

Aph Technological Consulting, 285 West Green Street, Pasadena, California 91105

Aph Technological Consulting, 285 West Green Street, Pasadena, California 91105

```
XXXXXXXXXX  XXXXXXXXXXXX  XX      XX  XXXXXXXX
XXXXXXXXXX  XXXXX XXXXXXXX  XX      XX  XXXXXXXX
XX          XX  XX          XXXXX  XXXXX  XX  XXX      XX
XX          XX  XX          XXXXX  XXXXX  XX  XXX      XX
XX          XX  XX          XX  XX  XX  XX  XX  XX      XX
XX          XX  XX          XX  XX  XX  XX  XX  XX      XX
XX          XX  XXXXXXXXXX  XX  XX  XX  XX  XX  XX      XX
XX          XX  XXXXXXXXXX  XX  XX  XX  XX  XX  XX      XX
XX          XX  XX          XX  XX  XX  XX  XX  XX      XX
XX          XX  XX          XX  XX  XX  XX  XX  XX      XX
XX          XX  XX          XX  XX  XX  XX  XX  XX      XX
XXXXXXXXXX  XXXXX XXXXX  XX      XX  XXXXXXXX
XXXXXXXXXX  XXXXXXXXXXXXX  XX      XX  XXXXXXXX
```

```
XX          XX  XXXXXXXXXXXX  XXXXX XXXXXXXX
XX          XX  XXXXX XXXXX  XXXXX XXXXXXXX
XXXXX  XXXXX  XX          X  XX
XXXXX  XXXXX  XX          X  XX
XX  XX  XX  XX  XX          X  XX
XX  XX  XX  XXXXXXXXXXXX  XX
XX  XX  XX  XXXXXXXXXX  XX
XX          XX  XX  XX  XX  XX
XX          XX  XX  XX  XX  XX
XX          XX  XX  XX  XX  XX
XX          XX  XX  XX  XX  XX
XX          XX  XX  XX  X  XX
XX          XX  XX  XX  X  XX
```

DEMO.MRT 13:56:18 05-DEC-8

DEMO.MRT 13:56:18 05-DEC-8

DEMO CASSETTE MERGE FILE

HEADER/DATA AREA ALLOCATION.
2 CHUNKS OF HEADERS
1 CHUNK LITERAL DATA.

BIDECLE THIS RECORD NUMBER
BIDECLE LOWE BOUND ON FOLLOWING RECORD
BIDECLE UPPE BOUND ON FOLLOWING RECORD
BIDECLE <ZERO TO STOP AFTER RECORD, NONZERO TO CONCATENATE>
BIDECLE PROG ADDRESS, CHUNK TO WAIT FOR
(MA HAVE UP TO 5 SUCH ENTRIES)
BIDECLE 0,0

DEFINITIONS OF FILES USED IN DEMO CASSETTE:

ROOT: DEF\	/P:\$8560-\$87FF	EMAP50,P1MAP,ROOT	\
PICSE: DEF\	/P:\$800-\$9BFF /V:\$9300-\$9BFF	EMAP50,P1MAP,PICSE,PSDATA PSINT,SCREEN,PSOBJ,PCODE PUTCOD,MOTION	\
BCURT=\$9C00 CURTAN: DEF\	/P:\$9C00-\$9DFF	EMAP50,P1MAP,CTLMAP CURTAN	\
BINTR=\$9E00 INTRO: DEF\	/P:\$9E00-\$A3F /Z:\$015D-\$01EF	EMAP50,P1MAP,CTLMAP DSTART,TIMINX,DSOUND,SPARK	\
BMAST=\$A400 MASTER: DEF\	/P:\$A400-\$ABFF	EMAP50,PICMAP,CTLMAP MASTER	\
BBDEM=\$AC00 BDEMO: DEF\	/P:\$A00-\$BBFF /Z:\$015D-\$01EF	EMAP50,CTLMAP BASBLD,KEYS,BDEMO,FIELD DEFENS,WHEEL,POSIT,OFFENS BASATO,BASPCT,BASSND	\
BCDEM=\$9C00 CDEMO: DEF\	/P:\$9C00-\$ABFF /Z:\$015D-\$01EF	EMAP50,P1MAP,CTLMAP CARDX,BLKJAK,TOSS,TABLE SHUFFLE,FLAGS,CGRAM CRDSND,XTRAX	\
BSDEM=\$B000 SDEMO: DEF\	/P:\$B000-\$BFFF /V:\$0314-\$0318	/Z:\$015D-\$01EF EMAP50,P1MAP,CTLMAP BOBX,DBASE,HAI,SHIP,CURSOR SOUNDS,SEQUIN,BULLET,PIX GRID,FLASH,BLOB,SCORE RAMAC,DEMOK	\
BMSPC=\$9C00 MASPIC: DEF\	/P:\$9C00-\$9DFF	EMAP50,CTLMAP,PICMAP MASPIC	\
BKBRD=\$9E00 KEYBRD: DEF\	/P:\$900-\$A1FF /Z:\$015D-\$01EF	EMAP50,CTLMAP,PICMAP	\

