FALL 1981





SOFTWARE and HARDWARE SOURCEBOOK

SYSTEM SUMMARIES

ARCADIAN NEWSLETTER PROGRAM INDEX

THE BASIC EXPRESS NEWSLETTER PROGRAM INDEX

SOFTWARE and HARDWARE SOURCES

DEALERS

SERVICE

QUESTIONAIRE

USER GROUPS

MANUALS

A compilation of known sources of Hardware and Software Products for the BALLY/ASTROVISION ARCADE

copyright Nov. 1st, 1981 by RMH Enterprises

BALLY Professional ARCADE SOFTWARE and HARDWARE SOURCEBOOK

This Sourcebook of software programs and hardware items is a compilation of information gathered from the ARCADIAN, THE BASIC EXPRESS, software authors, hardware builders, and various other sources. I wish to thank C. J. Anderson for pointing out the TRS-80 Sourcebook to me; Bob Fabris, editor of the ARCADIAN and Fred Cornett, editor of THE BASIC EXPRESS for printing the ad in their publications and also for their continuing support of the BALLY.

HOW TO USE THIS SOFTWARE AND HARDWARE SOURCEBOOK

First, glance through the INDEX, read the System Summaries and then use the Listing Index to find the type of Software or Hardware that you are interested in reading about, turn to the appropriate page and start reading.

HOW TO INTERPRET THE CODES USED IN THE INDEX AND NEWSLETTER LISTINGS

The Equipment Required Codes are common to all indexes and newsletters.

BALLY Professional ARCADE with BALLY BASIC and external Audio BB

Cassette Interface. BALLY Professional ARCADE Plus

BALLY/ASTROVISION Handles ιН ΧВ Extended BASIC KP Keypad

Blue Ram Add-on

VIPER System Add-on

BR

٧S

AB with ASTROVISION BASIC Cartridge with built-in interface.

HOW TO ORDER FROM THIS SOURCEBOOK

Copy the Order Form on the back cover, and fill out the required information, enclose payment required and mail to the "SOURCE" as per ad.

It is extremely important to fill out the information on the type of computer you have as this is the only way a supplier will know in what format to send your order, Prices are those in effect with the wart edition and are expected to see in effect with the wart edition ******IMPORTANT*****IMPORTANT*****IMPORTANT****** are publication of the wart edition of the w

Priors of all items are those at the time of publication and may change at any time or call the SOURCES for up to date catalogs and prices.

**** LMPORTANT*****IMPORTANT*****IMPORTANT*****IMPORTANT****

NOTICE TO ALL USERS OF THIS SOURCEBOOK

Since, I have not examined or tested most of these software programs or the hardware items offered by other persons, firms or companies, I make no quarantees or recommendations, expressed or implied, with respect to these programs or hardware. This includes but is not limited to availability, hardware requirements, accuracy, reliability, performance, or whether such programs are merchantable and fit for the purposes for which they are intended. Any price listed may change without notice.

If you want to purchase a SOURCEBOOK, please send a check for \$ 6.00 to: RMH ENTERPRISES 635 Los Alamos Ave. Livermore, CA 9455Ø

The next edition of this SOURCEBOOK will be available about May, 1982, Quantity discounts will be available. (10 or more copies to one address.)

SOFTWARE and HARDWARE PRODUCERS

If you are a source of software programs and/or hardware items please contact Richard Houser at (415) 449-8493 between 4:30 and 9:00 PM PST for further information on how to get included in the SOURCEBOOK.

I reserve the right to reject any listing submitted by returning the payment to the sender. Further, all listings are accepted with the express understanding that I shall have no liability for errors which may occur in the printed Sourcebook, including the failure to include a listing, and in no event shall I be liable for damage to any person submitting a Listing in an amount greater than the Listing fee.

This Sourcebook is Copyrighted on November 1, 1981 by Richard M. Houser.

No anauthorized copies should be made without the express written permission of Richard M. Houser.

This SOURCEBOOK is an independently published document and has no official connection with ASTROVISION.

SOURCEBOOK CONTENTS

Inside Fr	ont Cover
Section	A
Section	P A
Section	C
Section	D C
Sartur	C
Section	E
Section	The section of the se
Section	£ f
Section	· Š.
Section	T H
Section	6 1
Section	K J
	S 40
Section	
Section I & C Back Cove	
IBC	
IBC	r
ICC Back Cove	r
ICC Back Cove	r
Back Cove	r
Back Cove	r
Back Cove	r
Back Cove	r
Back Cove	r
Back Cove	r
	Section

The manufacturer of the BALLY Professional ARCADE is: ASTROVISION 6460 Busch Blvd., Suite 215 Columbus, OH 43229

All written inquiries should be made to the above address.

Their toll free phone number is (800) 848-8969

The BALLY/ASTROVISION SYSTEMS

BALLY Professional ARCADE (by BALLY and ASTROVISION) This was the original unit sold starting in 1979 and sold through late 1981. This unit was sold in many forms, but to be able to write and store programs you had to have the additional BALLY BASIC cartridge and the external audio cassette interface module. The unit originally sold for about \$ 300.00 with four joysticks. The BALLY BASIC cartridge cost an additional \$ 55.00 and the audio cassette interface an additional \$ 55.00. This unit was plagued by many heat related failures and many units were exchanged under warranty.

Programs or Hardware that require use of the original 300 baud in the "Equipment Required" BB BALLY BASIC will be coded with a column of this SOURCEBOOK.

This unit is now in the process of being replaced by the BALLY Professional ARCADE Plus discussed below.

BALLY Professional ARCADE Plus (by ASTROVISION) This unit is expected to be sold starting in late 1981. This will include the ASTROVISION BASIC cartridge with built-in 2000 baud cassette interface. The price for this unit with the ASTROVISION BASIC cartridge and two joysticks is expected to be about \$ 300. The main circuit board has also been completely redesigned to solve all the overheating problems which plagued the original unit. The new ASTROVISION BASIC cartridge allows programs to be stored and retreived from a cassette recorder 14 times as fast as the old BALLY BASIC. The new ASTROVISION BASIC will require some changes in programs that were written in the old BALLY BASIC. These are minor changes however, and a program or a tutorial will be available to tell you how to make these changes. When you order programs from this SOURCEBOOK it is important for you to tell the supplier what unit you have. Fill in that information on the enclosed order blanks. Most programs at this time are written for the old BALLY BASIC but as the new ASTROVISION BASIC cartridges become available the suppliers will have the programs avaiable in ASTROVISION BASIC. (AB)

Programs or Hardware that require use of the new 2000 baud ASTROVISION in the "Equipment Required" BASIC will be coded with a AB column of this SOURCEBOOK.

Expected in April.

ZGRASS-32 Keyboard (by ASTROVISION)

The ZGRASS-32 Keyboard is expected to be available in early 1982. The Keyboard will fit under the BALLY Professional ARCADES and give the user the following features:
(4446K Ram Memory included

32K Ram expandability internally 32K Rom capability internally Floppy Disc expansion capability(optional)
RS-232 Input/Output Interface included Two languages--ASTROVISION BASIC and ZGRASS 160×100 pixel screen resolution 256 color choices Broadcast Quality Video Extended Precision Math Package Dual Audio Cassette Jacks with motor control Voltrax Speech Chip(ptional).

Programs or Hardware that require use of the ZGRASS unit will be coded with a ZG in the "Equipment Required" column of future SOURCEBOOKS.

Other ADD-ON SYSTEMS AVAILABLE

BLUE RAM SYSTEMS (by Perkins Engineering)

The Blue Ram System was introduced in June 1980 and includes the the following items:

Btue Ram Meder Adeptor Moder Printer Interface
Blue Ram BSR Comments -Blue Ram -Blue Ram Keyboard

-Blue Ram BSR Controller

Blue Ram Operating System

See the Hardware Listings for more information on these items.

Programs or Hardware that require use of the Blue Ram System will be in the "Equipment Required" column of this coded with a BR SOURCEBOOK.

During 1982 the name of the unit will be changed to the ASTRO Professional ARCADE.

VIPER SYSTEMS (by Alternative Engineering)

The VIPER System was introduced in April 1981 and includes the following items:

VIPER System One VIPER System Five (5 slot motherboard) VIRER System Ten (10 slot motherboard)

1.

Hemony Board V5R16K+ VRS232 Interface Board VEPSE EPROM Programmer

VIPER System Keyboard VIPER Ram Gard

VIPER Interface Card

See the Hardware Listings for more information on these items.

Programs or Hardware that require use of the VIPER System will be VS in the "Equipment Required" column of this coded with a SOURCEBOOK.

Extended BASIC

JYSTEM

This extended BASIC will be available as a ROM cartridge for use with the Blue Ram System and as a 8K tape for use with the VIPER System. Programs should be generally compatable between systems except for some Input/Output routines.

Programs or Hardware that require use of the the Extended BASIC will in the "Equipment Required" column of this ХB be coded with a SOURCEBOOK.

SOURCE: Alternative Engineering PO Box 128 Gardiner, ME Ø4345

ARCADIAN 3626 Morrie Drive

Perkins Engineering 1004 Pleasant Ave. San Jose, CA 95127 Boyne City, MI 49712

Extended BASIC 1.0

BR or VS Language

DESCRIPTION:

This new language will be available in two versions: on tape for those of you that have a lot of added memory ie. the VIPER SYSTEM and on a ROM for those of you with a small added memory ie. The Blue Ram. or the VIPER SYSTEM Here is a list of most of the new commands and features that will appear in the Extended BASIC: POINT and CIRCLE

thork

SNAP memorizes what is on the screen and stores it in an array. Later you can recall the scene using SHOW.

NEW erases the existing program.

DEFAULT sets all variables to their original values.

ZERO sets all variables to zero.

DATA allows easier entry of variables.

SCROLL rolls the text up or down a specified number of lines. Conversion is available between decimal and hex and binary.

Four colors anywhere.

Additional character font size of 3x5.

A window can be set up of any size, anywhere, within which text can be placed and scrolled.

Contact above Sources for availability and pricing info.

SAVE EDIT TRACE

Program Name		betized Progr Type	# Players	Equipment Required	Source	Page
Air Raid		Game, War	1 P	BBorAB,1H	LMS CUR	G 17
Alarm Clock Alchemisymmetrical		Time Graphics		BB	ARC	E 1
Al's Poker Bandit		Game, Casino	1 P	BB,1H	TBE	F
nalog(Non-digital) Clock				ВВ	ARC	E 1
Amazed in Space	79	Game, Maze		BB,1H	ARC GM	E ·
RCADE Christmas Music		Music, 3 voic		BB BB,1-4H	CUR	
ARCADE Golf Arcade Dice		Game, Sport Games, Casir			ARC	F E E
RCADIAN Sampler		Graphics		ВВ	ARC	E
rtillery Duel	8Ø	Game, War	1 P	BB,2H	ARC	Ē
SCII Conversion Chart		Chart		BB	CUR ARC	F E 1
STROVISION Editor		Tutorial Game, Strates	-u 2P	AB BBorAB,2H	LMS	Ğ
tom Smasher Attack		Game, Chase		BB,1H	ARC	Ē
Backgammon		Game, Board		BBorAB	WM	G 2
Background/Foreground	8Ø	Tutorial		BB	ARC	Ē
sage is		Game, Logic		BB	ARC ARC	E E 1
BALLY 500		Game, Skill	2-31	BB,1 BB	ARC	E
BALLY BASIC Text Area BALLY BASIC Translations		Tutorial Tutorial		BB	ARC	Ē
BALLY Black Box		Game, Logic	1-4P	BB,1-4H	ARC	- E 1
Bally Slot		Game, Casino		BBorAB	SS	G 2
Bangman		Game, Word		BB,1H	ARC	E G 2
Barracade		Game, Skill	1 P	BBorAB BB	SS ARC	G 2 E
Base Conversion		Utility Educational	1 P	BBorAB	SS	Ğ 2
Beatle Quiz BIBLE Quiz		Educational		BB	ARC	E
Biginning Programming		Tutorial		BB	ARC	E
Singo		Game, Board	1 P	BB,1H	ARC	E
Biorhythm		Personal	1 20	BB	MSK CUR	G 1 F
Storbythm Compatability		Personal Personal	1-2P	BB	ARC	Ė
Biorhythm I Biorhythm II		Personal		BB	ARC	E
Bio-rhythm		Personal		BB	TBE	G 2
Blackbox		Game, Logic		BB	ARC MSK	E G 1
		Game, Casino		BB,1H BB	ARC	E
Black Hole Black Lagoon		Game, Space Game, Maze		BBorAB,1H	LMS	Ğ 1
BLUE RAM Programming		Tutorial		BB,BR	ARC	E
Bombardier		Game, War	1 P	•	LMS	G 1
Bombardment II		Game, War Game, Logic		BB,1H BB	MSK El	G 1 G
Bomb Squad Boo		Graphics	• •	BB	ĀRC	Ē 1
BOTS		Game, Chase	17	BB,1H	ARC	E
Bowling Secretary		Business	0.5	BB	DG	G E
Bowl a Rama		Game, Sport Math	21	BB,2H BB	ARC CUR	F
Bubble Sort Bullseye II		Game, Skill	1-2ØF		MSK	G 1
Camel		Game, Logic		BB	CUR	F
Character Size Multipler	8.0	Graphics		BB	CUR	F
Char. Size & Print Loc.		Tutorial	1 5	BB BB,1H	ARC MSK	E G 1
Chase III		Game, Chase Game, Board		BB, In	ARC	E
Checkers I Checkers II		Game, Board		BB	ARC	E
Chessette		Game, Board	21	BB	CUR	
Chicago Loop		Graphics		BB	CUR CUR	
Chopsticks Music		Music, 3 voi		BB BBorAB,1H	WM	Ġ
Chord Progressions Circle Plotter		Educational, Graphics	HUSTE	BB	ARC	E
Circles		Graphics		ВВ	ARC	E
Claim Jumper	81	Game, Strate	gy 1-51	BBorAB,1-4H		G E
Clock		Time	1 61	BB BBorAB,KP	ARC WM	G
Clue Codo		Game, Logic Educational	1-0	BB	ARC	E
Code Coder-Decoder		Game		BB	ARC	E
Color Chart		Graphics		ВВ	ARC	E
Color Formater	81	Graphics Uti	lity	BB	BE	G E
Compound Interest		Business	1 2	88 9 99 1-24	ARC CUR	_
Connect Four		Game, Logic		P BB,1-2H P BB,2H	ARC	
Connect Four II		Game, Logic Game, Logic		p BB,1-2H	ARC	Ε
Connect rour II		Graphics, Ga	ame 1	P BB,1H	TBE	
Cosmic Zap		Game, Space		P BBorAB	SS	G E
005m10 = 4P		Game, Skill	-	P BB,1H	ARC	

Al	phabet	ized Prog	ıram L	rsting #	s Equipment		
Program Name	Tyl	oe e		# yers	Required	Source	Page
oyote-Roadrunner Race		ne, Skill	., ., ., .,		BBorAB,2H	LMS LMS	G 9
razu Ball(Two in One)	8Ø Gai	ne, Skill		1 P	BBorAB,1H BB	ARC	E 11
reating Special Graphics	81 In.	cortai			BB	CUR	F - 5
ritter		aphics siness			BB	CUR	F 4
URSOR Inventory Program ursor Control Chart	8Ø Ch.				ВВ	CUR	F 4
aredevil	81 Ga	ne, Race			BB,1H	ARC	E 12
arts	81 Ga	ne, Simula	ation	1-4P		CUR	F 6
art Board		me, Skill		1 P	BBorAB,1H	LMS ARC	E 3
ata Storage		torial			BB BB	ARC	Ē
ay of Week & Calendar	8Ø Ti			1 P	BB,1H	ARC	Ē 1.
efuse		me, Hunt aphics		*'	BB	CUR	F
esign		aphics			ВВ	TBE	F
iamond igital Couch		me, Perso	nal	1 P	BB	ARC	E 1.
irect Video/Audio Ckt.	8Ø Pr				BB	CUR	F
irty Programming Tricks		torial			BB	CUR	F E
istance Between 2 Points	79 Ma	th			BB	ARC CUR	F
MA Graphics	8Ø Gr	aphics Ut		1 40	BB BBor AB	SS	G 2
og Racing		me, Sport			BB,1H	SC	G I
own the Trench		me, Space		11	BB	ŘŤ	Ğ 1
ungeons and Dragons		me Aid siness			BB	CUR	F
lectric Bill Analysis lect. Visualization Ctr.					BB	ARC	Ε
xac. Time Card Calc.	81 Bu	siness			BB	CUR	F
alling Stars		me, Skill		1 P	BBorAB	SS	G 2
ile Search		torial			BB	ARC	Ē
loating Point Math	8Ø Ma				BB	CUR WM	F G 2
lying Ace		me, War		-	BBorAB, IH	SS	G 1
ootball		me, Sport			BBorAB BB,1H	TBE	F
ox and Hounds	81 Ga	me, Board		1.	8B	ARC	E
requencies		ound			BB,KB	CUR	F
uli Size ASCII Keyboard	SØ G	me, Space	•	1 P	BB	CUR	F
ialactibattle ialactic War 2002		me, Space			BBorAB,1H	LMS	Ğ
Cobblers	81 Ga	ime, Skill			BB,2H	ARC	E 1
olf	81 G	ime, Sport	;	1 - 4 P	BB,1-4H	ARC ARC	E,
randfather Clock	81 T	me, Graph	nics		88 88	ARC	Ē 1
raphic Character Maker	81 G	aphics Ut	. 1 1 1 1 2 4	,	8 B	ARC	Ē
raphics Assembler	80 G	aphics Ut			BB	RT	G 1
raphics Assembler	80 C	aphics Ut	LIIItv	,	BB	ARD	G
Fraphics Demo	81 G:	ame, Logic	: :	1 F	ВВ	DG	G
Guess Five Guitar Course	8Ø E	ducationa	l, Mus	ic	BBorAB	WM	G
Guitar Course (Tuning)	8Ø E	ducationa	1, Mus	ic	BBorAB,1H	WM	G :
Halloween Ghost	8Ø G	raphics			BB	ARC ARC	Ē
lamurabi	8Ø G	ame, Econo	omic		BB BB	CUR	
lamurabi		ame, Econo	OMIC		BB,1H	ARC	Ë
Hangman I	/9 G	ame, Word ame, Adve	nture		P BB	DG	G
Haunted House	79 M		il Cui O		BB	ARC	E
Hello Dolly		tility			ВВ	ARC	_
lex Poker Hex to Decimal		tility			BB	ARC	
Hex to Decimal Converter	8Ø M				BB	CUR	
Hit the Pedestrian	79 G	ame, Skil			P BB,1H	SC ARC	
Horserace		ame, Spor			P BB	ARC	
Horse Race		ame, Spor			P BB,1-4H P BBorAB,KP	WM	Ğ
Horse Race		ame, Spor			P BBorAB	SS	Ğ
Hustlel		ame, Skil utorial	1	•	BB,BR	ARC	
Hybrid Programs		ame, War		1-4	P BB,1JS	SPS	
ICBM Attack IF Statements		utorial			ВВ	ARC	E
IF, AND, OR		utorial			BB 111	ARC	
Invasion Force		ame, Spac	e	1	P BB,1H	TBE	_
Interrupt Routine	8Ø L	tility	_		BB B BB 14	ARC ARC	
Invisible War		ame, Spac			P BB,1H P BB,1H	ARC	
Keno II 2.0		ame, Casi			P BBorAB,KP	LMS	_
Kill the Vulcan		iame, Spac iame, Spac			P BB	RT	G
Klingon Capture	81 6	iame, spaciame, Skil	ĩ		P BBorAB	SS	G
Laser Battle		imulation		-	ВВ	MS	_
Life Synthesis Model		imulation			BB	CUF	_
Light Show Program #2	81 (BBorAB, Li	aht LMS	פי כ

