444
6A79 3E3E
6A7B 3E3E3E 738 DATA >3E,3E,3E,E4,E6,E4,E6,E4
6A7E E4E6E4
6A81 E6E4
6A83 E6E4E6 739 DATA >E6,E4,E6,3E,3E,3E,3E,3E
6A86 3E3E3E
6A89 3E3E
6A8B 3E3E3E 740 DATA >3E,3E,3E,3E,3E,3E,3E,3E
6A8E 3E3E3E
6A91 3E3E
6A93 3E3E3E 741 DATA >3E,3E,3E,3E,3E,3E,3E,3E
6A96 3E3E3E

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6A99 3E3E
6A9B 3E3E3E      742      DATA >3E, >3E, >3E, >E5, >E7, >E5, >E7, >E5
6A9E E5E7E5
6AA1 E7E5
6AA3 E7E5E7      743      DATA >E7, >E5, >E7, >3E, >1F, >1C, >15, >4B
6AA6 3E1F1C
6AA9 154B
6AAB 3E653E      744      DATA >3E, >65, >3E, >3E, >2F, >26, >27, >3E
6AAE 3E2F26
6AB1 273E
6AB3 444444      745      DATA >44, >44, >44, >44, >44, >44, >44, >3E, >3E
6AB6 444444
6AB9 3E3E
6ABB 717171      746      COLORS DATA >71, >71, >71, >71, >71, >71, >71, >71
6ABE 717171
6AC1 7171
6AC3 717171      747      DATA >71, >71, >71, >71, >71, >71, >71, >71
6AC6 717171
6AC9 7171
6ACB 717171      748      DATA >71, >71, >71, >71, >71, >71, >71, >71
6ACE 717171
6AD1 7171
6AD3 717171      749      DATA >71, >71, >71, >71, >71, >71, >71, >71
6AD6 717171
6AD9 7171
6ADB A1A1A1      750      COLA1  DATA >A1, >A1, >A1, >A1, >A1, >A1, >A1, >A1
6ADE A1A1A1
6AE1 A1A1
6AE3 1A1A1A      751      COL1A  DATA >1A, >1A, >1A, >1A, >1A, >1A, >1A, >1A
6AE6 1A1A1A
6AE9 1A1A
6AEB 1A1A1A      752      DATA >1A, >1A, >1A, >1A, >1A, >1A, >1A, >1A
6AEE 1A1A1A
6AF1 1A1A
6AF3 1A1A1A      753      DATA >1A, >1A, >1A, >1A, >1A, >1A, >1A, >1A
6AF6 1A1A1A
6AF9 1A1A
6AFB 1A1A1A      754      DATA >1A, >1A, >1A, >1A, >1A, >1A, >1A, >1A
6AFE 1A1A1A
6B01 1A1A
6B03 000000      755      SHPCHR DATA >00, >00, >00, >00, >00, >00, >3E, >11
6B06 000000
6B09 3E11
6B0B 08FF80      756      DATA >08, >FF, >80, >47, >64, >18, >20, >FF
6B0E 476418
6B11 20FF
6B13 000000      757      DATA >00, >00, >00, >00, >00, >00, >00, >00
6B16 000000
6B19 0000
6B1B 80F038      758      DATA >80, >F0, >38, >9C, >07, >7C, >80, >00
6B1E 9C077C
6B21 8000
6B23 000000      759      DX     DATA >00, >00, >00, >88, >50, >20, >50, >88
6B26 885020
6B29 5088
    
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68B6 1E1E1E 781 BARCOL DATA >1E, >1E, >1E, >1E, >1E, >1E, >1E, >1E
68B9 1E1E1E
68BC 1E1E
68BE 444444 782 ZEROS DATA >44, >44, >44, >44, >44, >44
68C1 444444
68C4 000000 783 ENDARR DATA >00, >00, >00, >C0, >FF, >00, >00, >00
68C7 COFFCO
68CA 0000
68CC 000000 784 MIDARR DATA >00, >00, >00, >00, >FF, >00, >00, >00
68CF 00FF00
68D2 0000
68D4 000100 785 FNTARR DATA >00, >01, >00, >00, >FF, >00, >00, >01
68D7 00FF00
68DA 0001
68DC 008000 786 PNTARR DATA >00, >80, >C0, >E0, >F0, >E0, >C0, >80
68DF EOF0E0
68E2 C080

787
788 *****
789 * ROM MESSAGES AND DATA *
790 *****
68E4 100010 791 INTV01 DATA #>1000, #>1000, #>20F8, #>20F4, #>1CF0 SW00P
68E7 0020F8
68EA 20F41C
68ED F0
68EE 18E814 792 DATA #>18E8, #>14E0, #>10D8, #>0CD0, #>08C0, #>04B0
68F1 E010D8
68F4 0CD008
68F7 C00480
68FA 03C002 793 DATA #>03C0, #>02D0, #>01E0, #>FFE0, #>00E0
68FD 0001E0
6C00 FFE000
6C03 E0
6C04 100010 794 INTV1A DATA #>1000, #>1000, #>20F8, #>20F4, #>1CF0 SW00P
6C07 0020F8
6C0A 20F41C
6C0D F0
6C0E 1CF01C 795 DATA #>1CF0, #>1CF0, #>1CF0, #>1CF0, #>E0C0, #>E0B0
6C11 F01CF0
6C14 1CF0E0
6C17 C0E0B0
6C1A 04C0FC 796 DATA #>04C0, #>FCD0, #>01E0, #>FFE0, #>00E0
6C1D 0001E0
6C20 FFE000
6C23 E0
6C24 100010 797 INTV1B DATA #>1000, #>1000, #>1CF4, #>20F2, #>1CF0 SW00P
6C27 001CF4
6C2A 20F21C
6C2D F0
6C2E 18E820 798 DATA #>18E8, #>20E0, #>3020, #>1028, #>FC30
6C31 E03020
6C34 1028FC
6C37 30
6C38 B01004 799 DATA #>B010, #>04E0, #>02D0, #>01C0, #>FEBO, #>02A0, #>FFB0, #>00D0
6C3B E002D0

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6C3E 01C0FE
6C41 8002A0
6C44 FF8000
6C47 D0
6C48 18001C      800   INTV02  DATA  #>1800, #>1C00, #>20F8, #>20F4, #>1CF0
6C4B 0020F8
6C4E 20F41C
6C51 F0
6C52 18E814      801           DATA  #>18E8, #>14E0, #>10D8, #>0CD0, #>08C0, #>04B0
6C55 E010D8
6C58 0CD008
6C5B C004B0
6C5E 03C002      802           DATA  #>03C0, #>02D0, #>01E0, #>00E0
6C61 D001E0
6C64 00E0
6C66 18001C      803   INTV2A  DATA  #>1800, #>1C00, #>20F8, #>20F4, #>1CF0
6C69 0020F8
6C6C 20F41C
6C6F F0
6C70 18E814      804           DATA  #>18E8, #>14E0, #>10D8, #>0CD0, #>D0D0, #>30D0
6C73 E010D8
6C76 0CD0D0
6C79 D030D0
6C7C 20E0E0      805           DATA  #>20E0, #>E0E0, #>02D0, #>01E0, #>00E0
6C7F E002D0
6C82 01E000
6C85 E0
6C86 18001C      806   INTV2B  DATA  #>1800, #>1C00, #>20F8, #>20F4, #>1CF0
6C89 0020F8
6C8C 20F41C
6C8F F0
6C90 18E814      807           DATA  #>18E8, #>14E0, #>10D8, #>0CD0, #>FE80, #>0290
6C93 E010D8
6C96 0CD0FE
6C99 800290
6C9C FEA002      808           DATA  #>FEA0, #>02B0, #>FEC0, #>02D0, #>00D0
6C9F 80FECC
6CA2 02D000
6CA5 D0
6CA6 016801      809   INTV03  DATA  #>0168, #>0158, #>0148, #>0138, #>0130, #>0120, #>0118
6CA9 580148
6CAC 013801
6CAF 300120
6CB2 0118
6CB4 F010F0      810           DATA  #>F010, #>F008, #>F000, #>01F0, #>01E0, #>01D0, #>01C0
6CB7 08F000
6CBA 01F001
6CBD E001D0
6CC0 01C0
6CC2 018001      811           DATA  #>0180, #>01C0, #>01D0, #>00D0
6CC5 C001D0
6CC8 00D0
6CCA 000000      812   VELAK1  DATA  0,0,0,0 ALL SHIP                               INIT VEL
6CCD 00
6CCE 000000      813           DATA  0,0,0,0
    
```

```

6CD1 00
6CD2 000000      814          DATA  0,0,0,0
6CD5 00
6CD6 000000      815          DATA  0,0,0,0
6CD9 00
6CDA 000000      816          DATA  0,0,0,0
6CDD 00
6CDE 000000      817          DATA  0,0,0,0
6CE1 00
6CE2 000000      818          DATA  0,0,0,0
6CE5 00
6CE6 00ECC0      819  VELAK4  DATA  +0,-20,0,0      ALL SHIP INIT VE
6CE9 00
6CEA 00F000      820          DATA  +0,-16,0,0
6CED 00
6CEE 00ED00      821          DATA  +0,-19,0,0
6CF1 00
6CF2 00EA00      822          DATA  +0,-22,0,0
6CF5 00
6CF6 00F100      823          DATA  +0,-15,0,0
6CF9 00
6CFA 00EF00      824          DATA  +0,-17,0,0
6CFD 00
6CFE 00EE00      825          DATA  +0,-18,0,0
6D01 00
6D02 504684      826  SABSH1  DATA  >50, >46, >84, >0C      SHIP SPRITES
6D05 0C
6D06 503588      827  SABSH2  DATA  >50, >35, >88, >0A, >D0      (>88, >98, >8C, >9C, >9
6D09 0ADD
6D0B F4F8B0      828  SABAK1  DATA  >F4, >248, >B0, >0C      SHIP #1 SPRITE
6D0E 0C
6D0F C0E8B0      829          DATA  >C0, >232, >B0, >06
6D12 06
6D13 C0D8B0      830          DATA  >C0, >216, >B0, >05
6D16 05
6D17 C0E8B0      831          DATA  >C0, >232, >80, >0D
6D1A 0D
6D1B C0F8B0      832          DATA  >C0, >248, >B0, >0A, >D0
6D1E 0ADD
6D20 F4F8B4      833  SABAK2  DATA  >F4, >248, >B4, >0C      SHIP #2 SPRITE
6D23 0C
6D24 C0E8B4      834          DATA  >C0, >232, >B4, >06
6D27 06
6D28 C0D8B4      835          DATA  >C0, >216, >B4, >05
6D2B 05
6D2C C0E8B4      836          DATA  >C0, >232, >B4, >0D
6D2F 0D
6D30 C0F8B4      837          DATA  >C0, >248, >B4, >0A, >D0
6D33 0ADD
6D35 F4FFB8      838  SABAK3  DATA  >F4, >255, >B8, >0C      SHIP #3 SPRITE
6D38 0C
6D39 C0FFB8      839          DATA  >C0, >255, >B8, >06
6D3C 06
6D3D C0FFB8      840          DATA  >C0, >255, >B8, >05
6D40 05

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BD41 COFFB8      841          DATA >C0,255,1>B8,1>0D
BD44 0D
BD45 COFFB8      842          DATA >C0,255,1>B8,1>0A
BD48 0A
BD49 COFFB8      843          DATA >C0,255,1>B8,1>07
BD4C 07
BD4D COFFB8      844          DATA >C0,255,1>B8,1>02,1>D0
BD50 02D0
BD52 0CFFFE0    845  SABAK4  DATA 12,255,1>E0,1>0C          SHIP #4 SPRITES
BD55 0C
BD56 14FFFE0    846          DATA 20,255,1>E0,1>06
BD59 06
BD5A 24FFFE0    847          DATA 36,255,1>E0,1>0A
BD5D 0A
BD5E 34FFFE0    848          DATA 52,255,1>E0,1>0D
BD61 0D
BD62 44FFFE0    849          DATA 68,255,1>E0,1>07
BD65 07
BD66 55FFFE0    850          DATA 85,255,1>E0,1>02
BD69 02
BD6A 67FFFE0    851          DATA 103,255,1>E0,1>04,1>D0
BD6D 04D0
BD6F F4FFCB      852  SABAK5  DATA >F4,255,1>CB,1>0F,1>D0          SHIP #5 SPRITE
BD72 0FD0
BD74 F4FFCB      853  SABAK6  DATA >F4,255,1>CB,1>0F,1>D0          SHIP #6 SPRITE
BD77 0FD0
BD79 F4FFCB      854  SABAK7  DATA >F4,255,1>CB,1>0F,1>D0          SHIP #7 SPRITE
BD7C 0FD0
BD7E F4FFC0      855  SABAKX  DATA >F4,255,1>C0,1>0F,1>D0          SHIP INTERMISSION
BD81 0FD0
BD83 ECECEC      856  GRFUEL  DATA >EC,1>EC,1>EC,1>EC,1>EC          SOLID FUEL(FULL)
BD86 ECEC
BD88 ECECEC      857          DATA >EC,1>EC,1>EC,1>EC,1>EC
BD88 ECEC
BD8D 3E3E3E      858  SLEFT1  DATA #>3E3E,1>#>3E3E,1>#>3E3E,1>#>3E3E          # OF SHIPS IN RESER
BD90 3E3E3E
BD93 3E3E
BD95 E4E63E      859          DATA #>E4E6,1>#>3E3E,1>#>3E3E,1>#>3E3E
BD98 3E3E3E
BD98 3E3E
BD9D E4E6E4      860          DATA #>E4E6,1>#>E4E6,1>#>3E3E,1>#>3E3E
BDA0 E63E3E
BDA3 3E3E
BDA5 E4E6E4      861          DATA #>E4E6,1>#>E4E6,1>#>E4E6,1>#>3E3E
BDA8 E6E4E6
BDAB 3E3E
BDAD E4E6E4      862          DATA #>E4E6,1>#>E4E6,1>#>E4E6,1>#>E4E6
BDB0 E6E4E6
BDB3 E4E6
BDB5 3E3E3E      863  SLEFT2  DATA #>3E3E,1>#>3E3E,1>#>3E3E,1>#>3E3E
BDB8 3E3E3E
BDB8 3E3E
BDBD E5E73E      864          DATA #>E5E7,1>#>3E3E,1>#>3E3E,1>#>3E3E
BDC0 3E3E3E
BDC3 3E3E
    
```



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6DC5 E5E7E5      865          DATA  #>E5E7, #>E5E7, #>3E3E. #>3E3E
6DC8 E73E3E
6DCB 3E3E
6DCD E5E7E5      866          DATA  #>E5E7, #>E5E7, #>E5E7, #>3E3E
6000 E7E5E7
6003 3E3E
6005 E5E7E5      867          DATA  #>E5E7, #>E5E7, #>E5E7, #>E5E7
6DD8 E7E5E7
600E E5E7
6000 FC0000      868  VELEXP DATA  -4,-0,0,0  ,-0,0,0          SPRITE #0 EXPLOS
6DE0 00
60E1 000000      869          DATA  -0,-0,0,0          SPRITE #1
6DE4 00
6DE5 040000      870          DATA  +4,-0,0,0          SPRITE #2
6DE8 00
6DE9 000400      871          DATA  +0,+4,0,0          SPRITE #3
6DEC 00
6DED FDFD00      872          DATA  -3,-3,0,0          SPRITE #4
6DF0 00
6DF1 03FD00      873          DATA  +3,-3,0,0          SPRITE #5
6DF4 00
6DF5 030300      874          DATA  +3,+3,0,0          SPRITE #6
6DF8 00
6DF9 FD0300      875          DATA  -3,+3,0,0          SPRITE #7
6DFC 00
6DFD FCFD00      876          DATA  -4,-1,0,0          SPRITE #8
6E00 00
6E01 FFFC00      877          DATA  -1,-4,0,0          SPRITE #9
6E04 00
6E05 01FC00      878          DATA  +1,-4,0,0          SPRITE #10
6E08 00
6E09 04FF00      879          DATA  +4,-1,0,0          SPRITE #11
6E0C 00
6E0D 040100      880          DATA  +4,+1,0,0          SPRITE #12
6E10 00
6E11 010400      881          DATA  +1,+4,0,0          SPRITE #13
6E14 00
6E15 FF0400      882          DATA  -1,+4,0,0          SPRITE #14
6E18 00
6E19 FC0100      883          DATA  -4,+1,0,0          SPRITE #15
6E1C 00
6E1D AEAEAE      884  MSGOUT DATA  >AE, >AE, >AE, >AE, >AE, >AE, >AE, >AE  OUT OF FUEL
6E20 AEAEAE
6E23 AEAE
6E25 AEAEAE      885          DATA  >AE, >AE, >AE, >7E, >9C, >8F, >AE, >7E
6E28 7E9C8F
6E2B AE7E
6E2D 5DAE5D      886          DATA  >5D, >AE, >5D, >9C, >5C, >6F, >AE, >AE
6E30 9C5C6F
6E33 AEAE
6E35 AEAEAE      887          DATA  >AE, >AE, >AE, >AE, >AE, >AE, >AE, >AE
6E38 AEAEAE
6E3B AEAE
6E3D AEAE4E      888  MSGCOL DATA  >AE, >AE, >4E, >7E, >6F, >6F, >6C, >8E  COLLISION WITH
6E40 7E6F6F
    
```

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6E43 6C8E
6E45 6C7E7D      889          DATA >6C, >7E, >7D, >AE, >9E, >6C, >8F, >5F
6E48 AE9E6C
6E4B 8F5F
6E4D AE5C7D      890          DATA >AE, >5C, >7D, >5C, >7C, >AC, >AE, >4E
6E50 SC7CAC
6E53 AE4E
6E55 8D4C5D      891          DATA >8D, >4C, >5D, >8F, >AF, >AF, >AE, >AE
6E58 8FAFAF
6E5B AEAE
6E5D AEAEAE      892  MSGPHT DATA >AE, >AE, >AE, >AE, >AE, >5F, >6C, >8F      HIT BY PHOTON M
6E60 AEAE5F
6E63 6C8F
6E65 AE4DAC      893          DATA >AE, >4D, >AC, >AE, >7F, >5F, >7E, >8F
6E68 AE7F5F
6E6B 7E8F
6E6D 7E7DAE      894          DATA >7E, >7D, >AE, >7C, >6C, >8E, >8E, >6C
6E70 7C6C8E
6E73 8E6C
6E75 6F5CAF      895          DATA >6F, >5C, >AF, >AE, >AE, >AE, >AE, >AE
6E78 AEAEAE
6E7B AEAE
6E7D AEAEAE      896  MSGAST DATA >AE, >AE, >AE, >6F, >7E, >7E, >6E, >AE      LOOK OUT! OBST
6E80 6F7E7E
6E83 6EAE
6E85 7E9C8F      897          DATA >7E, >9C, >8F, >AF, >AE, >AE, >7E, >4D
6E88 AFAEAE
6E8B 7E4D
6E8D 8E8F4C      898          DATA >8E, >8F, >4C, >4E, >6F, >5C, >8E, >AE
6E90 4E6F5C
6E93 8EAE
6E95 4C5F5C      899          DATA >4C, >5F, >5C, >4C, >4F, >AF, >AE, >AE
6E98 4C4FAF
6E9B AEAE
6E9D AEAEAE      900  MSGSCN DATA >AE, >AE, >AE, >AE, >AE, >AE, >4E, >8D      CRASH WITH GROU
6EA0 AEAEAE
6EA3 4E8D
6EA5 4C8E5F      901          DATA >4C, >8E, >5F, >AE, >9E, >6C, >8F, >5F
6EA8 AE9E6C
6EAB 8F5F
6EAD AE5E8D      902          DATA >AE, >5E, >8D, >7E, >9C, >7D, >4F, >AF
6EB0 7E9C7D
6EB3 4FAF
6EB5 AFAFAE      903          DATA >AF, >AF, >AE, >AE, >AE, >AE, >AE, >AE
6EB8 AEAEAE
6EBB AEAE
6EBD AEAEAE      904  MSGHOT DATA >AE, >AE, >AE, >AE, >AE, >AE, >6F, >4C      LASER OVERHEATE
6EC0 AEAEAE
6EC3 6F4C
6EC5 8E5C8D      905          DATA >8E, >5C, >8D, >AE, >7E, >9D, >5C, >8D
6EC8 AE7E9D
6ECB 5C8D
6ECD 5F5C4C      906          DATA >5F, >5C, >4C, >8F, >5C, >4F, >AF, >AF
6ED0 8F5C4F
6ED3 AFAF
    
```

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6ED5 AFAEAE 907 DATA >AF,AE,AE,AE,AE,AE,AE,AE
6ED8 AEAEAE
6EDB AEAE
6EDD AEAEAE 908 MSGTIM DATA >AE,AE,AE,AE,AE,AE
6EE0 AEAEAE
6EE3 8F6C7C 909 DATA >8F,6C,7C,5C,AE "TIME "
6EE6 5CAE
6EE8 9E4C8D 910 DATA >9E,4C,8D,7F,AE "WARP "
6EEB 7FAE
6EED 4C4E8F 911 DATA >4C,4E,8F,6C,9D,4C,8F,5C,4F "ACTIVATED
6EFD 6C9D4C
6EF3 8F5C4F
6EF6 AEAEAE 912 DATA >AE,AE,AE,AE,AE,AE,AE,AE
6EF9 AEAEAE
6EFC AE
6EFD AEAEAE 913 MSGBLK DATA >AE,AE,AE,AE,AE,AE,AE,AE SPACES BLANK MS
6F00 AEAEAE
6F03 AEAE
6F05 AEAEAE 914 DATA >AE,AE,AE,AE,AE,AE,AE,AE
6F08 AEAEAE
6F0B AEAE
6F0D AEAEAE 915 DATA >AE,AE,AE,AE,AE,AE,AE,AE
6F10 AEAEAE
6F13 AEAE
6F15 AEAEAE 916 DATA >AE,AE,AE,AE,AE,AE,AE,AE
6F18 AEAEAE
6F1B AEAE
6F1D AEAEAE 917 MSGSTR DATA >AE,AE,AE,AE,AE,AE,AE,7F,8D PRESS FIRE TO B
6F20 AEAEAE
6F23 7F8D
6F25 5C8E8E 918 DATA >5C,8E,8E,AE,5D,6C,8D,5C
6F28 AE5D6C
6F2B 8D5C
6F2D AE8F7E 919 DATA >AE,8F,7E,AE,4D,5C,5E,6C
6F30 AE4D5C
6F33 5E6C
6F35 7DAEAE 920 DATA >7D,AE,AE,AE,AE,AE,AE,AE
6F38 AEAEAE
6F3B AEAE
6F3D AEAEAE 921 MSGEND DATA >AE,AE,AE,AE,AE,AE,AE,7F,8D PRESS REDO OR B
6F40 AEAEAE
6F43 7F8D
6F45 5C8E8E 922 DATA >5C,8E,8E,AE,8D,5C,4F,7E
6F48 AE8D5C
6F4B 4F7E
6F4D AE7E8D 923 DATA >AE,7E,8D,AE,4D,4C,4E,6E
6F50 AE4D4C
6F53 4E6E
6F55 AEAEAE 924 DATA >AE,AE,AE,AE,AE,AE,AE,AE
6F58 AEAEAE
6F5B AEAE
6F5D AEAEAE 925 MSGREF DATA >AE,AE,AE,AE,AE,AE,8D,5C,5D REFUELING TUNNE
6F60 AEAE8D
6F63 5C5D
6F65 9C5C6F 926 DATA >9C,5C,6F,6C,7D,5E,AE,8F
    
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927  DATA  >9C1>7D1>7D1>5C1>6F1>AE1>4C1>5F
928  DATA  >5C1>4C1>4F1>AE1>AE1>AE1>AE1>AE
929  MSGTUN DATA  >AE1>AE1>AE1>AE1>AE1>5D1>9C1>5C    FUEL STATION CO
930  DATA  >6F1>AE1>8E1>8F1>4C1>8F1>6C1>7E
931  DATA  >7D1>AE1>4E1>7E1>7C1>6C1>7D1>5E
932  DATA  >AE1>9C1>7F1>AE1>AE1>AE1>AE1>AE
933  MSGFUL  DATA  >AE1>AE1>AE1>AE1>AE1>AE1>AE1>5D    FUEL TANKS FULL
934  DATA  >9C1>5C1>6F1>AE1>8F1>4C1>7D1>6E
935  DATA  >8E1>AE1>5D1>9C1>6F1>6F1>AE1>AF
936  DATA  >AF1>AE1>AE1>AE1>AE1>AE1>AE1>AE
937  MSGXIT  DATA  >AE1>AE1>AE1>AE1>AE1>AE1>AE1>AE    EXIT TUNNEL
938  DATA  >AE1>AE1>5C1>9F1>6C1>8F1>AE1>8F
939  DATA  >9C1>7D1>7D1>5C1>6F1>AE1>AE1>AE
940  DATA  >AE1>AE1>AE1>AE1>AE1>AE1>AE1>AE
941  MSGBON  DATA  >AE1>AE1>AE1>AE1>4D1>7E1>7D1>9C    BONUS POINTS RE
942  DATA  >8E1>AE1>7F1>7E1>6C1>7D1>8F1>8E
943  DATA  >AE1>8D1>5C1>9E1>4C1>8D1>4F1>5C
944  DATA  >4F1>AE1>AF1>AF1>AE1>AE1>AE1>AE

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6FFB AEAE
6FFD AEAEAE 945 MSGWAT DATA >AE,AE,AE,AE,4E,8D,4C,8E CRASH!! PILOT
7000 AE4E8D
7003 4C8E
7005 5FAEAF 946 DATA >5F,AE,AF,AF,AE,AE,7F,6C
7008 AFAEAE
700B 7F6C
700D 6F7E8F 947 DATA >6F,7E,8F,AE,5C,8D,8D,7E
7010 AE5C8D
7013 8D7E
7015 8DAEAF 948 DATA >8D,AE,AF,AF,AE,AE,AE,AE
7018 AFAEAE
701B AEAE
701D AEAEAE 949 MSGAK1 DATA >AE,AE,AE,AE,4C,6F,6C,5C ALIEN CRAFT ADV
7020 AE4C6F
7023 6C5C
7025 7DAE4E 950 DATA >7D,AE,4E,8D,4C,5D,8F,AE
7028 8D4C5D
702B 8FAE
702D 4C4F9D 951 DATA >4C,4F,9D,4C,7D,4E,6C,7D
7030 4C7D4E
7033 6C7D
7035 5EAFAF 952 DATA >5E,AF,AF,AF,AE,AE,AE,AE
7038 AFAEAE
703B AEAE
703D AEAEAE 953 MSGAK2 DATA >AE,AE,AE,AE,4C,6F,6C,5C ALIEN CRAFT ADV
7040 AE4C6F
7043 6C5C
7045 7DAE4E 954 DATA >7D,AE,4E,8D,4C,5D,8F,AE
7048 8D4C5D
704B 8FAE
704D 4C4F9D 955 DATA >4C,4F,9D,4C,7D,4E,6C,7D
7050 4C7D4E
7053 6C7D
7055 5EAFAF 956 DATA >5E,AF,AF,AF,AE,AE,AE,AE
7058 AFAEAE
705B AEAE
705D AEAEAE 957 MSGAK3 DATA >AE,AE,AE,AE,4C,6F,6C,5C ALIEN CRAFT ADV
7060 AE4C6F
7063 6C5C
7065 7DAE4E 958 DATA >7D,AE,4E,8D,4C,5D,8F,AE
7068 8D4C5D
706B 8FAE
706D 4C4F9D 959 DATA >4C,4F,9D,4C,7D,4E,6C,7D
7070 4C7D4E
7073 6C7D
7075 5EAFAF 960 DATA >5E,AF,AF,AF,AE,AE,AE,AE
7078 AFAEAE
707B AEAE
707D AEAEAE 961 MSGAK4 DATA >AE,AE,AE,AE,4E,4C,9C,8F CAUTION! ASTER
7080 AE4E4C
7083 9C8F
7085 6C7E7D 962 DATA >6C,7E,7D,AF,AE,AE,4C,8E
7088 AFAEAE
708B 4C8E

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708D 8F5C8D 963 DATA >8F, >5C, >8D, >6C, >7E, >4F, >AE, >4D
7090 6C7E4F
7093 AE4D
7095 5C6F8F 964 DATA >5C, >6F, >8F, >AF, >AF, >AE, >AE, >AE
7098 AF8FAE
709B AEAE
709D AEAEAE 965 MSGAK5 DATA >AE, >AE, >AE, >AE, >9C, >8D, >4D, >6C URBITE SHIPS AT
70A0 AE9C8D
70A3 4D6C
70A5 8F5CAE 966 DATA >8F, >5C, >AE, >8E, >5F, >6C, >7F, >8E
70A8 8E5F6C
70AB 7F8E
70AD AE4C8F 967 DATA >AE, >4C, >8F, >8F, >4C, >4E, >6E, >6C
70B0 8F4C4E
70B3 6E6C
70B5 7D5EAF 968 DATA >7D, >5E, >AF, >AF, >AF, >AE, >AE, >AE
70B8 AF8FAE
70BB AEAE
70BD AEAEAE 969 MSGAK6 DATA >AE, >AE, >AE, >4F, >8D, >4C, >7C, >6C DRAMITE SHIPS A
70C0 4F8D4C
70C3 7C6C
70C5 8F5CAE 970 DATA >8F, >5C, >AE, >8E, >5F, >6C, >7F, >8E
70C8 8E5F6C
70CB 7F8E
70CD AE4C8F 971 DATA >AE, >4C, >8F, >8F, >4C, >4E, >6E, >6C
70D0 8F4C4E
70D3 6E6C
70D5 7D5EAF 972 DATA >7D, >5E, >AF, >AF, >AF, >AE, >AE, >AE
70D8 AF8FAE
70DB AEAE
70DD AEAEAE 973 MSGAK7 DATA >AE, >AE, >AE, >4D, >AC, >7D, >6C, >8F BYNITE SHIPS AT
70E0 4DAC7D
70E3 6C8F
70E5 5CAE8E 974 DATA >5C, >AE, >8E, >5F, >6C, >7F, >8E, >AE
70E8 5F6C7F
70EB 8EAE
70ED 4C8F8F 975 DATA >4C, >8F, >8F, >4C, >4E, >6E, >6C, >7D
70F0 4C4E6E
70F3 6C7D
70F5 5EAF8F 976 DATA >5E, >AF, >AF, >AF, >AE, >AE, >AE, >AE
70F8 AF8FAE
70FB AEAE
977
978 *****
979 SOUND LISTS
980 *****
70FD 04DFFF 981 SHPSND DATA 4, >DF, >FF, >93, >63, 1 >3800 -
7100 93B301
7103 04803F 982 DATA 4, >80, >3F, >AE, >3E, 60
7106 AE3E3C
7109 000000 983 DATA 0, >00, >00
710C 049FBF 984 OFFSND DATA 4, >9F, >BF, >DF, >FF, 0 >380F -
710F DFFFF0
7112 059FBF 985 SLWSND DATA 5, >9F, >BF, >DF, >FC, >E7, 1 >3815 -
7115 DFFCE7

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7118 01
7119 02C205      986          DATA 2, >C2, >05, 30
711C 1E
711D 00381C      987          DATA 0, >38, >1C
7120 059FBF      988  FSTSNB DATA 5, >9F, >BF, >DF, >F6, >E7, 1  >3823 -
7123 DFF6E7
7126 01
7127 02C205      989          DATA 2, >C2, >05, 30
712A 1E
712B 00382A      990          DATA 0, >38, >2A
712E 079FBF      991  EXPSNB DATA 7, >9F, >BF, >DF, >E7, >F0, >C0, >07, 5  >3831 -
7131 DFE7F0
7134 C00705
7137 01F106      992          DATA 1, >F1, 6
713A 01F207      993          DATA 1, >F2, 7
713D 01F308      994          DATA 1, >F3, 8
7140 01F409      995          DATA 1, >F4, 9
7143 01F50A      996          DATA 1, >F5, 10
7146 01F60B      997          DATA 1, >F6, 11
7149 01F70C      998          DATA 1, >F7, 12
714C 01F80D      999          DATA 1, >F8, 13
714F 01F90E     1000          DATA 1, >F9, 14
7152 01FA0F     1001          DATA 1, >FA, 15
7155 01FB10     1002          DATA 1, >FB, 16
7158 01FC11     1003          DATA 1, >FC, 17
715B 01FD12     1004          DATA 1, >FD, 18
715E 01FE1E     1005          DATA 1, >FE, 30
7161 01FF00     1006          DATA 1, >FF, 0
7164 049ABF     1007  FIRSNB DATA 4, >9A, >BF, >DF, >FF, 1  >3867 - >38A6
7167 DFFF01
716A 03800A     1008          DATA 3, >80, >0A, >98, 1
716D 9801
716F 03800C     1009          DATA 3, >80, >0C, >96, 1
7172 9601
7174 038010     1010          DATA 3, >80, >10, >94, 1
7177 9401
7179 038014     1011          DATA 3, >80, >14, >92, 1
717C 9201
717E 038018     1012          DATA 3, >80, >18, >90, 1
7181 9001
7183 03801C     1013          DATA 3, >80, >1C, >92, 1
7186 9201
7188 038020     1014          DATA 3, >80, >20, >94, 1
718B 9401
718D 038028     1015          DATA 3, >80, >28, >96, 1
7190 9601
7192 038030     1016          DATA 3, >80, >30, >98, 1
7195 9801
7197 038038     1017          DATA 3, >80, >38, >9A, 1
719A 9A01
719C 03803E     1018          DATA 3, >80, >3E, >9C, 1
719F 9C01
71A1 019F00     1019          DATA 1, >9F, 0
71A4 0499B9     1020  SW1SNB DATA 4, >99, >B9, >DF, >FF, 1  >38A7 - >38CE
71A7 DFFF01

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71AA	048020	1021		DATA	4, >80, >20, >A2, >20, 10	
71AD	A2200A					
71B0	048021	1022		DATA	4, >80, >21, >A2, >21, 8	
71B3	A22108					
71B6	048022	1023		DATA	4, >80, >22, >A2, >22, 6	
71B9	A22206					
71BC	048023	1024		DATA	4, >80, >23, >A2, >23, 4	
71BF	A22304					
71C2	048024	1025		DATA	4, >80, >24, >A2, >24, 2	
71C5	A22402					
71C8	029F8F	1026		DATA	2, >9F, >BF, 0	
71CB	00					
71CC	0496FB	1027	SW2SND	DATA	4, >96, >FB, >DF, >FF, 1	>38CF - >3917
71CF	DFFF01					
71D2	028030	1028		DATA	2, >80, >30, 3	
71D5	03					
71D6	028031	1029		DATA	2, >80, >31, 3	
71D9	03					
71DA	028032	1030		DATA	2, >80, >32, 3	
71DD	03					
71DE	028033	1031		DATA	2, >80, >33, 3	
71E1	03					
71E2	028034	1032		DATA	2, >80, >34, 3	
71E5	03					
71E6	028035	1033		DATA	2, >80, >35, 3	
71E9	03					
71EA	028036	1034		DATA	2, >80, >36, 3	
71ED	03					
71EE	028037	1035		DATA	2, >80, >37, 3	
71F1	03					
71F2	028038	1036		DATA	2, >80, >38, 3	
71F5	03					
71F6	028039	1037		DATA	2, >80, >39, 3	
71F9	03					
71FA	02803A	1038		DATA	2, >80, >3A, 3	
71FD	03					
71FE	02803B	1039		DATA	2, >80, >3B, 3	
7201	03					
7202	02803C	1040		DATA	2, >80, >3C, 3	
7205	03					
7206	02803D	1041		DATA	2, >80, >3D, 3	
7209	03					
720A	02803E	1042		DATA	2, >80, >3E, 3	
720D	03					
720E	02803F	1043		DATA	2, >80, >3F, 3	
7211	03					
7212	019F00	1044		DATA	1, >9F, 0	
7215	079F8F	1045	SW3SND	DATA	7, >9F, >BF, >DF, >FF, >C0, >05, >E3, 1	>3918 - >3947
7218	DFFFC0					
7218	05E301					
721E	01FC02	1046		DATA	1, >FC, 2	
7221	01F802	1047		DATA	1, >F8, 2	
7224	01F402	1048		DATA	1, >F4, 2	
7227	01F002	1049		DATA	1, >F0, 2	
722A	01FC02	1050		DATA	1, >FC, 2	

722D	01F802	1051		DATA	1, >F8, 2	
7230	01F402	1052		DATA	1, >F4, 2	
7233	01F002	1053		DATA	1, >F0, 2	
7236	01FC02	1054		DATA	1, >FC, 2	
7239	01F802	1055		DATA	1, >F8, 2	
723C	01F402	1056		DATA	1, >F4, 2	
723F	01F002	1057		DATA	1, >F0, 2	
7242	01FF00	1058		DATA	1, >FF, 0	
7245	049989	1059	SND567	DATA	4, >99, >B9, >D9, >FF, 1	>3948 - >398C
7248	D9FF01					
724B	06800A	1060		DATA	6, >80, >0A, >A1, >0A, >C2, >0A, 1	
724E	A10AC2					
7251	0A01					
7253	039A8A	1061		DATA	3, >9A, >BA, >DA, 1	
7256	DA01					
7258	039ABA	1062		DATA	3, >9A, >BA, >DA, 1	
725B	DA01					
725D	0398BB	1063		DATA	3, >9B, >BB, >DB, 1	
7260	DB01					
7262	0398BB	1064		DATA	3, >9B, >BB, >DB, 1	
7265	DB01					
7267	039CBC	1065		DATA	3, >9C, >BC, >DC, 1	
726A	DC01					
726C	039CBC	1066		DATA	3, >9C, >BC, >DC, 1	
726F	DC01					
7271	039DBD	1067		DATA	3, >9D, >BD, >DD, 1	
7274	DD01					
7276	039DBD	1068		DATA	3, >9D, >BD, >DD, 1	
7279	DD01					
727B	039EBE	1069		DATA	3, >9E, >BE, >DE, 1	
727E	DE01					
7280	039EBE	1070		DATA	3, >9E, >BE, >DE, 1	
7283	DE01					
7285	039FBF	1071		DATA	3, >9F, >BF, >DF, 0	
7288	DF00					
728A	049888	1072	SND123	DATA	4, >98, >B8, >DF, >FF, 1	>398D - >39C6
728D	DFFF01					
7290	048003	1073		DATA	4, >80, >03, >A0, >11, 1	
7293	A01101					
7296	048005	1074		DATA	4, >80, >05, >A0, >0F, 1	
7299	A00F01					
729C	048007	1075		DATA	4, >80, >07, >A0, >0D, 1	
729F	A00D01					
72A2	048009	1076		DATA	4, >80, >09, >A0, >0B, 1	
72A5	A00801					
72A8	04800B	1077		DATA	4, >80, >0B, >A0, >09, 1	
72AB	A00901					
72AE	04800D	1078		DATA	4, >80, >0D, >A0, >07, 1	
72B1	A00701					
72B4	04800F	1079		DATA	4, >80, >0F, >A0, >05, 1	
72B7	A00501					
72BA	048011	1080		DATA	4, >80, >11, >A0, >03, 1	
72BD	A00301					
72C0	029FBF	1081		DATA	2, >9F, >BF, 0	
72C3	00					

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72C4 0498BF 1082 SND4 DATA 4,>98,>BF,>DF,>FF,1 >39C7 - >????
72C7 DFFF01
72CA 028007 1083 DATA 2,>80,>07,1
72CD 01
72CE 028006 1084 DATA 2,>80,>06,1
72D1 01
72D2 028005 1085 DATA 2,>80,>05,1
72D5 01
72D6 028004 1086 DATA 2,>80,>04,1
72D9 01
72DA 028005 1087 DATA 2,>80,>05,1
72DD 01
72DE 028006 1088 DATA 2,>80,>06,1
72E1 01
72E2 028005 1089 DATA 2,>80,>05,1
72E5 01
72E6 028004 1090 DATA 2,>80,>04,1
72E9 01
72EA 028003 1091 DATA 2,>80,>03,1
72ED 01
72EE 028002 1092 DATA 2,>80,>02,1
72F1 01
72F2 028001 1093 DATA 2,>80,>01,1
72F5 01
72F6 019F00 1094 DATA 1,>9F,0
72F9 069FB4 1095 SNDOUT DATA 6,>9F,>84,>DF,>FF,>A0,>04,10 (>39FC - >3A18)
72FC DFFFA0
72FF 040A
7301 018608 1096 DATA 1,>86,8
7304 018807 1097 DATA 1,>88,7
7307 018A06 1098 DATA 1,>8A,6
730A 018805 1099 DATA 1,>88,5
730D 018D04 1100 DATA 1,>8D,4
7310 018E02 1101 DATA 1,>8E,2
7313 018F00 1102 DATA 1,>8F,0
7316 069FB4 1103 SNDREW DATA 6,>9F,>B4,>DF,>FF,>A0,>20,10 (>3A19 - >3A35)
7319 DFFFA0
731C 200A
731E 018608 1104 DATA 1,>86,8
7321 018807 1105 DATA 1,>88,7
7324 018A06 1106 DATA 1,>8A,6
7327 018805 1107 DATA 1,>88,5
732A 018D04 1108 DATA 1,>8D,4
732D 018E02 1109 DATA
7330 018F00 1110 DATA 1,>8F,0
7333 0A8B01 1111 CHIME DATA 10,>#>8B01,>#>A402,>#>C501,>FF,>9C,>BE,>DE,5 (>3
7336 A402C5
7339 01FF9C
733C BEDE05
733F 04A402 1112 DATA 4,>#>A402,>9E,>BC,7
7342 9EBC07
7345 03A704 1113 DATA 3,>#>A704,>BC,5
7348 BC05
734A 03A402 1114 DATA 3,>#>A402,>BC,7
734D BC07

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734F 088B01 1115 DATA 8, #>8B01, #>A402, #>C501, >9C, >BE, 5
7352 A402C5
7355 019CBE
7358 05
7359 04A402 1116 DATA 4, #>A402, >9E, >BC, 7
735C 9EBC07
735F 03A704 1117 DATA 3, #>A704, >BC, 5
7362 BC05
7364 03A402 1118 DATA 3, #>A402, >BC, 7
7367 BC07
7369 088B01 1119 DATA 8, #>8B01, #>A402, #>C501, >9C, >BE, 5
736C A402C5
736F 019CBE
7372 05
7373 04A402 1120 DATA 4, #>A402, >9E, >BC, 7
7376 9EBC07
7379 03A704 1121 DATA 3, #>A704, >BC, 5
737C BC05
737E 03A402 1122 DATA 3, #>A402, >BC, 7
7381 BC07
7383 039F8F 1123 DATA 3, >9F, >BF, >DF, 0
7386 DF00
7388 06BFDF 1124 FULSND DATA 6, >BF, >DF, >FF, #>8038, >93, 6 (>3A8B - >????)
738B FF8038
738E 9306
7390 028036 1125 DATA 2, #>8036, 6
7393 06
7394 028034 1126 DATA 2, #>8034, 6
7397 06
7398 028032 1127 DATA 2, #>8032, 6
739B 06
739C 038030 1128 DATA 3, #>8030, >95, 6
739F 9506
73A1 02802E 1129 DATA 2, #>802E, 6
73A4 06
73A5 02802C 1130 DATA 2, #>802C, 6
73A8 06
73A9 02802A 1131 DATA 2, #>802A, 6
73AC 06
73AD 028028 1132 DATA 2, #>8028, 6
73B0 06
73B1 028027 1133 DATA 2, #>8027, 6
73B4 06
73B5 028026 1134 DATA 2, #>8026, 6
73B8 06
73B9 028025 1135 DATA 2, #>8025, 6
73BC 06
73BD 028024 1136 DATA 2, #>8024, 6
73C0 06
73C1 028023 1137 DATA 2, #>8023, 5
73C4 05
73C5 028022 1138 DATA 2, #>8022, 5
73C8 05
73C9 038021 1139 DATA 3, #>8021, >97, 4
73CC 9704

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73CE 028020 1140 DATA 2, #>8020, 4
73D1 04
73D2 02801F 1141 DATA 2, #>801F, 4
73D5 04
73D6 02801E 1142 DATA 2, #>801E, 3
73D9 03
73DA 02801D 1143 DATA 2, #>801D, 3
73DD 03
73DE 02801C 1144 DATA 2, #>801C, 3
73E1 03
73E2 02801B 1145 DATA 2, #>801B, 3
73E5 03
73E6 02801A 1146 DATA 2, #>801A, 3
73E9 03
73EA 028019 1147 DATA 2, #>8019, 3
73ED 03
73EE 028018 1148 DATA 2, #>8018, 3
73F1 03
73F2 028017 1149 DATA 2, #>8017, 3
73F5 03
73F6 028016 1150 DATA 2, #>8016, 3
73F9 03
73FA 028015 1151 DATA 2, #>8015, 3
73FD 03
73FE 028014 1152 DATA 2, #>8014, 3
7401 03
7402 028013 1153 DATA 2, #>8013, 3
7405 03
7406 028012 1154 DATA 2, #>8012, 3
7409 03
740A 028011 1155 DATA 2, #>8011, 3
740D 03
740E 028010 1156 DATA 2, #>8010, 3
7411 03
7412 019F00 1157 DATA 1, #>9F, 0
1158 ***
1159 *** SCENERY DATA #0 HILLS START
1160 ***
7415 000000 1161 HILLA1 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
7418 000000
741B 000000
741E 000000
7421 000000
7424 00
7425 000000 1162 DATA #>0000, #>0000, #>0000, #>0103, #>0707, #>0F0F, #>FFFF
7428 000000
742B 010307
742E 070F0F
7431 FFFF
7433 000000 1163 HILLA2 DATA #>0000, #>0000, #>0000, #>0407, #>0767, #>676F, #>7F7F, #>1F1F
7436 000000
7439 040707
743C 67676F
743F 7F7F1F
7442 1F

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7443 3F3E3F 1164          DATA  #>3F3E, #>3F7F, #>7FFF, #>FFFF, #>FFF7, #>E3F7, #>FFFF
7446 7F7FFF
7449 FFFFFFFF
744C F7E3F7
744F FFFF
7451 1E7F7F 1165  HILLA3 DATA  #>1E7F, #>7FFF, #>FFFF, #>FFFF, #>FFCF, #>C7EF, #>FFFF, #>FFFF
7454 FFFFFFFF
7457 FFFFFFFF
745A CFC7EF
745D FFFFFFFF
7460 FF
7461 7F7FFF 1166          DATA  #>7F7F, #>FFFF, #>DFE7, #>E7FB, #>FFFF, #>FFF7, #>FFFF
7464 FFDFE7
7467 E7FBFF
746A FFFFFF7
746D FFFF
746F 000000 1167  HILLA4 DATA  #>0000, #>0000, #>0080, #>9898, #>F8F8, #>F8F8, #>F8FE, #>FFFF
7472 000080
7475 9898F8
7478 F8F8F8
747B F8FEFF
747E FF
747F 3EFEFE 1168          DATA  #>3EFE, #>FEFE, #>FFFF, #>FFFF, #>FFFF, #>F7E3, #>FFFF
7482 FEFFFF
7485 FFFFFFFF
7488 FFF7E3
748B FFFF
748D 000000 1169  HILLA5 DATA  #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>8000
7490 000000
7493 000000
7496 000000
7499 000080
749C 00
749D 000001 1170          DATA  #>0000, #>0101, #>C383, #>83C7, #>C6F7, #>F7FB, #>FFFF
74A0 01C383
74A3 83C7C6
74A6 F7F7FB
74A9 FFFF
74AB 000000 1171  HILLA6 DATA  #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0303, #>0000
74AE 000000
74B1 000000
74B4 000000
74B7 030300
74BA 00
74BB C1C1F1 1172          DATA  #>C1C1, #>F1F1, #>73F3, #>F3F7, #>D7FB, #>FDFE, #>FFFF
74BE F173F3
74C1 F3F7D7
74C4 FBFDFE
74C7 FFFF
74C9 000000 1173  HILLA7 DATA  #>0000, #>0000, #>0000, #>0000, #>3078, #>7878, #>F8FE, #>FCFC
74CC 000000
74CF 000030
74D2 787878
74D5 F8FEFC
74D8 FC

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74D9 FEEFEF 1174          DATA #>FEEE, #>FEFF, #>FF9F, #>DFFF, #>FBFF, #>FFFF, #>FFFF
74DC FFFF9F
74DF DFFFFB
74E2 FFFFFFFF
74E5 FFFF
74E7 000000 1175  HILLA8 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
74EA 000000
74ED 000000
74F0 000000
74F3 000000
74F6 00
74F7 004040 1176          DATA #>0040, #>40C0, #>8808, #>3838, #>6C7C, #>BCDF, #>FFFF
74FA C08808
74FD 38386C
7500 7CBCDF
7503 FFFF
7505 000000 1177  HILLB1 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
7508 000000
750B 000000
750E 000000
7511 000000
7514 00
7515 000000 1178          DATA #>0000, #>0000, #>0000, #>0040, #>60E0, #>F2B6, #>B5FF
7518 000000
751B 004060
751E E0F2B6
7521 B5FF
7523 000000 1179  HILLB2 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
7526 000000
7529 000000
752C 000000
752F 000000
7532 00
7533 000000 1180          DATA #>0000, #>0000, #>0000, #>0000, #>0040, #>4051, #>7DF7
7536 000000
7539 000000
753C 404051
753F 7DF7
7541 000000 1181  HILLB3 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
7544 000000
7547 000000
754A 000000
754D 000000
7550 00
7551 000000 1182          DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0213, #>56EE
7554 000000
7557 000000
755A 000213
755D 56EE
755F 000000 1183  HILLB4 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
7562 000000
7565 000000
7568 000000
756B 000000
756E 00
```

```
756F 000000 1184          DATA  #>0000, #>0000, #>0000, #)0000, #>0000, #>0004, #>2468
7572 000000
7575 000000
7578 000004
7578 2468
757D 000000 1185  HILLB5 DATA  #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
7580 000000
7583 000000
7586 000000
7589 000000
758C 00
758D 000000 1186          DATA  #>0000, #>0000, #>0000, #>0000, #>0000, #>0415, #>5FFF
7590 000000
7593 000000
7596 000415
7599 5FFF
7598 000000 1187  HILLB6 DATA  #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
759E 000000
75A1 000000
75A4 000000
75A7 000000
75AA 00
75AB 000000 1188          DATA  #>0000, #>0000, #>0000, #>0001, #>6123, #>6AF2, #>EFFF
75AE 000000
75B1 000161
75B4 236AF2
75B7 EFFF
75B9 000000 1189  HILLB7 DATA  #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
75BC 000000
75BF 000000
75C2 000000
75C5 000000
75C8 00
75C9 000000 1190          DATA  #>0000, #>0020, #>20E0, #>F0B8, #>F8EC, #>FCFF, #>FFFF
75CC 2020E0
75CF F0B8F8
75D2 ECF CFF
75D5 FFFF
75D7 000000 1191  HILLB8 DATA  #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
75DA 000000
75DD 000000
75E0 000000
75E3 000000
75E6 00
75E7 080C0F 1192          DATA  #>080C, #>0F0F, #>1D1D, #>3F3F, #>6F7F, #>BFD F, #>FFFF
75EA 0F1D1D
75ED 3F3F6F
75F0 7FBFD F
75F3 FFFF
75F5 000000 1193  HILLC1 DATA  #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
75F8 000000
75FB 000000
75FE 000000
7601 000000
7604 00
```

```
7605 000000 1194          DATA  #>0000, #>0000, #>0080, #>C0C0, #>6040, #>F8D8, #>EDF7
7608 000080
760B C0C060
760E 40F8D8
7611 EDF7
7613 000000 1195  HILLC2 DATA  #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
7616 000000
7619 000000
761C 000000
761F 000000
7622 C0
7623 000000 1196          DATA  #>0000, #>0000, #>7E41, #>4141, #>7E44, #>4A4A, #>4E4A
7626 007E41
7629 41417E
762C 444A4A
762F 4E4A
7631 000000 1197  HILLC3 DATA  #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
7634 000000
7637 000000
763A 000000
763D 000000
7640 00
7641 000000 1198          DATA  #>0000, #>0000, #>0000, #>0000, #>00E6, #>A8A4, #>C2AC
7644 000000
7647 000000
764A E6A8A4
764D C2AC
764F 000000 1199  HILLC4 DATA  #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
7652 000000
7655 000000
7658 000000
765B 000000
765E 00
765F 000000 1200          DATA  #>0000, #>0000, #>0000, #>0000, #>00EE, #>88C8, #>88EE
7662 000000
7665 000000
7668 EE88C8
766B 88EE
766D 000000 1201  HILLC5 DATA  #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
7670 000000
7673 000000
7676 000000
7679 000000
767C 00
767D 000000 1202          DATA  #>0000, #>0000, #>0000, #>0000, #>0001, #>031B, #>367F
7680 000000
7683 000000
7686 01031B
7689 367F
768B 000000 1203  HILLC6 DATA  #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
768E 000000
7691 000000
7694 000000
7697 000000
769A 00
```



```
7698 000000 1204          DATA  #>0000, #>0000, #>0000, #>0000, #>0000, #>0C4C. #>ADFF
769E 000000
76A1 000000
76A4 000C4C
76A7 ADFF
76A9 000000 1205  HILLC7 DATA  #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
76AC 000000
76AF 000000
76B2 000000
76B5 000000
76B8 00
76B9 000627 1206          DATA  #>0006, #>273F, #>1F3F, #>373B, #>7FFF, #>6FF7, #>FBFF
76BC 3F1F3F
76BF 373B7F
76C2 FF6FF7
76C5 FBFF
76C7 000000 1207  HILLC8 DATA  #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
76CA 000000
76CD 000000
76D0 000000
76D3 000000
76D6 00
76D7 000000 1208          DATA  #>0000, #>0080, #>C0E0, #>C0E0, #>.61A3, #>F1E3, #>EFF7
76DA 80C0E0
76DD C0E061
76E0 A3F1E3
76E3 EFF7
76E5 000000 1209  HILLD1 DATA  #>0000, #>0000, #>0000, #>0000, #>0000, #>0101, #>090F, #>0F1F
76E8 000000
76EB 000000
76EE 000101
76F1 090F0F
76F4 1F
76F5 373B3F 1210          DATA  #>373B, #>3F2F, #>7FFE, #>FFBF, #>BFEF, #>EFFD, #>BFFF
76F8 2F7FFE
76FB FFBFBF
76FE EFEEFFD
7701 BFFF
7703 000000 1211  HILLD2 DATA  #>0000, #>0000, #>0000, #>0000, #>0000, #>8080, #>80C0, #>8080
7706 000000
7709 000000
770C 008080
770F 80C080
7712 80
7713 C0E0C0 1212          DATA  #>C0E0, #>C0C0, #>E0E0, #>60A0, #>E0E8, #>ECFC, #>FDFF
7716 C0E0E0
7719 60A0E0
771C E8ECFC
771F FDFF
7721 000000 1213  HILLD3 DATA  #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
7724 000000
7727 000000
772A 000000
772D 000000
7730 00
```

```

7731 202E28 1214          DATA  #>202E, #>28AC, #>680E, #>A0AE, #>AAAA, #>E0A, #>40FF
7734 AC680E
7737 A0AEAA
773A AAEC0A
773D 40FF
773F 000000 1215  HILLD4  DATA  #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0101
7742 000000
7745 000000
7748 000000
774B 000001
774E 01
774F 0000C3 1216          DATA  #>0000, #>C3A3, #>A3AF, #>C70F, #>EFAE, #>EFAF, #>EFFF
7752 A3A3AF
7755 C70FEF
7758 AEEFAF
775B EFFF
775D 000000 1217  HILLD5  DATA  #>0000, #>0000, #>0000, #>0006, #>0E0F, #>1E1E, #>1F1F, #>7FFF
7760 000000
7763 00060E
7766 0F1E1E
7769 1F1F7F
776C FF
776D EFEEFF 1218          DATA  #>EFEE, #>FFFF, #>EFF7, #>F3FD, #>7F7F, #>FFFE, #>FFFF
7770 FFEFF7
7773 F3FD7F
7776 7FFFFFFE
7779 FFFF
777B 000000 1219  HILLD6  DATA  #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>80A0, #>E0F0
777E 000000
7781 000000
7784 000000
7787 80A0E0
778A F0
778B F0E060 1220          DATA  #>F0E0, #>60E0, #>F0F0, #>F8FC, #>F8FF, #>FBFD, #>7EFF
778E E0F0F0
7791 F8FCF8
7794 FFFBFD
7797 7EFF
7799 000000 1221  HILLD7  DATA  #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>000F, #>1F35, #>7F00
779C 000000
779F 000000
77A2 00000F
77A5 1F357F
77A8 00
77A9 0A0A0A 1222          DATA  #>0A0A, #>0A0A, #>0A0A, #>0A0A, #>0202, #>80FF, #>FFFF
77AC 0A0A0A
77AF 0A0A02
77B2 0280FF
77B5 FFFF
77B7 000000 1223  HILLD8  DATA  #>0000, #>0000, #>0000, #>0000, #>0000, #>00E0, #>F058, #>FC00
77BA 000000
77BD 000000
77C0 0000E0
77C3 F058FC
77C6 00

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77C7 A0A0A0 1224 DATA #>A0A0, #>A0A0, #>A0A0, #>A0A0, #>8080, #>00F8, #>FCFE
77CA A0A0A0
77CD A0A080
77D0 8000F8
77D3 FCFE
1225 GROM 4
1226 ***
1227 *** SCENERY DATA #1 SINGLE EASY TUNNEL
1228 ***
1229 SCEEN2 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
8000 000000
8003 000000
8006 000000
8009 000000
800C 000000
800F 00
8010 000000 1230 DATA #>0000, #>0000, #>0000, #>0004, #>0E0F, #>1F3F, #>3F7F
8013 000000
8016 00040E
8019 0F1F3F
801C 3F7F
801E 000000 1231 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
8021 000000
8024 000000
8027 000000
802A 000000
802D 00
802E 000000 1232 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>8081, #>DBFF
8031 000000
8034 000000
8037 008081
803A DBFF
803C 000000 1233 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
803F 000000
8042 000000
8045 000000
8048 000000
804B 00
804C 000000 1234 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0001, #>ACFF
804F 000000
8052 000000
8055 000001
8058 ACFF
805A 000000 1235 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
805D 000000
8060 000000
8063 000000
8066 000000
8069 00
806A 000000 1236 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>A1FF
806D 000000
8070 000000
8073 000000
8076 A1FF
8078 FF7F3F 1237 DATA #>FF7F, #>3F17, #>0301, #>0000, #>0000, #>0000, #>0000, #>0000
807B 170301
    
```

```
807E 000000
8081 000000
8084 000000
8087 00
8088 000000 1238 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>089C, #>FEFF
808B 000000
808E 000000
8091 00089C
8094 FEFF
8096 FFFFFFFF 1239 DATA #>FFFF, #>FFFF, #>FF7F, #>3F3F, #>1F0E, #>0600, #>0000, #>0000
8099 FFFF7F
809C 3F3F1F
809F 0E0600
80A2 000000
80A5 00
80A6 000000 1240 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>29FF
80A9 000000
80AC 000000
80AF 000000
80B2 29FF
80B4 FFFFFFFF 1241 DATA #>FFFF, #>FFFF, #>F9E0, #>C080, #>0000, #>0000, #>0000, #>0000
80B7 FFF9E0
80BA C08000
80BD 000000
80C0 000000
80C3 00
80C4 000000 1242 DATA #>0000, #>0000, #>0000, #>0000, #>0002, #>47EF, #>FFFF
80C7 000000
80CA 000000
80CD 0247EF
80D0 FFFF
80D2 FFFFFFFF 1243 DATA #>FFFF, #>FFEE, #>C480, #>0000, #>0000, #>0000, #>0000, #>0000
80D5 EEC480
80D8 000000
80DB 000000
80DE 000000
80E1 00
80E2 000000 1244 DATA #>0000, #>0000, #>0000, #>0002, #>070F, #>1F8F, #>FFFF
80E5 000000
80E8 000207
80EB 0F1F8F
80EE FFFF
80F0 FFFFFFFF 1245 DATA #>FFFF, #>FF5B, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
80F3 580000
80F6 000000
80F9 000000
80FC 000000
80FF 00
8100 000000 1246 DATA #>0000, #>0000, #>0000, #>0103, #>078F, #>DFFF, #>FFFF
8103 000000
8106 010307
8109 8FDFFF
810C FFFF
810E FFFFFFFF 1247 DATA #>FFFF, #>FF5A, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
8111 5A0000
```

```
8114 000000
8117 000000
811A 000000
811D 00
811E 000000 1248 DATA #>0000, #>0000, #>0000, #>80C0, #>E0F0, #>F8FD, #>FFFF
8121 000000
8124 80C0E0
8127 F0F8FD
812A FFFF
812C FFFFFFFF 1249 DATA #>FFFF, #>FFEF, #>4600, #>0000, #>0000, #>0000, #>0000, #>0000
812F EF4600
8132 000000
8135 000000
8138 000000
813B 00
813C 000000 1250 DATA #>0000, #>0000, #>0000, #>0000, #>0040, #>E0F0, #>FBFF
813F 000000
8142 000000
8145 40E0F0
8148 FBFF
814A FFFFFFFF 1251 DATA #>FFFF, #>FF7D, #>3810, #>0000, #>0000, #>0000, #>0000, #>0000
814D 7D3810
8150 000000
8153 000000
8156 000000
8159 00
815A 000000 1252 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0008, #>1DBF
815D 000000
8160 000000
8163 000008
8166 1DBF
8168 FFFFFFFF 1253 DATA #>FFFF, #>FFDF, #>8E04, #>0000, #>0000, #>0000, #>0000, #>0000
816B DF8E04
816E 000000
8171 000000
8174 000000
8177 00
8178 000000 1254 DATA #>0000, #>0000, #>0000, #>0000, #>0006, #>0F1F, #>BFFF
817B 000000
817E 000000
8181 060F1F
8184 BFFF
8186 FFFFFFFF 1255 DATA #>FFFF, #>FFFD, #>F870, #>2000, #>0000, #>0000, #>0000, #>0000
8189 FDF870
818C 200000
818F 000000
8192 000000
8195 00
8196 000000 1256 DATA #>0000, #>0000, #>0000, #>0000, #>0004, #>8E9F, #>FFFF
8199 000000
819C 000000
819F 048E9F
81A2 FFFF
81A4 FFFFFFFF 1257 DATA #>FFFF, #>FFFE, #>F460, #>0000, #>0000, #>10000, #>0000, #>0000
81A7 FEF460
```

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81AA 000000
81AD 000000
81B0 000000
81B3 00
81B4 000000 1258 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>081C, #>3EFF
81B7 000000
81BA 000000
81BD 00081C
81C0 3EFF
81C2 FFFFFFFF 1259 DATA #>FFFF, #>FFFF, #>FFCI, #>DFC?, #>DFDF, #>FFFF, #>0000, #>0000
81C5 FFFFCI
81C8 DFC?DF
81CB DFFFFFFF
81CE 000000
81D1 00
81D2 000000 1260 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>00FF, #>FFFF
81D5 000000
81D8 000000
81DB 0000FF
81DE FFFF
81E0 FFFFFFFF 1261 DATA #>FFFF, #>FFFF, #>FFDD, #>DDDD, #>DDE3, #>FFFF, #>0000, #>0000
81E3 FFFFDD
81E6 DDDDDD
81E9 E3FFFF
81EC 000000
81EF 00
81F0 000000 1262 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>00FF, #>FFFF
81F3 000000
81F6 000000
81F9 0000FF
81FC FFFF
81FE FFFFFFFF 1263 DATA #>FFFF, #>FFFF, #>FFC1, #>DFC?, #>DFC1, #>FFFF, #>0000, #>0000
8201 FFFFC1
8204 DFC?DF
8207 C1FFFF
820A 000000
820D 00
820E 000000 1264 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>00FF, #>FFFF
8211 000000
8214 000000
8217 0000FF
821A FFFF
821C FFFFFFFF 1265 DATA #>FFFF, #>FFFF, #>FFDF, #>DFDF, #>DFC1, #>FFFF, #>0000, #>0000
821F FFFFDF
8222 DFD?DF
8225 C1FFFF
8228 000000
822B 00
822C 000000 1266 DATA #>0000, #>0000, #>-0000, #>0000, #>0000, #>00FF, #>FFFF
822F 000000
8232 000000
8235 0000FF
8238 FFFF
823A FFFFFFFF 1267 DATA #>FFFF, #>FF9F, #>0E04, #>0000, #>0000, #>0000, #>0000, #>0000
823D 9F0E04

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```
8240 000000
8243 000000
8246 000000
8249 00
824A 000000 1268 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>040E, #>9FFF
824D 000000
8250 000000
8253 00040E
8256 9FFF
8258 FFFFFFFF 1269 DATA #>FFFF, #>FF76, #>2000, #>0000, #>0000, #>0000, #>0000, #>0000
825B 762000
825E 000000
8261 000000
8264 000000
8267 00
8268 000000 1270 DATA #>0000, #>0000, #>0000, #>0000, #>0008, #>1D3F, #>FFFF
826B 000000
826E 000000
8271 081D3F
8274 FFFF
8276 FFFFFFFF 1271 DATA #>FFFF, #>FF67, #>0200, #>0000, #>0000, #>0000, #>0000, #>0000
8279 670200
827C 000000
827F 000000
8282 000000
8285 00
8286 000000 1272 DATA #>0000, #>0000, #>0E1F, #>IF3F, #>3F7F, #>FFFF, #>FFFF
8289 000E1F
828C 1F3F3F
828F 7FFFFFFF
8292 FFFF
8294 FFFFFFFF 1273 DATA #>FFFF, #>FF7B, #>3100, #>0000, #>0000, #>0000, #>0000, #>0000
8297 783100
829A 000000
829D 000000
82A0 000000
82A3 00
82A4 000000 1274 DATA #>0000, #>0000, #>0000, #>80C0, #>E0F0, #>F8FD, #>FFFF
82A7 000000
82AA 80C0E0
82AD F0FBFD
82B0 FFFF
82B2 FFFFFFFF 1275 DATA #>FFFF, #>FFEF, #>C783, #>0100, #>0000, #>0000, #>0000, #>0000
82B5 EFC783
82B8 010000
82BB 000000
82BE 000000
82C1 00
82C2 000000 1276 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0287, #>CFFF
82C5 000000
82C8 000000
82CB 000287
82CE CFFF
82D0 FFFFFFFF 1277 DATA #>FFFF, #>FFFF, #>7320, #>0000, #>0000, #>0000, #>0000, #>0000
82D3 FF7320
```