KEYBRD

BFRDM=\$A200 FRDEMO: DEF\	/P:\$A200-\$AB iF	/Z:\$0160-\$01EF	EMAP50, P1MAP, CTLMAP PICMAP, FRDMAP FRDEMO, FRANCI PIC1, PIC2, CHEMIS, ROBE
BEXDM=\$B200 EXDEMO: DEF\	/P:\$B200-\$BF F	/V:\$0315-\$0318	/Z:\$015D-\$01EF EMAP50, P1MAP, CTLMAP, PICMAP EXDEMO, SITUPS, SUPIC
BSTOK=\$A600 STOCK: DEF\	/P:\$A 00-\$B1 FF		EMAP50, P1MAP, CTLMAP STDEMO, STBLCK, DJIA, PFGRFR PFNITR, PFSUBC, STSPC, STORE PFGAXA, DSPLA, DEMDAT
BSPLT=\$B200 SPLIT: DEF\	/P:\$B200-\$BF F	/V:\$0314-\$0318	/Z:\$0160-\$01EF EMAP50, P1MAP, CTLMAP SPLIT, SMOTN, BASKET, BSND BSKMOT, TANK, TNKSND, TNKMOT BACK, BCKMOT, MATH, MTHSND MTHMOT, DIET, DEITXT, DIETMT MVGRAM, BLIST
BFINE=\$A000 FINE: DEF\	/P:\$A 000-\$B1 FF	/V:\$0315-\$0318	/Z:\$015D-\$01EF EMAP50, P1MAP, CTLMAP FINE, TORPS, INTEL, FINROM TABLES, FINSND
BCRED=\$B400 CREDS: DEF\	/P:\$B400-\$B7 FF	/V:\$0318-\$0318	EMAP50, P1MAP, CTLMAP, P2MAP NEWCRD, HARM, SONG, VALKYR CRTEXT SCROLL
BCLOS=\$B200 CLOSE: DEF\	/P:\$B200-\$B3 FF		EMAP50, P1MAP, CTLMAP CLOSE

; FLAGS IN THIRD DATA .ORD

 NOCONT= 0
 CONT= 256

;THE TAPE ITSELF

RIB ;BOOTSTRAP RECORD

BOOT: LINK\ /P:\$B 00-\$BFFF EMAP50,P1MAP,CTLMAP,BOOT \

RIB ;INITIAL LOAD

REF ROOT
REF PICSE
REF CURTAN
REF INTRO
REF MASTER

```
*****
***** CURT IN,INTRO *****
*****
DATA<$8540> CONT, ;THIS DATA BLOCK REPEATED
              $AC00,$BBFF, ; AT END OF TAPE
              BCURT,3, ;CURTAIN
              BINTR,0, ;INTRO
              0
```

RIB /TIME:325 ;<<<< CURTAIN AND INTRO >>>>

REF BDEMO

```
*****
***** MASTER COMPONENT *****
*****
DATA<$8540> CONT
              $9C00,$A3FF,
              BMAST,3, ;MASTER COMPONENT
              0
```

RIB /TIME:270 ;<<<< MASTER COMPONENT >>>>

REF CDEMO/P1:\$00 0-\$07FF ;FIRST 2K OF CARDS

```
*****
***** BASE ALL *****
*****
DATA<$8540> CONT
              $A400,$ABFF,
              BBDEM,3, ;BASEBALL DEMO
              0
```