C 3	SO!	FTWARE INDEX	****	*****	**	****
Alp	hab	etized Program Li			Source	Page
Program Name						
		tility	1-4P	BB BB	CUR RT	F 6 G 13
		ame, Hunt raphics	1 - 41	BB	ARC	E 5
3-		ame, Skill		BBorAB,1H	WM	G 25
Lookout for the Bull II 8		ame, Skill		BBorAB,1H	WM	G 25 G 13
		ame, Simulation	1 P	BB BB	RT CUR	F 5
Machine Language Graphics 8 Mastermind 8	ion i	ame, Logic	1 P		ARC	E 7
Mastermind II 8	ØG	ame, Logic	1 P		ARC	E 9
		ame, Board	1-2P	BB	ARC TBE	E 12 F 7
	11 G 19 M	ame, Board	1-2P	BB	SC	G 17
iladii ildadiilad	-	ame, Math	1 P		CUR	F 4
	Ø G	ame, Skill		BBorAB,1H	WM	G 23
		ame, Maze		BBorAB,2H BBorAB	WM SS	G 23 G 2Ø
		ame, Maze utorial	16	BB	ARC	E 4
		tility		BB	ARC	E 2
Memory Contents-Hex 7		tility		BB	ARC	E 3
		tility		BB BB	ARC ARC	E 3 E 1 <i>0</i>
**************************************		raphics utorial		88	CUR	F 5
Tromot y with a retr		utorial		ВВ	ARC	E 6
Memory Tutorial II 8		utorial		BB	ARC	E 6 E 7
1101101 3 14001 141 114		utorial		BB BB	ARC ARC	E 7
		utorial iame, Puzzle		BB	TBE	F 7
		lath		ВВ	CUR	F 6
		ame, Space		BB	ARC	E 4 G 5
******		iame, Sport iame, Skill		BB,1H BBorAB	EL SS	G 2Ø
***************************************		Tame, Strategy		BBorAB,1H	LMS	G 1Ø
Monster Chase	81 G	lame, Chase		BB,1H	TBE	F 8
iletronity mount in agreem		Business	1 P	88 88	ARC TBE	E 5 G 22
		Game, Simulation Tutorial		BB	ARC	E 1Ø
11010 0202 111111 211010		ducational		ВВ	ARC	E 8
		ducational		8 B	CUR	F 6 E 11
Motherboard Modification & Mouse in the Hat		roject Game, Logic	1 P	BB BBorAB,1H	WM	G 24
		[utorial		ВВ	BE	G 3
Multi-processing 8		[utorial		BB	ARC	E 8
		Game, Logic Music	1 P	BB,1H BB	SC ARC	G 17 E 1 <i>0</i>
Music Assembler	81 N	Music. 3 voice.Ut	ility		RT	G 13
Music Composer 8	8Ø N	1us i c	-	BBorAB,1H	WM	G 24
Music Synthesizer Part I	79 T	[utoria]		88 88	ARC ARC	E 3 E 4
Music Synthesizer Part II 7 Music (3 Voice)	/9 I 80 N	lutorial Music, 3 voice		BB	ARC	Ē 7
Mystery Maze	81 0	Game, Skill	1 P	BBor AB	SS	G 21
Name and Nicomachus New Graphic Char, Maker	8Ø 9	Game, Number	1 P	BB	ARC ARC	E 7 E 13
New Graphic Char, Maker New Music Program Tutorial	81 (81 1	iraphics Utility Tutorial Music		BB,1H BB	ARC	E 13
New Subsearch	81 (Game, War	1 P	BB,1H	ARC	E 12
Nim	81 (Same, Logic	1-2P	BB,1-2H	ARC	E 11 F 5
Note Match	8Ø (Game, Music	1 P	BBOrAR 1H	CUR WM	
Note Match Note Match II	80 I	Game, Music Educational Music	. 1P	BBorAB, 1H	WM 1	G 24
Nuclear Math	81 6	Educational, Game	• 1P	BB	ARC	E 13
Number Match	79 (Game, Number		BB	ARC WM	E 5 G 23
Obstacle Course Obstacle Course Tourney	80 (Game, Maze		BBorAB,1H BBorAB,1H	WM	
Old Bent Nose	81	Game, Board		BB,2H	ARC	E 11
Old Glory	81 (Graphics, Music		BB DD 1-44	TBE CUR	
Ones and Fives Orbital Docking Simulator	81 (81 (1-4P	BB,1-4H BB	RT	
Organizing Tape Files	80	Tutorial		BB	CUR	F 5
Othello	8Ø (Game, Logic		BB,1H	CUR	
		Game, Logic		BB,1H BBorAB,1H	ARC WM	
rack-kat		Game, Skill Game, Skill		BBorAB,1H	WM	G 25
PEEK n' POKE	80	Tutorial		ВВ	CUR	
PEEK n' POKE		Tutorial		88 88	CUR CUR	
		Graphics Game, Logic	1-6P	BBorAB,1H	WM	G 23
. 31 431 3 1311						

A I	pna	betized Progra	n ⊾15€1ñ(#	equipment		
Program Name		Туре	Players	Required	Source	Page
		Game, Space		BBorAB,2H	LMS	G
		Game, Puzzle		BB	CUR ARC	F 1
		Game, Sport Music	11	BB,1H BB	ARC	E .
		Tutorial		BB	ARC	Ēi
		Tutorial		BB	CUR	F
		Project		BB,Printer	CUR	F
		Tutorial		BB	ARC	E 1.
rogramming Techniques II				BB	ARC	E 1.
. 9		Tutorial		BB	ARC	E E
		Tutorial	1_20	BB BB,1-2H	ARC DG	E G
		Game, Skill Graphics	1-21	BB 1 - 2 n	ARC	E
		Game, Skill	1 P	BB,1H	ARC	Ē 1
		Game, Skill		BBorAB,1H	LMS	G i
•		Utility		ВВ	ARC	Ε
everse	79	Game, Logic	1 P	BB,1H	ARC	E
		Game, Logic		BB,1H	CUR	F
		Game, Educatio	nal 1P	BBorAB	SS	G 2
		Graphics		88	CUR	F
		Game, Casino		BBorAB, 1-4H	LMS	G G 2
		Game, Skill Game, Simulati		BBorAB,1H BB	SS RT	G 1
		Game, Logic		BB ·	CUR	F
UN Maker		Tutorial	*1	BB	TBE	F
		Game, Space	1-2P	BB,1-2H	ARC	E
		Music, 3 voice		BB	GM	. G
	79	Tutorial		BB	ARC	Ė
		Game, Logic	1 P	BBorAB,1H	LMS	Ğ 1
erial and Parallel		Tutorial		BB	ARC	Ē
hangri-Logic		Tutorial		BB BB	TBE CUR	F F
hell-Metzner Sort		Math Graphics, Math		BB	ARC	E 1
hort Program Selection ideswipe		Game, Skill		BB,1H	CUR	F
tmon		Game, Logic		BB,1H	ARC	Ē
imon Says		Game, Memory		BBorAB	SS	G 2
ink the U-Boat	81	Game, War		BBorAB,1H	LMS	G 1
kunk		Game, Dice		BB,1-4H	DG	G
		Game, Casino		BBorAB,1H	WM	G 2 E
lot Machine I		Game, Casino		BB,1H	ARC	Ē
lot Machine II lot Machine III	20	Game, Casino Game, Casino	1-2r 1P	BB,1-2H BB,1H	ARC	Ē
mack-Up		Game, Skill	1 P	BBorAB	SS	Ğ 2
ound Effects		Tutorial, Soun		ВВ	TBE	F
ound Graph		Sound		BB	ARC	Ε
ound Port Study		Sound		BB	TBE	F
ound Trek		Game, Space		BB	RT	G 1
pacewar I		Game, Space		BB,2H	ARC	E E
pacewar II	8.0	Game, Space		BB,1H BB,1H	ARC MSK	E G 1
pace Battle		Game, Space Game, Space		BBorAB,KP	WM	G 2
pace Chase pace Checkers	Ω1	Game, Strategy		BBorAB,2H	LMS	Ğ
pace Sleuth		Game, Adventur		BBorAB, 1-4H	LMS	Ğ
pace Quest 2001		Game, War		BBorAB,1H	LMS	G 1
pace War		Game, Space	1-2P		RT	G 1
peed Math		Game, Math	1-2P	BBorAB,1H	WM	G 2
peed O Math		Game, Math	1 P	ВВ	ARC	Ē
pider Web		Graphics		BB	CUR	F
pinning Wheel		Game, Casino	71	BB,?H	ARC	E 1
pirals I		Graphics		88 88	ARC ARC	E.
pirals II		Graphics Math		BB	ARC	Ē
quare Root Starfire Assembler		Utility		BB	SC	Ğ 1
itanfire!		Game, Space	1 P	BB,1H	SC	ĞÎ
Starship Bally		Game, Space		BBorAB	SS	G 1
Star Base 2000		Game, Space	1 P	BBorAB,1H	LMS	G 1
Star Trek		Game, Space		ВВ	EL	G
Star Trek III		Game, Space		BB,1H	MSK	<u>G</u> 1
tar Wars Music		Music, 3 voice		BB BB 14	CUR	F
Strategic Air Command		Game, War		BB,1H	ARC	E 1 G 1
Submarine Minefield		Game, War Tutorial	1-2P	BB BB	SC ARC	E
Subroutines						

2000 AD

Alphabetized Program Listings # Equipment # Equipment Players Required Type Program Name Source Page Super Craps 81 Game, Casino 1-4P BBorAB Super Slot 81 Game, Casino 1-4P BBorAB Super Super Wumpus 79 Game, Hunt 1P BB Summetrical Art 81 Sound 81 Casino 81 Sound 81 Casino 81 C ARC E 11 SS G 19 SS SC G 19 G 17 ARC Symmetrical Art 81 Graphics 80 Tutorial E 12 ARC Taping Memory 80 Tutorial BB Target (Trio of Games) 80 Games, Skill 1P BBorAB, 1H Telling Time 81 Time, Educational 1P BB, 1H Text Editor 80 H+11+0 ARC LMS ARC ВВ G 11 Text Editor 8Ø Utility MSK The Beauty of the Loop 81 Tutorial BB The Fox and the Hare 80 Game, Board 2P BBorAB, 2H The Mummy's Treasure 81 Game, Board 1-4P BBorAB, 1-4H The Pits 81 Game, Maze 1P BB, 1H Tic-Tac-Dough 81 Game, Board 1P BBorAB TBE G LMS LMS 1P BB,1H 1P BBorAB 1P BB BB Tic-Tac-Dough Tic-Tac-Tollah Touch To-ARC E 12 81 Game, Board 8Ø Game, Board SS G 2Ø Touch Tone Simulate 79 Sound BB Tower of Hanoi 81 Game, Puzzle 1P BB,1H Tower of Hanoi 81 Game, Puzzle 1P BB,1H Traveller's Aid Package 81 Game Aid BB Treasure Island 81 Game, Hunt 2P BB Twixt 81 Game, Board 1P BB,1H Tycoon 81 Game, Board 1P BB,1H Tycoon 81 Game, Economic 1P BB UFO Battle 79 Game, Space 1-2P BB,1H US Geography-Major Cities 81 Educational, Game 1P BB US Geography-States 81 Educational, Game 1P BB Video Rally 80 Educational, Game 1P BB,1H VIPER 1 81 Tutorial BB,V1,XB Wavemaker's Mazemaker 80 Game, Maze 1P BB,1H We Three Kings 80 Music, 3 voice BB What-Zit 81 Game, Logic 1P BB Wildcatter 81 Game, Logic 1P BB Wumpus 80 Game, Logic 1P BB Wumpus 11 80 Game, Logic 1P BB Wumpus 11 80 Game, Logic 1P BB XY Tutorial 79 Utility BB Yahtzee ARD G 2 ARC ARC E 1Ø CUR F G 13 RT CUR ARC E 11 TBE G 17 SC ĔĹ EL ARD TBE CUR CUR TBE G EL CUR Wumpus II 80 Game, Logic 1P BB XY Tutorial 79 Utility BB Yahtzee 80 Game, Dice 1-4P BB,1-4H Yahtzee 81 Game, Dice 1-4P BB,1-4H Yahtzee 80 Game, Dice 1-4P BBorAB,1H Zappit 80 Game, Space 1P BB,1H Z-GRASS Language 81 Tutorial ZG Z-80 Minicourse 81 Educational & Utility BB 3D Tic Tac Toe 81 Game, Board 2P BBorAB,2H 3 Voice Music 80 Tutorial BB 3 Voice Music Tutorial 80 Music, 3 voice BB 4D2 81 Graphics BB MSK G SC G ARC 6 TBE WM G 24 ARC TBE BE LMS ARC . CUR CUR ARC E 13 15 Bach 2 Part Inventions 80 Music, 3 voice BB 15 Puzzle 80 Game, Puzzle 1P BB 256 Colors GM ARC Ε 7 CUR 5 81 Graphics BB 256 Colors

80 Game, Space 1P BB,1H

ARC

6

Pr	ogr	ams Listed by	Source		e				
Program Name		Туре	# Players	· 	Equipment Required	Source		!	
An	der	son Research	and Dest	gr	1	Section ARD	G G	2	0
Graphics Demo	80	Graphics Util Game, Board	iity 1	P	BB BB	ARD	Ğ	2 2	5
Tic-Tac-Tollah Video Rally		Educational,			BB,1H	ARD	G	. 2	
						Cantina			_
		IAN Newslette	er		вв	Section ARC		1Ø	
Archemisymmetrical Aralog(Non-digital) Clock		Graphics Time			BB	ARC		12	
Amazed in Space	79	Game, Maze			BB,1H	ARC	E	3	
Arcade Dice		Games, Castr	70 1-4	ļΡ	BB	ARC ARC	E E	5 6	
ARCADIAN Sampler		Graphics	. 1	p	BB BB,2H	ARC	Ē	7	
Artillery Duel		Game, War Tutorial	•		AB	ARC	E	13	
ASTROVISION Editor Attack		Game, Chase	1	lΡ	BB,1H	ARC	E	5	
Background/Foreground	8Ø	Tutorial			BB	ARC	Ē	8 6	
Bagels		Game, Logic			BB BB	ARC ARC	E E	1Ø	
BALLY 500		Game, Skill Tutorial	2	31	BB,1 BB	ARC	Ē	4	
BALLY BASIC Text Area BALLY BASIC Translations		Tutorial			BB	ARC	E	4	
BALLY Black Box		Game, Logic	1 - 4	4 P	BB,1-4H	ARC		12	
Bangman	79	Game, Word		1 P	BB,1H	ARC	E	8	
Base Conversion		Utility		חכ	BB	ARC ARC	E E	6	
BIBLE Quiz		Educational	,	۲,	BB BB	ARC	E	3	
Biginning Programming		Tutorial Game, Board		1 P	BB,1H	ARC	Ε	•	7
Bingo Biorhythm I		Personal		-	ВВ	ARC	E	5	
Biorhythm II		Personal			BB	ARC	E	6 4	
Blackbox		Game, Logic		-	BB	ARC ARC	E E		
Black Hole		Game, Space		1 1	BB BB,BR	ARC	E	9	
BLUE RAM Programming		Tutorial Graphics			BB	ARC	E	13	
Boo BOTS		Game, Chase		1 P	BB,1H	ARC	E		10
Bowl a Rama		Game, Sport		2 P	BB,2H	ARC	E		- 8
Char. Size & Print Loc.		Tutorial		1 0	BB BB	ARC ARC	E E	_	3
Checkers I		Game, Board Game, Board			BB	ARC	Ē		6
Checkers II		Graphics		• •	BB	ARC	Ε	-	12
Circle Plotter Circles		Graphics			BB	ARC	Ē		14
Clock	79	Time			BB	ARC	E E		9
Code		Educational			BB BB	ARC ARC			17.
Code - Decode		Game Graphics			BB	ARC	Ē		12
Color Chart Compound Interest		Business			BBonly	ARC	E		15
Connect Four I		Game, Logic	_		BB,2H	ARC	E E	_	7
Connect Four II		Game, Logic	1-		BB,1-2H BB,1H	ARC ARC	E		10
Count the Dots		Game, Skill		1 1	BB B	ARC	Ε		14
Creating Special Graphics	81	Game, Race		1 P	BB,1H	ARC		10	15
Daredevil Data Storage		Tutorial			ВВ	ARC	E		3
Day of Week & Calendar		f Time		1 17	88 9 8 8 1 11	ARC ARC	E E	144	13
Defuse 🗐		Game, Hunt			PBB,1H PBB	ARC	Ē		13
Digital Couch Distance Between 2 Points	. 70	. Game, Persor Math	iai	. 1	BB	ARC	E	4	_
Elect. Visualization Ctr.	8,	Graphics			BB	ARC			6
File Search	8.8	Tutorial			BB	ARC ARC			4
Frequencies		Sound		20	BB BB,2H	ARC		_	76
Gobblers		Game, Skill Game, Sport	1 -		BB,1-4H	ARC		_	12
Golf Grandfather Clock	8	l Time, Graph			ВВ	ARC			12
Graphic Character Maker	8:	l Graphics Ut	ility		BB	ARC	_		14
Graphics Assembler	81	y Graphics Ut	ility		BB	ARC ARC	_		110
Halloween Ghost		7 Graphics	m 1 c	11	BB PBB	ARC	_		7
Hamurabi		Ø Game, Econor 9 Game, Word			P BB,1H	ARC	E	_	6
Hangman I Hello Doll y		9 Music			BB	ARC			6 14
Hex Poker	8	1 Utility			BB	ARC	_		£3 14
Hex to Decimal		9 Utility	•	_ ,	BB PBB	ARC ARC	_		12
Horserace		Ø Game, Sport	_		P BB,1-4H	ARC		-	iji
Horse Race		Ø Game, Sport Ø Tutorial	•	7	BB,BR	ARC		E •	115
Hybrid Programs IF Statements Translation		9 Tutorial			BB	ARC	_		3
IF AND OR	7	9 Tutorial			BB	ARC	_		11.
, 💃 Interrupt Routine		Ø Utility		1	BB P BB,1H	ARC ARC	_		15
Invisible War		<pre>1 Game, Space 1 Game, Casin</pre>			P BB,1H	ARC	;	E - 15	216
Keno II 2.8		9 Graphics	_		ВВ	ARC			6
Mastermind		Ø Game, Logic		1	P BB	ARC		E (8