```
82D6 000000
82D9 000000
82DC 000000
82DF 00
82E0 000000 1278 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0011, #>BBFF
82E3 000000
82E6 000000
82E9 000011
82EC BBFF
82EE FFFFFFFF 1279 DATA #>FFFF, #>FFAE, #>0400, #>0000, #>0000, #>0000, #>0000, #>0000
82F1 AE0400
82F4 000000
82F7 000000
82FA 000000
82FD 00
82FE 000000 1280 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0183, #>D7FF
8301 000000
8304 000000
8307 000183
830A D7FF
830C FFFCE8 1281 DATA #>FFFC, #>E840, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
830F 400000
8312 000000
8315 000000
8318 000000
831B 00
831C 000000 1282 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>00B0, #>F9FF
831F 000000
8322 000000
8325 000090
8328 F9FF
832A 000000 1283 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
832D 000000
8330 000000
8333 000000
8336 000000
8339 00
833A 000000 1284 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0010, #>B9FF
833D 000000
8340 000000
8343 000010
8346 B9FF
8348 000000 1285 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
834B 000000
834E 000000
8351 000000
8354 000000
8357 00
8358 000000 1286 DATA #>0000, #>0000, #>0000, #>0000, #>0020, #>72FF, #>FFFF
835B 000000
835E 000000
8361 2072FF
8364 FFFF
8366 000000 1287 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
8369 000000
```



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836C 000000
836F 000000
8372 000000
8375 00
8376 000000 1288 DATA #>0000, #>0000, #>.0000, #>0000, #>0008, #>1D3F, #>FFFF
8379 000000
837C 000000
837F 081D3F
8382 FFFF
8384 000000 1289 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
8387 000000
838A 000000
838D 000000
8390 000000
8393 00
8394 000000 1290 DATA #>0000, #>0000, #>0101, #>1338, #>7FFF, #>FFFF, #>FFFF
8397 000101
839A 13387F
839D FFFFFFFF
83A0 FFFF
83A2 000000 1291 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
83A5 000000
83A8 000000
83AB 000000
83AE 000000
83B1 00
83B2 000040 1292 DATA #>0000, #>40E0, #>F0F0, #>F8F8, #>FCFE, #>FEFE, #>FFFF
83B5 E0F0F0
83B8 F8F8FC
83BB FEFEFE
83BE FFFF
1293 ***
1294 *** SCENERY DATA #2 SINGLE TUNNEL(HARD)
1295 ***
83C0 000000 1296 TUNN1 DATA #>0000, #>0000, #>0000, #>0001, #>0103, #>080F, #>0F0F, #>1F1F
83C3 000000
83C6 000101
83C9 03080F
83CC 0F0F1F
83CF 1F
83D0 1F3F3F 1297 DATA #>1F3F, #>3F3F, #>FFFF, #>FFFF, #>FFFF, #>FFFF, #>FFFF
83D3 3FFFFFFF
83D6 FFFFFFFF
83D9 FFFFFFFF
83DC FFFF
83DE 000000 1298 DATA #>0000, #>0000, #>40E0, #>F0F0, #>F8FC, #>FCFC, #>FEFE, #>FEFF
83E1 0040E0
83E4 F0F0F8
83E7 FCF0FC
83EA FEFEFE
83ED FF
83EE FFFFFFFF 1299 DATA #>FFFF, #>FFFF, #>FFFF, #>FFFF, #>FFFF, #>FFFF, #>FFFF
83F1 FFFFFFFF
83F4 FFFFFFFF
83F7 FFFFFFFF

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```
83FA FFFF
83FC 000000 1300 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0040, #>E0E0
83FF 000000
8402 000000
8405 000000
8408 0040E0
8408 E0
840C F0F0F0 1301 DATA #>F0F0, #>F0F8, #>F8F8, #>FCFF, #>FFFF, #>FFFF, #>FFFF
840F F8F8F8
8412 FCFFFF
8415 FFFFFFFF
8418 FFFF
841A 000000 1302 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
841D 000000
8420 000000
8423 000000
8426 000000
8429 00
842A 000000 1303 DATA #>0000, #>0000, #>0000, #>0000, #>82C7, #>EFFF, #>FFFF
842D 000000
8430 000082
8433 C7EFFF
8436 FFFF
8438 000000 1304 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
843B 000000
843E 000000
8441 000000
8444 000000
8447 00
8448 000000 1305 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>82C7, #>EFFF
844B 000000
844E 000000
8451 0082C7
8454 EFFF
8456 000000 1306 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
8459 000000
845C 000000
845F 000000
8462 000000
8465 00
8466 000000 1307 DATA #>0000, #>0000, #>0000, #>0000, #>0810, #>3E7F, #>FFFF
8469 000000
846C 000008
846F 1C3E7F
8472 FFFF
8474 FF7723 1308 DATA #>FF77, #>2301, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
8477 010000
847A 000000
847D 000000
8480 000000
8483 00
8484 000000 1309 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>2277, #>FFFF
8487 000000
848A 000000
848D 002277
```

```
8490 FFFF
8492 FFFFFFFF 1310 DATA #>FFFF, #>FF7E, #>7E3C, #>1C1C, #>1810, #>0000, #>0000, #>0000
8495 7E7E3C
8498 1C1C18
849B 100000
849E 000000
84A1 00
84A2 000000 1311 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0207, #>8FFF
84A5 000000
84A8 000000
84AB 000207
84AE 8FFF
84B0 FFFF77 1312 DATA #>FFFF, #>7723, #>0100, #>0000, #>0000, #>0000, #>0000, #>0000
84B3 230100
84B6 000000
84B9 000000
84BC 000000
84BF 00
84C0 000000 1313 DATA #>0000, #>0000, #>0000, #>0000, #>0004, #>0E1F, #>BFFF
84C3 000000
84C6 000000
84C9 040E1F
84CC BFFF
84CE FFFFF7 1314 DATA #>FFFF, #>F7E3, #>C180, #>0000, #>0000, #>0000, #>0000, #>0000
84D1 E3C180
84D4 000000
84D7 000000
84DA 000000
84DD 00
84DE 000000 1315 DATA #>0000, #>0000, #>0000, #>0001, #>0347, #>EFFF, #>FFFF
84E1 000000
84E4 000103
84E7 47EFFF
84EA FFFF
84EC FFFFFFFF 1316 DATA #>FFFF, #>FFBF, #>1F0E, #>0400, #>0000, #>0000, #>0000, #>0000
84EF BF1F0E
84F2 040000
84F5 000000
84F8 000000
84FB 00
84FC 000000 1317 DATA #>0000, #>0000, #>0010, #>387C, #>FFFF, #>FFFF, #>FFFF
84FF 000010
8502 387CFF
8505 FFFFFFFF
8508 FFFF
850A FFFFFD 1318 DATA #>FFFF, #>FDFA, #>7020, #>0000, #>0000, #>0000, #>0000, #>0000
850D FA7020
8510 000000
8513 000000
8516 000000
8319 00
851A 000000 1319 DATA #>0000, #>0000, #>2070, #>F8FC, #>FEFF, #>FFFF, #>FFFF
851D 002070
8520 FBFCFE
8523 FFFFFFFF
```

```
8526 FFFF
8528 FFFFF7 1320 DATA #>FFFF, #>F7E3, #>4100, #>0000, #>0000, #>0000, #>0000, #>0000
852B E34100
852E 000000
8531 000000
8534 000000
8537 00
8538 000000 1321 DATA #>0000, #>0000, #>0000, #>081C, #>3E7F, #>FFFF, #>FFFF
853B 000000
853E 081C3E
8541 7FFFFFFF
8544 FFFF
8546 FFFFDF 1322 DATA #>FFFF, #>DF8F, #>0703, #>0100, #>0000, #>0000, #>0000, #>0000
8549 8F0703
854C 010000
854F 000000
8552 000000
8555 00
8556 000000 1323 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>80D0, #>F8FE
8559 000000
855C 000000
855F 0080D0
8562 F8FE
8564 FFFFFB 1324 DATA #>FFFF, #>FBF1, #>E0C0, #>8000, #>0000, #>0000, #>0000, #>0000
8567 F1E0C0
856A 800000
856D 000000
8570 000000
8573 00
8574 000000 1325 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0001, #>D7FF
8577 000000
857A 000000
857D 000001
8580 D7FF
8582 FFFFFFFF 1326 DATA #>FFFF, #>FFFF, #>FFC1, #>DFC7, #>DFDF, #>FFFF, #>0000, #>0000
8585 FFFFC1
8588 DFC7DF
858B DFFFFFFF
858E 000000
8591 00
8592 000000 1327 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>FFFF, #>FFFF
8595 000000
8598 000000
859B 00FFFFFF
859E FFFF
85A0 FFFFFFFF 1328 DATA #>FFFF, #>FFFF, #>FFDD, #>DDDD, #>DDE3, #>FFFF, #>0000, #>0000
85A3 FFFFD
85A6 DDDDD
85A9 E3FFFF
85AC 000000
85AF 00
85B0 000000 1329 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>FFFF, #>FFFF
85B3 000000
85B6 000000
85B9 00FFFF
```

```
85BC FFFF
85BE FFFFFFFF 1330 DATA #>FFFF, #>FFFF, #>FFC1, #>DFC7, #>DFC1, #>FFFF, #>0000, #>0000
85C1 FFFFC1
85C4 DFC7DF
85C7 C1FFFF
85CA 000000
85CD 00
85CE 000000 1331 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>FFFF, #>FFFF
85D1 000000
85D4 000000
85D7 00FFFF
85DA FFFF
85DC FFFFFFFF 1332 DATA #>FFFF, #>FFFF, #>FFDF, #>DFDF, #>DFC1, #>FFFF, #>0000, #>0000
85DF FFFFDf
85E2 DfDfDf
85E5 C1FFFF
85E8 000000
85EB 00
85EC 000000 1333 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>FFFF, #>FFFF
85EF 000000
85F2 000000
85F5 00FFFF
85F8 FFFF
85FA FFFFFFFF 1334 DATA #>FFFF, #>FF9F, #>0E04, #>0000, #>0000, #>0000, #>0000, #>0000
85FD 9F0E04
8600 000000
8603 000000
8606 000000
8609 00
860A 000000 1335 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>9EFF
860D 000000
8610 000000
8613 000000
8616 9EFF
8618 FFFFFFFF 1336 DATA #>FFFF, #>FF76, #>2000, #>0000, #>0000, #>0000, #>0000, #>0000
861B 762000
861E 000000
8621 000000
8624 000000
8627 00
8628 000000 1337 DATA #>0000, #>0000, #>0000, #>0001, #>0103, #>072F, #>7FFF
862B 000000
862E 000101
8631 03072F
8634 7FFF
8636 FFFFFFFF 1338 DATA #>FFFF, #>FF67, #>0200, #>0000, #>0000, #>0000, #>0000, #>0000
8639 670200
863C 000000
863F 000000
8642 000000
8645 00
8646 000000 1339 DATA #>0000, #>0000, #>387C, #>FEFF, #>FFFF, #>FFFF, #>FFFF
8649 00387C
864C FEFFFF
864F FFFFFFFF
```

```
8652 FFFF
8654 FFFFFFFF 1340 DATA #>FFFF, #>FF7B, #>3100, #>0000, #>0000, #>0000, #>0000, #>0000
8657 7B3100
865A 000000
865D 000000
8660 000000
8663 00
8664 000000 1341 DATA #>0000, #>0000, #>0000, #>0010, #>B&FC, #>FEFE, #>FFFF
8667 000000
866A 0010B&
866D FCFEFE
8670 FFFF
8672 FFFFFFFF 1342 DATA #>FFFF, #>FFEF, #>C7&3, #>0100, #>0000, #>0000, #>0000, #>0000
8675 EFC7&3
8678 010000
867B 000000
867E 000000
8681 00
8682 000000 1343 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>39FF
8685 000000
8688 000000
868B 000000
868E 39FF
8690 FFFFFFFF 1344 DATA #>FFFF, #>FFFF, #>FFF1, #>E1C03#>0000, #>0000, #>0000, #>0000
8693 FFFFFFF1
8696 E1C000
8699 000000
869C 000000
869F 00
86A0 000000 1345 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>A&FE
86A3 000000
86A6 000000
86A9 000000
86AC A&FE
86AE FFFFFFFF 1346 DATA #>FFFF, #>FFFF, #>FFFF, #>FFFF, #>FFFF, #>7C6&, #>4000, #>0000
86B1 FFFFFFFF
86B4 FFFFFFFF
86B7 FF7C6&
86BA 400000
86BD 00
86BE 000000 1347 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>40EA
86C1 000000
86C4 000000
86C7 000000
86CA 40EA
86CC FFFFFFFF 1348 DATA #>FFFF, #>FFE7, #>C3&1, #>8000, #>0000, #>0000, #>0000, #>0000
86CF E7C3&1
86D2 800000
86D5 000000
86D8 000000
86DB 00
86DC 000000 1349 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>06CF
86DF 000000
86E2 000000
86E5 000000
```

```
86E8 06CF
86EA FFFFFFFF 1350 DATA #>FFFF, #>FFFF, #>FFF7, #>E240, #>0000, #>0000, #>0000, #>0000
86ED FFFFFFF7
86F0 E24000
86F3 000000
86F6 000000
86F9 00
86FA 000000 1351 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>1038, #>7CFF
86FD 000000
8700 000000
8703 001038
8706 7CFF
8708 FFFFD0C 1352 DATA #>FFFE, #>D0C88, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
870B 880000
870E 000000
8711 000000
8714 000000
8717 00
8718 000000 1353 DATA #>0000, #>0000, #>0000, #>0000, #>0103, #>0327, #>77FF
871B 000000
871E 000001
8721 030327
8724 77FF
8726 F0C080 1354 DATA #>F0C0, #>8000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
8729 000000
872C 000000
872F 000000
8732 000000
8735 00
8736 000000 1355 DATA #>0000, #>0001, #>0303, #>67F7, #>FFFF, #>FFFF, #>FFFF
8739 010303
873C 67F7FF
873F FFFFFFFF
8742 FFFF
8744 000000 1356 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
8747 000000
874A 000000
874D 000000
8750 000000
8753 00
8754 2070F8 1357 DATA #>2070, #>F8FC, #>FEFF, #>FFFF, #>FFFF, #>FFFF, #>FFFF
8757 FCFE FF
875A FFFFFFFF
875D FFFFFFFF
8760 FFFF
8762 000000 1358 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
8765 000000
8768 000000
876B 000000
876E 000000
8771 00
8772 000000 1359 DATA #>0000, #>0000, #>0000, #>80C0, #>E0F0, #>F8FC, #>FEFF
8775 000000
8778 80C0E0
877B F0FBFC
```

```

877E FEFF
      1360 ***
      1361 *** SCENERY DATA #3 FIRST HALF OF DOUBLE TUNNEL
      1362 ***
8780 000000 1363 TUNN2A DATA #>0000,#>0000,#>0000,#>0000,#>0000,#>0000,#>0000,#>0000
8783 000000
8786 000000
8789 000000
878C 000000
878F 00
8790 010307 1364 DATA #>0103,#>0707,#>0F1F,#>1F3F,#>3F3F,#>3F7F,#>7F7F
8793 070F1F
8796 1F3F3F
8799 3F3F7F
879C 7F7F
879E 000000 1365 DATA #>0000,#>0000,#>0000,#>0000,#>0000,#>0000,#>0000,#>0000
87A1 000000
87A4 000000
87A7 000000
87AA 000000
87AD 00
87AE 80E0F0 1366 DATA #>80E0,#>F0F1,#>FBFF,#>FFFF,#>FFFF,#>FFFF,#>FFFF
87B1 F1FBFF
87B4 FFFFFFFF
87B7 FFFFFFFF
87BA FFFF
87BC 000000 1367 DATA #>0000.#>0000,#>0000,#>0000,#>0000,#>0000,#>0000,#>0000
87BF 000000
87C2 000000
87C5 000000
87C8 000000
87CB 00
87CC 000000 1368 DATA #>0000,#>0000,#>8080,#>C4C6,#>CEEF,#>FFFF,#>FFFF
87CF 008080
87D2 C4C6CE
87D5 EFFFFFFF
87D8 FFFF
87DA 0F0705 1369 DATA #>0F07,#>0501,#>0000,#>0000,#>0000,#>0000,#>0000,#>0000
87DD 010000
87E0 000000
87E3 000000
87E6 000000
87E9 00
87EA 000000 1370 DATA #>0000,#>0000,#>0000,#>0000,#>0207,#>8FFF,#>FFFF
87ED 000000
87F0 000002
87F3 078FFF
87F6 FFFF
87F8 FFFFFFFF 1371 DATA #>FFFF,#>FFFF,#>FB71,#>2000,#>0000,#>0000,#>0000,#>0000
87FB FFFB71
87FE 200000
8801 000000
8804 000000
8807 00
8808 000000 1372 DATA #>0000,#>0000,#>0000,#>0000,#>0000,#>82C7,#>EFFF

```



```
880B 000000
880E 000000
8811 0082C7
8814 EFFF
8816 FFFFFFF 1373 DATA #>FFFF, #>FFEE, #>C480, #>0000, #>0000, #>0000, #>0000, #>0000
8819 EEC480
881C 000000
881F 000000
8822 000000
8825 00
8826 000000 1374 DATA #>0000, #>0000, #>0000, #>0000, #>081C, #>3E7F, #>FFFF
8829 000000
882C 000008
882F 1C3E7F
8832 FFFF
8834 FFFFE3 1375 DATA #>FFFF, #>E341, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
8837 410000
883A 000000
883D 000000
8840 000000
8843 00
8844 000000 1376 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>2277, #>FFFF
8847 000000
884A 000000
884D 002277
8850 FFFF
8852 FFFFFFF 1377 DATA #>FFFF, #>FF7E, #>7E3C, #>1C1C, #>1810, #>0000, #>0000, #>0000
8855 7E7E3C
8858 1C1C18
885B 100000
885E 000000
8861 00
8862 000000 1378 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0207, #>8FFF
8865 000000
8868 000000
886B 000207
886E 8FFF
8870 FFFF77 1379 DATA #>FFFF, #>7723, #>0100, #>0000, #>0000, #>0000, #>0000, #>0000
8873 230100
8876 000000
8879 000000
887C 000000
887F 00
8880 000000 1380 DATA #>0000, #>0000, #>0000, #>0000, #>0004, #>0E1F, #>BFFF
8883 000000
8886 000000
8889 040E1F
888C BFFF
888E FFFFF7 1381 DATA #>FFFF, #>F7E3, #>C180, #>0000, #>0000, #>0000, #>0000, #>0000
8891 E3C180
8894 000000
8897 000000
889A 000000
889D 00
889E 000000 1382 DATA #>0000, #>0000, #>0000, #>0001, #>0347, #>EFFF, #>FFFF
```

```
88A1 000000
88A4 000103
88A7 47EFFF
88AA FFFF
88AC FFFFFFF 1383 DATA #>FFFF, #>FFBF, #>1F0E, #>0400, #>0000, #>0000, #>0000, #>0000
88AF BF1F0E
88B2 040000
88B5 000000
88B8 000000
88BB 00
88BC 000000 1384 DATA #>0000, #>0000, #>0010, #>387C, #>FFFF, #>FFFF, #>FFFF
88BF 000010
88C2 387CFF
88C5 FFFFFFF
88C8 FFFF
88CA FFFFFFFD 1385 DATA #>FFFF, #>FDF8, #>7020, #>0000, #>0000, #>0000, #>0000, #>0000
88CD F87020
88D0 000000
88D3 000000
88D6 000000
88D9 00
88DA 000000 1386 DATA #>0000, #>0000, #>2070, #>F8FC, #>FEFF, #>FFFF, #>FFFF
88DD 002070
88E0 F8FCFE
88E3 FFFFFFF
88E6 FFFF
88E8 FFFFFF7 1387 DATA #>FFFF, #>F7E3, #>4100, #>0000, #>0000, #>0000, #>0000, #>0000
88EB E34100
88EE 000000
88F1 000000
88F4 000000
88F7 00
88F8 000000 1388 DATA #>0000, #>0000, #>0000, #>081C, #>3E7F, #>FFFF, #>FFFF
88FB 000000
88FE 081C3E
8901 7FFFFFF
8904 FFFF
8906 FFFFFDF 1389 DATA #>FFFF, #>DF8F, #>0703, #>0100, #>0000, #>0000, #>0000, #>0000
8909 8E0703
890C 010000
890F 000000
8912 000000
8915 00
8916 000000 1390 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>80D0, #>F8FE
8919 000000
891C 000000
891F 0080D0
8922 F8FE
8924 FFFFFB 1391 DATA #>FFFF, #>FBF1, #>E0C0, #>8000, #>0000, #>0000, #>0000, #>0000
8927 F1E0C0
892A 800000
892D 000000
8930 000000
8933 00
8934 000000 1392 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0001, #>D7FF
```

```

8937 000000
893A 000000
893D 000001
8940 D7FF
8942 FFFFFFF 1393 DATA #>FFFF, #>FFFF, #>FFC1, #>DFC7, #>DFDF, #>FFFF, #>0000, #>0000
8945 FFFFC1
8948 DFC7DF
894B DFFFFFF
894E 000000
8951 00
8952 000000 1394 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>FFFF, #>FFFF
8955 000000
8958 000000
895B 00FFFF
895E FFFF
8960 FFFFFFF 1395 DATA #>FFFF, #>FFFF, #>FFDD, #>DDDD, #>DDE3, #>FFFF, #>0000, #>0000
8963 FFFFD1
8966 DDDDD1
8969 E3FFFF
896C 000000
896F 00
8970 000000 1396 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>FFFF, #>FFFF
8973 000000
8976 000000
8979 00FFFF
897C FFFF
897E FFFFFFF 1397 DATA #>FFFF, #>FFFF, #>FFC1, #>DFC7, #>DFC1, #>FFFF, #>0000, #>0000
8981 FFFFC1
8984 DFC7DF
8987 C1FFFF
898A 000000
898D 00
898E 000000 1398 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>FFFF, #>FFFF
8991 000000
8994 000000
8997 00FFFF
899A FFFF
899C FFFFFFF 1399 DATA #>FFFF, #>FFFF, #>FFDF, #>DFDF, #>DFC1, #>FFFF, #>0000, #>0000
899F FFFFD1
89A2 DFD1DF
89A5 C1FFFF
89A8 000000
89AB 00
89AC 000000 1400 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>FFFF, #>FFFF
89AF 000000
89B2 000000
89B5 00FFFF
89B8 FFFF
89BA FFFFFFF 1401 DATA #>FFFF, #>FF9F, #>0E04, #>0000, #>0000, #>0000, #>0000, #>0000
89BD 9F0E04
89C0 000000
89C3 000000
89C6 000000
89C9 00
89CA 000000 1402 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>000C, #>9EFF

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```
89CD 000000
89DD 000000
89DE 00000C
89DF 9EFF
89D8 FFFFFFF 1403 DATA #>FFFF, #>FF76, #>2000, #>0000, #>0000, #>0000, #>0000, #>0000
89DB 762000
89DE 000000
89E1 000000
89E4 000000
89E7 00
89E8 000000 1404 DATA #>0000, #>0000, #>0000, #>0001, #>0103, #>072F, #>7FFF
89EB 000000
89EE 000101
89F1 03072F
89F4 7FFF
89F6 FFFFFFF 1405 DATA #>FFFF, #>FF67, #>0200, #>0000, #>0000, #>0000, #>0000, #>0000
89F9 670200
89FC 000000
89FF 000000
8A02 000000
8A05 00
8A06 000000 1406 DATA #>0000, #>0000, #>387C, #>FEFF, #>FFFF, #>FFFF, #>FFFF
8A09 00387C
8A0C FFFFFFF
8A0F FFFFFFF
8A12 FFFF
8A14 FFFFFFF 1407 DATA #>FFFF, #>FF7B, #>3100, #>0000, #>0000, #>0000, #>0000, #>0000
8A17 7B3100
8A1A 000000
8A1D 000000
8A20 000000
8A23 00
8A24 000000 1408 DATA #>0000, #>0000, #>0000, #>0010, #>B8FC, #>FEFE, #>FFFF
8A27 000000
8A2A 0010B8
8A2D FCFEFE
8A30 FFFF
8A32 FFFFFFF 1409 DATA #>FFFF, #>FFEF, #>C783, #>0100, #>0000, #>0000, #>0000, #>0000
8A35 EFC783
8A38 010000
8A3B 000000
8A3E 000000
8A41 00
8A42 000000 1410 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>39FF
8A45 000000
8A48 000000
8A4B 000000
8A4E 39FF
8A50 FFFFFFF 1411 DATA #>FFFF, #>FFFF, #>FFF1, #>E1C0, #>0000, #>0000, #>0000, #>0000
8A53 FFFF1
8A56 E1C000
8A59 000000
8A5C 000000
8A5F 00
8A60 000000 1412 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>A8FC
```

```
8A63 000000
8A66 000000
8A69 000000
8A6C A8FC
8A6E FFFFFFF 1413 DATA #>FFFF, #>FFFF, #>FFFF, #>FFFF, #>FFFF, #>7E7E, #>7E3C, #>3C18
8A71 FFFFFFF
8A74 FFFFFFF
8A77 FF7E7E
8A7A 7E3C3C
8A7D 18
8A7E 000000 1414 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>41F5
8A81 000000
8A84 000000
8A87 000000
8A8A 41F5
8A8C FFFFFFF 1415 DATA #>FFFF, #>FFE7, #>C381, #>8000, #>0000, #>0000, #>0000, #>0000
8A8F E7C381
8A92 800000
8A95 000000
8A98 000000
8A9B 00
8A9C 000000 1416 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>060F
8A9F 000000
8AA2 000000
8AA5 000000
8AA8 060F
8AAA FFFFFFF 1417 DATA #>FFFF, #>FFFF, #>FFF7, #>E240, #>0000, #>0000, #>0000, #>0000
8AAD FFFFF7
8AB0 E24000
8AB3 000000
8AB6 000000
8AB9 00
8ABA 000000 1418 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>1038, #>7CFF
8ABD 000000
8AC0 000000
8AC3 001038
8AC6 7CFF
8AC8 FFFFFDF 1419 DATA #>FFFF, #>DF89, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
8ACB 890000
8ACE 000000
8AD1 000000
8AD4 000000
8AD7 00
8AD8 000000 1420 DATA #>0000, #>0000, #>0000, #>0000, #>0103, #>10327, #>77FF
8ADB 000000
8ADE 000001
8AE1 030327
8AE4 77FF
8AE6 FFFFFFF 1421 DATA #>FFFF, #>FFD7, #>8400, #>0000, #>0000, #>0000, #>0000, #>0000
8AE9 078400
8AEC 000000
8AEF 000000
8AF2 000000
8AF5 00
8AF6 000000 1422 DATA #>0000, #>0001, #>0303, #>67F7, #>FFFF, #>FFFF, #>FFFF
```

```

8AF9 010303
8AFC 67F7FF
8AFF FFFFFFFF
8B02 FFFF
8B04 FFFFFFFF 1423 DATA #>FFFF, #>FF6E, #>0400, #>0000, #>0000, #>0000, #>0000, #>0000
8B07 6E0400
8B0A 000000
8B0D 000000
8B10 000000
8B13 00
8B14 000000 1424 DATA #>0000, #>0000, #>0020, #>70F8, #>FDFF, #>FFFF, #>FFFF
8B17 000020
8B1A 70F8FD
8B1D FFFFFFFF
8B20 FFFF
8B22 FFFFFFFF 1425 DATA #>FFFF, #>FF3E, #>1E0C, #>0000, #>0000, #>0000, #>0000, #>0000
8B25 3E1E0C
8B28 000000
8B2B 000000
8B2E 000000
8B31 00
8B32 000000 1426 DATA #>0000, #>0000, #>0000, #>0080, #>C6EE, #>FFFF, #>FFFF
8B35 000000
8B38 0080C6
8B3B EFFFFFFF
8B3E FFFF
1427 ***
1428 *** SCENERY DATA #4 SECOND HALF OF DOUBLE TUNNEL
1429 ***
8B40 FFFFFFFF 1430 TUNN2B DATA #>FFFF, #>FFFF, #>7F3F, #>3F1C, #>0800, #>0000, #>0000, #>0000
8B43 FF7F3F
8B46 3F1C08
8B49 000000
8B4C 000000
8B4F 00
8B50 000000 1431 DATA #>0000, #>0000, #>0000, #>0000, #>0101, #>0387, #>CFFF
8B53 000000
8B56 000001
8B59 010387
8B5C CFFF
8B5E FFFFFFFF 1432 DATA #>FFFF, #>FFFF, #>F7E3, #>0301, #>0000, #>0000, #>0000, #>0000
8B61 FFF7E3
8B64 030100
8B67 000000
8B6A 000000
8B6D 00
8B6E 000000 1433 DATA #>0000, #>0000, #>0000, #>00C0, #>E8FD, #>FFFF, #>FFFF
8B71 000000
8B74 00C0E8
8B77 FFFFFFFF
8B7A FFFF
8B7C FFFFFFFF 1434 DATA #>FFFF, #>FFFF, #>FFFF, #>FFFF, #>FF7D, #>7830, #>0000, #>0000
8B7F FFFFFFFF
8B82 FFFFFFFF
8B85 7D7830

```

```
8B88 000000
8B8B 00
8B8C 000000 1435 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>00C0, #>FAFF
8B8F 000000
8B92 000000
8B95 000000
8B98 FAFF
8B9A FFFFFFFF 1436 DATA #>FFFF, #>FFFF, #>FFFF, #>F3E1, #>0000, #>0000, #>0000, #>0000
8B9D FFFFFFFF
8BA0 F3E100
8BA3 000000
8BA6 000000
8BA9 00
8BAA 000000 1437 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0008, #>DCFF
8BAD 000000
8BB0 000000
8BB3 000008
8BB6 DCFF
8BB8 FFFFFFFF 1438 DATA #>FFFF, #>FFFF, #>FFFF, #>FFFF, #>FFFF, #>7F3E, #>1C08, #>0000
8BBB FFFFFFFF
8BBE FFFFFFFF
8BC1 FF7F3E
8BC4 1C0800
8BC7 00
8BC8 000000 1439 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0001, #>9BFF
8BCB 000000
8BCE 000000
8BD1 000001
8BD4 9BFF
8BD6 FFFFFFFF 1440 DATA #>FFFF, #>FFFF, #>FFFF, #>FFFF, #>FFBF, #>1D08, #>0000, #>0000
8BD9 FFFFFFFF
8BDC FFFFFFFF
8BDF BF1D08
8BE2 000000
8BE5 00
8BE6 000000 1441 DATA #>0000, #>0000, #>0000, #>00004#>0000, #>0004, #>CEFF
8BE9 000000
8BEC 000000
8BEF 000004
8BF2 CEFF
8BF4 FFFFFFFF 1442 DATA #>FFFF, #>FFFF, #>FFFF, #>FFFF, #>FFFF, #>FFFF, #>3F1E, #>0400
8BF7 FFFFFFFF
8BFA FFFFFFFF
8BFD FFFFFFFF
8C00 3F1E04
8C03 00
8C04 000000 1443 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>95FF
8C07 000000
8C0A 000000
8C0D 000000
8C10 95FF
8C12 FFFFFFFF 1444 DATA #>FFFF, #>FFFF, #>FFFF, #>FFFF, #>FFEE, #>C480, #>0000, #>0000
8C15 FFFFFFFF
8C18 FFFFFFFF
8C1B EEC480
```

```
8C1E 000000
8C21 00
8C22 000000 1445 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>03&F, #>FFFF
8C25 000000
8C28 000000
8C2B 0003&F
8C2E FFFF
8C30 FFFFFFFF 1446 DATA #>FFFF, #>FFFF, #>F&F0, #>C0&0, #>0000, #>0000, #>0000, #>0000
8C33 FFF&F0
8C36 C0&000
8C39 000000
8C3C 000000
8C3F 00
8C40 000000 1447 DATA #>0000, #>0000, #>0000, #>0000, #>0004, #>0E9F, #>BFFF
8C43 000000
8C46 000000
8C49 040E9F
8C4C BFFF
8C4E FFFFF7 1448 DATA #>FFFF, #>F7E3, #>C1&0, #>0000, #>0000, #>0000, #>0000, #>0000
8C51 E3C1&0
8C54 000000
8C57 000000
8C5A 000000
8C5D 00
8C5E 000000 1449 DATA #>0000, #>0000, #>0000, #>0001, #>0347, #>EFFF, #>FFFF
8C61 000000
8C64 000103
8C67 47EFFF
8C6A FFFF
8C6C FFFFFFFF 1450 DATA #>FFFF, #>FFBF, #>1F0E, #>0400, #>0000, #>0000, #>0000, #>0000
8C6F BF1F0E
8C72 040000
8C75 000000
8C78 000000
8C7B 00
8C7C 000000 1451 DATA #>0000, #>0000, #>0010, #>3&7C, #>FFFF, #>FFFF, #>FFFF
8C7F 000010
8C82 3&7CFF
8C85 FFFFFFFF
8C88 FFFF
8C8A FFFFFD 1452 DATA #>FFFF, #>FDF&, #>7020, #>0000, #>0000, #>0000, #>0000, #>0000
8C8D F&7020
8C90 000000
8C93 000000
8C96 000000
8C99 00
8C9A 000000 1453 DATA #>0000, #>0000, #>2070, #>F&FC, #>FEFF, #>FFFF, #>FFFF
8C9D 002070
8CA0 F&FCFE
8CA3 FFFFFFFF
8CA6 FFFF
8CA8 FFFFF7 1454 DATA #>FFFF, #>F7E3, #>4100, #>0000, #>0000, #>0000, #>0000, #>0000
8CAB E34100
8CAE 000000
8CB1 000000
```



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8CB4 000000
8CB7 00
8CB8 000000 1455 DATA #>0000, #>0000, #>0000, #>081C, #>3E7F, #>FFFF, #>FFFF
BCBB 000000
8CBE 081C3E
8CC1 7FFFFFFF
8CC4 FFFF
8CC6 FFFFDF 1456 DATA #>FFFF, #>DF8F, #>0703, #>0100, #>0000, #>0000, #>0000, #>0000
8CC9 8F0703
8CCC 010000
8CCF 000000
8CD2 000000
8CD5 00
8CD6 000000 1457 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>8000, #>F8FE
8CD9 000000
8CDC 000000
8CDF 008000
8CE2 F8FE
8CE4 FFFFFFFB 1458 DATA #>FFFF, #>FBF1, #>E0C0, #>8000, #>0000, #>0000, #>0000, #>0000
8CE7 F1E0C0
8CEA 800000
8CED 000000
8CF0 000000
8CF3 00
8CF4 000000 1459 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0001, #>07FF
8CF7 000000
8CFA 000000
8CFD 000001
8D00 D7FF
8D02 FFFFFFFF 1460 DATA #>FFFF, #>FFFF, #>FF7F, #>7F7F, #>3F07, #>0301, #>0000, #>0000
8D05 FFFF7F
8D08 7F7F3F
8D0B 070301
8D0E 000000
8D11 00
8D12 000000 1461 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>91F9
8D15 000000
8D18 000000
8D1B 000000
8D1E 91F9
8D20 FFFFFFFF 1462 DATA #>FFFF, #>FFFF, #>FCF8, #>F0F0, #>E0C0, #>8000, #>0000, #>0000
8D23 FFFCF8
8D26 F0F0E0
8D29 C08000
8D2C 000000
8D2F 00
8D30 000000 1463 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0080, #>C4E7
8D33 000000
8D36 000000
8D39 000080
8D3C C4E7
8D3E FFFFFFFF 1464 DATA #>FFFF, #>FFFF, #>FF7F, #>3F1F, #>0F0F, #>0500, #>0000, #>0000
8D41 FFFF7F
8D44 3F1F0F
8D47 0F0500
```

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8D4A 000000
8D4D 00
8D4E 000000 1465 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>C4E5
8D51 000000
8D54 000000
8D57 000000
8D5A C4E5
8D5C FFFFFFFF 1466 DATA #>FFFF, #>FFFF, #>FFFE, #>FCF0, #>E0C0, #>C080, #>0000, #>0000
8D5F FFFFFFFE
8D62 FCF0E0
8D65 C00080
8D68 000000
8D6B 00
8D6C 000000 1467 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0008, #>485D
8D6F 000000
8D72 000000
8D75 000008
8D78 485D
8D7A FFFFFFFF 1468 DATA #>FFFF, #>FF9F, #>0E04, #>0000, #>0000, #>0000, #>0000, #>0000
8D7D 9F0E04
8D80 000000
8D83 000000
8D86 000000
8D89 00
8D8A 000000 1469 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>000C, #>9EFF
8D8D 000000
8D90 000000
8D93 00000C
8D96 9EFF
8D98 FFFFFFFF 1470 DATA #>FFFF, #>FF76, #>2000, #>0000, #>0000, #>0000, #>0000, #>0000
8D9B 762000
8D9E 000000
8DA1 000000
8DA4 000000
8DA7 00
8DA8 000000 1471 DATA #>0000, #>0000, #>0000, #>0001, #>0103, #>072F, #>7FFF
8DAB 000000
8DAE 000101
8DB1 03072F
8DB4 7FFF
8DB6 FFFFFFFF 1472 DATA #>FFFF, #>FF67, #>0200, #>0000, #>0000, #>0000, #>0000, #>0000
8DB9 670200
8DBC 000000
8DBF 000000
8DC2 000000
8DC5 00
8DC6 000000 1473 DATA #>0000, #>0000, #>387C, #>FEFF, #>FFFF, #>FFFF, #>FFFF
8DC9 00387C
8DCC FEFFFF
8DCF FFFFFFFF
8DD2 FFFF
8DD4 FFFFFFFF 1474 DATA #>FFFF, #>FF78, #>3100, #>0000, #>0000, #>0000, #>0000, #>0000
8DD7 7E3100
8DDA 000000
8DDD 000000
```

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8DE0 000000
8DE3 00
8DE4 000000 1475 DATA #>0000, #>0000, #>0000, #>0010, #>B&FC, #>FEFE, #>FFFF
8DE7 000000
8DEA 001068
8DED FCFEFE
8DF0 FFFF
8DF2 FFFFFFFF 1476 DATA #>FFFF, #>FFEF, #>C7&3, #>0100, #>0000, #>0000, #>0000, #>0000
8DF5 EFC7&3
8DF& 010000
8DFB 000000
8DFE 000000
8E01 00
8E02 000000 1477 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>39FF
8E05 000000
8E08 000000
8E0B 000000
8E0E 39FF
8E10 FFFFFFFF 1478 DATA #>FFFF, #>FFFF, #>FFF1, #>E1C0, #>0000, #>0000, #>0000, #>0000
8E13 FFFFFFF1
8E16 E1C000
8E19 000000
8E1C 000000
8E1F 00
8E20 000000 1479 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>A&FC
8E23 000000
8E26 000000
8E29 000000
8E2C A&FC
8E2E FFFFFFFF 1480 DATA #>FFFF, #>FFFF, #>FFFF, #>FFFF, #>FFFF, #>7E7E, #>7E3C, #>3C1&
8E31 FFFFFFFF
8E34 FFFFFFFF
8E37 FF7E7E
8E3A 7E3C3C
8E3D 1&
8E3E 000000 1481 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>41F5
8E41 000000
8E44 000000
8E47 000000
8E4A 41F5
8E4C FFFFFFFF 1482 DATA #>FFFF, #>FFE7, #>C3&1, #>8000, #>0000, #>0000, #>0000, #>0000
8E4F E7C3&1
8E52 800000
8E55 000000
8E58 000000
8E5B 00
8E5C 000000 1483 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>060F
8E5F 000000
8E62 000000
8E65 000000
8E68 060F
8E6A FFFFFFFF 1484 DATA #>FFFF, #>FFFF, #>FFF7, #>E240, #>0000, #>0000, #>0000, #>0000
8E6D FFFFFFF7
8E70 E24000
8E73 000000
```

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8E76 000000
8E79 00
8E7A 000000 1485 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>1038, #>7CFF
8E7D 000000
8E80 000000
8E83 001038
8E86 7CFF
8E88 FFFFD C 1486 DATA #>FFFE, #>DC88, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
8E8B 880000
8E8E 000000
8E91 000000
8E94 000000
8E97 00
8E98 000000 1487 DATA #>0000, #>0000, #>0000, #>0000, #>0103, #>0327, #>77FF
8E9B 000000
8E9E 000001
8EA1 030327
8EA4 77FF
8EA6 F00080 1488 DATA #>F000, #>8000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
8EA9 000000
8EAC 000000
8EAF 000000
8EB2 000000
8EB5 00
8EB6 000000 1489 DATA #>0000, #>0001, #>0303, #>67F7, #>FFFF, #>FFFF, #>FFFF
8EB9 010303
8EBC 67F7FF
8EBF FFFFFFFF
8EC2 FFFF
8EC4 000000 1490 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
8EC7 000000
8ECA 000000
8ECD 000000
8ED0 000000
8ED3 00
8ED4 2070F8 1491 DATA #>2070, #>F8FC, #>FEFF, #>FFFF, #>FFFF, #>FFFF, #>FFFF
8ED7 FCFEFFF
8EDA FFFFFFFF
8EDD FFFFFFFF
8EE0 FFFF
8EE2 000000 1492 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
8EE5 000000
8EE8 000000
8EEB 000000
8EEE 000000
8EF1 00
8EF2 000000 1493 DATA #>0000, #>0000, #>0000, #>80C0, #>E0F0, #>F8FC, #>FEFF
8EF5 000000
8EF8 8000E0
8EFB F0F8FC
8EFE FEFF
1494 ***
1495 *** SCENERY DATA #5 ALIEN BASE
1496 ***
8F00 000000 1497 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000

```

```
8F03 000000
8F06 000000
8F09 000000
8F0C 000000
8F0F 00
8F10 000000 1498 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
8F13 000000
8F16 000000
8F19 000000
8F1C 0000
8F1E 000000 1499 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
8F21 000000
8F24 000000
8F27 000000
8F2A 000000
8F2D 00
8F2E 000000 1500 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
8F31 000000
8F34 000000
8F37 000000
8F3A 0000
8F3C 03070C 1501 DATA #>0307, #>0C18, #>3060, #>FFFF, #>0000, #>0000, #>0000, #>0000
8F3F 183060
8F42 FFFF00
8F45 000000
8F48 000000
8F4B 00
8F4C FF7F30 1502 DATA #>FF7F, #>3018, #>0C06, #>0301, #>0103, #>070F, #>1CF0
8F4F 180006
8F52 030101
8F55 03070F
8F58 1CF0
8F5A FFFF0F 1503 DATA #>FFFF, #>0F0F, #>0F0F, #>FFFF, #>CFCF, #>CFCF, #>D7D7, #>CFFF
8F5D 0F0F0F
8F60 FFF0CF
8F63 CFCFCF
8F66 D7D7CF
8F69 FF
8F6A F0FF0F 1504 DATA #>F0FF, #>0F0F, #>0F0F, #>FFFF, #>FF18, #>18FF, #>183C
8F6D 0F0F0F
8F70 FFF0FF
8F73 1818FF
8F76 183C
8F78 C0E0F0 1505 DATA #>C0E0, #>F0F8, #>FCFE, #>FFFF, #>0000, #>0000, #>0000, #>0000
8F7B F8FCFE
8F7E FFFF00
8F81 000000
8F84 000000
8F87 00
8F88 FFFEFC 1506 DATA #>FFFE, #>FCF8, #>F0E0, #>C080, #>80C0, #>E0F0, #>380F
8F8B F8F0E0
8F8E C08080
8F91 C0E0F0
8F94 380F
8F96 000000 1507 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
```

```
8F99 000000
8F9C 000000
8F9F 000000
8FA2 000000
8FA5 00
8FA6 000000 1508 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
8FA9 000000
8FAC 000000
8FAF 000000
8FB2 0000
8FB4 000000 1509 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
8FB7 000000
8FBA 000000
8FBD 000000
8FC0 000000
8FC3 00
8FC4 000000 1510 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
8FC7 000000
8FCA 000000
8FCD 000000
8FD0 0000
8FD2 000000 1511 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
8FD5 000000
8FD8 000000
8FDB 000000
8FDE 000000
8FE1 00
8FE2 000000 1512 DATA #>0000, #>0000, #>0000, #>0102, #>043F, #>FE04, #>0F00
8FE5 000000
8FE8 010204
8FEB 3FFE04
8FEE 0F00
8FF0 000000 1513 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
8FF3 000000
8FF6 000000
8FF9 000000
8FFC 000000
8FFF 00
9000 000000 1514 DATA #>0000, #>0000, #>00FC, #>0800, #>FC08, #>1020, #>C000
9003 0000FC
9006 0800FC
9009 081020
900C C000
900E 000000 1515 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
9011 000000
9014 000000
9017 000000
901A 000000
901D 00
901E 000000 1516 DATA #>0000, #>0000, #>0000, #>0102, #>043F, #>FE04, #>0F00
9021 000000
9024 010204
9027 3FFE04
902A 0F00
902C 000000 1517 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
```

```
902F 000000
9032 000000
9035 000000
9038 000000
9036 00
903C 000000 1518 DATA #>0000, #>0000, #>00FC, #>0800, #>FC08, #>1020, #>C000
903F 0000FC
9042 0800FC
9045 081020
9048 C000
904A 000000 1519 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
904D 000000
9050 000000
9053 000000
9056 000000
9059 00
905A 000000 1520 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
905D 000000
9060 000000
9063 000000
9066 0000
9068 000000 1521 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
906B 000000
906E 000000
9071 000000
9074 000000
9077 00
9078 000000 1522 DATA #>0000, #>0000, #>0007, #>0F1A, #>3F1F, #>0009, #>0201
907B 000007
907E 0F1A3F
9081 1F0009
9084 0201
9086 000000 1523 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
9089 000000
908C 000000
908F 000000
9092 000000
9095 00
9096 000000 1524 DATA #>0000, #>0000, #>00F0, #>F8AC, #>FEFC, #>0028, #>5040
9099 0000F0
909C FBACFE
909F FC0028
90A2 5040
90A4 000000 1525 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
90A7 000000
90AA 000000
90AD 000000
90B0 000000
90B3 00
90B4 000000 1526 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
90B7 000000
90BA 000000
90BD 000000
90C0 0000
90C2 000000 1527 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0002, #>070F
```

```
90C5 000000
90C8 000000
90CB 000000
90CE 000207
90D1 0F
90D2 171537 1528 DATA #>1715, #>3755, #>5755, #>5795, #>9795, #>F71D, #>1500
90D5 555755
90D8 579597
90DB 95F71D
90DE 1500
90E0 000000 1529 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0080
90E3 000000
90E6 000000
90E9 000000
90EC 000000
90EF 80
90F0 404060 1530 DATA #>4040, #>6050, #>5070, #>5048, #>4848, #>78C0, #>4000
90F3 505070
90F6 504848
90F9 4878C0
90FC 4000
90FE 000000 1531 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
9101 000000
9104 000000
9107 000000
910A 000000
910D 00
910E 000000 1532 DATA #>0000, #>0000, #>0000, #>0103, #>1CFF, #>0100, #>)0000
9111 000000
9114 01031C
9117 FF0100
911A 0000
911C 000000 1533 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
911F 000000
9122 000000
9125 000000
9128 000000
912B 00
912C 000000 1534 DATA #>0000, #>0000, #>3C78, #>F0E0, #>E0E0, #>F078, #>3C00
912F 003C78
9132 F0E0E0
9135 E0F078
9138 3C00
913A 000000 1535 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
913D 000000
9140 000000
9143 000000
9146 000000
9149 00
914A 000000 1536 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
914D 000000
9150 000000
9153 000000
9156 0000
9158 000000 1537 DATA #>0000, #>0000, #>0000, #>)0000, #>0000, #>0000, #>0000, #>0001
```



```
9158 000000
915E 000000
9161 000000
9164 000000
9167 01
9168 071C39 1538 DATA #>071C, #>3973, #>E3E3, #>F37F, #>3F1F, #>070E, #>1CF8
916B 73E3E3
916E F37F3F
9171 1F070E
9174 1CF8
9176 000000 1539 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0018, #>3CFF
9179 000000
917C 000000
917F 000000
9182 00183C
9185 FF
9186 66C381 1540 DATA #>66C3, #>8181, #>8181, #>81FF, #>FFFF, #>0000, #>0000
9189 818181
918C 81FFFF
918F FF0000
9192 0000
9194 000000 1541 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0080
9197 000000
919A 000000
919D 000000
91A0 000000
91A3 80
91A4 E0389C 1542 DATA #>E038, #>9CCE, #>C7C7, #>CFFE, #>FCF8, #>E070, #>381F
91A7 CEC7C7
91AA CFFEFC
91AD F8E070
91B0 381F
91B2 000000 1543 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
91B5 000000
91B8 000000
91BB 000000
91BE 000000
91C1 00
91C2 000000 1544 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
91C5 000000
91C8 000000
91CB 000000
91CE 0000
91D0 0F1F38 1545 DATA #>0F1F, #>387F, #>7F7F, #>7F3F, #>1F0F, #>0000, #>0000, #>0000
91D3 7F7F7F
91D6 7F3F1F
91D9 0F0000
91DC 000000
91DF 00
91E0 000000 1546 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
91E3 000000
91E6 000000
91E9 000000
91EC 0000
91EE FFFF00 1547 DATA #>FFFF, #>00FF, #>FFFF, #>FFFF, #>FFFF, #>A5A5, #>A5A5, #>A5A5
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91F1 FFFFFFFF
91F4 FFFFFFFF
91F7 FFA5A5
91FA A5A5A5
91FD A5
91FE A5A5A5 1548 DATA #>A5A5, #>A5A5, #>A5A5, #>A5A5, #>A5A5, #>A5A5, #>A5A5
9201 A5A5A5
9204 A5A5A5
9207 A5A5A5
920A A5A5
920C F0F81C 1549 DATA #>F0F8, #>1CFE, #>FEFE, #>FEFC, #>F&F0, #>0000, #>0000, #>0000
920F FEFEFE
9212 FEFCF8
9215 F00000
9218 000000
921B 00
921C 000000 1550 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
921F 000000
9222 000000
9225 000000
9228 0000
922A 000000 1551 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
522D 000000
9230 000000
9233 000000
9236 000000
9239 00
923A 000000 1552 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
923D 000000
9240 000000
9243 000000
9246 0000
9248 000000 1553 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0303, #>0202
924B 000000
924E 000000
9251 000000
9254 030302
9257 02
9258 020202 1554 DATA #>0202, #>0202, #>0203, #>0302, #>0202, #>0100, #>0000
925B 020203
925E 030202
9261 020100
9264 0000
9266 000000 1555 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>FF02, #>8448
9269 000000
926C 000000
926F 000000
9272 FF0284
9275 48
9276 303048 1556 DATA #>3030, #>4884, #>8201, #>0001, #>030F, #>3FFC, #>0103
9279 848201
927C 000103
927F 0F3FFC
9282 0103
9284 000000 1557 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>C020, #>1010
```

```

9287 000000
928A 000000
928D 000000
9290 C02010
9293 10
9244 101030 1558 DATA #>1010, #>3030, #>3060, #>E0C0, #>C0C0, #>C0C0, #>20F0
9297 303060
929A E0C0C0
929D C0C0C0
92A0 20F0
92A2 000000 1559 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
92A5 000000
92A8 000000
92AB 000000
92AE 000000
92B1 00
92B2 000000 1560 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
92B5 000000
92B8 000000
92BB 000000
92BE 0000
1561 ***
1562 *** SCENERY DATA #6 NEW HILLS WI TI-BUG
1563 ***
92C0 000000 1564 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
92C3 000000
92C6 000000
92C9 000000
92CC 000000
92CF 00
92D0 000000 1565 DATA #>0000, #>0000, #>0000, #>0000, #>0208, #>3F3F, #>7DFD
92D3 000000
92D6 000002
92D9 083F3F
92DC 7DFD
92DE 000000 1566 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
92E1 000000
92E4 000000
92E7 000000
92EA 000000
92ED 00
92EE 000000 1567 DATA #>0000, #>0000, #>0000, #>0383, #>8387, #>C7DE, #>FFFF
92F1 000000
92F4 038383
92F7 87C7DE
92FA FFFF
92FC 000000 1568 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
92FF 000000
9302 000000
9305 000000
9308 000000
930B 0C
930C 0C0C2F 1569 DATA #>0C0C, #>2F3F, #>BFFB, #>FBFF, #>FFDF, #>FFFF, #>7DFD
930F 3FBFFB
9312 FBFFFF