RIB /TIME:400 ;<<<< BASEBALL >>>>

REF CDEMO/P1:\$0800-\$0FFF ;LAST 2K OF CARDS

```
*****
***** CARDS *****
*****
DATA<$8540> NOCONT,
              $B000,$BFFF,
              BCDEM,3, ;CARDS DEMO
              0
```

RIB /TIME:270 ;<<< BLACKJACK >>>>

REF SDEMO

***** SPACE BATTLE *****

DATA<\$8540> NOCONT
\$9C00 \$ABFF,
BSDEM 3, ;SPACE BATTLE DEMO
0

RIB /TIME:220 ;<<<< SPACE BATTLE >>>>

REF MASPIC
REF KEYBRD
REF FRDEMO

***** KEYBOARD COMPONENT, FRENCH *****

DATA<\$8540> CONT
\$AC00 \$BFFF,
BMSPC 3, ;MASTER COMPONENT
BKBRD 52, ;KEYBOARD COMPONENT
BFRDM 98, ;FRENCH
0

RIB /TIME:535 ;<<<< KEYBOARD COMPONENT >>>>

REF STOCK/P1:\$06 0-\$0BFF ;LAST 1-1/2K OF STOCK
REF EXDEMO

***** EXERCISE *****

DATA<\$8540> CONT
\$9C00 \$ABFF,
BEXDM 3, ;EXERCISE
0

RIB /TIME:418 ;<<<< EXERCISE >>>>

REF CURTAN
REF INTRO
REF MASTE R/P1:\$0 00-\$01FF ;1ST 1/2K OF MASTER PICTURE
REF STOCK/P1:\$00 00-\$05FF ;1ST 1-1/2K OF STOCK

***** STOCK ANALYSIS *****

DATA<\$8540> CONT
\$B200 \$BFFF,
BSTOK 3, ;STOCK
0

RIB /TIME:230 ;<<<< STOCK ANALYSIS >>>>

REF SPLIT

```
RIB      /TIME:230      ;<<<< SPLIT SCREEN >>>>

REF      MASTER/P1:$0 00-$07FF      ;LAST 1-1/2K OF MASTER PICTURE
REF      FINE
```

```
***** FINALE *****  
DATA<$8540> CONT $B200,$BFFF,  
BFINE 3, ; FINALE  
Q
```

RIB /TIME:290 ;<<<< FINALE >>>>

REF CLOSE
REF CREFS

```

*****>*****
;*****
***** CLOSING CURTAIN *****
*****~*****
DATA<$8540>      NOCONT,
                  $BFFF,$BFFF,
                  BCRED 3,      ;CREDITS
                  BCLOS 0,      ;CLOSING CURTAIN
                  0

```

RIB /TIME:22 ;<<< CLOSING CURTAIN >>>

```

*****
;*****
*****
DATA<$8540>      CONT+RCDNUM+
                  $ACOO $BBFF,      ; REPEAT OF FIRST DATA BLOCK
                  BCURT 3,          ; CURTAIN
                  BINTR 0,          ; INTRO
                  0

```

***** E T R A R E O R D S A T E N D *****

[illegible]

APh Technological Consulting, 285 West Green Street, Pasadena, California 91105

APn Technological Consulting, 285 West Green Street, Pasadena, California 91105

```
XXXXXXXXX  XXXXXXXXXX  XX      XX      XXXXXXXX
XXXXXXXXX  XXXXXXXXXX  XX      XX      XXXXXXXX
XX         XX  XX      XXXXX  XXXXX  XX      XX
XX         XX  XX      XXXXX  XXXXX  XX      XX
XX         XX  XX      XX     XX     XX      XX
XX         XX  XXXXXXXXX  XX     XX     XX      XX
XX         XX  XXXXXXXXX  XX     XX     XX      XX
XX         XX  XX         XX     XX     XX      XX
XX         XX  XX         XX     XX     XX      XX
XX         XX  XX         XX     XX     XX      XX
XXXXXXXXXX  XXXXXXXXXX  XX      XX      XXXXXXXX
XXXXXXXXXX  XXXXXXXXXX  XX      XX      XXXXXXXX
```

```
XX          XXXXXXX  XX XXXXXXX
XX          XXXXXXX  XX XXXXXXX
XX          XX      X  XX
XX          XX      X  XX
XX          XX      X  XX
XX          XX      X  XX
XX          XX      X  XX
XX          XX      X  XX
XX          XX      X  XX
XX          XX      X  XX
XXXXXXXXXXXX  XXXXXXX  XX XXXXXXX
XXXXXXXXXXXX  XXXXXXX  XX XXXXXXX
```