Mah. Two FST

Program Name		Туре	# Players	Equipment Required	Source	Page
		ARCADIAN	Newslette	r	Section	E
Mastermind II		Game, Logic	1 P	BB	ARC	E •
Match	81	Game, Board	1-2P		ARC	E 42
Memory Addressing	79	Tutorial		BB	ARC	E 🐠.
Memory Contents-Binary		Utility		BB	ARC	E 🕿
Memory Contents-Hex		Utility		88	ARC	E 3
Memory Display		Utility		BB	ARC	F 🥌
				BB	ARC	E 🗯
Memory Doodle		Graphics			ARC	Ē 🕡
Memory Tutorial I		Tutorial		BB		
Memory Tutorial II		Tutorial		BB	ARC	E 🚭
Memory Tutorial III	8Ø	Tutorial		BB	ARC	E 👎
Memory Tutorial IV	8.0	Tutorial		BB	ARC	E T
Microtrek	79	Game, Space	1 P	BB	ARC	E 🗭
Monthly Loan Program		Business		BB	ARC	E 🛊
More BLUE RAM BASIC		Tutorial		BB	ARC	E 1
				BB	ARC	E @
Morse Code		Educational				
Motherboard Modification				BB	ARC	
Multi-processing	8Ø	Tutorial		BB	ARC	E .
Musical Staff	81	Music		BB	ARC	E 🐙
Music Synthesizer Part				BB	ARC	E 🐠
Music Synthesizer Part	70	Tutorial		BB	ARC	E 4
			C A	BB	ARC	Ē
Music (3 Voice)		Music, 3 voi			ARC	E 🕹
Name and Nicomachus		Game, Number		BB		
New Graphic Char, Maker	81	Graphics Uti	ilty	BB,1H	ARC	E 44
New Music Program	B 1	Tutorial, Mu	sic	BB	ARC	E 1
New Subsearch		Game, War	1 P	BB,1H	ARC	E 🗷
Nim		Game, Logic		BB,1-2H	ARC	E 😂
		Educational,		BB E	ARC	E 44
macroa, macri				BB	ARC	E 4
Number Match		Game, Number			ARC	E W
Old Bent Nose		Game, Board		BB,2H		
0-Jello		Game, Logic		BB,1H	ARC	E 6
Poo1	81	Game, Sport	1 P	BB,1H	ARC	_
Popeye the Sailor		Music		BB	ARC	E 🥏
Pre-Tutorial Pixels		Tutorial		BB	ARC	E 📥
				BB	ARC	E m
Programming Techniques	. 01	Tutonial		BB	ARC	E \$48
Programming Techniques				BB	ARC	E 🔴
Program Title & Instr.		Tutorial				
PX Function		Tutorial		BB	ARC	E ø
Random Art		Graphics		ВВ	ARC	E 🔮
Rebound	81	Game, Skill	1 P	BB,1H	ARC	E 14
Reseauencina	. 79	Utilitv		BB	ARC	E 🛊
Reverse	79	Game, Logic	1 P	BB,1H	ARC	E 2
Saucer Battle	70	Game, Space			ARC	E 2-
	79			. BB	ARC	E 2.
Serial and Parallel		Tutorial		BB	ARC	
Short Program Selection		Graphics, Ma		BB	ARC	E Ø
Simon		Game, Logic		BB,1H	ARC	E 2
Slot Machine I		Game, Casino	- 1 F	BB,1H	ARC	E 3
Slot Machine II		Game, Casino		BB,1-2H	ARC	E 🛢
		Game, Casino		BB,1H	ARC	Ë
Slot Machine III				BB, III	ARC	Ē
Sound Graph		Sound				E .
Spacewar I		Game, Space		BB,2H	ARC	
Spacewar II	8.0	Game, Space		BB,1H	ARC	E •
Speed O Math	8.0	Game, Math		BB	ARC	E •
Spinning Wheel		Game, Casino		BB,7H	ARC	E 🗯
		Graphics	•••	BB	ARC	E 🐠
Spirals I				BB	ARC	Ē Ø
Spirals II		Graphics		BB	ARC	Ē 4
Square Root		Math				E est
Strategic Air Command		Game, War	11	BB,1H	ARC	
Subroutines	79	Tutorial		BB	ARC	E d
Subsearch	8.0	Game, War	11	Р ВВ	ARC	E
Sub Hunter		Game, War		BB,1H	ARC	E 😹
Surf Sounds and Cricket				ВВ	ARC	.E 4
Surr Sounds and Cricket	a. 01	Caseptee		BB	ARC	E 12
Symmetrical Art		Graphics	•		ARC	E e
Taping Memory		Tutorial		8B		
Ielling Time	81	Time, Educat		BB,1H	ARC	E 🔀
The Pits	81	Game, Maze	. 11	BB,1H	ARC	E 🅦
Touch Tone Simulate		Sound		BB	ARC	E 🕏
		Game, Puzzle	<u>.</u> 11	BB,1H	ARC	E 16
Tower of Hanol				BB,1H	ARC	E 🗪
Twixt		Game, Board			ARC	Ē
Yahtzee		Game, Dice		BB,1-4H		
_Zappit	8.8	Game, Space	11	BB,1H	ARC	
3 Voice Music		Tutorial		BB	ARC	
4D2		Graphics		BB	ARC	
				РВВ	ARC	
15 Puzzle	20	/ Game, Puzzle	9 1	r DD		

Pr	ogr	ams Listed by	Sou	rce *	Equipment				
Program Name		Type	Pla	yers	Required	Source	Pa	ge	
Ba	rry	Ellerson				Section	G	3	_
		Graphics Util	ity		BB BB	BE BE	(G G	3
		Tutorial Educational &	Uti	lity	BB	BE		Ğ.	3
2 02 111111111111									
CURSOR/ THE BASI		XPRESS Newsle	tter		ВВ	Section CUR	F	F	3
Alarm Clock Al's Poker Bandit		Game, Casino		1 P	BB,1H	TBE		F	7
ARCADE Golf	8Ø	Game, Sport		1-4P	BB,1-4H	CUR		F	4
ASCII Conversion Chart		Chart Personal		1-2P	BB RR	CUR CUR		F F	5
Biorhythm Compatability Bubble Sort		Math			BB	CUR		F	2
Camel		Game, Logic		1 P		CUR		F F	2
Character Size Multipler		Graphics Game, Board		2 P	BB BB	CUR CUR		r F	3 5
Chessette Chicago Loop		Graphics			BB	CUR		F	3
Chopsticks Music		Music, 3 voic	e		ВВ	CUR		F	3
Connect Four		Game, Logic	_		BB,1-2H BB,1H	CUR TBE		F F	4 7
Connect-the-Dots Critter		Graphics, Gam Graphics	æ	11	BB, In	CUR		F	5
CURSOR Inventory Program		Business			ВВ	CUR		F	4
Cursor Control Chart		Chart			BB	CUR CUR		F F	4 6
Darts		Game, Simulat Graphics	lon	1-4P	88	CUR		F	4
Design Diamond		Graphics			BB	TBE		F	6
Direct Video/Audio Ckt.	8Ø	Project			ВВ	CUR		F	3
Dirty Programming Tricks		Tutorial Graphics Util	4+11		BB BB	CUR CUR		F	6 3
DMA Graphics Electric Bill Analysis		Business	ı cy		BB	CUR		F	2
Exec. Time Card Calc.	81	Business			ВВ	CUR		F	5
Floating Point Math		Math		1 0	BB BB,1H	CUR TBE		F	4 7
Fox and Hounds Full Size ASCII Keyboard		Game, Board Project		1.	BB,KB	CUR		F	2
Galactibattle		Game, Space			ВВ	CUR		F	3
Hamurabi		Game, Economi	С	1 P	BB BB	CUR CUR		F F	6 2
Hex to Decimal Converter Invasion Force		Math Game, Space		1 P	BB,1H	TBE		F	7
Life Synthesis Model		Simulation			BB	CUR		F	2
Line Resequence		Utility			BB BB	CUR CUR		F	6 5
Machine Language Graphics Match	81	Game, Board		1-2P		TBE		F	7
Math Quiz	8ø	Game, Math		1 P	ВВ	CUR		Ē	4
Memory Expansion		Tutorial			BB BB	CUR		F	5 7
Message from Lost Tribe Metric Converter		Game, Puzzle Math			BB	CUR		F	
Monster Chase	81	Game, Chase		1 P	BB,1H	TBE		F	8
Morse Code Simulator		Educational		1 P	BB	CUR CUR		F	6 5
Note Match Old Glory		Game, Music Graphics, Mus	sic	11	BB	TBE	1	f	7
Ones and Fives		Game, Dice		1 – 4 P	BB,1-4H	CUR		F	6
Organizing Tape Files		Tutorial		10	BB BB,1H	CUR CUR		F F	5 4
Othello PEEK n' POKE		Game, Logic Tutorial		11	BB	CUR		F	2
PEEK n' POKE		Tutorial			ВВ	CUR		F	5
Perspectives		Graphics		1 D	BB BB	CUR CUR		F	6 2
Plastic Puzzle PRINT Statements		Game, Puzzle Tutorial		1.	BB	CUR		F	3
Printer		Project			BB, Printe			F	2
Reverse		Game, Logic		1 P	BB,1H	CUR CUR		F F	4
Ring		Graphics Game, Logic		1 P	BB BB	CUR		F	3
Rotation RUN Maker		Tutorial			BB	TBE		F	7
Shangri-Logic		Tutorial			BB	TBE CUR		F	7 4
Shell-Metzner Sort		Math Game, Skill		1 P	BB BB,1H	CUR		F	4
Sideswipe Sound Effects		Tutorial, Sou	und	• '	ВВ	TBE		F	8
Sound Port Study	81	Sound			BB	TBE		F F	7 4
Spider Web		Graphics	- 6		BB BB	CUR CUR		F	3
Star Wars Music The Beauty of the Loop		Music, 3 void Tutorial	-6		BB	TBE		F	6
Tower of Hanol	81	Game, Puzzle			BB,1H	CUR		F	5 6
Treasure Island		Game, Hunt	1.0		BB BB	CUR TBE		F F	7
Tycoon		Game, Econom Tutorial		1.	BB,V1,XB	TBE		F	7

Secretary Si Business BB	
Avemaker's Mazemaker 38	ge
Avemaker's Mazemaker 38	- 4
### STATE OF COLORS 19	F 4
Don Gladden BB	F 7
Don Gladden BB	F 2
Don Gladden BB	F 2 F 6 F 6
Don Gladden BB	F 6
Don Gladden BB	F 3
Don Gladden BB	F 3
Don Gladden BB	F 5
Secretary Si Business BB	4
Section Sect	G 4
Section Sect	G 4
Section Sect	G 4
Section Sect	
Same	G 4
Samp Sayard	
Same Sport 1-4P BB File F	G 5
Star Trek	G 5 G 5
Stage Stag	G 5
Stage Stag	G 5
George Moses Co. RCADE Christmas Music 30 Music 3 voice BB GM GM GM GM GM GM GM	
RCADE Christmas Music	
Accord Doppin Raging SW Music, 3 voice BB GM	6 G 6
L & M Software	G 6
L & M Software	G 6
Air Raid	
Air Raid	7-1
Atom Smasher 81 Game, Strategy 2P BBOrAB, 2H LMS 3Black Lagoon 81 Game, Maze 1P BBOrAB, 1H LMS 2D BBOMBARD 1	G 1Ø
Black Lagoon	G 1Ø
Sambardier	G 18
Claim Jumper Coyote-Roadrunner Race Crazy Ball(Two in One) But Board Crazy Ball(Two in One) But Board Ball Board But	G 9
Cayote-Roadrunner Race of Game, Skill 1P BBorAB,1H LMS	G 9
Crazy Ball (Two in One) 88 Game, Skill 17 BBDrAS, 11 LMS Dart Board 88 Game, Space 1P BBDrAB, 1H LMS Galactic War 2002 80 Game, Space 1P BBDrAB, 1H LMS Kill the Vulcan 80 Game, Space 1P BBDrAB, Light LMS Light Show Program #2 81 Graphics 8BDrAB, Light LMS Mission Impossible 81 Game, Strategy 1P BBDrAB, 1H LMS Mission Impossible 81 Game, Strategy 2P BBDrAB, 2H LMS Phantom Star Fight 2003 81 Game, Space 2P BBDrAB, 1H LMS Rescue Air Drop 81 Game, Skill 1P BBDrAB, 1H LMS Rescue Air Drop 81 Game, Casino 1-5P BBDrAB, 1H LMS Rescue Air Drop 81 Game, Casino 1-5P BBDrAB, 1H LMS Search and Destroy 80 Game, Logic 1P BBDrAB, 1H LMS Search and Destroy 80 Game, War 1P BBDrAB, 1H LMS Sink the U-Boat 81 Game, War 1P BBDrAB, 1H LMS Sink the U-Boat 81 Game, Strategy 2P BBDrAB, 2H LMS Space Sleuth 81 Game, War 1P BBDrAB, 1H LMS Space Quest 2001 81 Game, Space 1P BBDrAB, 1H LM	G 9
Salactic War 2002	G 1Ø
Galactic War 2002 Kill I the Vulcan Light Show Program #2 81 Game, Space 82 BBorAB, 1H 83 Came, Space 84 BBorAB, 1H 85 Came, Space 86 Came, Space 87 BBorAB, 1H 88 Came, Space 88 Came, Space 89 Came, Space 80 Casino 81 Game, Space 81 Game, War 82 Casino 83 Came, Space 84 Casino 85 Came, Space 86 Came, Space 87 BBOrAB, 1H 88 Came, Space 88 Came, Space 89 Came, Space 80 Casino 80 Came, Space 81 Game, War 81 Game, War 82 Casino 83 Came, Space 84 Casino 85 Came, Space 86 Came, Space 87 BBORAB, 1H 88 Came, Space 88 Came, Space 89 Came, Space 89 Came, Space 80 Came, Space 81 Casino 80 Came, Space 81 Casino 82 Casino 83 Came, Space 84 Casino 85 Casino 86 Came, Space 87 BBORAB, 1H 88 Came, Board 89 Came, Board 10 Casino 10 Casino 11 Casino 12 Casino 13 Casino 14 Casino 15 Casino 16 Casino 17 Casino 18 Casino 19 Casino 19 Casino 10 Casino 10 Casino 11 Casino 12 Casino 13 Casino 14 Casino 15 Casino 16 Casino 17 Casino 18 Casino 19 Casino 19 Casino 10 Casino 10 Casino 11 Casino 12 Casino 13 Casino 14 Casino 15 Casino 16 Casino 17 Casino 18 Casino 19 Casino 19 Casino 10 Casino 10 Casino 11 Casino 12 Casino 13 Casino 14 Casino 15 Casino 16 Casino 17 Casino 18 Casino 19 Casino 19 Casino 19 Casino 10 Casino 10 Casino 11 Casino 12 Casino 13 Casino 14 Casino 15 Casino 16 Casino 17 Casino 18 Casino 19 Casin	G 9
Start Star	G 1Ø
Nission Impossible	G 9
Phantom Star Fight 2003	G 1Ø
Rescue Air Drop	9 7
Star Base 2000	G 10
Search and Destroy	G 9
Sink the U-Boat	G 10
Space Checkers	G 10
Space Sleuth	G 9
Space Quest 2001 81 Game, War 1P BBorAB, 1H LMS Star Base 2000 81 Game, Space 1P BBorAB, 1H LMS Target (Trio of Games) 80 Games, Skill 1P BBorAB, 1H LMS The Fox and the Hare 80 Game, Board 2P BBorAB, 2H LMS The Mummy's Treasure 81 Game, Board 1-4P BBorAB, 1-4H LMS 3D Tic Tac Toe 81 Game, Board 2P BBorAB, 2H LMS Mark S. Keller Biorhythm 80 Personal BB Blackjack II 80 Game, Casino 1P BB, 1H MSK Bombardment II 80 Game, War 1P BB, 1H MSK Bullseye II 80 Game, Skill 1-20P BB MSK Chase III 80 Game, Chase 1P BB, 1H MSK Space Battle 79 Game, Space 1P BB, 1H MSK Star Trek III 80 Game, Space 1P BB, 1H MSK Wumpus II 80 Game, Logic 1P BB Rich Tietjens Section Gettion	G 9
Star Base 2000 81 Game, Space . 1P BBorAB, 1H LMS Target (Trio of Games) 80 Games, Skill 1P BBorAB, 1H LMS The Fox and the Hare 80 Game, Board 2P BBorAB, 2H LMS The Mummy's Treasure 81 Game, Board 1-4P BBorAB, 1-4H LMS 3D Tic Tac Toe 81 Game, Board 2P BBorAB, 2H LMS Biorhythm 80 Fersonal BB MSK Blackjack II 80 Game, Casino 1P BB, 1H MSK Blackjack II 80 Game, War 1P BB, 1H MSK Bullseye II 80 Game, Skill 1-20P BB MSK Chase III 80 Game, Chase 1P BB, 1H MSK Life 80 Simulation BB MSK Space Battle 79 Game, Space 1P BB, 1H MSK Star Trek III 80 Game, Space 1P BB, 1H MSK Wumpus II 80 Game, Logic 1P BB Rich Tietjens Section G	G 18
Target (Trio of Games) 80 Games, Skill 17 BBOVAB, IN LINS The Fox and the Hare 80 Game, Board 2P BBorAB, 2H LMS The Mummy's Treasure 81 Game, Board 1-4P BBOVAB, 1-4H LMS 3D Tic Tac Toe 81 Game, Board 2P BBOVAB, 2H LMS Mark S. Keller Section G Biorhythm 80 Personal BB Blackjack II 80 Game, Casino 1P BB, 1H MSK Bombardment II 80 Game, War 1P BB, 1H MSK Bullseye II 80 Game, Skill 1-20P BB MSK Chase III 80 Game, Chase 1P BB, 1H MSK Space Battle 79 Game, Space 1P BB, 1H MSK Star Trek III 80 Game, Space 1P BB, 1H MSK Wumpus II 80 Game, Logic 1P BB MSK Rich Tietjens	G 18
The Fox and the Hare The Mummy's Treasure 3D Tic Tac Toe Mark S. Keller	G 12
The Mummy's Treasure 81 Game, Board 2P BBorAB, 1411 LMS 3D Tic Tac Toe 81 Game, Board 2P BBorAB, 2H LMS Mark S. Keller	G 12
Mark S. Keller Section G	G 12
Biorhythm	<u> </u>
Biorhythm 80 Personal BB MSK Blackjack II 80 Game, Casino 1P BB,1H MSK Bombardment II 80 Game, War 1P BB,1H MSK Bullseye II 80 Game, Skill 1-20P BB MSK Chase III 80 Game, Chase 1P BB,1H MSK Life 80 Simulation BB MSK Space Battle 79 Game, Space 1P BB,1H MSK Star Trek III 80 Game, Space 1P BB,1H MSK Text Editor 80 Utility BB MSK Wumpus II 80 Game, Logic 1P BB MSK	11
Black Jack II 80 Game, Casino 1P BB, 1H MSK Bombardment II 80 Game, War 1P BB, 1H MSK Bullseye II 80 Game, Skill 1-20P BB MSK Chase III 80 Game, Chase 1P BB, 1H MSK Life 80 Simulation BB MSK Space Battle 79 Game, Space 1P BB, 1H MSK Star Trek III 80 Game, Space 1P BB, 1H MSK Text Editor 80 Utility BB MSK Wumpus II 80 Game, Logic 1P BB MSK Rich Tietjens	G 11
Bombardment II	G 11
Bullseye II 8Ø Game, Skill 1-20P BB MSK Chase III 8Ø Game, Chase 1P BB, 1H MSK Life 8Ø Simulation BB MSK Space Battle 79 Game, Space 1P BB, 1H MSK Star Trek III 8Ø Game, Space 1P BB, 1H MSK Text Editor 8Ø Utility BB MSK Wumpus II 8Ø Game, Logic 1P BB MSK Rich Tietjens	G 1
Chase III 80 Game, Chase 1P BB, 1R MSK Life 80 Simulation BB MSK Space Battle 79 Game, Space 1P BB, 1H MSK Star Trek III 80 Game, Space 1P BB, 1H MSK Text Editor 80 Utility BB MSK Wumpus II 80 Game, Logic 1P BB MSK Rich Tietjens Section G	G 11
Life	G 1
Space Battle	G 1
Star Trek III 80 Game, Space 17 BB, 111 Text Editor 80 Utility BB MSK Wumpus II 80 Game, Logic 1P BB MSK Rich Tietiens Section G	G 1
Text Editor Wumpus II 80 Game, Logic 1P BB MSK Rich Tietiens Section G	G 1
Rich Tietjens Section G	Gi
Kich Heciens	
SI Camp Aid BB RT	13- G 1
Dungeons and Pragons of Game Ard	G 1
Graphics Assembler of Graphics of the RR RT	G 1
Klingon Capture 61 Game, Space 1-48 RR	G 1
Lion Country 80 Game, Hunt 1-4P BB RI	