```

```
9315 DFFFFFF
9318 7DFF
931A 000000 1570 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
931D 000000
9320 000000
9323 000000
9326 000000
9329 00
932A 000000 1571 DATA #>0000, #>0080, #>CCFF, #>FFFF, #>FFFF, #>FFFE, #>FFFF
932D 80CCFF
9330 FFFFFFFF
9333 FFFFFFFE
9336 FFFF
9338 000000 1572 DATA #>0000, #>0000, #>0000, #>0000, #>0303, #>0F0F, #>1F5E, #>7E7E
933B 000000
933E 000003
9341 030F0F
9344 1F5E7E
9347 7E
9348 3E3F3F 1573 DATA #>3E3F, #>3FFF, #>FFF7, #>F7F7, #>FFFF, #>FFF8, #>788F
934B FFFFF7
934E F7F7FF
9351 FFFFFFFB
9354 78BF
9356 000000 1574 DATA #>0000, #>0000, #>0000, #>C1E3, #>EBFB, #>FBFB, #>FB03, FF80
9359 000000
935C C1E3EB
935F FBFBFB
9362 FB03FF
9365 80
9366 C04060 1575 DATA #>C040, #>6088, #>DCE7, #>F3FD, #>FEFF, #>FFFB, #>FDFF
9369 88DCE7
936C F3FDFF
936F FFFFFFFB
9372 FDFF
9374 000000 1576 DATA #>0000, #>0000, #>0000, #>FC04, #>0505, #>0406, #>020C, #>1921
9377 000000
937A FC0405
937D 050406
9380 020C19
9383 21
9384 213005 1577 DATA #>213D, #>0505, #>05C4, #>E231, #>9008, #>ECF7, #>F8FC
9387 0505C4
938A E23190
938D D8ECF7
9390 FBFC
9392 000000 1578 DATA #>0000, #>0000, #>0000, #>0080, #>4040, #>8000, #>0C12, #>BABA
9395 000000
9398 008040
939B 408000
939E 0C12BA
93A1 8A
93A2 8ABAA1 1579 DATA #>8ABA, #>A1A1, #>A122, #>4093, #>274F, #>4F2F, #>EF1F
93A5 A1A122
93A8 409327
```

```
93AB 4F4F2F
93AE EF1F
93B0 000000 1580 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
93B3 000000
93B6 000000
93B9 000000
93BC 000000
93BF 00
93C0 004070 1581 DATA #>0040, #>707C, #>78FC, #>ECFF, #>FFFF, #>BDFE, #>FFFF
93C3 7C78FC
93C6 ECFFFF
93C9 FFBDFE
93CC FFFF
93CE 000000 1582 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>060E
93D1 000000
93D4 000000
93D7 000000
93DA 000006
93DD 0E
93DE 3F1F3F 1583 DATA #>3F1F, #>3F3F, #>3FFF, #>FFFF, #>F7FB, #>FFFF, #>7FFF
93E1 3F3FFF
93E4 FFFFFFF7
93E7 FBFFFFFF
93EA 7FFF
93EC 000000 1584 DATA #>0000, #>0000, #>0000, #>0006, #>0E0F, #>1E1E, #>1F1F, #>7FFF
93EF 000000
93F2 00060E
93F5 0F1E1E
93F8 1F1F7F
93FB FF
93FC EFEEFF 1585 DATA #>EFEE, #>FFFF, #>EFF7, #>F3F0, #>7F7F, #>FFFE, #>FFFF
93FF FFEFF7
9402 F3FD7F
9405 7FFFFFFE
9408 FFFF
940A 000000 1586 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>80A0, #>E0F0
9400 000000
9410 000000
9413 000000
9416 80A0E0
9419 F0
941A F0E060 1587 DATA #>F0E0, #>60E0, #>F0F0, #>F8FC, #>F8FF, #>FBFD, #>7EFF
941D E0F0F0
9420 F8FCF8
9423 FFFBFD
9426 7EFF
9428 000000 1588 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
9429 000000
942E 000000
9431 000000
9434 000000
9437 00
9438 000000 1589 DATA #>0000, #>0000, #>0000, #>0000, #>000C, #>0C90, #>FFFF
9436 000000
943E 000000
```

```
9441 0C0C9D
9444 FFFF
9446 000000 1590 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0303, #>0202
9449 000000
944C 000000
944F 000000
9452 030302
9455 02
9456 020202 1591 DATA #>0202, #>0202, #>0203, #>0302, #>0202, #>0160, #>E8FC
9459 020203
945C 030202
945F 020160
9462 E8FC
9464 000000 1592 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>FF02, #>8448
9467 000000
946A 000000
946D 000000
9470 FF0284
9473 48
9474 303048 1593 DATA #>3030, #>4884, #>8201, #>0001, #>030F, #>3FFC, #>0103
9477 848201
947A 000103
947D 0F3FFC
9480 0103
9482 000000 1594 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>C020, #>1010
9485 000000
9488 000000
948B 000000
948E C02010
9491 10
9492 101030 1595 DATA #>1010, #>3030, #>3060, #>E0C0, #>C0C0, #>C0C0, #>20F0
9495 303060
9498 E0C0C0
949B C00000
949E 20F0
94A0 000000 1596 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
94A3 000000
94A6 000000
94A9 000000
94AC 000000
94AF 00
94B0 000000 1597 DATA #>0000, #>0000, #>0000, #>0001, #>0707, #>1F7D, #>7FFF
94B3 000000
94B6 000107
94B9 071F7D
94BC 7FFF
94BE 000000 1598 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
94C1 000000
94C4 000000
94C7 000000
94CA 000000
94CD 00
94CE 000000 1599 DATA #>0000, #>0000, #>0808, #>3838, #>6C7C, #>BCDF, #>FFFF
94D1 000808
94D4 38386C
```

```
94D7 7CBCDF
94DA FFFF
94DC 000000 1600 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
94DF 000000
94E2 000000
94E5 000000
94E8 000000
94EB 00
94EC 000000 1601 DATA #>0000, #>0000, #>0000, #>0040, #>68EC, #>FFBF, #>BDFE
94EF 000000
94F2 004068
94F5 ECFFBF
94F8 BDFE
94FA 000000 1602 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
94FD 000000
9500 000000
9503 000000
9506 000000
9509 00
950A 000000 1603 DATA #>0000, #>0000, #>0000, #>0000, #>0043, #>C307, #>FFF7
950D 000000
9510 000000
9513 43C3D7
9516 FFF7
9518 000000 1604 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
951B 000000
951E 000000
9521 000000
9524 000000
9527 00
9528 000000 1605 DATA #>0000, #>0000, #>0000, #>0000, #>80C0, #>62FB, #>FFEF
952B 000000
952E 000080
9531 C062FB
9534 FFEF
9536 000000 1606 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
9539 000000
953C 000000
953F 000000
9542 000000
9545 00
9546 000000 1607 DATA #>0000, #>0000, #>0000, #>0002, #>070D, #>1F6F, #>FFFB
9549 000000
954C 000207
954F 001F6F
9552 FFFB
9554 000000 1608 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
9557 000000
955A 000000
955D 000000
9560 000000
9563 00
9564 000000 1609 DATA #>0000, #>0000, #>0606, #>1F30, #>BF7F, #>FFF7, #>F8FF
9567 000606
956A 1F3DBF
```

```
956D 7FFFF7
9570 FBFF
9572 000000 1610 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
9575 000000
9578 000000
957B 000000
957E 000000
9581 00
9582 000000 1611 DATA #>0000, #>0000, #>0000, #>0001, #>E1E3, #>EAF2, #>EFFF
9585 000000
9588 0001E1
958B E3EAF2
958E EFFF
9590 000000 1612 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
9593 000000
9596 000000
9599 000000
959C 000000
959F 00
95A0 000000 1613 DATA #>0000, #>0020, #>20E0, #>F0B8, #>F8EC, #>FCFF, #>FFFF
95A3 2020E0
95A6 F0B8F8
95A9 ECF CFF
95AC FFFF
95AE 000000 1614 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
95B1 000000
95B4 000000
95B7 000000
95BA 000000
95BD 00
95BE 000002 1615 DATA #>0000, #>0202, #>030F, #>071F, #>1F1F, #>3638, #>FFFF
95C1 02030F
95C4 071F1F
95C7 1F3B3B
95CA FFFF
95CC 000000 1616 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
95CF 000000
95D2 000000
95D5 000000
95D8 000000
95DB 00
95DC 000303 1617 DATA #>0003, #>0307, #>CFFF, #>F7FB, #>FFFF, #>FFCF, #>FFFF
95DF C7CFFF
95E2 F7FBFF
95E5 FFFFCF
95E8 FFFF
95EA 000000 1618 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0060
95ED 000000
95F0 000000
95F3 000000
95F6 000000
95F9 60
95FA EOF8FF 1619 DATA #>EOF8, #>FFFF, #>FEF7, #>FBFF, #>FFFF, #>7FF7, #>F7FF
95FD FFFEF7
9600 FBFFFF
```



```

9603 FF7FF7
9606 F7FF
9608 000000 1620 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
960B 000000
960E 000000
9611 000000
9614 000000
9617 00
9618 000000 1621 DATA #>0000, #>0000, #>0000, #>0080, #>C0F4, #>FCFE, #>F7FB
961B 000000
961E 0080C0
9621 F4FCFE
9624 F7FB
9626 000000 1622 DATA #>0000, #>0000, #>0000, #>0001, #>0101, #>0101, #>007F, #>7E66
9629 000000
962C 000101
962F 010101
9632 007F7E
9635 66
9636 666666 1623 DATA #>6666, #>6696, #>0607, #>0701, #>0101, #>0191, #>B1FB
9639 960607
963C 070101
963F 010191
9642 B1FB
9644 000000 1624 DATA #>0000, #>0000, #>8888, #>88FC, #>24FC, #>04FC, #>70FF, #>ABAB
9647 008888
964A 88FC24
964D FC04FC
9650 70FFAB
9653 AB
9654 ABABAB 1625 DATA #>ABAB, #>ABAB, #>ABFF, #>FF8C, #>8C8C, #>8C8C, #>8CDE
9657 ABABFF
965A FF8C8C
965D 8C8C8C
9660 8CDE
9662 000000 1626 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>00F0, #>F030
9665 000000
9668 000000
966B 000000
966E 00F0F0
9671 30
9672 303030 1627 DATA #>3030, #>3048, #>0000, #>0000, #>0000, #>1030, #>7CDE
9675 480000
9678 000000
967B 001030
967E 7CDE

1628 GROM 5
1629 ***
1630 *** BEGIN SPEECH DATA
1631 ***
1632 * PRESS FIRE TO BEGIN
1633 SPPRES EQU $
1634 DATA #235
1635 DATA >10, >80, >58, >43, >9B, >6A, >8A, >67

A000
A000 00EB
A002 108058
A005 43986A
    
```

```

A008 8A67
A00A 46C8D9 1636 DATA >46, >C8, >D9, >EA, >D1, >4C, >8E, >8C
A00D EAD14C
A010 8E8C
A012 139658 1637 DATA >13, >96, >58, >6B, >AA, >76, >09, >5A
A015 68AA76
A018 D95A
A01A C22469 1638 DATA >C2, >24, >69, >D3, >85, >3A, >85, >1C
A01D D3853A
A020 851C
A022 037459 1639 DATA >03, >74, >59, >66
A025 66
A026 010844 1640 DATA >01, >08, >44, >C0, >03, >14, >60, >40
A029 C00314
A02C 6040
A02E 56AE43 1641 DATA >56, >AE, >43, >D5, >D3, >23, >84, >18
A031 D5D323
A034 8418
A036 2DCDEC 1642 DATA >2D, >CD, >EC, >88, >F0, >64, >7C, >74
A039 88F064
A03C 7C74
A03E 8B2222 1643 DATA >8B, >22, >22, >52, >CE, >D1, >5D, >4F
A041 52CED1
A044 5D4F
A046 6B2FD9 1644 DATA >6B, >2F, >09, >47
A049 47
A04A F7CDBD 1645 DATA >F7, >CD, >BD, >BC, >E8, >IC, >D1, > , >27
A04D BCE81C
A050 DD27
A052 F78692 1646 DATA >F7, >86, >92, >73, >74, >9F, >CC, >D7
A055 73749F
A058 CCD7
A05A 52EE02 1647 DATA >52, >EE, >D2, >70, >91, >1C, >4F, >39
A05D 70911C
A060 4F39
A062 43F785 1648 DATA >43, >F7, >85, >73, >84, >E4, >0C, >DD
A065 73B4E4
A068 0CDD
A06A 57AE96 1649 DATA >57, >AE, >96, >92
A06D 92
A06E DCF4D0 1650 DATA >DC, >F4, >D0, >A8, >93, >57, >6A, >03
A071 A89357
A074 6AD3
A076 60926C 1651 DATA >6D, >92, >6C, >76, >C9, >55, >4F, >BA
A079 76C955
A07C 4FBA
A07E B70ED9 1652 DATA >87, >0E, >D9, >1A, >DB, >18, >02, >88
A081 1ADB18
A084 0288
A086 3A8403 1653 DATA >3A, >84, >03, >14, >00, >40, >80, >54
A089 140040
A08C 8054
A08E E10001 1654 DATA >E1, >00, >01, >F8
A091 F8
A092 CC3500 1655 DATA >CC, >35, >00, >DF, >8F, >26, >D9, >18

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```

A095 DF8F26
A098 D91B
A09A B58EB7 1656 DATA >B5, >8E, >B7, >3C, >B5, >A9, >65, >9D
A09D 3CB5A9
A0A0 659D
A0A2 98C84E 1657 DATA >98, >C8, >4E, >65, >B8, >AD, >60, >14
A0A5 65B8AD
A0A8 6014
A0AA 68E854 1658 DATA >68, >E8, >54, >4E, >9B, >1E, >0D, >57
A0AD 4E981E
A0B0 0057
A0B2 CDD89E 1659 DATA >CD, >DB, >9E, >7A
A0B5 7A
A0B6 019386 1660 DATA >D1, >93, >86, >DE, >4E, >4A, >DE, >20
A0B9 DE4E4A
A0BC DE20
A0BE 862196 1661 DATA >86, >21, >96, >63, >E9, >84, >01, >D3
A0C1 63E984
A0C4 01D3
A0C6 803533 1662 DATA >80, >35, >33, >4A, >F5, >AE, >61, >82
A0C9 4AF5AE
A0CC 6182
A0CE CD6935 1663 DATA >CD, >69, >35, >2B, >18, >0B, >F7, >44
A0D1 2B1808
A0D4 F744
A0D6 9DEDEA 1664 DATA >9D, >ED, >EA, >18
A0D9 18
A0DA 57087B 1665 DATA >57, >0B, >76, >55, >57, >A5, >5C, >66
A0DD 5557A5
A0E0 5C66
A0E2 F2C59C 1666 DATA >F2, >C5, >9C, >85, >F2, >14, >03, >0F
A0E5 B5F214
A0E8 D30F
A0EA 73C50F 1667 DATA >73, >C5, >0F
1668 * GOOD SHOT
A0ED 0090 1669 DATA #144
A0EF E00025 1670 DATA >E0, >00, >25, >03, >96, >09, >DC, >48
A0F2 039609
A0F5 DC48
A0F7 B02B5E 1671 DATA >B0, >2B, >5E, >46, >6A, >4E, >2E, >A5
A0FA 466A4E
A0FD 2EA5
A0FF F4E8C1 1672 DATA >F4, >E8, >C1, >9B, >65, >7C, >EC, >A3
A102 98657C
A105 ECA3
A107 056B91 1673 DATA >05, >6B, >91, >79, >71, >8E, >56, >B4
A10A 79718E
A10D 5684
A10F 79F8C6 1674 DATA >79, >F8, >C6, >75
A112 75
A113 2A97B1 1675 DATA >2A, >97, >B1, >99, >23, >C5, >69, >C7
A116 9923C5
A119 69C7
A11B BAA898 1676 DATA >BA, >A8, >98, >D2, >EC, >05, >E0, >67
A11E D2EC05

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A121 E067
A123 B3067C 1677 DATA >83, >06, >7C, >1B, >D6, >80, >3F, >C6
A126 18D680
A129 3FC6
A12B 1BF047 1678 DATA >18, >F0, >47, >58, >03, >7E, >1F, >1D
A12E 58037E
A131 1F1D
A133 F24DA1 1679 DATA >F2, >4D, >A1, >8E
A136 8E
A137 11E7C8 1680 DATA >11, >E7, >C8, >36, >7B, >C6, >18, >D3
A13A 367BC6
A13D 18D3
A13F A3D89A 1681 DATA >A3, >D8, >9A, >11, >93, >6A, >8E, >6A
A142 11936A
A145 8E6A
A147 587964 1682 DATA >58, >79, >64, >81, >39, >9A, >EB, >65
A14A B1399A
A14D EB65
A14F 19A5F8 1683 DATA >19, >A5, >F8, >18, >AE, >87, >A7, >8F
A152 18AEB7
A155 A78F
A157 D261D9 1684 DATA >D2, >61, >D9, >91
A15A 91
A15B 9E514C 1685 DATA >9E, >51, >4C, >86, >E3, >7A, >44, >65
A15E 86E37A
A161 4465
A163 32199E 1686 DATA >32, >19, >9E, >2B, >E1, >55, >A1, >2A
A166 28E155
A169 A12A
A16B 783645 1687 DATA >78, >36, >45, >E6, >B3, >68, >00, >00
A16E E6B36B
A171 0000
A173 03289D 1688 DATA >03, >28, >9D, >46, >00, >6C, >78, >08
A176 46006C
A179 7808
A17B A06CDA 1689 DATA >A0, >6C, >DA, >03
A17E 03
1690 * COUNTDOWN
A17F 0070 1691 DATA #112
A181 090846 1692 DATA >09, >08, >46, >78, >C9, >59, >87, >96
A184 7BC959
A187 8796
A189 868823 1693 DATA >86, >B8, >23, >B8, >6A, >D5, >51, >8C
A18C BB6AD5
A18F 518C
A191 8EE268 1694 DATA >8E, >E2, >68, >D8, >44, >DA, >BE, >EA
A194 D844DA
A197 BEEA
A199 517D89 1695 DATA >51, >7D, >89, >70, >6F, >25, >58, >35
A19C 706F25
A19F 5835
A1A1 806A16 1696 DATA >80, >6A, >16, >0C
A1A4 0C
A1A5 902953 1697 DATA >90, >29, >53, >E8, >46, >47, >78, >94
A1A8 E84647

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A1AB 7894
A1AD 63ED4A 1698 DATA >63,ED,4A,73,E9,85,16,67
A1B0 73E985
A1B3 1667
A1B5 95B5A1 1699 DATA >95,B5,A1,DB,68,15,A7,AC
A1B8 DB6815
A1BB A7AC
A1BD 97E1B2 1700 DATA >97,E1,82,55,54,80,DA,C6
A1C0 555480
A1C3 DACE
A1C5 30FDF0 1701 DATA >30,FD,FO,DO
A1C8 D0
A1C9 3246D3 1702 DATA >32,46,D3,EC,56,B3,5C,0D
A1CC EC56B3
A1CF 5C0D
A1D1 6708D9 1703 DATA >87,08,D9,D5,CE,86,73,B4
A1D4 D5CEB6
A1D7 7384
A1D9 F29150 1704 DATA >F2,91,50,DB,C6,D1,C2,4E
A1DC DBC6D1
A1DF C24E
A1E1 D41D0B 1705 DATA >D4,1D,0B,47,52,FD,8A,54
A1E4 4752FD
A1E7 8A54
A1E9 C29C11 1706 DATA >C2,9C,11,35
A1EC 35
A1ED 844AD6 1707 DATA >84,4A,D6,03
A1F0 03
A1F1 0057 1708 * FIVE
A1F3 042822 1709 DATA #87
A1F6 D900C5 1710 DATA >04,28,22,D9,00,C5,A6,7B
A1F9 A67B
A1FB 6071A6 1711 DATA >60,71,A6,47,69,A4,A2,A3
A1FE 4769A4
A201 A2A3
A203 9A9961 1712 DATA >9A,99,61,99,82,8F,66,67
A206 99B28F
A209 6667
A20B A6455A 1713 DATA >A6,45,5A,3E,9A,9D,19,1E
A20E 3E9A9D
A211 191E
A213 29E5E8 1714 DATA >29,E5,E8,6E
A216 6E
A217 A48787 1715 DATA >A4,87,B7,95,68,5C,F3,58
A21A 95685C
A21D F358
A21F AE4694 1716 DATA >AE,46,94,37,93,65,FB,E4
A222 379365
A225 FBE4
A227 595E6C 1717 DATA >59,5E,6C,86,3D,EC,10,35
A22A B63DEC
A22D 1035
A22F 321B4D 1718 DATA >32,1B,4D,B7,93,ED,A2,7A
A232 B793ED

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A235 A27A
A237 FB32D1 1719 DATA >FB,32,D1,26
A23A 26
A23B 028208 1720 DATA >02,82,08,23,40,D2,A9,0C
A23E 2340D2
A241 A90C
A243 28B698 1721 DATA >28,B6,98,00,C9,A4,3C
A246 00C9A4
A249 3C
1722 * FOUR
A24A 0034 1723 DATA #52
A24C 0A48A5 1724 DATA >0A,48,A5,55,03,1A,80,80
A24F 55031A
A252 B080
A254 060A2F 1725 DATA >06,0A,2F,D7,B0,73,C5,9D
A257 D7B073
A25A C59D
A25C EAD4A6 1726 DATA >EA,D4,A6,DE,8D,61,AA,19
A25F DE8D61
A262 AA19
A264 5A9255 1727 DATA >5A,92,55,BA,9D,ED,E4,98
A267 BA9DED
A26A E498
A26C CA93DC 1728 DATA >CA,93,DC,86
A26F 86
A270 731D6B 1729 DATA >73,1D,6B,53,9A,44,D9,6A
A273 539A44
A276 D96A
A278 B68491 1730 DATA >B6,84,91,7A,8B,9B,59,7E
A27B 7A8B9B
A27E 597E
1731 DATA
1732 * THREE
1733 DATA #51

A280 0033
A282 080826 1734 DATA >08,08,26,84,03,1E,28,4A
A285 84031E
A288 284A
A28A 534AC5 1735 DATA >53,4A,C5,59,A7,A8,2E,8B
A28D 59A7A8
A290 2E8B
A292 8565EC 1736 DATA >85,65,EC,AE,36,D5,67,CA
A295 AE36D5
A298 67CA
A29A D688B2 1737 DATA >D6,88,B2,D5,A3,7A,23,81
A29D D5A37A
A2A0 23B1
A2A2 8D71B6 1738 DATA >8D,71,B6,BE
A2A5 BE
A2A6 8C24C4 1739 DATA >8C,24,C4,E7,5A,F1,B4,BA
A2A9 E75AF1
A2AC B4BA
A2AE 55ED68 1740 DATA >55,ED,68,5B,47,3B,0F
A2B1 5B473B
A2B4 0F
1741 * TWO

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A2B5 002E      1742      DATA #46
A2B7 0D586E    1743      DATA >0D,58,6E,25,01,D5,88,36
A2BA 2501D5
A2BD 8836
A2BF 2958D3    1744      DATA >29,58,D3,B4,35,7D,95,AB
A2C2 B4357D
A2C5 95AB
A2C7 5CF56A    1745      DATA >5C,F5,6A,4D,13,3E,63,EC
A2CA 40133E
A2CD 63EC
A2CF AA7423    1746      DATA >AA,74,23,9B,C9,E2,AE,72
A2D2 98C9E2
A2D5 AE72
A2D7 64AA44    1747      DATA >64,AA,44,CB
A2DA CB
A2DB 580622    1748      DATA >5B,DB,22,26,29,67,A9,2E
A2DE 262967
A2E1 A92E
A2E3 F801      1749      DATA >F8,01
                1750      * ONE
A2E5 0036      1751      DATA #54
A2E7 496786    1752      DATA >49,67,BB,D4,7C,AC,77,FD
A2EA D47CAC
A2ED 77FD
A2EF E8A697    1753      DATA >E8,A6,97,98,9E,EC,AB,5F
A2F2 9B9EEC
A2F5 AB5F
A2F7 FD1AD7    1754      DATA >FD,1A,D7,3B,AB,4F,16,5E
A2FA 38A64F
A2FD 165E
A2FF A9785B    1755      DATA >A9,78,5B,C9,0E,52,4E,3C
A302 C90E52
A305 4E3C
A307 940408    1756      DATA >94,04,DB,09
A30A 09
A30B 397357    1757      DATA >39,73,57,E5,60,65,73,19
A30E E56D65
A311 7319
A313 2F9A8A    1758      DATA >2F,9A,8A,85,65,18,70,58
A316 856518
A319 7D58
A31B A87E      1759      DATA >A8,7E
                1760      * FIRE
                1761      * ADVANCE TO NEXT LEVEL
A31D 0107      1762      DATA #263
A31F 3084EA    1763      DATA >30,84,EA,DC,20,86,F1,32
A322 DC2D88
A325 F132
A327 BCF6CC    1764      DATA >BC,F6,CC,36,46,53,0F,AB
A32A 364653
A32D 0FA6
A32F 356C55    1765      DATA >35,6C,55,29,B3,58,D5,1A
A332 29B358
A335 D51A
A337 89B6ED    1766      DATA >89,B6,ED,6C,39,CB,78,21
    
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A33A 6C39CB
A33D 7B21
A33F 077194 1767 DATA >07, >71, >94, >AC
A342 AC
A343 EDC33 1768 DATA >EC, >DC, >33, >96, >C9, >35, >AE, >7E
A346 96C935
A349 AE7E
A34B 8C1CCD 1769 DATA >8C, >1C, >CD, >BD, >13, >F6, >31, >4A
A34E BD13F6
A351 314A
A353 0A8D6C 1770 DATA >0A, >8D, >6C, >C4, >C7, >48, >C9, >DD
A356 C4C748
A359 C9DD
A35B 46595D 1771 DATA >46, >59, >5D, >7D, >EB, >4D, >33, >32
A35E 7DEB4D
A361 3332
A363 CE351C 1772 DATA >CE, >35, >1C, >57
A366 57
A367 55A98C 1773 DATA >55, >A9, >8C, >F7, >BD, >A6, >62, >A7
A36A F7BDAB
A36D 62A7
A36F 2C9516 1774 DATA >2C, >95, >16, >E2, >52, >09, >D0, >A1
A372 E25209
A375 D0AI
A377 1B033A 1775 DATA >1B, >03, >3A, >76, >13, >C0, >A1, >A9
A37A 7613C0
A37D A1A9
A37F 023832 1776 DATA >02, >38, >32, >55, >01, >5B, >A7, >0A
A382 550158
A385 A70A
A387 A0EB30 1777 DATA >A0, >EB, >30, >0E
A38A 0E
A38B 600000 1778 DATA >60, >00, >00, >80, >01, >53, >86, >05
A38E 800153
A391 8605
A393 E05997 1779 DATA >E0, >59, >97, >00, >6C, >1D, >DC, >F4
A396 006C1D
A399 DCF4
A39B C45C33 1780 DATA >C4, >5C, >33, >D7, >4C, >31, >B4, >F4
A39E D74C31
A3A1 B4F4
A3A3 2F5656 1781 DATA >2F, >56, >56, >D5, >1C, >66, >60, >96
A3A6 D51066
A3A9 6096
A3AB 6361FB 1782 DATA >63, >61, >FB, >98
A3AE 98
A3AF D9997B 1783 DATA >D9, >99, >7B, >2C, >ED, >63, >16, >6F
A3B2 2CED63
A3B5 166F
A3B7 9A76B2 1784 DATA >9A, >76, >82, >97, >99, >BD, >08, >D8
A3BA 97998D
A3BD D8D8
A3BF 3236BA 1785 DATA >32, >36, >BA, >C5, >91, >20, >EE, >D4
A3C2 C5912D
A3C5 EED4

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A3C7 00D6A5 1786 DATA >00, >D6, >A5, >24, >20, >86, >60, >07
A3CA 242086
A3CD 6007
A3CF 149866 1787 DATA >14, >98, >66, >01
A3D2 01
A3D3 0D20C0 1788 DATA >0D, >20, >C0, >E3, >70, >30, >06, >4B
A3D6 E37030
A3D9 064B
A3DB 5D3A23 1789 DATA >5D, >3A, >23, >2B, >1A, >C3, >D4, >AE
A3DE 2B1AC3
A3E1 D4AE
A3E3 CCB294 1790 DATA >CC, >82, >94, >2C, >D3, >E6, >0E, >1B
A3E6 2CD3E6
A3E9 0E1B
A3EB 67BCCD 1791 DATA >67, >BC, >CD, >62, >99, >98, >21, >B6
A3EE 629998
A3F1 2186
A3F3 889929 1792 DATA >88, >99, >29, >58
A3F6 58
A3F7 7A5ABA 1793 DATA >7A, >5A, >BA, >11, >66, >D2, >41, >C6
A3FA 1166D2
A3FD 41C6
A3FF EE34E8 1794 DATA >EE, >34, >E8, >3A, >B7, >89, >8E, >AC
A402 3AB789
A405 BEAC
A407 EA0657 1795 DATA >EA, >06, >57, >8C, >56, >F5, >52, >E2
A40A 8C56F5
A40D 52E2
A40F 5CD1DB 1796 DATA >5C, >D1, >DB, >38, >4A, >B1, >71, >45
A412 384A81
A415 7145
A417 EEC04C 1797 DATA >EE, >C0, >4C, >39
A41A 39
A41B C262A1 1798 DATA >C2, >62, >A1, >5D, >24, >22, >21, >40
A41E 5D2422
A421 2140
A423 980978 1799 DATA >98, >09, >78
1800 * NICE SHOOTING
A426 00A9 1801 DATA #169
A428 46E3B2 1802 DATA >46, >E3, >B2, >27, >24, >14, >37, >CD
A42B 272414
A42E 37CD
A430 470F5F 1803 DATA >47, >0F, >5F, >95, >73, >B4, >18, >3B
A433 9573B4
A436 1838
A438 3CDACE 1804 DATA >3C, >DA, >CE, >D5, >AE, >76, >D4, >14
A43B D5AE76
A43E D414
A440 332C5B 1805 DATA >33, >2C, >5B, >F1, >51, >4A, >76, >D7
A443 F1514A
A446 76D7
A448 2DD94B 1806 DATA >2D, >D9, >413, >2E
A44B 2E
A44C C1DCD6 1807 DATA >C1, >DC, >D6, >A5, >0E, >A9, >3A, >09
A44F A50EA9

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A452 3409
A454 7F57D2 1808 DATA >7F, >57, >D2, >84, >62, >38, >A2, >82
A457 846238
A45A A282
A45C 56E2B3 1809 DATA >56, >E2, >B3, >65, >93, >4F, >39, >8E
A45F 65934F
A462 398E
A464 4FC238 1810 DATA >4F, >C2, >38, >6B, >9D, >30, >E0, >EB
A467 6B9D30
A46A E0EB
A46C 0C0A50 1811 DATA >0C, >0A, >50, >80
A46F 80
A470 020498 1812 DATA >02, >04, >98, >CC, >12, >01, >86, >57
4473 CC1201
A476 8657
A478 212030 1813 DATA >21, >20, >30, >69, >05, >BC, >31, >E1
A47B 6905BC
A47E 31E1
A480 010F44 1814 DATA >01, >0F, >44, >20, >03, >01, >B8, >BB
A483 200301
A486 B8BB
A488 A9F0CD 1815 DATA >A9, >F0, >CD, >B0, >BA, >4D, >93, >21
A48B B0BA4D
A48E 9321
A490 F664CA 1816 DATA >F6, >64, >CA, >9A
A493 9A
A494 5586D8 1817 DATA >55, >86, >D8, >B2, >08, >6B, >54, >6E
A497 820868
A49A 546E
A49C 624826 1818 DATA >62, >48, >26, >6C, >31, >3B, >48, >D3
A49F 6C3138
A4A2 48D3
A4A4 898265 1819 DATA >89, >B2, >65, >23, >03, >0C, >19, >61
A4A7 23030C
A4AA 1961
A4AC 80AF8C 1820 DATA >80, >AF, >8C, >19, >40, >53, >4D, >31
A4AF 194053
A4B2 4D31
A4B4 72508E 1821 DATA >72, >50, >8B, >5A
A4B7 5A
A4B8 DAC9CE 1822 DATA >DA, >C9, >CE, >41, >A2, >22, >E9, >44
A4BB 414222
A4BE E944
A4C0 DBDBCB 1823 DATA >DB, >DB, >CB, >8E, >5A, >6B, >54, >D5
A4C3 8E5A6B
A4C6 54D5
A4C8 183B08 1824 DATA >18, >3B, >08, >AF, >14, >B5, >A3, >AD
A4CB AF14B5
A4CE A3AD
44D0 07 1825 DATA >07
1826 * GREAT SHOT PILOT
44D1 00BD 1827 DATA #189
44D3 4D7399 1828 DATA >4D, >73, >99, >C6, >B3, >9D, >2D, >2D
A4D6 C6B39D
A4D9 2D2D
    
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A4DB 154ECB 1829 DATA >15, >4E, >CB, >91, >73, >D4, >9A, >55
A4DE 9173D4
A4E1 9A55
A4E3 3DC6CE 1830 DATA >3D, >C6, >CE, >51, >AB, >15, >CF, >69
A4E6 51AB15
A4E9 CF69
A4EB 274B9E 1831 DATA >27, >4B, >9E, >49, >D9, >AB, >65, >37
A4EE 49D9AB
A4F1 6537
A4F3 691515 1832 DATA >69, >15, >15, >AD
A4F6 AD
A4F7 526CB4 1833 DATA >52, >6C, >B4, >A6, >54, >3A, >8B, >09
A4FA A6543A
A4FD 8B09
A4FF 0028A0 1834 DATA >00, >28, >A0, >90, >48, >02, >78, >AE
A502 904802
A505 78AE
A507 09C080 1835 DATA >09, >C0, >80, >6E, >54, >14, >F0, >FB
A50A 6E5414
A50D F0FB
A50F A9073C 1836 DATA >A9, >07, >3C, >10, >01, >07, >DC, >9A
A512 100107
A515 DC9A
A517 BC04E7 1837 DATA >BC, >04, >E7, >B3
A51A B3
A51B 2C53C9 1838 DATA >2C, >53, >C9, >12, >7D, >EE, >72, >3B
A51E 127DEE
A521 723B
A523 8657DE 1839 DATA >86, >57, >DE, >EA, >D4, >0C, >A0, >57
A526 EAD40C
A529 A057
A52B B80074 1840 DATA >B8, >00, >74, >CE, >04, >30, >40, >91
A52E CE0430
A531 4091
A533 E90C28 1841 DATA >E9, >0C, >28, >D2, >8D, >00, >91, >87
A536 D28D00
A539 9187
A53B 010000 1842 DATA >01, >00, >00, >00
A53E 00
A53F 001000 1843 DATA >00, >10, >00, >98, >0A, >01, >68, >D7
A542 980A01
A545 68D7
A547 94743B 1844 DATA >94, >74, >3B, >D3, >DD, >82, >69, >33
A54A D3DD82
A54D 6933
A54F 5CCD8C 1845 DATA >5C, >CD, >8C, >28, >3A, >C3, >F0, >29
A552 283AC3
A555 F029
A557 33AAE8 1846 DATA >33, >AA, >E8, >36, >C3, >C6, >EC, >8A
A55A 36C3C6
A55D EC8A
A55F 60520C 1847 DATA >60, >52, >0C, >E8
A562 EB
A563 32CA93 1848 DATA >32, >CA, >93, >69, >30, >8C, >CE, >B2
A566 69308C

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A569 CEB2
A56B 2C26C9 1849 DATA >2C, >26, >C9, >80, >26, >48, >28, >19
A56E 802648
A571 2819
A573 37DDBA 1850 DATA >37, >DD, >BA, >4A, >DF, >50, >DC, >F4
A576 4ADF50
A579 DCF4
A57B E0326C 1851 DATA >E0, >32, >6C, >53, >71, >D2, >BC, >0B
A57E 5371D2
A581 BCOB
A583 F309D5 1852 DATA >F3, >09, >D5, >00
A586 00
A587 0002D8 1853 DATA >00, >02, >D8, >C6, >98, >01, >55, >7B
A58A C69801
A58D 5578
A58F 3E 1854 DATA >3E
1855 * ENEMY DESTROYED
A590 0109 1856 DATA #265
A592 4BCBD6 1857 DATA >4B, >CB, >DB, >23, >2A, >99, >2C, >CD
A595 232A99
A598 2CCD
A59A 9BAC48 1858 DATA >9B, >AC, >48, >65, >3D, >34, >6F, >33
A59D 653D34
A5A0 6F33
A5A2 A29555 1859 DATA >A2, >95, >55, >52, >85, >F6, >48, >4F
A5A5 5285F6
A5A8 484F
A5AA 8A4D09 1860 DATA >8A, >40, >09, >CA, >A5, >AC, >91, >2C
A5AD CAA5AC
A5B0 912C
A5B2 3958D7 1861 DATA >39, >58, >D7, >C8
A5B5 C8
A5B6 62BDE4 1862 DATA >62, >BD, >E4, >EC, >CC, >30, >4A, >4E
A5B9 ECCC3D
A5BC 4A4E
ABBE 92AD96 1863 DATA >92, >AD, >96, >0E, >89, >E8, >41, >56
A5C1 0E89E8
A5C4 4156
A5C6 DAD625 1864 DATA >DA, >DB, >25, >E3, >07, >59, >E8, >E8
A5C9 E30759
A5CC E8E8
A5CE 10AFDF 1865 DATA >10, >AF, >DF, >A4, >6C, >C5, >82, >42
A5D1 A46CC5
A5D4 B242
A5D6 6E93AA 1866 DATA >6E, >93, >AA, >66
A5D9 66
A5DA CF1189 1867 DATA >CF, >11, >B9, >4D, >EA, >9A, >2D, >C7
A5DD 4DEA9A
A5E0 2DC7
A5E2 6917A9 1868 DATA >69, >17, >A9, >68, >F2, >1A, >A3, >5D
A5E5 6BF21A
A5E8 A35D
A5EA A4A6C9 1869 DATA >A4, >A6, >C9, >B8, >8D, >71, >92, >9A
A5ED 888D71
A5FD 929A
    
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A5F2 229F32 1870 DATA >22, >9F, >32, >3A, >49, >6A, >86, >7C
A5F5 3A496A
A5F8 867C
A5FA 5A9104 1871 DATA >5A, >91, >04, >39
A5FD 39
A5FE 08AA09 1872 DATA >0B, >AA, >09, >61, >A6, >E4, >2A, >D1
A601 61A6E4
A604 2AD1
A606 724A2D 1873 DATA >72, >4A, >2D, >00, >00, >00, >28, >A0
A609 000000
A60C 28A0
A60E 0937A3 1874 DATA >09, >37, >A3, >59, >E9, >EF, >55, >B2
A611 59E9EF
A614 55B2
A616 A3E634 1875 DATA >A3, >E6, >34, >A5, >AA, >CB, >8B, >B6
A619 A5AACB
A61C 88B6
A61E 021A15 1876 DATA >02, >1A, >15, >97
A621 97
A622 80000A 1877 DATA >80, >00, >0A, >0B, >35, >C0, >50, >19
A625 0B35C0
A628 5019
A62A 0658D2 1878 DATA >06, >58, >D2, >D5, >00, >CB, >07, >03
A62D D500CB
A630 0703
A632 18E0F7 1879 DATA >18, >E0, >F7, >90, >A2, >DA, >AC, >E1
A635 90A2DA
A638 ACE1
A63A E96D9A 1880 DATA >E9, >6D, >9A, >6A, >BA, >86, >A7, >D5
A63D 6ABA86
A640 A7D5
A642 69AA69 1881 DATA >69, >AA, >69, >11
A645 11
A646 165EB5 1882 DATA >16, >5E, >B5, >69, >A6, >64, >A9, >76
A649 69A664
A64C A976
A64E D8A699 1883 DATA >D8, >A6, >99, >92, >2D, >7E, >56, >9A
A651 922D7E
A654 569A
A656 AE6B96 1884 DATA >AE, >6B, >96, >FA, >29, >6E, >86, >CD
A659 FA296E
A65C 86CD
A65E 91E62B 1885 DATA >91, >E6, >2B, >A7, >59, >21, >78, >B9
A661 A75921
A664 78B9
A666 AD9C62 1886 DATA >AD, >9C, >62, >47
A669 47
A66A 6F1131 1887 DATA >6F, >11, >31, >74, >8A, >9D, >9C, >7A
A66D 748A9D
A670 9C7A
A672 E6D249 1888 DATA >E6, >D2, >49, >76, >54, >5A, >D5, >43
A675 76545A
A678 D543
A67A 3BD849 1889 DATA >3B, >D8, >49, >98, >56, >9C, >64, >62
A67D 98569C

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A680 6462
A682 672E9E 1890 DATA >67, >2E, >9E, >16, >76, >90, >5D, >84
A685 167690
A688 5D84
A68A 485838 1891 DATA >48, >58, >38, >31
A68D 31
A68E F60066 1892 DATA >F6, >0C, >66, >C9, >A1, >54, >D9, >B3
A691 C9A154
A694 D9B3
A696 B92BA5 1893 DATA >B9, >2B, >A5, >DD, >07
A699 DD07
1894 * LASER ON TARGET
A69B 00FB 1895 DATA #251
A69D C6703A 1896 DATA >C6, >70, >3A, >D2, >33, >54, >47, >23
A6A0 D23354
A6A3 4723
A6A5 1A4306 1897 DATA >1A, >43, >0B, >D6, >3B, >5B, >15, >2D
A6A8 D63B5B
A6AB 152D
A6AD CD3BEF 1898 DATA >CD, >3B, >EF, >6C, >55, >B4, >B4, >A8
A6B0 6C55B4
A6B3 B4A8
A6B5 356A5E 1899 DATA >35, >6A, >5E, >D5, >56, >87, >52, >9C
A6B8 D55687
A6BB 529C
A6BD 9AD7AB 1900 DATA >9A, >D7, >AB, >6C
A6C0 6C
A6C1 4A8EAA 1901 DATA >4A, >8E, >AA, >52, >27, >2B, >28, >C3
A6C4 52272B
A6C7 28C3
A6C9 0B6736 1902 DATA >0B, >67, >36, >63, >A1, >6E, >66, >EC
A6CC 63A16E
A6CF 66EC
A6D1 324E85 1903 DATA >32, >4E, >85, >FA, >63, >87, >48, >CA
A6D4 FA6387
A6D7 48CA
A6D9 4952D4 1904 DATA >49, >52, >D4, >EA, >9A, >A5, >64, >88
A6DC EA9AA5
A6DF 6488
A6E1 C9995B 1905 DATA >C9, >99, >5B, >B7
A6E4 B7
A6E5 9C2126 1906 DATA >9C, >21, >26, >6F, >E6, >39, >D6, >9A
A6E8 6FE639
A6EB D69A
A6ED E8A3FA 1907 DATA >E8, >A3, >FA, >44, >C6, >E9, >62, >13
A6F0 44C6E9
A6F3 6213
A6F5 5D962C 1908 DATA >5D, >96, >2C, >9B, >D8, >5D, >2A, >92
A6F8 9BD85D
A6FB 2A92
A6FD CF9A61 1909 DATA >CF, >9A, >61, >13, >C7, >39, >36, >F9
A700 13C739
A703 36F9
A705 947E2B 1910 DATA >94, >7E, >2B, >00
A708 00

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A709 01881E 1911 DATA >01, >B8, >1E, >DD, >74, >38, >32, >43
A70C DD7438
A70F 3243
A711 DA76D3 1912 DATA >DA, >76, >D3, >ED, >8C, >70, >2D, >38
A714 ED8C70
A717 2038
A719 43B72D 1913 DATA >43, >B7, >2D, >23, >2D, >E5, >0E, >CD
A71C 232DE5
A71F 0ECD
A721 A78C88 1914 DATA >A7, >8C, >88, >62, >D2, >34, >17, >23
A724 62D234
A727 1723
A729 6C4C75 1915 DATA >6C, >4C, >75, >D0
A72C D0
A72D 2D8F17 1916 DATA >2D, >8F, >17, >F3, >94, >51, >F3, >9A
A730 F39451
A733 F39A
A735 D2148F 1917 DATA >D2, >14, >8F, >08, >35, >35, >E0, >80
A738 0B3535
A73B E080
A73D 2A321D 1918 DATA >2A, >32, >10, >50, >A5, >A7, >03, >BA
A740 50A5A7
A743 038A
A745 282F4A 1919 DATA >28, >2F, >4A, >51, >E1, >C5, >6A, >BB
A748 51E1C5
A74B 6ABB
A74D 698679 1920 DATA >69, >86, >79, >85
A750 85
A751 8CDDA6 1921 DATA >8C, >D0, >A6, >D9, >E6, >99, >52, >F6
A754 D9E699
A757 52F6
A759 9AECAA 1922 DATA >9A, >EE, >AA, >65, >48, >C7, >6D, >7A
A75C 654BC7
A75F 607A
A761 68EAA5 1923 DATA >68, >EA, >A5, >68, >25, >E9, >89, >0A
A764 6825E9
A767 890A
A769 179F23 1924 DATA >17, >9F, >23, >61, >75, >6E, >14, >96
A76C 61756E
A76F 1496
A771 6A0550 1925 DATA >6A, >05, >50, >3C
A774 3C
A775 73724A 1926 DATA >73, >72, >4A, >62, >F5, >3A, >C5, >C1
A778 62F53A
A77B C5C1
A77D 4D46D2 1927 DATA >40, >46, >D2, >E7, >14, >85, >CC, >E8
A780 E71485
A783 CCEB
A785 A89C66 1928 DATA >A8, >9C, >66, >6C, >EA, >60, >83, >68
A788 6CEA60
A78B 836B
A78D 563602 1929 DATA >56, >36, >02, >12, >33, >07, >60, >40
A790 123307
A793 6040
A795 62EE0F 1930 DATA >62, >EE, >0F
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1931 * WARNING ---- TIME TO RE-FUEL
A798 016E 1932 DATA #366
A79A 49E3B3 1933 DATA >49, >E3, >B3, >43, >E5, >E2, >16, >55
A79D 43E5E2
A7A0 1655
A7A2 8E76E1 1934 DATA >8E, >76, >E1, >9D, >3B, >54, >BD, >3A
A7A5 9D3B54
A7A8 BD3A
A7AA 043BDE 1935 DATA >04, >3B, >DE, >50, >EC, >F4, >54, >59
A7AD 50ECF4
A7B0 5459
A7B2 8848F1 1936 DATA >BB, >48, >F1, >DD, >22, >78, >AC, >2C
A7B5 DD2278
A7B8 AC2C
A7BA 2554F1 1937 DATA >25, >54, >F1, >D4
A7BD D4
A7BE 820354 1938 DATA >B2, >D3, >54, >6F, >25, >BD, >CC, >8A
A7C1 6F25BD
A7C4 CC8A
A7C6 D378C8 1939 DATA >D3, >78, >C8, >51, >1E, >98, >41, >D7
A7C9 511E9B
A7CC 41D7
A7CE 3CA7D4 1940 DATA >3C, >A7, >04, >95, >24, >C3, >68, >CB
A7D1 9524C3
A7D4 6BCB
A7D6 2C4792 1941 DATA >2C, >47, >92, >CC, >A4, >2C, >2B, >0C
A7D9 CCA42C
A7DC 2B0C
A7DE 4930A3 1942 DATA >49, >30, >A3, >96
A7E1 96
A7E2 2C5784 1943 DATA >2C, >57, >B4, >CE, >CA, >86, >AA, >4C
A7E5 CECAB6
A7E8 AA4C
A7EA 8818CB 1944 DATA >88, >18, >CB, >33, >CF, >14, >55, >AC
A7ED 33CF14
A7FD 55AC
A7F2 6D6D6B 1945 DATA >6D, >6D, >6B, >48, >9A, >00, >00, >00
A7F5 489A00
A7F8 0000
A7FA 000000 1946 DATA >00, >00, >00, >00, >00, >00, >00, >20
A7FD 000000
A800 0020
A802 80C8C3 1947 DATA >80, >C8, >C3, >03
A805 03
A806 60A45A 1948 DATA >60, >A4, >5A, >00, >AC, >EE, >2C, >9A
A809 00ACEE
A80C 2C9A
A80E 1969E5 1949 DATA >19, >69, >E5, >A6, >64, >68, >6E, >84
A811 A66468
A814 6E84
A816 55869C 1950 DATA >55, >86, >9C, >A5, >F9, >91, >5A, >15
A819 A5F991
A81C 5A15
A81E 768E16 1951 DATA >76, >8E, >16, >4A, >59, >65, >C8, >39
A821 4A5965

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A824 C839
A826 5ACC69 1952 DATA >5A, >CC, >69, >95
A829 95
A82A C9E4A8 1953 DATA >C9, >E4, >A8, >39, >84, >45, >15, >E3
A82D 398445
A830 15E3
A832 A56617 1954 DATA >A5, >66, >17, >16, >59, >8C, >87, >92
A835 16598C
A838 8792
A83A 829967 1955 DATA >82, >99, >67, >01, >49, >AA, >B1, >9E
A83D D149AA
A840 619E
A842 6E65DB 1956 DATA >6E, >65, >DB, >29, >4A, >DB, >94, >98
A845 294ADB
A848 9498
A84A 25A708 1957 DATA >25, >A7, >08, >9D
A84D 9D
A84E 932AB6 1958 DATA >93, >2A, >B6, >80, >C2, >6C, >AF, >AA
A851 8DC26C
A854 AF AA
A856 3A560A 1959 DATA >3A, >56, >0A, >17, >75, >6D, >26, >57
A859 17756D
A85C 2657
A85E A88D0B 1960 DATA >A8, >8D, >08, >A7, >A5, >67, >60, >80
A861 A7A567
A864 6080
A866 21AE0E 1961 DATA >21, >AE, >0E, >80, >DB, >38, >48, >A7
A869 B0D638
A86C 48A7
A86E 5E0449 1962 DATA >5E, >04, >49, >2A
A871 2A
A872 270523 1963 DATA >27, >05, >23, >51, >D1, >81, >B3, >9A
A875 51D181
A878 B39A
A87A 34E7D4 1964 DATA >34, >E7, >04, >B2, >B2, >4C, >D0, >AC
A87D B2B24C
A880 D0AC
A882 370BAF 1965 DATA >37, >0B, >AF, >D8, >4E, >37, >C1, >D4
A885 084E37
A888 C1D4
A88A 8D6307 1966 DATA >8D, >63, >07, >DD, >7A, >D3, >CC, >A8
A88D 0D7AD3
A890 CCA8
A892 5DB414 1967 DATA >5D, >B4, >14, >59
A895 59
A896 B33A4C 1968 DATA >83, >3A, >4C, >07, >8A, >06, >3C, >4B
A899 D78AD6
A89C 3C4B
A89E E4594E 1969 DATA >E4, >59, >4E, >5A, >31, >2C, >90, >2D
A8A1 5A312C
A8A4 9D2D
A8A6 3AE8BD 1970 DATA >3A, >E8, >BD, >06, >33, >B4, >13, >03
A8A9 0633B4
A8AC 1303
A8AE B492A2 1971 DATA >B4, >92, >A2, >80, >56, >14, >05, >D0
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A8B1 805614
A8B4 05D0
A8B6 B2B302 1972 DATA >82, >B3, >02, >7A
A8B9 7A
A8BA 0931C0 1973 DATA >09, >31, >C0, >C8, >4E, >06, >98, >C5
A8BD C84E06
A8CD 98C5
A8C2 29C8CD 1974 DATA >29, >C8, >CD, >93, >5A, >5C, >EC, >A2
A8C5 935A5C
A8CB ECA2
A8CA 96C8EA 1975 DATA >96, >C8, >EA, >31, >61, >92, >EA, >AC
A8CD 316192
A8DD EAAC
A8D2 797A95 1976 DATA >79, >7A, >95, >0D, >9A, >F2, >D1, >21
A8D5 0D9AF2
A8D8 D121
A8DA 5DC569 1977 DATA >5D, >C5, >69, >22
A8DD 72
A8DE 57AA6C 1978 DATA >57, >AA, >6C, >DD, >60, >A8, >50, >A5
A8E1 DD60A8
A8E4 50A5
A8E6 54D59C 1979 DATA >54, >05, >9C, >29, >F3, >B8, >F2, >C4
A8E9 29F3B8
A8EC F2C4
A8EE 71B64C 1980 DATA >71, >B6, >4C, >53, >C2, >13, >C7, >39
A8F1 53C213
A8F4 C739
A8F6 AA8EB3 1981 DATA >AA, >8E, >B3, >AC, >63, >E3, >A8, >B2
A8F9 AC63E3
A8FC A882
A8FE 269249 1982 DATA >26, >92, >49, >94
A901 94
A902 23E386 1983 DATA >23, >E3, >86, >72, >A4, >7E
A905 72A47E
1984 * LASER OVERHEATED
A908 0118 1985 DATA #280
A90A CE90AA 1986 DATA >CE, >90, >AA, >BA, >A6, >65, >07, >43
A900 BAA665
A910 0743
A912 ABB4DE 1987 DATA >AB, >B4, >DE, >94, >E2, >75, >AF, >17
A915 94E275
A918 AF17
A91A 0D98CC 1988 DATA >DD, >98, >CC, >DA, >60, >DC, >74, >EF
A91D DA60DC
A920 74EF
A922 BCB355 1989 DATA >BC, >B3, >55, >D1, >D4, >87, >96, >AD
A925 D1D487
A928 96AD
A92A 864FD8 1990 DATA >86, >4F, >D8, >19
A92D 19
A92E 5AD652 1991 DATA >5A, >D6, >52, >71, >E1, >A4, >A9, >49
A931 71E1A4
A934 A949
A936 49D796 1992 DATA >49, >D7, >96, >9D, >A6, >14, >23, >19
A939 9DA614

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A93C 2319
A93E 57B29D 1993 DATA >57, >B2, >9D, >B2, >F3, >B8, >60, >31
A941 B2F3B8
A944 6031
A946 56C0D7 1994 DATA >56, >C0, >D7, >C6, >1A, >90, >80, >00
A949 C61A90
A94C 8000
A94E BE304F 1995 DATA >BE, >30, >4F, >CA
A951 CA
A952 4A1561 1996 DATA >4A, >15, >61, >21, >47, >49, >83, >74
4955 214749
A958 8374
A95A 8A869D 1997 DATA >8A, >86, >9D, >22, >06, >6B, >E1, >17
495D 22066B
A960 E117
A962 4A8A18 1998 DATA >4A, >8A, >18, >BD, >A6, >ED, >D2, >2B
A965 BDA6ED
A968 D22B
A96A A28F9A 1999 DATA >A2, >8F, >9A, >95, >2D, >27, >89, >2E
A96D 952D27
4970 892E
A972 495594 2000 DATA >49, >55, >94, >9D
A975 9D
A976 24DAA4 2001 DATA >24, >DA, >A4, >39, >5E, >56, >82, >A8
A979 395E56
A97C 8248
A97E 83557B 2002 DATA >83, >55, >7B, >4A, >36, >92, >F7, >CE
A981 443692
A984 F7CE
A986 1E151B 2003 DATA >1E, >15, >1B, >00, >00, >00, >00, >00
A989 000000
A98C 0000
A98E 000020 2004 DATA >00, >00, >20, >19, >C1, >47, >28, >6F
4991 19C147
A994 2B6F
A996 9CA49B 2005 DATA >9C, >A4, >9B, >12
A999 12
A99A AEB6B6 2006 DATA >AE, >86, >B6, >93, >AE, >72, >86, >DA
A99D 93AE72
A9A0 86DA
A9A2 DA76BA 2007 DATA >DA, >76, >BA, >F6, >99, >CA, >15, >DB
A9A5 F699CA
A9A8 15DB
A9AA 1849B9 2008 DATA >18, >49, >B9, >99, >9A, >53, >63, >34
A9AD 999453
49B0 6334
A9B2 EDA2EC 2009 DATA >ED, >A2, >EC, >8A, >80, >9E, >94, >6B
49B5 8A8D9E
49B8 946B
A9BA B8BA0E 2010 DATA >B8, >BA, >0E, >9A
49BD 94
A9BE 2BC66D 2011 DATA >2B, >C6, >6D, >E9, >26, >69, >BE, >B1
A9C1 E92669
A9C4 BEB1
A9C6 B57492 2012 DATA >B5, >74, >92, >A4, >D9, >24, >36, >D1

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A9C9 A4D924
A9CC 36D1
A9CE 8E9D16 2013 DATA >8E,9D,16,0C,67,45,46,36
A9D1 006745
A9D4 4836
A9D6 FA1C2A 2014 DATA >FA,1C,2A,CA,ED,48,01,33
A9D9 CAED48
A9DC 0133
A9DE B069C0 2015 DATA >B0,69,C0,A8
A9E1 A8
A9E2 439358 2016 DATA >43,93,58,AB,68,A7,16,C6
A9E5 A66BA7
A9E8 16C6
A9EA 31E58C 2017 DATA >31,E5,8C,9C,DB,24,58,6D
A9ED 9CD624
A9F0 586D
A9F2 30347A 2018 DATA >30,34,7A,95,64,35,25,93
A9F5 956435
A9F8 2593
A9FA 593384 2019 DATA >59,33,84,AA,B8,5D,00,05
A9FD AAB85D
AA00 0005
AA02 14EBCE 2020 DATA >14,EB,CE,80
AA05 80
AA06 2ACD8C 2021 DATA >2A,CD,8C,EA,B5,66,4E,33
AA09 EAB566
AA0C 4E33
AA0E 717654 2022 DATA >71,76,54,96,51,47,DB,38
AA11 965147
AA14 DB38
AA16 5E8967 2023 DATA >5E,89,67,0F,6D,E5,66,A1
AA19 0F6DE5
AA1C 66A1
AA1E 163689 2024 DATA >16,36,89,1F
AA21 1F
2025 * GAME OVER
2026 *** DATA #209
2027 *** DATA >41,3D,50,CC,C4,00,14,2D
2028 *** DATA >72,DD,09,60,58,34,27,AD
2029 *** DATA >67,9D,75,D3,AA,E2,AA,36
2030 *** DATA >C5,4D,6B,8A,AB,C6,14,35
2031 *** DATA >B5,29,CE,5A
2032 *** DATA >93,D3,94,AE,39,6A,83,4E
2033 *** DATA >51,BA,AB,E8,55,DA,45,69
2034 *** DATA >8A,A3,47,68,17,B9,2A,8E
2035 *** DATA >49,63,52,64,A7,3D,53,5D
2036 *** DATA >4E,90,B5,FO
2037 *** DATA >46,09,25,41,32,C2,86,D9
2038 *** DATA >9C,24,D9,71,EB,E4,70,93
2039 *** DATA >64,17,DA,D4,CA,6A,92,5D
2040 *** DATA >6A,83,6C,A7,48,3F,31,D0
2041 *** DATA >55,9D,00,24
2042 *** DATA >7D,C5,30,B7,70,92,74,53
2043 *** DATA >5B,2D,CE,6A,D2,74,1D,D5
2044 *** DATA >2C,38,41,D3,A3,48,73,AC

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2045 *** DATA >06, >4D, >CF, >42, >CB, >8D, >E3, >34
2046 *** DATA >35, >93, >2C, >2F
2047 *** DATA >86, >D1, >54, >18, >15, >AD, >34, >C6
2048 *** DATA >6C, >46, >CC, >C4, >94, >30, >20, >1A
2049 *** DATA >13, >06, >14, >13, >66, >84, >24, >C3
2050 *** DATA >4C, >D2, >76, >B0, >AC, >77, >2F, >4D
2051 *** DATA >DB, >CE, >72, >D1
2052 *** DATA >A5, >3C, >63, >39, >DB, >FB, >90, >F0
2053 *** DATA >74, >64, >6C, >EF, >82, >C3, >C3, >B1
2054 *** DATA >82, >BD, >0E, >33, >4B, >DB, >C2, >CA
2055 *** DATA >22, >54, >25, >63, >3D
2056 * SORRY ---- YOU ARE OUT OF FUEL
AA22 0167 2057 DATA #359
AA24 06F8DA 2058 DATA >06, >F8, >DA, >C3, >02, >1E, >68, >92
AA27 C3021E
AA2A 6892
AA2C 091996 2059 DATA >09, >19, >96, >C5, >64, >48, >7A, >54
AA2F C56448
AA32 7A54
AA34 A635DC 2060 DATA >A6, >35, >DC, >25, >9B, >DE, >91, >B6
AA37 259BDE
AA3A 9186
AA3C 769762 2061 DATA >76, >97, >62, >56, >46, >FA, >DA, >1D
AA3F 5646FA
AA42 DA1D
AA44 8A1951 2062 DATA >8A, >19, >51, >E1
AA47 E1
AA48 636DA8 2063 DATA >63, >6D, >A8, >86, >7A, >BB, >8F, >95
AA4B B67ABB
AA4E 8F95
AA50 A6D96A 2064 DATA >A6, >D9, >6A, >15, >19, >51, >9B, >EE
AA53 151951
AA56 9BEE
AA58 B34664 2065 DATA >B3, >46, >64, >94, >19, >46, >4C, >1A
AA5B 941946
AA5E 4C1A
AA60 9E6365 2066 DATA >9E, >63, >65, >18, >39, >A8, >67, >8C
AA63 1839A8
AA66 678C
AA68 956654 2067 DATA >95, >66, >54, >A7
AA6B A7
AA6C 963972 2068 DATA >96, >39, >72, >8A, >51, >8C, >78, >76
AA6F 8A518C
AA72 7876
AA74 31297A 2069 DATA >31, >29, >7A, >92, >EA, >53, >CD, >24
AA77 92EA53
AA7A CD24
AA7C 68514A 2070 DATA >68, >51, >4A, >F7, >04, >6D, >AB, >09
AA7F F7046D
AA82 AB09
AA84 AD2AE2 2071 DATA >AD, >2A, >E2, >8C, >52, >03, >00, >00
AA87 8C5203
AA8A 0000
AA8C 000000 2072 DATA >00, >00, >00, >00
AA8F 00

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AA90	000490	2073	DATA	>00, >04, >90, >2C, >C6, >19, >5D, >80
AA93	2CC619			
AA96	5D80			
AA98	468FEC	2074	DATA	>46, >8F, >EC, >A4, >37, >C5, >1A, >5D
AA9B	A437C5			
AA9E	1A5D			
AAA0	568A96	2075	DATA	>56, >8A, >96, >BD, >70, >56, >99, >29
AAA3	BD7056			
AAA6	9929			
AAA8	9AB36E	2076	DATA	>9A, >B3, >6E, >E5, >5D, >85, >68, >D6
AAA8	E55DB5			
AAA8	68D6			
AAB0	45BA74	2077	DATA	>45, >BA, >74, >BD
AAB3	BD			
AAB4	A2DA92	2078	DATA	>A2, >DA, >92, >29, >72, >75, >88, >66
AAB7	297275			
AABA	8B66			
AABC	6A96E8	2079	DATA	>6A, >96, >E8, >BB, >6E, >BA, >6D, >15
AABF	BB6EBA			
AAC2	6D15			
AAC4	4E6FA7	2080	DATA	>4E, >6F, >A7, >18, >FA, >84, >85, >8E
AAC7	18FA84			
AACA	858E			
AACC	9462E8	2081	DATA	>94, >62, >E8, >15, >11, >96, >72, >8A
AACF	151196			
AAD2	728A			
AAD4	618665	2082	DATA	>61, >86, >65, >69
AAD7	69			
AAD8	5A2DA6	2083	DATA	>5A, >2D, >A6, >6F, >16, >65, >51, >B5
AADB	6F1665			
AAD8	51B5			
AAE0	98A1BA	2084	DATA	>98, >A1, >BA, >A7, >65, >94, >66, >F9
AAE3	A76594			
AAE6	66F9			
AAE8	E259DE	2085	DATA	>E2, >59, >DE, >56, >A6, >D9, >0C, >BB
AAEB	56A6D9			
AAEE	0CBB			
AAF0	3C2A5C	2086	DATA	>3C, >2A, >5C, >EE, >D0, >DD, >0C, >8F
AAF3	EED0DD			
AAF6	0C8F			
AAF8	74B943	2087	DATA	>74, >B9, >43, >77
AFB	77			
AAFC	A52CAD	2088	DATA	>A5, >2C, >AD, >E5, >0D, >CD, >87, >F2
AAFF	E50DCD			
AB02	87F2			
AB04	F4B337	2089	DATA	>F4, >B3, >37, >F4, >68, >03, >D5, >4B
AB07	F468D3			
AB0A	D54B			
AB0C	3633BA	2090	DATA	>36, >33, >BA, >14, >0E, >4D, >27, >0A
AB0F	140E4D			
AB12	270A			
AB14	C8A822	2091	DATA	>C8, >A8, >22, >38, >C1, >85, >5B, >8F
AB17	38C185			
AB1A	5B8F			
AB1C	926445	2092	DATA	>92, >64, >45, >13

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AB1F 13
AB20 61FE8A 2093 DATA >61,FE,8A,93,61,6D,B6,65
AB23 93616D
AB26 8665
AB28 D10EBA 2094 DATA >D1,0E,BA,33,E6,EE,4D,D9
AB2B 33E6EE
AB2E 4DD9
AB30 E8CDA9 2095 DATA >E8,C0,A9,0A,A5,12,10,40
AB33 0AA512
AB36 1040
AB38 95A106 2096 DATA >95,A1,06,58,29,C4,00,33
AB3B 5829C4
AB3E 0033
AB40 3829E0 2097 DATA >38,29,E0,58
AB43 58
AB44 65A76C 2098 DATA >65,A7,6C,2F,18,DA,4E,92
AB47 2F18DA
AB4A 4E92
AB4C 561478 2099 DATA >56,14,7B,76,9B,4E,5A,30
AB4F 769B4E
AB52 5A30
AB54 1A5553 2100 DATA >1A,95,53,26,E9,DA,66,AB
AB57 26E9DA
AB5A 66AB
AB5C 559560 2101 DATA >55,95,60,98,98,21,3C,55
AB5F 989821
AB62 3C55
AB64 82A96B 2102 DATA >82,A9,6B,99
AB67 99
AB68 E84671 2103 DATA >E8,46,71,B6,EA,AD,EA,1B
AB6B B6EAAAD
AB6E EA1B
AB70 DB393A 2104 DATA >DB,39,3A,8F,B3,AE,63,E3
AB73 8FB3AE
AB76 63E3
AB78 A83421 2105 DATA >A8,34,21,56,A9,8C,A3,FC
AB7B 56A98C
AB7E A3FC
AB80 A672C6 2106 DATA >A6,72,C6,56,B6,B6,53,C6
AB83 56B686
AB86 53C6
AB88 E1E601 2107 DATA >E1,E6,01
2108 * EXTRA SHIP!
AB8B 0089 2109 DATA #137
AB8D 4B8B41 2110 DATA >4B,8B,41,3A,46,14,4D,B5
AB90 3A4614
AB93 4DB5
AB95 AB4549 2111 DATA >AB,45,49,9E,AA,A3,99,38
AB98 9EAAA3
AB9B 9938
AB9D AD0C0F 2112 DATA >AD,0C,0F,4F,53,02,0A,AB
ABA0 4F5302
ABA3 0AAB
ABA5 A95400 2113 DATA >A9,54,00,D5,BA,08,A0,EB
ABA8 D5BA08

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ABAB A0EB
ABAD 54014C 2114 DATA >54, >01, >4C, >63
ABBD 63
ABBE CA8041 2115 DATA >CA, >80, >41, >49, >15, >90, >BB, >85
ABB4 491590
ABB7 6885
ABBE 037A6B 2116 DATA >03, >7A, >68, >4B, >92, >4D, >9A, >11
ABBC 4B924D
ABBF 9A11
ABC1 11B529 2117 DATA >11, >B5, >29, >3A, >79, >74, >A6, >B4
ABC4 3A7974
ABC7 A6B4
ABC9 A6D8E8 2118 DATA >A6, >D8, >E8, >15, >D1, >F4, >9A, >62
ABCC 15D1F4
ABCF 9A62
ABD1 B2F986 2119 DATA >B2, >F9, >86, >C9
ABD4 C9
ABD5 2B8A93 2120 DATA >2B, >8A, >93, >3E, >19, >69, >26, >01
ABD8 3E1969
ABDB 2601
ABDE CB2B06 2121 DATA >CB, >2B, >06, >E0, >AD, >F5, >00, >FC
ABE0 E0ADF5
ABE3 00FC
ABE5 811E80 2122 DATA >B1, >1E, >80, >DF, >C6, >1C, >F0, >C7
ABE8 DFC61C
ABEB F0C7
ABED A8036E 2123 DATA >A8, >03, >6E, >6F, >75, >80, >23, >5E
ABF0 6F7580
ABF3 235E
ABF5 4309DA 2124 DATA >43, >09, >DA, >2A
ABF8 2A
ABF9 FA941C 2125 DATA >FA, >94, >1C, >AD, >78, >0B, >8B, >53
ABFC AD78013
ABFF 8B53
AC01 BCCC64 2126 DATA >BC, >CC, >64, >3D, >D2, >5E, >49, >32
AC04 3DD25E
AC07 4932
AC09 AD7733 2127 DATA >AD, >77, >33, >56, >3B, >00, >02, >E0
AC0C 563800
AC0F 02E0
AC11 661A03 2128 DATA >66, >1A, >03, >18, >78
AC14 1878
2129 * PLEASE PRESS THE REDO OR BACK KEY
2130 *** DATA #514
2131 *** DATA >0A, >F0, >32, >92, >01, >5E, >BB, >04
2132 *** DATA >41, >68, >68, >AD, >A6, >D3, >94, >60
2133 *** DATA >25, >A2, >1A, >F1, >50, >8A, >65, >CB
2134 *** DATA >6C, >DA, >43, >6E, >41, >08, >BA, >69
2135 *** DATA >0F, >B9, >05, >26
2136 *** DATA >EF, >66, >3C, >A4, >EE, >99, >BD, >86
2137 *** DATA >F1, >10, >B8, >27, >85, >29, >45, >43
2138 *** DATA >A8, >8E, >C5, >2E, >94, >34, >21, >28
2139 *** DATA >F1, >E8, >54, >12, >84, >A0, >54, >B2
2140 *** DATA >96, >A9, >00, >AA
2141 *** DATA >54, >17, >40, >B5, >25, >06, >D8, >02

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2142 *** DATA >0D, >01, >98, >59, >00, >18, >20, >3A
2143 *** DATA >37, >07, >18, >2D, >D6, >14, >9B, >B4
2144 *** DATA >3C, >D3, >DC, >50, >6D, >8C, >CA, >48
2145 *** DATA >EA, >43, >B5, >D9
2146 *** DATA >AB, >2A, >18, >0F, >D5, >C6, >C8, >6C
2147 *** DATA >67, >5C, >54, >63, >B3, >AD, >9C, >49
2148 *** DATA >D1, >66, >70, >53, >2C, >CB, >0A, >F8
2149 *** DATA >2A, >4C, >01, >5F, >A6, >0A, >E0, >1B
2150 *** DATA >37, >01, >7C, >ED
2151 *** DATA >C6, >01, >02, >7C, >6E, >81, >01, >00
2152 *** DATA >04, >44, >E9, >51, >F4, >6A, >DD, >D5
2153 *** DATA >5C, >49, >D3, >85, >AA, >98, >18, >39
2154 *** DATA >C5, >80, >C6, >32, >EB, >CC, >26, >C3
2155 *** DATA >05, >D5, >C8, >4C
2156 *** DATA >14, >34, >1F, >5C, >D5, >B3, >51, >D0
2157 *** DATA >7D, >54, >F5, >C8, >C4, >45, >4B, >59
2158 *** DATA >45, >33, >66, >37, >B5, >25, >11, >8D
2159 *** DATA >99, >D3, >D4, >11, >85, >2D, >37, >4A
2160 *** DATA >53, >47, >50, >D2
2161 *** DATA >BC, >C8, >49, >1D, >DE, >48, >6D, >6D
2162 *** DATA >08, >2D, >12, >F1, >8C, >92, >23, >8C
2163 *** DATA >C2, >D8, >42, >3D, >69, >D1, >6F, >0E
2164 *** DATA >72, >71, >AB, >4D, >AB, >4E, >D4, >E3
2165 *** DATA >64, >0F, >AD, >3A
2166 *** DATA >51, >8F, >73, >3C, >D4, >1A, >55, >CD
2167 *** DATA >DF, >CA, >50, >88, >17, >75, >5F, >DB
2168 *** DATA >43, >2D, >51, >D5, >EC, >A2, >34, >25
2169 *** DATA >05, >35, >8B, >85, >D2, >94, >18, >CC
2170 *** DATA >CC, >D7, >52, >51
2171 *** DATA >82, >B6, >08, >AB, >30, >49, >81, >3A
2172 *** DATA >DD, >BD, >02, >3B, >45, >9B, >0C, >B7
2173 *** DATA >36, >63, >64, >65, >A6, >5D, >C2, >16
2174 *** DATA >02, >D8, >E8, >40, >40, >E2, >E6, >08
2175 *** DATA >88, >4C, >03, >01
2176 *** DATA >91, >99, >21, >20, >30, >53, >06, >A8
2177 *** DATA >D9, >5E, >74, >7D, >D2, >55, >37, >6E
2178 *** DATA >D1, >F5, >4D, >09, >EF, >2A, >45, >57
2179 *** DATA >38, >CD, >B5, >AA, >34, >5D, >F7, >88
2180 *** DATA >E0, >8C, >5A, >74
2181 *** DATA >D3, >3C, >9C, >28, >8E, >33, >9C, >4D
2182 *** DATA >57, >0E, >37, >C2, >0C, >44, >22, >22
2183 *** DATA >EC, >12, >26, >51, >95, >B4, >56, >2C
2184 *** DATA >4C, >CB, >C4, >5C, >D3, >A9, >D0, >0D
2185 *** DATA >77, >0B, >71, >49
2186 *** DATA >4B, >0F, >49, >33, >BB, >58, >1F, >2D
2187 *** DATA >04, >AB, >9C, >62, >7D, >84, >18, >BD
2188 *** DATA >82, >92, >CD, >D1, >62, >F2, >A8, >6C
2189 *** DATA >A6, >47, >4F, >D1, >23, >63, >E4, >34
2190 *** DATA >3D, >45, >AB, >98
2191 *** DATA >64, >E2, >00, >13, >62, >09, >90, >A4
2192 *** DATA >3A, >02, >12, >53, >43, >40, >E2, >6A
2193 *** DATA >08, >88, >CC, >15, >01, >81, >BA, >1B
2194 *** DATA >20, >09, >0F, >05, >6C, >0D, >65, >80
2195 *** DATA >ED, >28, >14, >30
2196 *** DATA >B4, >A8, >33, >23, >91, >9C, >72, >55
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2197 *** DATA >CE, >CC, >4C, >EC, >26, >19, >3A, >2B
2198 *** DATA >31, >F1, >DD, >64, >68, >EC, >C4, >38
2199 *** DATA >6E, >92, >A1, >71, >22, >13, >8F, >4E
2200 *** DATA >D5, >C6, >F1, >44
2201 *** DATA >6B, >22, >15, >1B, >27, >32, >89, >CD
2202 *** DATA >54, >FC
2203 * CAUTION, ASTEROID BELT
AC16 0148 2204 DATA #328
AC18 0E0821 2205 DATA >0E, >08, >21, >C5, >03, >45, >8A, >66
AC1B C50345
AC1E 8A66
AC20 42556D 2206 DATA >42, >55, >6D, >0D, >D9, >EC, >D4, >F2
AC23 0DD9EC
AC26 D4F2
AC28 B2BD14 2207 DATA >B2, >BD, >14, >BB, >D2, >22, >22, >F1
AC2B BBD222
AC2E 22F1
AC30 52EC88 2208 DATA >52, >EC, >88, >48, >1B, >BB, >4D, >31
AC33 4818BB
AC36 4D31
AC38 25AD3D 2209 DATA >25, >AD, >3D, >A5
AC3B A5
AC3C 167538 2210 DATA >16, >75, >38, >55, >D5, >08, >15, >80
AC3F 55D508
AC42 1580
AC44 D75312 2211 DATA >D7, >53, >12, >F0, >D6, >79, >04, >22
AC47 F0D679
AC4A 0422
AC4C 1080DB 2212 DATA >10, >80, >DB, >83, >4A, >11, >A5, >47
AC4F 834A11
AC52 A547
AC54 78982B 2213 DATA >78, >9B, >28, >65, >50, >11, >19, >2D
AC57 655011
AC5A 192D
AC5C 35545E 2214 DATA >35, >54, >5E, >46
AC5F 46
AC60 A486D4 2215 DATA >A4, >86, >D4, >58, >F9, >DA, >57, >AA
AC63 58F9DA
AC66 57AA
AC68 F6D4AA 2216 DATA >F6, >D4, >AA, >2D, >18, >AB, >2A, >30
AC6B 2D18AB
AC6E 2A30
AC70 8EB474 2217 DATA >8E, >B4, >74, >42, >80, >28, >D3, >00
AC73 428028
AC76 D300
AC78 000000 2218 DATA >00, >00, >00, >00, >00, >00, >60, >68
AC7B 000000
AC7E 6068
AC80 256778 2219 DATA >25, >67, >78, >96
AC83 96
AC84 DCA3C5 2220 DATA >DC, >A3, >C5, >14, >59, >5D, >4C, >97
AC87 14595D
AC8A 4C97
AC8C E65AE4 2221 DATA >E6, >5A, >E4, >84, >DA, >19, >AA, >6D
AC8F 84DA19

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AC92 AA6D
AC94 DE15A2 2222 DATA >DE,15,A2,6E,A8,86,64,64
AC97 6EA8B6
AC9A 6464
AC9C B9BCA2 2223 DATA >B9,BC,A2,7A,15,A3,EA,4C
AC9F 7A15A3
ACA2 EA4C
ACA4 04F099 2224 DATA >04,F0,99,38
ACA7 3B
ACA8 033E0B 2225 DATA >03,3E,08,63,C0,17,61,A0
ACAB 63C017
ACAE 61A0
ACB0 80EB42 2226 DATA >80,EB,42,15,D0,B3,98,01
ACB3 15D0B3
ACB6 9801
ACB8 7A6F35 2227 DATA >7A,6F,35,40,99,CE,49,77
ACBB 4099CE
ACBE 4977
ACCD C5D52C 2228 DATA >C5,D5,2C,5D,27,00,74,35
ACC3 50270D
ACCB 7435
ACCB 0FCD9C 2229 DATA >0F,CD,9C,74
ACCB 74
ACCC 3B245D 2230 DATA >3B,24,5D,3C,53,D1,6D,83
ACCF 3C5301
ACD2 6DB3
ACD4 3483C6 2231 DATA >34,83,C6,CD,30,39,D3,2C
ACD7 CD3039
ACDA D32C
ACDC AB34C3 2232 DATA >AB,34,C3,E4,2C,B3,87,D3
ACDF E42CB3
ACE2 B7D3
ACE4 4C1B03 2233 DATA >4C,1B,D3,C3,4E,EE,30,63
ACE7 C34EEE
ACEA 3063
ACEC B0F078 2234 DATA >80,F0,78,B9
ACEF B9
ACFO CD8C46 2235 DATA >CD,8C,46,33,73,19,07,33
ACF3 337319
ACF6 0733
ACF8 6855AF 2236 DATA >6B,55,AF,A5,23,EC,42,C5
ACFB A523EC
ACFE 42C5
AD00 4A4835 2237 DATA >4A,48,35,33,0B,63,0D,6B
AD03 330863
AD06 0D68
AD08 35C19C 2238 DATA >35,C1,9C,C5,DC,C2,94,30
AD0B C5DCC2
AD0E 9430
AD10 AB7011 2239 DATA >AB,70,11,D7
AD13 D7
AD14 720A0C 2240 DATA >72,0A,0C,70,CE,BC,98,C6
AD17 70CEBC
AD1A 98C6
AD1C 67948F 2241 DATA >67,94,8F,B4,66,BA,18,E5

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AD1F B466BA
AD22 18E5
AD24 55749B 2242 DATA >55,74,98,65,48,86,57,D1
AD27 654886
AD2A 5701
AD2C 2DB66D 2243 DATA >2D,86,6D,65,5E,25,27,D9
AD2F 655E25
AD32 27D9
AD34 A68D69 2244 DATA >A6,8D,69,A7
AD37 A7
AD38 ADE0E8 2245 DATA >AD,E0,E8,36,26,9D,86,9C
AD3B 36269D
AD3E B69C
AD40 A3F29A 2246 DATA >A3,F2,9A,44,C5,52,8E,76
AD43 44C552
AD46 8E76
AD48 93C695 2247 DATA >93,C6,95,18,40,00,5F,A7
AD4B 184000
AD4E 5FA7
AD50 33E083 2248 DATA >33,E0,83,2A,03,64,5F,2E
AD53 2A0364
AD56 5F2E
AD58 00A728 2249 DATA >00,A7,28,11
AD5B 11
AD5C 1064DA 2250 DATA >10,64,DA,03
AD5F 03
2251 * ALERT, ALIEN CRAFT ADVANCING
AD60 01CC 2252 DATA #460
AD62 43F77E 2253 DATA >43,F7,7E,52,B2,DB,34,4D
AD65 5282DB
AD68 344D
AD6A 872DE9 2254 DATA >87,2D,E9,66,9C,34,5E,DA
AD6D 669C34
AD70 5EDA
AD72 6C424D 2255 DATA >6C,42,4D,D0,58,19,87,4D
AD75 D05819
AD78 B74D
AD7A 2941E3 2256 DATA >29,41,E3,79,DC,3A,24,27
AD7D 79DC3A
AD80 2427
AD82 80A736 2257 DATA >8D,A7,36,E8
AD85 EB
AD86 A28D54 2258 DATA >A2,8D,54,A3,3A,25,58,D1
AD89 A33A25
AD8C 58D1
AD8E 528DEE 2259 DATA >52,8D,EE,00,38,25,48,F5
AD91 D03825
AD94 4BF5
AD96 2EDD63 2260 DATA >2E,DD,63,E4,0C,D5,07,F7
AD99 E40CD5
AD9C 07F7
AD9E B4B1DD 2261 DATA >84,81,DD,34,9F,D5,CB,47
ADA1 349FD5
ADA4 C847
ADA6 723142 2262 DATA >72,31,42,11

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ADA9 11
ADAA 6F1DD8 2263 DATA >6F, >1D, >DB, >CD, >8C, >85, >23, >6D
ADAD CD8C85
ADBD 236D
ADB2 600300 2264 DATA >6D, >03, >00, >02, >12, >53, >77, >40
ADB5 021253
ADB8 7740
ADBA 669E02 2265 DATA >66, >9E, >02, >A8, >4C, >15, >00, >00
ADBD A84C15
ADC0 0000
ADC2 000000 2266 DATA >00, >00, >00, >00, >10, >90, >B9, >19
ADC5 001090
ADC8 B919
ADCA 00C0D0 2267 DATA >00, >C0, >D0, >8B
ADCD 8B
ADCE B5C875 2268 DATA >B5, >C8, >75, >39, >CB, >28, >5E, >3D
ADD1 39C828
ADD4 5E3D
ADD6 87192F 2269 DATA >B7, >19, >2F, >30, >69, >CD, >6C, >97
ADD9 3D69CD
ADDC 6C97
ADDE BBB468 2270 DATA >BB, >B4, >68, >A4, >6A, >4C, >C9, >52
ADE1 A46A4C
ADE4 C952
ADE6 BDD5CC 2271 DATA >BD, >D5, >CC, >75, >3B, >4B, >75, >D6
ADE9 753849
ADEC 75D6
ADEE C32FEC 2272 DATA >C3, >2F, >EC, >0C
ADF1 0C
ADF2 45BB8C 2273 DATA >45, >BB, >8C, >D8, >92, >3D, >14, >A7
ADF5 D8923D
ADF8 14A7
ADFA A3AC5B 2274 DATA >A3, >AC, >5B, >F6, >50, >A2, >71, >97
ADF0 F650A2
AE00 7197
AE02 6B5A43 2275 DATA >6B, >5A, >43, >2E, >46, >DD, >B6, >18
AE05 2E46DD
AE08 B618
AE0A 2D891A 2276 DATA >2D, >B9, >1A, >31, >AF, >92, >35, >E4
AE0D 31AF92
AE10 35E4
AE12 E6D87C 2277 DATA >E6, >D8, >7C, >8A
AE15 8A
AE16 F6528A 2278 DATA >F6, >52, >8A, >11, >CF, >29, >DA, >4B
AE19 11CF29
AE1C DA4B
AE1E C94623 2279 DATA >C9, >46, >23, >27, >E8, >2C, >25, >6A
AE21 27E82C
AE24 256A
AE26 CB6CA3 2280 DATA >CB, >6C, >A3, >90, >14, >2B, >EC, >53
AE29 9D1428
AE2C EC53
AE2E 947552 2281 DATA >94, >75, >52, >8C, >F4, >77, >61, >D7
AE31 8CF477
AE34 61D7

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AE36 495106 2282 DATA >49, >51, >C6, >5F
AE39 5F
AE3A 595025 2283 DATA >59, >5D, >25, >45, >98, >EE, >24, >95
AE3D 4598EE
AE40 2495
AE42 6314C9 2284 DATA >63, >14, >C9, >82, >DB, >CD, >35, >04
AE45 B2DBCD
AE48 3504
AE4A 203437 2285 DATA >20, >34, >37, >07, >F8, >62, >6E, >80
AE4D 07F862
AE50 6E80
AE52 58538A 2286 DATA >58, >53, >8A, >92, >6C, >53, >86, >58
AE55 926C53
AE58 8658
AE5A 5A9A2D 2287 DATA >5A, >9A, >2D, >56
AE5D 56
AE5E 652DE7 2288 DATA >65, >2D, >E7, >68, >2E, >46, >A7, >0F
AE61 682E46
AE64 A70F
AE66 DBA3BB 2289 DATA >DB, >A3, >BB, >18, >15, >59, >6C, >8F
AE69 181559
AE6C 6C8F
AE6E EE4354 2290 DATA >EE, >43, >54, >64, >31, >3B, >BA, >8F
AE71 64313B
AE74 BA8F
AE76 99E9CD 2291 DATA >99, >E9, >CD, >EC, >68, >2E, >66, >85
AE79 EC682E
AE7C 6685
AE7E 0FD3A1 2292 DATA >0F, >D3, >A1, >79
AE81 79
AE82 1FEB56 2293 DATA >1F, >EB, >56, >48, >08, >C0, >89, >87
AE85 4808C0
AE88 8987
AE8A 023217 2294 DATA >02, >32, >17, >56, >40, >36, >24, >E0
AE8D 564036
AE90 24E0
AE92 802CCC 2295 DATA >80, >2C, >CC, >19, >C0, >4A, >15, >00
AE95 19C04A
AE98 1500
AE9A 38C069 2296 DATA >38, >C0, >69, >CF, >A1, >07, >18, >59
AE9D CFA107
AEA0 1B59
AEA2 EB8C9B 2297 DATA >EB, >8C, >9B, >1E
AEA5 1E
AEA6 B4678C 2298 DATA >84, >67, >8C, >33, >76, >66, >A0, >9A
AEA9 337666
AEAC A09A
AEA E54BCB 2299 DATA >65, >48, >CB, >99, >51, >70, >46, >A6
AEB1 995170
AEB4 46A6
AEB6 65637A 2300 DATA >65, >63, >7A, >25, >9A, >39, >92, >8D
AEB9 259A39
AEB C 928D
AEBE 15A468 2301 DATA >15, >A4, >68, >44, >45, >56, >56, >E6
AEC1 444556

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AEC4 56E6
AEC6 A2E1E6 2302 DATA >A2, >E1, >E6, >5A
AEC9 5A
AECA 1985B3 2303 DATA >19, >85, >B3, >86, >86, >D3, >66, >44
AECD 8686D3
AED0 6644
AED2 AB1959 2304 DATA >AB, >19, >59, >8C, >97, >E1, >4D, >4C
AED5 8C97E1
AED8 4D4C
AEDA 4E313E 2305 DATA >4E, >31, >3E, >7A, >32, >51, >59, >C1
AEDD 7A3251
AEE0 59C1
AEE2 7AE9C1 2306 DATA >7A, >E9, >C1, >47, >54, >39, >EB, >A1
AEE5 475439
AEE8 EBA1
AEEA BBI851 2307 DATA >BB, >18, >51, >19
AEED 19
AEEE 688A6E 2308 DATA >68, >8A, >6E, >7C, >B5, >85, >81, >0E
AEF1 7CB585
AEF4 B10E
AEF6 BA91FE 2309 DATA >BA, >91, >FE, >26, >9E, >D8, >E8, >9A
AEF9 269ED8
AEFC E89A
AEFE F98E1A 2310 DATA >F9, >8E, >1A, >15, >06, >44, >5D, >46
AF01 150644
AF04 5D46
AF06 80C8D5 2311 DATA >80, >C8, >D5, >04, >D0, >B4, >9B, >00
AF09 04D0B4
AF0C 9B00
AF0E B27257 2312 DATA >B2, >72, >57, >40
AF11 40
AF12 B2E149 2313 DATA >B2, >E1, >49, >B4, >26, >2A, >C3, >19
AF15 B4262A
AF18 C319
AF1A 15333A 2314 DATA >15, >33, >3A, >8B, >28, >47, >52, >EA
AF1D 8B2847
AF20 52EA
AF22 E434CA 2315 DATA >E4, >34, >CA, >0D, >49, >AA, >B3, >91
AF25 0D49AA
AF28 B391
AF2A 6C5384 2316 DATA >6C, >53, >B4, >0F
AF2D 0F
AF2E 0116 2317 * ALERT, SHIPS ATTACKING
AF30 0888C4 2318 DATA #278
AF33 ADE9CE 2319 DATA >08, >88, >C4, >AD, >E9, >CE, >6F, >5A
AF36 6F5A
AF38 869DA6 2320 DATA >86, >9D, >A6, >5B, >3F, >A1, >55, >F2
AF3B 5B3FA1
AF3E 55F2
AF40 8AA66D 2321 DATA >8A, >A6, >6D, >95, >4C, >28, >0D, >9A
AF43 954C2B
AF46 0D9A
AF48 0893D6 2322 DATA >08, >93, >D6, >A3, >38, >68, >CA, >76
AF4B A33868

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AF4E CA76			
AF50 C88CE2	2323	DATA	>C8, >8C, >E2, >A4
AF53 A4			
AF54 5ADD2E	2324	DATA	>5A, >DD, >2E, >F9, >72, >96, >12, >54
AF57 F97296			
AF5A 1254			
AF5C 87C639	2325	DATA	>87, >C6, >39, >59, >4A, >34, >69, >EE
AF5F 594A34			
AF62 69EE			
AF64 1D77A9	2326	DATA	>1D, >77, >A9, >31, >BB, >A4, >4E, >9C
AF67 31BBA4			
AF6A 4E9C			
AF6C AD3523	2327	DATA	>AD, >35, >23, >36, >E3, >96, >AE, >93
AF6F 36E396			
AF72 AE93			
AF74 5C9F28	2328	DATA	>5C, >9F, >28, >DB
AF77 DB			
AF78 2E16C3	2329	DATA	>2E, >16, >C3, >9A, >53, >35, >2F, >27
AF7B 9A5335			
AF7E 2F27			
AF80 000A68	2330	DATA	>00, >0A, >68, >D4, >5D, >00, >95, >AB
AF83 D45D00			
AF86 95AB			
AF88 030000	2331	DATA	>03, >00, >00, >00, >00, >00, >00, >03
AF8B 000000			
AF8E 0003			
AF90 1E6575	2332	DATA	>1E, >65, >75, >C0, >EF, >C1, >1E, >B0
AF93 C0EFC1			
AF96 1E130			
AF98 8003FE	2333	DATA	>80, >03, >FE, >1C
AF9B 1C			
AF9C 1E4A33	2334	DATA	>1E, >4A, >33, >A6, >66, >6F, >67, >29
AF9F A6666F			
AFA2 6729			
AFA4 C56858	2335	DATA	>C5, >68, >58, >BF, >93, >A5, >44, >ED
AFA7 BF93A5			
AFAA 44ED			
AFAC 11F94E	2336	DATA	>11, >F9, >4E, >8A, >1C, >9C, >87, >E5
AFAF 8A1C9C			
AFB2 87E5			
AFB4 2A0160	2337	DATA	>2A, >01, >60, >40, >06, >6E, >02, >D8
AFB7 40066E			
AFBA 02D8			
AFBC C28D01	2338	DATA	>C2, >8D, >01, >DF
AFBF DF			
AFC0 247380	2339	DATA	>24, >73, >80, >00, >DF, >98, >22, >20
AFC3 00DF98			
AFC6 2220			
AFC8 305528	2340	DATA	>30, >55, >28, >4A, >4E, >99, >92, >ED
AFCB 4A4E99			
Afce 92ED			
AFD0 3A29DE	2341	DATA	>3A, >29, >DE, >45, >D9, >26, >13, >01
AFD3 45D926			
AFD6 1301			
AFD8 10BF65	2342	DATA	>10, >BF, >65, >80, >C8, >CD, >15, >10


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AFDB 80C8CD
AFDE 1510
AFE0 809801 2343 DATA >80,1>96,1>01,1>AA
AFE3 AA
AFE4 704BCA 2344 DATA >70,1>4B,1>CA,1>4E,1>6E,1>69,1>69,1>69
AFE7 4E6E69
AFEA 6969
AFEC A8217A 2345 DATA >A8,1>21,1>7A,1>C6,1>24,1>93,1>A5,1>C5
AFEF C62493
AFF2 A5C5
AFF4 189E95 2346 DATA >18,1>9E,1>95,1>F6,1>96,1>96,1>62,1>78
AFF7 F69696
AFFA 6278
AFFC 65DA18 2347 DATA >65,1>DA,1>1B,1>5A,1>4A,1>1A,1>59,1>2D
AFFF 5A4A1A
B002 592D
B004 D7692D 2348 DATA >D7,1>69,1>2D,1>91
B007 91
B008 84A554 2349 DATA >84,1>A5,1>54,1>50,1>40,1>96,1>E6,1>02
B00B 504096
B00E E602
B010 68863D 2350 DATA >68,1>86,1>3D,1>19,1>2D,1>0A,1>47,1>AC
B013 192D0A
B016 47AC
B018 9C6295 2351 DATA >9C,1>62,1>B5,1>A4,1>52,1>31,1>74,1>82
B01B A45231
B01E 7482
B020 5502C7 2352 DATA >55,1>02,1>C7,1>84,1>D3,1>33,1>76,1>76
B023 840333
B026 7676
B028 14EFCA 2353 DATA >14,1>EF,1>CA,1>D4
B02B D4
B02C D85E79 2354 DATA >D8,1>5E,1>79,1>27,1>BB,1>1B,1>65,1>05
B02F 27BB18
B032 6505
B034 A15DEC 2355 DATA >A1,1>5D,1>EC,1>4A,1>95,1>95,1>34,1>B7
B037 4A9595
B03A 3487
B03C B3A915 2356 DATA >B3,1>A9,1>15,1>56,1>A6,1>AA,1>A9,1>EA
B03F 56A6AA
B042 A9EA
B044 F601 2357 DATA >F6,1>01
2358 * CONGRATULATIONS!
B046 00FE 2359 DATA #254
B048 49815E 2360 DATA >49,1>81,1>5E,1>30,1>22,1>A9,1>14,1>D5
B04B 3D22A9
B04E 1405
B050 0688CC 2361 DATA >06,1>8B,1>CC,1>42,1>52,1>34,1>63,1>BD
B053 425234
B056 63BD
B058 D30249 2362 DATA >D3,1>02,1>49,1>D0,1>94,1>F1,1>53,1>6A
B05B D094F1
B05E 536A
B060 974EE3 2363 DATA >97,1>4E,1>E3,1>3E,1>C7,1>29,1>63,1>21
B063 3EC729

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B066	6321		
B068	0077D7	2364	DATA >00, >77, >D7, >A4
B06B	A4		
B06C	E91016	2365	DATA >E9, >10, >16, >96, >89, >9B, >E6, >1A
B06F	968996		
B072	E61A		
B074	976749	2366	DATA >97, >67, >49, >19, >AA, >2F, >DA, >99
B077	19AA2F		
B07A	DA99		
B07C	23FBA8	2367	DATA >23, >FB, >A8, >21, >59, >56, >AE, >92
B07F	215956		
B082	AE92		
B084	A3C668	2368	DATA >A3, >C6, >68, >91, >79, >8A, >93, >92
B087	91798A		
B08A	9392		
B08C	82A94F	2369	DATA >82, >A9, >4F, >29
B08F	29		
B090	518AE3	2370	DATA >51, >8A, >E3, >E2, >69, >E1, >D4, >01
B093	E269E1		
B096	D401		
B098	83B305	2371	DATA >83, >B3, >05, >E5, >8E, >04, >36, >6D
B09B	E58E04		
B09E	366D		
B0A0	5B946C	2372	DATA >5B, >94, >6C, >38, >3D, >DB, >68, >51
B0A3	3830D6		
B0A6	6851		
B0A8	82B190	2373	DATA >82, >B1, >80, >8E, >C8, >45, >80, >C6
B0AB	8EC845		
B0AE	8DC6		
B0B0	5DA363	2374	DATA >5D, >A3, >63, >17
B0B3	17		
B0B4	C5E834	2375	DATA >C5, >EB, >34, >8B, >93, >D3, >14, >67
B0B7	8B93D3		
B0BA	1467		
B0BC	D37D47	2376	DATA >D3, >7D, >47, >E9, >52, >A2, >0F, >B3
B0BF	E952A2		
B0C2	0FB3		
B0C4	2EC548	2377	DATA >2E, >C5, >4B, >49, >DE, >CD, >37, >94
B0C7	49DEC0		
B0CA	3794		
B0CC	2C393B	2378	DATA >2C, >39, >3B, >75, >BF, >94, >3B, >E4
B0CF	75BF94		
B0D2	3BE4		
B0D4	6235BC	2379	DATA >62, >35, >BC, >5B
B0D7	5B		
B0D8	4A5186	2380	DATA >4A, >51, >86, >62, >D6, >08, >D1, >01
B0DB	62D808		
B0DE	D101		
B0E0	38BD34	2381	DATA >38, >BD, >34, >00, >7F, >AC, >07, >E0
B0E3	007FAC		
B0E6	07E0		
B0E8	AFD200	2382	DATA >AF, >D2, >00, >FC, >35, >51, >F4, >BF
B0EB	FC3551		
B0EE	F4BF		
B0F0	7E3354	2383	DATA >7E, >33, >54, >59, >D2, >BB, >30, >2D

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BOF3 59D288
BOF6 302D
BOF8 ADCAC9 2384 DATA >AD, >CA, >C9, >F0
BOF8 F0
BOFC D6C383 2385 DATA >D6, >C3, >83, >19, >05, >C8, >3A, >4F
BOFF 1905C8
B102 3A4F
B104 88A4E3 2386 DATA >88, >A4, >E3, >EC, >20, >84, >8A, >5C
B107 EC2084
B10A 8A5C
B10C 858183 2387 DATA >85, >81, >83, >D4, >4D, >76, >C5, >C6
B10F D44D76
B112 C5C6
B114 8DC26A 2388 DATA >8D, >C2, >6A, >30, >54, >9B, >D6, >49
B117 305498
B11A D649
B11C DDE270 2389 DATA >DD, >E2, >7D, >EC
B11F EC
B120 7ACF75 2390 DATA >7A, >CF, >75, >86, >CD, >8D, >2A, >22
B123 86CD8D
B126 2A22
B128 976875 2391 DATA >97, >68, >75, >27, >42, >9F, >D6, >C4
B128 27429F
B12E D6C4
B130 D46513 2392 DATA >D4, >65, >13, >A0, >8A, >34, >04, >7C
B133 A08A34
B136 047C
B138 958680 2393 DATA >95, >86, >80, >2F, >43, >11, >F0, >85
B138 2F4311
B13E F085
B140 05028E 2394 DATA >05, >02, >8E, >4E
B143 4E
B144 8707 2395 DATA >87, >07
2396 * NICE FLYING
B146 00FC 2397 DATA >08, >C8, >DC, >0C, >01, >91, >A9, >09
B14B 0C0191
B14E A909
B150 755A15 2399 DATA >75, >5A, >15, >93, >9D, >A8, >74, >45
B153 9390A8
B156 7445
B158 63D84C 2400 DATA >63, >D8, >4C, >82, >32, >34, >F5, >6F
B15B 823234
B15E F56F
B160 3538C6 2401 DATA >35, >38, >C6, >80, >4C, >6F, >54, >E1
B163 804C6F
B166 54E1
B168 14CD45 2402 DATA >14, >CD, >45, >F7
B16B F7
B16C 6C633C 2403 DATA >6C, >63, >3C, >74, >D7, >C2, >A3, >55
B16F 74D7C2
B172 A355
B174 F1D243 2404 DATA >F1, >D2, >43, >0F, >C8, >72, >45, >4B
B177 0FC872
B17A 454B

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B17C 8B352C    2405    DATA  >8B, >35, >2C, >2B, >59, >2F, >35, >C7
B17F 2B592F
B182 35C7
B184 F0E864    2406    DATA  >F0, >E8, >64, >B5, >94, >EA, >2D, >62
B187 B594EA
B18A 2D62
B18C 5DE190    2407    DATA  >5D, >E1, >90, >8A
B18F 8A
B190 93A872    2408    DATA  >93, >A8, >72, >39, >45, >88, >5A, >B2
B193 394588
B196 5AB2
B198 9AE504    2409    DATA  >9A, >E5, >04, >3E, >29, >B1, >98, >96
B19B 3E29B1
B19E 9896
B1A0 AD801A    2410    DATA  >AD, >80, >1A, >93, >19, >50, >A5, >29
B1A3 931950
B1A6 A529
B1A8 018A0E    2411    DATA  >01, >8A, >0E, >A5, >00, >05, >28, >C0
B1AB A50005
B1AE 28C0
B1B0 010164    2412    DATA  >01, >01, >64, >65
B1B3 65
B1B4 8E001E    2413    DATA  >8E, >00, >1E, >3B, >01, >00, >00, >80
B1B7 3B0100
B1BA 0080
B1BC 005187    2414    DATA  >00, >51, >87, >10, >20, >8A, >70, >02
B1BF 10208A
B1C2 7002
B1C4 24ED82    2415    DATA  >24, >ED, >82, >00, >27, >C2, >09, >10
B1C7 0027C2
B1CA 0910
B1CC A49800    2416    DATA  >A4, >9B, >00, >9A, >49, >32, >62, >17
B1CF 9A4932
B1D2 6217
B1D4 AAAEE1    2417    DATA  >AA, >AE, >E1, >D4
B1D7 D4
B1D8 29BCAC    2418    DATA  >29, >BC, >AC, >4B, >97, >E5, >A4, >C8
B1DB 4B97E5
B1DE A4C8
B1E0 D9EAE0    2419    DATA  >D9, >EA, >E0, >4A, >9A, >6A, >56, >AB
B1E3 4A9A6A
B1E6 56AB
B1E8 4FA81E    2420    DATA  >4F, >A8, >1E, >AA, >1D, >63, >56, >C9
B1EB AA1D63
B1EE 56C9
B1F0 76A8AE    2421    DATA  >76, >A8, >AE, >4E, >58, >07, >9B, >A5
B1F3 4E5807
B1F6 9BA5
B1F8 FA5C1E    2422    DATA  >FA, >5C, >1E, >9D
B1FB 9D
B1FC 6C861A    2423    DATA  >6C, >86, >1A, >7C, >46, >8C, >2B, >69
B1FF 7C468C
B202 2B69
B204 5A90D9    2424    DATA  >5A, >90, >D9, >D1, >2A, >27, >69, >89
B207 D12A27

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B20A 6989
B20C EB5406 2425 DATA >EB, >54, >06, >E3, >64, >64, >2E, >55
B20F E36464
B212 2E55
B214 E3AC93 2426 DATA >E3, >AC, >93, >99, >85, >64, >B5, >B3
B217 998564
B21A B5B3
B21C 0E5612 2427 DATA >0E, >56, >12, >52
B21F 52
B220 55C628 2428 DATA >55, >C6, >28, >58, >59, >71, >75, >19
B223 585971
B226 7519
B228 6D6717 2429 DATA >6D, >67, >17, >25, >BA, >EE, >74, >8D
B22B 25BAEE
B22E 748D
B230 DD3C5A 2430 DATA >DD, >3C, >5A, >BB, >CA, >35, >76, >AB
B233 BBCA35
B236 76A6
B238 6AE566 2431 DATA >6A, >E5, >66, >5B, >D9, >89, >AA, >97
B23B 5BD989
B23E AA97
B240 861C6D 2432 DATA >86, >1C, >6D, >3F
B243 3F
2433 * PILOT ERROR ---- SHIP LOST!
2434 *** DATA #365
2435 *** DATA >06, >D0, >DC, >DC, >01, >39, >66, >0D
2436 *** DATA >C5, >8D, >F4, >48, >93, >B3, >14, >DF
2437 *** DATA >22, >32, >C3, >EE, >52, >42, >8A, >AC
2438 *** DATA >6C, >A7, >4B, >71, >31, >AA, >BB, >14
2439 *** DATA >0D, >C5, >45, >8F
2440 *** DATA >6A, >57, >D4, >54, >1B, >22, >7C, >5C
2441 *** DATA >71, >D1, >4C, >0C, >8F, >09, >C5, >4D
2442 *** DATA >77, >2E, >DC, >37, >14, >37, >D3, >78
2443 *** DATA >F7, >FC, >50, >9C, >2C, >6F, >CD, >63
2444 *** DATA >42, >31, >20, >20
2445 *** DATA >30, >75, >03, >64, >55, >4E, >00, >AE
2446 *** DATA >27, >11, >A0, >74, >37, >02, >3C, >13
2447 *** DATA >43, >40, >A4, >16, >CD, >48, >5E, >A3
2448 *** DATA >B2, >15, >35, >C3, >79, >AF, >F2, >44
2449 *** DATA >5A, >0C, >97, >BC
2450 *** DATA >D3, >92, >6E, >31, >6C, >B6, >8E, >08
2451 *** DATA >3A, >C9, >34, >55, >3A, >AD, >2C, >05
2452 *** DATA >D3, >34, >89, >76, >B7, >15, >4C, >D3
2453 *** DATA >25, >DB, >C3, >51, >B0, >4C, >E3, >EC
2454 *** DATA >F0, >94, >C1, >B6
2455 *** DATA >95, >AB, >35, >62, >07, >DB, >56, >8E
2456 *** DATA >B6, >70, >15, >6C, >5B, >C5, >3B, >C2
2457 *** DATA >55, >70, >5C, >51, >AD, >0C, >55, >CE
2458 *** DATA >71, >C9, >34, >C3, >1C, >19, >2B, >88
2459 *** DATA >60, >D3, >60, >84
2460 *** DATA >00, >A7, >5C, >00, >00, >00, >00, >00
2461 *** DATA >00, >00, >80, >01, >DD, >08, >39, >E0
2462 *** DATA >CF, >92, >00, >FC, >DD, >9E, >80, >3F
2463 *** DATA >57, >02, >F0, >FB, >5A, >12, >EF, >1A
2464 *** DATA >52, >94, >A4, >43

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2465 *** DATA >89,>C6,>3C,>A6,>E8,>2C,>39,>68
2466 *** DATA >AF,>C8,>93,>B3,>E4,>E0,>3C,>3C
2467 *** DATA >CF,>69,>52,>7C,>48,>55,>9B,>DA
2468 *** DATA >00,>A0,>00,>6E,>A6,>25,>80,>01
2469 *** DATA >00,>00,>50,>8C
2470 *** DATA >E1,>59,>AE,>E1,>D8,>EB,>C1,>B0
2471 *** DATA >D2,>33,>2C,>9C,>38,>5D,>EA,>69
2472 *** DATA >D3,>74,>64,>34,>56,>36,>24,>DB
2473 *** DATA >76,>D1,>D4,>29,>B1,>73,>C5,>4D
2474 *** DATA >D7,>BB,>C5,>AB
2475 *** DATA >D9,>34,>43,>CF,>31,>CB,>66,>DC
2476 *** DATA >0C,>DD,>D7,>CD,>47,>6E,>B1,>CC
2477 *** DATA >18,>B3,>18,>39,>C5,>36,>6D,>CD
2478 *** DATA >BC,>E5,>06,>C7,>F4,>36,>CB,>96
2479 *** DATA >1B,>4C,>6F,>DB
2480 *** DATA >45,>D2,>0C,>03,>9C,>4E,>67,>40
2481 *** DATA >12,>21,>0C,>C8,>DC,>4D,>00,>4D
2482 *** DATA >85,>21,>E0,>9B,>30,>04,>7C,>91
2483 *** DATA >82,>80,>CF,>C2,>00,>40,>01,>85
2484 *** DATA >B5,>13,>20,>88
2485 *** DATA >70,>04,>44,>91,>F2
2486 ***
2487 *** SCENERY DATA #7 HILLS W/ SPACE REEDS
2488 ***
B244 000000 2489 SCEEN6 DATA #>0000,#>0000,#>0000,#>0000,#>0000,#>0000,#>0000,#>0000
B247 000000
B24A 000000
B24D 000000
B250 000000
B253 00
B254 000000 2490 DATA #>0000,#>0002,#>0206,#>2727,#>2737,#>377F,#>FFFF
B257 020206
B25A 272727
B25D 37377F
B260 FFFF
B262 040606 2491 DATA #>0406,#>0606,#>0606,#>060E,#>0E0E,#>0E0E,#>0E0F,#>0F0F
B265 060606
B268 060E0E
B26B 0E0E0E
B26E 0E0F0F
B271 0F
B272 9F9F9F 2492 DATA #>9F9F,#>9F9F,#>9FBF,#>BFBF,#>FFFF,#>FFFF,#>FFFF
B275 9FBFBF
B278 BFBFFF
B27B FFFFFFFF
B27E FFFF
B280 000000 2493 DATA #>0000,#>0000,#>0000,#>1018,#>1818,#>1818,#>1C1C,#>1C1C
B283 000000
B286 101818
B289 181818
B28C 1C1C1C
B28F 1C
B290 1C3C3C 2494 DATA #>1C3C,#>3C3C,#>3EBE,#>FEFE,#>FFFF,#>FFFF,#>FFFF
B293 3C3EBE
B296 FEFEFF

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```

B299 FFFFFFFF
B29C FFFF
B29E 000000 2495 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0202, #>0303, #>4343
B2A1 000000
B2A4 000000
B2A7 000202
B2AA 030343
B2AD 43
B2AE 636363 2496 DATA #>6363, #>6363, #>E3E7, #>E7F7, #>F7FF, #>FFFF, #>FFFF
B2B1 63E3E7
B2B4 E7F7F7
B2B7 FFFFFFFF
B2BA FFFF
B2BC 000000 2497 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
B2BF 000000
B2C2 000000
B2C5 000000
B2C8 000000
B2CB 00
B2CC 000010 2498 DATA #>0000, #>1010, #>9090, #>9282, #>B6BF, #>FFFF, #>FFFF
B2CF 109090
B2D2 928286
B2D5 BFFFFFFF
B2D8 FFFF
B2DA 000000 2499 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
B2DD 000000
B2E0 000000
B2E3 000000
B2E6 000000
B2E9 00
B2EA 000000 2500 DATA #>0000, #>0002, #>0202, #>020A, #>2A2A, #>6A7A, #>FAFF
B2ED 020202
B2F0 020A2A
B2F3 2A6A7A
B2F6 FAFF
B2F8 000001 2501 DATA #>0000, #>0101, #>0101, #>0101, #>0101, #>0909, #>0909, #>0909
B2FB 010101
B2FE 010101
B301 010909
B304 090909
B307 09
B308 090929 2502 DATA #>0909, #>2929, #>2929, #>29A9, #>A9A9, #>A9A9, #>FFFF
B30B 292929
B30E 29A9A9
B311 A9A9A9
B314 FFFF
B316 000000 2503 DATA #>0000, #>0000, #>0000, #>0808, #>0809, #>0909, #>0909
B319 000000
B31C 080808
B31F 090909
B322 090909
B325 29
B326 292929 2504 DATA #>2929, #>2929, #>2929, #>2929, #>2929, #>2939, #>7FFF
B329 292929
B32C 292929