DEMO.LOG 13:57:34 0 -DEC-81

DEMO.LOG 13:57:34 0 -DEC-8

```

RECORD 0      ;(A HROW-AWAY RECORD)
<RIB> 1 chunk (+ leader) 00:00:12 00:00:00:00
<NULL> 4 chunks 00:00:22 00:00:00:12
[TOTAL 5 chunks in 1 header] 00:01:04
<IRG> 1 second 00:01:00 00:00:01:04

RECORD 1      ;800 STRAP RECORD
<RIB> 1 chunk (+ leader) 00:00:12 00:00:02:04
BOOT loaded:
==>HD 13 chunks $8E00-$BF9F 00:02:12 00:00:02:16
[TOTAL 14 chunks in 1 header] 00:02:24
<IRG> 1 second 00:01:00 00:00:04:28

RECORD 2      ;INITIAL LOAD
<RIB> 1 chunk (+ leader) 00:00:12 00:00:05:28
ROOT referenced:
==>HD 17 chunks $856-$877F 00:03:04 00:00:06:10
PICSE referenced:
==>HD 88 chunks $880-$92FF 00:16:08
CURTAN referenced:
==>HD 7 chunks $9C0-$9CDF 00:01:09
INTRO referenced:
==>HD 26 chunks $9E0-$A13F 00:04:24
MASTER referenced:
==>HD 19 chunks $A40-$A65F 00:03:15
<DATA> 1 chunk $854-$855F 00:00:06
<XRIB> 2 chunks $850-$853F 00:00:11
[TOTAL 161 chunks in 7 headers] 00:30:00
<IRG> 1 second 00:01:00 00:00:35:29

RECORD 3      ;<<<< CURTAIN AND INTRO >>>>
<RIB> 1 chunk (+ leader) 00:00:12 00:00:36:29
BDEMO referenced:
==>HD 120 chunks $AC00-$BAFF 00:22:06 00:00:37:11
<DATA> 1 chunk $854-$855F 00:00:06
<NULL> 47 chunks 00:08:21
[TOTAL 169 chunks in 3 headers] 00:31:14
<IRG> 1 6/375 seconds 00:01:00 00:01:08:13

RECORD 4      ;<<<< MASTER COMPONENT >>>>
<RIB> 1 chunk (+ leader) 00:00:12 00:01:09:14
CDEMO referenced:
==>HD 64 chunks $9C0-$A3FF 00:11:25 00:01:09:26
<DATA> 1 chunk $854-$855F 00:00:06
<NULL> 73 chunks 00:13:15
[TOTAL 139 chunks in 3 headers] 00:25:27
<IRG> 1 25/375 seconds 00:01:00 00:01:35:12

RECORD 5      ;<<<< BASEBALL >>>>
<RIB> 1 chunk (+ leader) 00:00:12 00:01:36:14
CDEMO referenced:
==>HD 3 chunks $A40-$A45F 00:00:17 00:01:36:26
<DATA> 1 chunk $8540-$855F 00:00:06
<NULL> 204 chunks 00:37:22

```

[TOTAL 209 chunks in 3 headers] 00:38:26
 <IRG> 1 44/375 seconds 00:01:04 00:02:15:10

RECORD 6 ;<<<< BLACKJACK >>>>
 <RIB> 1 chunk (+ leader) 00:00:12 00:02:16:14
 SDEMO referenced:
 ==>HD 86 chunks \$8000-\$8ABF 00:15:27 00:02:16:26
 <DATA> 1 chunk \$854-\$855F 00:00:06
 <NULL> 51 chunks 00:09:13
 [TOTAL 139 chunks in 3 headers] 00:25:27
 <IRG> 1 25/375 seconds 00:01:02 00:02:42:12