wn the Trench t the Pedestrian th Routines nch arfire Assembler arfire! bmarine Minefield per Wumpus O Battle Tutorial S BM Attack	Ric 81 81 81 81 81 81 81 79 79 79 79 79 79 79 79 79 80 80 79 79 79 81 81 81	Game, Simul Game, Space Game, Space Game, Space Game, Skill Math Game, Logic Utility Game, Space Game, War Game, Hunt Game, Space Utility tre Systems Game, War Software Game, Casin	ation ice,Util ation ation 1 ng	1P 1ty 1P 1P 1P -2P 1P 1P 1P 1P	BB BB BB BB BB BB, 1H BB, 1H BB BB, 1H BB	RT RT RT RT RT RT RT Section SC	G 13 G 13 G 13 G 13 G 13 G 13 G 13 G 17 G 17 G 17 G 17 G 17 G 17 G 17 G 17
sic Assembler pital Docking Simulator cket Pilot und Trek ace War aveller's Aid Package Swn the Trench t the Pedestrian th Routines nch arfire Assembler arfire! bmarine Minefield per Wumpus O Battle Tutorial SBM Attack SIly Slot rracade atle Quiz smic Zap	81 81 81 81 81 81 81 6ebre 79 79 79 79 79 79 79 79 79 80 80 79 79 79 81 81 81	Game, Simulandsic, 3 vo Game, Simulands Simulands Space Game, Space Game, Space Game, Space Game, Skillands Math Game, Logic Utility Game, Space Game, War Game, Hunt Game, Space Utility Came, Came, War Came, Casing Came, Casing Came, Casing Came, Casing Came, Casing Came, Simulands Came, Casing Came, Simulands Came, Space Came, Casing Came, Simulands Came, Simulands Came, Space Came, Casing Came, Simulands Came, Space Came, Casing Came, Simulands Came, Space Came, Space Came, Casing Came, Simulands Came, Space Came,	ation ice,Util ation ation 1 ng	1 ty 1 P 1 P 1 P 1 P 1 P 1 P 1 P 1 P 1 P 1 P	BB BB BB BB BB BB, 1H BB, 1H BB BB, 1H BB BB, 1H BB BB, 1H BB	RT RT RT RT RT Section SC SC SC SC SC SC SC SC SC SC SC	G 13 G 13 G 13 G 13 G 13 G 13 G 17 G 17 G 17 G 17 G 17 G 17 G 17 G 17
sic Assembler pital Docking Simulator cket Pilot und Trek ace War aveller's Aid Package Swn the Trench t the Pedestrian th Routines nch arfire Assembler arfire! bmarine Minefield per Wumpus O Battle Tutorial SBM Attack SIly Slot rracade atle Quiz smic Zap	81 81 81 81 81 6ebre 79 79 79 79 79 79 79 79 8Ø 79 79 88 88 89 81 81 81	Music, 3 vo Game, Simul Game, Simul Game, Space Game, Space Game Aid e's Computi Game, Space Game, Skill Math Game, Logic Utility Game, Space Game, War Game, Hunt Game, Space Utility tre Systems Game, War Software Game, Casin	ice,Util ation ation 1 ng	1 ty 1 P 1 P 1 P 1 P 1 P 1 P 1 P 1 P 1 P 2 P 1 P	BB BB BB BB BB BB, 1H BB, 1H BB BB, 1H BB BB, 1H BB BB, 1H BB	RT RT RT RT RT Section SC SC SC SC SC SC SC SC SC SC SC	G 13 G 13 G 13 G 13 G 13 G 13 G 17 G 17 G 17 G 17 G 17 G 17 G 17 G 17
oital Docking Simulator cket Pilot und Trek ace War aveller's Aid Package Win the Trench t the Pedestrian th Routines nch arfire Assembler arfire! bmarine Minefield per Wumpus O Battle Tutorial SBM Attack SIly Slot rracade atle Quiz smic Zap	81 81 81 81 81 6ebre 79 79 79 79 79 79 79 79 8Ø 79 79 81 81 81	Game, Simul Game, Simul Game, Space Game, Space Game, Space Game, Skill Math Game, Logic Utility Game, Space Game, War Game, Hunt Game, Space Utility Tre Systems Game, War Software Game, Casin	ation ation 1 ng 1	1P 1P 1P -2P 1P 1P 1P 1P 1P 1-2P	BB BB BB BB BB, 1H BB, 1H BB BB, 1H BB BB, 1H BB BB, 1H BB	RT RT RT RT RT Section SC SC SC SC SC SC SC SC SC SC SC	G 13 G 13 G 13 G 13 G 13 G 17 G 17 G 17 G 17 G 17 G 17 G 17 G 17
sket Pilot und Trek ace War aveller's Aid Package What the Trench t the Pedestrian th Routines nch arfire Assembler arfire! bmarine Minefield per Wumpus O Battle Tutorial SM Attack SIly Slot rracade atle Quiz smic Zap	81 81 81 81 6ebre 79 79 79 79 79 79 79 79 8Ø 79 79 81 81 81 81	Game, Simul Game, Space Game, Space Game, Space Game, Skill Math Game, Logic Utility Game, Space Game, War Game, Hunt Game, Space Utility tre Systems Game, War Software Game, Casin	ation 1 ng 1	1P 1P -2P 1P 1P 1P 1P 1P 1-2P	BB BB BB BB, 1H BB, 1H BB, 1H BB BB, 1H BB BB, 1H BB BB, 1H BB	RT RT RT RT Section SC SC SC SC SC SC SC SC SC SC SC	G 13 G 13 G 13 G 13 G 17 G 17 G 17 G 17 G 17 G 17 G 17 G 17
sket Pilot und Trek ace War aveller's Aid Package What the Trench t the Pedestrian th Routines nch arfire Assembler arfire! bmarine Minefield per Wumpus O Battle Tutorial SM Attack SIly Slot rracade atle Quiz smic Zap	81 81 81 81 6ebre 79 79 79 79 79 79 79 79 8Ø 79 79 81 81 81 81	Game, Simul Game, Space Game, Space Game, Space Game, Skill Math Game, Logic Utility Game, Space Game, War Game, Hunt Game, Space Utility tre Systems Game, War Software Game, Casin	ation 1 ng 1	1P -2P 1P 1P 1P 1P 1-2P 1-2P	BB BB BB, 1H BB, 1H BB BB, 1H BB BB, 1H BB BB, 1H BB BB, 1H BB	RT RT RT Section SC SC SC SC SC SC SC SC SC SC SC	G 13 G 13 G 13 G 17 G 17 G 17 G 17 G 17 G 17 G 17 G 17
sce War aveller's Aid Package What the Trench t the Pedestrian th Routines nch arfire Assembler arfire! bmarine Minefield per Wumpus O Battle Tutorial SBM Attack SIly Slot rracade atle Quiz smic Zap	81 81 79 79 79 79 79 79 79 79 79 81 81 81 81	Game, Space Game Aid e's Computi Game, Space Game, Skill Math Game, Logic Utility Game, Space Game, War Game, Hunt Game, Space Utility tre Systems Game, War Software Game, Casin	1 ng 1 1	1P 1P 1P 1P 1P 1-2P 1P	BB, 1H BB, 1H BB, 1H BB BB, 1H BB BB, 1H BB BB, 1H BB	RT RT Section SC SC SC SC SC SC SC SC SC SC SC SC SC	G 13 G 17 G 17 G 17 G 17 G 17 G 17 G 17 G 17
wn the Trench t the Pedestrian th Routines nch arfire Assembler arfire! bmarine Minefield per Wumpus O Battle Tutorial SBM Attack SIly Slot rracade atle Quiz smic Zap	81 ebre 79 79 79 80 80 79 79 79 79 81 81 81 81	Game Aid ee's Computi Game, Space Game, Skill Math Game, Logic Utility Game, Space Game, War Game, Hunt Game, Space Utility tre Systems Game, War Software Game, Casin	ng 1 1	1P 1P 1P 1P 1-2P 1P	BB,1H BB,1H BB BB,1H BB BB,1H BB BB,1H BB BB,1H BB	RT Section SC	G 13 G 17 G 1
wn the Trench t the Pedestrian th Routines nch arfire Assembler arfire! bmarine Minefield per Wumpus O Battle Tutorial SBM Attack SIly Slot rracade atle Quiz smic Zap	ebre 79 79 79 8 8 8 79 79 79 79 81 81 81 81	ee's Computi Game, Space Game, Skill Math Game, Logic Utility Game, Space Game, War Game, Hunt Game, Space Utility tre Systems Game, War Software Game, Casin	1 1	1P 1P 1P 1-2P 1P 1-2P	BB,1H BB,1H BB BB,1H BB BB,1H BB BB,1H BB	Section SC	G 17 G 17 G 17 G 17 G 17 G 17 G 17 G 17
wn the Trench t the Pedestrian th Routines nch arfire Assembler arfire! bmarine Minefield per Wumpus O Battle Tutorial SBM Attack SIly Slot rracade atle Quiz smic Zap	79 79 79 8Ø 79 79 79 79 81 81 81 81	Game, Space Game, Skill Math Game, Logic Utility Game, Space Game, War Game, Hunt Game, Space Utility tre Systems Game, War Software Game, Casin	1 1	1P 1P 1P 1-2P 1P 1-2P	BB,1H BB,1H BB,1H BB,1H BB,1H BB,1H BB,1H BB	SC SC SC SC SC SC SC SC SC SC SC	G 17 G 17 G 17 G 17 G 17 G 17 G 17 G 17
t the Pedestrian th Routines nch arfire Assembler arfire! bmarine Minefield per Wumpus O Battle Tutorial SBM Attack SIly Slot rracade atle Quiz smic Zap	79 79 8Ø 8Ø 79 79 79 81 81 81 81	Game, Skill Math Game, Logic Utility Game, Space Game, War Game, Hunt Game, Space Utility tre Systems Game, War Software Game, Casin	1 1	1P 1P 1P 1-2P 1P 1-2P	BB,1H BB BB,1H BB BB,1H BB BB,1H BB	SC SC SC SC SC SC SC SC SC SC	G 17 G 17 G 17 G 17 G 17 G 17 G 17 G 17
th Routines nch arfire Assembler arfire! bmarine Minefield per Wumpus O Battle Tutorial SBM Attack SIly Slot rracade atle Quiz smic Zap	79 79 80 80 79 79 79 79 81 81 81	Math Game, Logic Utility Game, Space Game, War Game, Hunt Game, Space Utility tre Systems Game, War Software Game, Casin	1 1	1P 1P 1-2P 1P 1-2P	BB BB,1H BB BB,1H BB BB,1H BB	SC SC SC SC SC SC SC SC SC	G 17 G 17 G 17 G 17 G 17 G 17 G 17 G 17
nch arfire Assembler arfire! bmarine Minefield per Wumpus 0 Battle Tutorial SBM Attack SIly Slot rracade atle Quiz smic Zap	79 8Ø 8Ø 79 79 79 79 81 81 81	Game, Logic Utility Game, Space Game, War Game, Hunt Game, Space Utility tre Systems Game, War Software Game, Casin	1 1	1P 1-2P 1P 1-2P	BB,1H BB BB,1H BB BB BB,1H BB	SC SC SC SC SC SC SC SC	G 17 G 17 G 17 G 17 G 17 G 17 G 17 G 18 G 18
arfire Assembler arfire! bmarine Minefield per Wumpus 0 Battle Tutorial SBM Attack SIly Slot rracade atle Quiz smic Zap	8Ø 8Ø 79 79 79 79 Spect 81 81 81	Utility Game, Space Game, War Game, Hunt Game, Space Utility tre Systems Game, War - Software Game, Casin	1 1	1P 1-2P 1P 1-2P	BB BB,1H BB BB BB,1H BB	SC SC SC SC SC SC	G 17 G 17 G 17 G 17 G 17 G 17 G 18 G 18
arfire! bmarine Minefield per Wumpus 0 Battle Tutorial SBM Attack SIly Slot rracade atle Quiz smic Zap	8Ø 79 79 79 79 81 81 81 81	Game, Space Game, War Game, Hunt Game, Space Utility tre Systems Game, War Software Game, Casin	1 1	1-2P 1P 1-2P	BB,1H BB BB BB,1H BB	SC SC SC SC SC	G 17 G 17 G 17 G 17 G 17 G 18 G 18
bmarine Minefield per Wumpus O Battle Tutorial SBM Attack SIly Slot rracade atle Quiz smic Zap	79 79 79 79 81 81 81 81	Game, War Game, Hunt Game, Space Utility tre Systems Game, War Software Game, Casin	1 1	1-2P 1P 1-2P	BB BB,1H BB	SC SC SC SC Section SPS	G 17 G 17 G 17 G 17 G 18 G 18
per Wumpus O Battle Tutorial SBM Attack SIly Slot rracade atle Quiz smic Zap	79 79 79 Spect 81 81 81	Game, Hunt Game, Space Utility tre Systems Game, War Software Game, Casin	1	1 P L - 2 P	BB BB,1H BB	SC SC SC Section SPS	G 17 G 17 G 17 G 18 G 18
O Battle Tutorial SBM Attack Slly Slot rracade atle Quiz smic Zap	79 79 Spect 81 Super 81 81 81	Game, Space Utility tre Systems Game, War - Software Game, Casin	1	1-2P	BB,1H BB	SC SC Section SPS	G 17 G 17 G 18 G 18
Tutorial SBM Attack Slly Slot rracade atle Quiz smic Zap	79 Spect 81 Super 81 81 81	Utility tre Systems Game, War Software Game, Casin	1		ВВ	Section SPS	G 17 G 18 G 18 G 19-21
BM Attack Solve Silve S	81 81 Super 81 81 81	tre Systems Game, War - Software Game, Casin		l – 4P	· 	Section SPS	G 18 G 18
BM Attack Ily Slot rracade atle Quiz smic Zap	81 Super 81 81 81	Game, War Software Game, Casin		l – 4P	BB,1JS	SPS	G 18 G 19-21
lly Slot rracade atle Quiz smic Zap	Super 81 81 81	Software Game, Casin					G 19-21
lly Slot rracade atle Quiz smic Zap	81 81 81	Game, Casin	_				
rracade atle Quiz smic Zap	81 81			1 15	D.D. m.A.D	Section SS	G 2Ø
atle Quiz smic Zap	81				BBorAB		G 21
smic Zap		Game, Skill			BBorAB	88	
		Educational			BBorAB	\$\$	G 2Ø
g Racing		Game, Space			BBorAB		G 21
		Game, Sport			BBorAB	SS	G 2Ø
lling Stars	81	Game, Skill			BBorAB	\$8	G 21
otball	81	Game, Sport	. 1		BBorAB	SS	G 19
stle!		Game, Skill			BBorAB	SS	G 21
ser Battle		Game, Skill			BBorAB	\$\$	G 21
ze-A-Matic!!		Game, Maze			BBorAB	SS	G 2Ø
ssile Attack		Game, Skill			BBorAB	SS	G 2Ø
stery Maze		Game, Skill			BBorAB	SS	G 21
verse						SS	G 2Ø
bot Alert!							G 21
mon Says							G 21
ack-Up							G 2Ø
arship Bally			-				G 19
per Craps							G 19
per Slot							G 19
c-Tac-Dough				.1P	BBorAB	SS	G 2Ø
			SS Soft	ware	DD	Section	G 22 G 22
o-rhythm				1.0			G 22
on Landing	8.0	Game, Simul	ation	11	DD .	IDE	G 44
ismor I					DD - 10	Section	G 23-25
ckgammon	81	Game, Board	1 lp				G 24 S
ord Progressions							
ue							Ø 23
ying Ace				1-56			G 23
itar Course							
iltar Course (Tuning)							G 24:
orse Race							7 44
ookout for the Bull		Game, Skil					6 35
okout for the Bull II							6 45
XX (Robot from Space)	8.0						G /23
aze Race							G(23
ouse in the Hat			C Fig.	1 P			G 24)
isic Composer				سیر			G 24
ote Match	8.0	Game, Music	C Poddenia inchi				The same of the sa
stacle Course	8.0	Game, Maze		1 P	BBorAB,1H	WM.	23 24
ostacle Course Fourney				-1ØP	BBORAB, 1H	WM	C 24
ack-Rat	- 81	Game, Skil	1				G Ko
ack-Rat II	81	Game, Skil	1				4 25
erversion	8.0	Game, Logi					G 23
lot Machine							23
pace Chase							6 X3
peed Math							0 24
ahtzee _	8.0	Game, Dice		1-4P	BBorAB,1H	WM	g 24
	verse bot Alert! mon Says ack-Up arship Bally per Craps per Slot c-Tac-Dough o-rhythm on Landing ckgammon ord Progressions ue ying Ace itar Course i	verse bot Alert! mon Says ack-Up arship Bally per Craps per Slot c-Tac-Dough THE o-rhythm on Landing wave ckgammon ord Progressions ue ying Ace itar Course itar Course (Tuning) irse Race bokout for the Bull X (Robot from Space) X (Robot f	bot Alert! mon Says ack-Up arship Bally per Craps per Slot c-Tac-Dough THE BASIC EXPRE 80 Game, Simul WaveMakers ckgammon ord Progressions ue ying Ace itar Course itar Cour	serse bot Alert! 81 Game, Educational 81 Game, Skill 81 Game, Memory 81 Game, Skill 81 Game, Skill 81 Game, Skill 81 Game, Space 81 Game, Casino 81 Game, Casino 81 Game, Casino 81 Game, Board 80 Fersonal 80 Game, Simulation 80 Game, Simulation 80 Game, Simulation 80 Game, Logic 80 Game, War 80 Educational, Music 80 Game, War 80 Educational, Music 80 Game, War 80 Educational, Music 80 Game, Sport 80 Game, Skill 80 Game, Skill 80 Game, Skill 80 Game, Skill 80 Game, Maze 80 Game, Maze 80 Game, Maze 80 Game, Music	Verse bot Alert! 81 Game, Educational 1P bot Alert! 81 Game, Skill 1P arck-Up 81 Game, Memory 1P ack-Up 81 Game, Skill 1P arship Bally 81 Game, Space 1P street Str	## Star Same Educational P BBorAB 1	SI Game, Educational IP BBOrAB SS bot Alert! 81 Game, Skill 1P BBOrAB, H SS ack-Up 81 Game, Skill 1P BBORAB SS ack-Up 81 Game, Skill 1P BBORAB SS arship Bally 81 Game, Skill 1P BBORAB SS per Craps 81 Game, Casino 1-4P BBORAB SS per Craps 81 Game, Casino 1-4P BBORAB SS c-Tac-Dough 81 Game, Casino 1-4P BBORAB SS c-Tac-Dough 81 Game, Board 1P BBORAB SS c-Tac-Dough 81 Game, Board 1P BBORAB SS corney or hythm 80 Game, Simulation 1P BB TBE TBE SS Corney or hythm 80 Game, Simulation 1P BB TBE TBE SS Corney or hythm 80 Game, Simulation 1P BB TBE TBE SS Corney or hythm 80 Game, Simulation 1P BB TBE TBE SS Corney or hythm 80 Game, Simulation 1P BB TBE TBE SS Corney or hythm 80 Game, Simulation 1P BB TBE TBE SS Corney or hythm 80 Game, Simulation 1P BB TBE TBE SS Corney or hythm 80 Game, Simulation 1P BB TBE TBE SS Corney or hythm 80 Game, Simulation 1P BB TBE TBE SS Corney or hythm 80 Game, Simulation 1P BB TBE TBE SS Corney or hythm 80 Game, Simulation 1P BB TBE TBE SS Corney or hythm 80 Game, Simulation 1P BB TBE TBE SS Corney or hythm 80 Game, Simulation 1P BB TBE TBE TBE SS Corney or hythm 80 Game, Simulation 1P BB TBE TBE TBE SS CORNEY OR HYTHM 80 GAME, ST CORNEY