```

```
B32F 292939
B332 7FFF
B334 000008 2505 DATA #>0000, #>0808, #>0808, #>0808, #>0808, #>0808, #>0808, #>0828, #>2828
B337 080808
B33A 080808
B33D 080808
B340 082828
B343 28
B344 28282A 2506 DATA #>2828, #>2A2A, #>2A2A, #>2A2A, #>2A2A, #>2A2A, #>2ABE, #>FFFF
B347 2A2A2A
B34A 2A2A2A
B34D 2A2ABE
B350 FFFF
B352 000000 2507 DATA #>0000, #>0000, #>0000, #>1010, #>1050, #>5050, #>5050, #>5050
B355 000000
B358 101010
B35B 505050
B35E 505050
B361 50
B362 545454 2508 DATA #>5454, #>5454, #>5454, #>5454, #>5454, #>5454, #>545F, #>FFFF
B365 545454
B368 545454
B36B 54545F
B36E FFFF
B370 000000 2509 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0202, #>020A, #>0A0A
B373 000000
B376 000000
B379 000202
B37C 020A0A
B37F 0A
B380 0A0A0A 2510 DATA #>0A0A, #>0A0A, #>8A8A, #>8A8A, #>AAAA, #>AAAA, #>BFFF
B383 0A8A8A
B386 8A8AAA
B389 AAAAAA
B38C BFFF
B38E 000000 2511 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0044
B391 000000
B394 000000
B397 000000
B39A 000000
B39D 44
B39E 444444 2512 DATA #>4444, #>4455, #>5555, #>5555, #>5555, #>5555, #>55F5, #>FDFF
B3A1 555555
B3A4 555555
B3A7 5555F5
B3AA FDFF
B3AC 000000 2513 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>2020, #>3030
B3AF 000000
B3B2 000000
B3B5 000000
B3B8 202030
B3BB 30
B3BC 303838 2514 DATA #>3038, #>3838, #>3838, #>3838, #>3838, #>3C7C, #>7EFE, #>FFFF
B3BF 383838
B3C2 38383C
```



```
B3C5 7C7EFE
B3C8 FFFF
B3CA 000000 2515 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
B3CD 000000
B3D0 000000
B3D3 000000
B3D6 000000
B3D9 00
B3DA 202020 2516 DATA #>2020, #>2060, #>6060, #>70F0, #>F0F0, #>FAFE, #>FFFF
B3DD 606060
B3E0 70F0F0
B3E3 F0FAFE
B3E6 FFFF
B3E8 03070C 2517 DATA #>0307, #>0C18, #>3060, #>FFFF, #>0000, #>0000, #>0000, #>0000
B3EB 183060
B3EE FFFF00
B3F1 000000
B3F4 000000
B3F7 00
B3F8 FF7F30 2518 DATA #>FF7F, #>3018, #>0C06, #>0301, #>0103, #>070F, #>1CF0
B3FB 180C06
B3FE 030101
B401 03070F
B404 1CF0
B406 FFFF0F 2519 DATA #>FFFF, #>0F0F, #>0F0F, #>FFFO, #>CFCF, #>CFCF, #>D7D7, #>CFFF
B409 0F0F0F
B40C FFF0CF
B40F CFCFCF
B412 D7D7CF
B415 FF
B416 FOFF0F 2520 DATA #>FOFF, #>0F0F, #>0F0F, #>FFFO, #>FF18, #>18FF, #>183C
B419 0F0F0F
B41C FFF0FF
B41F 1818FF
B422 183C
B424 COE0F0 2521 DATA #>COE0, #>F0F8, #>FCFE, #>FFFF, #>0000, #>0000, #>0000, #>0000
B427 F8FCFE
B42A FFFF00
B42D 000000
B430 000000
B433 00
B434 FFFEFC 2522 DATA #>FFFE, #>FCF8, #>FOE0, #>(C080, #)80C0, #>E0F0, #)380F
B437 F8F0E0
B43A C08080
B43D COE0F0
B440 380F
B442 000000 2523 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
B445 000000
B448 000000
B44B 000000
B44E 000000
B451 00
B452 000000 2524 DATA #>0000, #>0000, #>0000, #>0405, #)0535, #>3777, #>7FFF
B455 000000
B458 040505
```

```
B45B 353777
B45E 7FFF
B460 000003 2525 DATA #>0000, #>0304, #>7F20, #>103F, #>FF10, #>207F, #>0000, #>0000
B463 047F20
B466 103FFF
B469 10207F
B46C 000000
B46F 00
B470 000000 2526 DATA #>0000, #>0000, #>0202, #>0287, #>8797, #>9FFF, #>FFFF
B473 000202
B476 028787
B479 979FFF
B47C FFFF
B47E 0000FF 2527 DATA #>0000, #>FF01, #>D226, #>5ADA, #>DA26, #>7F00, #>0000, #>0000
B481 010226
B484 5ADADA
B487 267F00
B48A 000000
B48D 00
B48E 000000 2528 DATA #>0000, #>0000, #>080C, #>0C8C, #>8E9E, #>BEFE, #>FFFF
B491 00080C
B494 0C8C8E
B497 9EBEFE
B49A FFFF
B49C 000000 2529 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0304, #>7F20, #>103F
B49F 000000
B4A2 000000
B4A5 000304
B4A8 7F2010
B4AB 3F
B4AC FF1020 2530 DATA #>FF10, #>207F, #>0000, #>0000, #>0010, #>D9D9, #>FFFF
B4AF 7F0000
B4B2 000000
B4B5 10D9D9
B4B8 FFFF
B4BA 000000 2531 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>FF01, #>D226, #>5ADA
B4BD 000000
B4C0 000000
B4C3 00FF01
B4C6 D2265A
B4C9 DA
B4CA DA267F 2532 DATA #>DA26, #>7F00, #>0000, #>0000, #>A1F5, #>FFFF, #>FFFF
B4CD 000000
B4D0 0000A1
B4D3 F5FFFF
B4D6 FFFF
B4D8 000000 2533 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
B4DB 000000
B4DE 000000
B4E1 000000
B4E4 000000
B4E7 00
B4E8 000000 2534 DATA #>0000, #>0002, #>0206, #>0607, #>0FAF, #>BFFF, #>FFFF
B4EB 020206
B4EE 06070F
```

```
B4F1 AFBFFF
B4F4 FFFF
B4F6 000000 2535 DATA #>0000, #>0000, #>0000, #>0000, #>0606, #>0E0E, #>0E0F
B4F9 000000
B4FC 000006
B4FF 060E0E
B502 0E0F0F
B505 0F
B506 9F9F9F 2536 DATA #>9F9F, #>9F9F, #>9FBF, #>BFBF, #>BFBF, #>BFFF, #>FFFF
B509 9F9FBF
B50C BFBFBF
B50F BFBFFF
B512 FFFF
B514 000000 2537 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>1018, #>1C1C
B517 000000
B51A 000000
B51D 000000
B520 10181C
B523 1C
B524 1 C3C3C 2538 DATA #>1C3C, #>3C3C, #>3EBE, #>BEBE, #>BEBE, #>BEBE, #>FFFF, #>FFFF
B527 3C3EBE
B52A BEBEBE
B52D BEFFFF
B530 FFFF
B532 000000 2539 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
B535 000000
B538 000000
B53B 000000
B53E 000000
B541 00
B542 000000 2540 DATA #>0000, #>0002, #>0206, #>2727, #>2737, #>377F, #>FFFF
B545 020206
B548 272727
B54B 37377F
B54E FFFF
B550 000000 2541 DATA #>0000, #>0000, #>0000, #>0000, #>0404, #>040C, #>0F0F, #>0F0F
B553 000000
B556 000004
B559 04040C
B55C 0F0F0F
B55F 0F
B560 9F9F9F 2542 DATA #>9F9F, #>9F9F, #>9FBF, #>BFBF, #>BFBF, #>FFFF, #>FFFF, #>FFFF
B563 9F9FBF
B566 BFBFFF
B569 FFFFFFFF
B56C FFFF
B56E 000000 2543 DATA #>0000, #>0000, #>0000, #>1018, #>1818, #>1818, #>1C1C, #>1C1C
B571 000000
B574 101818
B577 181818
B57A 1C1C1C
B57D 1C
B57E 1C3C3C 2544 DATA #>1C3C, #>3C3C, #>3EBE, #>FEFE, #>FEFE, #>FFFF, #>FFFF, #>FFFF
B581 3C3EBE
B584 FEFEFF
```

```
B587 FFFFFFFF
B58A FFFF
B58C 000000 2545 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>4040
B58F 000000
B592 000000
B595 000000
B598 000040
B598 40
B59C 626263 2546 DATA #>6262, #>6363, #>E3E7, #>E7F7, #>F7FF, #>FFFF, #>FFFF
B59F 63E3E7
B5A2 E7F7F7
B5A5 FFFFFFFF
B5A8 FFFF
B5AA 000000 2547 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
B5AD 000000
B5B0 000000
B5B3 000000
B5B6 000000
B5B9 00
B5BA 000010 2548 DATA #>0000, #>1010, #>9090, #>92B2, #>B6BF, #>FFFF, #>FFFF
B5BD 109090
B5C0 92B2B6
B5C3 BFFFFFFF
B5C6 FFFF
B5C8 000000 2549 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
B5CB 000000
B5CE 000000
B5D1 000000
B5D4 000000
B5D7 00
B5D8 000000 2550 DATA #>0000, #>0000, #>0000, #>0004, #>0416, #>B6F7, #>FFFF
B5DB 000000
B5DE 000404
B5E1 16B6F7
B5E4 FFFF
B5E6 000000 2551 DATA #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000, #>0000
B5E9 000000
B5EC 000000
B5EF 000000
B5F2 000000
B5F5 00
B5F6 000000 2552 DATA #>0000, #>0000, #>0040, #>6060, #>6070, #>F0F8, #>FAFF
B5F9 000040
B5FC 606060
B5FF 70F0F8
B602 FAFF
2553 END
```

ERRORS= 0

LENGTH=17497 (>4459)

296 SYMBOLS USED


```

0001          *****
0002          *
0003          *                               S C R O L L                               *
0004          *
0005          *           BY:           JIM DRAMIS           *
0006          *           PAUL URBANUS           *
0007          *           DATE:          02/17/82 - 7/15/82   *
0008          *
0009          *
0010          *
0011          *****
0012          IDT   'NEWROM'
0014          ***   OPTION XREF
0015 6000          RORG  >6000
0016 6000 08 H08   BYTE  >08           H08 - H00 MUST BE THIS DESCENDING ORD
0017 6001 07 H07   BYTE  >07
0018 6002 06 H06   BYTE  >06
0019 6003 05 H05   BYTE  >05
0020 6004 04 H04   BYTE  >04
0021 6005 03 H03   BYTE  >03
0022 6006 02 H02   BYTE  >02
0023 6007 01 H01   BYTE  >01
0024 6008 00 H00   BYTE  >00
0025 6009 09 H09   BYTE  >09
0026 600A 0A H0A   BYTE  >0A
0027 600B 0B H0B   BYTE  >0B
0028 600C 0C H0C   BYTE  >0C
0029 600D 0D H0D   BYTE  >0D
0030 600E 0E H0E   BYTE  >0E
0031 600F 0F H0F   BYTE  >0F
0032 6010          RORG  >6010
0033 6010 6324'   DATA @START
0034          000E   SCAN   EQU   >000E   ADDRESS OF SCAN ROUTINE
0035          8300   CPURAM EQU   >8300   BEGINNING ADDRES OF CPU RAM
0036          83E0   GPLWS  EQU   >83E0   GPL WORKSPACE
0037          83F1   R&LB   EQU   GPLWS+1?
0038          8800   VDPRD  EQU   >8800   VDP READ DATA WINDOW ADDRESS
0039          8C00   VDPWD  EQU   >8C00   VDP WRITE DATA WINDOW ADDRESS
0040          8C02   VDPWA  EQU   >8C02   HARDWARE READ/WRITE VDP LOCATION
0041          1B00   SAL    EQU   >1B00   SPRITE ATTRIBUTE LIST
0042          3C00   RSMOT  EQU   >3C00   SPRITE AUTO-MOTION LIST
0043          2100   QSAML  EQU   RSMOT-SAL
0044 6012          EVEN
0045 6012 0004 H0004  DATA  >0004
0046 6014 0006 H0006  DATA  >0006
0047 6016 0008 H0008  DATA  >0008
0048 6018 000E H000E  DATA  >000E
0049 601A 0010 H0010  DATA  >0010
0050 601C 0050 H0050  DATA  >C050
0051 601E 0090 H0090  DATA  >0090
0052 6020 00FF H00FF  DATA  >00FF
0053 6022 0100 H0100  DATA  >0100
0054 6024 0A00 H0A00  DATA  >0A00
0055 6026 0AF8 H0AF8  DATA  >0AF8           8 BYTES LESS THAN FIRST HCHAR VDP LO
0056 6028 9000 H9000  DATA  >9000
0057 602A BC06 HBC06  DATA  >BC06
0058 602C C004 HC004  DATA  >C004
0059 602E D000 HD000  DATA  >D000
0060 6030 E41C HE41C  DATA  >E41C           SHIP LIFT SPEED #3
0061 6032 F010 HF010  DATA  >F010           2

```

```

0062 6034 FC04 HFC04 DATA >FC04
0063 6036 20 H20 BYTE >20
0064 6037 24 H24 BYTE >24
0065 6038 18 H18 BYTE >18
0066 6039 12 H12 BYTE >12
0067 603A 13 H13 BYTE >13
0068 603B 14 H14 BYTE >14
0069 603C 30 H30 BYTE >30
0070 603D 31 H31 BYTE >31
0071 603E 32 H32 BYTE >32
0072 603F 39 H39 BYTE >39
0073 6040 3C H3C BYTE >3C
0074 6041 11 H11 BYTE >11
0075 601B' H10 EQU H0010+1
0076 6042 40 H40 BYTE >40
0077 601D' H50 EQU H0050+1
0078 6043 41 H41 BYTE >41
0079 6044 60 H60 BYTE >60
0080 6045 71 H71 BYTE >71
0081 6046 78 H78 BYTE >78
0082 602E' HD0 EQU HD0000+0
0083 6047 E0 HE0 BYTE >E0
0084 6030' HE4 EQU HE41C+0
0085 6048 E8 HE8 BYTE >E8
0086 6032' HFO EQU HF010+0
0087 6049 FA HFA BYTE >FA
0088 6034' HFC EQU HFC04+0
0089 604A FE HFE BYTE >FE
0090 6021' HFF EQU H00FF+1
0091 604B E2 HE2 BYTE >E2
0092 604C 80 H80 BYTE >80
0093 604D 81 H81 BYTE >81
0094 604E 88 H88 BYTE >88
0095 604F 8C H8C BYTE >8C
0096 601F' H90 EQU H0090+1
0097 6050 94 H94 BYTE >94
0098 6051 98 H98 BYTE >98
0099 6052 9C H9C BYTE >9C
0100 6053 A0 HAO BYTE >A0
0101 6054 A2 HA2 BYTE >A2
0102 6055 A4 HA4 BYTE >A4
0103 6056 A8 HA8 BYTE >A8
0104 6057 AC HAC BYTE >AC
0105 6058 B0 HBO BYTE >B0
0106 602A' HBC EQU HBC06+0
0107 602C' HCO EQU HCO04+0
0108 6059 C4 HC4 BYTE >C4
0109 605A DC HDC BYTE >DC
0110 605B 1A H1A BYTE >1A
0111 605C 66 H66 BYTE >66
0112 605D

```

1

NORMAL FIRE<NO SPEED INCREASE>
RIGHT FIRE<FASTER>

```

0113 *****
0114 * SPEECH PHRASES AVAILABLE IN GAME *
0115 *****
0116 *PRESS FIRE TO BEGIN 1
0117 *GOOD SHOT 2
0118 *COUNTDOWN 3
0119 *FIVE .. 4
0120 *FOUR .. 5
0121 *THREE .. 6

```



```

0122      *TWO ..                               7
0123      *ONE ..                               8
0124      *ADVANCE TO NEXT LEVEL                9
0125      *NICE SHOOTING                       10
0126      *GREAT SHOT ...PILOT                 11
0127      *ENEMY DESTROYED                     12
0128      *LASER ON TARGET                     13
0129      *WARNING ...TIME TO REFUEL           14
0130      *LASER OVERHEATED                    15
0131      *SORRY ...YOU ARE OUT OF FUEL        16
0132      *EXTRA SHIP                          17
0133      *CAUTION: ASTEROID BELT              18
0134      *ALERT, ALIEN CRAFT ADVANCING        19
0135      *ALERT. SHIPS ATTACKING              20
0136      *CONGRATULATIONS!                   21
0137      *NICE FLYING                          22
0138 605D
0139      *****
0140      *****
0141      ***          URB EQUATES AND DATA
0142      *****
0143      *****
0144 000A      NUMRGS  EQU  >000A
0145 000F      DELAY   EQU  >000F
0146 1800      PNT     EQU  >1800
0147 8374      KUNIT   EQU  >8374
0148 8375      KCODE   EQU  >8375
0149 F000      GRPAD   EQU  >F000
0150 0000      RESET   EQU  >0000
0151 833C      FASTWS  EQU  >833C
0152 83D4      REGSAV  EQU  >83D4
0153 605D      BITTBL  BYTE >80, >40, >20, >10, >8, >4, >2, >1
      605E      40
      605F      20
      6060      10
      6061      08
      6062      04
      6063      02
      6064      01
0154 6065      00      0FSTBL BYTE >00, >08, >10, >11
      6066      08
      6067      10
      6068      11
0155      0002      TEMP1  EQU  2
0156      0005      CCOLOR EQU  5
0157      0006      CX1    EQU  6
0158      0007      CY1    EQU  7
0159      0008      CX2    EQU  8
0160      0009      CY2    EQU  9
0161      8354      LDPT1  EQU  FASTWS+24
0162      8360      LDPT2  EQU  LDPT1+12
0163      1000      SCSTRT EQU  >1000
0164      0000      SCOFFS EQU  0
0165      0800      SCRLEN EQU  >800
0166      1800      SCREND EQU  SCSTRT+SCOFFS+SCRLEN
0167      003C      BUFLN  EQU  60
0168      0040      COLINC EQU  64
0169      3C80      COLBUF EQU  >3C80
0170      0003      RINDX3 EQU  3
0171      0004      RINDX4 EQU  4

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0172      0005  REXCTS  EQU   5
0173      0006  RVDPA6  EQU   6
0174      *
0175      8300  FBUFFR  EQU  >8300
0176      *
0177  606A  4000  RDWMSK  DATA >4000
0178  606C  FFC5  VALTBL  DATA -BUFLEN+1,-BUFLEN
      606E  FFC4
0179      0003  ROW      EQU   3
0180      0004  COL      EQU   4
0181      000F  BACK     EQU  >F      KEYCODE RETURN BY 'BACK' KEY
0182      0030  AZERO    EQU  >30     ASCII VALUE FOR ZERO
0183      0037  ASEVEN   EQU  >37     ASCII VALLUE FOR SEVEN
0184      8376  YJOY     EQU  >8376
0185      ***
0186      *** POINT DATA FOR STAR FIELD(X,Y POSITIONS)
0187      ***
0188  6070  3C05  PTLIST  DATA >3C05
0189  6072  1E01  DATA >1E01
0190  6074  6403  DATA >6403
0191  6076  AF02  DATA >AF02
0192  6078  C80A  DATA >C80A
0193  607A  000C  DATA >000C
0194  607C  0E43  DATA >0E43
0195  607E  1018  DATA >1018
0196  6080  1C5F  DATA >1C5F
0197  6082  2B24  DATA >2B24
0198  6084  3141  DATA >3141
0199  6086  3535  DATA >3535
0200  6088  4067  DATA >4067
0201  608A  4C47  DATA >4C47
0202  608C  5540  DATA >5540
0203  608E  6026  DATA >6026
0204  6090  7246  DATA >7246
0205  6092  7512  DATA >7512
0206  6094  8571  DATA >8571
0207  6096  8F30  DATA >8F30
0208  6098  9055  DATA >9055
0209  609A  9115  DATA >9115
0210  609C  946F  DATA >946F
0211  609E  9C22  DATA >9C22
0212  60A0  AA47  DATA >AA47
0213  60A2  A33C  DATA >A33C
0214  60A4  B168  DATA >B168
0215  60A6  B61E  DATA >B61E
0216  60A8  4020  DATA >4020
0217  60AA  C02D  DATA >C02D
0218  60AC  CF4B  DATA >CF4B
0219  60AE  CC3E  DATA >CC3E
0220  60B0  D669  DATA >D669
0221  60B2  D216  DATA >D216
0222  60B4  6060  DATA >6060
0223  60B6  E520  DATA >E520
0224  60B8  EE65  DATA >EE65
0225  60BA  E23A  DATA >E23A
0226      60BC'  ENDPTS  EQU   $
0227      * *****
0228      * COLOR TABLE *
0229      * *****
0230      6008'  CLEAR  EQU   H00

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0231      6007'  BLACK   EQU   H01
0232      6006'  MGREEN  EQU   H02
0233      6005'  LGREEN  EQU   H03
0234      6004'  DBLUE   EQU   H04
0235      6003'  LBLUE   EQU   H05
0236      6002'  DRED    EQU   H06
0237      6001'  CYAN    EQU   H07
0238      6000'  MRED    EQU   H08
0239      6009'  LRED    EQU   H09
0240      600A'  DYELL   EQU   H0A
0241      600B'  LYELL   EQU   H0B
0242      600C'  DGREEN  EQU   H0C
0243      600D'  MAGENT  EQU   H0D
0244      600E'  GRAY    EQU   H0E
0245      600F'  WHITE   EQU   H0F

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60BC

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0247      *****
0248      * SOUND LIST AT HIGH VDP(>3800 - ) *
0249      *****
0250      3800  SHPSND  EQU   >3800
0251      380F  OFFSND  EQU   >380F
0252      3815  SLWSND  EQU   >3815
0253      3823  FSTSND  EQU   >3823
0254      3831  EXPSND  EQU   >3831
0255      3867  FIRSND  EQU   >3867
0256      38A7  SW1SND  EQU   >38A7
0257      38CF  SW2SND  EQU   >38CF
0258      3918  SW3SND  EQU   >3918
0259      3948  SND567  EQU   >3948
0260      398D  SND123  EQU   >398D
0261      39C7  SND4    EQU   >39C7
0262      39FC  OUTSND  EQU   >39FC
0263      3A19  REWSND  EQU   >3A19
0264      3A36  CHMSND  EQU   >3A36
0265      3A8B  FULSND  EQU   >3A8B

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60BC

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0267      *****
0268      * CPU RAM EQUATES *
0269      *****
0270      8300  TEMPO0  EQU   CPURAM+>00
0271      8374  KEYBRD  EQU   CPURAM+>74      KEY BOARD TO SCAN FROM
0272      8375  KEY     EQU   CPURAM+>75      KEY CODE RETURNED
0273      8376  JOYX   EQU   CPURAM+>76
0274      8377  JOYX   EQU   CPURAM+>77
0275      8378  GAMFLG EQU   CPURAM+>78      GAME FLAG
0276      8379  TIMER  EQU   CPURAM+>79
0277      837A  MOTION EQU   CPURAM+>7A
0278      837C  STATUS EQU   CPURAM+>7C
0279      837E  SHFSAV EQU   CPURAM+>7E      TEMP SAVE LOCATION FOR SHIFT COUNTS
0280      8386  FRMPTR EQU   CPURAM+>86      POINTER INTO SCREEN DATA
0281      8388  PXL CNT EQU   CPURAM+>88      DOWN COUNTER FOR MAX HORIZ PIXELS
0282      8389  **LASSAY EQU   CPURAM+>8A      NUMBER OF "LASER OVERHEATED" PHRA
0283      838B  TUNPAG EQU   CPURAM+>8B      PREVIOUS TUNNEL SCENERY SUCCESSFULLY
0284      838C  INCSPH EQU   CPURAM+>8C
0285      838E  ATKFLG EQU   CPURAM+>8E      1 BYTE
0286      838F  INITAK EQU   CPURAM+>8F      1 BYTE
0287      8390  YXLOC1  EQU   CPURAM+>90
0288      8394  YXLOC2  EQU   CPURAM+>94
0289      8398  SPADR   EQU   CPURAM+>98      CURRENT POINTER TO LPC SPEECH DATA I
0290      839A  SPLEN   EQU   CPURAM+>9A      NO. OF SPEECH BYTES REMAINING IN PHR

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0291      839C  CYCLE    EQU    CPURAM+>9C      1 BYTE: GAME CYCLE NUMBER
0292      839E  FIRPNT  EQU    CPURAM+>9E      1 BYTE
0293      839F  SHFTFLG EQU    CPURAM+>9F      1 BYTE: 0 NO ERASE, 1 ERASE LINE THA
0294      83A0  SHFTBL  EQU    SHIFT1      URB EQUATE
0295      83A0  SHFT1   EQU    CPURAM+>A0      SHIFT CIRCULAR COUNT FOR SCENERY SCR
0296      83A2  SHFT2   EQU    CPURAM+>A2      SHIFT CIRCULAR COUNT FOR SCENERY SCR
0297      83A4  TEMP2   EQU    CPURAM+>A4      TEMP SAVE AREA FOR ATTACK WAVE NUMBE
0298      83A6  XOFF   EQU    CPURAM+>A6      X COORDINATE VDP OFFSET FOR STAR FIE
0299      83A8  ADRSAV  EQU    CPURAM+>A8      SAVED ADDRESS FOR LASER SHOT PIXEL S
0300      83AA  RND     EQU    CPURAM+>AA      RANDOM NUMBER HOPEFULLY BETWEEN 0 -
0301      83AC  SABCNT  EQU    CPURAM+>AC      # OF SPRITES BYTES TO READ/WRITE FOR
0302      83AE  HITNUM  EQU    CPURAM+>AE      1 BYTE: # OF HITS(COLOR NYBBLE> TO D
0303      83AF  CLOCK1  EQU    CPURAM+>AF      CLOCK INTERVAL TIMER FOR ASTEROID BE
0304      83B0  RNDVEL  EQU    CPURAM+>B0      RANDOM NUMBER POINTER TO VELOCITY TA
0305      83B1  PHOTFG  EQU    CPURAM+>B1      PHOTON BOOM FLAG: 0 = NOT SHOT, 1 =
0306      83B2  REFFLG  EQU    CPURAM+>B2      RE-FUELING FLAG: 0=NOT REF,1=NOT IN T
0307      83B3  ATKSET  EQU    CPURAM+>B3      TABLE POINTER FOR NEXT ATTACK FLAG N
0308      83B4  VELVAR  EQU    CPURAM+>B4      UP AND DOWN VELS FOR PLAYER SHIP
0309      83B6  SHOTCT  EQU    CPURAM+>B6      COUNTER FOR NUMBER OF LASER SHOTS
0310      83B7  HOTCHK  EQU    CPURAM+>B7      COUNTER TO CHECK AGAINST NUMBER OF L
0311      83B8  HOTFLG  EQU    CPURAM+>B8      TABLE POINTER AND HEAT SENSOR
0312      83B9  SHIPS   EQU    CPURAM+>B9      NUMBER OF YOUR SHIPS LEFT
0313      83BA  POINTS  EQU    CPURAM+>BA      NUMBER OF POINTS JUST SCORED IN HEX
0314      83BC  FULCNT  EQU    CPURAM+>BC      SYSTEM COUNTER FOR OUT OF FUEL GAGE
0315      83BD  FULPNT  EQU    CPURAM+>BD      POINTER TO FUEL CHARACTERS
0316      83BE  SCRPN  EQU    CPURAM+>BE      VDP SCREEN POSITIONS FOR FUEL CHARAC
0317      83BF  MSGFLG  EQU    CPURAM+>BF      MESSAGE FLAG: 0 = NO MSG TO PUT OUT
0318      83D6  CLRSCN  EQU    CPURAM+>D6      SCREEN TIME-OUT COUNTER
0319      *****
0320      * WORKING SPACE REGISTERS ( START AT >83A0 ) *
0321      *****
0322      833C  MYWS    EQU    CPURAM+>3C
0323      0000  VDPADD  EQU    R0          VDP ADDRESS TO READ/WRITE TO
0324      833D  VADDLB  EQU    MYWS+1     VDP ADDRESS LOWER BYTE
0325      0000  Y       EQU    VDPADD
0326      833D  YLB    EQU    VADDLB
0327      0001  RLOC   EQU    R1          POINTER TO BUFFER TO BE READ INTO
0328      0002  RCOUNT EQU    R2          # OF BYTES IN BUFFER TO READ
0329      0002  WCOUNT EQU    R2          # OF BYTES IN BUFFER TO WRITE
0330      0003  WLOC   EQU    R3          POINTER TO BUFFER TO BE WRITTEN
0331      8344  REG4HB  EQU    MYWS+8     FOR COINCIDENCE CHECKING
0332      8345  REG4LB  EQU    MYWS+9     FOR COINCIDENCE CHECKING
0333      0005  COUNT  EQU    R5          COUNTER FOR LOOP
0334      0006  TEMP   EQU    R6          TEMPORARY ADDRESS
0335      8349  REG6LB  EQU    MYWS+13
0336      0007  X       EQU    R7
0337      834B  REG7LB  EQU    MYWS+15
0338      0008  PTRNNO  EQU    R8          PATTERN NUMBER
0339      834C  REG8HB  EQU    MYWS+16
0340      834D  REG8LB  EQU    MYWS+17
0341      0009  XREM   EQU    R9
0342      8350  REGAHB  EQU    MYWS+20
0343      8351  REGALB  EQU    MYWS+21     FOR COINCIDENCE CHECKING
0344      000C  YXPOS  EQU    R12
0345      000F  RAND   EQU    R15
0346      8354  YPOS   EQU    MYWS+24
0347      8355  XPOS   EQU    MYWS+25
0348      *****
0349      * INTERRUPT WORKSPACE REGISTERS *
0350      *****

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0351      83C0  INTWS   EQU   CPURAM+>C0
0352      ***
0353      ***
0354      *** REGISTER EQUATES FOR SUM-CHECKING AND POINT CONTROL
0355      *** BITMAPPING SUBROUTINES(LINALG AND PTCTL)
0356      ***
0357      0005  M       EQU   R5       ROW INCREMENT: +1 OR -1
0358      0006  N       EQU   R6       COLUMN INCREMENT: +1 OR -1
0359      0007  D       EQU   R7       DELTA X DISTANCE
0360      0008  E       EQU   R8       DELTA Y DISTANCE
0361      000C  S       EQU   R12      SUM CHECKER FOR SUBTRACTING
0362      ***
0363      0009  XPTL   EQU   R9       X1
0364      000A  YPTL   EQU   R10      Y1
0365  60BC
0366      *****
0367      * TABLE AREA *
0368      *****
0369  60BC  8000  MSKSCN  DATA  >8000,>4000,>2000,>1000          BIT MASK FOR COIN
        60BE  4000
        60C0  2000
        60C2  1000
0370  60C4  0800          DATA  >0800,>0400,>0200,>0100          ON SCEEN DATA
        60C6  0400
        60C8  0200
        60CA  0100
0371  60CC   FC  CLRFUL  BYTE  >FC,>FC,>FC,>FC,>FC,>FC,>FC,>FC,>FC  CLEAR
        60CD   FC
        60CE   FC
        60CF   FC
        60D0   FC
        60D1   FC
        60D2   FC
        60D3   FC
        60D4   FC
        60D5   FC
0372  60D6   00  SAYTAB  BYTE  0,19,19,19,18,20,20,20          SPEECH WARNING FO
        60D7   13
        60D8   13
        60D9   13
        60DA   12
        60DB   14
        60DC   14
        60DD   14
0373  60DE   02  SAY123  BYTE  2,10,11,13          SPEECH REWARD FO
        60DF   0A
        60E0   0B
        60E1   0D
0374  60E2   00  SCENES  BYTE  >00,>05,>06,>07          HILL TABLE FOR RA
        60E3   05
        60E4   06
        60E5   07
0375  60E6   00  SPEENM  BYTE  >00,>08,>07,>06,>05,>04,>03  1,2,3,4,5,COUNTDO
        60E7   08
        60E8   07
        60E9   06
        60EA   05
        60EB   04
        60EC   03
0376  60ED   55  LIFT01  BYTE  >55          VERTICAL LEFT NUM

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0377	60EE	65	LIFT02	BYTE	>65	
0378	60EF	75	LIFT03	BYTE	>75	
0379	60F0	00	FULPIX	BYTE	>00, >FC, >F7, >F6	FUEL CHARS FOR GA
	60F1	FC				
	60F2	F7				
	60F3	F6				
0380	60F4	F5		BYTE	>F5, >F4, >EF, >EE, >ED, >EC	
	60F5	F4				
	60F6	EF				
	60F7	EE				
	60F8	ED				
	60F9	EC				
0381	60FA	06	COINY	BYTE	>06, >07, >0C, >0C, >0C, >0A, >09, >03, >03, >06	Y OFFSE
	60FB	07				
	60FC	0C				
	60FD	0C				
	60FE	0C				
	60FF	0A				
	6100	09				
	6101	03				
	6102	03				
	6103	06				
0382	6104	00	COINX	BYTE	>00, >00, >00, >04, >07, >0C, >0F, >03, >07, >0C	X OFFSE
	6105	00				
	6106	00				
	6107	04				
	6108	07				
	6109	0C				
	610A	0F				
	610B	03				
	610C	07				
	610D	0C				
0383	610E	A1	SCEENC	BYTE	>A1, >A1, >C1, >61, >41	SCENERY COLOR DAT
	610F	A1				
	6110	C1				
	6111	61				
	6112	41				
0384	6113	D1		BYTE	>D1, >91, >31, >71, >41	AND CYCLE
	6114	91				
	6115	31				
	6116	71				
	6117	41				
0385	6118	81		BYTE	>81, >51, >21, >E1, >F1	
	6119	51				
	611A	21				
	611B	E1				
	611C	F1				
0386	611D	00	ADDSCR	BYTE	>00, >00, >10, >20	SCORE INCREASES F
	611E	00				
	611F	10				
	6120	20				
0387	6121	02	REGLD	BYTE	>02, >E2, >06, >FF, >03, >36, >03, >11	VDP REG VALUES
	6122	E2				
	6123	06				
	6124	FF				
	6125	03				
	6126	36				
	6127	03				
	6128	11				
0388	6129	03	FIRE	BYTE	>03, >0E, >0A, >0F, >03, >0B, >03, >07	FIRE COLORS

	612A	0E					
	612B	0A					
	612C	0F					
	612D	03					
	612E	0B					
	612F	03					
	6130	07					
0389	6131	E1	LOADCL	BYTE	>E1, >41, >91, >A1, >71, >D1, >21, >61	COLOR TABLE COLOR	
	6132	41					
	6133	91					
	6134	A1					
	6135	71					
	6136	D1					
	6137	21					
	6138	61					
0390	6139	41	LOADC1	BYTE	>41, >41, >41, >41, >41, >41, >41, >41	COLOR TABLE COLOR	
	613A	41					
	613B	41					
	613C	41					
	613D	41					
	613E	41					
	613F	41					
	6140	41					
0391	6141	61	LOADC2	BYTE	>61, >61, >61, >61, >61, >61, >61, >61	COLOR TABLE COLOR	
	6142	61					
	6143	61					
	6144	61					
	6145	61					
	6146	61					
	6147	61					
	6148	61					
0392	6149	E1	LOADC3	BYTE	>E1, >E1, >E1, >E1, >E1, >E1, >E1, >E1	COLOR TABLE COLOR	
	614A	E1					
	614B	E1					
	614C	E1					
	614D	E1					
	614E	E1					
	614F	E1					
	6150	E1					
0393	6151	71	LOADC4	BYTE	>71, >71, >71, >71, >71, >71, >71, >71	COLOR TABLE COLOR	
	6152	71					
	6153	71					
	6154	71					
	6155	71					
	6156	71					
	6157	71					
	6158	71					
0394	6159	08	YPTADJ	BYTE	>08, >0C, >0B, >10, >0A, >08, >09, >0D	ADJUST ATTACK SHI	
	615A	0C					
	615B	0B					
	615C	10					
	615D	0A					
	615E	08					
	615F	09					
	6160	0D					
0395	6161	00	SETCOL	BYTE	>00, >07, >0E	COLORS FOR ALIEN	
	6162	07					
	6163	0E					
0396	6164	00	SETCLS	BYTE	>00, >04, >07	COLORS FOR ALIEN	
	6165	04					

	61A2	01				
	61A3	01				
	61A4	01				
	61A5	01				
	61A6	01				
	61A7	01				
	61A8	01				
0409	61A9	02	HOTTMB	BYTE	>02, >01, >01, >01, >01, >01, >01, >01	
	61AA	01				
	61AB	01				
	61AC	01				
	61AD	01				
	61AE	01				
	61AF	01				
	61B0	01				
0410	61B1	01		BYTE	>01, >01, >01, >01, >01, >01, >01, >01	
	61B2	01				
	61B3	01				
	61B4	01				
	61B5	01				
	61B6	01				
	61B7	01				
	61B8	01				
0411	61BA	0010	PNTVAL	DATA	>0010, >0020, >0030	POINT VALUES FOR
	61BC	0020				
	61BE	0030				
0412	61C0	D8E4	INTYX1	DATA	>D8E4, >E0E2, >E8E0, >ECDE, >F8DC	INIT SAB YP
	61C2	E0E2				
	61C4	E8E0				
	61C6	ECDE				
	61C8	F8DC				
0413	61CA	00F0	LASTV1	DATA	>00F0, >00F2, >00F3, >00EC, >00F4	FINAL VEL5
	61CC	00F2				
	61CE	00F3				
	61D0	00EC				
	61D2	00F4				
0414	61D4	0A00	INTVE1	DATA	>0A00, >0A00, >3000, >4800, >6000	INIT VEL5
	61D6	0A00				
	61D8	3000				
	61DA	4800				
	61DC	6000				
0415	61DE	F8DC	INTYX2	DATA	>F8DC, >ECDE, >E8E0, >E0E2, >D8E4	
	61E0	ECDE				
	61E2	E8E0				
	61E4	E0E2				
	61E6	D8E4				
0416	61E8	00E0	LASTV2	DATA	>00E0, >00DE, >00E4, >00DC, >00E1	
	61EA	00DE				
	61EC	00E4				
	61EE	00DC				
	61F0	00E1				
0417	61F2	6000	INTVE2	DATA	>6000, >5000, >3000, >1000, >0100	
	61F4	5000				
	61F6	3000				
	61F8	1000				
	61FA	0100				
0418	61FC	18FE	INTYX3	DATA	>18FE, >2800, >38FE, >4800, >58FE, >6800, >78FE, >0000	
	61FE	2800				
	6200	38FE				
	6202	4800				

	6204	58FE			
	6206	6800			
	6208	78FE			
	620A	0000			
0419	620C	18FE	DATA	>18FE, >6800, >58FE, >2800, >78FE, >4800, >38FE, >0000	
	620E	6800			
	6210	58FE			
	6212	2800			
	6214	78FE			
	6216	4800			
	6218	38FE			
	621A	0000			
0420	621C	78FE	DATA	>78FE, >6800, >18FE, >4800, >58FE, >2800, >38FE, >0000	
	621E	6800			
	6220	18FE			
	6222	4800			
	6224	58FE			
	6226	2800			
	6228	38FE			
	622A	0000			
0421	622C	78FE	DATA	>78FE, >6800, >58FE, >4800, >38FE, >2800, >18FE	
	622E	6800			
	6230	58FE			
	6232	4800			
	6234	38FE			
	6236	2800			
	6238	18FE			
0422	623A	00D8	LASTV3 DATA	>00D8, >00D5, >00D7, >00D6, >00D9, >00DA, >00DC	
	623C	00D5			
	623E	00D7			
	6240	00D6			
	6242	00D9			
	6244	00DA			
	6246	00DC			
0423	6248	0101	INTVE3 DATA	>0101, >0170, >0101, >0170, >0101, >0170, >0101	
	624A	0170			
	624C	0101			
	624E	0170			
	6250	0101			
	6252	0170			
	6254	0101			
0424			***		
0425			*** DATA FOR ATTACK WAVES #5, #6, #7		
0426			***		
0427	6256	C807	INTCLS DATA	>C807, >C806, >C80D	INIT SAB CHAR AND
	6258	C806			
	625A	C80D			
0428	625C	0020	INTYX6 DATA	>0020, >0000	INIT SAB YPT
	625E	0000			
0429	6260	FF80	INTVE6 DATA	>FF80, >60A0, >0180	INIT VELS
	6262	60A0			
	6264	0180			
0430	6266	D409	PHCHCL DATA	>D409, >D80E, >D00A	CHAR AND COLOR
	6268	D80E			
	626A	D00A			
0431	626C	F4FE	UPFACT DATA	>F4FE, >E0FE, >F0F8	UP VEL FACTOR
	626E	E0FE			
	6270	F0F8			
0432	6272	0CFE	DNFACT DATA	>0CFE, >20FE, >10F8	DOWN VEL FACTOR
	6274	20FE			

0433	6276 10F8					
	6278 00E4	STFACT	DATA	>00E4, >00E0, >00F8		STOP VEL FACTOR
	627A 00E0					
	627C 00F8					
0434	627E 0307	SHPFUG	DATA	>0307, >0408, >0506, >050B, >020F		FUDGE FACTORS FO
	6280 0408					
	6282 0506					
	6284 050B					
	6286 020F					
0435	6288 020F		DATA	>020F, >020F		(ATTACK#1 - #7)
	628A 020F					
0436	628C 07	SH1TAB	BYTE	>07, >06, >06, >06, >05, >05, >05, >05		SHIFT1 COUNT PAR
	628D 06					
	628E 06					
	628F 06					
	6290 05					
	6291 05					
	6292 05					
	6293 05					
0437	6294 05		BYTE	>05, >04, >04, >04, >04, >04, >04, >04		
	6295 04					
	6296 04					
	6297 04					
	6298 04					
	6299 04					
	629A 04					
	629B 04					
0438	629C 0F	SH2TAB	BYTE	>0F, >0E, >0E, >0E, >0D, >0D, >0D, >0D		SHIFT2 COUNT PAR
	629D 0E					
	629E 0E					
	629F 0E					
	62A0 0D					
	62A1 0D					
	62A2 0D					
	62A3 0D					
0439	62A4 0D		BYTE	>0D, >0C, >0C, >0C, >0C, >0C, >0C, >0C		
	62A5 0C					
	62A6 0C					
	62A7 0C					
	62A8 0C					
	62A9 0C					
	62AA 0C					
	62AB 0C					
0440	62AC 00	SABNUM	BYTE	00, 20, 20, 28, 28, 4, 4, 4		RD/WRT SAB CNTS FO
	62AD 14					
	62AE 14					
	62AF 1C					
	62B0 1C					
	62B1 04					
	62B2 04					
	62B3 04					
0441	62B4 0000	PNTLOC	DATA	0		2/3 PNT COLOR DATA
0442	62B6 6139'		DATA	@LOADC1		
0443	62B8 6141'		DATA	@LOADC2		
0444	62BA 6149'		DATA	@LOADC3		
0445	62BC 6A16'	TABLE5	DATA	@DNKEY		KEYBOARD ONE SCAN
0446	62BE 73AE'		DATA	@CHKJOY		
0447	62C0 6A36'		DATA	@LFKEY		
0448	62C2 6A6E'		DATA	@RTKEY		
0449	62C4 73AE'		DATA	@CHKJOY		

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0450 62C6 69C8' DATA @UPKEY
0451 62C8 6A16' TABLE6 DATA @DNKEY JOYSTICK 1,2 SCAN
0452 62CA 6A36' DATA @LFKEY
0453 62CC 69C8' DATA @UPKEY
0454 62CE 6A6E' DATA @RTKEY
0455 62D0 6DD4' TABLE7 DATA @CONTIN ATTACK WAVE FLAG
0456 62D2 752C' DATA @CHGAK1 FOR PROCESSING
0457 62D4 752C' DATA @CHGAK1
0458 62D6 752C' DATA @CHGAK1
0459 62D8 777C' DATA @CHGAK4
0460 62DA 7958' DATA @CHGAK5
0461 62DC 7958' DATA @CHGAK5
0462 62DE 7958' DATA @CHGAK5
0463 62E0 6DD4' TABLE8 DATA @CONTIN ATTACK WAVE FLAG
0464 62E2 748C' DATA @G0INT1 FOR INITIALIZATION
0465 62E4 747E' DATA @G0INT2
0466 62E6 7470' DATA @G0INT3
0467 62E8 7426' DATA @G0INT4
0468 62EA 7418' DATA @G0INT5
0469 62EC 7402' DATA @G0INT6
0470 62EE 73F8' DATA @G0INT7
0471 *****
0472 * VDP GAME VARIABLES STORAGE *
0473 *****
0474 3FF0 SAVR11 EQU >3FF0 2 BYTES:R11 OF GPLPWS TO RE
0475 *****
0476 * GROM READ ADDRESSES *
0477 *****
0478 601B ROMLNK EQU >601B GROM READ DATA ADDR FOR RETURN L
0479 6BE4 INTV01 EQU >6BE4 GROM 3 READ DATA ADDR FOR MSGS A
0480 A000 SPADDR EQU >A000 GROM 5 READ DATA ADDR FOR SPEECH
0481 *****
0482 * MESSAGES AND MISC DATA FROM GROM *
0483 *****
0484 6C04 INTV1A EQU INTV01+32
0485 6C24 INTV1B EQU INTV1A+32
0486 6C48 INTV02 EQU INTV1B+36
0487 6C66 INTV2A EQU INTV02+30
0488 6C86 INTV2B EQU INTV2A+32
0489 6CA6 INTV03 EQU INTV2B+32
0490 6CCA VELAK1 EQU INTV03+36
0491 6CE6 VELAK4 EQU VELAK1+28
0492 6D02 SABSH1 EQU VELAK4+28
0493 6D0B SABAK1 EQU SABSH1+9
0494 6D20 SABAK2 EQU SABAK1+21
0495 6D35 SABAK3 EQU SABAK2+21
0496 6D52 SABAK4 EQU SABAK3+29
0497 6D6F SABAK5 EQU SABAK4+29
0498 6D74 SABAK6 EQU SABAK5+5
0499 6D79 SABAK7 EQU SABAK6+5
0500 6D7E SABAKX EQU SABAK7+5
0501 6D83 GRFUEL EQU SABAKX+5 FUEL DATA
0502 6D8D SLEFT1 EQU GRFUEL+10 NUMBER OF SHIPS IN RESERVE
0503 6DD0 VELEXP EQU SLEFT1+80 EXPLOSION VELS
0504 6E1D MSGOUT EQU VELEXP+64 OUT OF FUEL MSG
0505 6E3D MSGCOL EQU MSGOUT+32 COLLISION W/ CRAFT MSG
0506 6E5D MSGPHT EQU MSGCOL+32 COLLISION W/ PHOTON MSG
0507 6E7D MSGAST EQU MSGPHT+32 COLLISION W/ ASTERIOD MSG
0508 6E9D MSGSCN EQU MSGOUT+128 COLLISION W/ GROUND MSG
0509 6EBD MSGHOT EQU MSGOUT+160 LASER OVER-HEATED MSG

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0510	6EDD	MSGTIM	EQU	MSGOUT+192	TIME WARP ACTIVATED MSG	
0511	6EFD	MSGBLK	EQU	MSGOUT+224	BLANK OUT MSG	
0512	6F1D	MSGSTR	EQU	MSGOUT+256	START UP MESSAGE	
0513	6F3D	MSGEND	EQU	MSGOUT+288	END MESSAGE	
0514	6F5D	MSGREF	EQU	MSGOUT+320	REFUELING TUNNEL AHEAD MSG	
0515	6F7D	MSGTUN	EQU	MSGOUT+352	REFUELING STATION COMING U	
0516	6F9D	MSGEXT	EQU	MSGOUT+384	FUEL TANKS FULL MSG	
0517	6FBD	MSGXIT	EQU	MSGOUT+416	EXIT TUNNEL MSG	
0518	6FDD	MSGBON	EQU	MSGOUT+448	BONUS POINTS REWARDED !!	
0519	6FFD	MSGWAT	EQU	MSGOUT+480	PILOT ERROR! IMPACT WITH T	
0520	701D	AKMSG	EQU	MSGOUT+512	START OF ATTACK MESSAGES	
0521	62F0	701D	MSGTAB	DATA	AKMSG	MSGAK1
0522	62F2	703D		DATA	AKMSG+32	MSGAK2
0523	62F4	705D		DATA	AKMSG+64	MSGAK3
0524	62F6	707D		DATA	AKMSG+96	MSGAK4
0525	62F8	709D		DATA	AKMSG+128	MSGAK5
0526	62FA	70BD		DATA	AKMSG+160	MSGAK6
0527	62FC	70DD		DATA	AKMSG+192	MSGAK7
0528	62FE					

* S A B INITS *

0532	62FE	0C	SABA4A	BYTE	12,255,1>E0,1>0C	SHIP #4 SPRITES
	62FF	FF				
	6300	E0				
	6301	0C				
0533	6302	14		BYTE	20,255,1>E0,1>06	
	6303	FF				
	6304	E0				
	6305	06				
0534	6306	24		BYTE	36,255,1>E0,1>0A	
	6307	FF				
	6308	E0				
	6309	0A				
0535	630A	34		BYTE	52,255,1>E0,1>0D	
	630B	FF				
	630C	E0				
	630D	0D				
0536	630E	44		BYTE	68,255,1>E0,1>07	
	630F	FF				
	6310	E0				
	6311	07				
0537	6312	55		BYTE	85,255,1>E0,1>02	
	6313	FF				
	6314	E0				
	6315	02				
0538	6316	67		BYTE	103,255,1>E0,1>04,1>D0	
	6317	FF				
	6318	E0				
	6319	04				
	631A	D0				
0539	631B	00	VELAKO	BYTE	0,0,0,0	ALL SHIP INIT VELC
	631C	00				
	631D	00				
	631E	00				
0540	631F	00		BYTE	0,0,0,0	
	6320	00				
	6321	00				
	6322	00				
0541	6323					