RECORD 7 ;<<<< SPACE BATTLE >>>>
 <RIB> 1 chunk (+ leader) 00:00:12 00:02:43:14
 MASPIC referenced:
 ==>HD 14 chunks \$9C00-\$9DBF 00:02:18 00:02:43:26
 KEYBRD referenced:
 ==>HD 22 chunks \$9E00-\$A0BF 00:04:02
 FRDEMO referenced:
 ==>HD 40 chunks \$A200-\$A6FF 00:07:12
 <DATA> 1 chunk \$8540-\$855F 00:00:06
 <NULL> 33 chunks 00:06:03
 <XRIB> 1 chunk \$850-\$851F 00:00:06
 [TOTAL 112 chunks in 6 headers] 00:20:28
 <IRG> 1 23/375 seconds 00:01:02 00:03:04:12

RECORD 8 ;<<<< KEYBOARD COMPONENT >>>>
 <RIB> 1 chunk (+ leader) 00:00:12 00:03:05:14
 STOCK referenced:
 ==>HD 12 chunks \$AC00-\$AD7F 00:02:07 00:03:05:26
 EXDEMO referenced:
 ==>HD 55 chunks \$B200-\$B8DF 00:10:05
 <DATA> 1 chunk \$8540-\$855F 00:00:06
 <NULL> 212 chunks 00:39:07
 <XRIB> 1 chunk \$850-\$851F 00:00:06
 [TOTAL 282 chunks in 5 headers] 00:52:11
 <IRG> 1 42/375 seconds 00:01:03 00:03:57:25

RECORD 9 ;<<<< EXERCISE >>>>
 <RIB> 1 chunk (+ leader) 00:00:12 00:03:58:28
 CURTAN referenced:
 ==>HD 7 chunks \$9C00-\$9CDF 00:01:09 00:03:59:10
 INTRO referenced:
 ==>HD 26 chunks \$9E00-\$A13F 00:04:24
 MASTER referenced:
 ==>HD 16 chunks \$A400-\$A5FF 00:02:29
 STOCK referenced:
 ==>HD 48 chunks \$A600-\$ABFF 00:08:26
 <DATA> 1 chunk \$8540-\$855F 00:00:06
 <NULL> 118 chunks 00:21:25
 <XRIB> 2 chunks \$850-\$853F 00:00:11
 [TOTAL 219 chunks in 7 headers] 00:40:21
 <IRG> 1 25/375 seconds 00:01:02 00:04:39:20

RECORD 10 ;<<<< STOCK ANALYSIS >>>>
 <RIB> 1 chunk (+ leader) 00:00:12 00:04:40:22
 SPLIT referenced:
 ==>HD 112 chunks \$B20 (-\$BFFF 00:20:22 00:04:41:04
 <DATA> 1 chunk \$854 -\$855F 00:00:06
 <NULL> 3 chunks 00:00:17
 [TOTAL 117 chunks in 3 headers] 00:21:25
 <IRG> 1 52/375 seconds 00:01:04 00:05:02:18

RECORD 11 ;<<<< SPLIT SCREEN >>>>
 <RIB> 1 chunk (+ leader) 00:00:12 00:05:03:22
 MASTER referenced:
 ==>HD 3 chunks \$A60 (-\$A65F 00:00:17 00:05:04:04
 FINE referenced:
 ==>HD 39 chunks \$AC0 (-\$B0DF 00:07:06
 <DATA> 1 chunk \$854 -\$855F 00:00:06
 <NULL> 72 chunks 00:13:10
 <XRIB> 1 chunk \$850 -\$851F 00:00:06
 [TOTAL 117 chunks in 5 headers] 00:21:25
 <IRG> 1 52/375 seconds 00:01:04 00:05:25:18

RECORD 12 ;<<<< FINALE >>>>
 <RIB> 1 chunk (+ leader) 00:00:12 00:05:26:22
 CLOSE referenced:
 ==>HD 9 chunks \$B20 (-\$B31F 00:01:20 00:05:27:04
 CREDs referenced:
 ==>HD 23 chunks \$B40 (-\$B6DF 00:04:08
 ==>HD 53 chunks \$B80 (-\$BE9F 00:09:24
 ==>HD 6 chunks \$BF0 (-\$BFBF 00:01:03
 <DATA> 1 chunk \$854 (-\$855F 00:00:06
 <NULL> 55 chunks 00:10:05
 <XRIB> 2 chunks \$850 -\$853F 00:00:11
 [TOTAL 150 chunks in 7 headers] 00:27:29
 <IRG> 1 12/375 seconds 00:01:01 00:05:54:22