rro	grai	ns Listed by	ıype		F			
Program Name Y	ear	Туре	# Player		Equipment Required	Source	Page	
		BUSINESS						
Sowling Secretary	81	Business			BB	DG	G	4
Compound Interest		Business			BB	ARC	Ē	
URSOR Inventory Program		Business			BB BB	CUR CUR	F F	4 2
Electric Bill Analysis Exec. Time Card Calc.		Business Business	•		BB	CUR	F	5
Monthly Loan Program		Business			BB	ARC	E	5
	. (CHART	······································					
ASCII Conversion Chart		Chart			BB BB	CUR CUR	F F	4
Cursor Control Chart		Chart			DD			
		CATIONAL	·		0.0 4.0			0.0
Seatle Quiz		Educational Educational			BBorAB BB	SS ARC	G E	2Ø 6
BIBLE Quiz Chord Progressions		Educational,	Mustc	4٢	BBorAB,1H	WM	Ğ	24
Code		Educational			BB	ARC	Ē	8
Guitar Course		Educational,	Music		BBorAB	MM	G	24
Guitar Course (Tuning)		Educational,	Music		BBorAB,1H	WM	G	24
forse Code		Educational			BB	ARC	E	8 6
forse Code Simulator		Educational Educational	Musta	1 0	BB BBorAB,1H	CUR WM	F	-24
Note Match II Nuclear Math		Educational,			BB	ARC	E	13
leverse		Game, Educat			BBorAB	SS		2Ø
Telling Time		Time, Educat			BB,1H	ARC	Ε	
JS Geography-Major Cities	81	Educational,	Game		BB	EL	G	5
JS Geography-States		Educational,			BB	EL	G	5
/ideo Rally		Educational,			BB,1H	ARD BE	G G	2
Z-89 Minicourse	81	Educational	& Util	ıty	ВВ	DE		<u>.</u>
		GAME						
Air Raid	81	Game, War		1 P	BBorAB,1H	LMS	G	1Ø
Al's Poker Bandit		Game, Casino			BB,1H	TBE	F	7
Amazed in Space		Game, Maze			BB,1H	ARC		3
Arcade Dice		Games, Casi		1-4P		ARC		5
ARCADE Golf		Game, Sport			BB,1-4H	CUR	F	4 7
Artillery Duel Atom Smasher		Game, War Game, Strate	au		BB,2H BBorAB,2H	ARC LMS	Ğ	. 9
Attack		Game, Chase	33		BB,1H	ARC	Ĕ	5
Backgammon		Game, Board	1 p		BBorAB	WM	G	
Bagels		Game, Logic	•	1·P	BB	ARC		6
BALLY 500	81	Game, Skill			BB,1	ARC		
BALLY Black Box		Game, Logic			BB,1-4H	ARC		
Bally Slot		Game, Casino	•		BBorAB	SS ARC	. G	2Ø 3
Sangman		Game, Word Game, Skill		. 1P	BB,1H BBorAB	SS	G	
Sarracade Bingo		Game, Board			BB,1H	ARC		- 6
31ackbox		Game, Logic			ВВ	ARC		4
Blackjack II		Game, Casino	•	1 P	BB,1H	MSK		
Black Hole		Game, Space			BB	ARC		. 6
Black Lagoon		Game, Maze			BBorAB,1H	LMS LMS		
Bombardier		Game, War			BBorAB,1H BB,1H	MSK		
Bombardment II Bomb Squad		Game, War Game, Logic			BB, In	EL	G	
BOTS		Game, Chase		1 P		ARC		8
Bowl a Rama		Game, Sport			BB,2H	ARC		
Bullseye II	8.0	Game, Skill	1	-2ØP		MSK		
Camel		Game, Logic			BB /	CUR		
Chase III		Game, Chase			BB,1H	MSK ARC	_	
Checkers I Checkers II		Game, Board Game, Board			BB BB	ARC		
Chessette		Game, Board			BB	CUR		
Claim Jumper		Game, Strate	*		BBorAB,1-4		G	9
Clue		Game, Logic			BBorAB, KP	WM.		23
Coder-Decoder		Game			BB	ARC		
Connect-the-Dots		Graphics, Ga			BB,1H	TBE CUR		
Connect Four		Game, Logic			BB,1-2H BB,2H	ARC		
Connect Four I Connect Four II		Game, Logic Game, Logic			BB,1-2H	ARC		
Cosmic Zap		Game, Space			BBorAB	SS	G	21
		Game, Skill			BB,1H	ARC	E	8

Program Name	Year	Туре	# Play		Equipment Required	Source	Page
· · · · · · · · · · · · · · · · · · ·		GAMES	, cont.		· · · · · · · · · · · · · · · · · · ·		
oyote-Roadrunner Race	9 81	Game,	Skill		BBorAB,2H	LMS	G
razy Ball(Two in One)			Sk111		BBorAB,1H	LMS	G ,
aredevil		Game,		1P 1-4P	BB,1H	ARC CUR	E 1 F
arts art Board		,	Simulation Skill		BBorAB,1H	LMS	G 1
efuse		Game,			BB,1H	ARC	E 1
igital Couch			Personal		ВВ	ARC	E 1
og Racing			Sport		BBorAB	SS	G 2
own the Trench			Space	1 P	BB,1H	SC RT	G 1 G 1
ungeons and Dragons alling Stars		Game .	Skill	1 P	BB BBorAB	SS	G 2
lying Ace		Game,			BBorAB,1H	WM	G 2
ootball			Sport		BBorAB	SS	G 1
ox and Hounds			Board		BB,1H	TBE	F
alactibattle			Space		BB	CUR	
alactic War 2002 obblers			Space Skill		BBorAB,1H BB,2H	LMS ARC	
olf			Sport		BB,1-4H	ARC	
uess Five			Logic		ВВ	DG	G
lamurabi	8.0	Game,	Economic		BB	ARC	
lamurabi			Economic		BB	CUR	
langman I		Game,			BB,1H BB	ARC DG	E G
launted House lit the Pedestrian			Adventure Skill		BB,1H	SC	G 1
lorserace			Sport	1-4P	•	ARC	
lorse Race			Sport		BB,1-4H	ARC	
lorse Race			Sport		BBorAB, KP	WM	G 2
lustle!			Sk † 11		BBorAB BB,1JS	SS SPS	G 2 G 1
CBM Attack Invasion Force		Game, Game,			BB,103	TBE	
nvisible War			Space		BB,1H	ARC	
Ceno II 2.Ø			Casino		BB,1H	ARC	
(ill the Vulcan			Space		BBorAB,KP	LMS	
Clingon Capture			Space		BB BBorAB	RT SS	G 1 G 2
aser Battle .lon Country		Game,	Skill Hunt	1-4		RT	G 1
ookout for the Bull			Sk 111		BBorAB,1H	ŴM	G 2
cokout for the Bull			Sk 111		BBorAB,1H	WM	G 2
unar Lander			Simulation		BB	RT ARC	G 1
lastermind lastermind II			Logic Logic		BB BB	ARC	-
latch			Board	1-2P		ARC	
latch			Board	1-2P		TBE	F
1ath Quiz		Game,			BB	CUR	
AX (Robot from Space			Skill		BBorAB,1H	VM	G 2 G 2
Maze Race Maze-A-Matic!!	8 <i>0</i> 1	Game,	Maze Maze		BBorAB,2H BBorAB	WM SS	G 2
laze-A-maticii lessage from Lost Trii			Puzzle		BB	TBE	
licrotrek	79	Game,	Space		BB	ARC	
iini Golf			Sport	1-4P	BB,1H	EL	G
lissile Attack			Skill Strategy	16	BBorAB BBorAB,1H	SS LMS	
lission Impossible			Chase	1 5	BB,1H	TBE	
loon Landing			Simulation		BB	TBE	
louse in the Hat			Logic		BBorAB,1H	WM	G 2
lunch			Logic		BB,1H	SC	G 1
lystery Maze			Skill Number		BBorAB BB	SS ARC	G 2
Name and Nicomachus New Subsearch			War		BB,1H	ARC	
Vim			Logic	1-26	BB,1-2H	ÁRC	E 1
Note Match	8.0	Game,	Music	1 F	BB	CUR	_
Note Match			Music	1 F	BBorAB,1H		G 2
Núclear Math			tional, Game Number	9 1 F	RR	ARC ARC	
Number Match Obstacle Course			Maze	1 F	BBorAB,1H	WM	
Obstacle Course Tourn				1-1ØF	BBorAB,1H	WM	G 2
Old Bent Nose	81	Game,	Board		BB,2H	ARC	
Ones and Fives	81	Game,			BB,1-4H		F G 1
Orbital Docking Simul	ator 81	Game,	Simulation	1 t	BB,1H	CUR	
Othello O-Jello			Logic Logic		BB,1H	ARC	
Pack-Rat			CL 4 1 1	1 0	PRAPAR 14	WM	G 2
Pack-Rat II			Skill	11	BBorAB, 1H	WM	G 2
					BBorAB,1H		. G 2

Programs Listed by Type

		Type	ted by Type # Playe	ers	Equipment Required	Source	Page
rrogram Name	ea.						
		GAME,	cont.				
Phantom Star Fight 2003	81	Game.	Space	2 P	BBorAB,2H	LMS	
Plastic Puzzle			Puzzle		ВВ	CUR	
Pool			Sport		BB,1H	ARC	
Quickdraw			Sk 111		BB,1-2H	DG ARC	G 4 E 12
Rebound			Sk111 Sk111		BB,1H BBorAB,1H	LMS	
Rescue Air Drop Reverse			Logic		BB,1H	ARC	
Reverse			Logic		BB,1H	CUR	. F 4
Reverse			Educational	1 F	BBorAB	SS	G 2Ø
River City Gambler			Casino		BBorAB,1-4		
Robot Alert!			Skill		BBorAB,1H	SS RT	G 21 G 13
Rocket Pilot			Simulation		P BB P BB	CUR	
Rotation			Logic Space		BB,1-2H	ARC	
Saucer Battle Search and Destroy			Logic		BBorAB,1H	LMS	
Sideswipe			Skill		BB,1H	CUR	. F 4
Simon			Logic	1 F	BB,1H	ARC	
Simon Says			Memory		BBorAB	SS	G 21
Sink the U-Boat		Game,			BBorAB, 1H	LMS	
Skunk		Game,			BB,1-4H	DG WM	G 4 G 23
Slot Machine			Casino		BBorAB, 1H	ARC	_
Slot Machine I Slot Machine II			Casino Casino		9 BB,1H 9 BB,1-2H	ARC	
Slot Machine III			Casino		BB,1H	ARC	
Smack-Up			Sk 111		BBorAB	SS	G 2Ø
Sound Trek			Space	11	BB	RT	G 13
Spacewar I	79	Game,	Space		BB,2H	ARC	
Spacewar II	8.0	Game,	Space		BB,1H	ARC	
Space Battle			Space		BB,1H	MSK	G 11 G 23
Space Chase			Space		P BBorAB,KP P BBorAB,2H	WM LMS	· -
Space Checkers Space Sleuth			Strategy Adventure		BBOTAB, 1-4	1 1 1 1	
Space Quest 2001		Game,			BBorAB,1H	LMS	
Space War			Space		Р ВВ	RT	G 13
Speed Math		Game,			BBorAB,1H	WM	G 24
Speed O Math		Game,			P BB	ARC	
Spinning Wheel			Casino		H BB,?H	ARC	E 11 G 17
Starfirel			Space		P BB,1H P BBorAB	SC SS	G 19
Starship Bally			Space Space		P BBorAB, 1H	LMS	
Star Base 2000 Star Trek			Space		P BB	ĒL	G 5
Star Trek III			Space		P BB,1H	MSK	G 11
Strategic Air Command		Game,			Р ВВ,1Н	ARC	
Submarine Minefield	79	Game,	War		PBB	SC	
Subsearch		Game,			P BB	ARC	
Sub Hunter		Game,			P BB,1H	ARC SS	E 11 G 19
Super Craps			Casino		P BBorAB P BBorAB	\$\$ \$\$	G 19
Super Slot		Game,	Casino		P BB	SC	G 17
Super Wumpus Target (Trio of Games)			, Sk 111		P BBorAB,1H	LMS	
The Fox and the Hare			Board		P BBorAB,2H	LMS	
The Mummy's Treasure	-		Board		P BBorAB,1-4		
The Pits	81	Game,	Maze		P BB,1H	ARC	
Tic-Tac-Dough			Board		P BBorAB	SS	
Tic-Tac-Tollah			Board		PBB	ARI ARI	
Tower of Hanoi			Puzzle		P BB,1H P BB,1H	CUE	
Tower of Hanol Traveller's Aid Package		Game,	Puzzle Aid		BB	RT	
Treasure Island		Game,		2	P BB	CUF	_
Twixt			Board		P BB,1H	ARG	E 11
Tycoon	81	Game,	Economic Company Compa		P BB	TBE	
UFO Battle	79	Game,	Space		P BB,1H	sc	G 17
US Geography-Major Cities	s 81	Educa	tional, Game	1	n pp	EL EL	G 5 G 5
US Geography-States			tional, Game		P BB	ARI	
Video Rally Wavemaker's Mazemaker		Game,	tional, Game		P BB,1H P BB,1H	CUI	
			Logic		P BB	TBI	
What-Zit Wildcatter			Economic		P BB	EL	. G 5
					P BB	CUI	R F 2
	8.0	′Game,	Logic				
Wumpus Wumpus II	8.0	Game	Logic	1	P BB	MSI	K G 11
Wumpus Wumpus II Yahtzee	8.8 8.8	Game,	Logic Dice	1 1-4	P BB P BB,1-4H	MSI AR	K G 11 C E 7
Wumpus Wumpus II	8.0 8.0 8.1	Game Game	Logic Dice	1 1-4 1-4	P BB	MSI ARG TBI	K G 11 C E 7 E F 6