```

0542 *****
0543 *                START OF MAINLINE                *
0544 *****
0545 6323
0546 6323
0547 6324 C80B START MOV R11,TEMP00 SAVE GPL RETURN ADR TEMPORARI
      6326 8300
0548 6328 02E0 LWPI MYWS
      632A 833C
0549 632C 04E0 CLR @SPADR NO SPEECH DATA PENDING ...
      632E 8398
0550 6330 04E0 CLR @SPLEN ... HENCE NO BYTES TO SEND
      6332 839A
0551 6334 D820 MOVB HE2,@>83D4 TO KEEP VDP(1) VALUE WHEN KEY
      6336 604B'
      6338 83D4
0552 633A 0201 LI R1,REGLD SET BYTE ADDRESS
      633C 6121'
0553 633E 0202 LI R2,>7F00 REG WRITE CONSTANT -1
      6340 7F00
0554 6342 06C2 LOOP SWPB R2 MOVE HIGH TO LOW/LOW TO HIGH
0555 6344 0582 INC R2 SET REGISTER NUMBER
0556 6346 D0B1 MOVB *R1+,R2 SET VALUE FOR OUTPUT
0557 6348 D802 MOVB R2,@>8C02 WRITE VALUE
      634A 8C02
0558 634C 06C2 SWPB R2 MOVE HIGH TO LOW/LOW TO HIGH
0559 634E D802 MOVB R2,@>8C02 WRITE REGISTER NUMBER
      6350 8C02
0560 6352 0282 CI R2,>8700 CHECK FOR LAST REGISTER
      6354 8700
0561 6356 1AF5 JL LOOP GO BACK FOR NEXT REGISTER & V
0562 6358 06A0 BL @WRTVCL GET ADR OF VDP VAR SAVE AREA
      635A 7E58'
0563 635C 3FF0 DATA SAVR11,2,TEMP00 GROM R11 RETURN LINGAGE
      635E 0002
      6360 8300
0564 6362 9820 CB GAMFLG,H01 CAME FROM EXPLOSION ONLY?
      6364 8378
      6366 6007'
0565 6368 160C JNE NOTEXP NO
0566 636A 06A0 BL @SUBINT DO INITS
      636C 6F2C'
0567 636E 06A0 BL @SUBLFT DISPLAY NUMBER OF SHIPS REMAI
      6370 7CDA'
0568 6372 9820 CB ATKSET,H10 ATTACK SET NUMBER OUT OF RANG
      6374 83B3
      6376 601B'
0569 6378 1A02 JL NOCYC5 NO, SO CONTINUE AS NORMAL
0570 637A 0460 B @EXPINT YES, INIT TO CURRENT ATTACK F
      637C 6DBC'
0571 637E 0460 NOCYC5 B @EXPSTR GO INIT TO CURRENT ATTACK FLA
      6380 6DA2'
0572 ***
0573 *** THE FOLLOWING TWO SECTIONS OF CODE LOAD THE TWO MAIN
0574 *** LOOPS OF THE SCROLL ROUTINE INTO FAST RAM
0575 ***
0576 6382 0300 NOTEXP LIM1 0
      6384 0000
0577 6386 0200 LI R0,GETLP START OF FETCH LOOP IN ROM
      6388 7D0A'

```

```

0578 638A 0201          LI    R1,LDPT1          FIRST LOAD POINT IN FAST RAM
      638C 8354
0579 638E 0202          LI    R2,GETRET-GETLP    LENGTH OF FIRST LOOP
      6390 000C
0580 6392 06A0          BL    @INSTLP          SUBROUTINE MOVES THE CODE
      6394 72FE'
0581                                     ***
0582 6396 0200          LI    R0,SHFLP          START OF SHIFT & STORE LOOP
      6398 7D16'
0583 639A 0201          LI    R1,LDPT2          SECOND LOAD POINT IN FAST RAM
      639C 8360
0584 639E 0202          LI    R2,SHFRET-SHFLP    LENGTH OF LOOP #2
      63A0 0010
0585 63A2 06A0          BL    @INSTLP          SUBROUTINE MOVES THE LOOP
      63A4 72FE'
0586 63A6 0300          LIMB  2
      63A8 0002
0587                                     *****
0588 *    DO NOT USE R12,R13,R14,R15    *
0589 *    FROM THIS POINT FORWARD SINCE *
0590 *    FAST RAM LOOPS WILL BE WIPPED *
0591 *    OUT !!!!!!!                    *
0592                                     *****
0593 ***
0594 ***  DEFINE COLORS FOR 2/3 TOP PNT
0595 ***
0596 ***  LI  WLOC,LOADC4          CYAN COLOR WRITE DATA LOCATION
0597 ***  BL  @SUBCOL            GET TITLE SCREEN COLORS FOR PNT'
0598 *****
0599 ***
0600 ***  DEFINE CHARACTERS FOR TOP AND MIDDLE SCREEN
0601 ***
0602 ***  CLR  VDPADD
0603 ***  LI  WLOC,VELAK1
0604 ***  LI  WCOUNT,8
0605 ***MORTOP BL  @WRITE
0606 ***  AI  VDPADD,8
0607 ***  CI  VDPADD,>1000
0608 ***  JNE MORTOP
0609 *****
0610 ***  PUT OUT CHARS ON SCREEN
0611 ***
0612 *****
0613 ***  LI  WLOC,REGALB
0614 ***  LI  WCOUNT,1
0615 ***  LI  VDPADD,>1800
0616 ***  BL  @PUTSCN
0617 ***  LI  VDPADD,>1900
0618 ***  BL  @PUTSCN
0619 ***  LI  VDPADD,>1A00
0620 ***  BL  @PUTSCN
0621 *****
0622 63AA
0623 *****
0624 *    MAIN PROGRAM LOOP    *
0625 *****
0626 63AA
0627 63AA 0300          LIMB  0
      63AC 0000
0628 63AE D820          MOVB  H50,@>83C2          DISABLE SPRITE MOTION AND "QUIT"

```

	63B0	601D'			
	63B2	83C2			
0629	63B4	0204	LI	R4,SPMOVE	GET ADDR FOR ROUTINE
	63B6	7E84'			
0630	63B8	C804	MOV	R4,@>83C4	VECTOR FOR EXTERNAL INTERRUPT ROU
	63BA	83C4			
0631	63BC	04E0	CLR	@SPADR	NO SPEECH DATA TO EXECUTE YET
	63BE	8398			
0632	63C0	04E0	CLR	@SPLEN	NO BYTES TO MOVE TO SPEECH CHIP
	63C2	839A			
0633	63C4	0300	LIMI	2	
	63C6	0002			
0634	63C8	020A	LI	R10,>00A1	HIT#1 COLOR TO PASS TO SUB FOR SC
	63CA	00A1			
0635	63CC	06A0	BL	@SCNSUB	GO SET THE NEW SCENERY COLOR
	63CE	7700'			
0636	63D0	06A0	BL	@SUBLFT	DISPLAY THESE 4 PLAYER SHIPS IN R
	63D2	7CDA'			
0637	63D4	9820	CB	@GAMFLG,H02	REDO OR BACK?
	63D6	8378			
	63D8	6006'			
0638	63DA	1300	JEQ	DATAZZ	REDO FLAG IS SET
0639	63DC'	DATAZZ	EQU	⋆	INITIALIZE AND START UP GAME NOW
0640	63DC	0203	LI	WLOC,LOADCL	MULTI-COLOR WRITE DATA LOCATION
	63DE	6131'			
0641	63E0	06A0	BL	@SUBCOL	GET MULTI-COLORS FOR TOP PNT'S
	63E2	6E54'			
0642	63E4	06A0	BL	@SUBINT	INIT SAB FOR 2 SPRITES, VELOCITIE
	63E6	6F2C'			
0643	63E8	020A	LI	R10,MSGSTR	PUT UP THE
	63EA	6F1D			
0644	63EC	06A0	BL	@SETGRM	START MSG
	63EE	6E86'			
0645	63F0	04C0	CLR	VDPADD	DEFINE ZERO DATA FOR ALL TPNT AND
0646	63F2	0203	LI	WLOC,VELAKO	
	63F4	631B'			
0647	63F6	0202	LI	WCOUNT,⋆	
	63F8	0008			
0648	63FA	06A0	MORTOP	BL	@WRITE
	63FC	7E5E'			
0649	63FE	0220	AI	VDPADD,⋆	
	6400	0008			
0650	6402	0280	CI	VDPADD, >1000	
	6404	1000			
0651	6406	16F9	JNE	MORTOP	
0652	6408	D820	MOVVB	H00,GAMFLG	MAKE SURE GAME FLAG IS RE-SET BEF
	640A	6008'			
	640C	8378			
0653	640E	D820	MOVVB	H01,TUNPAG	SET TO EASY SINGLE TUNNEL 1ST TO
	6410	6007'			
	6412	8388			
0654	6414	06A0	BL	@SPSUB	CHECK TO SAY "PRESS ANY"
	6416	6E22'			
0655	6418	0001	DATA	1	
0656	641A	06A0	LOOP01	BL	@COINCH
	641C	721E'			
0657	641E	0420	BLWP	@RANDOM	RANDOMIZE
	6420	7D3C'			
0658	6422	D820	MOVVB	H00,CLRSCN	CLEAR SCREEN TIME-OUT COUNTER
	6424	6008'			


```

0659 6426 83D6
      6428 D1E0          MOVB  FIRPNT,R7          GET SAVED FIRE COLOR TABLE POINTE
      642A 839E
0660 642C 0987          SRL   R7,R8
0661 642E 0587          INC   R7
0662 6430 0287          CI    R7,R8
      6432 0008
0663 6434 1601          JNE   NOCLR7
0664 6436 04C7          CLR   R7          POINT AT BEGINNING OF FIR
0665 6438 D827          MOVB  FIRE(R7),YXLOC2+3  GET NEW COLOR OF FIRE FROM
      643A 6129'
      643C 8397
0666 643E 06C7          SWPB  R7
0667 6440 D807          MOVB  R7,FIRPNT          RESTORE NEW FIRE COLOR TAB
      6442 839E
0668 6444 9820          CB    YXLOC2+2,H90      NO FIRE SHOWING?
      6446 8396
      6448 601F'
0669 644A 1308          JEQ   NOFIRE          NOP, SO DONT' CHANGE PATT
0670 644C D120          MOVB  YXLOC2+2,R4      GET FIRE CHAR(>88,>98 OR
      644E 8396
0671 6450 2920          XOR   H9000,R4        >88 <---> >98 OR
      6452 6028'
0672 6454 0264          ORI   R4,>8000        >8C <---> >9C
      6456 8000
0673 6458 D804          MOVB  R4,YXLOC2+2      REPLACE NEW FIRE CHAR(NOR
      645A 8396
0674
0675          ***
0676          ***  WRITE OUT SAB'S(CHAR AND COLOR ONLY) FOR FIRE SPRITE
0677 645C 06A0          NOFIRE BL @WRTVCL      CHAR AND COLOR UPDATED ONLY
      645E 7E58'
0678 6460 1806          DATA >1806,R2,YXLOC2+2
      6462 0002
      6464 8396
0679 6466 06A0          BL    @COINCH          CHECK COIN
      6468 721E'
0680 646A 06A0          BL    @STARMV          GO MOVE THE STAR FIELD ONE PIXEL
      646C 6FA6'
0681 646E 06A0          BL    @COINCH          CHECK COIN - YOUR SHIP AND THE A
      6470 721E'
0682 6472 0420          BLWP  @ERASV          CHECK TO ERASE A LASER SHOT LINE
      6474 7024'
0683 6476 06A0          BL    @COINCK          CHECK COIN BETWEEN SHIP AND SCEN
      6478 71BA'
0684 647A 06A0          BL    @COINCH          CHECK COIN - YOUR SHIP AND THE A
      647C 721E'
0685
0686          ****
0687          ****  THE FOLLOWING CODE CHECKS TO SEE IF A NEW PAGE NUMBER
0688          ****  IS NEEDED IN REGISTER 1 FOR NEW SCENERY. IF NEW PAGE
0689          ****  NUMBER IS NEEDED, THEN B @NEWFRM
0690          ****  ELSE, BRANCH TO @SCRLST
0691 647E C060          MOV   @SHFSAV,R1
      6480 837E
0692 6482 1321          JEQ   GOSCR1
0693 6484 D060          MOVB  REFFLG,R1        NO RE-FUEL YET?
      6486 8382
0694 6488 1315          JEQ   RANDON          CORRECT
0695 648A D060          MOVB  TUNPAG,R1        GET TUNNEL SUCCESS NUMBER

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0696 648C 838B
0696 648E 0981 SRL R1,8 PUT IN LOWER BYTE
0697 6490 0281 CI R1,3 SCROLLING IN A SINGLE TUNNEL ONL
      6492 0003
0698 6494 1A16 JL NEWJUP YES, SO BRING IT IN ONCE MORE
0699 6496 0281 CI R1,3 SCENE SUCCESS 1ST HALF OF DOUBLE
      6498 0003
0700 649A 1604 JNE NOTSC3 NO
0701 649C 8820 AB HD1,TUNPAG INCREASE TUNNEL SCENERY PAGE TO
      649E 6007'
      64A0 838B
0702 64A2 100F JMP NEWJUP SCROLL IT
0703 64A4 0281 NOTSC3 CI R1,4 2ND HALF OF TUNNEL?
      64A6 0004
0704 64A8 1301 JEQ SC4 YES
0705 64AA 1004 JMP RANDON JUST WENT BY. BUT TUNPAG=5. SO B
0706 64AC D820 SC4 MOV B HD5,TUNPAG SCROLL IN 2ND HALF OF TUNNEL
      64AE 6003'
      64B0 838B
0707 64B2 1007 JMP NEWJUP BUT SET TUNNEL PAGE # TO FLAG NO
0708 64B4' RANDON EQU $
0709 64B4 0420 BLWP @RANDOM
      64B6 7D3C'
0710 64B8 C04A MOV R10,R1
0711 64BA 0981 SRL R1,8 0 OR 1 OR 2 OR 3
0712 64BC D061 MOV B SCENES(R1),R1 0 OR 5 OR 6 OR 7
      64BE 60E2'
0713 64C0 0981 SRL R1,8
0714 64C2 0460 NEWJUP B @NEWFRM
      64C4 6510'
0715 *
0716 64C6 0460 GOSCRL B @SCRLLST
      64C8 6546'
0717 ****
0718 ***
0719 *** THIS ROUTINE IS USED TO SCROLL A STRIP OF THE SCREEN
0720 *** HORIZONTALLLY TO THE LEFT. THIS ROUTINE ASSUMES THE
0721 *** NAME TABLE HAS BEEN FORMATTED CORRECTLY(COLUMN FORMATING)
0722 ***
0723 *** REGISTER USAGE
0724 ***
0725 *** RD - SCRATCH, VDP ADDRESS
0726 *** R1 - SCRATCH, VDP DATA IN MSBYTE
0727 *** R3 - INDEX INTO CPU RAM WHICH BUFFERS VDP DATA
0728 *** R4 - INDEX INTO CPU BUFFER USED DURING SHIFT LOOP
0729 *** R6 - HOLDS START ADDRESS OF VOP BLOCK TO BUFFER
0730 ***
0731 *
0732 *
0733 *****
0734 *
0735 * THIS ROUTINE IS USED TO SCROLL A STRIP OF THE SCREEN
0736 * HORIZONTALLLY TO THE LEFT. THIS ROUTINE ASSUMES THE
0737 * NAME TABLE HAS BEEN FORMATTED CORRECTLY(COLUMN FORMATING)
0738 *
0739 *
0740 64C9' MSKTB2 EQU $-1
0741 64CA 7F BYTE >7F, >3F, >1F, >0F
      64CB 3F
      64CC 1F

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```

0742  64CD  0F
      64CE  07      BYTE >07, >03, >01, >00
      64CF  03
      64D0  01
      64D1  00

0743
0744      6000'  * SHFT2  EQU  HO8          REPLACES 9 BYTE VALUES BELO
0745      ***
0746      ***
0747      ***
0748      ***      BYTE >08, >07, >06, >05, >04
0749      ***      BYTE >03, >02, >01, >00

0750  64D2
0751  64D2      EVEN
0752      64D2'  FRMTBL  EQU  $
0753  64D2  7415      DATA >7415      GROM      3 HILLS ORIGINAL
0754  64D4  8000      DATA >8000      GROM      4 EASY SINGLE TUNNEL
0755  64D6  83C0      DATA >83C0      GROM      4 HARD SINGLE TUNNEL
0756  64D8  8780      DATA >8780      GROM      4 1ST HALF OF DOUBLE TUNNEL
0757  64DA  8B40      DATA >8B40      GROM      4 2ND HALF OF DOUBLE TUNNEL
0758  64DC  8F00      DATA >8F00      GROM      4 ALIEN BASE
0759  64DE  92C0      DATA >92C0      GROM      4 HILLS W/ TI-BUG
0760  64E0  B244      DATA >B244      GROM      5 HILLS W/ SPACE REEDS
0761
0762  64E2  001E      * COLADD  DATA  BUFLEN/2
0763      *
0764      0000      RTEMPO  EQU  0
0765      0001      RTEMP1  EQU  1
0766      0002      RSTAT2  EQU  2 - THE STATUS OF 4TH LSBIT OF PXL CNT
0767      0005      RSHFC5  EQU  5 - ACTUAL SHIFT COUNT
0768      *
0769      9800      GRMBAS  EQU  >9800      - GROM BASE ADDRESS
0770      0000      DATINC  EQU  >0000      - DATA OFFSET IN MEMORY
0771      0002      ADRINC  EQU  >0002      - ADDRESS OFFSET IN MEMORY MAP
0772      0400      WRTINC  EQU  >0400      - WRITE OFFSET IN MEMORY MAP
0773      0000      RDINC   EQU  >0000      - READ OFFSET IN MEMORY MAP
0774      *
0775      9802      GRMRA   EQU  GRMBAS+RDINC+ADRINC      - GROM ADDRESS READ LOCA
0776      9C02      GRMWA   EQU  GRMBAS+WRTINC+ADRINC      - GROM ADDRESS WRITE LOC
0777      9800      GRMRD   EQU  GRMBAS+RDINC+DATINC      - GROM DATA READ LOCATIO
0778      9C00      GRMWD   EQU  GRMBAS+WRTINC+DATINC      - GROM DATA WRITE LOCATI
0779      *
0780      *
0781      64E4'  GRMADR  EQU  $
0782  64E4  C2A0      MOV     @FRMPTR, R10
      64E6  8386
0783      64E8'  GRMAD2  EQU  $
0784  64E8  0300      LIM1   0
      64EA  0000
0785  64EC  D80A      MOVVB  R10, @GRMWA
      64EE  9C02
0786  64F0  06CA      SWPB  R10
0787  64F2  D80A      MOVVB  R10, @GRMWA
      64F4  9C02
0788  64F6  045B      RT
0789
0790  64F8  E1A0      * VADR6W  SOC  @RDWMSK, RVDPA6
      64FA  606A'
0791      64FC'  VADR6R  EQU  $
0792  64FC  0300      LIM1   0

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0793  64FE 0000
      6500 D820          MOVB  @FASTWS+13,@VDPWA
      6502 8349
      6504 8C02
0794  6506 D806          MOVB  RVDPA6,@VDPWA
      6508 8C02
0795  650A 41A0          SZC   @RDWMSK,RVDPA6
      650C 606A'
0796  650E 045B          RT
0797
      *
0798  *** SET UP VARIABLES FOR SPECIAL GRAPHICS DATA FEED FROM ROM
0799
      *
0800
      *
0801  6510' NEWFRM EQU  $          ENTRY POINT TO NEW FRAME
0802  6510 C820          MOV   @HDOFF,@PXL CNT      INITIALIZE NEW FRAME POINTER
      6512 6020'
      6514 8388
0803  6516 0A11          SLA   RTEMP1,1          NEW FRAME NUMBER IS IN REG 1
0804  6518 C821          MOV   @FRMTBL(R1),@FRMPTR  GET FRAME STRT ADDR FRM TBL
      651A 64D2'
      651C 8386
0805
      *
0806  651E 0206          MOV   @FRMPTR,RSTAT2      COPY START ADDR OF ROM DATA
      6520 3C80          LI    RVDPA6,COLBUF      SET VDP POINTER TO OVFLOW BUFF
0807
      6522 06A0          BL   @VADR6W
      6524 64F8'
0808  6526 06A0          BL   @GRMADR
      6528 64E4'
0809  652A 0203          LI    RINDX3,BUFLEN
      652C 003C
0810  652E D820          FRSTLP MOVB @GRMRD,@VDPWD   ***
      6530 9800
      6532 8C00
0811
      *
0812  6534 0643          DECT  RINDX3             *** BLOCK MOVE OF FIRST COLUMN
0813  6536 16FB          JNE   FRSTLP            *** OF NEW SCENERY FRAME TO
0814  6538
      6538
0815  6538 A820          A     @COLADD,@FRMPTR   * ADJUST THE GROM ADDRESS PTR T
      653A 64E2'
      653C 8386
0816  653E 0300          LIM1 2
      6540 0002
0817  6542 0300          LIM1 0
      6544 0000
0818  6546' SCRLST EQU  $
0819  6546 0208          LI    R8,BUFLEN        CONSTANT IN REGISTER TO SAVE CO
      6548 003C
0820  654A 0209          LI    R9,PXL CNT      PUT ADDRESS CONSTANT IN REG TO
      654C 8388
0821  654E C060          MOV   @SHFTBL,RTEMP1   GET CURRENT SHIFT COUNT
      6550 83A0
0822  6552 D161          MOVB  @SHFT2(R1),RSHFC5  GET TRUE SHIFT COUNT FRM TABLE
      6554 6000'
0823  6556 0985          SRL   RSHFC5,8         RIGHT ADJUST THE SHIFT COUNT
0824  6558 C0A0          MOV   @H0008,RSTAT2    INITIALIZE BIT MASK
      655A 6016'
0825  655C C059          MOV   *R9,RTEMP1
0826  655E 2042          COC   RSTAT2,RTEMP1    SAVE 4TH LSBIT OF PXL CNT
0827  6560 1301          JEQ   KEEPFG
0828  6562 04C2          CLR   RSTAT2

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0829      6564'  KEEPFG  EQU    $
0830 6564 6645      S      RSHFCS,*R9      CALCULATE NEW FRAME EDGE
0831 6566 1315      JEQ    SETVD1      IF EQUAL...
0832 6568 1514      JGT    SETVD1      ...OR GREATER THAN, JUMP
0833 656A 0599      INC    *R9
0834 656C 1311      JEQ    CNTADJ
0835 656E C005      MOV    RSHFCS,RTEMPO      COPY SHIFT COUNTT
0836 6570 A019      A      *R9,RTEMPO      READJUST TO RMDR PIXEL COUNT
0837 6572 D820      MOVB   @SHFTBL+1,@SHFSAV      SAVE OLD SHIFT COUNTT
        6574 83A1
        6576 837E
0838 6578 D820      MOVB   @SHFTBL+3,@SHFSAV+1      SAVE OTHER OLD SHIFT VALUE
        657A 83A3
        657C 837F
0839 657E 0500      NEG    RTEMPO      MAKE THE SHIFT CNT NEG
0840 6580 0220      AI     RTEMPO,8      ADJUST CNT FOR CIRCULAR SHIFT
        6582 0008
0841 6584 C800      MOV    RD,@SHFTBL      SET UP TEMP SHIFT VALUE
        6586 83A0
0842 6588 0220      AI     RD,8      PAD FOR EVEN BYTE SHIFTING
        658A 0008
0843 658C C800      MOV    RD,@SHFTBL+2      SAVE THE OTHER SHIFT VALUE
        658E 83A2
0844 6590 0619      CNTADJ DEC    *R9
0845 6592'  SETVD1  EQU    $      (THIS LABEL WAS SETVDP, BUT SUB
0846 6592 0206      LI     RVDPA6,SCSTRT
        6594 1000
0847 6596 06A0      BL     @VADR6R
        6598 64FC'
0848 659A 0203      LI     RINDX3,-BUFLEN
        659C FFC4
0849 659E D8E0      SCNDLP MOVB   @VDPRD,@FBUFFR+BUFLEN(RINDX3)
        65A0 8800
        65A2 833C
0850 65A4 05C3      INCT  RINDX3
0851 65A6 11FB      JLT   SCNDLP
0852 65A8 0300      LIM1  2
        65AA 0002
0853 65AC 0300      LIM1  0
        65AE 0000
0854      *
0855 65B0 0206      LI     RVDPA6,SCSTRT-COLINC
        65B2 0FC0
0856 65B4 04C3      CLR   RINDX3
0857 65B6'  LOOPIN  EQU    $
0858 65B6 0226      AI     RVDPA6,COLINC*2      ADD OFFSET TO POINT TWO COLUMNS
        65B8 0080
0859 65BA 41A0      SZC   @RDWMSK,RVDPA6      TO RIGHT; RESET READ/WRIT FLAG
        65BC 606A'
0860 65BE'  NXTSHF EQU    $
0861 65BE 0286      CI     RVDPA6,SCREND      IS IT TIME FOR LAST COL SCROLL
        65C0 1800
0862 65C2 1602      JNE   DOR6      JUMP IF NOT LAST COLUMN
0863 65C4 0206      LI     RVDPA6,COLBUF      SET VDP POINTER TO OVFLOW BUFF
        65C6 3C80
0864 65C8 06A0      DOR6  BL     @VADR6R
        65CA 64FC'
0865 65CC C0E3      GETOFS MOV    @VALTBL(RINDX3),RINDX3      GET BUFFR INDEX FROM TBL
        65CE 606C'
0866 65D0 06A0      BL     @LDPT1      BRANCH TO LOOP IN FSTRAM

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0867 65D2 8354
      65D4 0300      LIM1  2
      65D6 0002
0868 65D8 0300      LIM1  0
      65DA 0000
0869
0870 65DC 0286      *          CI    RVDPA6, COLBUF      IS THIS THE LAST COLUMN?
      65DE 3C80
0871 65E0 1302      JEQ    PATCH1
0872 65E2 0460      B      @D0SHFT      IF NOT, JUMP & DON'T ADJ PNTR.
      65E4 6702'
0873 65E6 65E6'      PATCH1 EQU    $
0874 65E8 C659      MOV    *R9, *R9      SEE IF SHIFT COUNT IS POSITIVE
0875 65EA 1303      JEQ    PATCH2
0876 65EC 1502      JGT    PATCH2
0877 65EE 0460      B      @RSTADR      COUNT IS NEG, SO SPECIAL CASE
      65EE 66FE'
0878 65F0 C019      PATCH2 MOV    *R9, RTEMP0      COPY THE SHIFT COUNT
0879 65F2 0580      INC    RTEMP0
0880 65F4 0240      ANDI   RTEMP0, >0008      STRIP OFF ALL BITS BUT 4TH BIT
      65F6 0008
0881 65F8 2880      XOR    RTEMP0, RSTAT2      DID BIT 4 CHANGE STATES?
0882 65FA 163F      JNE    M0RBTS          YES, SO GET MORE BITS FROM ROM
0883
0884      *          THE FOLLOWING SECTION OF CODE IS USED IF THE DATA
0885      *          SCOLBUF HAS ENOUGH BITS TO CONTRIBUTE TO THE
0886      *          NEXT SHIFT OF THE SCENERY.
0887      *
0888 65FC 0206      LI     RVDPA6, SCREND-COLINC      SET VDP POINTER TO COL 31
      65FE 17C0
0889 6600 06A0      BL     @VADR6W
      6602 64F8'
0890 6604 0202      LI     RSTAT2, FBUFFR          LOAD UP START ADDR OF CPU BUFF
      6606 8300
0891 6608 C0C8      MOV    R8, RINDX3
0892      *          LI     RINDX3, BUFLen          LOAD BUFFER LENGTH
0893 660A C020      MOV    @SHFTBL, R0           GET CURRENT SHIFT COUNT
      660C 83A0
0894 660E 660E'      SHFLP2 EQU    $
0895 6610 C052      MOV    *RSTAT2, RTEMP1      ***
0896 6612 0B01      SRC    RTEMP1, 0           *** THIS SECTION OF CODE SHFTS
0897 6614 D801      MOVB   RTEMP1, @VDPWD      *** THE DATA IN THE BUFFER,
      6616 8C00
0898 6618 CC81      MOV    RTEMP1, *RSTAT2+      *** STORES RESULTS IN SCREEN
0899 661A 0643      DECT   RINDX3              *** BUFFER
0900 661C 15F9      JGT    SHFLP2              ***
0901 661E 0300      LIM1  2
      661E 0002
0902 6620 0300      LIM1  0
      6622 0000
0903 6624 0206      LI     RVDPA6, COLBUF
      6626 3C80
0904 6628 06A0      BL     @VADR6W
      662A 64F8'
0905 662C 0202      LI     RSTAT2, FBUFFR
      662E 8300
0906 6630 C0C8      MOV    R8, RINDX3
0907      *          LI     RINDX3, BUFLen
0908 6632 04C4      CLR    RINDX4
0909 6634 C059      MOV    *R9, R1

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0910 6636 0581          INC  R1
0911 6638 0241          ANDI R1,>0007
      663A 0007
0912 663C 130F          JEQ  GETCOL
0913 663E 0021          MOVB @MSKTB2(R1),R0
      6640 64C9'
0914 6642 5900  SAVLP2  SZCB  R0,@FBUFFR+1(RINDEX4)
      6644 8301
0915 6646 0824          MOVB @FBUFFR+1(RINDEX4),@VDPWD
      6648 8301
      664A 8C00
0916 664C 05C4          INCT RINDEX4
0917 664E 0643          DECT RINDEX3
0918 6650 15F8          JGT  SAVLP2
0919 6652 0300          LIM1 2
      6654 0002
0920 6656 0300          LIM1 0
      6658 0000
0921 665A 1071          JMP  SHFOUT
0922 665C'  GETCOL  EQU  $
0923 665C 06A0          BL  @GRMADR
      665E 64E4'
0924 6660 D820  SPLP2  MOVB  @GRMRD,@VDPWD
      6662 9800
      6664 8C00
0925 6666 0643          DECT RINDEX3
0926 6668 15FB          JGT  SPLP2
0927 666A 0300          LIM1 2
      666C 0002
0928 666E 0300          LIM1 0
      6670 0000
0929 6672 A820          A    @COLADD,@FRMPTR
      6674 64E2'
      6676 8386
0930 6678 1062          JMP  SHFOUT
0931
0932 *
0933 * THE FOLLOWING CODE IS CALLED IF THERE ARE NOT
0934 * ENOUGH BITS IN @BUFCOL DATA TO COMPLETE A
0935 * SCROLL. THEREFORE, THIS ROUTINE PULLS THOSE
0936 * EXTRA BITS OUT OF ROM/GROM. THE DATA
0937 * @COLBUF IS PROPERLY ADJUSTED FOR THE NEXT
0938 * SCROLL.
0939 *
0939 667A'  MORBTS  EQU  $
0940 667A 04C4          CLR  RINDEX4
0941 667C C0C8          MOV  R8,RINDEX3
0942 *
0943 667E C020          LI  RINDEX3,BUFLEN
      6680 8388          MOV  @PXL CNT,R0
0944 6682 A005          A    RSHFC5,R0
0945 6684 0580          INC  R0
0946 6686 0240          ANDI R0,>0007
      6688 0007
0947 668A 06A0          BL  @GRMADR
      668C 64E4'
0948 668E D060  SHFLP3  MOVB  @GRMRD,RTEMP1
      6690 9800
0949 6692 0901          SRL  RTEMP1,0
0950 6694 F901          SOCB RTEMP1,@FBUFFR(RINDEX4)
      6696 8300

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0951	6698	05C4		INCT	RINDX4	
0952	669A	0643		DECT	RINDX3	
0953	669C	15F8		JGT	SHFLP3	
0954	669E	0300		LIMI	2	
	66A0	0002				
0955	66A2	0300		LIMI	0	
	66A4	0000				
0956	66A6	0206		LI	RVDPA6, COLBUF	
	66A8	3C80				
0957	66AA	06A0		BL	@VADR6W	
	66AC	64F8'				
0958	66AE	C0C8		MOV	R8, RINDX3	
0959			*	LI	RINDX3, BUFLN	
0960	66B0	0500		NEG	RTEMP0	
0961	66B2	A005		A	RSHFC5, RTEMP0	
0962	66B4	04C1		CLR	RTEMP1	
0963	66B6	06A0		BL	@GRMADR	
	66B8	64E4'				
0964	66BA	D060	SHFLP5	MOV	@GRMRD, RTEMP1	
	66BC	9800				
0965	66BE	0A01		SLA	RTEMP1, 0	
0966	66C0	D801		MOV	RTEMP1, @VDPWD	
	66C2	8C00				
0967	66C4	0643		DECT	RINDX3	
0968	66C6	15F9		JGT	SHFLP5	
0969	66C8	0300		LIMI	2	
	66CA	0002				
0970	66CC	0300		LIMI	0	
	66CE	0000				
0971	66D0	A820		A	@COLADD, @FRMPTR	
	66D2	64E2'				
	66D4	8386				
0972	66D6	0206		LI	RVDPA6, SCREND-COLINC	
	66D8	17C0				
0973	66DA	06A0		BL	@VADR6W	
	66DC	64F8'				
0974	66DE	C0C8		MOV	R8, RINDX3	
0975			*	LI	RINDX3, BUFLN	
0976	66E0	0204		LI	RINDX4, FBUFFR	
	66E2	8300				
0977	66E4	C020		MOV	@SHFTBL, R0	
	66E6	83A0				
0978	66E8	C074	SHFLP4	MOV	*RINDX4+, R1	***
0979	66EA	0B01		SRC	R1, 0	*** THIS LOOP SHIFTS THE
0980	66EC	D801		MOV	R1, @VDPWD	*** BUFFER DATA AND STORES
	66EE	8C00				
0981	66F0	0643		DECT	RINDX3	*** THE RESULT IN SCREEN
0982	66F2	15FA		JGT	SHFLP4	*** COLUMN 31
0983	66F4	0300		LIMI	2	
	66F6	0002				
0984	66F8	0300		LIM!	0	
	66FA	0000				
0985	66FC	1020		JMP	SHFOUT	
0986	66FE	a206	RSTADR	LI	RVDPA6, SCREND	RESTORE VDP PNTR TO END COLUMN
	6700	1800				
0987		6702'	DOSHFT	EQU	⋄	
0988	6702	0226		AI	RVDPA6, -COLINC	ADJ VDP ADDR TO PREV COLUMN
	6704	FFC0				
0989	6706	06A0		BL	@VADR6W	
	6708	64F8'				


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0990
0991          670A' *
0992 670A 0A13 SHFENT EQU $
0993 670C C023 SLA RINDX3,1 MPY INDEX RMNDR BY 2
        670E 83A0 MOV @SHFTBL(RINDX3),R0 GET SHIFT CNT FROM TABLE
0994 6710 0204 LI RINDX4,-BUFLEN LOAD BUFLEN IN INDEX REG
        6712 FFC4
0995 6714 06A0 BL @LDPT2 BRANCH TO LOOP IN FSTRAM
        6716 8360
0996 6718 0300 LIM1 2
        671A 0002
0997 671C 0300 LIM1 0
        671E 0000

0998 *
0999 *
1000 6720 C059 MOV *R9,RTEMP1
1001          * MOV @PXL CNT,RTEMP1
1002 6722 0581 INC RTEMP1
1003 6724 1508 JGT NEWCOL
1004 6726 1309 JEQ NEWFLG
1005 6728 D820 MOVVB @SHFSAV,@SHFTBL+1
        672A 837E
        672C 83A1
1006 672E D820 MOVVB @SHFSAV+1,@SHFTBL+3
        6730 837F
        6732 83A3
1007 6734 1002 JMP NEWFLG
1008 6736 0460 NEWCOL B @LOOPIN JUMP TO START OF LOOP
        6738 6586'

1009 *
1010          673A' NEWFLG EQU $
1011 673A 0701 SET0 R1
1012 673C 1001 JMP SHFOU2
1013 673E' SHFOUT EQU $
1014 673E 04C1 CLR R1
1015 6740' SHFOU2 EQU $
1016 6740 C801 MOV R1,@SHFSAV
        6742 837E