RECORD 13 ;<<<< CLOSING CURTAIN >>>>
 <RIB> 1 chunk (+ leader) 00:00:12 00:05:55:22
 <DATA> 1 chunk \$854 (-\$855F 00:00:06 00:05:56:04
 <NULL> 3 chunks 00:00:17
 [TOTAL 5 chunks in 2 headers] 00:01:04
 <IRG> 1 22/375 seconds 00:01:02 00:05:56:27

RECORD 14 ;<<<< EXTRA RIB >>>>
 <RIB> 1 chunk (+ leader) 00:00:12 00:05:57:28
 <NULL> 9 chunks 00:01:20 00:05:58:10
 [TOTAL 10 chunks in 1 header] 00:02:02
 <IRG> 1 second 00:01:00 00:06:00:00

RECORD 15 ;<<<< EXTRA RIB >>>>
 <RIB> 1 chunk (+ leader) 00:00:12 00:06:01:00
 <NULL> 9 chunks 00:01:20 00:06:01:12
 [TOTAL 10 chunks in 1 header] 00:02:02
 <IRG> 1 second 00:01:00 00:06:03:02

RECORD 16		;<<<< EXTRA RIB >>>>	
<RIB>	1 chunk (+ leader)	00:00:12	00:06:04:02
<NULL>	9 chunks	00:01:20	00:06:04:14
[TOTAL	10 chunks in 1 header]	00:02:02	
<IRG>	1 second	00:01:00	00:06:06:04
RECORD 17		;<<<< EXTRA RIB >>>>	
<RIB>	1 chunk (+ leader)	00:00:12	00:06:07:04
<NULL>	9 chunks	00:01:20	00:06:07:16
[TOTAL	10 chunks in 1 header]	00:02:02	
<IRG>	1 second	00:01:00	00:06:09:06
RECORD 18		;<<<< EXTRA RIB >>>>	
<RIB>	1 chunk (+ leader)	00:00:12	00:06:10:06
<NULL>	9 chunks	00:01:20	00:06:10:18
[TOTAL	10 chunks in 1 header]	00:02:02	
<IRG>	1 second	00:01:00	00:06:12:03
RECORD 19		;<<<< EXTRA RIB >>>>	
<RIB>	1 chunk (+ leader)	00:00:12	00:06:13:08
<NULL>	9 chunks	00:01:20	00:06:13:20
[TOTAL	10 chunks in 1 header]	00:02:02	
<IRG>	1 second	00:01:00	00:06:15:10
RECORD 20		;<<<< EXTRA RIB >>>>	
<RIB>	1 chunk (+ leader)	00:00:12	00:06:16:10
<NULL>	9 chunks	00:01:20	00:06:16:22
[TOTAL	10 chunks in 1 header]	00:02:02	
<IRG>	1 second	00:01:00	00:06:18:12
RECORD 21		;<<<< EXTRA RIB >>>>	
<RIB>	1 chunk (+ leader)	00:00:12	00:06:19:12
<NULL>	9 chunks	00:01:20	00:06:19:24
[TOTAL	10 chunks in 1 header]	00:02:02	
<IRG>	1 second	00:01:00	00:06:21:14
RECORD 22		;<<<< EXTRA RIB >>>>	
<RIB>	1 chunk (+ leader)	00:00:12	00:06:22:14
<NULL>	9 chunks	00:01:20	00:06:22:26
[TOTAL	10 chunks in 1 header]	00:02:02	
<IRG>	1 second	00:01:00	00:06:24:16
RECORD 23		;<<<< EXTRA RIB >>>>	
<RIB>	1 chunk (+ leader)	00:00:12	00:06:25:16
<NULL>	9 chunks	00:01:20	00:06:25:28
[TOTAL	10 chunks in 1 header]	00:02:02	
<IRG>	1 second	00:01:00	00:06:27:18

No errors detected