Programs Listed by Type Equipment Program Name Year Type Players Required Source Page GAME, cont. 80 Game, Space 81 Game, Board ARC 1P BB, 1H Zappit 2P BBorAB,2H LMS G 9 3D Tic Tac Toe 7 15 Puzzle 80 Game, Puzzle 1P BB ARC Ε 1P BB, 1H ARC Ε 6 8Ø Game, Space 2ØØØ AD GRAPHICS ARC 1Ø Alchemisymmetrical 81 Graphics ARC E 6 BB ARCADIAN Sampler 80 Graphics ARC E 13 Boo 81 Graphics BB RR CUR F 3 Character Size Multipler 80 Graphics F BB CUR 3 Chicago Loop 80 Graphics Circle Plotter BB ARC Ε 81 Graphics BB ARC Ε 11 Circles 81 Graphics Color Chart 81 Graphics ВВ ARC Ε 10 Color Formater 81 Graphics Utility ВВ ΒE G 3 1P BB,1H TBE Connect-the-Dots 81 Graphics, Game F 5 8Ø Graphics ВВ CUR Critter F CUR 8Ø Graphics BB Design F BB TBE 6 Diamond 81 Graphics F CUR DMA Graphics 80 Graphics Utility BB E Elect. Visualization Ctr. 80 Graphics BB ARC ARC Ε 9 RR Grandfather Clock 81 Time, Graphics Graphic Character Maker 81 Graphics Utility BB ARC E 11 ARC 8 80 Graphics Utility Ε Graphics Assembler BB Graphics Assembler BBRT. G 13 81 Graphics Utility BBARD G 2 Graphics Demo 8Ø Graphics Utility 8Ø Graphics BB ARC Ε 8 Halloween Ghost 81 Graphics BBorAB, Light LMS Light Show Program #2 Ε 5 Logo 79 Graphics BB ARC Ε 10 81 Graphics ВВ ARC Memory Doodle Ε 13 81 Graphics Utility **BB,1H** ARC New Graphic Char, Maker Old Glory TBE 7 81 Graphics, Music BB F 6 CUR Perspectives 81 Graphics BB E 79 Graphics BB ARC 2 Random Art CUR 3 F 80 Graphics BB Ring E Short Program Selection 81 Graphics, Math ВB ARC 1Ø CUR F 4 BBSpider Web 8Ø Graphics Ε 7 Spirals I 80 Graphics BB ARC 80 Graphics ARC Ε 8 BB Spirals II E 12 BB ARC Symmetrical Art 81 Graphics ARC Ε 13 81 Graphics BB 4D2 CUR 5 81 Graphics BB 256 Colors MATH BB CUR 2 Bubble Sort 80 Math Distance Between 2 Points 79 Math Ε 4 ARC BB F CUR BB Floating Point Math 80 Math 17 79 Math BB SC G Math Routines CUR 81 Math. BB F 6 Metric Converter 4 CUR F ВВ Shell-Metzner Sort 8Ø Math ВВ ARC Ε 1.0 Short Program Selection 81 Graphics, Math ARC 79 Math BB Square Root MUSIC G 6 BB GM ARCADE Christmas Music 80 Music, 3 voice G 24 Chord Progressions 80 Educational, Music BBorAB, 1H WM F CUR 3 BB Chopsticks Music 80 Music, 3 voice 24 80 Educational, Music 80 Educational, Music G **BBorAB** WM: Gultar Course 24 BBorAB, 1H WM! G Guitar Course (Tuning) 5 Hello Dolly ARC E 79 Mustc BB Ε 10 ВВ ARC Musical Staff 81 Music G 13 81 Music, 3 voice, Utility BB RT Music Assembler 8Ø Music BBorAB, 1H WM G 24 Music Composer ARC E Music (3 Voice) 80 Music, 3 voice BB 13 BB ARC Ε New Music Program Tutorial81 Tutorial, Music 1P BB **PCUR** Note Match 8Ø Game, Music 1P BBorAB, 1H WM G 24 Note Match 80 Game, Music G 24 80 Educational, Music 1P BBorAB,1H WM Note Match II TBE F 81 Graphics, Music ВВ Old Glory **ARC** Ε 5 79 Music BB Popeye the Sailor

C 15	***	SOFTWARE INC	*****	******	*****	****	***
		Type	#	Equipment Required	Source	Page	
		MUSIC, cont	•				
Scott Joplin Ragtime Star Wars Music We Three Kings 3 Voice Music Assembler 15 Bach 2 Part Inventions	8Ø 8Ø 8Ø	Music, 3 vo Music, 3 vo Music, 3 vo Music, 3 vo Music, 3 vo	ice ice ice	BB BB BB BB	GM CUR CUR CUR GM	G F F G	6 3 5 3 6
		PROJECT					
Direct Video/Audio Ckt. Full Size ASCII Keyboard Motherboard Modification Printer	8Ø 81	Project Project Project Project		BB BB,KB BB BB,Printer	CUR CUR ARC CUR	F	3 2 11 2
		SIMULATION					
Darts Life Life Synthesis Model Lunar Lander Moon Landing Orbital Docking Simulator	8Ø 8Ø 81 8Ø	Game, Simulation Simulation Game, Simulation Game, Simul Game, Simul SOUND	ation 1P ation	BB BB BB BB BB	CUR MSK CUR RT TBE RT	G F G	6 11 2 13 22 13
Frequencies Sound Effects Sound Graph Sound Port Study Surf Sounds and Crickets Touch Tone Simulate	81 79 81 81	Sound Tutorial, S Sound Sound Sound Sound	ound	BB BB BB BB BB	ARC TBE ARC TBE ARC ARC	F E F E	3 7 3 7 9
		TIME					
Alarm Clock Analog(Non-digital) Clock Clock Day of Week & Calendar Grandfather Clock Telling Time	81 79 8Ø 81 81	Time Time Time Time Time Time, Graph Time, Educa		BB BB BB BB BB,1H	CUR ARC ARC ARC ARC	E E E	3 12 2 9 9
ACTROVICION Editor			· · · · · · · · · · · · · · · · · · ·	AR	ARC	E	13
ASTROVISION Editor Background/Foreground BALLY BASIC Text Area BALLY BASIC Translations Biginning Programming BLUE RAM Programming Char. Size & Print Loc. Creating Special Graphics Data Storage Dirty Programming Tricks File Search Hybrid Programs IF Statements IF,AND,OR Machine Language Graphics Memory Addressing Memory Expansion Memory Tutorial I Memory Tutorial II Memory Tutorial III Memory Tutorial IV More BLUE RAM BASIC Multicolor Graphics Multi-processing Music Synthesizer Part I Music Synthesizer Part II New Music Program Tutoria Organizing Tape Files PEEK n' POKE PEEK n' POKE PEEK n' POKE Pre-Tutorial Pixels PRINT Statements	80999809998999999999999999999999999999	Tutorial	fus f c	ABBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB	ARCOCARCOCARCA ARCOCARCA A		8 4 4 3 9 3 1 2 6 9 8 3 2 5 4 5 6 6 7 7 Ø 3 8 3 4 3 5 2 5 1

Starfire Assembler

Text Editor

XY Tutorial

Z-8Ø Minicourse

****** Programs Listed by Type Equipment Players Required Source Page Program Name Year Type TUTORIAL, cont. Programming Techniques I 81 Tutorial Programming Techniques II 81 Tutorial Program Title & Instr. 80 Tutorial ВВ ARC E 10 E ВВ ARC 10 ВВ ARC Ε 9 4 79 Tutorial ARC Ε PX Function ВВ 81 Tutorial 79 Tutorial ВВ F 7 RUN Maker TBE Screen Operation BB ARC Ε 2 7 7 8 Serial and Parallel 80 Tutorial ВВ ARC Ε F 81 Tutorial TBE Shangri-Logic ВВ 81 Tutorial, Sound 79 Tutorial F Sound Effects ВB TBE 4 ARC Ε RR Subroutines Taping Memory 80 Tutorial ВВ ARC 9 81 Tutorial 81 Tutorial 6 7 The Beauty of the Loop RRTBE F F VIPER 1 BB, V1, XB TBE Z-GRASS Language 81 Tutorial 6 TBE ZG 3 Voice Music 8Ø Tutorial ВВ ARC Ε 7 3 Voice Music Tutorial 80 Tutorial BB CUR UTILITY Base Conversion 8Ø Utility ВВ ARC Ε 8 81 Graphics Utility Color Formater BB ΒE G 3 DMA Graphics 80 Graphics Utility BB CUR F 3 Ε Graphic Character Maker 81 Graphics Utility BB ARC 11 Graphics Assembler 80 Graphics Utility ВВ ARC Ε 8 81 Graphics Utility Graphics Assembler ВВ RT G 13 Graphics Demo 80 Graphics Utility BB ARD G 2 ARC E 11 Hex Poker 81 Utility BB 79 Utility Ε Hex to Decimal ВВ ARC 2 9 8Ø Utility BB ARC Ε Interrupt Routine 81 Utility CUR 6 Line Resequence BB Memory Contents-Binary ARC E 233 79 Utility BB Memory Contents-Hex Memory Display 79 Utility ВВ **ARC** Ε 79 Utility BB 81 Music, 3 voice, Utility BB ARC E Music Assembler RT G 13 E BB,1H ARC 13 New Graphic Char. Maker 81 Graphics Utility Resequencing 79 Utility BBARC Ε 80 Utility G 17

8Ø Utility

79 Utility

81 Educational & Utility

ВВ

ВВ

ВВ

BB

SC

SC

BE

MSK

G

G 17

G 3

11

Alphabetized Hardware Listings

•	4 i Piti	apecized naidw	416 21501				
BALLY BOOSTER T-Shirts		T-Shirts			DG	G	4
Blue Ram		Memory, I/O		BBorAB, EB+BR	PE	G G	
Blue Ram BSR Controller		Interface		BBorAB, BR+BSR BBorAB, EB+BR	PE	G	
Blue Ram Keyboard-62		Keyboard	am	BBorAB, EB+BR	PE		12
BR Operating System Vi.#		Operating Syst Accessory	·eiii	BBO! AB; EB . BK	TBE	Ğ	
Cassette Tape Eraser Cassette Tape Recorder		Accessory			TBE		22
Clock Kludge Mod. Kit		Modification		BB	BE	G	3
C-3Ø Tape		Accessory			TBE		22
EDGETAGS		Accessory			RS	-	16
Extended BASIC 1.Ø	81	Language		BR or VS	See	В	2
Hand Control Cables		Accessory			TBE		22
Heat Sinks		Accessory			TBE	G	
HD-1 Head Demagnetizer		Accessory			TBE TBE	G G	
Machine Language Manager		Cartridge		· C	RT	G	
MEM-EXTEND			Available	BBorAB,EB+BR	PE	Ğ	
Modem Printer Interface		Interface		BB	RT		15
Parallel/Serial Adaptor		Interface		BBorAB	SPS	_	18
Spectre Joystick Handle		Accessory Accessory	Available	·	BE	G	3
Telephone Modem		Interface	Availabio	BB,VS	ĀĒ	Ğ	1
VIPER Interface Card		Keyboard		BB,VS	AE	G	1
VIPER Keyboard VIPER RAM Card		Memory		BB,VS	AE.	G	1
VIPER System One		Add-on System		BB, VS	ΑE	G	1
VIPER System Five		Add-on System		BB, VS	ΑE	G	1
VIPER System Ten		Add-on System		BB, VS	ΑE	G	1
	***	********	*****	****	****	***	***
******				*****	****	***	****
Hardware	List	ings By Classi	ification				
		ACCESSORY	,				
Cassette Tape Eraser		Accessory			TBE	G	22
Cassette Tape Recorder		Accessory			TBE	G	22
C-3Ø Tape		Accessory			TBE	G	22
EDGETAGS	81	Accessory			RS		16
Hand Controll Cables		Accessory			TBE		22
Heat Sinks		Accessory			TBE		22
HD-1 Head Demagnetizer		Accessory			TBE		22
Spectre Joystick Handle	81	Accessory		BBorAB	SPS	G	18 3
Telephone Modem		Accessory	Availabl	e soon	BE	G	3
		ADD-ON SYS	TEM				
VIPER System One	81	Add-on System		BB, VS	ΑE	G	1
VIPER System Five		Add-on System		BB,VS	ΑE	G	1
VIPER System Ten	81	Add-on System		BB,VS	ΑE	G	1
	٠.	CARTRIDGES			TBE	G	22
Machine Language Manager	81	Cartridge					
		INTERFACE					
Blue Ram	81	Memory, I/O		BBorAB,EB+BR	PE		12
Blue Ram BSR Controller	8Ø	Interface		BBorAB, BR+BSR			12
Color Organ Light Show	8.0	Interface		BBorAB,Stereo			10
Modem Printer Interface	81	Interface		BBorAB, EB+BR	PE		12
Modem Printer Interface		Interface .		BBorAB, EB+BR	PE		12
VIPER Interface Card	81	Interface		BB,VS	AE	G	1
		KEYBOARD					
n. n. k i	0.1			BBorAB, EB+BR	PE	G	12
Blue Ram Keyboard-62		Keyboard Keyboard		BB, VS	AE	G	1
VIPER Keyboard	01	Reyboard					
		LANGUAGE				_	_
Extended BASIC 1.0	81	Language		BR or VS	See	В	2
D.1	01	MEMORY		BBorAB, EB+BR	PE	G	12
Blue Ram	9.1	Memory, I/O Memory	Availab1		RT		15
MEM-EXTEND VIPER RAM Card	Ω1	Memory	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	BB,VS	AE	G	1
VICE NAME CAPA	7 1						
		IFICATION		.	0.5	~	9
Clock Kludge Mod. Kit	81	Modification		ВВ	BE	G	3
	OPF	RATING SYSTEM					
BR Operating System V1.0		Coperating Sys	tem	BBorAB, EB+BR	PE	G	12
nr oberacing ayarem Area							
		T-SHIRTS			DG	G	4
BALLY BOOSTER T-Shirts	81	T-Shirts			D G	u	
the state of the s							

Hardware Listings By Source

Alternativ	e Engineering		Section	G 1
Extended Basic on Tape	81 Language	BB,VS	AE	B 2
VIPER Interface Card		BB, VS	AE	G 1
VIPER Keyboard	81 Keyboard	BB,VS	AE .	G 1
VIPER RAM Card	81 Memory	BB, VS	ΑE	G 1
	81 Add-on System		AE	G 1
VIPER System One			ĀĒ	ĞÎ
VIPER System Five	81 Add-on Syste		ĀĒ	ĞÎ
VIPER System Ten	81 Add-on Syste	m BB,VS	ME	G I
ARCAD	TΔN		Section	E
Extended Basic	81 Language	BB.VSorBF	R ARC	B 2
extended basic	or canguage			
Barry	Ellerson		Section	G 3
Clock Kludge Mod. Kit	81 Modification	ВВ	BE	G 3
	Accessory	Available soon	BE	G 3
Telephone Modem	Accessor y	Available 3001		
Don	Gladden		Section	G 4
BALLY BOOSTER T-Shirts			DG	G 4
L & M Soft	ware		Section	G 1Ø
Color Organ Light Show	8Ø Interface	BBorAB, St	tereo LMS	G 1Ø
Perkins En	aineerina		Section	G 12
	81 Memory, I/O	BBorAB,Ei		G 12
Blue Ram		BBorAB, B		G 12
Blue Ram BSR Controller				G 12
Blue Ram Keyboard-62	81 Keyboard	BBorAB, E		
BR Operating System V1.0	80 Operating Sy	stem BBorAB,E		G 12
Extended Basic in ROM	81 Language	BB,BR	PE	B 2
Modem Printer Interface	81 Interface	BBorAB,E	B+BR PE	G 12
B. I. T.			Section	G 15
Rich Ti		Aunilahla Coon	RT	G 15
MEM-EXTEND	Memory	Available Soon		G 15
Parallel/Serial Adaptor	81 Interface	ВВ	RT	G 13
Roger Saur	nders		Section	G 16
EDGETAGS	81 Accessory		RS	G 16
EDGL INGS	01 H0000001J			
Spectre Sy	ystems		Section	G 18
Spectre Joystick Handle	81 Accessory	BBorAB	SPS	G 18
THE BASIC	EXPRESS		Section	G 22
			TBE	G 22
Cassette Tape Recorder	Accessory Accessory		TBE	G 22
•	Accessory		TBE	G 22
C-3Ø Tape	Accessory		TBE	G 22
Hand Control Cables	•		TBE	G 22
II made tidades	Accessory		TBE	G 22
Heat Sinks				
HD-1 Head Demagnetizer Machine Language Manager	Accessory Cartridge		TBE	G 22

ARCADIAN

This Newsletter is the origin of all data on the Bally/AstroVision ARCADE unit because it first appeared in 1978. The first Volume (\$10) includes basic tutorial material and it documents our discoveries of hidden commands, controls, access provisions, and utilization of the Tiny Basic videocade. Volume Two (\$10) carries on in the same tradition of service to the subscriber with additional tutorials, and the use of machine code language programming, three-part harmony in Basic, and the advent of the first hardware to expand the ARCADE's memory capabilities. Volume Three (\$12.50) continues with more and more programs and knowledge. With the advent of the AstroVision Basic, and our own Extended Basic, Volume Four will include usable and useful programs in all languages, plus material of value from both the software and hardware standpoint. The ARCADIAN will, of course, support the user with suitable material when the Add-Under expansion is available.