1017 *
1018 * JIM, YOUR CODE TO SCAN THE KEYBOARD AND GENERALLY SERVICE
1019 * THE GAME SHOULD RESIDE HERE ....
1020 * AFTER THE GAME IS SERVICED, MAKE THE WORD @SHFSAV
1021 * AFFECT STATUS. IF @SHFSAV=0 THEN BRANCH @SCRLST.
1022 * IF @SHFSAV<0, THEN SET NEW SCENERY PAGE NUMBER IN REGISTE
1023 * THEN BRANCH @NEWFRM
1024 *
1025 ***
1026 *** SCAN KEYBOARD AND JOYSTICKS
1027 ***
1028          6744' SCANIT EQU $
1029 6744' TUMBLA EQU $
1030 6744 06A0 BL @COINCH CHECK COIN - YOUR SHIP AND THE A
        6746 721E'
1031 6748 06A0 BL @SUBHOT GO CHECK FOR LASER OVER-HEATING
        674A 6E96'
1032 674C 06A0 BL @COINCK GO CHECK SPRITE/SCENERY COINCIDE
        674E 71BA'
1033 6750 D1A0 MOVVB ATKFLG,R6 ANY ATTACKING GOING ON?
        6752 838E
1034 6754 1347 JEQ NOGAGE NO. NOT YET. SO DON'T DECREASE F

```

1035	6756	D1A0		MOV B	SCR PNT, R6	OUT OF FUEL NOW?
	6758	83BE				
1036	675A	131B		JEQ	JMP SCN	YES, SO DON'T SCAN THE KEYBOARD
1037	675C	7820		CB	REF FLG, HD2	IN REFUELING TUNNEL NOW? (REF FLG
	675E	83B2				
	6760	6006'				
1038	6762	1440		JHE	NO GAGE	YES, SO DON'T DEplete FUEL
1039	6764	7820		SB	HD1, FUL CNT	0 - >10: ZERO YET?
	6766	6007'				
	6768	83BC				
1040	676A	153C		JGT	NO GAGE	NO, NOT 0
1041	676C	D820		MOV B	HD1, FUL CNT	RE-INIT
	676E	601B'				
	6770	83BC				
1042	6772	7820		SB	HD1, FUL PNT	1 - 9: ZERO YET?
	6774	6007'				
	6776	83BD				
1043	6778	1625		JNE	NOT DRY	NO, CONTINUE
1044	677A	D820		MOV B	HD8, FUL PNT	RE-INIT
	677C	6000'				
	677E	83BD				
1045	6780	7820		SB	HD2, SCR PNT	2 - 20: ZERO YET?
	6782	6006'				
	6784	83BE				
1046	6786	161E		JNE	NOT DRY	NO, SO POINT TO SAME SCREEN VDP
1047	6788	06A0		BL	@SPSUB	SAY SPEECH PHRASE "SORRY ...
	678A	6E22'				
1048	678C	0010		DATA	16	YOU ARE OUT OF FUEL
1049	678E	0460		B	@DNEC2	STOP SHIP, YOU'RE OUT OF FUEL. N
	6790	6AE8'				
1050	6792	B820	JMP SCN	AB	HD1, INC SHP	DOWNWARD
	6794	6007'				
	6796	838C				
1051	6798	C1A0		MOV	INC SHP, R6	GET VEL COUNT
	679A	838C				
1052	679C	0986		SRL	R6, 8	PUT IN LOWER BYTE
1053	679E	0246		ANDI	R6, >0001	CHECK FOR ODD COUNT
	67A0	0001				
1054	67A2	1303		JEQ	EVEN 1	EVEN
1055	67A4	06A0		BL	@SUBBLK	ODD
	67A6	6E6E'				
1056	67A8	1008		JMP	SET FIR	CONTINUE
1057	67AA	020A	EVEN 1	LI	R10, MSG OUT	GET OUT OF
	67AC	6E1D				
1058	67AE	06A0		BL	@SETGRM	FUEL MSG
	67B0	6E86'				
1059	67B2	020A		LI	R10, OUTSND	EXECUTE THE
	67B4	39FC				
1060	67B6	06A0		BL	@SOUND	OUT OF FUEL SOUND
	67B8	7DEC'				
1061	67BA	D820	SET FIR	MOV B	H90, YXL0C2+2	NO FIRE
	67BC	601F'				
	67BE	8396				
1062	67C0	0460		B	@DNECH	OUT OF FUEL, SO DON'T SCAN KEYBR
	67C2	6AAC'				
1063	67C4	D1A0	NOT DRY	MOV B	FUL PNT, R6	GET FUEL TABLE POINTER
	67C6	83BD				
1064	67C8	0986		SRL	R6, 8	PUT IN LOW BYTE 1 - 8
1065	67CA	D826		MOV B	FULPIX(R6), REGALB	GET NEW FUEL CHARACTER
	67CC	60F0'				

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        67CE 8351
1066      ***      LI      WLOC,REGALB
1067      ***      LI      WCOUNT,1
1068      ***      MOVVB   SCRPNTR,R6          GET VDP POINTER
1069      ***      SRL      R6,8
1070      ***      MOV      FULSCR(R6),VDPADD      POINT TO FUEL CHARACTER
1071      ***      BL      @WRITE
1072 67D0 0200      LI      VDPADD,1AA7      1ST POSITION OF FUEL CHAR ON SCR
        67D2 1AA7
1073 67D4 D1AD      MOVVB   SCRPNTR,R6          GET VDP SCREEN CHAR POINTER(2,4,
        67D6 83BE
1074 67D8 0996      SRL      R6,9          1,2,3 ...10
1075 67DA A006      A        R6,VDPADD      ADD IN OFFSET TO FUEL GAGE
1076 67DC 06AD      BL      @WRTCL          WRITE OUT FUEL GAGE READING
        67DE 7E5A'
1077 67E0 0001      DATA   1,REGALB
        67E2 8351
1078 67E4 D820      NOGAGE MOVVB   HD1,KEYBRD      SET UP KEYBOARD ONE SCAN
        67E6 6007'
        67E8 8374
1079 67EA 06AD      BL      @COINCH          CHECK COIN
        67EC 721E'
1080 67EE 06AD      BL      @SCANKEY          SCAN KEYBOARD(LIMI'S OFF, THEN 0
        67F0 7D26'
1081 67F2 06AD      BL      @COINCH          CHECK COIN
        67F4 721E'
1082 67F6 04C4      CLR     R4          ZERO OUT REG4
1083 67F8 9820      CB      KEY,HD5          IS KEY RETURNED 0 - 5 ?
        67FA 8375
        67FC 6003'
1084 67FE 1B08      JH      CHK123          YES, SO GO CHECK KEYS >13,>07,>0
1085 6800 04C4      CLR     R4          CLEAR REG4
1086 6802 D820      MOVVB   KEY,REG4LB      KEY IS 0 - 6
        6804 8375
        6806 8345
1087 6808 0A14      SLA     R4,1          ADJUST TABLE POINTER(WORD)
1088 680A C124      MOV     TABLE5(R4),R4  POINT TO BRANCH ADDRESS
        680C 62BC'
1089 680E 0694      BL      *R4          GO MOVE MMAN
1090      6810'      CHK123 EQU     $
1091 6810 9820      CB      KEY,H13          KEY #1 PRESSED?
        6812 8375
        6814 603A'
1092 6816 1609      JNE     CHKK07          NO, KEEP CHECKING
1093 6818 C820      MOV     HFC04,VELVAR    UP AND DOWN VELS
        681A 6034'
        681C 83B4
1094 681E 06AD      BL      @WRTVCL          WRITE OUT 1 LIFT ON THE SCREEN
        6820 7E58'
1095 6822 1AF1      DATA   >1AF1,1,LIFT01
        6824 0001
        6826 60ED'
1096 6828 1019      JMP     CHKH01
1097 682A 9820      CHKK07 CB      KEY,HD7          KEY #2 PRESSED?
        682C 8375
        682E 6001'
1098 6830 1609      JNE     CHKK08          NO, KEEP CHECKING
1099 6832 C820      MOV     HFD10,VELVAR    UP AND DOWN VELS
        6834 6032'
        6836 83B4

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1100 6838 06A0          BL   @WRTVCL          WRITE OUT LIFT 2 ON SCREEN
      683A 7E58'
1101 683C 1AF1          DATA >1AF1,1,1,LIFT02
      683E 0001
      6840 60EE'
1102 6842 100C          JMP   CHKHD1
1103 6844 9820  CHKK08  CB   KEY,H08          KEY #3 PRESSED?
      6846 8375
      6848 6000'
1104 684A 1608          JNE   CHKHD1          NO, CONTINUE AND CHECK JOYSTICKS
1105 684C 0820          MOV   HE41C,VELVAR   UP AND DOWN VELS
      684E 6030'
      6850 83B4
1106 6852 06A0          BL   @WRTVCL          WRITE OUT LIFT 3 ON SCREEN
      6854 7E58'
1107 6856 1AF1          DATA >1AF1,1,1,LIFT03
      6858 0001
      685A 60EF'
1108 685C 06A0  CHKHD1  BL   @CHKJOY          GO CHECK JOYSTICK
      685E 73AE'
1109 6860 D820          MOV   HD2,KEYBRD     TRY KEYBOARD TWO
      6862 6006'
      6864 8374
1110 6866 06A0          BL   @COINCH         CHECK COIN
      6868 721E'
1111 686A 06A0          BL   @SCANKY         SCAN THE KEYBOARD
      686C 7D26'
1112 686E 06A0          BL   @COINCH         CHECK COIN
      6870 721E'
1113 6872 9820          CB   KEY,H0D         KEY PRESSED FOR FIRING? ("." BUTT
      6874 8375
      6876 600D'
1114 6878 1604          JNE   BLJOY1         NO, CONTINUE
1115 687A 06A0          BL   @CHKSTR         SEE IF GAME HAS STARTED. IF NOT,
      687C 7384'
1116 687E 0420          BLWP  @SHOTV         YES, SO GO LAY LASER FIRE LINE
      6880 7020'
1117 6882 06A0  BLJOY1  BL   @CHKJOY          GO CHECK JOYSTICK
      6884 73AE'
1118 6886 06A0          BL   @COINCH         CHECK COIN
      6888 721E'
1119          ***
1120          *** AT THIS POINT, CHECK FOR WARP KEY
1121          ***
1122 688A 9820          CB   KEY,H0B         "P" KEY HIT FOR "TIME WARP ACTIV
      688C 8375
      688E 600B'
1123 6890 1632          JNE   NOTP02         NO, KEEP ON GOING
1124 6892 D820          MOV   MOTION,TEMPOD+0  SAVE AUTO-MOTION COUNT
      6894 837A
      6896 8300
1125 6898 D820          MOV   HD0,MOTION     STOP AUTO-MOTION
      689A 6008'
      689C 837A
1126 689E 06A0  KEY0    BL   @SCANKY
      68A0 7D26'
1127 68A2 04E0          CLR  KEYBRD
      68A4 8374
1128 68A6 020A  MOREMG  LI   R10,MSGTIM     GET TIME-
      68A8 6EDD

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1129	68AA 06A0		BL	@SETGRM	WARP MSG
	68AC 6E86'				
1130	68AE D820		MOV B	H00,TIMER	
	68B0 6008'				
	68B2 8379				
1131	68B4 D820		MOV B	H00,CLRSCN	
	68B6 6008'				
	68B8 83D6				
1132	68BA 06A0	DELYP1	BL	@SCANKY	
	68BC 7D26'				
1133	68BE D2A0		MOV B	STATUS,R10	
	68C0 837C				
1134	68C2 1614		JNE	BLKMSG	
1135	68C4 9820		CB	TIMER,H30	
	68C6 8379				
	68C8 603C'				
1136	68CA 16F7		JNE	DELYP1	
1137	68CC 06A0		BL	@SUBBLK	LOAD GROM READ ADDR W/ BLANK MSG
	68CE 6E6E'				
1138	68D0 D820		MOV B	H00,TIMER	
	68D2 6008'				
	68D4 8379				
1139	68D6 04CA		CLR	R10	
1140	68D8 06A0	DELYP2	BL	@SCANKY	
	68DA 7D26'				
1141	68DC D2A0		MOV B	STATUS,R10	
	68DE 837C				
1142	68E0 1607		JNE	NOTP01	
1143	68E2 9820		CB	TIMER,H10	
	68E4 8379				
	68E6 601B'				
1144	68E8 16F7		JNE	DELYP2	
1145	68EA 10DD		JMP	MOREMG	
1146	68EC 06A0	BLKMSG	BL	@SUBBLK	LOAD GROM READ ADDR W/ BLANK MSG
	68EE 6E6E'				
1147	68F0 D820	NOTP01	MOV B	TEMPO0+0,MOTION	RESTORE AUTO-MOTION COUNT
	68F2 8300				
	68F4 837A				
1148	68F6 9820	NOTP02	CB	INCSHP+1,HFE	
	68F8 838D				
	68FA 604A'				
1149	68FC 1106		JLT	COTINS	
1150	68FE 9820		CB	INCSHP+1,H02	
	6900 838D				
	6902 6006'				
1151	6904 1502		JGT	COTINS	
1152	6906 0460		B	@D0NEC2	STOP ALL MOTION
	6908 6AE8'				
1153	690A 9820	COTINS	CB	YXL0C2+0,H0C	T00 FAR UP?
	690C 8394				
	690E 600C'				
1154	6910 1A08		JL	FARUP	YES, SO STOP VERTICAL MOTION
1155	6912 9820		CB	YXL0C2+0,H0D	T00 FAR UP?
	6914 8394				
	6916 6047'				
1156	6918 1B04		JH	FARUP	
1157	691A 9820		CB	INCSHP,VELVAR+0	GOING UP?
	691C 838C				
	691E 83B4				
1158	6920 160F		JNE	COTIN6	

1159	6922	D820	FARUP	MOV B	H00,INCSHP	STOP UP/DOWN MOTION
	6924	6008'				
	6926	838C				
1160	6928	9820		CB	YXL0C2+1,H0D	TOO FAR RIGHT?
	692A	8395				
	692C	602C'				
1161	692E	1806		JH	FARXX	
1162	6930	9820		CB	YXL0C2+1,H14	TOO FAR LEFT?
	6932	8395				
	6934	603B'				
1163	6936	1A02		JL	FARXX	
1164	6938	0460		B	@D0NECH	JUST STOP UP/DOWN MOTION
	693A	6AAC'				
1165	693C	0460	FARXX	B	@D0NEC2	STOP ALL MOTION
	693E	6AE8'				
1166	6940	9820	C0TIN6	CB	INCSHP,VELVAR+1	GOING DOWN?
	6942	838C				
	6944	83B5				
1167	6946	1605		JNE	C0TIN?	
1168	6948	D820		MOV B	H00,INCSHP	
	694A	6008'				
	694C	838C				
1169	694E	0460		B	@D0NECH	
	6950	6AAC'				
1170	6952	9820	C0TIN?	CB	YXL0C2+2,H8C	FAST FIRE1 ALREADY?
	6954	8396				
	6956	604F'				
1171	6958	1305		JEQ	FAST0N	YES
1172	695A	9820		CB	YXL0C2+2,H9C	FAST FIRE2 ALREADY?
	695C	8396				
	695E	6052'				
1173	6960	1301		JEQ	FAST0N	YES
1174	6962	1009		JMP	NOFAST	NO FAST FIRE ON, SO FORGET EVERY
1175	6964	D2A0	FAST0N	MOV B	@>83CE,R10	ANY SOUND GOING ON?
	6966	83CE				
1176	6968	1301		JEQ	SNDIT5	>83CE = 0 , SO NO OTHER SOUNDS N
1177	696A	1016		JMP	QUITCK	YES, SO DON'T EXECUTE FSTSNDFAS
1178	696C	020A	SNDIT5	LI	R10,FSTSNDFAS	EXECUTE THE FAST
	696E	3823				
1179	6970	06A0		BL	@SOUND	FIRE SOUND
	6972	7DEC'				
1180	6974	1011		JMP	QUITCK	CONTINUE ON
1181	6976	9820	NOFAST	CB	YXL0C2+2,H8B	NORMAL FIRE1 ALREADY?
	6978	8396				
	697A	604E'				
1182	697C	1305		JEQ	NORM0N	YES
1183	697E	9820		CB	YXL0C2+2,H9B	NORMAL FIRE1 ALREADY?
	6980	8396				
	6982	6051'				
1184	6984	1301		JEQ	NORM0N	YES
1185	6986	1008		JMP	QUITCK	NO NORMAL FIRE EITHER, SO FORGET
1186	6988	D2A0	NORM0N	MOV B	@>83CE,R10	ANY SOUND GOING ON?
	698A	83CE				
1187	698C	1301		JEQ	SNDIT6	NO OTHER SOUNDS ON NOW
1188	698E	1004		JMP	QUITCK	YES, A SOUND IS EXECUTING SO DON
1189	6990	020A	SNDIT6	LI	R10,SLWSND	EXECUTE THE
	6992	3815				
1190	6994	06A0		BL	@SOUND	NORMAL FIRE SOUND
	6996	7DEC'				
1191	6998	9820	QUITCK	CB	YXL0C2+1,H0D	TOO FAR RIGHT?

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        699A 699C
        699C 602C'
1192 699E 1806      JH   FARRT
1193 69A0 9820      CB   YXLOC2+1,H14      TOO FAR LEFT?
        69A2 8395
        69A4 603B'
1194 69A6 1A07      JL   FARLT
1195 69A8 0460      B    @ENDCHK          NO KEYS PRESSED AND NO BORDER PR
        69AA 6B24'
1196 69AC D820      FARRT MOVB HFF,INCSHP+1
        69AE 6021'
        69B0 838D
1197 69B2 0460      B    @LFKEY          TOO FAR RIGHT SO GO LEFT
        69B4 6A36'
1198 69B6 D820      FARLT MOVB HD1,INCSHP+1
        69B8 6007'
        69BA 838D
1199 69BC 0460      B    @RTKEY          TOO FAR LEFT  SO GO RIGHT
        69BE 6A6E'
1200                ***
1201                ***   UPKEY, DNKEY, LTKEY, AND RTKEY ROUTINES
1202                ***
1203 69C0 0460      JUMPOB B    @DONEC2      STOP ALL MOTION
        69C2 6AE8'
1204 69C4 0460      JUMP11 B    @DONECH
        69C6 6AAC'
1205 69C8 7820      UPKEY SB   HD2,FULCNT      DEplete
        69CA 6006'
        69CC 838C
1206 69CE 9820      CB   YXLOC2+0,H10      TOO FAR UP?
        69D0 8394
        69D2 601B'
1207 69D4 1A0D      JL   JUMP25
1208 69D6 9820      CB   YXLOC2+0,HED      TOO FAR UP?
        69D8 8394
        69DA 6047'
1209 69DC 1809      JH   JUMP25
1210 69DE 9820      CB   YXLOC2+1,H14      TOO FAR LEFT?
        69E0 8395
        69E2 603B'
1211 69E4 1A0A      JL   JUMP10          YES, SO GO RIGHT
1212 69E6 9820      CB   YXLOC2+1,HCD      TOO FAR RIGHT?
        69E8 8395
        69EA 602C'
1213 69EC 1806      JH   JUMP10          YES, SO GO LEFT
1214 69EE 1008      JMP  NOH001
1215 69F0 D820      JUMP25 MOVB HD0,INCSHP      NEW CODE
        69F2 6008'
        69F4 838C
1216 69F6 0460      B    @DONECH          WAS B    @DONEC2
        69F8 6AAC'
1217 69FA D820      JUMP10 MOVB HD0,INCSHP+1      STOP RIGHT/LEFT MOTION
        69FC 6008'
        69FE 838D
1218 6A00 9820      NOH001 CB   YXLOC2+2,H9D      LESS FIRE(NO FIRE) ON ALREADY
        6A02 8396
        6A04 601F'
1219 6A06 1603      JNE  KEEPFR
1220 6A08 D820      MOVB H88,YXLOC2+2      NO, SOMETHING ELSE, SO KEEP IT
        6A0A 604E'      PUT OUT NORMAL FIRE

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1221	6A0C 8396 6A0E D820 6A10 8384 6A12 838C	KEEPFR	MOV B	VELVAR+0,INCSHP	MOVE UP NOW
1222	6A14 104B		JMP	DONECH	
1223	6A16 9820 6A18 8395 6A1A 603B'	DNKEY	CB	YXL0C2+1,H14	TOO FAR LEFT?
1224	6A1C 1A05		JL	JUMP12	YES, SO GO RIGHT
1225	6A1E 9820 6A20 8395 6A22 602C'		CB	YXL0C2+1,HCD	TOO FAR RIGHT?
1226	6A24 1B01		JH	JUMP12	YES, SO GO LEFT
1227	6A26 1003		JMP	DNIT	
1228	6A28 D820 6A2A 6008' 6A2C 838D	JUMP12	MOV B	H00,INCSHP+1	STOP RIGHT/LEFT MOTION
1229	6A2E D820 6A30 8385 6A32 838C	DNIT	MOV B	VELVAR+1,INCSHP	MOVE DOWN NOW
1230	6A34 103B		JMP	DONECH	
1231	6A36 9820 6A38 8395 6A3A 603B'	LFKEY	CB	YXL0C2+1,H14	TOO FAR LEFT?
1232	6A3C 1A55		JL	DONEC2	
1233	6A3E 9820 6A40 8395 6A42 602C'		CB	YXL0C2+1,HCD	TOO FAR RIGHT?
1234	6A44 1B0C		JH	JUMPO7	GO LEFT THEN
1235	6A46 D820 6A48 6008' 6A4A 838C	LFIT	MOVE	H00,INCSHP	STOP UP/DOWN
1236	6A4C 7820 6A4E 6007' 6A50 838D		SB	H01,INCSHP+1	MOVE LEFT
1237	6A52 D820 6A54 601F' 6A56 8396		MOV B	H90,YXL0C2+2	LESS FIRE
1238	6A58 06A0 6A5A 736E'		BL	@0FFSUB	SOUND OFF
1239	6A5C 1027		JMP	DONECH	
1240	6A5E D820 6A60 6021' 6A62 838D	JUMPO7	MOV B	HFF,INCSHP+1	
1241	6A64 10F0		JMP	LFIT	TOO FAR RIGHT SO GO LEFT
1242	6A66 D820 6A68 6007' 6A6A 838D	JUMPO8	MOV B	H01,INCSHP+1	
1243	6A6C 100B		JMP	RTIT	TOO FAR LEFT SO GO RIGHT
1244	6A6E 7820 6A70 6006' 6A72 838C	RTKEY	SB	H02,FULCNT	DEplete FUEL RESERVE
1245	6A74 9820 6A76 8395 6A78 602C'		CB	YXL0C2+1,HCD	TOO FAR RIGHT?
1246	6A7A 1B36		JH	DONEC2	
1247	6A7C 9820 6A7E 8395 6A80 603B'		CB	YXL0C2+1,H14	TOO FAR LEFT?
1248	6A82 1AF1		JL	JUMPO8	GO RIGHT THEN

1249	6A84 D820	RTIT	MOV B	H00,INCSHP	STOP UP/DOWN
	6A86 6008'				
	6A88 838C				
1250	6A8A 8820		AB	H01,INCSHP+1	MOVE RIGHT
	6A8C 6007'				
	6A8E 838D				
1251	6A90 06A0		BL	@FSTSUB	FAST FIRE
	6A92 7356'				
1252	6A94 D2A0		MOV B	@>83CE,R10	ANY SOUND GOING ON?
	6A96 83CE				
1253	6A98 1305		JEQ	SNDIT1	>83CE = 0 , SO NO OTHER SOUNDS N
1254	6A9A C2A0		MOV	@>83CC,R10	GET SOUND LIST POINTER VDP LOCAT
	6A9C 83CC				
1255	6A9E 028A		CI	R10,>3823	FSTSND ALREADY ON?
	6AA0 3823				
1256	6AA2 1404		JHE	DONECH	YES, SO DON'T EXECUTE FSTSND SOU
1257	6AA4 020A	SNDIT1	LI	R10,FSTSND	
	6AA6 3823				
1258	6AA8 06A0		BL	@SOUND	
	6AAA 7DEC'				
1259	6AAC 0300	DONECH	LIMI	0	INCREASE VELOCITIES FOR ALL 2 SH
	6AAE 0000				
1260	6AB0 0200		LI	VDPADD,>3C00	
	6AB2 3C00				
1261	6AB4 0202		LI	WCOUNT,2	
	6AB6 0002				
1262	6AB8 0203		LI	WL0C,INCSHP	
	6ABA 838C				
1263	6ABC D820	MORVEL	MOV B	VADDLB,@>8C02	SET UP LOWER BYTE OF ADDRESS
	6ABE 833D				
	6AC0 8C02				
1264	6AC2 C180		MOV	VDPADD,TEMP	
1265	6AC4 C142		MOV	WCOUNT,COUNT	
1266	6AC6 0266		ORI	TEMP,>4000	SET VDP WRITE FLAG
	6AC8 4000				
1267	6ACA D806		MOV B	TEMP,@>8C02	SET UP UPPER BYTE OF ADDRESS
	6ACC 8C02				
1268	6ACE C183		MOV	WL0C,TEMP	
1269	6AD0 D836	WRIT02	MOV B	*TEMP+,VDPWD	WRITE BYTE INTO VDP
	6AD2 8C00				
1270	6AD4 0605		DEC	COUNT	DECREMENT COUNTER
1271	6AD6 15FC		JGT	WRIT02	
1272	6AD8 0220		AI	VDPADD,4	
	6ADA 0004				
1273	6ADC 0280		CI	VDPADD,>3C08	
	6ADE 3C08				
1274	6AE0 16ED		JNE	MORVEL	
1275	6AE2 0300		LIMI	2	
	6AE4 0002				
1276	6AE6 101E	DONEC1	JMP	ENDCHK	QUIT CHECK
1277	6AE8 06A0	DONEC2	BL	@STOPM0	NO MOVEMENT FOR TWO SPRITES:STOP
	6AEA 6F1A'				
1278	6AEC 04E0		CLR	INCSHP	NO MOVEMENT INIT'ED AGAIN
	6AEE 838C				
1279	6AF0 9820		CB	YXL0C2+2,H8B	NORMAL FIRE1 ALREADY?
	6AF2 8396				
	6AF4 604E'				
1280	6AF6 1307		JEQ	NORMAL	YES
1281	6AF8 9820		CB	YXL0C2+2,H98	NORMAL FIRE2 ALREADY?
	6AFA 8396				

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1282 6AFC 6051'
1283 6AFE 1303          JEQ  NORMAL          YES
        6B00 D820          MOVB H88,YXL0C2+2    NORMAL FIRE
        6B02 604E'
        6B04 8396
1284 6B06 D2A0    NORMAL  MOVB  @>83CE,R10    ANY SOUND GOING ON?
        6B08 83CE
1285 6B0A 1308          JEQ  SNDIT2          >83CE = 0 , SO NO OTHER SOUNDS N
1286 6B0C C2A0          MOV  @>83CC,R10    GET SOUND LIST POINTER VDP LOCAT
        6B0E 83CC
1287 6B10 028A          CI    R10,>3855    SHOT SOUND EXECUTING?(SHTSND)
        6B12 3855
1288 6B14 1407          JHE  ENDCHK          YES, SO DON'T EXECUTE SLWSND(NOR
1289 6B16 028A          CI    R10,>3823    NORMAL(SLWSND) SOUND ON ALREADY?
        6B18 3823
1290 6B1A 1A04          JL   ENDCHK          YES, SO DON'T RE-EXECUTE IT
1291 6B1C 020A    SNDIT2  LI    R10,SLWSND    GET NORMAL
        6B1E 3815
1292 6B20 06A0          BL   @SOUND          FIRE SOUND
        6B22 7DEC'
1293 6B24 9820    ENDCHK  CB   KEYBRD,H02    KEY BOARD# A TWO ALREADY?
        6B26 8374
        6B28 6006'
1294 6B2A 130D          JEQ  ENDCK1          YES, SO "." BUTTON ALREADY CHECK
1295 6B2C D820          MOVB H02,KEYBRD    SET TO KEY BOARD #2
        6B2E 6006'
        6B30 8374
1296 6B32 06A0          BL   @SCANKY        SCAN THE KEYBOARD
        6B34 7D26'
1297 6B36 9820          CB   KEY,H0D        "." PRESSED?
        6B38 8375
        6B3A 600D'
1298 6B3C 1604          JNE  ENDCK1          NO, GO ON
1299 6B3E 06A0          BL   @CHKSTR        SEE IF GAME HAS STARTED, IF NOT,
        6B40 7384'
1300 6B42 0420          BLWP @SH0TV         GO LAY LASER FIRE
        6B44 7020'
1301 6B46 06A0    ENDCK1  BL   @WRTVCL        CHAR AND COLOR UPDATED ONLY
        6B48 7E58'
1302 6B4A 1806          DATA >1B06,2,YXL0C2+2
        6B4C 0002
        6B4E 8396
1303 6B50 06A0          BL   @C0INCH        CHECK COIN
        6B52 721E'
1304          ***
1305          ***  BRANCH TO ATTACK WAVE IF READY
1306          ***
1307 6B54 D1A0          MOVB REFFLG,R6      ANY REFUELING GOING ON?
        6B56 83B2
1308 6B58 136E          JEQ  JMREF1          NO, SO CONTINUE
1309 6B5A 9820          CB   REFFLG,H03    REFUELED ALREADY?
        6B5C 83B2
        6B5E 6005'
1310 6B60 136C          JEQ  CHKH8D          YES, SO DON'T CHECK FOR PARKIN
1311 6B62 9820          CB   REFFLG,H02    SHIP IN TUNNEL ALREADY?
        6B64 83B2
        6B66 6006'
1312 6B68 1667          JNE  JMRFO1          NO, NOT YET
1313 6B6A 9820          CB   YXL0C1+0,H88  SHIP JUST UNDER REFOELING TANK
        6B6C 8390

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1314	6B6E 604E'	JL	CHKH80	NO,SOMEONE TRIED TO REFUEL W/O
1315	6B70 1A64	SB	PXLCNT+1,YXLOC1+1	GET DIFF OF PIXEL SCROLL CNT A
	6B72 7820			
	6B74 8389			
	6B76 8391			
1316	6B78 D120	MOV B	YXLOC1+1,R4	GOT DIFF
	6B7A 8391			
1317	6B7C 0984	SRL	R4,8	
1318	6B7E 0284	CI	R4,138	CHECK IF BY REFUELING TANK
	6B80 008A			
1319	6B82 1B5B	JH	CHKH80	NO
1320	6B84 0284	CI	R4,128	CHECK IF BY REFUELING TANK
	6B86 0080			
1321	6B88 1A58	JL	CHKH80	NO
1322	6B8A D820	MOV B	H03,REFFLG	SET REFUELING FLAG TO REFUELED
	6B8C 6005'			
	6B8E 83B2			
1323	6B90 D820	MOV B	H00,MOTION	STOP SHIP'S MOTION
	6B92 6008'			
	6B94 837A			
1324	6B96 06A0	BL	@SPSUB	EXECUTE SPEECH PHRASE "CONGRAT
	6B98 6E22'			
1325	6B9A 0015	DATA	21	
1326	6B9C 06A0	BL	@WRTVCL	
	6B9E 7E58'			
1327	6BA0 1AA8	DATA	>1AA8,1D,CLRFUL	CLEAR OUT ANY FUEL REMAINING
	6BA2 000A			
	6BA4 60CC'			
1328	6BA6 0200	LI	VDPADD,1AA8	
	6BA8 1AA8			
1329	6BAA 0208	LI	R8,2	
	6BAC 0002			
1330	6BAE 0204	LI	R4,>0C00	
	6BB0 0C00			
1331	6BB2 020A	LI	R1D,FULSND	
	6BB4 3A8B			
1332	6BB6 06A0	BL	@SOUND	
	6BB8 7DEC'			
1333	6BBA 0604	TANKIT DEC	R4	
1334	6BBC 16FE	JNE	TANKIT	
1335	6BBE 0204	LI	R4,>0C00	
	6BC0 0C00			
1336	6BC2 D828	MOV B	FULPIX(R8),REGALB	
	6BC4 60F0'			
	6BC6 8351			
1337	6BC8 06A0	BL	@WRTCL	
	6BCA 7E5A'			
1338	6BCC 0001	DATA	1,REGALB	
	6BCE 8351			
1339	6BD0 0588	INC	R8	
1340	6BD2 0288	CI	R8,1D	
	6BD4 000A			
1341	6BD6 16F1	JNE	TANKIT	
1342	6BD8 0580	INC	VDPADD	
1343	6BDA 0280	CI	VDPADD,1AB2	
	6BDC 1AB2			
1344	6BDE 1303	JEQ	TNKFUL	
1345	6BE0 0208	LI	R8,2	
	6BE2 0002			
1346	6BE4 10EA	JMP	TANKIT	

1347	6BE6 020A	TNKFUL	LI	R10,MSGEXT	DISPLAY FUEL TANKS
	6BE8 6F9D				
1348	6BEA 06AD		BL	@SETGRM	FULL MSG
	6BEC 6E86'				
1349	6BEE 06AD		BL	@SUBREF	GIVE FUEL AND DO 3 FUEL INITS,
	6BFO 6F28'				
1350	6BF2 06AD		BL	@PAUSES	DELAY FOR 2 SECOND
	6BF4 6E32'				
1351	6BF6 020A		LI	R10,MSGBON	DISPLAY BONUS
	6BF8 6FDD				
1352	6BFA 06AD		BL	@SETGRM	POINTS REWARDED MSG
	6BFC 6E86'				
1353	6BFE 06AD		BL	@PAUSES	DELAY FOR 2 SECOND
	6C00 6E32'				
1354	6C02 D1E0		MOV B	TUNPAG,R7	GET CURRENT TUNNEL SCENERY SUC
	6C04 838B				
1355	6C06 0987		SRL	R7,8	PUT IN LOWER BYTE
1356	6C08 0287		CI	R7,3	1,2,OR 3/4?
	6C0A 0003				
1357	6C0C 1A02		JL	LOAD12	IT'S 1 OR 2
1358	6C0E 0207		LI	R7,3	IT'S 3/4, SO MAKE IT 3
	6C10 0003				
1359	6C12 0A17	LOAD12	SLA	R7,1	1,2,3 -----> 2,4,6 SETS OF 500
1360	6C14 C820	FULREW	MOV	H0050,POINTS	GIVE 1000,2000, OR 3000 POINTS
	6C16 601C'				
	6C18 83BA				
1361	6C1A 06AD		BL	@SPECSC	BONUS POINTS
	6C1C 7D5C'				
1362	6C1E 0607		DEC	R7	POINT SETS COMPLETED?
1363	6C20 16F9		JNE	FULREW	NOT YET
1364	6C22 020A		LI	R10,MSGXIT	DISPLAY EXIT
	6C24 6FBD				
1365	6C26 06AD		BL	@SETGRM	TUNNEL MSG
	6C28 6E86'				
1366	6C2A 06AD		BL	@PAUSES	DELAY FOR 2 SECOND
	6C2C 6E32'				
1367	6C2E D820		MOV B	H02,MOTION	RESTORE MOTION AGAIN
	6C30 6006'				
	6C32 837A				
1368	6C34 1037		JMP	JUMPC0	CONTINUE
1369	6C36 1038	JMREF1	JMP	N0REF1	
1370	6C38 1021	JMRFO1	JMP	REF01	
1371	6C3A 9820	CHKH80	CB	YXL0C1+0,H80	SHIP OUT OF TUNNEL YET?
	6C3C 8390				
	6C3E 604C'				
1372	6C40 1428		JHE	REF02	NOT YET, SO RE-DISPLAY TUNNEL
1373	6C42 9820		CB	SCRPNT,H0A	FUEL BELOW QUARTER TANK?
	6C44 83BE				
	6C46 600A'				
1374	6C48 1408		JHE	EXIT0K	YES, SO SHIP HAS GOT TO REFUEL
1375	6C4A D820		MOV B	H01,REFFLG	SET RE-FUELING FLAG
	6C4C 6007'				
	6C4E 83B2				
1376	6C50 020A		LI	R10,MSGREF	PUT UP THE
	6C52 6F5D				
1377	6C54 06AD		EL	@SETGRM	REFUELING MSG
	6C56 6E86'				
1378	6C58 1025		JMP	JUMPC0	CONTINUE
1379	6C5A D820	EXIT0K	MOV B	H00,REFFLG	RESET REFUELING FLAG
	6C5C 6008'				

1380	BC5E 83B2 BC60 9820 BC62 838B BC64 6004'		CB	TUNPAG,H04	DOUBLE TUNNEL FLOWN THROUGH SU
1381	BC66 1A03		JL	NOTUN4	NOT AT THIS TIME
1382	BC68 D820 BC6A 6006' BC6C 838B		MOV B	H02,TUNPAG	POINT TO PREVIOUS OF DOUBLE TU
1383	BC6E 8820 BC70 6007' BC72 838B	NOTUN4	AB	H01,TUNPAG	INCREASE TUNNEL SUCCESS FLAG F
1384	BC74 06A0 BC76 6E22'		BL	@SPSUB	EXECUTE SPEECH PHRASE "NICE FL
1385	BC78 0016		DATA	22	
1386	BC7A 106C		JMP	NOREF2	START UP ATTACK WAVE - 1ST PUT
1387	BC7C 9820 BC7E 8390 BC80 604C'	REF01	CB	YXLOC1+0,H80	SHIP INTO TUNNEL YET?
1388	BC82 1A10		JL	JUMPC0	NOT YET, SO CONTINUE W/O ATTAC
1389	BC84 D820 BC86 6006' BC88 838B		MOV B	H02,REFFLG	SHIP IN THE TUNNEL, SO SET REF
1390	BC8A 020A BC8C 3A19		LI	R10,REWSND	EXECUTE TUNNEL
1391	BC8E 06A0 BC90 7DEC'		BL	@SOUND	ENTRY SOUND
1392	BC92 9820 BC94 838B BC96 6005'	REF02	CB	REFFLG,H03	IN TUNNEL AND REFUELED ALREADY
1393	BC98 1601		JNE	REF2A	NO
1394	BC9A 1004		JMP	JUMPC0	CONTINUE - W/O ATTACKING STILL
1395	BC9C 020A BC9E 6F7D	REF2A	LI	R10,MSGTUN	DISPLAY IN
1396	BCA0 06A0 BCA2 6E86'		BL	@SETGRM	TUNNEL MSG
1397	BCA4 0460 BCA6 6DD8'	JUMPC0	B	@CONTON	CONTINUE - W/O ATTACKING STILL
1398	BCA8 D220 BCAA 83BF	NOREF1	MOV B	MSGFLG,R8	ANY MSG TO DISPLAY?
1399	BCAC 131E		JEQ	BRATTK	NO, SO GO PROCESS SHIP LOGIC IF
1400		***	MOV B	MSGFLG,R8	GET MSGFLG AS A COUNTER
1401	BCAE 09D8		SRL	R8,13	5,4,3,2,1,0?
1402	BCB0 1803		JOC	G0T31	GOT 5 OR 3 OR 1
1403	BCB2 06A0 BCB4 6E6E'		BL	@SUBBLK	GOT 4 OR 2 OR 0, SO BLANK OUT TH
1404	BCB6 1014		JMP	INCFLG	CONTINUE
1405	BCB8 9820 BCBA 838E BCBC 6005'	G0T31	CB	ATKFLG,H03	ATTACK WAVE GREATER THAN 1,2,3?
1406	BCBE 1803		JH	ALM567	YES
1407	BCC0 020A BCC2 398D		LI	R10,SND123	GET SOUND FOR ATTACK 1,2,3
1408	BCC4 1009		JMP	ALM123	
1409	BCC6 9820 BCC8 838E BCCA 6004	ALM567	CB	ATKFLG,H04	
1410	BCCC 1303		JEQ	ALM4	
1411	BCC E 020A BCD0 3948		LI	R10,SND567	EXECUTE THE
1412	BCD2 1002		JMP	ALM123	

1413	BCD4 020A	ALM4	LI	R10,SND4	
	BCD6 39C7				
1414	BCD8 06A0	ALM123	BL	@SOUND	ALARM SOUND
	BCDA 7DEC'				
1415	BCDC 06A0		BL	@SUBMSG	GO DISPLAY THE MSG AGAIN
	BCDE 6E74'				
1416	BCE0 7820	INCFLG	SB	H04,MSGFLG	DECREASE MSG FLAG COUNTER
	BCE2 6004'				
	BCE4 83BF				
1417	BCE6 1678		JNE	CONTON	CONINUE(NO ATTACKING YET)
1418	BCE8 1069		JMP	EXPINT	CONTINUE TO NEXT ATTACK WAVE
1419	BCEA D2A0	BRATTK	MOV B	ATKFLG,R10	ANY ATTACKING GOING ON?
	BCEC 838E				
1420	BCEE 1374		JEQ	CONTON	NO, SO CONTINUE
1421	BCF0 0420		BLWP	@RANDOM	YES, SO GET RANDOM NUMBER RND
	BCF2 7D3C'				
1422	BCF4 094A		SRL	R10,4	REGISTER 10 HAS RANDOM #0 - 63
1423		***			
1424		***			
1425		***			
1426	BCF6 04C4		CLR	R4	CLEAR VECTOR ADDR
1427	BCF8 D820		MOV B	ATKFLG,REG4LB	GET ATTACK WAVE FLAG
	BCFA 838E				
	BCFC 8345				
1428	BCFE 0A14		SLA	R4,1	ADJUST FOR WORD TABLE OFF
1429	BD00 C124		MOV	TABLE7(R4),R4	GET JUMP VECTOR
	BD02 62D0'				
1430	BD04 0694		BL	*R4	BRANCH TO VECTOR, PROCESS
1431		***			
1432		***	CHECK	HERE TO BRING IN NEW ATTACK WAVE/INITIALIZE	
1433		***			
1434	BD06 C120	GOBACK	MOV	POINTS,R4	ANY POINTS JUST SCORED?
	BD08 83BA				
1435	BD0A 1302		JEQ	CHKR7	NO, SO CONTINUE
1436	BD0C 06A0		BL	@SCORE	YES, SO GO ADD POINTS IN TO SC
	BD0E 7D60'				
1437	BD10 C1C7	CHKR7	MOV	R7,R7	ALL SHIPS DESTROYED?
1438	BD12 1660		JNE	CONTIN	NO, CONTINUE
1439	BD14 04C4		CLR	R4	CLEAR TABLE POINTER
1440	BD16 8820		AB	H01,ATKSET	INCREASE ATTACK FLAG TABLE POI
	BD18 6007'				
	BD1A 83B3				
1441	BD1C D120		MOV B	ATKSET,R4	
	BD1E 83B3				
1442	BD20 0984		SRL	R4,8	
1443	BD22 D820		MOV B	ATKFLG,REG8LB	SAVE ATTACK FLAG
	BD24 838E				
	BD26 834D				
1444	BD28 D824		MOV B	ATFGTB(R4),ATKFLG	GET NEXT ATTACK-WAVE NUMBER FR
	BD2A 616D'				
	BD2C 838E				
1445	BD2E 9820		CB	SCRPNT,H0A	FUEL BELOW QUARTER TANK?
	BD30 83BE				
	BD32 600A'				
1446	BD34 140F		JHE	NOREF2	NOT YET, SO DON'T GO INTO REFU
1447	BD36 D820		MOV B	H01,REFFLG	SET REFUELING FLAG
	BD38 6007'				
	BD3A 83B2				
1448	BD3C 020A		LI	R10,MSGREF	PUT UP THE
	BD3E 6F5D				

1449	BD40 06A0		BL	@SETGRM	RE-FUELING MSG
	BD42 6E86'				
1450	BD44 020A		LI	R10,CHMSND	EXECUTE THE CHIME
	BD46 3A36				
1451	BD48 06A0		BL	@SOUND	START UP REFUELING CYCLE SOUND
	BD4A 7DEC'				
1452	BD4C 06A0		BL	@SPSUB	SAY SPEECH PHRASE "WARNING ...
	BD4E 6E22'				
1453	BD50 000E		DATA	14	TIME TO REFUEL"
1454	BD52 1042		JMP	CONTON	CONTINUE
1455	BD54 D820	NOREF2	MOVB	HFF,CLOCK1	SET CLOCK INTERVAL TIMER-COME
	BD56 6021'				
	BD58 83AF				
1456	BD5A 9820		CB	ATKSET,H10	ATTACK FLAG SET NUMBER IN NORM
	BD5C 83B3				
	BD5E 601B'				
1457	BD60 1A1B		JL	NOCYC4	YES, SO CONTINUE AS IS
1458	BD62 9820		CB	ATKSET,H12	ATTACK FLAG SET TO MIDDLE OF S
	BD64 83B3				
	BD66 6039'				
1459	BD68 1608		JNE	NOAB01	NO, SO DON'T SCREW UP ATKSET N
1460	BD6A 0420		BLWP	@RANDOM	RANDOMIZE
	BD6C 7D3C'				
1461	BD6E 099A		SRL	R10,9	0 OR 1
1462	BD70 C28A		MOV	R10,R10	50% PROBABILITY
1463	BD72 1603		JNE	NOAB01	
1464	BD74 7820		SB	H01,ATKSET	RANDOM NUMBER OF ATTACKS HERE
	BD76 6007'				
	BD78 83B3				
1465	BD7A 9820	NOAB01	CB	ATKSET,H13	ATTACK FLAG SET PAST ALL RANGE
	BD7C 83B3				
	BD7E 603A'				
1466	BD80 1A1D		JL	EXPINT	NOT YET:GOT GAME CYCLE INTERM,
1467	BD82 D820		MOVB	H03,HITNUM	SET HIT # BACK TO 3 AGAIN FOR
	BD84 6005'				
	BD86 83AE				
1468	BD88 D820		MOVB	HFF,ATKSET	RE-INIT ATTACK WAVE FLAG TABLE
	BD8A 6021'				
	BD8C 83B3				
1469	BD8E D820		MOVB	H6D,MSGFLG	INIT MSG FLAG NUMBER
	BD90 6044'				
	BD92 83BF				
1470	BD94 04C7		CLR	R7	SET ATTACK INIT FLAG
1471	BD96 10BC		JMP	CHKR7	START GAME CYCLE OVER AGAIN
1472	BD98 9820	NOCYC4	CB	ATKFLG,REG8LB	SAME ATTACK WAVE STILL?
	BD9A 838E				
	BD9C 834D				
1473	BD9E 1601		JNE	EXPSTR	NO, SO GET SPEECH AND MSG
1474	BDA0 1009		JMP	NOWARN	DON'T INIT ATTACK WAVE YE
1475	BDA2 C1A0	EXPSTR	MOV	SPADR,R6	ANY SPEECH EXECUTING?
	BDA4 8398				
1476	BDA6 1606		JNE	NOWARN	YES, SO SKIP SPEECH
1477	BDA8 D1A0		MOVB	ATKFLG,R6	
	BDAA 838E				
1478	BDAC 0986		SRL	R6,8	1,2,3,4,5,6,7
1479	BDAE D826		MOVB	SAYTAB(R6),SPADR+1	GET SPEECH INDEX NUMBER F
	BDB0 60D6'				
	BDB2 8399				
1480	BDB4 D820	NOWARN	MOVB	H6D,MSGFLG	SET MSG FLAG TO DISPLAY A
	BDB6 6044'				

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1481 6DB8 83BF
1481 6DBA 100E      JMP   CONTON      DON'T INIT ATTACK WAVE YE
1482 6DBC 04C4      EXPINT CLR   R4      COME FROM MSG FLASH OVER
1483 6DBE 0820      MOVVB ATKFLG,REG4LB GET ATTACK WAVE FLAG
      6DC0 838E
      6DC2 8345
1484 6DC4 C104      MOV   R4,R4      ATTACK FLAG ZERO?
1485 6DC6 1602      JNE   NOT000     NO, SO GO ON
1486 6DC8 0204      LI    R4,1       YES, SO SET IT TO 1ST ATT
      6DCA 0001
1487 6DCC 0A14      NOT000 SLA  R4,1     ADJUST FOR WORD TABLE OFF
1488 6DCE C124      MOV   TABLE8(R4),R4 GET JUMP VECTOR
      6DD0 62E0
1489 6DD2 0694      BL    *R4        BRANCH TO VECTOR, INIT NE
1490 6DD4 06A0      CONTIN BL    @C0INCH COME BACK HERE FROM ATTACK ROUTINE,
      6DD6 721E
1491
1492
1493
1494
1495 6DD8 D120      *****
      6DDA 838D      * THE FOLLOWING DECREASES THE SHIFT COUNT(INCREASES THE *
1496 6DDC 0984      * PIXEL INCREMENTS) AND VV ACCORDING TO INCSTP VALUE *
1497 6DDE 0284      *****
      6DE0 001D      CONTON MOVVB INCSTP+1,R4      GET SPEED COUNT(LEFT/RIGH
1498 6DE2 1A04      SRL   R4,8       PUT IN LOW BYTE
1499 6DE4 0284      CI    R4,29      NEED ONLY -2 AND 0 - 24 V
      6DE6 00FE      JL    GETSHT     0.K. ...WITHIN 0 - 12
1500 6DE8 1301      CI    R4,>00FE   -2 VELOCITY?
1501 6DEA 1012      JEQ   GETSHT     THAT'S 0.K., TOO
1502 6DEC 0224      GETSHT JMP   INCSTA     NO CHANGE IN SCREEN SCROL
      6DEE 0002      AI    R4,2       ADD IN TABLE ADJUSTMENT(0
1503 6DF0 0244      ANDI  R4,>001E   SKIP ODD NUMBER VELOCITIE
      6DF2 001E
1504 6DF4 0914      SRL   R4,1       ADJUST FOR TABLE(0,1,2 ..
1505 6DF6 D824      MOVVB SH1TAB(R4),SHIFT1+1 PUT CORRESPONDING VALUE I
      6DF8 628C
      6DFA 83A1
1506 6DFC D824      MOVVB SH2TAB(R4),SHIFT2+1 PUT CORRESPONDING VALUE I
      6DFE 629C
      6E00 83A3
1507 6E02 0284      CI    R4,3
      6E04 0003
1508 6E06 1A08      JL    NOSHFT
1509 6E08 0284      CI    R4,11
      6E0A 0008
1510 6E0C 1806      JH    MOVEST
1511 6E0E 1005      JMP   MOVEST
1512 6E10 06C4      INCSTA SWPB  R4
1513 6E12 D104      MOVVB R4,R4
1514 6E14 1104      JLT   NOSHFT
1515 6E16 06A0      BL    @STARMV
      6E18 6FA6
1516 6E1A 06A0      MOVEST BL    @STARMV
      6E1C 6FA6
1517 6E1E 0460      NOSHFT B     @LOOP01      CONTINUE W/ MAIN PROGRAM
      6E20 641A
1518 6E22
1519
1520
*****
*****

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1521 *****
1522 6E22
1523 *****
1524 * SUBROUTINE TO SET UP INDEX *
1525 * TO GROM SPEECH DATA *
1526 *****
1527 6E22 C820 SPSUB MOV SPADR,SPADR ANY SPEECH CURRENTLY EXECUTIN
      6E24 8398
      6E26 8398
1528 JNE ITSSPK YES, SO GET OUT
1529 6E28 1602 MOV *R11,SPADR PUT SPEECH PHRASE INDEX IN L0
      6E2A C818
      6E2C 8398
1530 6E2E 05CB ITSSPK INCT R11 RETURN NEXT INSTRUCTION PAST
1531 6E30 045B B *R11 RETURN
1532 6E32
1533 *****
1534 * DELAY 2 SECOND SUBROUTINE *
1535 *****
1536 6E32 D820 PAUSES MOV B H00,TIMER
      6E34 6008'
      6E36 8379
1537 6E38 9820 WASTE1 CB TIMER,H78
      6E3A 8379
      6E3C 6046'
1538 6E3E 1AFC JL WASTE1
1539 6E40 045B B *R11
1540 6E42
1541 *****
1542 * READ IN TWO SHIP SPRITES *
1543 *****
1544 ***READYX MOV R11,R8 SAVE RETURN LINKAGE
1545 *** BL @RDVCL READ IN SAB'S FOR TWO SHIP SPRI
1546 *** DATA >1B00,8,YXLOC1
1547 *** B *R8
1548 6E42
1549 *****
1550 * GET ATTACKING SPRITE SHIPS INTO CPURAM *
1551 * BUFFER BEFORE DREAD BRANCH IS TAKEN *
1552 *****
1553 6E42 0200 SETVDP LI VDPADD,1B08 READ IN ALL SPRITES INTO CPURA
      6E44 1B08
1554 6E46 0201 LI RLOC,TEMPOD READ BUFFER
      6E48 8300
1555 6E4A 0203 LI WLOC,TEMPOD WRITE BUFFER THE SAME
      6E4C 8300
1556 6E4E C0AD MOV SABCNT,RCOUNT GET # OF BYTES TO BE READ IN
      6E50 83AC
1557 6E52 045B B *R11 RETURN TO CALLER
1558 6E54
1559 *****
1560 * DISPLAY VERTICAL LIFT NUMBER *
1561 * WRITE LOCATION(WLOC) PRE-LOADED *
1562 *****
1563 ***LIFTIT MOV R11,R4 SAVE RETURN LINKAGE
1564 *** LI VDPADD,1AF1 SCREEN VDP LOCATION OF LIFT NU
1565 *** LI WCOUNT,1 WRITE ONLY ONE BYTE
1566 *** BL @WRITE WRITE THE NUMBER(1,2,3) ON THE
1567 *** B *R4 RETURN TO CALLER
1568 6E54
1569 *****

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1570      *** LOAD IN COLORS FOR TOP AND MIDDLE PNT *
1571      *****
1572      6E54 C28B      SUBCOL  MOV  R11,R10
1573      6E56 0200      LI      VDPADD, >2000
1574      6E58 2000      LI      WCOUNT, 8
1575      6E5A 0202      COLoad  BL      @WRITE
1576      6E60 06A0      AI      VDPADD, 8
1577      6E62 0220      CI      VDPADD, >3000
1578      6E64 0008      JNE     COLoad
1579      6E66 0280      B      *R10
1580      6E68 3000      *****
1581      6E6A 16F9      * ROUTINE THAT WILL DISPLAY ATTACK *
1582      6E6C 045A      * WARNING MESSAGES BELOW THE SCENERY *
1583      *****
1584      6E6E 020A      SUBBLK  LI      R10,MSGBLK      BLANK OUT ANY MSGS
1585      6E70 6EFD      JMP     SETGRM
1586      6E72 1009      SUBMSG  MOVb   ATKFLG,R4
1587      6E74 D120      SRL    R4,8      1,2,3,4,5,6,7
1588      6E76 838E      MOV    R4,R4      0 ALREADY?
1589      6E78 0984      JEQ   YES000      YES, SO KEEP IT ZERO
1590      6E7A C104      DEC   R4          0,1,2,3,4,5,6
1591      6E7C 1301      YES000 SLA   R4,1      0,2,4,6,8,10,12
1592      6E7E 0604      MOV   MSGTAB(R4),R10 SET GROM READ ADDR W/ ADDR OF S
1593      6E80 0A14      SETGRM MOV   R11,R9      SAVE RETURN LINKAGE HERE
1594      6E82 C2A4      LI    VDPADD, >1A80  POINT TO VDP SCREEN START ADDR
1595      6E84 62F0      LI    WCOUNT, 32     ALWAYS WRITE OUT COMPLETE ROW
1596      6E86 C248      BL    @GRMVDP       GET GROM DATA AND WRITE IT TO V
1597      6E88 0200      B     *R9           RETURN TO CALLER
1598      6E8A 1A80
1599      6E8C 0202
1600      6E8E 0020
1601      6E90 06A0      *****
1602      6E92 7E02      * CHECK FOR LASER OVER-HEATING HERE *
1603      6E94 0459      * (SOFTWARE THERMOCOUPLE) *
1604      6E96      *****
1605      6E98 C10B      SUBHOT  MOV   R11,R4      SAVE RETURN ADDR
1606      6E9A B820      AB     HD1,HOTCHK      YES, SO INCREMENT HOT CHECKER
1607      6E9C 6007      MOVb   HOTFLG,R6      GET HEAT SENSOR FLAG
1608      6E9E D1A0      SRL    R6,8      PUT IN LOW BYTE
1609      6EA0 83B8      MOVb   HITNUM,R7      GET NUMBER OF HITS CURRENTLY
1610      6EA2 0986      SRL    R7,8      GOT 1,2,3
1611      6EA4 D1E0      DEC   R7          ADJUST FOR 0 BOUNDARY - 0,1,2
1612      6EA6 83AE      MOV   R7,R9      SAVE 0,1,2 FOR LATER TABLE POI
1613      6EA8 0987      MPY   HD010,R7      R8 = 0,16,32
1614      6EAA 0607      A     R8,R6      GOT OFFSET TO HOT TIMER TABLE
1615      6EAC C247      CB    HOTCHK,HOTTIM(R6) TIME TO CHECK FOR OVER-HEATING
1616      6EAE 39E0
1617      6EB0 601A
1618      6EB2 A188
1619      6EB4 99A0

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	6EB6	83B7			
	6EB8	6189'			
1614	6EBA	1A2E	JL	NOCHOT	NOT ACCORDING TO THIS TIMER
1615	6EBC	7820	SB	SHOTCT,HOTCHK	TIME TO CHECK, SO GET HEAT FAC
	6EBE	83B6			
	6ECO	83B7			
1616	6EC2	9820	CB	HOTCHK,H01	TOO HOT? - WHEN YOUR HOT, YOUR
	6EC4	83B7			
	6EC6	6007'			
1617	6EC8	140D	JHE	ITCOOL	WHEN YOUR NOT, YOUR NOT
1618	6ECA	8820	AB	H01,HOTFLG	INCREASE HEAT FACTOR
	6ECC	6007'			
	6ECE	83B8			
1619			***	CB	HOTFLG,HOTSAY(R9)
1620			***	JNE	NOSAYH
1621			***	MOVB	LASSAY,LASSAY
1622			***	JEQ	FLSHIT
1623			***	BL	@SPSUB
1624			***	DATA	15
1625			***	MOV	SPADR,SPADR
1626			***	JNE	FLSHIT
1627			***	MOVB	H0F,SPADR+1
1628			***	SB	H01,LASSAY
1629			***	JMP	FLSHIT
1630	6ED0	9A60	CB	HOTFLG,H0TLIM(R9)	ALMOST TOO HOT?
	6ED2	83B8			
	6ED4	6186'			
1631	6ED6	160D	JNE	FLSHIT	NO, SO DON'T WARN ABOUT LASER
1632	6ED8	0204	LI	R4,>9406	DON'T SAY LASER OVERHEATED ANY
	6EDA	9406			DON'T
1633	6EDC	020A	LI	R10,MSGHOT	EXECUTE SPEECH PHRASE "LASER O
	6EDE	6EBD			EXECUTE SPEECH PHRASE "LASER O
1634			***	MOVB	H01,LASSAY
1635	6EE0	0460	B	@G0B00M	EXECUTE SPEECH PHRASE "LASER O
	6EE2	7C84'			EXECUTE SPEECH PHRASE "LASER O
1636	6EE4	D820	ITCOOL	MOVB	HOTFLG,HOTFLG
	6EE6	83B8			EXECUTE SPEECH PHRASE "LASER O
	6EE8	83B8			EXECUTE SPEECH PHRASE "LASER O
1637	6EEA	130F	JEQ	CHKGRN	EXECUTE SPEECH PHRASE "LASER O
1638	6EEC	7820	SB	H01,HOTFLG	EXECUTE SPEECH PHRASE "LASER O
	6EEE	6007'			DECREASE SAY COUNTER
	6EF0	83B8			CONTINUE
1639	6EF2	D1A0	FLSHIT	MOVB	YXLOC1+3,R6
	6EF4	8393			TOO HOT?
1640	6EF6	29A0	XOR	H0ADD,R6	
	6EF8	6024'			
1641	6EFA	D806	MOVB	R6,YXLOC1+3	
	6EFC	8393			
1642	6EFE	06A0	BL	@WRTVCL	
	6F00	7E58'			
1643	6F02	1B03	DATA	>1B03,1,YXLOC1+3	
	6F04	0001			
	6F06	8393			
1644	6F08	1005	JMP	NOTHOT	
1645	6F0A	9820	CHKGRN	CB	YXLOC1+3,H0C
	6F0C	8393			
	6F0E	600C'			
1646	6F10	1301	JEQ	NOTHOT	YES, SO GO ON
1647	6F12	10EF	JMP	FLSHIT	NO, SO GO RE-SET SHIP TO GREE
1648	6F14	04E0	NOTHOT	CLR	RE-SET LASER SHOT AND HOT CHEC

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1649 6F16 83B6
1649 6F18 0454 NOCHOT B *R4 RETURN TO CALLER
1650 6F1A
1651 *****
1652 * SUBROUTINE THAT STOPS AUTO-MOTION *
1653 * OF FIRST TWO SHIP SPRITES *
1654 *****
1655 6F1A C20B STOPM0 MOV R11,R8
1656 6F1C 06A0 BL @WRTVCL NO MOVEMENT
1657 6F1E 7E58'
1657 6F20 3C00 DATA >3C00,R,VELAK0
1658 6F22 0008
1659 6F24 631B'
1658 6F26 0458 B *R8
1659 6F28
1660 *****
1661 * SOME GAME INITIALIZATIONS *
1662 *****
1663 6F28 C10B SUBREF MOV R11,R4 SAVE RETURN LINKAGE FROM EXTRA
1664 6F2A 102B JMP EXTFUL ONLY GIVE EXTRA FUEL AND NO OTH
1665 6F2C C10B SUBINT MOV R11,R4
1666 6F2E 0200 LI VDPADD,R>1B00 READ IN SHIP SPRITES FROM GROM
1667 6F30 1B00
1667 6F32 0202 LI WCOUNT,R
1668 6F34 0009
1668 6F36 020A LI R10,SABSH1
1669 6F38 6D02
1669 6F3A 06A0 BL @GRMVDP
1670 6F3C 7E02'
1670 6F3E 06A0 BL @STOPM0 ZERO OUT AUTO-MOTION
1671 6F40 6F1A'
1671 6F42 D820 MOV B HD2,MOTION TWO SPRITES IN MOTION NOW
1672 6F44 600B'
1672 6F46 837A
1672 6F48 04E0 CLR INC SHP RE-INIT TO NO MOVEMENT FOR SHIP
1673 6F4A 838C
1673 6F4C 04E0 CLR SHOTCT RE-INIT SHOTCT AND HOTCHK
1674 6F4E 838B
1674 6F50 04E0 CLR POINTS RE-INIT POINTS SCORED TO ZERO
1675 6F52 838A
1675 6F54 D820 MOV B HD0,HOTFLG RE-INIT HEAT SENSOR
1676 6F56 600B'
1676 6F58 838B
1676 6F5A D820 MOV B HD0,MSGFLG RE-INIT TO PUT NO MESSAGES OUT
1677 6F5C 600B'
1677 6F5E 838F
1677 6F60 C820 MOV H000B,SHIFT1 1ST WORD SHIFT COUNT
1678 6F62 6014'
1678 6F64 83A0
1678 6F66 C820 MOV H000E,SHIFT2 2ND WORD SHIFT COUNT
1679 6F68 6018'
1679 6F6A 83A2
1679 6F6C D820 MOV B HD0,PHOTFG INIT TO NO PHOTON BOOMS SHOT YE
1680 6F6E 600B'
1680 6F70 8381
1680 6F72 06A0 BL @RDVCL READ IN SAC'S FOR TWO SHIP SPRI
1681 6F74 7E32'
1681 6F76 1B00 DATA >1B00,R,YXL0C1 INTO ITS CPU BUFFER
1682 6F78 0008
1683 6F7A 8390

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1682 6F7C D820      MOVB  H00,REFFLG      CLEAR REFUELING FLAG TO NO REFU
      6F7E 6008'
      6F80 83B2
1683      6F82'  EXTFUL  EQU  $
1684 6F82 0200      LI  VDPADD,1AA8      START OF FUEL GAGE
      6F84 1AA8
1685 6F86 0202      LI  WCOUNT,10
      6F88 000A
1686 6F8A 020A      LI  R10,GRFUEL      GROM ADDR OF SOLID FUEL CHARS
      6F8C 6D83
1687 6F8E 06A0      BL  @GRMVDP          WRITE OUT FUEL DATA TO START OV
      6F90 7E02'
1688 6F92 D820      MOVB  H10,FULCNT      INIT FUEL GAGE TIMER
      6F94 601B'
      6F96 83BC
1689 6F98 D820      MOVB  H09,FULPNT      INIT FUEL GAGE CHARACTER POINTE
      6F9A 6009'
      6F9C 83BD
1690 6F9E D820      MOVB  H14,SCRPNNT      INIT FUEL GAGE VPD SCREEN CHAR
      6FA0 603B'
      6FA2 83BE
1691 6FA4 0454      B    *R4
1692 6FAB
1693      *****
1694      * STAR MOVEMENT ROUTINE *
1695      *****
1696 6FAB C28B      STARMV  MOV  R11,R10
1697 6FA8 02E0      LWPI  FASTWS-32      WS AT >831C
      6FAA 831C
1698 6FAC 0205      LI  R5,PTLIST      LOAD START OF STAR COORDINATE
      6FAE 6070'
1699 6FB0 C1B5      STARLP  MOV  *R5+,R6      GET 1ST XY PAIR
1700 6FB2 C1C6      MOV  R6,R7          COPY XY POINT IN X REG,
1701 6FB4 0247      ANDI  R7,>00FF      MASK OFF THE Y POINT
      6FB6 00FF
1702 6FB8 0986      SRL  R6,8          RIGHT ADJUST THE POINT
1703 6FBA A1A0      A    X0FF,R6      ADD MOVEMENT OFFSET
      6FBC 83A6
1704 6FBE 0246      ANDI  R6,>00FF      MASK OFF ANY CARRY
      6FC0 00FF
1705 6FC2 C006      MOV  R6,R0          PASS THE XPOINT
1706 6FC4 C047      MOV  R7,R1          PASS THE YPOINT
1707 6FC6 0287      CI  R7,>0040
      6FC8 0040
1708 6FCA 1A03      JL  LOWERD
1709 6FCC 0208      LI  R8,>1000
      6FCE 1000
1710 6FD0 1002      JMP  TOP3RD
1711 6FD2 0208      LOWERD  LI  R8,>0800
      6FD4 0800
1712 6FD6 06A0      TOP3RD  BL  @PTADR          GET ADDR,DATA,SHIFT COUNT
      6FD8 7306'
1713 6FDA D123      MOVB  BITTBL(R3),R4      GET THE SHIFT MASK IN HIGH BY
      6FDC 605D'
1714 6FDE 5044      SZCB  R4,R1          RESET THE OLD BIT
1715 6FEO 0A14      SLA  R4,1          IF CARRY, THEN SPECIAL CASE
1716 6FE2 1804      JOC  SPCASE        JUMP IS SPECIAL CASE
1717 6FE4 F044      SOCB  R4,R1          NO SPCL CASE, SO SET THE 'STA
1718 6FE6 06A0      BL  @WRTBYT        WRTBYT RESTORES PIXEL BYTE IN
      6FE8 7338'

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1719 6FEA 1010      JMP      ENDLST      JUMP AND CHECK FOR END-OF-LIS
1720      6FEC'      SPCASE EQU      $      ENTRY POINT FOR WRAP ONE 'STA
1721 6FEC 06A0      BL      @WRTBYT      RESTORE THE ZEROED BYTE
      6FEE 7338'
1722 6FF0 C0C0      MOV     RD,R3      COPY VDP ADDRESS INTO R3
1723 6FF2 0243      ANDI   R3,>07C0     CHECK FOR BYTE AT LEFT OF SCR
      6FF4 07C0
1724 6FF6 160A      JNE    ENDLST
1725 6FF8 5020      SZCB  @BITTBL+1,R0  CLEAR OFF VDP WRITE FLAG
      6FFA 605E'
1726 6FFC 0220      AI     RD,-64+>800  DECR COLUMN ADDR & ADD 1/3 SC
      6FFE 07C0
1727      7000'      DOREAD EQU      $
1728 7000 06A0      BL      @GETBYT      FETCH THE PATTERN BYTE IT FID
      7002 731E'
1729 7004 F060      SOCB  BITTBL+7,R1  SET THE LSBIT IN THE PATTERN
      7006 6064'
1730 7008 06A0      BL      @WRTBYT      REWRITE THE PATTERN BYTE TO
      700A 7338'
1731 700C 0285      ENDLST CI      R5,ENDPTS  END OF STAR FIELD LIST??
      700E 60BC'
1732 7010 1ACF      JL     STARLP
1733 7012 0620      DEC   XOFF          ADJUST XPT OFFSET FOR LEFT MO
      7014 83A6
1734 7016 02E0      LWPI  FASTWS        RELOAD OLD WS AT >833C
      7018 833C
1735 701A 045A      B     *R10
1736 701C
1737
1738      *****
1739      * FIRE A SHOT SUBROUTINE AND THEN ERASE IT LATER SUBROUTINE*
1740      * ALSO CHECK FOR COINCIDENCE BETWEEN SHIP AND ALIEN CRAFT *
1741      *****
1741 701C 0460      JUMP15 B      @SHOTRT  RETURN IF NOT IN LIMIT
      701E 717A'
1742 7020 831C      SHOTV DATA  FASTWS-32,SHOTIN  WS AND PC FOR BLWP
      7022 7028'
1743 7024 831C      ERASV DATA  FASTWS-32,UNLINE  WS AND PC FOR BLWP
      7026 7180'
1744      7028'      SHOTIN EQU      $      ENTRY POINT TO SHOT LASER
1745 7028 0300      LIM1  0            DISABLE INTERRUPTS
      702A 0000
1746 702C 0200      LI    RD,SAL        POINT TO SAB START(FRONT OF S
      702E 1800
1747 7030 D820      MOVVB FASTWS-31,VDPWA  SET UP LOWER BYTE OF ADDR
      7032 831D
      7034 8C02
1748 7036 D800      MOVVB RD,VDPWA      SET UP HIGH BYTE + WRITE FLAG
      7038 8C02
1749 703A C000      MOV   RD,R0        WAIT FOR VDP
1750 703C D060      MOVVB VDPD,R1      GET THE Y BYTE
      703E 8800
1751 7040 0981      SRL  R1,8          RIGHT ADJUST THE Y POSITION
1752 7042 0221      AI   R1,9          ADD SPRITE CORNER OFFSET
      7044 0009
1753 7046 0281      CI   R1,>7F        CHECK RIGHT LIMIT FOR Y
      7048 007F
1754 704A 1BE8      JH   JUMP15        RETURN IF NOT IN LIMIT
1755 704C B820      AB  HD1,SHOTCT     INCREASE TIME OF LASER FIRE S
      704E 6007'
      7050 83B6

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1756 7052 C241      MOV  R1,R9          SAVE SHOT YPT
1757 7054 D020      MOVB VDPRD,R0      Y IS IN RANGE SO GET X POINT
      7056 8800
1758 7058 0980      SRL  R0,R8          RIGHT ADJUST X POINT
1759 705A C1C0      MOV  R0,R7          SAVE SHOT XPT
1760 705C 0220      AI   R0,R22        ADJUST CORNER OF SPRITE OFFSE
      705E 0016
1761 7060 06A0      BL   @PTADR        GET STARTING ADDR OF POINT
      7062 7306
1762 7064 C800      MOV  R0,ADRSAV     SAVE STARTING ADDR OF BYTE FO
      7066 83A8
1763 7068 020A      LI   R10,FIRSND    EXECUTE LASER
      706A 3867
1764 706C 06A0      BL   @SOUND        FIRE SOUND
      706E 7DEC
1765 7070 D820      MOVB, ATKFLG,ATKFLG ANY ATTACKING GOING ON?
      7072 838E
      7074 838E
1766 7076 1353      JEQ  N0ATK1        NO SO DON'T READ IN SHIP'S SA
1767                                     ***
1768                                     *** CHECK FOR HIT ON ALIEN CRAFT AND ADJUST REG2 ADDR
1769                                     *** POINTER W/ PROPER VDP LIMIT CHECK,
1770                                     *** IF A SHIP IS HIT SET FLAG IN LEFT NYBBLE OF COLOR
1771                                     *** BYTE AND SAVE ENDING ADDR FOR ERASE LINE ROUTINE
1772                                     *** ( R6 ONLY FREE REG AT THIS POINT)
1773                                     ***
1774 7078 04C8      CLR  R8            YPT 16 PIXELS OFFSET OF SHIP
1775 707A 0200      LI   R0,>1B08     READ IN ALL ALIEN SHIPS
      707C 1B08
1776 707E 0201      LI   R1,TEMPO0    READ BUFFER LOCATION IN CPURA
      7080 8300
1777 7082 C0A0      MOV  SABCNT,R2     GET # OF BYTES TO READ
      7084 83AC
1778 7086 0300      LIM1 0            DISABLE INTERRUPTS
      7088 0000
1779 708A D820      MOVB FASTWS-31,>8C02 SET UP LOWER BYTE OF ADDRESS
      708C 831D
      708E 8C02
1780 7090 C000      MOV  R0,R0        WAIT FOR VDP
1781 7092 D800      MOVB R0,>8C02     SET UP UPPER BYTE OF ADDRESS
      7094 8C02
1782 7096 C000      MOV  R0,R0        WAIT FOR VDP
1783 7098 DC60      MOVB VDPRD,*R1+   READ VDP BYTE INTO BUFFER
      709A 8800
1784 709C 0602      DEC  R2            DECREMENT COUNTER
1785 709E 15FC      JGT  R00020       AND LOOP IF NEEDED
1786 70A0 0300      LIM1 2            ENABLE INTERRUPTS
      70A2 0002
1787 70A4 04C5      CLR  R5            CLEAR POINTER TO CPURAM
1788 70A6 06C9      SWPB R9           PUT SHOT YPT IN HIGH BYTE
1789 70A8 D2A0      MOVB ATKFLG,R10   GET ATTACK FLAG
      70AA 838E
1790 70AC 097A      SRL  R10,R7       ADJUST POINTER TO TABLE
1791 70AE 022A      AI   R10,-2       ADJUST POINTER TO TABLE
      70B0 FFFE
1792 70B2 C2AA      MOV  SHPFUG(R10),R10 GET 1ST YPT AND 2ND YPT FOR F
      70B4 627E
1793 70B6 9825      CHKHIT CB TEMPO0+2(R5),H80 CHAR ATTACKING SHIP ALREADY A
      70B8 8302
      70BA 604C

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1794	70BC	132B		JEQ	NOHITO	YES, SO DON'T BOTHER W/ CHECK
1795	70BE	9825		CB	TEMPOD+D(R5),HCO	SHIP ALREADY GONE?
	70CD	8300				
	70C2	602C				
1796	70C4	1327		JEQ	NOHITO	YES, SO DON'T BOTHER W/ CHECK
1797	70C6	9825		CB	TEMPOD+D(R5),HDO	SHIP ALREADY GONE?
	70C8	8300				
	70CA	602E'				
1798	70CC	1323		JEQ	NOHITO	YES, SO DON'T BOTHER W/ CHECK
1799	70CE	D225		MOV B	TEMPOD(R5),R8	GET YPT OF SHIP(1ST FACTOR IN
	70DD	8300				
1800	70D2	B20A		AB	R1D,R8	ADJUST SHIP YPT W/ 1ST FACTOR
1801	70D4	9209		CB	R9,R8	SHOT'S YPT W/I SHIP'S TOP SPR
1802	70D6	1A1E		JL	NOHITO	NO HIT
1803	70D8	06CA		SWPB	R1D	GET 2ND FACTOR IN HIGH BYTE
1804	70DA	B20A		AB	R1D,R8	ADJUST SHIP YPT W/ 2ND FACTOR
1805	70DC	9209		CB	R9,R8	SHOT'S YPT W/I SHIP'S BOTTOM
1806	70DE	1B19		JH	NOHIT1	NO HIT
1807	70E0	06C7		SWPB	R7	GET SAVED SHOT XPT IN LOW BYT
1808	70E2	9947		CB	R7,TEMPOD+1(R5)	IS SHIP PAST ATTACKING SHIP?C
	70E4	8301				
1809	70E6	141B		JHE	NOATK1	YES, SO FIRE TO END OF SCREEN
1810	70E8	D1E5		MOV B	TEMPOD+3(R5),R7	YES, WE HAVE A HIT
	70EA	8303				
1811	70EC	0987		SRL	R7,R8	SET COLOR NYBBLE AS SPLAT FLA
1812	70EE	0227		AI	R7,>001D	KEEP ADDING IN SPLAT FLAG
	70F0	001D				
1813	70F2	06C7		SWPB	R7	PUT COLOR IN HIGH BYTE
1814	70F4	D947		MOV B	R7,TEMPOD+3(R5)	RESTORE NEW COLOR
	70F6	8303				
1815	70F8	D025		MOV B	TEMPOD+1(R5),R0	GET SHIP HIT XPT
	70FA	8301				
1816	70FC	0980		SRL	R0,R8	RIGHT ADJUST THE X POSITION
1817	70FE	022D		AI	R0,R8	ADJUST TO CENTER OF SHIP'S XP
	7100	0008				
1818	7102	06C9		SWPB	R9	PUT SHOT YPT BACK INTO LOW BY
1819	7104	C049		MOV	R9,R1	RESTORE SHOT'S YPT
1820	7106	06A0		BL	@PTADR	GET ENDING ADDR OF POINT(SHOT
	7108	7306'				
1821	710A	C080		MOV	R0,R2	SET NEW SHOT LINE LIMIT
1822	710C	C020		MOV	ADRS AV,R0	RESTORE SHOT'S VDP ADDR
	710E	83A8				
1823	7110	100F		JMP	SETPXL	GO DRAW SHOT LINE
1824	7112	06CA	NOHIT1	SWPB	R1D	GET 1ST FACTOR IN HIGH BYTE
1825	7114	0225	NOHITO	AI	R5,4	NEXT SPRITE'S YPT
	7116	0004				
1826	7118	8805		C	R5,SABCNT	PAST ALL ALIEN SHIPS?
	711A	83AC				
1827	711C	16CC		JNE	CHKHIT	NO KEEP CHECKING REST OF SHIP
1828	711E	C020	NOATK1	MOV	ADRS AV,R0	RESTORE SHOT'S VDP ADDR
	7120	83A8				
1829	7122	0202		LI	R2,>1000	LOAD UP LIMIT FOR MIDDLE SCRE
	7124	1000				
1830	7126	0280		CI	R0,>800	CHECK ADDRESS AGAINST 1ST/2ND
	7128	0800				
1831	712A	1402		JHE	SETPXL	IF IN MIDDLE THIRD, LIMIT IS
1832	712C	0202		LI	R2,>800	LOAD LIMIT FOR SHOT IN TOP TH
	712E	0800				
1833	7130	F060	SETPXL	S0CB	HFF,R1	SET ALL BITS IN BYTE(TO MAKE
	7132	6021				


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1834 7134 06A0 SHOTLP BL @WRTBYT WRITE THE BYTE OUT
      7136 7338'
1835 7138 4020 SZC RDWMSK,R0 STRIP OFF VDP WRITE FLAG
      713A 606A'
1836 713C 0220 AI R0,R4 ADJUST ADDR TO NEXT BYTE ADJA
      713E 0040
1837 7140 8080 C R0,R2 PAST RIGHT EDGE LIMIT?
1838 7142 1AF8 JL SHOTLP OK, SO KEEP SHOT GOING
1839 7144 D820 MOVB HD1,SHTFLG ALL DONE, SO SET SHOT FLAG FO
      7146 6007'
      7148 839F
1840 714A D020 MOVB ATKFLG,R0 ANY ATTACKING GOING ON?
      714C 838E
1841 714E 1315 JEQ SHOTRT NO SO DON'T WRITE OUT NEW SHI
1842 7150 0200 LI R0,>1B08 READ IN ALL ALIEN SHIPS
      7152 1B08
1843 7154 C0A0 MOV SABCNT,R2 RESTORE WRITE/READ BYTE COUNT
      7156 83AC
1844 7158 0201 LI R1,TEMPOD WRITE BUFFER LOCATION IN CPUR
      715A 8300
1845 715C 0300 LIMIT 0 DISABLE INTERRUPTS
      715E 0000
1846 7160 D820 MOVB FASTWS-31,>8C02 SET UP LOWER BYTE OF ADDRESS
      7162 831D
      7164 8C02
1847 7166 C000 MOV R0,R0 WAIT FOR VDP
1848 7168 0260 ORI R0,>4000 SET UP VDP WRITE FLA4
      716A 4000
1849 716C D800 MOVB R0,>8C02 SET UP UPPER BYTE OF ADDRESS
      716E 8C02
1850 7170 C000 MOV R0,R0 WAIT FOR VDP
1851 7172 D831 W00020 MOVB *R1+,VDPWD READ VDP BYTE INTO BUFFER
      7174 8C00
1852 7176 0602 DEC R2 DECREMENT COUNTER
1853 7178 15FC JGT W00020 AND LOOP IF NEEDED
1854 717A 0300 SHOTRT LIMIT 2 ENABLE INTERRUPTS
      717C 0002
1855 717E 0380 RTWP RETURN TO CALLER
1856 ***
1857 *** ERASE LINE PREVIOUSLY DRAWN
1858 ***
1859 7180' UNLINE EQU $
1860 7180 0300 LIMIT 0
      7182 0000
1861 7184 D060 MOVB SHTFLG,R1 IS FLAG SET(ZERO OR ONE) TO E
      7186 839F
1862 7188 1315 JEQ ERASRT NO, SO RETURN
1863 718A 04C1 CLR R1 YES, SO SET ALL BITS IN BYTE
1864 718C 0202 LI R2,>1000 LOAD INITIAL LIMIT FOR MIDDLE
      718E 1000
1865 7190 C020 MOV ADRSV,R0 GET STARTING BYTE OF LINE DRA
      7192 83A8
1866 7194 0280 CI R0,>800 CHECK WHICH THIRD SHOT IS IN
      7196 0800
1867 7198 1402 JHE ERASLP JUMP IF SHOT IS IN MIDDLE THI
1868 719A 0202 LI R2,>800 SET LIMIT FOR UPPER THIRD
      719C 0800
1869 719E' ERASLP EQU $
1870 719E 06A0 BL @WRTBYT WRITE OUT THE BYTE(ERASE THE
      71A0 7338'

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1871 71A2 4020          SZC  RDWMSK,R0          STRIP OFF THE VDP WRITE FLAG
      71A4 606A'
1872 71A6 0220          AI   RD,R4          NEXT ADJACENT BYTE
      71A8 0040
1873 71AA 8080          C    RD,R2          PAST THE RIGHT EDGE LIMIT?
1874 71AC 1AF8          JL   ERASLP         NO KEEP ERASING THE LINE
1875 71AE D820          MOVB H0D,SHTFLG    RESET FLAG FOR NON-ERASE
      71B0 6008'
      71B2 839F
1876 71B4 0300  ERASRT  LIM1 2
      71B6 0002
1877 71B8 0380          RTWP          RETURN TO CALLER
1878 71BA
1879
1880 *****
1881 * THIS SUBROUTINE CHECKS FOR COINCIDENCE *
1882 * BETWEEN THE SHIP SPRITE AND SCENERY *
1883 *****
1883 71BA C28B  COINCK  MOV  R1,R10          SAVE RETURN ADDR
1884 71BC 02E0          LWPI  FASTWS-32
      71BE 831C
1885 71C0 04C5          CLR  R5          SET TABLE POINTER
1886 71C2 9820          CB   YXL0C1+0,R71  UPPER-LEFT SPRITE(16 PIXELS OFFS
      71C4 8390
      71C6 6045'
1887 71C8 1A16          JL   RETJOY       NO, SO DON'T CHECK STARS OR YOU
1888 71CA D020  MORCOI  MOVB  YXL0C1+1,R0      GET XPT OF UPPER LEFT CORNER OF