Current Volume Four (Nov 81-Oct 82) is \$12.50 postpaid first class.

ARCADIAN 3626 Morrie Dr., San Jose, CA 95127-9990

unselicited testimonials:

You have no Idea of how your newsletter, The Arcadian, has done for me. It's like a dream come true. I would like to express my appreciation for it. Thank you!!!

I OWE YOU A DEBT OF GRATITUDE (BUT MAYBE THE \$10 WILL, DO) FOR ALL THE EXCITING INFORMATION I REVIEWED IN VOLUME ONE OF THE ARCADIAN. MY ENCLOSED CHECK IS TO INSURE THAT I RECEIVE MORE VALUABLE DATA THROUGHOUT THE YEAR.

out to mention what a fine magazine out to mention what a fine magazine the areachion is. I have beared quite the areachion is. I tutorials, and the a bit from your tutorials, and the a bit from your are excellent!, enclosed programs are excellent!, enclosed programs are excellent!

GETTING A NEW COMPUTER!

KEEP UP THE EXCELLENT WORK. IT HAS BEEN PAR MORE THAN MY WILDEST DREAMS.

fuel another novel relaif to was which have renewed my user who has been of great benefit to money worth by subscribing.

ARCADE. I HAVE LEARNED A LOT FROM THE PROGRAMS YOU PRINT.
AND IT HAS HELPED ME IN ALTER UNDERSTANDING HOW IT
FUNCTIONS.

All ARCADIAN programs are available as source listings in back issues of the ARCADIAN from:

ARCADIAN Vol. I (92 pages) \$ 10.00 Subscriptions run Bob Fabris Vol. II (106 pages) \$ 10.00 from November 3626 Morrie Drive Vol. III (130 pages) \$ 12.50 to October. San Jose, CA 95127 Vol. IV Subscription \$ 12.50

Some of the ARCADIAN programs are available on cassette tape. Contact the ARCADIAN or RMH ENTERPRISES for details.

All of the programs in the ARCADIAN prior to Nov-Dec 1981 are written in the Old BALLY BASIC. To use with the New ASTROVISION BASIC you will have to make some minor changes in the programs. These changes are covered in the ARCADIAN, along with a program used to enter BALLY BASIC programs recorded at 300 Baud into the 2000 Baud ASTROVISION BASIC Cartridge.

Simon	79 Game, Logic 1P BB, 1H
by:B. Bilbrey	The computer shows you a random sequence of colors which you
J. Borrello	have to repeat using the joystick. Each time you get the
ARC 1-35,45,77	sequence correct another color is added to the sequence for
	you to guess. See how long a sequence you can remember.
Clock	79 Time BB
by: J. Cousins	This program produces a digital clock on the screen.
by to the document	THIS PIOSICAL PIOCESTAL CONTRACTOR OF THE PROPERTY OF THE PROP
ARC 1-36	
Hex to Decimal	79 Utility BB
by:E. Sams	This program converts hex numbers to decimal numbers.
100 1 00	
ARC 1-36	

Reverse	79 Game, Logic 1P BB,1H
	The object is to put nine numbers in ascending order that
M. Toth	are initially in random order. Use the knob to identify the numbers to be moved, and the trigger to initiate the move.
ARC 1-38,46	numbers to be moved, and the trigger to initiate the move.
Screen Operation	79 Tutorial BB
by:J. Perkins	Tutorial explaining some of the basic's of screen operation.
ARC 1-40	
TE AND OP Evolon	ation 79 Tutorial BB
hv:J. Taillefer	IF, AND, OR statements explained.
by . o. farriorer	
ARC 1-41	
Data Storage	79 Tutorial BB
by:B. Weber	This program is used if you want to save the program, the
	registers, and and the strings.
ARC 1-41	
Checkers I	79 Game, Board 1P BB
by:J. Collins	This program has been replaced by Checkers II in the
100 1 10	ARCADIAN 2-12.
ARC 1-42	
Memory Contents-	Binary 79 Utility BB
by:M. Manowski	This program yields the decimal number plus the 16 bit binary output for a selected memory location.
ARC 1-43	binary output for a selected memory location:
7110 1 70	
D. J. J. J. J.	79 Graphics BB
Random Art	79 Graphics BB This program produces a moving box graphical presentation.
by:E. Sams	This program produces a moving box graphical presentation.
ARC 1-44,49	
•	

Memory Contents-h	lex 79 Utility BB
by:G. Moser	This program yields the hexidecimal number for a selected memory location.
ARC 1-44	
Bangman by:E. Sams	79 Game, Word 1P BB,1H A quite clever twist to the old hangman game. It has a
	good scheme for entering letters without them appearing on the screen, and a search routine for multiusage of
ARC 1-48,7Ø	letters.
Char. Size & Pri	nt Loc. 79 Tutorial BB
by:S. Walters D. Ibach	Explanation of character size in pixels and also the PRINT location using the CX and CY commands.
ARC 1-5Ø	
IF Statements	79 Tutorial BB
by:S. Walters D. Ibach	More information on IF statements.
ARC 1-52	
IF Statements by:J. Taillefer	79 Tutorial BB IF statements using greater than or less than.
ARC 1-53	
·····•	
Slot Machine I	79 Game, Casino 1P BB,1H
by:E. Sams	Casino slot machine game, that keeps track of the bet, number of wins, and the amount of money you have.
ARC 1-59,69,77	Indiaber of Wills, and the amount of money year.
Beginning Progra	mming 79 Tutorial BB
by:B. Fabris	Some material for the beginner in programming and computer usage.
ARC 1-56	
Amazed in Space	79 Game, Maze 1P BB,1H The object of this game is to maneuver the spaceship thru the
by:??????	maze as quickly as possible without hitting the walls. You
ARC 1-6Ø	select the path size, maze width and height, and the degree of difficulty. Your score is based on the input parameters.
Music Synthesize by: C. Thomka	r Part I 79 Tutorial In depth look at the music synthesizer circuit.
ARC 1-62	
ARC I UZ	
Sound Graph	79 Sound BB,1H
by: C. Thomka	This program allows you to set the Master Counter (&16), A Counter (&17), B Counter (&18), C Counter (&19), Vibrato (&28
ARC 1-65	V_{O} 1 A ($\&2$ 1). V_{O} 1 B and C ($\&2$ 2) and Noise Vol ($\&2$ 3) to
*	different values and hear what the result sounds like.
Touch Tone Simul	ate 79 Sound BB
by:C. Thomka	This program allows you to simulate the Bell relephone Touch Tone sounds and by holding the telephone mouthplece
ARC 1-65	at the TV speaker you can dial a telephone number.
Memory Display	79 Utility BB
by:C. Thomka	This is a nice memory dump program that displays the decimal and hevidecimal location numbers (Address) and the Data. It
ARC 1-67	will do whole blocks by giving the starting and ending address
Square Root	79 Math BB 32 767 to the
by:D. Stocker	Calculates the square root of numbers up to 32,767 to the nearest whole number.
ARC 1-67	

	2 Points 79 Math BB This reserves a levilator the distance (nearest whole number)
by:D. Stocker	This program calculates the distance (nearest whole number) between two points when given their corresponding X and Y
ARC 1-67	locations. Also plots a graph and draws a line between the two points. This is for small values of X and Y.
Frequencies	79 Sound BB
by:B. Hood	Converts frequencies to register values and vice-versa.
ARC 1-7Ø	
Music Synthesize by:C. Thomka	r Part II 79 Tutorial BB In depth look at the music synthesizer circuit.
ARC 1-71	
Subroutines by:B. Fabris	79 Tutorial BB Subroutines explained.
ARC 1-72	
Blackbox	79 Game, logic 1P BB
by:B. Reany	A Black Box consisting of an 8x8 grid, has a preselected number of hidden atoms. You select a X-ray input point and by
ARC 1-74,77	a set of X-ray penetration rules and results must try to figure
	out where the atoms are located.
BALLY BASIC Text	Area 79 Tutorial BB
by:D. Ibach	Explains how to store data in the text, write self modifying
ARC 1-78	code and storing machine code in the text
Spacewar I	79 Game, Space 2P BB,2H
by:D. Ibach	Two player game in which you try to shoot the other player,
ARC 1-79,2-4	however only when you fire can you be seen.
•	
PX Function	79 Tutorial BB
by:S. Walters	Using the PX Function.
ARC 1-81	
	slations 79 Tutorial BB Translating other BASIC's to BALLY BASIC.
ARC 1-82	
Memory Addressin	g 79 Tutorial BB
by: ?????	Use of the 4K of RAM by the BALLY Software.
ARC 1-87	
Microtrek	79 Game, Space 1P BB
by:B. Andrus	Small but interesting version of the STAR-TREK game found
ARC 1-89,2-4	on almost all big computers. You can move in the sector, move to a new quadrant, fire phasors, get sensor reports and get
ARC 1 05,2 4	status reports. Quite challenging for the BALLY.
Resequencing	79 Utility BB
by:R. Schweitzer	This is a utility program which will renumber your
ARC 1-91,2-11	BALLY BASIC program and record the renumbered program on tape. This is a great program to use in making your programs appear professional looking. It also can save you memory space.
Saucer Battle	79 Game, Space 1-2P BB,1-2H
by:J. Hurst	One or two player game in which you shoot at each other's
ARC 2-1,39	spaceship. Interesting firing and hit routines. Difficulty, number of laser blasts, and maximum score can be preselected.
	Unique blowup graphics.

E 3	
Logo by:G. McLimore	79 Graphics BB This program produces the logo used in the ARCADIAN.
ARC 2-3	
Arcade Dice by:K. Grismayer	79 Game, Casino 1-4P BB.1-4H Provides electronic dice for up to four players to use in board games. Second game on menu plays CRAPS without odds and
ARC 2-6	and special bets, but keeps track of come bets.
Checkers II by:J. Collins ARC 2-12	79 Game, Board 1P BB Computer plays checkers with you, you should be able to beat the computer but if you make a mistake watch out. Good graphics and board layout.
ARC 2-12	and board rayout.
Attack by:C. Morimoto	79 Game, Chase 1P BB,1H Game of chase. The object is to maneuver yourself into a position where all five attackers have destroyed themselves by
ARC 2-13	smashing into walls in the process of chasing you.
Hangman I by:C. Morimoto	79 Game, Word 2P BB,1H First player inputs word, second player tries to guess word before trapdoor is sprung. Good graphics routine.
ARC 2-14	
Biorhythm I	79 Personal 1P BB
by:M. Angliss	This program has been replaced by BIORHYTHM II in ARCADIAN 2-44.
ARC 2-15	
Nbar Mak-L	79 Game, Number 1P BB
Number Match by:S. Walpole	The object of this game is to match the numbers one at a time as quickly as possible for the highest score. Continue until
ARC 2-17	the program stops.
Hello Dolly by:S. Walpole	79 Music BB One voice "Hello Dolly" music.
ARC 2-17	
Popeye the Sailo by:S. Walpole	or 79 Music BB One voice "Popeye the Sailor" music.
ARC 2-17	
Elect. Visualiza by:D. Sandin	ation Ctr. 80 Graphics Graphically produced large letters of two text lines.
ARC 2-2Ø	
Slot Machine II	79 Game, Casino 1-2P BB,2H
by: Mueller	Slot Machine game having an interesting reel rotation routine.
ARC 2-21	
Monthly Loan Pro	ogram 80 Business BB
by:G. Hallquist	This program calculates the monthly payments and total payment amount when you input the loan amount, the interest
ARC 2-22	rate, and the months the loan will run.
7annit	80 Game, Space 1P BB,1H
	n Lock on the target using the handle, then use the trigger to fire your laser.
ARC 2-23	

<u> </u>	
Bagels by:C. Morimoto	79 Game, Logic 1P BB This Bagels game gives you a random 3 digit non duplicating digit number. You must use logic and the clues given after each
ARC 2-25	guess to find the number. A running average is computed as the number of guesses divided by the number of games won.
Memory Tutorial by:B. Fabris	I 79 Tutorial BB Tutorial on computer memory.
ARC 2-29	
Spacewar II by:D. Clark ARC 2-31,47	80 Game, Space 1P BB STAR-TREK type game in which you must try to destroy all the Klingons and the Death Star. You can raise/lower deflection shields, fire phasors, fire photon torpedoes, move to a new quadrant or self-destruct.
Hamurabi by:R. Houser ARC 2-32	80 Game, Economic 1P BB Economic game in which you are the king. You must make decisions on running your kingdom economically for a period of 10 years. You must feed your people, buy and sell land, plant crops and if you last 10 years you will be scored on your rule.
Bingo by:E. Sams ARC 2-33	80 Game, Board 1P BB,1H BINGO game in which you must decide whether the number given is on your card before time runs out. Use knob to indicate yes or no and the trigger to register. If you get 5 in a row before the computer does, you win.
Connect Four I by:L. Camnitz	80 Game, Logic 2P BB,2H Try to get four of your pieces in a line vertically, horizontally or diagonally before your opponent.
ARC 2-35	
Memory Tutorial by:B. Fabris	II 80 Tutorial BB Tutorial on computer memory.
·ARC 2-38	
ARCADIAN Sampler by:C. Anderson	80 Graphics Letter routine that gives you lower case letters in two versions.
ARC 2-39	
O-Jello by:C. Perkins ARC 2-41	80 Game, Logic 1P BB,1H This is a Tiny Basic version of "Othello" (Reversi) in in which you play against the computer. Have fun trying to beat the computer.
2000 AD by:E. Larkin ARC 2-42	80 Game, Space 1P BB,1H A shoot-em-up between an alien invader and a ground station. Use the knob to aim, the trigger to fire, and the handle to move about.
Biorhythm II by:D. Walter ARC 2-44,53	80 Personal BB You input the month-day-year of your birth and today's date. The total number of days you have lived will be calculated along with physical index, emotional index, and intellectual index, and a graph showing these for the next 25 days.
BIBLE Quiz by:B. Henzel ARC 2-48	80 Educational 2P BB A teaching program for multiple choice questions, in this case a BIBLE QUIZ.
Black Hole by:R. Picardi ARC 2-50,65	80 Game, Space 1P BB,1H Try to achieve orbit with the mystery ship with the X and Y handle control. You should be at the same speed and distance from the Black Hole as the mystery ship.

L /	
Slot Machine III by:????	80 Game, Casino 1P BB,1H Casino slot machine game.
ARC 2-51	
Bowl a Rama	80 Game, Sport 2P BB,2H
by:B. Hensel	Bowling game in which the computer displays the pins and keeps score. The ball is initially invisible at the bottom of
ARC 2-52,65	the screen. When you pull the trigger, the ball appears and you can control the ball by moving the handle left or right.
Mastermind by:C. Burkemper	8Ø Game, Logic 1P BB Tiny BASIC version of popular logic game
ARC 2-53	
Memory Tutorial by:B. Fabris	III 80 Tutorial BB Tutorial on computer memory.
ARC 2-54	
Artillery Duel	8Ø Game, War 2P BB,2H
by:J. Perkins	Each player in turn tries to load and aim his gun such that he will hit the other players gun emplacement and cause it to be destroyed. There are gravity and random wind effects. The
ARC 2-59	handle is used for firing, aimming, and loading the gun.
Memory Tutorial by:B. Fabris	IV 80 Tutorial BB Tutorial on computer memory.
ARC 2-6Ø	
4KC 2-00	
3-Voice Music	80 Tutorial BB
by:G. Moses	Tutorial on three voice music. How to read the music then enter the note values in a three tone program which allows
ARC 2-62	you to then play the three voice music.
M 1 - 12 V-1-0	80 Music, 3 voice BB
Music (3 Voice) by:B. Bilbrey &	This program allows you to input three tone music into the
B. Weber	RALLY Voice A. Voice B. Voice C plus the chord duration are
ARC 2-62,82	input using the keyboard. The music produced is quite good.
15 Puzzle	80 Game, Puzzle 1P BB,1H
by:B. Wiseman	TV screen version of the popular 15 puzzle, which uses the handle to move 24 letters around the screen.
ARC 2-64	
Spirals I	8Ø Graphics BB
by:M. Giwer	Graphics program produces spirals on the screen.
ARC 2-69	
Serial and Paral	llel 80 Tutorial BB
by:B. Fabris	Comments on serial and parallel data movement. Schematic by Rich Tietjens of serial to parallel converter and a subroutine
R. Tietjens ARC 2-7Ø	to use with the converter.
Name and Nicomac	chus 80 Game, Number 1P BB
by:D. Ahl	Routine to enable you to input a player's name into a program Also a number game in which you pick a number and then answer
H. Chiuppi ARC 2-72	three questions about that number which the computer asks. The The computer then tells you what number you picked.
Yahtzee	80 Game, Dice 1-4P BB,1-4H Yahtzee on the TV screen for 1-4 players. Dice are portrayed
by:B. Wiseman	on the screen, you select the dice to keep and reroll. When 3 rolls are completed, you select the category in which your
ARC 2-74,82,88	score is to be recorded.