      71CC 8391
1889 71CE D060          MOVB  YXL0C1+0,R1  GET YPT OF UPPER LEFT CORNER OF
      71D0 8390
1890 71D2 B025          AB   COINX(R5),R0  ADD IN COIN OFFSET TO YPT
      71D4 6104'
1891 71D6 B065          AB   COINY(R5),R1  ADD IN COIN OFFSET TO XPT
      71D8 60FA'
1892 71DA 0980          SRL  RD,R8          CLEAR AND PLACE IN LOW BYTE
1893 71DC 0981          SRL  R1,R8          CLEAR AND PLACE IN LOW BYTE
1894 71DE 06A0          BL   @PTADR        R1=BYTE AT VDP ADDR,R3=POINTER T
      71E0 7306'
1895 71E2 0241          ANDI  R1,>FF00      CLEAR TO HIGH BYTE ONLY
      71E4 FF00
1896 71E6 0A13          SLA  R3,R1          WORD BOUNDARY FOR BIT MASK TABLE
1897 71E8 2063          COC  MSKSCN(R3),R1  COMPARE BIT IN CHAR W/ BIT IN SP
      71EA 60BC'
1898 71EC 1307          JEQ  BRB00M        SAME, SO COIN DETECTED, GO BLOW
1899 71EE 0585          INC  R5          NOT THE SAME BIT SET, SO TRY NEX
1900 71F0 0285          CI   R5,R0        DONE CHECKING ALL BIT SPOTS IN S
      71F2 000A
1901 71F4 16EA          JNE  MORCOI        NO, SO KEEP CHECKING MORE BIT P
1902 71F6 02E0  RETJOY  LWPI  FASTWS
      71F8 833C
1903 71FA 045A          B    *R10          YES, SO RETURN TO SCAN - NO CRA
1904 71FC 02E0  BRB00M  LWPI  FASTWS
      71FE 833C
1905 7200 0204          LI   R4,>940A      PRE-LOAD CHAR AND COLOR FOR EXPL
      7202 940A
1906 7204 020A          LI   R10,MSGSCN   PRE-LOAD CRASH W/ GROUND MSG
      7206 6E9D
1907 7208 9820          CB   REFFLG,H02   ANY REFUELING GOING ON IN THE TU
      720A 8382
      720C 6006'
1908 720E 1A05          JL   GR0COL        NO

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1909 7210 06A0          BL   @SPSUB          EXECUTE SPEECH PHRASE "PILOT ERR
      7212 6E22'
1910 7214 0017          DATA 23          SHIP LOST"
1911 7216 020A          LI   R10,MSGWAT      YES, SO GET CRASH W/ TUNNEL MSG
      7218 6FFD
1912 721A 0460 GROCOL  B   @G0B00M      EXPLODE !!!
      721C 7C84'
1913 721E
1914
1915 *****
1916 * SUBROUTINE THAT CHECKS COINCIDENCE W/ YOUR SHIP AND ATTAC
1917 *****
1917 721E C288 COINCH  MOV  R11,R10
1918 7220 06A0          BL   @RDVCL          READ IN SAB'S FOR YOUR TWO SHI
      7222 7E32'
1919 7224 1800          DATA >1B00,8,YXL0C1 INTO ITS CPU BUFFER
      7226 0008
      7228 8390
1920 722A D1A0          MOVVB ATKFLG,R6      ANY ATTACKING GOING ON?
      722C 838E
1921 722E 1366          JEQ  BACKON         NO, NOT YET SO DON'T CHECK COI
1922 7230 06A0          BL   @SETVDP        SET UP SPRITES TO BE READ IN B
      7232 6E42'
1923 7234 D1A0          MOVVB PHOTFG,R6     PHOTON BOMB ALREADY SHOT?
      7236 83B1
1924 7238 1302          JEQ  NOBOM1        NO, NOT AT THIS TIME
1925 723A 0222          AI   RCOUNT,4   YES, SO READ IN ITS SAB ALSO
      723C 0004
1926 723E 06A0 NOBOM1  BL   @READ         READ THE SPRITES INTO BUFFER
      7240 7E38'
1927 7242 9820          CB   TEMPO0+0,H0D  EXPL SPRTS STILL IN( ATK SHIP
      7244 8300
      7246 602E'
1928 7248 1359          JEQ  BACKON         YES, SO DON'T CHECK INIT
1929 724A 04C6          CLR  R6            CLEAR POINTER INTO RAM
1930 724C D120          MOVVB YXL0C1+1,R4  GET FRONT OF SHIP'S XPT
      724E 8391
1931 7250 D160          MOVVB YXL0C1+0,R5  GET FRONT OF SHIP'S YPT
      7252 8390
1932 7254 0984          SRL  R4,8         PUT XPT IN LOW BYTE
1933 7256 0985          SRL  R5,8         PUT YPT IN LOW BYTE
1934 7258 9826 MORHIT  CB   TEMPO0+2(R6),H8D IS ATTACKING SHIP ALREADY SPLA
      725A 8302
      725C 604C'
1935 725E 132C          JEQ  NOHIT2        YES, SO NO COINCIDENCE CHECK O
1936 7260 9826          CB   TEMPO0+0(R6),H0D ATTACKING SHIP GONE COMPLETELY
      7262 8300
      7264 602C'
1937 7266 1328          JEQ  NOHIT2        YES, SO NO COINCIDENCE CHECK O
1938 7268 D266          MOVVB TEMPO0+1(R6),R9 GET ATTACK SHIP'S XPT
      726A 8301
1939 726C 0989          SRL  R9,8         PUT IN LOWER BYTE
1940 726E 6244          S    R4,R9        GET DIFF OF XPT'S
1941 7270 0749          ABS  R9           GET POSITIVE DIFF OF XPT'S
1942 7272 0289          CI   R9,14       CRASH?
      7274 000E
1943 7276 1820          JH   NOHIT2        NO, NEXT ATTACK SHIP
1944 7278 D266          MOVVB TEMPO0+0(R6),R9 GET ATTACK SHIP'S YPT
      727A 8300
1945 727C 0989          SRL  R9,8         PUT IN LOW BYTE
1946 727E 6245          S    R5,R9        GET DIFF OF YPT'S

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1947	7280	0749	ABS	R9	GET POSITIVE DIFF OF YPT'S
1948	7282	0289	CI	R9,10	CRASH?
	7284	000A			
1949	7286	1B18	JH	NOHIT2	NO, NEXT ATTACK SHIP
1950	7288	D820	MOV B	H00,MOTION	STOP AUTO-MOTION
	728A	6008'			
	728C	837A			
1951	728E	0204	LI	R4,>940F	PRE-LOAD CHAR AND COLOR FOR EX
	7290	940F			
1952	7292	D1A6	MOV B	TEMPO0+2(RB),RB	GET THE CHAR THAT MADE A HIT
	7294	8302			
1953	7296	0986	SRL	R6,8	PUT CHAR IN LOWER BYTE
1954	7298	0286	CI	R6,>D0	SHIP SPRITE?
	729A	00D0			
1955	729C	1403	JHE	CHKED	NO, TRY CHECKING FOR A PHOTON
1956	729E	020A	LI	R10,MSGCOL	PRE-LOAD SHIP HIT MSG
	72A0	6E3D			
1957	72A2	1008	JMP	MSLOAD	CONTINUE
1958	72A4	0286	CHKED	CI	PHOTON SPRITE?
	72A6	00E0			
1959	72A8	1403	JHE	GOTAST	NO, WE HAVE A HIT ON A ASTERIO
1960	72AA	020A	LI	R10,MSGPHT	PRE-LOAD PHOTON HIT MSG
	72AC	6E5D			
1961	72AE	1002	JMP	MSLOAD	CONTINUE
1962	72B0	020A	GOTAST	LI	PRE-LOAD ASTERIOD HIT MSG
	72B2	6E7D			
1963	72B4	0460	MSLOAD	B	CRASH, SO GO EXPLODE !!!
	72B6	7C84'			
1964	72B8	0226	NOHIT2	AI	
	72BA	0004			
1965	72BC	8086	C	R6,RCOUNT	
1966	72BE	16CC	JNE	MORHIT	
1967	72C0	D1A0	MOV B	PHOTFG,RB	PHOTON SHOT ALREADY?
	72C2	83B1			
1968	72C4	131B	JEQ	BACKON	NO, DON'T WORRY ABOUT SHOT'S
1969	72C6	0203	LI	WLOC,TEMPO0+4	
	72C8	8304			
1970	72CA	06A0	BL	@RDVCL	READ IN SHOT'S SAB YPT,XPT
	72CC	7E32'			
1971	72CE	1B0C	DATA	>1B0C,2,TEMPO0+4	
	72D0	0002			
	72D2	8304			
1972	72D4	9820	CB	TEMPO0+5,H20	SHOT AT LEFT OF SCREEN?
	72D6	8305			
	72D8	6036'			
1973	72DA	1A05	JL	STOPPH	YES, SO STOP PHOTON
1974	72DC	9820	CB	TEMPO0+5,HF0	SHOT FAR RIGHT OF SCREEN?
	72DE	8305			
	72E0	6032'			
1975	72E2	1401	JHE	STOPPH	YES, SO STOP PHOTON
1976	72E4	100B	JMP	BACKON	DON'T STOP PHOTON SHOT YET
1977	72E6	D820	STOPPH	MOV B	STOP PHOTON
	72E8	6005'			
	72EA	837A			
1978	72EC	C820	MOV	H0000,TEMPO0+4	
	72EE	602E'			
	72F0	8304			
1979	72F2	06A0	BL	@WRITE	DELETE PHOTON SPRITE
	72F4	7E5E'			
1980	72F6	D820	MOV B	H00,PHOTFG	SET FLAG TO NO PHOTON SHOT

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1981 72F8 6008'
1982 72FA 83B1
1983 72FC 045A BACKON B *R10
1984 72FE
1985 *****
1986 * THIS IS A BLOCK MOVE ROUTINE FROM CPU TO CPU *
1987 * GENERALLY USED TO MOVE CODE FROM SLOW ROM TO FAST RAM *
1988 * R0 - START ADDRESS OF BLOCK TO BE MOVED *
1989 * R1 - DESTINATION LOAD ADDRESS *
1990 * R2 - LENGTH OF BLOCK TO MOVE *
1991 * CALLED BY: BL @INSTLP *
1992 *****
1993 72FE CC70 INSTLP MOV *R0+,*R1+ MOVE THE FIRST WORD OF BLOCK
1994 7300 0642 DECT R2 DECREMENT BLOCK LENGTH COUNTER
1995 7302 16FD JNE INSTLP IF BLOCK NOT ALL MOVED, DO NXT
1996 7304 045B RT BLOCK DONE, SO RETURN
1997 7306
1998 *****
1999 * LINE DRAWING SUM-TRACKING ALGORITHM FOR *
2000 * CONNECTING TWO POINTS. REGISTERS 0-10,12 *
2001 * ARE USED, X1,X1,Y1,Y2 ARE CPURAM WORDS *
2002 * FOR X'S AND Y'S. COLOR IS CPURAM WORD THAT *
2003 * IS 0 FOR NO COLOR AND 1 FOR COLOR(SET PIXEL *
2004 * TO NO COLOR OR COLOR. *
2005 * *
2006 * M(R5) ROW INCREMENT: +1 OR -1 *
2007 * N(R6) COLUMN INCREMENT: +1 OR -1 *
2008 * D(R7) DELTA X DISTANCE *
2009 * E(R8) DELTA Y DISTANCE *
2010 * S(R12) SUM CHECKER FOR SUBTRACTING *
2011 * XPTL(R9) X1 *
2012 * YPTL(R10) Y1 *
2013 *** *
2014 *** *
2015 * R0 TEMP XPT DISTANCE *
2016 * R1 TEMP YPT DISTANCE *
2017 * R2 SET/RESET DATA: NON-0 OR 0 *
2018 * *
2019 *****
2020 *** M EQU 5 ROW
2021 *** N EQU 6 COL
2022 *** D EQU 7 DELTA X
2023 *** E EQU 8 DELTA Y
2024 *** S EQU 12 0 OR -1 SUM-CHECKER
2025 *** XPTL EQU 9 X1
2026 *** YPTL EQU 10 Y1
2027 *****
2028 * PTCTL--POINT CONTROL SETS OR RESETS ONE PIXEL *
2029 * INPUT PARAMETERS *
2030 * R0=XPT=PIXEL DISTANCE FROM LEFT OF SCREEN *
2031 * R1=YPT=PIXEL DISTANCE FROM BOTTOM OF SCREEN *
2032 * R2=SET/RESET DATA 0=RESET NONZERO=SET *
2033 * *
2034 *****
2035 7306' PTADR EQU $
2036 7306 C0C0 MOV R0,R3 MOV X POINT TO R3
2037 7308 C101 MOV R1,R4 MOV Y POINT TO R4
2038 730A 0243 ANDI R3,>0007 SAVE BIT POSITION IN PATT BYTE

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2039 730C 0007
2039 730E 4003 SZC R3,R0 STRIP OF 3 LSB'S FROM X-POINT
2040 7310 0A30 SLA R0,R3 MPY ADJUSTED XPT BY 8
2041 7312 0864 SRA R4,R6 SAVE 2 MSBITS OF YPOINT
2042 7314 0241 ANDI R1,R>003F KEEP 6 LSBITS OF YPT:DONT SHFT
2043 7316 003F
2043 7318 F024 SOCB @0FSTBL(R4),R0 MASK IN TWO BITS
2043 731A 6065'
2044 731C A001 A R1,R0 ADDRESS OF BYTE NOW IN R0
2045 731E 0300 GETBYT LIM1 0
2046 7320 0000
2046 7322 D820 MOVB @FASTWS-31,@VDPWA
2046 7324 831D
2046 7326 8C02
2047 7328 D800 MOVB R0,@VDPWA
2047 732A 8C02
2048 732C C000 MOV R0,R0
2049 732E D060 MOVB @VDPRD,R1
2049 7330 8800
2050 7332 0300 LIM1 2
2049 7334 0002
2051 7336 045B B *R11 RETURN TO CALLER NOW
2052
2053 7338' WRTBYT EQU $
2054 7338 0300 LIM1 0
2054 733A 0000
2055 733C 0260 ORI R0,R>4000
2055 733E 4000
2056 7340 D820 MOVB @FASTWS-31,@VDPWA
2056 7342 831D
2056 7344 8C02
2057 7346 D800 MOVB R0,@VDPWA
2057 7348 8C02
2058 734A C000 MOV R0,R0
2059 734C D801 MOVB R1,@VDPWD
2059 734E 8C00
2060 7350 0300 LIM1 2
2060 7352 0002
2061 7354 045B RT
2062 7356' PTEND EQU $
2063 7356
2064 *****
2065 * FAST FIRE CHECK SUBROUTINE *
2066 *****
2067 7356 9820 FSTSUB CB YXL0C2+2,H8C ALREADY FAST FIRE1?
2067 7358 8396
2067 735A 604F'
2068 735C 1307 JEQ NOWFST YES
2069 735E 9820 CB YXL0C2+2,H9C ALREADY FAST FIRE2?
2069 7360 8396
2069 7362 6052'
2070 7364 1303 JEQ NOWFST YES
2071 7366 D820 MOVB H8C,YXL0C2+2 CHANGE TO FAST FIRE
2071 7368 604F'
2071 736A 8396
2072 736C 045B NOWFST B *R11 RETURN TO ONE OF THREE CALLER
2073 736E
2074 *****
2075 * SOUND OFF CHECK SUBROUTINE *
2076 * FOR LEFT,DNLEFT, AND UPKEFT *

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2077 *****
2078 0FFSUB MOV R11,R9 SAVE RETURN ADDR
2079 737E C24B MOV @>83CC,R10 GET SOUND LIST POINTER VDP LOCAT
      7372 83CC
2080 7374 028A CI R10,>3855 SHOT SOUND ALREADY ON?
      7376 3855
2081 7378 1404 JHE SHOTON YES, SO DON'T TURN OFF SOUNDS YE
2082 737A 020A LI R10,0FFSND TURN OFF
      737C 380F
2083 737E 06AD BL @SOUND ALL SOUNDS
      7380 7DEC
2084 7382 0459 SHOTON B *R9 RETURN TO CALLER
2085 7384
2086 *****
2087 * ROUTINE TO CHECK IF GAME HAS *
2088 * ALREADY BEGUN OR NOT *
2089 *****
2090 7384 C1CB CHKSTR MOV R11,R7
2091 7386 D820 MOVB GAMFLG,GAMFLG GAME STARTED YET?
      7388 8378
      738A 8378
2092 738C 160F JNE FIREIT YES, SO FIRE LASER SHOT
2093 738E D820 MOVB HD1,GAMFLG NO, SO SET GAME FLAG AND START U
      7390 6007
      7392 8378
2094 7394 D820 MOVB HD0,ATKSET INIT ATTACK-FLAG TABLE POINTER
      7396 6008
      7398 83B3
2095 739A D820 MOVB HD1,HITNUM TAKES ONE HIT TO DESTROY ATTACKIN
      739C 6007
      739E 83AE
2096 73A0 D820 MOVB HD0,MSGFLG SET FOR FIRST ATTACK MSG
      73A2 6044
      73A4 83BF
2097 73A6 06AD BL @SPSUB CHECK TO SAY "ALERT ... ALIEN CRA
      73A8 6E22
2098 73AA 0013 DATA 19 ADVANCING" FOT INITIAL ATTACK#0
2099 73AC 0457 FIREIT B *R7
2100 73AE
2101 *****
2102 * ROUTINE THAT CHECKS FOR JOYSTICK *
2103 *****
2104 73AE C20B CHKJOY MOV R11,R8 SAVE RETURN ADDR
2105 73B0 9820 CB KEY,H12 FIRE BUTTON PRESSED?
      73B2 8375
      73B4 6039
2106 73B6 1604 JNE CHKJYX NO, CHECK JOY'S
2107 73B8 06AD BL @CHKSTR SEE IF GAME HAS ALREADY STARTED,
      73BA 7384
2108 73BC 0420 BLWP @SHOTV YES, GO LAY LASER LINE
      73BE 7020
2109 73C0 C120 CHKJYX MOV JOYY,R4 GET JOYY,JOYX
      73C2 8376
2110 73C4 1318 JEQ CHKHD2 BOTH = ZERO SO NO JOYSTICK
2111 73C6 D120 MOVB JOYY,REG4HB GET JOYY
      73C8 8376
2112 73CA 1305 JEQ GOODJO ZERO, SO GOOD DIRECTION
2113 73CC D820 MOVB JOYX,REG4LB GET JOYX
      73CE 8377
      73D0 8345

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2114 73D2 1301      JEQ   GOODJO      ZERO, SO GOOD DIRECTION
2115 73D4 1010      JMP   CHKHO2      NEITHER ZERO SO GOT DIAGONAL
2116 73D6 B120      GOODJO AB   HO4,REG4HB  GET RID OF NEG NUMBERS
      73D8 6004'
2117 73DA B820      AB   HO4,REG4LB  GET RID OF NEG NUMBERS
      73DC 6004'
      73DE 8345
2118 73E0 5820      SZCB  HO4,REG4LB  CLEAR OUT ONE COLUMN OF BITS
      73E2 6004'
      73E4 8345
2119 73E6 B804      AB   REG4HB,REG4LB  ADD UPPER AND LOWER BYTES
      73E8 8345
2120 73EA 5120      SZCB  HFF,REG4HB  MAKE UPPER BYTE BITS VALUE OF REG
      73EC 6021'
2121 73EE 0914      SRL  R4,1        MOVE TO LOW END OF WORD(0,2,4,6 V
2122 73F0 C124      MOV  TABLE6(R4),R4  POINT TO BRANCH
      73F2 62C8'
2123 73F4 0454      B    *R4         GO MOVE MMAN
2124 73F6 0458      CHKHO2 B    *R8         NO HIT, SO RETURN OFF OF SAVED
R12125 73F8
2126 *****
2127 * JUMP VECTOR LOCATIONS FOR *
2128 * ATTACK WAVES #1 - 5 *
2129 *****
2130 73F8 0203      GOINT7 LI  WLOC,SABAK7  >CB CHARS
      73FA 6D79
2131 73FC 0208      LI   RB,MAGENT      SAME COLOR FOR SPECIAL CASE
      73FE 600D'
2132 7400 100F      JMP   G0567
2133 7402 0203      GOINT6 LI  WLOC,SABAK6  >CB CHARS
      7404 6D74
2134 7406 0208      LI   RB,DRED        SAME COLOR FOR SPECIAL CASE
      7408 6002'
2135 740A 9820      CB   ATKSET,H10     NEXT GAME CYCLE INTERMISSION IN P
      740C 83B3
      740E 601B'
2136 7410 1A07      JL   G0567          NO, SO CONTINUE AS IS
2137 7412 0203      LI   WLOC,SABAKX   >CD CHAR
      7414 6D7E
2138 7416 1004      JMP   G0567
2139 7418 0203      GOINT5 LI  WLOC,SABAK5  >CB CHARS
      741A 6D6F
2140 741C 0208      LI   RB,CYAN        SAME COLOR FOR SPECIAL CASE
      741E 6001'
2141 7420 0204      G0567 LI  R4,VELAK1    >CB CHARS
      7422 6CCA
2142 7424 103C      JMP   GOATTK
2143 7426 7426'      GOINT4 EQU  $
2144 7426 D1A0      MOVVB HITNUM,R6     GET HIT COUNT FOR TABLE POINTE
      7428 83AE
2145 742A 0986      SRL  R6,8         PUT IN LOWER BYTE(1,2,3)
2146 742C 9820      CB   CLOCK1,HFF    CLOCK NOT SET YET(>FF)?
      742E 83AF
      7430 6021'
2147 7432 1606      JNE  NOTICK        YES, SO DON'T RE-SET IT(KEEP C
2148 7434 D826      MOVVB ASTTIM(R6),CLOCK1  SET INTERVAL TIMER W/ TABLE VA
      7436 6182'
      7438 83AF
2149 743A B820      AB   CYCLE,CLOCK1  INCREASE TIME OF ASTERIOD BELT
      743C 839C

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2150	743E 83AF 7440 D1E0 7442 839C	NOTICK	MOV B	CYCLE,R7	NEXT GAME CYCLE?
2151	7444 1302		JEQ	NOCYC7	NO
2152	7446 0206 7448 0001		LI	R6,1	YES, SO SET TO BLUE COLOR
2153	744A 0A16	NOCYC7	SLA	R6,1	(2,4,6)
2154	744C C1A6 744E 62B4'		MOV	PNTLOC(R6),R6	GET PNT COLOR DATA ADDR
2155	7450 C0C6		MOV	R6,WLOC	SET IT W/ WRITE LOCATION
2156	7452 0420 7454 7024'		BLWP	@ERASV	ERASE LASER SHOT, IF ANY
2157	7456 D820 7458 6008' 745A 837A		MOV B	H00,MOTION	STOP AUTO-MOTION TEMPORARILY
2158	745C 06A0 745E 6E54'		BL	@SUBCOL	SET 2/3 PNT COLORS
2159	7460 0203 7462 6D52		LI	WLOC,SABAK4	
2160	7464 0204 7466 6CE6		LI	R4,VELAK4	
2161	7468 D820 746A 6008' 746C 8379		MOV B	H00,TIMER	
2162	746E 1017		JMP	GOATTK	
2163	7470 0203 7472 6D35	GOINT3	LI	WLOC,SABAK3	>B3 CHARS
2164	7474 0208 7476 6002'		LI	R8,DRED	SAME COLOR FOR SPECIAL CASE ONLY
2165	7478 06A0 747A 7514'		BL	@INTINT	SOME INITS
2166	747C 1010		JMP	GOATTK	
2167	747E 0203 7480 6D20	GOINT2	LI	WLOC,SABAK2	>B4 CHARS
2168	7482 06A0 7484 7514'		BL	&INTINT	SOME INITS
2169	7486 0208 7488 600A'		LI	R8,DYELL	SAME COLOR FOR SPECIAL CASE ONLY
2170	748A 1009		JMP	GOATTK	
2171	748C 0203 748E 6D0B	GOINT1	LI	WLOC,SABAK1	>B0 CHARS
2172	7490 06A0 7492 7514'		BL	@INTINT	SOME INITS
2173	7494 D820 7496 6007' 7498 838E		MOV B	H01,ATKFLG	SET ATTACK FLAG FOR SHIP ATTACK
2174	749A 0208 749C 600D'		LI	R8,MAGENT	SAME COLOR FOR SPECIAL CASE ONLY
2175	749E 0200 74A0 1B08	GOATTK	LI	VDPADD,>1B08	GET THE 5 - 7 SHIP'S SABS
2176	74A2 D0A0 74A4 838E		MOV B	ATKFLG,WCOUNT	GET ATTACK FLAG
2177	74A6 0982		SRL	WCOUNT,8	PUT FLAG IN LOW BYTE
2178	74A8 D0A2 74AA 62AC'		MOV B	SABNUM(WCOUNT),WCOUNT	GOT COUNT
2179	74AC 0982		SRL	WCOUNT,8	TO BE READ IN OR WRITTEN
2180	74AE C802 74B0 83AC		MOV	WCOUNT,SABCNT	
2181	74B2 0582		INC	WCOUNT	1 MORE FOR >D0 OF NEXT SP
2182	74B4 C283		MOV	WLOC,R10	SET GROM READ ADR

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2183 74B6 06A0          BL    @GRMVDP          SET UP SAB INFO
      74B8 7E02'
2184 74BA 0200          LI    VDPADD, >3C08
      74BC 3C08
2185 74BE C284          MOV   R4, R10          GET VELOCITY TABLE ADDR READ LOCA
2186 74C0 0602          DEC   WCOUNT
2187 74C2 06A0          BL    @GRMVDP
      74C4 7E02'
2188 74C6 9820          CB    ATKFLG, H04      ASTEROIDS?
      74C8 838E
      74CA 6004'
2189 74CC 1413          JHE   NOSPEC          YES, SO NO SPECIAL COLOR LOGIC
2190 74CE 9820          CB    HITNUM, H01     NO, ATTACKING SHIP #1-3, MORE TH
      74D0 83AE
      74D2 6007'
2191 74D4 130F          JEQ   NOSPEC          NO, SO KEEP DIFFERENT COLORS
2192 74D6 C0C8          MOV   R8, WLOC        GET SPECIAL CASE COLOR ADDR SAVED
2193 74D8 0202          LI    WCOUNT, 1
      74DA 0001
2194 74DC 0200          LI    VDPADD, >1B0B   WRITE TO COLOR BYTE ONLY
      74DE 1B0B
2195 74E0 0209          LI    R9, >1B0B
      74E2 1B0B
2196 74E4 A260          A     SABCNT, R9      GET COLOR BYTE + TO END OF SAB VD
      74E6 83AC
2197 74E8 06A0          SPECCL BL @WRITE
      74EA 7E5E'
2198 74EC 0220          AI    VDPADD, 4      NEXT SPRITE ATTACKING SHIP
      74EE 0004
2199 74F0 8240          C     VDPADD, R9     PAST END OF THIS ATTACK WAVES SAB
2200 74F2 16FA          JNE   SPECCL         NO, SO CONTINUE WRITING OUT SPEC
2201 74F4 C160          NOSPEC MOV SABCNT, R5  GET # OF BYTES READ/WRITE OF SAB
      74F6 83AC
2202 74F8 0925          SRL   R5, 2          DIVIDE BY 4 TO GET AUO-MOTION COU
2203 74FA 0225          AI    R5, 2          ADD IN 2 MORE AUTO-MOT CNTS FOR S
      74FC 0002
2204 74FE 06C5          SWPB  R5             PUT COUNT IN HIGH BYTE
2205 7500 D805          MOVB  R5, MOTION     FORCE IT INTO >837A
      7502 837A
2206 7504 D820          MOVB  H00, INITAK    INIT ATTACK INIT FLAG
      7506 6008'
      7508 838F
2207 750A D820          MOVB  H00, PHOTFG    SET TO NO PHOTON SHOTS FIRED YET
      750C 6008'
      750E 8381
2208 7510 0460          B     @CONTIN        GO BACK TO CALLER
      7512 6DD4'
2209 7514
2210
2211 *****
2212 * SOME INITS FOR GOINT1 AND GOINT2 *
2213 *****
2214 7514 0420          INTINT BLWP @RANDOM    GET RANDOM #
      7516 7D3C'
2214 7518 098A          SRL   R10, 8         # 0 - 3
2215 751A 06CA          SWPB  R10
2216 751C C80A          MOV   R10, RNDVEL    GET TABLE POINTER FOR VELS
      751E 8380
2217 7520 0204          LI    R4, VELAK1
      7522 6CCA
2218 7524 D820          MOVB  H00, TIMER     CLEAR TIMER FOR SPEED UP OF ATTAC

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7526 6008'
7528 8379
2219 752A 045B          B      *R11
2220 752C
2221 752C
2222
2223 *****
2224 * ROUTINE FOR SHIP ATTACK WAVES #1 - 3 *
2225 *****
2226 ***
2227 *** ATTACK WAVE #1 - #3 AND INIT SWOOP
2228 ***
2228 752C 06A0 CHGAK1 BL @RANALL GET R4 1 OR 0, CLR R7, CLR R5
752E 7766'
2229 7530 04E0          CLR TEMP2
7532 83A4
2230 7534 D820          MOV B ATKFLG,TEMP2+1 SAVE ATTACK FLAG IN TEMP AREA
7536 838E
7538 83A5
2231 753A 9820          CB INITAK,HFA
753C 838F
753E 6049'
2232 7540 1342          JEQ MORSH1
2233 7542 04C9          CLR R9
2234 7544 D1E0          MOV B INITAK,R7 GET SWOOP VELS NUMBER
7546 838F
2235 7548 0987          SRL R7,8 0,1,2,3 ...
2236 754A 0A17          SLA R7,1 0,2,4,6 ...
2237 754C 0200 TRYAG1 LI VDPADD,3C08
754E 3C08
2238 7550 A009          A R9,VDPADD
2239 *** LI RCOUNT,2
2240 *** LI RLOC,REG8HB
2241 7552 0203          LI WLOC,REG8HB
7554 834C
2242 7556 06A0          BL @RDCL
7558 7E34'
2243 755A 0002          DATA 2,REG8HB
755C 834C
2244 755E C208          MOV R8,R8 NO VELOCITY YET?
2245 7560 1316          JEQ GETVIL CORRECT, SO INIT IT
2246 7562 D208          MOV B R8,R8 ALL DONE W/ THIS SPRITE?
2247 7564 160F          JNE MORVL1 NO, KEEP GETTING VELS
2248 7566 C109          MOV R9,R4
2249 7568 0914          SRL R4,1
2250 756A 06A0          BL @SUBLAS YES, GET FINAL VEL
756C 7C66'
2251 756E 06A0          BL @WRITE WRITE IT FOR THAT LAST SPRITE
7570 7E5E'
2252 7572 0229          AI R9,4 GET NEXT SPRITE'S INIT VEL
7574 0004
2253 7576 8809          C R9,SABCNT LAST OF THE SPRITE INITS
7578 83AC
2254 757A 16E8          JNE TRYAG1 NO GO TRY THIS ONE
2255 *** LIM1 0
2256 *** MOV B HDO,VDPWD
2257 *** LIM1 2
2258 757C D820 NEXT1C MOV B HFA,INITAK
757E 6049'
7580 838F
2259 7582 1019          JMP NEXT1B

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2260	7584	06A0	MORVL1	BL	@SUBVLS	GET VELS
	7586	7BF8'				
2261	7588	06A0		BL	@WRITE	
	758A	7E5E'				
2262	758C	1011		JMP	NEXT1A	
2263	758E	C109	GETV11	MOV	R9,R4	
2264	7590	0914		SRL	R4,1	WAS 0,4,8,12,16 ...NOW 0,2,4,6
2265	7592	06A0		BL	@SUBFST	GET FIRST VELS
	7594	7BDA'				
2266	7596	06A0		BL	@WRITE	WRITE OUT NEW INIT VEL
	7598	7E5E'				
2267	759A	0220		AI	VDPADD,->2100	SAB LIST
	759C	DF00				
2268	759E	06A0		BL	@SUBYXS	INIT YPT,XPT AND HIGH VDP SOUN
	75A0	7B9E'				
2269	75A2	06A0		BL	@WRITE	WRITE OUT NEW SAB INIT(YPT,XPT
	75A4	7E5E'				
2270	75A6	06A0		BL	@SOUND	EXECUTE THE "SWOOP" SOUND(R10
	75A8	7DEC'				
2271	75AA	D820		MOV	H00,INITAK	
	75AC	6008'				
	75AE	838F				
2272	75B0	B820	NEXT1A	AB	H01,INITAK	
	75B2	6007'				
	75B4	838F				
2273	75B6	06A0	NEXT1B	BL	@SETVDP	SET UP SPRITES TO BE READ IN
	75B8	6E42'				
2274	75BA	06A0		BL	@READ	READ IT!!!!!!
	75BC	7E38'				
2275	75BE	04C5		CLR	R5	START W/ FIRST SPRITE
2276	75C0	0207		LI	R7,1	CLEAR FLAG: R7=1,CONTINE
	75C2	0001				
2277	75C4	04C4		CLR	R4	NO HOVERING WHEN INITING S
2278	75C6	9960	MORSH1	CB	H00,TEMPO0+0(R5)	YPT
	75C8	602C'				
	75CA	8300				
2279	75CC	1368		JEQ	NEXT01	
2280	75CE	0207		LI	R7,1	SET FLAG
	75D0	0001				
2281	75D2	9960		CB	H80,TEMPO0+2(R5)	CHAR
	75D4	604C'				
	75D6	8302				
2282	75D8	1607		JNE	N0C01	
2283	75DA	D960		MOV	H00,TEMPO0+0(R5)	YPT
	75DC	602C'				
	75DE	8300				
2284	75E0	D960		MOV	H00,TEMPO0+3(R5)	COLOR
	75E2	6008'				
	75E4	8303				
2285	75E6	105B		JMP	NEXT01	
2286	75E8	9825	N0C01	CB	TEMPO0+0(R5),H0C	YPT
	75EA	8300				
	75EC	600C'				
2287	75EE	1A09		JL	H0VDN1	
2288	75F0	9825		CB	TEMPO0+0(R5),HC4	YPT
	75F2	8300				
	75F4	6059'				
2289	75F6	1B05		JH	H0VDN1	
2290	75F8	9825		CB	TEMPO0+0(R5),H78	YPT
	75FA	8300				

2291	75FC 6046'				
2291	75FE 1804		JH	H0VUP1	
2292	7600 1005		JMP	GETHV1	
2293	7602 0204	H0VDN1	LI	R4,>0100	FORCE DOWN
	7604 0100				
2294	7606 1002		JMP	GETHV1	
2295	7608 0204	H0VUP1	LI	R4,>FF00	FORCE UP
	760A FF00				
2296	760C 9825	GETHV1	CB	TEMPO0+1(R5),HFE	CHAR
	760E 8301				
	7610 604A'				
2297	7612 1A16		JL	GETHV2	
2298	7614 C1A0		MOV	RND,R6	RESTORE RANDOM NUMBER
	7616 83AA				
2299	7618 0246		ANDI	R6,>03F0	
	761A 03F0				
2300	761C 0976		SRL	R6,7	0 - 7
2301	761E 9825		CB	TEMPO0+0(R5),H1A	YPT
	7620 8300				
	7622 605B'				
2302	7624 1A0A		JL	G0DN1	
2303	7626 9825		CB	TEMPO0+0(R5),H66	YPT
	7628 8300				
	762A 605C'				
2304	762C 1802		JH	G0UP1	
2305	762E C104		MOV	R4,R4	
2306	7630 1504		JGT	G0DN1	
2307	7632 7966	G0UP1	SB	YPTADJ(R6),TEMPO0+0(R5)	
	7634 6159'				
	7636 8300				
2308	7638 1003		JMP	GETHV2	
2309	763A 8966	G0DN1	AB	YPTADJ(R6),TEMPO0+0(R5)	
	763C 6159'				
	763E 8300				
2310	7640 8944	GETHV2	AB	R4,TEMPO0+0(R5)	YPT
	7642 8300				
2311	7644 D2A5		MOV B	TEMPO0+3(R5),R10	COLOR
	7646 8303				
2312	7648 09CA		SRL	R10,12	
2313	764A C24A		MOV	R10,R9	SAVE COUNT THAT'S NOW IN L
2314	764C 1328		JEQ	NEXT01	NO HITS SO KEEP ORIGINAL
2315	764E 9820		CB	REGALB,HITNUM	GONE YET?(R10 = 1,2,3...)
	7650 8351				
	7652 83AE				
2316	7654 1A1E		JL	GETCL1	
2317	7656 D960		MOV B	H80,TEMPO0+2(R5)	CHAR
	7658 604C'				
	765A 8302				
2318	765C 0420		BLWP	@RANDOM	GET RANDOM #
	765E 7D3C'				
2319	7660 094A		SRL	R10,4	#0 - 63
2320	7662 028A		CI	R10,48	1/4 CHANCE TO EXECUTE ANY
	7664 0030				
2321	7666 140C		JHE	NOGSHT	NOT THIS TIME
2322	7668 028A		CI	R10,32	
	766A 0020				
2323	766C 1A09		JL	NOGSHT	
2324	766E C2A0		MOV	@SPADR,R10	IS VALUE @SPADR=0
	7670 8398				
2325	7672 1606		JNE	NOGSHT	JUMP IF NOT ZERO

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2326 7674 0420          BLWP  @RANDOM          GET RANDOM # AGAIN
      7676 7D3C'
2327 7678 098A          SRL   R10,8           #0 - 3
2328 767A D82A          MOVVB SAY123(R10),SPADR+1 GET 1 OF 4 SPEECH PHRASE I
      767C 60DE'
      767E 8399
2329          7680' NOGSHT EQU  $
2330          *** MOVVB ATKFLG,R10      GET ATTACK FLAG(1,2,3)
2331          *** SRL   R10,8           PUT IN LOWER BYTE
2332 7680 C2AD          MOV  TEMP2,R10
      7682 83A4
2333 7684 0A1A          SLA  R10,1           2,4,6
2334 7686 022A          AI   R10,-2         0,2,4
      7688 FFFE
2335 768A C82A          MOV  PNTVAL(R10),POINTS  GIVE 10,20,30 POINTS
      768C 61BA'
      768E 83BA
2336 7690 1006          JMP  NEXT01
2337 7692 0A4A          GETCL1 SLA  R10,4
2338 7694 06CA          SWPB R10
2339 7696 F2A9          SOCB SETCOL(R9),R10
      7698 6161'
2340 769A D94A          MOVVB R10,TEMPO0+3(R5)  COLOR
      769C 8303
2341 769E 0225          NEXT01 AI   R5,4
      76A0 0004
2342 76A2 8805          C    R5,SABCNT        PAST NUMBER OF SPRITES TO
      76A4 83AC
2343 76A6 168F          JNE  MORSH1          NO, KEEP CHECKING
2344 76A8 06A0          BL   @WRITE
      76AA 7E5E'
2345 76AC 9820          BACK1A CB   INITAK,HFA  STILL SWOOPING?
      76AE 838F
      76B0 6049'
2346 76B2 1624          JNE  BACK1B          YES, SO GO BACK NOW
2347 76B4 0206          LI   R6,18           SET ACCELERATION TIMER
      76B6 0012
2348 76B8 D020          MOVVB CYCLE,R0       GET CYCLE GAME NUMBER
      76BA 839C
2349 76BC 0980          SRL  R0,8           PUT IN LOWER BYTE(0,1,2,3,4 ...
2350 76BE 0A10          SLA  R0,1           0,2,4,6,8 ...
2351 76C0 6180          S    R0,R6          DECREASE TIMER(SPEED UP ACC) W/
2352 76C2 1502          JGT  SPEEOK          ONLY POSITIVE VALUES
2353 76C4 0206          LI   R6,1           SET TO ONE AND HOLD
      76C6 0001
2354 76C8 9820          SPEEOK CB   TIMER,REG6LB  TIME UP YET?
      76CA 8379
      76CC 8349
2355 76CE 1A16          JL   BACK1B          NO, SO GO BACK NOW
2356 76D0 D820          MOVVB H00,TIMER     RE-INIT TIMER
      76D2 6008'
      76D4 8379
2357 76D6 0200          LI   VDPADD,3COB    SET TO ATTACK SHIPS VDP VELS
      76D8 3C08
2358 76DA 06A0          BL   @READ          READ VELS INTO BUFFER
      76DC 7E38'
2359 76DE 04C5          CLR  R5             CLEAR VELS SPRITE POINTER
2360 76E0 9825          CB   TEMPO0+1(R5),H90 VEL AT HIGHEST?
      76E2 8301
      76E4 601F'

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2361 76E6 1A0A          JL    BACK1B          YES, SO GO BACK NOW
2362 76E8 7960          SBH01V SB    HO1,TEMPO0+1(R5) INCREASE X VEL FOR THIS SPRITE
      76EA 6007'
      76EC 8301
2363 76EE 0225          AI    R5,4           NEXT SPRITE'S VEL
      76F0 0004
2364 76F2 8805          C     R5,SABCNT      END OF SPRITE VEL LIST YET?
      76F4 83AC
2365 76F6 16F8          JNE   SBH01V         NO, NOT YET
2366 76F8 06A0          BL    @WRITE         WRITE BACK THE NEW FASTER VELS
      76FA 7E5E'
2367 76FC 0460          BACK1B B    @GOBACK
      76FE 6D06'
2368 7700
2369
2370 *****
2371 * SUBROUTINE TO SET SCENERY COLOR *
2372 * AND MSG LINE CHARACTER COLORS *
2373 *****
2373 7700 C20B          SCNSUB MOV    R11,R8
2374 7702 C24A          MOV    R10,R9          SAVE COLOR DATA LOAD
2375 7704 0203          LI    WLOC,REGALB
      7706 8351
2376 7708 0202          LI    WCOUNT,1
      770A 0001
2377 770C 0200          LI    VDPADD, >3000    COLOR TABLE FOR BOTTOM 3RD OF S
      770E 3000
2378 7710 04C7          CLR   R7             LOOP COUNTER
2379 7712 06A0          SCENCL BL    @WRITE    WRITE OUT NEW COLORS
      7714 7E5E'
2380 7716 0580          INC   VDPADD         NEXT COLOR BYTE
2381 7718 0587          INC   R7             INCREASE LOOP COUNTER
2382 771A 0287          CI    R7, >0020      PAST THIS COLOR SET?(FOUR TOP C
      771C 0020
2383 771E 16F9          JNE   SCENCL         NO, NOT YET
2384 7720 04C7          CLR   R7             RE-INIT LOOP COUNTER
2385 7722 0220          AI    VDPADD, >0020  NEXT COLOR SET
      7724 0020
2386 7726 0280          CI    VDPADD, >3800   IS THAT ALL THE NECESSARY COLOR
      7728 3800
2387 772A 16F3          JNE   SCENCL         NO, NOT YET
2388 772C 094A          SRL   R10,4          PUSH OUT SOME COLOR INFO
2389 772E 026A          ORI   R10, >0010     KEEP ONLY LOWER BYTE OF INVERSE
      7730 0010
2390 7732 0200          LI    VDPADD, >3260   NOW, ZAP NEW MTNS. COLOR FOR LO
      7734 3260
2391 7736 06A0          MSGCL BL    @WRITE    WRITE OUT NEW COLOR
      7738 7E5E'
2392 773A 0580          INC   VDPADD         NEXT COLOR BYTE
2393 773C 0587          INC   R7             INCREASE LOOP COUNTER
2394 773E 0287          CI    R7, >0020      PAST THIS SET OF COLORS?
      7740 0020
2395 7742 16F9          JNE   MSGCL         NOT YET
2396 7744 04C7          CLR   R7             RE-INIT LOOP COUNTER
2397 7746 0220          AI    VDPADD, >0060  NEXT COLOR SET
      7748 0060
2398 774A 0280          CI    VDPADD, >35E0   IS THAT ALL THE NECESSARY COLOR
      774C 35E0
2399 774E 1AF3          JL    MSGCL         NO, NOT YET
2400 7750 C289          MOV   R9,R10         RESTORE COLOR DATA LOAD
2401 7752 0200          LI    VDPADD, >3570  LOCATION OF COLOR DATA FOR >AE

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2402 7754 3570
7756 06A0 AECLOR BL @WRITE WRITE OUT ONE BYTE
7758 7E5E'
2403 775A 0580 INC VDPADD
2404 775C 0587 INC R7
2405 775E 0287 CI R7,R
7760 0008
2406 7762 16F9 JNE AECLOR
2407 7764 0458 B *R8
2408 7766
2409 *****
2410 * COMMON INITS TO START UP ATTACK *
2411 * PROCESSING FOR ATTACKS #1-3,4 *
2412 *****
2413 7766 04C7 RANALL CLR R7 INIT FLAG
2414 7768 04C5 CLR R5
2415 776A 028A RANAL4 CI R10,R32
776C 0020
2416 776E 1A03 JL SETRAA
2417 7770 0204 LI R4,>0100
7772 0100
2418 7774 1002 JMP CHGYAA
2419 7776 0204 SETRAA LI R4,>FF00
7778 FF00
2420 777A 045B CHGYAA B *R11
2421 777C
2422 ***
2423 *** ATTACK WAVE #4
2424 ***
2425 777C 06A0 CHGAK4 BL @RANALL GET R4 = 1 OR 0, CLR R7, C
777E 7766'
2426 7780 06A0 BL @SETVDP READ SPRITES INTO BUFFER
7782 6E42'
2427 7784 C184 MOV R4,R6 GET >0100 OR >FF00
2428 7786 0A26 SLA R6,R2 NOW >0400 OR >FC00
2429 7788 9960 MORSH4 CB HCD,TEMP00+0(R5) YPT
778A 602C'
778C 8300
2430 778E 130A JEQ NEXTA4
2431 7790 0207 LI R7,R SET FLAG
7792 0001
2432 7794 9960 CB H80,TEMP00+2(R5) CHAR
7796 604C'
7798 8302
2433 779A 161E JNE NOC04
2434 779C D960 MOVVB HCD,TEMP00+0(R5) YPT
779E 602C'
77A0 8300
2435 77A2 103F JMP NEXT04
2436 77A4 D820 NEXTA4 MOVVB CLOCK1,CLOCK1 TIME UP ALREADY?
77A6 83AF
77A8 83AF
2437 77AA 133B JEQ NEXT04 YEP, SO NO SPECIAL
2438 77AC D965 MOVVB SABA4A+0(R5),TEMP00+0(R5) GET ORIGINAL YPT
77AE 62FE'
77B0 8300
2439 77B2 D965 MOVVB SABA4A+1(R5),TEMP00+1(R5) GET ORIGINAL XPT
77B4 62FF'
77B6 8301
2440 77B8 D965 MOVVB SABA4A+2(R5),TEMP00+2(R5) GET ORIGINAL CHAR

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	77BA	6300'			
	77BC	8302			
2441	77BE	D965	MOV	SABA4A+3(R5),TEMPO0+3(R5)	GET ORIGINAL COLOR
	77C0	6301'			
	77C2	8303			
2442	77C4	0420	BLWP	@RANDOM	
	77C6	7D3C'			
2443	77C8	094A	SRL	R10,4	#0 - 63
2444	77CA	06A0	BL	@RANAL4	SET R4 TO 1 OR 0 (NO CLR 5
	77CC	776A'			
2445	77CE	C184	MOV	R4,R6	GET >0100 OR >FF00
2446	77D0	0A26	SLA	R6,2	NOW >0400 OR >FC00
2447	77D2	B946	AB	R6,TEMPO0+0(R5)	FUDGE IN NEW YPT
	77D4	8300			
2448	77D6	1025	JMP	NEXT04	
2449	77D8	D1A5	MOV	TEMPO0+2(R5),R6	GET CURRENT CHAR
	77DA	8302			
2450	77DC	0986	SRL	R6,8	
2451	77DE	0226	AI	R6,4	NEXT CHAR
	77E0	0004			
2452	77E2	0266	ORI	R6,>00E0	NO >00 CHARS EITHER
	77E4	00E0			
2453	77E6	06C6	SWPB	R6	
2454	77E8	D946	MOV	R6,TEMPO0+2(R5)	SET NEW CHAR
	77EA	8302			
2455	77EC	9825	CB	TEMPO0+0(R5),H08	YPT
	77EE	8300			
	77F0	6000'			
2456	77F2	1A05	JL	H0VDN4	
2457	77F4	9825	CB	TEMPO0+0(R5),H78	YPT
	77F6	8300			
	77F8	6046'			
2458	77FA	1B04	JH	H0VUP4	
2459	77FC	1005	JMP	GETHV4	
2460	77FE	0204	LI	R4,>0100	FORCE DOWN
	7800	0100			
2461	7802	1002	JMP	GETHV4	
2462	7804	0204	LI	R4,>FF00	FORCE UP
	7806	FF00			
2463	7808	B944	AB	R4,TEMPO0+0(R5)	YPT
	780A	8300			
2464	780C	D2A5	MOV	TEMPO0+3(R5),R10	COLOR
	780E	8303			
2465	7810	09CA	SRL	R10,12	
2466	7812	C28A	MOV	R10,R10	1 HIT AND GONE
2467	7814	1306	JEQ	NEXT04	
2468	7816	D960	MOV	H80,TEMPO0+2(R5)	CHAR
	7818	604C'			
	781A	8302			
2469	781C	C820	MOV	H0010,P0INTS	10 POINTS/HIT
	781E	601A'			
	7820	83BA			
2470	7822	0225	AI	R5,4	
	7824	0004			
2471	7826	8805	C	R5,SABCNT	PAST NUMBER OF SPRITES TO
	7828	83AC			
2472	782A	16AE	JNE	MORSH4	NO, KEEP CHECKING
2473	782C	06A0	BL	@WRITE	
	782E	7E5E'			
2474	7830	D1A0	MOV	CLOCK1,R6	TIME UP ALREADY?

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2475 7832 83AF
2476 7834 1335          JEQ   NOHFO          YEP
       7836 9820          CB    TIMER,H3C      TIMER UP YET(1 SEC INTERVA
       7838 8379
       783A 6040'
2477 783C 1A31          JL    NOHFO          NO, NOT YET
2478 783E D820          MOVB  H00,TIMER      YES, SO RESET TIMER
       7840 6008'
       7842 8379

2479                                     ***
2480                                     *** CHECK CLOCK FOR COUNTDOWN, 5,4,3,2,1
2481                                     ***
2482 7844 D1A0          MOVB  CLOCK1,R6
       7846 83AF
2483 7848 0986          SRL  R6,8
2484 784A 0286          CI   R6,12
       784C 000C
2485 784E 1809          JH   NONUMS
2486 7850 0916          SRL  R6,1
2487 7852 1807          JOC  NONUMS
2488 7854 C820          MOV  SPADR,SPADR
       7856 8398
       7858 8398
2489 785A 1603          JNE  NONUMS
2490 785C D826          MOVB  SPEENM(R6),SPADR+1
       785E 60E6'
       7860 8399
2491 7862 7820  NONUMS  SB    H01,CLOCK1      DECREASE INTERVAL CLOCK TI
       7864 6007'
       7866 83AF
2492 7868 160C          JNE  NOHFOA         ZERO YET?
2493 786A 04C6          CLR  R6
2494 786C D9A0  MORE80  MOVB  H80,TEMPO0+2(R6)  SET >80 CHARS FOR ALL SPRI
       786E 604C'
       7870 8302
2495 7872 0226          AI   R6,4
       7874 0004
2496 7876 0286          CI   R6,28
       7878 001C
2497 787A 16F8          JNE  MORE80
2498 787C 06A0          BL   @WRITE
       787E 7E5E'
2499 7880 100F          JMP
2500 7882 0200  NOHFOA  LI   VDPADD1,>3C08      SET TO ATTACK SHIPS VDP VELS
       7884 3C08
2501 7886 06A0          BL   @READ          READ VELS INTO BUFFER
       7888 7E38'
2502 788A 04C5          CLR  R5             CLEAR VELS SPRITE POINTER
2503 788C 7960  SBH08V  SB    H02,TEMPO0+1(R5)  INCREASE X VEL FOR THIS SPRITE
       788E 6006'
       7890 8301
2504 7892 0225          AI   R5,4          NEXT SPRITE'S VEL
       7894 0004
2505 7896 8805          C    R5,SABCNT     END OF SPRITE VEL LIST YET?
       7898 83AC
2506 789A 16F8          JNE  SBH08V        NO, NOT YET
2507 789C 06A0          BL   @WRITE        WRITE BACK THE NEW FASTER VELS
       789E 7E5E'
2508 78A0 C1C7  NOHFO  MOV  R7,R7          ALL DONE?
2509 78A2 1658          JNE  G00N01        NOT YET

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2510	78A4 06A0		BL	@SPSUB	SEND PHRASE INDEX FOR "ADVANCE
	78A6 6E22'				
2511	78A8 0009		DATA	9	TO NEXT LEVEL"
2512	78AA 0420		BLWP	@ERASV	CLEAN UP LASER SHOT, IF ANY
	78AC 7024'				
2513	78AE D820		MOVB	H02,MOTION	ONLY PLAYER SHIP IN AUTO-MOTION
	78B0 6006'				
	78B2 837A				
2514	78B4 06A0		BL	@WRTVCL	DELETE ALL OTHER SPRITES
	78B6 7E58'				
2515	78B8 1B08		DATA	>1B08,1,HD0	
	78BA 0001				
	78BC 602E'				
2516	78BE B820		AB	H01,HITNUM	INCREASE NUMBER OF HITS TO DEST
	78C0 6007'				
	78C2 83AE				
2517	78C4 9820		CB	HITNUM,H04	PAST 3 HITS?
	78C6 83AE				
	78C8 6004'				
2518	78CA 1607		JNE	NOH03	NO, SO KEEP CURRENT HIT NUMBER
2519	78CC D820		MOVB	H01,HITNUM	YES, SO ONLY ALLOW HITS 1 ON IN
	78CE 6007'				
	78D0 83AE				
2520	78D2 B820		AB	H01,CYCLE	INCREASE GAME CYCLE NUMBER
	78D4 6007'				
	78D6 839C				
2521	78D8 1009		JMP	NOCYC3	
2522	78DA D820	NOH03	MOVB	HFF,ATKSET	RE-INIT ATTACK WAVE FLAG TABLE
	78DC 6021'				
	78DE 83B3				
2523	78E0 D820		MOVB	H60,MSGFLG	RE-INIT MESSAGE NUMBER FLAG
	78E2 6044'				
	78E4 83BF				
2524	78E6 D1A0		MOVB	CYCLE,R6	NEXT GAME CYCLE?
	78E8 839C				
2525	78EA 1308		JEQ	NOCYC1	NO
2526	78EC D1A0	NOCYC3	MOVB	CYCLE,R6	GET CYCLE NUMBER 1,2,3 ...
	78EE 839C				
2527	78F0 0986		SRL	R6,8	PUT IN LOWER BYTE
2528	78F2 0226		AI	R6,3	ADD IN OFFSET TO COLOR SCENERY
	78F4 0003				
2529	78F6 0286		CI	R6,15	PAST TABLE INDEX FOR SCENERY CO
	78F8 000F				
2530	78FA 1A03		JL	NEWSCL	NO, SO GET NEW SCENERY COLOR
2531	78FC D1A0	NOCYC1	MOVB	HITNUM,R6	GET HIT NUMBER
	78FE 83AE				
2532	7900 0986		SRL	R6,8	PUT IN LOWER BYTE FOR TABLE OFF
2533	7902 D826	NEWSCL	MOVB	SCEENC(R6),REGALB	GET NEW SCENERY COLOR FROM COLO
	7904 610E'				
	7906 8351				
2534	7908 06A0		BL	@SCNSUB	GO SET THE NEW SCENERY COLOR
	790A 7700'				
2535	790C D1E0		MOVB	CYCLE,R7	NEXT GAME CYCLE?
	790E 839C				
2536	7910 1308		JEQ	NOCYC2	NO
2537	7912 0207		LI	R7,7	LOOP 7 SETS OF 500(3,500 POINTS
	7914 0007				
2538	7916 B820		AB	CYCLE,REG7LB	INCREASE SET COUNT BY CYCLE(SO
	7918 839C				
	791A 834B				

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2539 791C 0287          CI   R7,21      20 SETS OF 500 POINTS LIMIT YET
      791E 0015
2540 7920 1A08          JL   REWARD  LOWER YET
2541 7922 0207          LI   R7,20      SET TO 10,000 POINTS
      7924 0014
2542 7926 1005          JMP  REWARD  DISPLAY THE POINTS
2543 7928 D1E0  NOCYC2  MOVB  HITNUM,R7  GET HIT NUMBER
      792A 83AE
2544 792C 0987          SRL  R7,8      PUT IN LOWER BYTE - 2,3,4
2545 792E 0607          DEC  R7        1,2,3
2546 7930 0A17          SLA  R7,1      2,4,6 AS LOOP COUNTER FOR SETS
2547 7932 C820  REWARD  MOV  H0050,POINTS  GIVE 1000,2000,3000 POINTS FOR
      7934 601C'
      7936 83BA
2548 7938 06A0          BL   @SPECSC  DISPLAY IT ON THE SCREEN W/ SPE
      793A 7D5C'
2549 793C 0607          DEC  R7
2550 793E 16F9          JNE  REWARD
2551 7940 D820          MOVB H00,MOTION
      7942 6008'
      7944 837A
2552 7946 0203          LI   WLOC,LOADCL
      7948 6131'
2553 794A 06A0          BL   @SUBCOL
      794C 6E54'
2554 794E D820          MOVB H02,MOTION  START OVER W/ ATK WAVE #1 AND R
      7950 6006'
      7952 837A
2555 7954 0460  GOON01  B     @GOBACK  CONTINUE W/ THIS ASTEROID BELT
      7956 6D06'
2556          ***
2557          ***  ATTACK WAVE #5 - 7 AND  INIT SWOOP
2558          ***
2559 7958 D120  CHGAK5  MOVB  ATKFLG,R4  GET ATTACK FLAG(5 - 7)
      795A 838E
2560 795C 0984          SRL  R4,8      PUT IN LOWER BYTE
2561 795E 0A14          SLA  R4,1      10,12,14
2562 7960 0224          AI   R4,-10   ATTACK FLAG TABLE OFFSET(0,2,4
      7962 FFF6
2563 7964 9820  CHGYP5  CB     INITAK,HFD  NO SWOOP?
      7966 838F
      7968 6032'
2564 796A 142E          JHE  NEXT5B
2565 796C 0200          LI   VDPADD,->3C08
      796E 3C08
2566 7970 0202          LI   RCOUNT,2
      7972 0002
2567 7974 0201          LI   RLOC,REG8HB
      7976 834C
2568 7978 0203          LI   WLOC,REG8HB
      797A 834C
2569 797C C224  GETVIS  MOV  INTVE6(R4),R8  GET FIRST VEL
      797E 6260
2570 7980 06A0          BL   @WRITE    WRITE OUT NEW INIT VEL
      7982 7E5E'
2571 7984 0220          AI   VDPADD,->2100  SAB LIST
      7986 DF00
2572 7988 0284          CI   R4,4      ATTACK WAVE #7 GOING ON?
      798A 0004
2573 798C 1605          JNE  NOATK?   NOP

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2574 798E D220          MOVB  YXLOC1+0,R8      MAKE YOUR SHIP'S YPT THE ATTAC
      7990 8390
2575 7992 0268          ORI   R8,>00FD          FORCE IN SINGLE XPT START POSI
      7994 00FD
2576 7996 1006          JMP   WRTAT?           GO GET ATTACK WAVE #? NOW
2577 7998 C224 NOATK?  MOV   INTYX6(R4),R8  GET INITIAL YPT FOR ATTACKING
      799A 625C'
2578 799C A20A          A     R10,R8          NOW RANDOM YPT: >20 - >5F
2579 799E 06C8          SWPB  R8              PUT IN LOW BYTE
2580 79A0 0268          ORI   R8,>00E8          ADD IN XPT SHIP STARTING POSIT
      79A2 00E8
2581 79A4 79A4' WRTAT?  EQU   $
2582 79A4 D1A0          MOVB  CYCLE,R6         NEXT GAME CYCLE IN PROGRESS?
      79A6 839C
2583 79A8 130A          JEQ   NOCYC9          NO
2584 79AA 9820          CB    ATKSET,H10     NEXT GAME CYCLE INTERN IN PROG
      79AC 83B3
      79AE 601B'
2585 79B0 1406          JHE   NOCYC9          NO, KEEP R8 SET UPS AS IS
2586 79B2 7820          SB    H18,REG8LB     FORCE NEW XPT START POSITION C
      79B4 6038'
      79B6 834D
2587 79B8 7820          SB    CYCLE,REG8LB   1 PIXEL CLOSER
      79BA 839C
      79BC 834D
2588 79BE 06A0 NOCYC9  BL    @WRITE          WRITE OUT NEW SAB INIT(YPT,XPT)
      79C0 7E5E'
2589 79C2 D820          MOVB  HFD,INITAK
      79C4 6032'
      79C6 838F
2590 79C8 04C7 NEXT5B  CLR   R7              R7=1, CONTINUE; R7=0, NEX
2591 79CA 0200          LI    VDPADD,>3C08   READ IN CURRENT VELOCITIES
      79CC 3C08
2592 79CE 0201          LI    RLOC,TEMPO0+12
      79D0 830C
2593 79D2 C0A0          MOV   SABCNT,RCOUNT
      79D4 83AC
2594 79D6 06A0          BL    @READ
      79D8 7E38'
2595          ***      BL    @RDVCL
2596          ***      DATA >3C08,SABCNT,TEMPO0+12
2597 79DA 06A0          BL    @SETVDP        SET UP SPRITES TO BE READ
      79DC 6E42'
2598 79DE 06A0          BL    @READ          READ IT
      79E0 7E38'
2599 79E2 9820          CB    HCD,TEMPO0+0  YPT
      79E4 602C'
      79E6 8300
2600 79E8 130F          JEQ   JMTEMP
2601 79EA 0207          LI    R7,1           SET FLAG
      79EC 0001
2602 79EE 9820          CB    H80,TEMPO0+2  CHAR
      79F0 604C'
      79F2 8302
2603 79F4 160B          JNE   NOC05
2604 79F6 D820          MOVB  HCD,TEMPO0+0  YPT
      79F8 602C'
      79FA 8300
2605 79FC 06A0          BL    @WRITE        WRITE IT TO SAB
      79FE 7E5E'

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2606	7A00 04E0		CLR	TEMPO0+12	CLEAR SHIP'S MOTION
	7A02 830C				
2607	7A04 0460		B	@WRIT08	WRITE OUT SHIP'S VEL
	7A06 7B4A'				
2608	7A08 0460	JMTEMP	B	@NEXT05	
	7A0A 7B24'				
2609	7A0C D1A0	NOC05	MOV	TEMPO0+0,R6	GET YPT OF ATTACK SHIP
	7A0E 8300				
2610	7A10 D220		MOV	YXLOC1+0,R8	GET YPT OF YOUR SHIP
	7A12 8390				
2611	7A14 0986		SRL	R6,R8	PUT IN LOWER BYTE AND CLEA
2612	7A16 0988		SRL	R8,R8	PUT IN LOWER BYTE AND CLEA
2613	7A18 6206		S	R6,R8	GET DIFF IN YPT'S
2614	7A1A 0748		ABS	R8	GET POSITIVE DIFF
2615	7A1C C188		MOV	R8,R6	SAVE DIFF
2616	7A1E 0288		CI	R8,R6	W/I 6 PIXELS?
	7A20 0006				
2617	7A22 141D		JHE	CHKC5C	NO, CHECK WHICH DIRECTION
2618	7A24 D820		MOV	PH0TFG,PH0TFG	PHOTON SHOT ALREADY?
	7A26 83B1				
	7A28 83B1				
2619	7A2A 1627		JNE	CHKC5A	YES
2620	7A2C C824		MOV	PHCHCL(R4),TEMPO0+6	GET PHOTON CHAR AND COLOR
	7A2E 6266'				
	7A30 8306				
2621	7A32 C820		MOV	H0090,TEMPO0+16	GET VELOCITY FOR PHOTON SH
	7A34 601E'				
	7A36 8310				
2622	7A38 C820		MOV	TEMPO0+0,TEMPO0+4	ATTACK SHIP ON TARGET, GET
	7A3A 8300				
	7A3C 8304				
2623	7A3E D820		MOV	H00,TEMPO0+8	DELETE ALL OTHER SPRITES
	7A40 602E'				
	7A42 8308				
2624	7A44 04E0		CLR	TEMPO0+18	GET VELOCITY
	7A46 8312				
2625	7A48 D820		MOV	H04,MOTION	SET FOUR SPRITE IN MOTION
	7A4A 6004'				
	7A4C 837A				
2626	7A4E 9820		CB	ATKSET,H10	NEXT GAME CYCLE INTERN IN
	7A50 83B3				
	7A52 601B'				
2627	7A54 1A12		JL	CHKC5A	NO, KEEP CPU SET UPS AS IS
2628	7A56 C820		MOV	HBC06,TEMPO0+6	YO, SO GET SPECIAL PHOTON
	7A58 602A'				
	7A5A 8306				
2629	7A5C 100E		JMP	CHKC5A	CONTINUE
2630	7A5E 9820	CHKC5C	CB	TEMPO0+0,YXLOC1+0	ATTACK SHIP'S NEEDS TO MOV
	7A60 8300				
	7A62 8390				
2631	7A64 1A07		JL	MVDOWN	ATTACK SHIP YPT LOWER, SO
2632	7A66 9820		CB	TEMPO0+0,H00	OUT OF RANGE? NEW CODE
	7A68 8300				
	7A6A 602E'				
2633	7A6C 1B03		JH	MVDOWN	YES NEW CODE
2634	7A6E C224		MOV	UPFACT(R4),R8	ATTACK SHIP YPT HIGHER, SO
	7A70 626C'				
2635	7A72 1005		JMP	CHKCL5	CONTINUE
2636	7A74 C224	MVDOWN	MOV	DNFACT(R4),R8	MOVE ATTACK SHIP DOWNWARD
	7A76 6272'				

2637	7A78	1002		JMP	CHKCLS		
2638	7A7A	C224	CHKC5A	MOV	STFACT(R4),R8		STOP ATTACK SHIP'S VERTICA
	7A7C	6278'					
2639	7A7E	C808	CHKCLS	MOV	R8,TEMPO0+12		
	7A80	830C					
2640	7A82	D2A0	CHKC5B	MOV	TEMP00+3,R10		COLOR
	7A84	8303					
2641	7A86	09CA		SRL	R10,12		
2642	7A88	9820		CB	INITAK,HFC		SHIELDS UP STILL?
	7A8A	838F					
	7A8C	6034'					
2643	7A8E	1319		JEQ	CHKHTS		NO, SO GO AHEAD AND CHECK
2644	7A90	D2A0		MOV	TEMP00+3,R10		YES, SO FORCE TO NO HITS..
	7A92	8303					
2645	7A94	024A		ANDI	R10,>0F00		BY CLEARING ANY HIT COUNT
	7A96	0F00					
2646	7A98	D80A		MOV	R10,TEMP00+3		COLOR BYTE NYBBLE.
	7A9A	8303					
2647	7A9C	04CA		CLR	R10		TO CONTINUE TO "NEXT05"
2648	7A9E	B820		AB	H01,INITAK		ADD TO ATTACK SWOOP FLAG A
	7AA0	6007'					
	7AA2	838F					
2649	7AA4	9820		CB	INITAK,HFC		SHIELDS UP TIME LIMIT OVER
	7AA6	838F					
	7AA8	6034'					
2650	7AAA	160B		JNE	CHKHTS		NOT YET, SO CONTINUE
2651	7AAC	9820		CB	ATKSET,H10		NEXT GAME CYCLE INTERM IN
	7AAE	83B3					
	7AB0	601B'					
2652	7AB2	1A04		JL	NOCYCB		NO
2653	7AB4	C820		MOV	H0004,TEMP00+2		GET NEW(CHAR SAME) AND COL
	7AB6	602C'					
	7AB8	8302					
2654	7ABA	1003		JMP	CHKHTS		CONTINUE
2655	7ABC	C824	NOCYCB	MOV	INTCLS(R4),TEMP00+2		GET NEW (CHAR SAME) AND CO
	7ABE	6256'					
	7AC0	8302					
2656	7AC2	C24A	CHKHTS	MOV	R10,R9		SAVE COUNT THAT'S NOW IN L
2657	7AC4	132F		JEQ	NEXT05		NO HITS , SO KEEP ORIGINAL
2658	7AC6	9820		CB	REGALB,HITNUM		GONE YET?(R10 = 1,2,3...)
	7AC8	8351					
	7ACA	83AE					
2659	7ACC	1A19		JL	GETCLS		
2660	7ACE	D820		MOV	H80,TEMP00+2		CHAR
	7AD0	604C'					
	7AD2	8302					
2661	7AD4	0420		BLWP	@RANDOM		GET RANDOM #
	7AD6	7D3C'					
2662	7AD8	094A		SRL	R10,4		#0 - E3
2663	7ADA	028A		CI	R10,16		1/4 CHANCE TO EXECUTE ANY
	7ADC	0010					
2664	7ADE	1406		JHE	NOENEM		NOT THIS TIME
2665	7AE0	C2A0		MOV	@SPADR,R10		IS VALUE @SPADR=0
	7AE2	8398					
2666	7AE4	1603		JNE	NOENEM		JUMP IF NOT ZERO
2667	7AE6	D820		MOV	@H0C,@SPADR+1		SEND PHRASE INDEX "ENEMY D
	7AE8	600C'					
	7AEA	8399					
2668	7AEC	0284	NOENEM	EQU	⚡		
2669	7AEC	0284		CI	R4,4		ATTACK #7 GOING ON?

	7AEE	0004				
2670	7AF0	1603		JNE	NOCL07	NO
2671	7AF2	D820		MOVB	H0D,TEMP00+3	SET COLOR OF SHIP IN CASE
	7AF4	600D'				
	7AF6	8303				
2672	7AF8	C824	NOCL07	MOV	PNTVAL(R4),P0INTS	GET 10,20,30 POINTS
	7AFA	61BA'				
	7AFC	83BA				
2673	7AFE	1012		JMP	NEXT05	
2674	7B00	0A4A	GETCL5	SLA	R10,4	
2675	7B02	06CA		SWPB	R10	
2676	7B04	0284		CI	R4,4	ATTACK #7 GOING ON?
	7B06	0004				
2677	7B08	1309		JEQ	Y0ATK7	YES
2678	7B0A	0284		CI	R4,2	ATTACK #6 GOING ON?
	7B0C	0002				
2679	7B0E	1303		JEQ	Y0ATK6	YES
2680	7B10	F2A9		S0CB	SETCL5(R9),R10	ATTACK #5 IS GOING ON
	7B12	6164'				
2681	7B14	1005		JMP	COLSET	
2682	7B16	F2A9	Y0ATK6	S0CB	SETCL6(R9),R10	
	7B18	6167'				
2683	7B1A	1002		JMP	COLSET	
2684	7B1C	F2A9	Y0ATK7	S0CB	SETCL7(R9),R10	
	7B1E	616A'				
2685	7B20	D80A	COLSET	MOVB	R10,TEMP00+3	COLOR
	7B22	8303				
2686	7B24	0286	NEXT05	CI	R6,6	WRITE BACK PHOTONS'S TOO?
	7B26	0006				
2687	7B28	140E		JHE	PH0T01	NO
2688	7B2A	D820		MOVB	PH0TFG,PH0TFG	PHOTON SHOT ALREADY?
	7B2C	83B1				
	7B2E	83B1				
2689	7B30	160A		JNE	PH0T01	YES
2690	7B32	0202		LI	WCOUNT,9	NO, SO LOAD UP PHOTON'S SA
	7B34	0009				
2691	7B36	D820		MOVB	H01,PH0TFG	SET FLAG TO PHOTON SHOT AL
	7B38	6007'				
	7B3A	83B1				
2692	7B3C	06A0		BL	@WRITE	WRITE BACK SAB'S
	7B3E	7E5E'				
2693	7B40	0202		LI	WCOUNT,8	
	7B42	0008				
2694	7B44	1002		JMP	WRIT08	
2695	7B46	06A0	PH0T01	BL	@WRITE	WRITE BACK SAB'S
	7B48	7E5E'				
2696	7B4A	0200	WRIT08	LI	VDPADD, >3C08	
	7B4C	3C08				
2697	7B4E	0203		LI	WLOC,TEMP00+12	
	7B50	830C				
2698	7B52	06A0		BL	@WRITE	WRITE BACK VEL'S
	7B54	7E5E'				
2699	7B56	D1A0		MOVB	PH0TFG,R6	PHOTON SHOT ALREADY?
	7B58	83B1				
2700	7B5A	131F		JEQ	BACK5A	NO, DON'T WORRY ABOUT SHO
2701	7B5C	0207		LI	R7,1	PHOTON OUT THERE, DON'T INI
	7B5E	0001				
2702	7B60	0203		LI	WLOC,TEMP00+4	
	7B62	8304				
2703	7964	06A0		BL	@RDVCL	READ IN SHOT'S SAB YPT,XPT


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2704 7866 7E32'
      7868 1B0C          DATA >1B0C,2,TEMPO0+4
      786A 0002
      786C 8304
2705 786E 9820          CB      TEMPO0+5,H20          SHOT AT LEFT OF SCREEN?
      7870 8305
      7872 6036'
2706 7874 1A07          JL      STOPPT          YES, SO STOP PHOTON
2707 7876 9820          CB      TEMPO0+5,HF0          SHOT FAR RIGHT OF SCREEN?
      7878 8305
      787A 6032'
2708 787C 1403          JHE    STOPPT          YES, SO STOP PHOTON
2709 787E 06A0          BL      @COINCH        GO CHECK COIN - SHIP/ATTAC
      7880 721E'
2710 7882 100B          JMP    BACK5A          DON'T STOP PHOTON SHOT YET
2711 7884 D820          STOPPT MOVVB HO3,MOTION STOP PHOTON
      7886 6005'
      7888 837A
2712 788A C820          MOV    HD000,TEMPO0+4
      788C 602E'
      788E 8304
2713 7890 06A0          BL      @WRITE          DELETE PHOTON SPRITE
      7892 7E5E'
2714 7894 D820          MOVVB HO0,PHOTFG      SET FLAG TO NO PHOTON SHOT
      7896 6008'
      7898 83B1
2715 789A 0460          BACK5A B      @G0BACK
      789C 6D06'
2716 789E
2717 *****
2718 * SUBROUTINES TO INIT YPT,XPT STARTING *
2719 * ATTACK POSITIONS, STARTING VELOCITIES *
2720 * CONTINUED VELOCITIES, FINAL VELOCITIES *
2721 * FOR ALIEN SHIP SWOOP ROUTINES. *
2722 *****
2723 ***SUBYXS CLR R6 CLEAR VECTOR ADDR
2724 *** MOVVB ATKFLG,REG6LB GET ATTACK WAVE FLAG
2725 789E C1A0          SUBYXS MOV    TEMP2,R6
      78A0 83A4
2726 78A2 0916          SRL    R6,1           SHIFT BITS OUT TO TEST CARRY S
2727 78A4 1707          JNC    BRYX2          R6 = 2
2728 78A6 0916          SRL    R6,1           R6 = 1 OR 3
2729 78A8 180A          JOC    BRYX3          R6 = 3
2730 78AA C224          BRYX1 MOV    INTYX1(R4),R8 R6 = 1 GET YPT,XPT INIT
      78AC 61C0'
2731 78AE 020A          LI     R10,SW1SND     GET 1ST SWOOPING SOUND
      78B0 38A7
2732 78B2 1012          JMP    ENDYXS
2733 78B4 C224          BRYX2 MOV    INTYX2(R4),R8 GET YPT,XPT INIT
      78B6 61DE'
2734 78B8 020A          LI     R10,SW2SND     GET 2ND SWOOPING SOUND
      78BA 38CF
2735 78BC 100D          JMP    ENDYXS
2736 ***BRYX3 MOV INTYX3(R4),R8 GET YPT,XPT INIT
2737 *** LI R10,SW3SND GET 3RD SWOOPING SOUND
2738 78BE 9820          BRYX3 CB      SHIPS,H04
      78C0 83B9
      78C2 6004'
2739 78C4 1A05          JL     NOHARD
2740 78C6 D1A0          MOVVB RNDVEL,R6      0,1,2,3

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2741 7BC8 83B0
2741 7BCA 0986 SRL R6,8
2742 7BCC 0A46 SLA R6,4 0,16,32,48
2743 7BCE A106 A R6,R4
2744 7BD0 C224 NOHARD MOV INTYX3(R4),R8
2744 7BD2 61FC'
2745 7BD4 020A LI R10,SW3SND
2745 7BD6 3918
2746 7BD8 045B ENDYXS B *R11
2747 ***
2748 ***
2749 ***
2750 ***SUBFST CLR R6 CLEAR VECTOR ADDR
2751 *** MOVVB ATKFLG,REG6LB GET ATTACK WAVE FLAG
2752 7BDA C1A0 SUBFST MOV TEMP2,R6
2752 7BDC 83A4
2753 7BDE 0916 SRL R6,1 SHIFT BITS OUT TO TEST CARRY S
2754 7BE0 1705 JNC BRFS2 R6 = 2
2755 7BE2 0916 SRL R6,1 R6 = 1 OR 3
2756 7BE4 1806 JOC BRFS3 R6 = 3
2757 7BE6 C224 BRFS1 MOV INTVE1(R4),R8 GET FIRST VEL
2757 7BE8 61D4'
2758 7BEA 1005 JMP ENDFSS
2759 7BEC C224 BRFS2 MOV INTVE2(R4),R8 GET FIRST VEL
2759 7BEE 61F2'
2760 7BFD 1002 JMP ENDFSS
2761 7BF2 C224 BRFS3 MOV INTVE3(R4),R8 GET FIRST VEL
2761 7BF4 6248'
2762 7BF6 045B ENDFSS B *R11
2763 ***
2764 ***
2765 ***
2766 ***SUBVLS CLR R6 CLEAR VECTOR ADDR
2767 *** MOVVB ATKFLG,REG6LB GET ATTACK WAVE FLAG
2768 7BF8 C1A0 SUBVLS MOV TEMP2,R6
2768 7BFA 83A4
2769 7BFC 0916 SRL R6,1 SHIFT BITS OUT TO TEST CARRY S
2770 7BFE 1711 JNC BRVL2 R6 = 2
2771 7C00 0916 SRL R6,1 R6 = 1 OR 3
2772 7C02 181E JOC BRVL3 R6 = 3
2773 7C04 D1A0 BRVL1 MOVVB RNDVEL,R6 GET TABLE VELs #1 POINTER #0,
2773 7C06 83B0
2774 7C08 0996 SRL R6,9 CLEAR AND PUT IN LOWER BYTE
2775 7C0A 1705 JNC BRVL1B R6 = 2
2776 7C0C 0916 SRL R6,1 R6 = 1 OR 3
2777 7C0E 1806 JOC BRVL1C R6 = 3
2778 7C10 0206 LI R6,INTV01 GET GRM ADR FOR 1ST VELs
2778 7C12 6BE4
2779 7C14 1017 JMP ENDVLS
2780 7C16 0206 BRVL1B LI R6,INTV1A
2780 7C18 6C04
2781 7C1A 1014 JMP ENDVLS
2782 7C1C 0206 BRVL1C LI R6,INTV1B
2782 7C1E 6C24
2783 7C20 1011 JMP ENDVLS
2784 7C22 D1A0 BRVL2 MOVVB RNDVEL,R6 GET TABLE VELs #1 POINTER #0,
2784 7C24 83B0
2785 7C26 0996 SRL R6,9 CLEAR AND PUT IN LOWER BYTE
2786 7C28 1705 JNC BRVL2B R6 = 2
2787 7C2A 0916 SRL R6,1 R6 = 1 OR 3

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2788 7C2C 1806          JOC   BRVL2C          R6 = 3
2789 7C2E 0206          LI    R6,INTV02
      7C30 6C48
2790 7C32 1008          JMP   ENDVLS
2791 7C34 0206  BRVL2B  LI    R6,INTV2A
      7C36 6C66
2792 7C38 1005          JMP   ENDVLS
2793 7C3A 0206  BRVL2C  LI    R6,INTV2B
      7C3C 6C86
2794 7C3E 1002          JMP   ENDVLS
2795 7C40 0206  BRVL3   LI    R6,INTV03
      7C42 6CA6
2796 7C44 A187  ENDVLS  A    R7,R6          GET OFFSET TO GROM ADR
2797 7C46 0300          LIM1  0
      7C48 0000
2798 7C4A D806          MOVB  R6,GRMWA          GOREAD THE GROM ADR FOR START
      7C4C 9C02
2799 7C4E 06C6          SWPB  R6
2800 7C50 D806          MOVB  R6,GRMWA
      7C52 9C02
2801 7C54 D220          MOVB  GRMRD,R6          GROM ADR SET, NOW READ LOAD DA
      7C56 9800
2802 7C58 06C8          SWPB  R6
2803 7C5A D220          MOVB  GRMRD,R6
      7C5C 9800
2804 7C5E 06C8          SWPB  R6          R6 IS PLUG W/ PROPER VEL
2805 7C60 0300          LIM1  2
      7C62 0002
2806 7C64 045B          B     *R11
2807          ***
2808          ***
2809          ***
2810          ***SUBLAS CLR   R6          CLEAR VECTOR ADDR
2811          ***      MOVB  ATKFLG,REG6LB  GET ATTACK WAVE FLAG
2812 7C66 C1A0  SUBLAS  MOV   TEMP2,R6
      7C68 83A4
2813 7C6A 0916          SRL   R6,1          SHIFT BITS OUT TO TEST CARRY S
2814 7C6C 1705          JNC   BRLS2          R6 = 2
2815 7C6E 0916          SRL   R6,1          R6 = 1 OR 3
2816 7C70 1806          JOC   BRLS3          R6 = 3
2817 7C72 C224  BRLS1  MOV   LASTV1(R4),R6  GET FIRST VEL
      7C74 61CA'
2818 7C76 1005          JMP   ENDLSS
2819 7C78 C224  BRLS2  MOV   LASTV2(R4),R6  GET FIRST VEL
      7C7A 61E8'
2820 7C7C 1002          JMP   ENDLSS
2821 7C7E C224  BRLS3  MOV   LASTV3(R4),R6  GET FIRST VEL
      7C80 623A'
2822 7C82 045B  ENDLSS  B     *R11
2823 7C84
2824          *****
2825          * EXPLODE THE SHIP *
2826          *****
2827 7C84
2828          ***
2829          *** STOP MOTION OF SHIP(TWO SPRITES)
2830          ***
2831 7C84 D820  GOBOOM  MOVB  H00,MOTION          STOP AUTO-MOTION
      7C86 6008'
      7C88 837A

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2832 7C8A 06A0          BL    @WRTVCL          DELETE ALL SPRITES EXCEPT PLAYE
      7C8C 7E58'
2833 7C8E 1B08          DATA >1B08,1,HDD
      7C90 0001
      7C92 602E'
2834 7C94 0420          BLWP  @ERASV           CLEAN UP SHOT, IF ANY
      7C96 7024'
2835 7C98 06A0          BL    @STOPMO         NO AUTO-MOTION
      7C9A 6F1A'
2836 7C9C 06A0          BL    @SETGRM         RLD PRE-LOADED W/ MSG(MSGCOL,MS
      7C9E 6E86'
2837          **          BL    @READYX          READ SAB'S FOR 2 SHIP SPRITES FO
2838          ***
2839          *** GET EXPLOSION(SPRITES #0 - #15) POSITION, CHAR, COLOR
2840          ***
2841          **          LI    VDPADD,>1B00      POINT TO SPRITE SAB COLOR
2842          **          MOV   YXLOC1,TEMPO0
2843          **          MOV   R4,TEMPO0+2      GET CHAR AND COLOR PRE-LOADED
2844          **          LI    WLOC,TEMPO0      CHAR AND COLOR - >94 AND ??????
2845          **          LI    WCOUNT,4        WRITE ONLY THE CHAR AND COLOR F
2846          **MOREX1  BL    @WRITE
2847          **          AI    VDPADD,4        NEXT SPRITE
2848          **          CI    VDPADD,>1B40     LAST OF 16 SPRITES?
2849          **          JNE   MOREX1
2850 7CA0 020A          LI    RLD,EXPSND      EXPLOSION
      7CA2 3831
2851 7CA4 06A0          BL    @SOUND          SOUND !!!
      7CA6 7DEC'
2852          ***
2853          *** NOW EXPLODE THE 16 SPRITES
2854          ***
2855          **          LI    VDPADD,>3C00
2856          **          LI    WCOUNT,16
2857          **          LI    RLD,VELEXP      LOAD GROM READ ADDR W/ EXPLOSION
2858          **          BL    @GRMVDP        GET THE GROM DATA AND WRITE TO V
2859          **          MOVB  H10,MOTION
2860          **          LI    RLD,EXPSND      EXPLOSION
2861          **          BL    @SOUND          SOUND !!!
2862          **          MOVB  H00,TIMER
2863          **DELAY2  BL    @REDBAK
2864          **          CB    TIMER,H39
2865          **          JNE   DELAY2
2866          **          LI    WCOUNT,1
2867          **          LI    WLOC,HA0
2868          **          BL    @EXPSUB
2869          **          LI    WLOC,HA4
2870          **          BL    @EXPSUB
2871          **          LI    WLOC,HAB
2872          **          BL    @EXPSUB
2873          **          LI    WLOC,HAC
2874          **          BL    @EXPSUB
2875          **          MOVB  H00,TIMER
2876          **DELEXP  BL    @REDBAK
2877          **          CB    TIMER,H08
2878          **          JNE   DELEXP
2879          **          MOVB  H00,MOTION
2880          **          LI    VDPADD,>1B00
2881          **          LI    WLOC,HDD
2882          **          BL    @WRITE
2883          **          LI    WLOC,HCD

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2884      **          LI      VDPADD, >1B04
2885      **MORECO    BL      @WRITE
2886      **          AI      VDPADD, 4
2887      **          CI      VDPADD, >1B44
2888      **          JNE     MORECO
2889      **          MOVB    H00, TIMER
2890      **DELINT    BL      @REDBAK
2891      **          CB      TIMER, H30
2892      **          JNE     DELINT
2893      **          BL      @SUBINT DO INITS
2894      **          MOV     SHIPS, SHIPS      NO SHIPS LEFT?
2895      **          JEQ     QUIT              NOP, END OF GAME
2896      **          SB      H01, SHIPS      REDUCE SHIP COUNTER
2897      **          BL      @SUBBLK         BLANK OUT ANY MESSAGES
2898      **          BL      @SUBLFT        DISPLAY NUMBER OF SHIPS REMAINING IN
2899      **          MOVB    H01, GAMFLG     INIT TO GAME STARTED EVEN IF FIRE NO
2900      **          CB      PAGFLG, H02    IS TUNNEL SCENERY PAGE FLAG POINTING
2901      **          JNE     GOSTR          NO
2902      **          MOVB    H01, PAGFLG    YES, SO SET FLAG TO POINT TO 1ST HAL
2903      **GOSTR     B       @EXPSTR        GO INIT TO CURRENT ATTACK WAVE
2904      **QUIT     BL      @FININT        STOP ALL AUTO-MOTION, DELETE SPRIT
2905      ****
2906      ***
2907      ***   FIGURE OUT HIGH SCORE, IF ANY
2908      ***
2909      ***          LI      VDPADD, >1AB8   GET ADDR OF YOUR SCORE
2910      ***          LI      RCOUNT, 4     READ IN 4 SCORE DIGITS
2911      ***          LI      RLOC, TEMPO0+0  YOUR SCORE BUFFER AREA
2912      ***          BL      @READ
2913      ***          AI      VDPADD, >0040   GET ADDR OF HIGH SCORE
2914      ***          LI      RLOC, TEMPO0+4  HIGH SCORE BUFFER AREA
2915      ***          BL      @READ
2916      ***          CLR     R7              POINTER IN RAM BUFFER FOR DIGIT
2917      ***MOREHI   CB      TEMPO0+4(R7), TEMPO0+0(R7)  COMPARE THE LEFTM
2918      ***          JH      NOHI            HIGH SCORE STILL HIG
2919      ***          JL      NEWHI          YOUR SCORE IS NOW TH
2920      ***          INC     R7              DIGITS ARE = , SO CO
2921      ***          CI      R7, 4          PAST ALL THE DIGITS?
2922      ***          JNE     MOREHI        NOT YET, SO KEEP COM
2923      ***          JMP     NOHI          PAST ALL DIGITS, SO
2924      ***NEWHI    LI      WLOC, TEMPO0+0   GET WRITE LOCATIO
2925      ***          BL      @WRITE        YOUR SCORE IS NOW TH
2926      **          LI      WLOC, LOADCL    LOAD UP 2/3 PNT W/ 0
2927      **          BL      @SUBCOL        SET COLORS IN PNT'S
2928      ***
2929      ***   PUT UP GAME OVER MESSAGE
2930      ***
2931      ***          LI      R10, MSGEND     PUT UP PRESS REDO
2932      ***          BL      @SETGRM       OR BACK MSG
2933      ***          CLR     R4
2934      ***          LI      WCOUNT, 8
2935      ***          LI      RLOC, TEMPO0+0
2936      ***          LI      WLOC, TEMPO0+0
2937      ***MSGONE   MOV     VDPTB1(R4), VDPADD   GET DATA ALREADY AT >1000
2938      ***          BL      @READ
2939      ***          MOV     VDPTB2(R4), VDPADD   PUT DATA AT >0800 MPNT
2940      ***          BL      @WRITE
2941      ***          INCT   R4
2942      ***          CI      R4, 16
2943      ***          JNE     MSGONE

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2944      ***          CLR      R7          CLEAR "RED0"&"BACK" FLAG
2945      ***          BL        @PAUSE1
2946      ***          MOV      R7,R7
2947      ***          JNE      LEAVE
2948      ***          CLR      R4
2949      ***          LI        WLOC,VELAK1
2950      ***MSGTWO    MOV      VDPTB2(R4),VDPADD    PUT DATA BACK AT >0800 MPN
2951      ***          BL        @WRITE
2952      ***          INCT     R4
2953      ***          CI        R4,16
2954      ***          JNE      MSGTWO
2955      ***          BL        @PAUSE1
2956      ***          MOV      R7,R7
2957      ***          JNE      LEAVE
2958      ***          JMP      QUIT
2959      *****
2960      ***LEAVE      EQU      $
2961      ***          MOVB     H00,TIMER    SET TIMER
2962      ***LEVNOT    CB        TIMER,H60    TIME UP IF NO SPEECH SYNTH CONNE
2963      ***          JH        SETSPA      YES
2964      ***          MOV      SPADR,R7    FINISH UP ANY SPEECH BEFORE GOING B
2965      ***          JNE      LEVNOT      KEEP CHECKING
2966      7CAB 04E0    SETSPA  CLR      SPADR
2967      7CAA 8398
2968      7CAC 0300    LIM1    0          NO SPEECH EXECUTING
2969      7CAE 0000
2970      7CB0 020A    LI        R10,R0MLNK    HARD-CODED GROM READ ADR FOR LINK B
2971      7CB2 601B
2972      7CB4 06A0    BL        @GRMAD2      SET UP GROM READ DATA WINDOW
2973      7CB6 64E8'
2974      7CB8 D2A0    MOVB     GRMRD,R10     SET HIGH BYTE OF GROM ADR
2975      7CBA 9800
2976      7CBC D820    MOVB     GRMRD,REGALB  SET LOW BYTE OF GROM ADR
2977      7CBE 9800
2978      7CC0 8351
2979      7CC2 06A0    BL        @GRMAD2      SET UP GROM READ W/ PROPER RETURN A
2980      7CC4 64E8'
2981      7CC6 06A0    BL        @RDVCL       GET R11 SAVED ADR FOR GPL INTERPRET
2982      7CC8 7E32'
2983      7CCA 3FF0    DATA   SAVR11,2,TEMPO0  BRANCH FROM SET VDP REG 0 SET F0
2984      7CCC 0002
2985      7CCE 8300
2986      7CD0 02E0    LWPI     GPLWS
2987      7CD2 83E0
2988      7CD4 C2E0    MOV      TEMPO0,R11    RESTORE RETURN TO GPL INTERPRETER
2989      7CD6 8300
2990      7CD8 045B    B        *R11          GO BACK TO GPL CODE
2991      7CDA
2992      *****
2993      * SOME FINAL INITS FOR GAME *
2994      *****
2995      **FININT      MOV      R11,R8
2996      **          MOVB     H00,MOTION    STOP ALL AUTO-MOTION
2997      **          BL        @WRTVCL     DELETE ALL SPRITES
2998      **          DATA   >1B00,1,H00
2999      **          B        *R8
3000      7CDA
3001      *****
3002      * DELAY SUBROUTINE TO CHECK FOR RED0 AND BACK *
3003      *****

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2991 **REDBAK      MOV    R11,R9
2992 **            MOVB   H00,KEYBRD
2993 **            BL     @SCANKEY      SCAN THE KEYBOARD
2994 **            CB     KEY,H06      REDO?
2995 **            JEQ    REOUT
2996 **            CB     KEY,H0F      BACK?
2997 **            JEQ    BAOUT
2998 **            JMP    STAYIT
2999 **REOUT      BL     @FININT      FINAL GAME INITS
3000 **            MOVB   H02,GAMFLG    SET GAME FLAG FOR REDO CHECK IN GRO
3001 **            B     @LEAVE        LEAVE PROGRAM
3002 **BAOUT      BL     @FININT      FINAL GAME INITS
3003 **            MOVB   H03,GAMFLG    SET GAME FLAG FOR BACK CHECK IN GRO
3004 **            B     @LEAVE        LEAVE PROGRAM
3005 **STAYIT     B      *R9
3006 7CDA
3007
3008 *****
3009 * DISPLAY NUMBER OF SHIPS REMAINING *
3010 *****
3011 7CDA C20B   SUBLFT  MOV    R11,R8      SAVE RETURN ADDR
3012 7CDC D1AD   MOVB   SHIPS,R6      GET SHIP COUNT
3013 7CDE 83B9
3014 7CE0 0986   SRL    R6,8          PUT IN LOWER BYTE(0,1,2,3,4...)
3015 7CE2 0286   CI     R6,4          MORE SHIPS THAN 5 IN RESERVE?
3016 7CE4 0004
3017 7CE6 1B10   JH    NOSH0W        YES, DON'T SO DISPLAY ANY MORE
3018 7CE8 0A36   SLA   R6,3          (0,8,16,24,32)
3019 7CEA 0202   LI    WCOUNT,R8     WRITE OUT COMPLETE PORTION OF S
3020 7CEC 0008
3021 7CEE 020A   LI    R10,SLEFT1   GET ADDR OF START OF CHARS' FRO
3022 7CF0 6D8D
3023 7CF2 A286   A     R6,R10        ADD IN TABLE OFFSET FOR SHIPS=0
3024 7CF4 0200   LI    VDPADD,>1AC3  GET LOCATION OF SHIPS LEFT NUMB
3025 7CF6 1AC3
3026 7CF8 06A0   BL    @GRMVDP       RIGHT OUT NEW NUMBER OF SHIPS L
3027 7CFA 7E02'
3028 7CFC 022A   AI    R10,40        GET ADDR OF START OF CHARS'TABL
3029 7CFE 0028
3030 7D00 0220   AI    VDPADD,>0020  NEXT LINE BELOW
3031 7D02 0020
3032 7D04 06A0   BL    @GRMVDP       RIGHT NEW NUMBER OF SHIPS LEFT
3033 7D06 7E02'
3034 7D08 0458   NOSH0W B    *R8     RETURN TO CALLER
3035 7D0A
3036 *****
3037 * LOAD IN DIFFERENT EXPLOSION DATA *
3038 *****
3039 **EXPSUB      MOV    R11,R9
3040 **            LI    VDPADD,>1B02
3041 **MOREXD      BL     @WRITE
3042 **            AI    VDPADD,4
3043 **            CI    VDPADD,>1B42
3044 **            JNE   MOREXD
3045 **            MOVB   H00,TIMER
3046 **DELAYO      CB     TIMER,H10
3047 **            JNE   DELAYO
3048 **            B     *R9
3049 7DOA
3050 *****
3051 * LOOPS FOR SCROLL ROUTINE IN FASTRAM *

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3042 *****
3043 7D0A D8E0 GETLP  MOV  @VDPD, @FBUFFR+BUFLN(RINDX3)  MOVE BYTE TO BUFFR
      7D0C 8800
      7D0E 833C
3044 7D10 05C3      INCT  RINDX3      INCREMENT BUFFR INDEX
3045 7D12 11FB      JLT   GETLP      IF INDX NEG, GET MOR BYTS
3046 7D14 045B      RT          RETURN TO ROM CODE
3047      7D16' GETRET EQU  $
3048 *
3049 7D16 C064 SHFLP  MOV  @FBUFFR+BUFLN(RINDX4), R1  GET ONE BYTE FROM BUFR
      7D18 833C
3050 7D1A 0B01      SRC   R1, 0      SHIFT THE BYTE ON REGISTER 0
3051 7D1C D801      MOV  R1, @VDPWD  STORE THE BYTE IN VDP RAM
      7D1E 8C00
3052 7D20 05C4      INCT  RINDX4      UPDATE THE INDEX COUNTER
3053 7D22 11F9      JLT   SHFLP      IF STILL NEG, JMP & READ NEXT
3054 7D24 045B      RT          RETURN TO ROM CODE
3055      7D26' SHFRET EQU  $
3056 *****
3057 * SUBROUTINE TO PUT CHARS TO SCREEN *
3058 *****
3059 *****
3060 ***PUTSCN  MOV  R1, R7
3061 ***NEWCOL  CLR  R10
3062 ***        CLR  R8
3063 ***        MOV  VDPADD, R4
3064 ***MORCOL  BL  @WRITE
3065 ***        INC  R10
3066 ***        INC  R8
3067 ***        AI  VDPADD, 32
3068 ***        CI  R8, 8
3069 ***        JNE MORCOL
3070 ***        INC  R4
3071 ***        MOV  R4, VDPADD
3072 ***        CLR  R8
3073 ***        CI  R10, 256
3074 ***        JNE MORCOL
3075 ***        MOV  R7, R11
3076 ***        B   *R11
3077 *****
3078 *****
3079 * SCAN KEYBOARD ROUTINE *
3080 *****
3081 7D26 0300 SCANKY  LIM1  0
      7D28 0000
3082 7D2A 02E0      LWPI  GPLWS
      7D2C 83E0
3083 7D2E 06A0      BL   @SCAN      SCAN THE KEYBOARD
      7D30 000E
3084 7D32 02E0      LWPI  MYWS
      7D34 833C
3085 7D36 0300      LIM1  2
      7D38 0002
3086 7D3A 045B      B    *R11
3087 7D3C
3088 *****
3089 * THIS ROUTINE GENERATES A 16 BIT *
3090 * RANDOM NUMBER AND PLACES IT IN RND *
3091 *****
3092 7D3C 831C  RANDOM  DATA  FASTWS-32, RANDIN

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3093 7D3E 7D40' RANDIN EQU $
3094 7D40 0204 LI R4,28645
      7D42 6FE5
3095 7D44 3920 MPY RND,R4
      7D46 83AA
3096 7D48 0225 AI R5,31417
      7D4A 7AB9
3097 7D4C C805 MOV R5,RND
      7D4E 83AA
3098 7D50 C285 MOV R5,R10
3099 7D52 024A ANDI R10,>03F0
      7D54 03F0
3100 7D56 C80A MOV R10,@>8350 REGISTER 10 OF FASTWS(FASTWS+
      7D58 8350
3101 7D5A 0380 RTWP
3102 7D5C
3103 *****
3104 * ADD TO SCORE ROUTINE *
3105 *****
3106 7D5C C24B SPECSC MOV R11,R9 SAVE RETURN ADDR
3107 7D5E 1009 JMP SPECIL GO TO SPECIAL SCORING
3108 7D60 C24B SCORE MOV R11,R9 SAVE RETURN ADDR
3109 7D62 C120 MOV HITNUM,R4 GET HIT NUMBER(1,2,3)
      7D64 83AE
3110 7D66 0984 SRL R4,B PUT IN LOWER BYTE
3111 7D68 D124 MOVVB ADDSCR(R4),R4 +0, +10, +20
      7D6A 611D'
3112 7D6C 0984 SRL R4,B PUT IN LOWER BYTE
3113 7D6E A804 A R4,POINTS ADD VALUE ONTO CURRENT POINTS
      7D70 83BA
3114 7D72 0203 SPECIL LI WLOC,TEMPOD
      7D74 8300
3115 7D76 06A0 BL @RDVCL READ IN FOUR SCORE BYTES
      7D78 7E32'
3116 7D7A 1AB8 DATA >1AB8,R4,TEMPOD
      7D7C 0004
      7D7E 8300
3117 7D80 04CA CLR R10 CLEAR FLAG TO NO FIVE PREVIOUS
3118 7D82 9820 CB TEMPOD+2,H94 ALREADY A "5"(500 POINTS)?
      7D84 8302
      7D86 6050'
3119 7D88 1602 JNE NOFIVE NO, SO KEEP FLAG SET TO NO FI
3120 7D8A 020A LI R10,1 YES,SO SET FLAG TO ALREADY FI
      7D8C 0001
3121 7D8E 0208 NOFIVE LI R8,3 SET DIGIT POINTER TO CPURAM B
      7D90 0003
3122 7D92 D128 MOVVB TEMPOD(R8),R4 GET RIGHT MOST DIGIT
      7D94 8300
3123 7D96 0984 SRL R4,B PUT THAT DIGIT IN LOWER BYTE
3124 7D98 A120 A POINTS,R4 ADD CURRENT SCORE KEEPER TO T
      7D9A 83BA
3125 7D9C 0284 DIGCHK CI R4,>00E4 TENS PLACE PAST A "9"(>D4)
      7D9E 00E4
3126 7DA0 1A0F JL ADDIN NO, SO GO ADD TO SCORE AND R
3127 7DA2 7820 SB HAD,REG4LB YES, SO TAKE "10"(>E4) BACK
      7DA4 6053'
      7DA6 8345
3128 7DA8 DA20 MOVVB REG4LB,TEMPOD(R8) RESTORE NEW NUMBER
      7DAA 8345

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3129 7DAC 8300
3129 7DAE C208          MOV  R8,R8          PAST END OF SCORE BUFFER?
3130 7DB0 1307          JEQ  ADDIN          YES, DO NOT CHECKING DIGITS >
3131 7DB2 0608          DEC  R8            POINT LOWER IN BUFFER CPU
3132 7DB4 D128          MOVB TEMPOD(R8),R4  GET NEXT DIGIT TO THE LEFT
3132 7DB6 8300
3133 7DB8 0984          SRL  R4,R8          PUT THAT DIGIT IN THE LOWER B
3134 7DBA 0224          AI   R4,>0010      ADD IN CARRY FROM PREVIOUS DI
3134 7DBC 0010
3135 7DBE 10EE          JMP  DIGCHK          CHECK FOR GREATER THAN "10"
3136 7DC0 DA20          ADDIN MOVB REG4LB,TEMPOD(R8)  RESTORE NEW NUMBER
3136 7DC2 8345
3136 7DC4 8300
3137 7DC6 04E0          CLR  POINTS          CLEAR OUT POINTS FOR NEXT TIM
3137 7DC8 83BA
3138 7DCA 06A0          BL   @WRITE          WRITE BACK NEW SCORE
3138 7DCC 7E5E'
3139 7DCE C28A          MOV  R10,R10        5000 POINTS PREVIOUSLY?
3140 7DD0 160C          JNE  YOFIVE          YES, SO DON'T CHECK FOR EXTRA
3141 7DD2 9820          CB   TEMPOD+2,H94   5000+ POINTS NOW?
3141 7DD4 8302
3141 7DD6 6050'
3142 7DD8 1608          JNE  YOFIVE          NO FIVE DIGIT YET
3143 7DDA B820          AB   HOL,SHIPS      A FIVE DIGIT JUST TURNED UP A
3143 7DDC 6007'
3143 7DDE 83B9
3144 7DE0 06A0          BL   @SUBLFT        EXTRA SHIP AND GO DISPLAY IT
3144 7DE2 7CDA'
3145 7DE4 06A0          BL   @SPSUB         SAY SPEECH PHRASE "EXTRA SHIP
3145 7DE6 6E22'
3146 7DE8 0011          DATA 17
3147 7DEA 0459          YOFIVE B *R9        RETURN TO CALLER
3148 *****
3149 *****
3150 * DELAY SUBROUTINE *
3151 *****
3152 ***PAUSE1 MOVB H00,TIMER
3153 ***      MOVB H00,KEYBRD
3154 ***STALL1 LIM1 0
3155 ***      LWPI GPLWS
3156 ***      BL   @SCAN          SCAN THE KEYBOARD
3157 ***      LWPI MYWS
3158 ***      LIM1 2
3159 ***      CB   KEY,H06
3160 ***      JEQ  GETOUT
3161 ***      CB   KEY,H0F
3162 ***      JEQ  GETOUT
3163 ***      JMP  STAYIN
3164 ***GETOUT LI R7,1          SET FLAG
3165 ***      JMP  RTNO1
3166 ***STAYIN CB TIMER,H24
3167 ***      JL   STALL1
3168 ***RTNO1 B *R11
3169 *****
3170 7DEC
3171 *****
3172 * CALL SOUND ROUTINE *
3173 *****
3174 7DEC C80A          SOUND MOV R10,@B3CC  SOUND LIST POINTER(HIGH VDP ADD
3174 7DEE 83CC

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3175 7DF0 F820          SOCB  HD1, @>83FD          SOUND TIMER MSByte(GPL REG14)
      7DF2 6007'
      7DF4 83FD
3176 7DF6 D820          MOVB  HD1, @>83CE          NUMBER OF SOUND BYTES
      7DF8 6007'
      7DFA 83CE
3177 7DFC 0300          LIM1  2          ENABLE INTERRUPTS
      7DFE 0002
3178 7E00 045B          B      *R11          RETURN
3179
3180          *****
3181          * WRITE TO VDP FROM GROM *
3182          *****
3182 7E02 0300          GRMVDP LIM1  0
      7E04 0000
3183 7E06 D80A          MOVB  R10, @GRMWA          SET UP GROM UPPER BYTE ADDR
      7E08 9C02
3184 7E0A D820          MOVB  @REGALB, @GRMWA          SET UP GROM LOWER BYTE ADDR
      7E0C 8351
      7E0E 9C02
3185 7E10 D820          MOVB  VADDLB, @>8C02          SET UP LDWER BYTE OF ADDRESS
      7E12 833D
      7E14 8C02
3186 7E16 C142          MOV   WCOUNT, COUNT
3187 7E18 C180          MOV   VDPADD, TEMP
3188 7E1A 0266          ORI   TEMP, >4000          SET VDP WRITE FLAG
      7E1C 4000
3189 7E1E D806          MOVB  TEMP, @>8C02          SET UP UPPER BYTE OF ADDRESS
      7E20 8C02
3190 7E22 D820          W00030 MOVB  GRMRD, VDPWD          WRITE BYTE INTO VDP
      7E24 9800
      7E26 8C00
3191 7E28 0605          DEC   COUNT          DECREMENT COUNTER
3192 7E2A 15FB          JGT   W00030
3193 7E2C 0300          LIM1  2          ENABLE INTERRUPTS
      7E2E 0002
3194 7E30 045B          RT
3195 7E32
3196          *****
3197          * READ FROM VDP *
3198          *****
3199 7E32 C03B          RDVCL MOV   *R11+, VDPADD
3200 7E34 C0BB          RDCL  MOV   *R11+, RCOUNT
3201 7E36 C07B          MOV   *R11+, RLOC
3202 7E38 0300          READ  LIM1  0          DISABLE INTERRUPTS
      7E3A 0000
3203 7E3C D820          MOVB  VADDLB, @>8C02          SET UP LOWER BYTE OF ADDRESS
      7E3E 833D
      7E40 8C02
3204 7E42 C142          MOV   RCOUNT, COUNT
3205 7E44 D800          MOVB  VDPADD, @>8C02          SET UP UPPER BYTE OF ADDRESS
      7E46 8C02
3206 7E48 C181          MOV   RLOC, TEMP
3207 7E4A DDA0          R00010 MOVB  VDPRD, *TEMP+          READ VDP BYTE INTO BUFFER
      7E4C 8800
3208 7E4E 0605          DEC   COUNT          DECREMENT COUNTER
3209 7E50 15FC          JGT   R00010          AND LOOP IF NEEDED
3210 7E52 0300          LIM1  2          ENABLE INTERRUPTS
      7E54 0002
3211 7E56 045B          RT
3212          *****

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3213          * WRITE TO VDP *
3214          *****
3215 7E58 C03B WRTVCL MOV *R11+,VDPADD
3216 7E5A C0BB WRTCL  MOV *R11+,WCOUNT
3217 7E5C C0FB          MOV *R11+,WLOC
3218 7E5E 0300 WRITE  LIM1 0          DISABLE INTERRUPTS
          7E60 0000
3219 7E62 D820          MOVVB VADDLB, @>8C02 SET UP LOWER BYTE OF ADDRESS
          7E64 833D
          7E66 8C02
3220 7E68 C142          MOV  WCOUNT, COUNT
3221 7E6A C180          MOV  VDPADD, TEMP
3222 7E6C 0266          ORI  TEMP, >4000 SET VDP WRITE FLAG
          7E6E 4000
3223 7E70 D806          MOVVB TEMP, @>8C02 SET UP UPPER BYTE OF ADDRESS
          7E72 8C02
3224 7E74 C183          MOV  WLOC, TEMP
3225 7E76 D836 W00010 MOVVB *TEMP+, VDPWD WRITE BYTE INTO VDP
          7E78 8C00
3226 7E7A 0605          DEC  COUNT DECREMENT COUNTER
3227 7E7C 15FC          JGT  W00010
3228 7E7E 0300          LIM1 2          ENABLE INTERRUPTS
          7E80 0002
3229 7E82 045B          RT
3230          *****
3231          * USER INTERRUPT ROUTINE FOR AUTO-MOTION, *
3232          * CONTROL PASSES HERE FROM INTERRUPT HANDLER *
3233          * AND IS CURRENTLY IN GPL WORKSPACE, R13, *
3234          * R14, AND R15 MUST BE PRESERVED SINCE THEY *
3235          * ARE THE WS, PC, AND STATUS REG VALUES FOR *
3236          * THE INTERRUPT WORKSPACE, *
3237          *****
3238 7E84 020A SPMOVE LI R10, @>8C02
          7E86 8C02
3239 7E88 D320          MOVVB MOTION, R12
          7E8A 837A
3240 7E8C 1343          JEQ  NOMOT
3241 7E8E 098C          SRL  R12, 8
3242 7E90 0202          LI  R2, VDPWD
          7E92 8800
3243 7E94 0203          LI  R3, VDPWD
          7E96 8C00
3244 7E98 0208          LI  R8, RSMOT
          7E9A 3C00
3245 7E9C D6A0 MLOOP MOVVB R8LB, *R10
          7E9E 83F1
3246 7EA0 D688          MOVVB R8, *R10
3247 7EA2 04C4          CLR  R4
3248 7EA4 D112          MOVVB *R2, R4
3249 7EA6 04C6          CLR  R6
3250 7EA8 D192          MOVVB *R2, R6
3251 7EAA 0844          SRA  R4, 4
3252 7EAC D152          MOVVB *R2, R5
3253 7EAE 0845          SRA  R5, 4
3254 7EB0 A144          A  R4, R5
3255 7EB2 D1D2          MOVVB *R2, R7
3256 7EB4 0846          SRA  R6, 4
3257 7EB6 0847          SRA  R7, 4
3258 7EB8 A1C6          A  R6, R7
3259 7EBA 0228          AI  R8, -QSAML

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3260 7EBC DF00
3260 7EBE D6A0          MOVB  R8L,R1
3260 7ECO 83F1
3261 7EC2 D688          MOVB  R8,R1
3262 7EC4 04C4          CLR   R4
3263 7EC6 D112          MOVB  *R2,R4
3264 7EC8 A105          A     R5,R4
3265 7ECA 0284          CI     R4,>COFF          6*>2000+255
3265 7ECC COFF
3266 7ECE 1209          JLE   0NSCRN
3267 7ED0 0284          CI     R4,>E000          7*>2000
3267 7ED2 E000
3268 7ED4 1B06          JH    0NSCRN
3269 7ED6 C145          MOV   R5,R5
3270 7ED8 1502          JGT   5+6
3271 7EDA 0224          AI    R4,>C000          6*>2000
3271 7EDC C000
3272 7EDE 0224          AI    R4,>2000          2000
3272 7EE0 2000
3273 7EE2 04C6          0NSCRN CLR  R6
3274 7EE4 0192          MOVB  *R2,R6
3275 7EE6 A187          A     R7,R6
3276 7EE8 0268          ORI   R8,>4000
3276 7EEA 4000
3277 7EEC D6A0          MOVB  R8L,R1
3277 7EEE 83F1
3278 7EFO D688          MOVB  R8,R1
3279 7EF2 D4C4          MOVB  R4,R3
3280 7EF4 0228          AI    R8,QSAML+2
3280 7EF6 2102
3281 7EF8 D4C6          MOVB  R6,R3
3282 7EFA 06C5          SWPB  R5
3283 7EFC D6A0          MOVB  R8L,R1
3283 7EFE 83F1
3284 7F00 D688          MOVB  R8,R1
3285 7F02 0945          SRL   R5,4
3286 7F04 D4C5          MOVB  R5,R3
3287 7F06 06C7          SWPB  R7
3288 7F08 0947          SRL   R7,4
3289 7FOA D4C7          MOVB  R7,R3
3290 7FOC 0228          AI    R8,>C002          2->4000
3290 7FOE C002
3291 7F10 060C          DEC   R12
3292 7F12 15C4          JGT   ML00P
3293 7F14' NOMOT EQU 5
3294 *
3295 *
3296 *****
3297 *
3298 *VARIABLE DEFINITION FOR INTERRUPT-DRIVEN
3299 *SPEECH PROCESSING, INITIAL DESIGN IS FOR
3300 *LOADING DIRECT SPEECH DATA,
3301 *
3302 * ADDR DEFINITION
3303 * ---- |-----|
3304 * | |
3305 * SPADR | CURRENT POINTER TO LPC SPEECH DATA |
3306 * |-----|
3307 * | |
3308 * SPLEN | NO. OF BYTES REMAINING IN LIST |

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3309 * |-----|
3310 *
3311 *
3312 * THE POINTER @SPADR IS CLEARED AFTER THE SPEECH
3313 * DATA HAS FED TO THE SPEECH CHIP
3314 *
3315 * UPON ENTRY TO INTERRUPT ROUTINE, THE WORD @SPADR
3316 * IS COMPARED TO ZERO, IF EQUAL, THIS INDICATES
3317 * NO SPEECH DATA AVAILABLE, AND INTERRUPT PROCESSING
3318 * IS TERMINATED, IF NONZERO, A CHECK IS DONE FOR
3319 * START OF NEW SPEECH LIST, THIS IS INDICATED BY
3320 * A VALUE OF 1-255 @SPADR, VALUES IN THIS RANGE WILL
3321 * WILL BE CONSIDERED INDEXES INTO AN LPC ADDRESS
3322 * POINTER TABLE, EACH ADDRESS REPRESENTS THE START
3323 * OF LPC DATA FOR THE SPECIFIED PHRASE,
3324 *
3325 *
3326 *****
3327 *
3328 * REGISTER USAGE
3329 *
3330 * R0 - R5 HOLDS 9900 CODE WHICH READS SPEECH S
3331 * R6 USER GROM ADDRESS SAVE REGISTER
3332 * R7 TEMPORARY
3333 * R8 ADDRESS POINTER TO LPC DATA
3334 * R9 TEMPORARY
3335 * R10 DESTINATION REGISTER FOR SPEECH STAT
3336 *
3337 0400 SPADD EQU >400
3338 9000 SPCHR0 EQU >9000
3339 9400 SPCHWT EQU SPCHR0+>400
3340 83E0 READIT EQU GPLWS
3341 83F4 SPDATA EQU GPLWS+20 LOCATION IS GPL WORKSPACE REG 10
3342 *
3343 7F14' SPKINT EQU $
3344 7F14 C220 MOV @SPADR,R8 AFFECT STATUS W/ADDRESS POINTR
3345 7F16 8398
3346 7F1A 1347 JEQ SPKRT2 IF NO POINTER. EXIT
3347 7F1C 0207 LI R7,C0DADR ADDRESS OF CODE TO COPY
3348 7F1E 020A LI R10,READIT LOAD POINT IN FAST RAM
3349 7F20 83E0
3350 7F22 0209 LI R9,CDLEN LENGTH OF CODE BLOCK
3351 7F24 000C
3352 7F26 CEB7 MOVEIT MOV *R7+,*R10+ MOV ONE WORD
3353 7F28 0649 DECT R9 DECREMENT WORD COUNTER
3354 7F2A 16FD JNE MOVEIT MOVE MORE IF NOT FINISHED
3355 7F2C 0209 LI R9,8 DEFAULT NO. OF BYTES TO MOVE
3356 7F2E 0008
3357 7F30 D1C8 MOV8 R8,R7 CHECK FOR START OF NEW PAGE
3358 7F32 161E JNE GRMFX ADDRESS SET UP, SO MOVE DATA
3359 7F34 06A0 BL @READIT GET SPEECH STATUS
3360 7F36 83E0
3361 7F38 0A1A SLA R10,1 CHECK 'SPEECH DONE?' BIT
3362 7F3A 1836 JOC SPKRT2 IF STILL BUSY, RETURN
3363 7F3C C288 MOV R8,R10 COPY TABLE INDEX VALUE
3364 7F3E 0A1A SLA R10,1 MAKE VALUE A WORD INDEX
3365 7F40 C2AA MOV @INDXTB(R10),R10 COPY GROM ADDRESS FROM TABLE
3366 7F42 7FCA'
3367 7F44 06A0 BL @SAVIT2 SAVE OLD GROM ADDRESS

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3362 7F46 7FB2'      MOV  R10,R8      COPY GROM ADR TO ADR DECR REG
3363 7F48 C20A      BL   @GRMAD2     SET UP GROM ADDRESS
      7F4A 06A0
3364 7F4C 64E8'      MOVB @GRMRD,@SPLEN GET FIRST BYTE OF LENGTH
      7F4E D820
      7F50 9800
      7F52 839A
3365 7F54 D820      MOVB @GRMRD,@SPLEN+1 GET SECOND LENGTH BYTE
      7F56 9800
      7F58 839B
3366 7F5A 05C8      INCT R8          ADJUST GROM POINTER TO ACTUAL D
3367 *              MOV  R8,@SPADR  STORE ADDR IN PERMANENT LOC
3368 *              BL   @SPCMND  SET UP 'SPEAK EXTERNAL' COMMAND
3369 7F5C          SPCMND
3370 7F5C D820      MOVB @H6D,@SPCHWT  SEND THE 'SPEAK EXTERNAL' CMND
      7F5E 6044'
      7F60 9400
3371 7F62 1000      NOP
3372 7F64 1000      NOP
3373 7F66 1000      NOP
3374 7F68 1000      NOP
3375 *              RT
3376 7F6A 0209      LI   R9,16       INIT BYTE COUNT TO FILL SPEECH
      7F6C 0010
3377 7F6E 1004      JMP  SPCHST      CHECK SPEECH STATUS
3378 GRMFX EQU  $
3379 7F70 0209      LI   R9,8        B BYTES TO SEND TO SPEECH FIFO
      7F72 0008
3380 7F74 06A0      BL   @SAVIT2    SAVE OLD GROM ADDRESS
      7F76 7FB2'
3381 7F78 7F78'      SPCHST EQU  $
3382 7F7A 06A0      BL   @READIT    READ SPEECH CHIP STATUS
      7F7C 83E0
3383 7F7E 0A2A      SLA  R10,2      MOV 2ND MSBIT INTO CARRY BIT
3384 7F80 170D      JNC  SPKRET     IF BUFFER NOT LOW, JUMP
3385 7F82 C288      MOV  R8,R10    GET READY TO PASS GROM ADDRESS
3386 7F84 06A0      BL   @GRMAD2    SET UP THE GROM ADDRESS
      7F86 64E8'
3387 *
3388 *
3389 7F88 7F88'      LOOPR EQU  $
3390 7F8A D820      MOVB @GRMRD,@SPCHWT MOVE ONE BYTE TO SPEECH FIFO
      7F8C 9800
      7F8E 9400
3391 7F90 0620      DEC  @SPLEN     DECREMENT TOTAL BYTE COUNTER
      7F92 839A
3392 7F94 1304      JEQ  SPKRET     IF ZERO, JUMP TO EXIT
3393 7F96 0588      INC  R8        POINT TO NEXT SPEECH BYTE IN GR
3394 7F98 0609      DEC  R9        DECREMENT LOCAL FIFO FILL CNT
3395 7F9A 16F7      JNE  LOOPR     JUMP AND MOVE NXT BYTE IF >0
3396 7F9C 1007      JMP  SPKRT2
3397 *
3398 *
3399 7F9A 7F9A'      SPKRET EQU  $
3400 7F9C C1E0      MOV  @SPLEN,R7  CHECK FOR ZERO VALUE IN LENGTH
      7F9E 839A
3401 7F9F 1601      JNE  SPKRT3    IF LEN NOT ZERO, RESTORE PNTR
3402 7FA0 04C8      CLR  R8        CLEAR POINTER VAL; USE AS FLAG
3403 7FA2 7FA2'      SPKRT3 EQU  $
3404 7FA4 C286      MOV  R6,R10    GET USER GROM COUNTER VALUE

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3405 7FA4 06A0          BL    @GRMAD2          RESTORE USER GROM ADDRESS
      7FAB 64E8'
3406
3407          7FA8' *
      SPKRT2 EQU    $
3408 7FAB C808          MOV   RB,@SPADR          RESTORE CURRENT POINTER VALLUE
      7FAA 8398
3409 7FAC 02E0          LWPI  INTWS            RESTORE INTERRUPT LINKAGE
      7FAE 83C0
3410 7FB0 0380          RTWP                    RETURN TO CALLING ASMBLY PRGRM
3411
3412 *
3413 *
3414 *
3415 ***
3416 ***          SHORT SUBROUTINE TO SAVE GROM ADDRESS FOR MAIN PROGRAM
3417 ***
3418          7FB2' SAVIT2 EQU    $
3419 7FB2 D1A0          MOVVB @GRMRA,RB          SAVE ONE BYTE OF GROM ADDRESS
      7FB4 9802
3420 7FB6 D820          MOVVB @GRMRA,@GPLWS+13  SAVE LOW BYTE OF GPL ADDRESS
      7FB8 9802
      7FBA 83ED
3421 7FBC 0606          DEC   RB                ADJUST GROM ADDRESS FOR NEXT SE
3422 7FBE 045B          RT
3423
3424 *
3425 ***          DELAY LOOP FOR 16 BIT BUSS
3426 ***
3427 7FC0 D2A0          CODADR MOVVB @SPCHRDR,R10
      7FC2 9000
3428 7FC4 1000          NOP
3429 7FC6 1000          NOP
3430 7FC8 1000          NOP
3431 7FCA 045B          RT
3432          000C          CDLEN EQU    $-CODADR
3433
3434 *
3435 ***          GROM ADDRESSES FOR SPEECH DATA
3436 ***
3437          7FCA' INDXTB EQU    $-2          REMEMBER THAT A ZERO INDEX
3438 *          VALUE WILL NEVER OCCUR(HA! HA!)
3439 7FCC A000          SPPRES DATA SPADDR          PRESS FIRE TO BEGIN
3440          A0E0          ACCUM1 EQU    SPADDR+2+235
3441 7FCE A0E0          SPGOOD DATA ACCUM1          GOOD SHOT
3442          A17F          ACCUM2 EQU    ACCUM1+2+144
3443 7FD0 A17F          SPCONT DATA ACCUM2          COUNTDOWN
3444          A1F1          ACCUM3 EQU    ACCUM2+2+112
3445 7FD2 A1F1          SPFIVE DATA ACCUM3          FIVE..
3446          A24A          ACCUM4 EQU    ACCUM3+2+87
3447 7FD4 A24A          SPFOUR  DATA ACCUM4          FOUR..
3448          A280          ACCUM5 EQU    ACCUM4+2+52
3449 7FD6 A280          SPTHRE  DATA ACCUM5          THREE..
3450          A2B5          ACCUM6 EQU    ACCUM5+2+51
3451 7FD8 A2B5          SPTWO  DATA ACCUM6          TWO..
3452          A2E5          ACCUM7 EQU    ACCUM6+2+46
3453 7FDA A2E5          SPONE  DATA ACCUM7          ONE..
3454          A31D          ACCUM9 EQU    ACCUM7+2+54
3455 7FDC A31D          SPADVC  DATA ACCUM9          ADVANCE TO NEXT LEVEL
3456          A426          ACCUMB  EQU    ACCUM9+2+263
3457 7FDE A426          SPNICE  DATA ACCUMB          NICE SHOOTING

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3458		A4D1	ACCUMC	EQU	ACCUMB+2+169	
3459	7FED	A4D1	SPGRET	DATA	ACCUMC	GREAT SHOT...PILOT
3460		A590	ACCUMD	EQU	ACCUMC+2+189	
3461	7FE2	A590	SPENEM	DATA	ACCUMD	ENEMY DESTROYED
3462		A69B	ACCUME	EQU	ACCUMD+2+265	
3463	7FE4	A69B	SPLAST	DATA	ACCUME	LASER ON TARGET
3464		A798	ACCUMF	EQU	ACCUME+2+251	
3465	7FEB	A798	SPWARN	DATA	ACCUMF	WARNING...TIME TO REFUEL
3466		A908	ACCUI0	EQU	ACCUMF+2+366	
3467	7FEB	A908	SPLAS0	DATA	ACCUI0	LASER OVERHEATED
3468		AA22	ACCUI1	EQU	ACCUI0+2+280	
3469	7FEA	AA22	SPSORR	DATA	ACCUI1	SORRY...YOU ARE OUT OF FUEL
3470		AB8B	ACCUI3	EQU	ACCUI1+2+359	
3471	7FEC	AB8B	SPEXTR	DATA	ACCUI3	EXTRA SHIP
3472		AC16	ACCUI4	EQU	ACCUI3+2+137	
3473	7FEE	AC16	SPCAUT	DATA	ACCUI4	CAUTION: ASTEROID BELT
3474		AD60	ACCUI6	EQU	ACCUI4+2+328	
3475	7FF0	AD60	SPALEA	DATA	ACCUI6	ALERT, ALIEN CRAFT ADVANCING
3476		AF2E	ACCUI7	EQU	ACCUI6+2+460	
3477	7FF2	AF2E	SPALES	DATA	ACCUI7	ALERT, SHIPS ATTACKING
3478		B046	ACCUI8	EQU	ACCUI7+2+278	
3479	7FF4	B046	SPCONG	DATA	ACCUI8	CONGRATULATIONS!
3480		B146	ACCUI9	EQU	ACCUI8+2+254	
3481	7FF6	B146	SPFLYI	DATA	ACCUI9	NICE FLYING
3482				END		
NO ERRORS,			NO WARNINGS			

LABEL	VALUE	DEFN	REFERENCES									
COTIN6	6940'	1166	1158									
COTIN7	6952'	1170	1167									
COUNT	0005	0333	1265	1270	3186	3191	3204	3208	3220	3226		
CPURAM	8300	0035	0270	0271	0272	0273	0274	0275	0276	0277	0278	
			0279	0280	0281	0283	0284	0285	0286	0287	0288	
			0289	0290	0291	0292	0293	0295	0296	0297	0298	
			0299	0300	0301	0302	0303	0304	0305	0306	0307	
			0308	0309	0310	0311	0312	0313	0314	0315	0316	
			0317	0318	0322	0351						
CX1	0006	0157										
CX2	0008	0159										
CY1	0007	0158										
CY2	0009	0160										
CYAN	6001'	0237	2140									
CYCLE	839C	0291	2149	2150	2348	2520	2524	2526	2535	2538	2582	
			2587									
D	0007	0359										
DATA11	63DC'	0639	0638									
DATINC	0000	0770	0777	0778								
DBLUE	6004'	0234										
DELAY	000F	0145										
DELYP1	68BA'	1132	1136									
DELYP2	68D8'	1140	1144									
DGREEN	600C'	0242										
DIGCHK	7D9C'	3125	3135									
DNFACT	6272'	0432	2636									
DNIT	6A2E'	1229	1227									
DNKEY	6A16'	1223	0445	0451								
DONEC1	6AE6'	1276										
DONEC2	6AE8'	1277	1049	1152	1165	1203	1232	1246				
DONECH	6AAC'	1259	1062	1164	1169	1204	1216	1222	1230	1239	1256	
DORB	65C8'	0864	0862									
DORAD	7000'	1727										
DOSHFT	6702'	0987	0872									
DRED	6002'	0236	2134	2164								
DYELL	600A'	0240	2169									
E	0008	0360										
ENDCHK	6824'	1293	1195	1276	1288	1290						
ENDCK1	6846'	1301	1294	1298								
ENDFSS	78F6'	2762	2758	2760								
ENDLSS	7C82'	2822	2818	2820								
ENDLST	700C'	1731	1719	1724								
ENDPTS	608C'	0226	1731									
ENDVLS	7C44'	2796	2779	2781	2783	2790	2792	2794				
ENDYXS	78D8'	2746	2732	2735								
ERASLP	719E'	1869	1867	1874								
ERASRT	7184'	1876	1862									
ERASV	7024'	1743	0682	2156	2512	2834						
EVEN1	67AA'	1057	1054									
EXITOK	6C5A'	1379	1374									
EXPINT	6D8C'	1482	0570	1418	1466							
EXPSND	3831	0254	2850									
EXPSTR	6DA2'	1475	0571	1473								
EXTFUL	6F82'	1683	1664									
FARLT	6986'	1198	1194									
FARRT	69AC'	1196	1192									
FARUP	6922'	1159	1154	1156								
FARXX	693C'	1165	1161	1163								
FASTON	6964'	1175	1171	1173								
FASTWS	833C	0151	0161	0793	1697	1734	1742	1743	1747	1779	1846	

LABEL	VALUE	DEFN	REFERENCES								
			1884	1902	1904	2046	2056	3092			
FBUFFR	8300	0175	0849	0890	0905	0914	0915	0950	0976	3043	3049
FIRE	6129'	0388	0665								
FIREIT	73AC'	2099	2092								
FIRPNT	839E	0292	0659	0667							
FIRSND	3867	0255	1763								
FLSHIT	6EF2'	1639	1631	1647							
FORCEV	6800'	1085									
FRMPTR	8386	0280	0782	0804	0815	0929	0971				
FRMTBL	64D2'	0752	0804								
FRSTLP	652E'	0810	0813								
FSTSND	3823	0253	1178	1257							
FSTSUB	7356'	2067	1251								
FULCNT	838C	0314	1039	1041	1205	1244	1688				
FULPIX	60F0'	0379	1065	1336							
FULPNT	838D	0315	1042	1044	1063	1689					
FULREW	6C14'	1360	1363								
FULSND	3A8B	0265	1331								
GAMFLG	8378	0275	0564	0637	0652	2091	2091	2093			
GETBYT	731E'	2045	1728								
GETCL1	7692'	2337	2316								
GETCL5	7600'	2674	2659								
GETCOL	665C'	0922	0912								
GETHV1	760C'	2296	2292	2294							
GETHV2	7640'	2310	2297	2308							
GETHV4	7808'	2463	2459	2461							
GETLP	7D0A'	3043	0577	0579	3045						
GETOFS	65CC'	0865									
GETRET	7016'	3047	0579								
GETSHT	6DEC'	1502	1498	1500							
GETVI1	758E'	2263	2245								
GETVI5	797C'	2569									
GO567	7420'	2141	2132	2136	2138						
GOATTK	749E'	2175	2142	2162	2166	2170					
GOBACK	6006'	1434	2367	2555	2715						
GOBOOM	7C84'	2831	1635	1912	1963						
GOBN1	763A'	2309	2302	2306							
GOINT1	748C'	2171	0464								
GOINT2	747E'	2167	0465								
GOINT3	7470'	2163	0466								
GOINT4	7426'	2143	0467								
GOINT5	7418'	2139	0468								
GOINT6	7402'	2133	0469								
GOINT7	73F8'	2130	0470								
GOODJO	73D6'	2116	2112	2114							
GOON01	7954'	2555	2509								
GO SCRL	64C6'	0716	0692								
60131	6C88'	1405	1402								
GOTAST	7280'	1962	1959								
GOUP1	7632'	2307	2304								
GPLWS	83E0	0036	0037	2975	3082	3340	3341	3420			
GRAY	600E'	0244									
GRFUEL	6083	0501	0502	1686							
GRMAD2	64E8'	0783	2969	2972	3363	3386	3405				
GRMADR	64E4'	0781	0808	0923	0947	0963					
GRMBAS	9800	0769	0775	0776	0777	0778					
GRMFIX	7F70'	3378	3354								
GRMRA	9802	0775	3419	3420							
GRMRD	9800	0777	0810	0924	0948	0964	2801	2803	2970	2971	3190
			3364	3365	3390						

LABEL	VALUE	DEFN	REFERENCES
NEWSCL	7902'	2533	2530
NEXT01	769E'	2341	2279 2285 2314 2336
NEXT04	7822'	2470	2435 2437 2448 2467
NEXT05	7924'	2686	2608 2657 2673
NEXTIA	7580'	2272	2262
NEXT1B	7586'	2273	2259
NEXT1C	757C'	2258	
NEXT5B	79C8'	2590	2564
NEXTA4	77A4'	2436	2430
NOAB01	6D7A'	1465	1459 1463
NOATK1	711E'	1828	1766 1809
NOATK7	7998'	2577	2573
NOB0M1	723E'	1926	1924
NOCC01	75E8'	2286	2282
NOCC04	77D8'	2449	2433
NOCC05	7A0C'	2609	2603
NOCH0T	6F18'	1649	1614
NOCL07	7AF8'	2672	2670
NOCLR7	6438'	0665	0663
NOCYC1	78FC'	2531	2525
NOCYC2	7928'	2543	2536
NOCYC3	78EC'	2526	2521
NOCYC4	6D98'	1472	1457
NOCYC5	637E'	0571	0569
NOCYC7	744A'	2153	2151
NOCYC8	7ABC'	2655	2652
NOCYC9	79BE'	2588	2583 2585
NOENEM	7AEC'	2668	2664 2666
NOFAST	6976'	1181	1174
NOFIRE	645C'	0677	0669
NOFIVE	7D8E'	3121	3119
NOGAGE	67E4'	1078	1034 1038 1040
NOGSHT	7680'	2329	2321 2323 2325
NOH001	6A00'	1218	1214
NOHARD	7BDD'	2744	2739
NOHFO	78AD'	2508	2475 2477 2499
NOHF0A	7882'	2500	2492
NOHITO	7114'	1825	1794 1796 1798 1802
NOHIT1	7112'	1824	1806
NOHIT2	7298'	1964	1935 1937 1943 1949
NOM0T	7F14'	3293	3240
NONUMS	7862'	2491	2485 2487 2489
NOREF1	6CA8'	1398	1369
NOREF2	6D54'	1455	1386 1446
NORMAL	6806'	1284	1280 1282
NORMON	6988'	1186	1182 1184
NO SHFT	6E1E'	1517	1508 1514
NO SHOW	7D08'	3024	3014
NO SPEC	74F4'	2201	2189 2191
NOT000	6DCC'	1487	1485
NOTDRY	67C4'	1063	1043 1046
NOTEXP	6382'	0576	0565
NOTH03	78DA'	2522	2518
NOTHOT	6F14'	1648	1644 1646
NOTICK	7440'	2150	2147
NOTP01	68F0'	1147	1142
NOTP02	68F6'	1148	1123
NOTSC3	64A4'	0703	0700
NOTUN4	6C6E'	1383	1381
NOWARN	6DB4'	1480	1474 1476

LABEL	VALUE	DEFN	REFERENCES									
NOWFST	736C'	2072	2068	2070								
NUMRGS	000A	0144										
NXTSHF	658E'	0860										
OFFSND	380F	0251	2082									
OFFSUB	736E'	2078	1238									
OFSTBL	6065'	0154	2043									
ONSCRN	7EE2'	3273	3266	3268								
OUTSND	39FC	0262	1059									
PATCH1	65E6'	0873	0871									
PATCH2	65F0'	0878	0875	0876								
PAUSES	6E32'	1536	1350	1353	1366							
PHCHCL	6266'	0430	2620									
PHOT01	7846'	2695	2687	2689								
PHOTFG	8381	0305	1679	1923	1967	1980	2207	2618	2618	2688	2688	
			2691	2699	2714							
PNT	1800	0146										
PNTLOC	6284'	0441	2154									
PNTVAL	618A'	0411	2335	2672								
POINTS	838A	0313	1360	1434	1674	2335	2469	2547	2672	3113	3124	
			3137									
PTADR	7306'	2035	1712	1761	1820	1894						
PTEND	7356'	2062										
PTLIST	6070'	0188	1698									
PTRNNO	0006	0338										
PXLCNT	8388	0281	0802	0820	0943	1315						
QSAML	2100	0043	3259	3280								
QUITCK	6998'	1191	1177	1180	1185	1188						
RO	0000		0323	0577	0582	0841	0842	0843	0893	0913	0914	
			0943	0944	0945	0946	0977	0993	1705	1722	1725	
			1726	1746	1748	1749	1749	1757	1758	1759	1760	
			1762	1775	1780	1780	1781	1782	1782	1815	1816	
			1817	1821	1822	1828	1830	1835	1836	1837	1840	
			1842	1847	1847	1848	1849	1850	1850	1865	1866	
			1871	1872	1873	1888	1890	1892	1992	2036	2039	
			2040	2043	2044	2047	2048	2048	2055	2057	2058	
			2058	2348	2349	2350	2351					
R00010	7E4A'	3207	3209									
R00020	7098'	1783	1785									
R1	0001		0327	0552	0556	0578	0583	0691	0693	0695	0696	
			0697	0699	0703	0710	0711	0712	0712	0713	0804	
			0822	0909	0910	0911	0913	0978	0979	0980	1011	
			1014	1016	1706	1714	1717	1729	1750	1751	1752	
			1753	1756	1776	1783	1819	1833	1844	1851	1861	
			1863	1889	1891	1893	1895	1897	1992	2037	2042	
			2044	2049	2059	3049	3050	3051				
R10	000A		0364	0634	0643	0710	0782	0785	0786	0787	1057	
			1059	1128	1133	1139	1141	1175	1178	1186	1189	
			1252	1254	1255	1257	1284	1286	1287	1289	1291	
			1331	1347	1351	1364	1376	1390	1395	1407	1411	
			1413	1419	1422	1448	1450	1461	1462	1462	1572	
			1579	1584	1592	1633	1668	1686	1696	1735	1763	
			1789	1790	1791	1792	1792	1800	1803	1804	1824	
			1883	1903	1906	1911	1917	1956	1960	1962	1981	
			2079	2080	2082	2182	2185	2214	2215	2216	2311	
			2312	2313	2319	2320	2322	2324	2327	2328	2332	
			2333	2334	2335	2337	2338	2339	2340	2374	2388	
			2389	2400	2415	2443	2464	2465	2466	2466	2578	
			2640	2641	2644	2645	2646	2647	2656	2662	2663	
			2665	2674	2675	2680	2682	2684	2685	2731	2734	
			2745	2850	2968	2970	3017	3018	3021	3098	3099	

			3100	3117	3120	3139	3139	3174	3183	3238	3245
			3246	3260	3261	3277	3278	3283	3284	3347	3349
			3356	3358	3359	3360	3360	3362	3383	3385	3404
			3427								
R11	0008		0547	1529	1530	1531	1539	1557	1572	1593	1603
			1655	1663	1665	1696	1883	1917	2051	2072	2078
			2090	2104	2219	2373	2420	2746	2762	2806	2822
			2976	2977	3010	3086	3106	3106	3178	3199	3200
			3201	3215	3216	3217					
R12	000C		0344	0361	3239	3241	3291				
R15	000F		0345								
R2	0002		0328	0329	0553	0554	0555	0556	0557	0558	0559
			0560	0579	0584	1777	1784	1821	1829	1832	1837
			1843	1852	1864	1868	1873	1993	3242	3248	3250
			3252	3255	3263	3274					
R3	0003		0330	1713	1722	1723	1896	1897	2036	2038	2039
			3243	3279	3281	3286	3289				
R4	0004		0629	0630	0670	0671	0672	0673	1082	1085	1087
			1088	1088	1089	1316	1317	1318	1320	1330	1333
			1335	1426	1428	1429	1429	1430	1434	1439	1441
			1442	1444	1482	1484	1484	1486	1487	1488	1488
			1489	1495	1496	1497	1499	1502	1503	1504	1505
			1506	1507	1509	1512	1513	1513	1586	1587	1588
			1588	1590	1591	1592	1603	1632	1649	1663	1665
			1691	1713	1714	1715	1717	1905	1930	1932	1940
			1951	2037	2041	2043	2109	2121	2122	2122	2123
			2141	2160	2185	2217	2248	2249	2263	2264	2277
			2293	2295	2305	2305	2310	2417	2419	2427	2445
			2460	2462	2463	2559	2560	2561	2562	2569	2572
			2577	2620	2634	2636	2638	2655	2669	2672	2676
			2678	2730	2733	2743	2744	2757	2759	2761	2817
			2819	2821	3094	3095	3109	3110	3111	3111	3112
			3113	3122	3123	3124	3125	3132	3133	3134	3247
			3248	3251	3254	3262	3263	3264	3265	3267	3271
			3272	3279							
R5	0005		0333	0357	1698	1699	1731	1787	1793	1795	1797
			1799	1808	1810	1814	1815	1825	1826	1885	1890
			1891	1899	1900	1931	1933	1946	2201	2202	2203
			2204	2205	2275	2278	2281	2283	2284	2286	2288
			2290	2296	2301	2303	2307	2309	2310	2311	2317
			2340	2341	2342	2359	2360	2362	2363	2364	2414
			2429	2432	2434	2438	2438	2439	2439	2440	2440
			2441	2441	2447	2449	2454	2455	2457	2463	2464
			2468	2470	2471	2502	2503	2504	2505	3096	3097
			3098	3252	3253	3254	3264	3269	3269	3282	3285
			3286								
R6	0006		0334	0358	1033	1035	1051	1052	1053	1063	1064
			1065	1073	1074	1075	1307	1475	1477	1478	1479
			1605	1606	1612	1613	1639	1640	1641	1699	1700
			1702	1703	1704	1705	1920	1923	1929	1934	1936
			1938	1944	1952	1952	1953	1954	1958	1964	1965
			1967	2144	2145	2148	2152	2153	2154	2154	2155
			2298	2299	2300	2307	2309	2347	2351	2353	2427
			2428	2445	2446	2447	2449	2450	2451	2452	2453
			2454	2474	2482	2483	2484	2486	2490	2493	2494
			2495	2496	2524	2526	2527	2528	2529	2531	2532
			2533	2582	2609	2611	2613	2615	2686	2699	2725
			2726	2728	2740	2741	2742	2743	2752	2753	2755
			2768	2769	2771	2773	2774	2776	2778	2780	2782
			2784	2785	2787	2789	2791	2793	2795	2796	2798

LABEL	VALUE	DEFN	REFERENCES	PAGE
			2799 2800 2812 2813 2815 3011 3012 3013 3015	
			3018 3249 3250 3256 3258 3273 3274 3275 3281	
			3404 3419 3421	
R7	0007		0336 0359 0659 0660 0661 0662 0664 0665 0666	
			0667 1354 1355 1356 1358 1359 1362 1437 1437	
			1470 1607 1608 1609 1610 1611 1700 1701 1706	
			1707 1759 1807 1808 1810 1811 1812 1813 1814	
			2090 2099 2150 2234 2235 2236 2276 2280 2378	
			2381 2382 2384 2393 2394 2396 2404 2405 2413	
			2431 2508 2508 2535 2537 2539 2541 2543 2544	
			2545 2546 2549 2590 2601 2701 2796 3255 3257	
			3258 3275 3287 3288 3289 3346 3349 3353 3400	
R8	0008		0338 0360 0819 0891 0906 0941 0958 0974 1329	
			1336 1339 1340 1345 1398 1401 1612 1655 1658	
			1709 1711 1774 1799 1800 1801 1804 1805 2104	
			2124 2131 2134 2140 2164 2169 2174 2192 2244	
			2244 2246 2246 2373 2407 2569 2574 2575 2577	
			2578 2579 2580 2610 2612 2613 2614 2615 2616	
			2634 2636 2638 2639 2730 2733 2744 2757 2759	
			2761 2801 2802 2803 2804 2817 2819 2821 3010	
			3024 3121 3122 3128 3129 3129 3131 3132 3136	
			3244 3246 3259 3261 3276 3278 3280 3284 3290	
			3344 3353 3358 3362 3366 3385 3393 3402 3408	
R8LB	83F1	0037	3245 3260 3277 3283	
R9	0009		0341 0363 0820 0825 0830 0833 0836 0844 0874	
			0874 0878 0909 1000 1593 1597 1610 1630 1756	
			1788 1801 1805 1818 1819 1938 1939 1940 1941	
			1942 1944 1945 1946 1947 1948 2078 2084 2195	
			2196 2199 2233 2238 2248 2252 2253 2263 2313	
			2339 2374 2400 2656 2680 2682 2684 3106 3108	
			3147 3348 3350 3352 3376 3379 3394	
RANAL4	776A'	2415	2444	
RANALL	7766'	2413	2228 2425	
RAND	000F	0345		
RANDIN	7D40'	3093	3092	
RANDOM	7D3C'	3092	0657 0709 1421 1460 2213 2318 2326 2442 2661	
RANDON	64B4'	0708	0694 0705	
RCOUNT	0002	0328	1556 1925 1965 2566 2593 3200 3204	
RDCL	7E34'	3200	2242	
RDINC	0000	0773	0775 0777	
RDVCL	7E32'	3199	1680 1918 1970 2703 2973 3115	
RDWMSK	606A'	0177	0790 0795 0859 1835 1871	
READ	7E38'	3202	1926 2274 2358 2501 2594 2598	
READIT	83E0	3340	3347 3355 3382	
REF01	6C7C'	1387	1370	
REF02	6C92'	1392	1372	
REF2A	6C9C'	1395	1393	
REFFLG	8382	0306	0693 1037 1307 1309 1311 1322 1375 1379 1389	
			1392 1447 1682 1907	
REG4HB	8344	0331	2111 2116 2119 2120	
REG4LB	8345	0332	1086 1427 1483 2113 2117 2118 2119 3127 3128	
			3136	
REG6LB	8349	0335	2354	
REG7LB	8348	0337	2538	
REG8HB	834C	0339	2241 2243 2567 2568	
REG8LB	834D	0340	1443 1472 2586 2587	
REGAHB	8350	0342		
REGALB	8351	0343	1065 1077 1336 1338 2315 2375 2533 2658 2971	
			3184	
REGLD	6121'	0387	0552	

LABEL	VALUE	DEFN	REFERENCES										
SCORE	7D60'	3108	1436										
SCREND	1800	0166	0861	0888	0972	0986							
SCRLEN	0800	0165	0166										
SCRLST	6546'	0818	0716										
SCRPN1	838E	0316	1035	1045	1073	1373	1445	1690					
SCSTR1	1000	0163	0166	0846	0855								
SETCL5	6164'	0396	2680										
SETCL6	6167'	0397	2682										
SETCL7	616A'	0398	2684										
SETCOL	6161'	0395	2339										
SETFIR	678A'	1061	1056										
SETGRM	6E86'	1593	0644	1058	1129	1348	1352	1365	1377	1396	1449		
			1585	2836									
SETPXL	7130'	1833	1823	1831									
SETRAA	7776'	2419	2416										
SETSPA	7CA8'	2966											
SETVD1	6592'	0845	0831	0832									
SETVDP	6E42'	1553	1922	2273	2426	2597							
SH1TAB	628C'	0436	1505										
SH2TAB	629C'	0438	1506										
SHFENT	670A'	0991											
SHFLP	7D16'	3049	0582	0584	3053								
SHFLP2	660E'	0894	0900										
SHFLP3	668E'	0948	0953										
SHFLP4	66E8'	0978	0982										
SHFLP5	668A'	0964	0968										
SHFOU2	6740'	1015	1012										
SHFOU1	673E'	1013	0921	0930	0985								
SHFRET	7D26'	3055	0584										
SHFSAV	837E	0279	0691	0837	0838	1005	1006	1016					
SHFT2	6000'	0744	0822										
SHFTBL	83A0	0294	0821	0837	0838	0841	0843	0893	0977	0993	1005		
			1006										
SHIFT1	83A0	0295	0294	1505	1677								
SHIFT2	83A2	0296	1506	1678									
SHIPS	8389	0312	2738	3011	3143								
SHOTCT	8386	0309	1615	1648	1673	1755							
SHOTIN	7028'	1744	1742										
SHOTLP	7134'	1834	1838										
SHOTON	7382'	2084	2081										
SHOTRT	717A'	1854	1741	1841									
SHOTV	7020'	1742	1116	1300	2106								
SHPFUG	627E'	0434	1792										
SHP5ND	3800	0250											
SHTFLG	839F	0293	1839	1861	1875								
SLEFT1	6D8D	0502	0503	3017									
SLWSND	3815	0252	1189	1291									
SND123	398D	0260	1407										
SND4	39C7	0261	1413										
SND567	3948	0259	1411										
SNDIT1	6AA4'	1257	1253										
SNDIT2	681C'	1291	1285										
SNDIT5	696C'	1178	1176										
SNDIT6	6990'	1189	1187										
SOUND	7DEC'	3174	1060	1179	1190	1258	1292	1332	1391	1414	1451		
			1764	2083	2270	2851							
SPADD	0400	3337											
SPADDR	A000	0480	3439	3440									
SPADR	8398	0289	0549	0631	1475	1479	1527	1527	1529	2324	2328		
			2488	2488	2490	2665	2667	2966	3344	3408			

LABEL	VALUE	DEFN	REFERENCES
SPADVC	7FDC'	3455	
SPALEA	7FF0'	3475	
SPALES	7FF2'	3477	
SPCASE	6FEC'	1720	1716
SPCAUT	7FEE'	3473	
SPCHRD	9000	3338	3339 3427
SPCHST	7F78'	3381	3377
SPCHWT	9400	3339	3370 3390
SPCMND	7F5C'	3369	
SPCONG	7FF4'	3479	
SPCONT	7FD0'	3443	
SPDATA	83F4	3341	
SPECCCL	74E8'	2197	2200
SPECIL	7D72'	3114	3107
SPECSC	7D5C'	3106	1361 2548
SPEENM	60E6'	0375	2490
SPEEOK	76C8'	2354	2352
SPENEM	7FE2'	3461	
SPEXTR	7FEC'	3471	
SPFIVE	7FD2'	3445	
SPFLYI	7FF6'	3481	
SPFOUR	7FD4'	3447	
SPGOOD	7FCE'	3441	
SPGRET	7FEO'	3459	
SPKINT	7F14'	3343	
SPKRET	7F9A'	3399	3384 3392
SPKRT2	7FA8'	3407	3345 3357 3396
SPKRT3	7FA2'	3403	3401
SPLAS0	7FEB'	3467	
SPLAST	7FE4'	3463	
SPLEN	839A	0290	0550 0632 3364 3365 3391 3400
SPLP2	6660'	0924	0926
SPMOVE	7E84'	3238	0629
SPNICE	7FDE'	3457	
SPONE	7FDA'	3453	
SPPRES	7FCC'	3439	
SPSORR	7FEA'	3469	
SPSUB	6E22'	1527	0654 1047 1324 1384 1452 1909 2097 2510 3145
SPTHRE	7FD6'	3449	
SPTW0	7FD8'	3451	
SPWARN	7FEE'	3465	
STARLP	6FB0'	1699	1732
STARMV	6FA6'	1696	0680 1515 1516
START	6324'	0547	0033
STATUS	837C	0278	1133 1141
STFACT	6278'	0433	2638
STOPM0	6F1A'	1655	1277 1670 2835
STOPPH	72E6'	1977	1973 1975
STOPPT	7B84'	2711	2706 2706
SUBBLK	6E6E'	1584	1055 1137 1146 1403
SUBCOL	6E54'	1572	0641 2158 2553
SUBFST	7BDA'	2752	2265
SUBHOT	6E96'	1603	1031
SUBINT	6F2C'	1665	0566 0642
SUBLAS	7C66'	2812	2250
SUBLFT	7CDA'	3010	0567 0636 3144
SUBMSG	6E74'	1586	1415
SUBREF	6F28'	1663	1349
SUBVLS	7BF8'	2768	2260
SUBYXS	7B9E'	2725	2268

LABEL	VALUE	DEFN	REFERENCES									
SW1SND	38A7	0256	2731									
SW2SND	38CF	0257	2734									
SW3SND	3918	0258	2745									
TABLE5	62BC'	0445	1088									
TABLE6	62C8'	0451	2122									
TABLE7	62D0'	0455	1429									
TABLE8	62E0'	0463	1488									
TANKIT	68BA'	1333	1334	1341	1346							
TEMP	0006	0334	1264	1266	1267	1268	1269	3187	3188	3189	3206	
			3207	3221	3222	3223	3224	3225				
TEMPOO	8300	0270	0547	0563	1124	1147	1554	1555	1776	1793	1795	
			1797	1799	1808	1810	1814	1815	1844	1927	1934	
			1936	1938	1944	1952	1969	1971	1972	1974	1978	
			2278	2281	2283	2284	2286	2288	2290	2296	2301	
			2303	2307	2309	2310	2311	2317	2340	2360	2362	
			2429	2432	2434	2438	2439	2440	2441	2447	2449	
			2454	2455	2457	2463	2464	2468	2494	2503	2592	
			2599	2602	2604	2606	2609	2620	2621	2622	2622	
			2623	2624	2628	2630	2632	2639	2640	2644	2646	
			2653	2655	2660	2671	2685	2697	2702	2704	2705	
			2707	2712	2974	2976	3114	3116	3118	3122	3128	
			3132	3136	3141							
TEMPI	0002	0155										
TEMP2	83A4	0297	2229	2230	2332	2725	2752	2768	2812			
TIMER	8379	0276	1130	1135	1138	1143	1536	1537	2161	2218	2354	
			2356	2476	2478							
TNKFUL	68E6'	1347	1344									
TOP3RD	6FD6'	1712	1710									
TRYAG1	754C'	2237	2254									
TUMBLA	6744'	1029										
TUNPAG	8388	0283	0653	0695	0701	0706	1354	1380	1382	1383		
UNLINE	7180'	1859	1743									
UPFACT	626C'	0431	2634									
UPKEY	69C8'	1205	0450	0453								
VADDLB	833D	0324	0326	1263	3185	3203	3219					
VADR6R	64FC'	0791	0847	0864								
VADR6W	64F8'	0790	0807	0889	0904	0957	0973	0989				
VALTBL	606C'	0178	0865									
VDPADD	0000	0323	0325	0645	0649	0650	1072	1075	1260	1264	1272	
			1273	1328	1342	1343	1553	1573	1576	1577	1594	
			1666	1684	2175	2184	2194	2198	2199	2237	2238	
			2267	2357	2377	2380	2385	2386	2390	2392	2397	
			2398	2401	2403	2500	2565	2571	2591	2696	3019	
			3022	3187	3199	3205	3215	3221				
VDPRD	8800	0038	0849	1750	1757	1783	2049	3043	3207	3242		
VDPWA	8C02	0040	0793	0794	1747	1748	2046	2047	2056	2057		
VDPWD	8C00	0039	0810	0897	0915	0924	0966	0980	1269	1651	2059	
			3051	3190	3225	3243						
VELAKO	631B'	0539	0646	1657								
VELAK1	6CCA	0490	0491	2141	2217							
VELAK4	6CE6	0491	0492	2160								
VELEXP	6DDD	0503	0504									
VELVAR	83B4	0308	1093	1099	1105	1157	1166	1221	1229			
W00010	7E76'	3225	3227									
W00020	7172'	1851	1853									
W00030		3190	3292									
WASTE1	6E38'	1537	1538									
WCOUNT	0002	0329	0647	1261	1265	1574	1595	1667	1685	2176	2177	
			2178	2178	2179	2180	2181	2186	2193	2376	2690	
			2693	3016	3186	3216	3220					