C C	80 Educational BB This program has been revised and updated using the MORSE CODE program additions, deletions, and corrections in ARCADIAN 2-88.
•	80 Game, War 1P BB find the submarine hidden in the $100 \times 10^{\circ}$ grid. When you acquire sonar contact fire a missile and sink the submarine. If you
ADC 2-93 +	take too long the submarine will sink you. Ron wrote a new Subsearch in ARC 3-102
B. Weber	80 Educational BB Combined with CODE (ARC 2-81) gives morse code program. Input speed and then your message, when you have finished your message type WORDS RUN for the message to be output in code. You can repeat, erase, and add to the message.
Base Conversion by:R. McCoy	80 Utility Converts from any of four numerical systems into the other three systems. Decimal to hexidecimal to octal to binary.
ARC 2-89 -	
•	
	80 Game, Chase 1P BB,1H A 9x19 grid is presented on the screen,then 15 walls are randomly placed, then 15 BOTS, then you. After you make a move with the handle, the BOTS advance on you one square at a time. To win you must maneuver so the BOTS will crash into the walls.
	80 Game, Skill 1P BB,1H Program puts a random amount of dots (max. 17) on the screen for a short period of time. After you have counted
ADC 2.02	them pull the trigger and enter the amount in the keypad. The computer will keep track of your score.
	8Ø Game, Logic 1-2P BB,1-2H Moving alternately you try to get four of your pieces in a row either horizontally, vertically or diagonally before the
ARC 2-94	the computer does.
Spirals II by:M. Giwer	8Ø Graphics BB Graphics program produces spirals on the screen.
ARC 2-94	
ARC 2-96	Programming aid for those who want to make graphic figures using the box command. Allows you to record on tape the finished figure, assign starting line numbers and line spacing for use in another program.
Hybrid Programs by:B. Fabris ARC 2-98	80 Tutorial BB,BR Tutorial on programs that contain both machine-code segments and BASIC segments. Also covers dumping and loading the programs, and hybrid program data transfer.
Background/Foregr by:B. Fabris	round 8% Tutorial BB Tutorial on doing two operations at once on the computer.
ARC 2-100	
Halloween Ghost by:J. Wilkerson	80 Graphics Gives you a talking skull to use at halloween. It makes random snide remarks to people going by.
ARC 2-1Ø4	
Multi-processing by:R. Tietjens	80 Tutorial Definition of a multi-processing system using two processors, in this case the BALLY and a TRS-80.
ARC 3-4	

E 9	anderan
File Search by:B. Fabris	80 Tutorial BB Tutorial on using a File Search Routine for file management.
ARC 3-4	
Speed O Math by:B. Wiseman	80 Game, Math 1P BB Player selects addition, subtraction, multiplication or
ARC 3-6	division problems. Computer gives you 10 problems and at the end tells you how many you got correct.
	1 40 00 411
Horse Race by:H. Brecheisen	80 Game, Sport 1-4P BB,4H You decide on which horse you want to bet on and how much you want to bet using the handles.
ARC 3-7	
Intonnunt Poutin	e 80 Utility BB
Interrupt Routin by:B. Bilbray	This is a BASIC-user interrupt routine for Foreground/Background processing. By inputting this program,
ARC 3-13	you will be able to use the BASIC while at the same time the object will move about the screen at a speed determined by KN 1
BLUE RAM Program	ming 80 Tutorial BB,BR
by:B. Fabris	Tutorial on programming the Blue Ram.
ARC 3-14	
Mastermind II by:B. Wiseman	80 Game, Logic 1P BB In this version of Mastermind, the computer holds a four- color code which you must try to guess. Enter your guesses via
ARC 3-19	the keypad.
	Instr. 80 Tutorial BB
Program Title & by:S. Walters	Describes proceedure which allows you to display a title at the beginning of the tape load, and up to nine lines of title/
ARC 3-2Ø	instructions at the end of the tape load without using any memory space.
Day of Week and by:K. Gregg	Calendar 80 Time BB Input the date and program will tell you what the day of
	week was for that date and print a calendar.
ARC 3-22	
Taping Memory	80 Tutorial BB
by:D. Ibach	Tutorial on loading your program on tape to accomplish three things: Program doesn't list on screen during loading, contents
ARC 3-24	of strings variables can be included, and you can save memory space.
Horserace	80 Game, Sport 1-4P BB,1-4H
by:P. Slezak	Bet on your favorite horse and see if you can win a bundle at the track.
ARC 3-26	
Surf Sounds and by: B. Ellerson	Crickets 81 Sound BB Surf and Cricket sounds are produced by this program.
ARC 3-33	
Cinale Dietie	81 Graphics BB
Circle Plotter by:B. Ellerson	the state of the s
ARC 3-33	
	A PA
Grandfather Cloc by:B. Ellerson	ck 81 Time, graphics BB Graphically displays a Grandfather Clock which keeps time and sounds out the hours.
ARC 3-34,51	

Color Chart	81 Graphics BB
by:J. Winn	lising this utility program you can select colors to use in
	your program and read the BC and FC numbers which produce then
ARC 3-35	
·	
More Blue Ram BA	SIC 81 Tutorial BB
y:B. Fabris	More on use of the Blue Ram and BASIC.
ARC 3-36	
ARC 3-30	
Alchemisymmetric	
y:B. Ellerson	Graphic art display.
NDC 2 20 62	
RC 3-39,63	
rogramming Tech	iniques I 81 Tutorial BB
y:B. Wiseman	Tutorial on programming "tricks".
vno 2 42	How to keep it small. How to make it run faster.
ARC 3-43	How to make it run faster.
Golf	81 Game, Sport 1-4P BB,1-4H
oy:B. Hensel	Golf game for up to four players. Computer randomly
_	develops a nine hole golf course including different hole
ARC 3-46,51	layouts, green layouts and hazards. Each player selects club and direction to hit. See if you can get the lowest score.
	and direction to nit. See if you can get the lowest score:
Musical Staff	81 Music BB
oy:B. Wiseman	Write music on a staff in the Key of C and then listen.
ARC 3-48,51	
Short Program Se	election 81 Graphics, Math BB
bv:D. Heinerman	Four short programs3D Corner, Denominator, Electronic
-, -	Blanked, and Boxes. Three graphic display programs and one
ARC 3-49	math program.
Digital Couch	81 Game, Personal 1P BB
by:B. Weber	Computer becomes psychiatrist giving answers to your
J I NING.	responses to an ink blot test.
ARC 3-51	
Tower of Hanoi	81 Game, Puzzle 1P BB,1H
by:B. Wiseman	Rebuild the Tower of Hanoi in a new location using the
3, 12, 4133man	hand control to pick the block you want to move.
ARC 3-54	
	aniques II 81 Tutorial BB
	nniques II 81 Tutorial BB Tutorial on programming "tricks".
by:B. Wiseman	Tricks of the Trade.
ARC 3-55	THE TOTAL OF THE OWNER OF THE OWNER OF THE OWNER
- 	
	01.0 01.111 0.00.00.00
BALLY 5ØØ	81 Game, Skill 2-3P BB,3H One player controls turns in road while one or two other
by:B. Hensel	players drive down the road trying to miss the randomly
ARC 3-57	placed road hazards. See how long you can drive safely.
Defuse	81 Game, Hunt 1P BB
by:D. Heinerman	You must locate the bomb hidden in a huge government experimental building of 1 million rooms. Using hot-cold
ARC 3-58	clues find the bomb in 200 seconds.
NK 3-30	CIRCO TING ONE DOME IN CONTROL
Memory Doodle	81 Graphics BB
by:M. Peace	Produces graphic doodles on the screen.
100 0 67	
ARC 3-67	

L 11	
Twixt by:J. Pipek	8! Game, Board IP BB,1H Play the computer and try to generate a line from one side of the playing board to the other before the computer can.
ARC 3-67	- Che prayring board to the other before the temperature
Motherboard Modif by:B. Ellerson	Fications 81 Project Modification that can be made to the motherboards of the older ARCADES to correct Screen Tearing, Loss of Horizontal Sync. on
ARC 3-72	warm up, Unit goes dead or keeps reseting after warm up.
C. b. Houston	81 Game, War 1P BB,1H
Sub Hunter by:B. Wiseman	You command a destroyer in an attempt to locate and destroy the enemy submarine fleet before they torpedo and
ARC 3-75	sink you.
	10 00 11 10 DD 11
Strategic Air Comby:B. Weber	nmand 81 Game, War 1P BB,1H You must protect your population from an enemy missile attack on your cities. If loss of life exceeds 1,000,000
ARC 3-76	people you lose the game.
Circles	81 Graphics BB
by:R. Picardi	Produces pop art on the screen.
ARC 3-77	
11 D - 1:	81 Utility BB
Hex Poker by:A. Rathmell	Short hex poker routine that swaps pairs in the hex code, converts them to decimal, and pokes them into memory slots.
ARC 3-78	
Pre-Tutorial Pixe by:B. Fabris	els 81 Tutorial BB Explains pixels, bits, and bytes.
ARC 3-82	
	DD.
Creating Special by:R. Tietjens	Graphics 81 Tutorial Tutorial on creating special graphics characters using the programs below.
ARC 3-83	
Graphic Characte by:R. Tietjens	r Maker 81 Graphics Utility BB This programs in combination with the Tutorial "Creating Special Graphics" by Rich Tietjens will allow you to make
ARC 3-84	your own special characters and then move them around the screen.
Nim	81 Game, Logic 1-2P BB,1-2H
by:R. Hilferding ARC 3-86	15 Boxes are displayed. You decide who moves first. The players then alternate in removing 1, 2, or 3 boxes. The player having to take the last box is the loser.
AING 3-00	prayer making to take the rate of the reserve
Spinning Wheel	81 Game, Casino ?P BB,?H
by:T. Owczarek	Combination program consisting of the old "Wheel of Fortune" gambling game and advertising messages which the
ARC 3-91	author used at fund raising faires.
Pool	81 Game, Sport 1P BB,1H
by:B. Hensel	Computer version of the 8 Ball. The computer racks the balls and breaks. You then select the direction and strength
ARC 3-94	of the shot then pull the trigger to shoot. By controlling KN(1) you can then control the direction of the hit balls.
Old Bent Nose by:B. Wiseman	81 Game, Board 2P BB,2H This is a combination concentration and 3 in a row game
ARC 3-97,111	with a few unique additions. First you match two squares on the 5x5 grid and try to end up with three matches in a row. You lose your turn if you don't match or pick "Old Bent Nose".

Compound Interest by: J. Shadle	81 Business Program using the on-board calculator routines in the least complex method yet devised.
ARC 3-98	
New Sub Search	81 Game, War 1P BB,1H
by:R. Picardi	Find the submarine hidden in the 10x10 grid using the joystick.
ARC 3-1Ø2	the submarine. If you take to long the submarine will sink you. You will slowly sink by the stern if torpedoed.
BALLY Black Box	81 Game, logic 1-4P BB,1-4H
by:S. Walters	Determine the location of the 5 randomly placed balls in the 8x8 black box. Send probes into the black box and by observing the probes behavior deduce the location of the 5 balls.
ARC 3-1Ø3,118	the probes behavior deduce the location of the order
	al)Clock 81 Time BB
Analog(Non-digit by:G. Moses	al)Clock 81 Time Graphiccally displays and old fashioned analog clock. You input the hours, minutes and seconds and watch the clock keep time.
ARC 3-1Ø5	
*	
Daredevil	81 Game, Race 1P BB,1H
by:D. Martin	You see the windshield and instruments. Follow the instructions that appear at the bottom of the screen, using TR(1).
ARC 3-106,111	
	81 Game, Maze 1P BB,1H
The Pits by:T. Goulding	Move the small dot in the upper left hand corner to the medium sized box in the lower left corner without hitting the "pits"
ARC 3-1Ø8	and getting zapped. A trip in less than 16 moves is doing well.
Invisible War	81 Game, Space 1P BB,1H
by: J. Winn	Space Game
ARC 3-112	
Symmetrical Art by:R. Rosenhouse	81 Graphics BB Graphic art program.
ARC 3-113	
Telling Time by:B. Hensel	81 Time, Educational 1P 8B,1H Educational game to help children learn to tell time. Uses the Graphic Character Maker Program by Rich Tietjens (ARC 3-84).
ARC 3-114	graphic character maker riogiam by kitch riogiam
Keno II 2.0 by:M. Keller	81 Game, Casino 1P BB,1H You pick 1 to 15 numbers on displayed Keno card. The computer picks and displays 20 numbers and calculates payoffs.
400 0 110	picks and displays 20 numbers and calculates payoris.
ARC 3-116	
	1 00 00
Match by:E. Groebe	81 Game, Board 1-2P BB The object of this board game is for either one or two players to select pairs of cards. Based on card game Concentration.
ARC 3-123	to select pairs of cards, based on card game content
Data and	81 Game, Skill 1P BB,1H
Rebound by:D. Martin	Game of skill for one player. Select ball speed, then try to
ARC 3-124	handle to control the angle of the rebound off the walls.
	81 Game, Skill 2P BB,2H
Gobblers by:B. Wiseman	81 Game, Skill 2P BB,2H Two player game, played on a 10 by 5 field. The object is to have your gobbler gobble up more squares than your opponent.
ARC 3-125	Use the handles to direct your gobblers around the board.

E 13	ARCADIAN
Boo by:S. Walters	81 Graphics BB Halloween Graphics program.
ARC 3-126	
New Graphic Char by:B. Weber	Improvement on Rich Tietjens' Graphic Unaracter Maker which
ARC 3-128	handle to position the flashing cursor on the grid and pull the trigger.
ASTROVISION Edit by:B. Fabris	or 81 Tutorial AB Tutorial on use of the new ASTROVISION BASIC Editor feature. Sure helps in correcting long statement lines.
ARC 4-1	
Nuclear Math by:D. Gladden	81 Educational, Game 1P 8B Arithmetic problems are given, if your answers are correct the temperature of the reactor remains cool, however, if you miss too many problems the reactor will overheat and blow-up.
ARC 4-4	too many problems the reactor will overheat and blow up.
4D2 by:R. Blommaert	81 Graphics Graphics arts program. If you dig into the program you can figure out how the author does it.
ARC 4-5	
Code-Decode by:E. Groebe	81 Game BB Program show how to encode and then decode a message.
ARC 4-6	
New Music Progra by:G. Moses	m Tutorial 81 Tutorial, Music BB Tutorial on putting 3-voice music into a music program without having to use .REMARK statements. This is George Moses latest
ARC 4-18	program for writing music tapes for the BALLY.

THE BASIC EXPRESS formerly the CURSOR Newsletter

THE BASIC EXPRESS is a professional quality bimonthly newsletter containing programs and information on the BALLY. An average of 2-3 programs per month are described with instructions and program listings. An average of one tutorial per month is provided on different facets of the BALLY. This is a reader participation newsletter in that programs, articles, tutorials, etc. are needed to provide a quality and useful newsletter.

THE BASIC EXPRESS is available at annual rate of \$ 9.75 per six issues. Contact THE BASIC EXPRESS for more details.

THE BASIC EXPRESS (714) 866-5826 P.O. Box 1763 Big Bear Lake, CA 92315

Shipping Address

THE BASIC EXPRESS The Old Ice House 711 Pine Knot Big Bear Lake, CA 92315 All CURSOR and THE BASIC EXPRESS programs are available as source listings in back issues of the CURSOR and THE BASIC EXPRESS and on tape from:

THE BASIC EXPRESS

Individual issues are available for \$ 1.75 / issue \$ 9.75 / Vol.

P.O. Box 1763

Big Bear Lake, CA 92315

S 3.95 per issue \$ 7.50 per two issues

Volume 1 of the CURSOR \$ 9.75 Volume 2 of the CURSOR \$ 9.75

Electric Bill An by:K. Wolfe	nalysis 80 Business BB This program estimates the cost of using an appliance based
CUR 1-1	on your last months billing rate. You input beginning and ending meter reading, electric bill for that period, appliance wattage rating, hours used and computer will calculate cost.
Plastic Puzzle by:F. Cornett	80 Game, Puzzle 1P BB,1H Rearrange the letters into alphabetical order using the
CUR 1-3	handle.
Full Size ASCII by:E.Mulholland CUR 1-4	Keyboard 80 Project BB Construction project on how to interface a ASCII keyboard thru the Audio Cassette Interface.
COR 1-4	
Life Synthesis M by:F. Cornett	This is a simulation called LIFE. You input a colony of the
CUR 1-6	desired shape and a cell will survive with 2-3 neighbors, die with \emptyset -1 or more than 4 neighbors, and give birth if a cell is adjacent to 3 cells when it moves to the next generation.
PEEK n' POKE by:F. Cornett	80 Tutorial BB Short tutorial on PEEK and POKE commands.
CUR 1-10	
Hex to Decimal C by:F. Cornett	onverter 80 Math This program converts hexidecimal numbers to decimal numbers.
CUR 1-11	
Printer by:F. Cornett CUR 1-11	80 Project How to add a phone jack to the Audio Cassette Interface which will provide a TTL Voltage Level RS232 Standard ASCII Code for use with a printer.
Bubble Sort by:T. Hays	80 Math BB Number sorting program.
CUR 1-12	
Camel by:Creative Computing CUR 1-12	80 Game, Logic 1P BB The object is to travel 200 miles across the desert. You're being chased by wild pygmies. You have one canteen, which will last 6 drinks, it can be refilled by finding an oasis. During your journey, you will encounter various hazards. Good Luck.
Wumpus by:C. Pruitt R. Leake CUR 1-14	80 Game, Logic 1P BB The Wumpus lives in a cavern of 20 rooms. Each room is connected to 3 other rooms. Your mission is to deduce in which room the Wumpus is sleeping in, and shoot him with an arrow. You have 5 arrows to use. Watch out for Bats, pits and Wumpus.

, 3	THE BASIC LANKESS TO MICH 19 CHO SORBOR
3 Voice Music Tuby: B. Bilbrey	torial 80 Tutorial BB This tutorial tells how to use the 3 Voice Music Assembler.
CUR 1-17	
	sembler 80 Music, 3 voice BB
CUR 1-18	This program allows you to write you own music or by using sheet music input the notes and then sit back and listen to three voice music and you'll be quite surprised.
Star Wars Music by:M. Nelepa	80 Music, 3 voice BB Star Wars Music in 3 voices.
CUR 1-19	
Chopsticks by:F. Cornett	80 Music, 3 voice BB Chopsticks in 3 voices.
CUR 1-19	
Chicago Loop	80 Graphics BB
CUR 1-21	Simple but very innovative program which incorporates the use of three loops to provide a unique display of graphics looking very much like a city on a lake, complete with reflections, traffic, and sound effects.
Character Size M	ultiplier 80 Graphics BB
by:F. Cornett	This program uses POKE and CALL to generate different sized
CUR 1-22	character sets with factors of 2X, 4X, or 8X. Don't use more characters than can fill the screen or the program will bomb.
Rotation	80 Game, Logic 1P BB
by:R. Leake	With an initial group of 16 letters in a 4x4 grid, you are to
CUR 1-22	rotate each corner group to try to end up with the 4x4 grid in alphabetical order. A special move allows you to interchange a pair of horizontal adjacent letters.
Ring by:A. Paul	80 Graphics BB Graphics routine to make a ring of various sizes and thicknesses.
CUR 1-31	LITICKHESSES.
DMA Graphics by:C. Anderson	80 Graphics, Utility BB Tutorial covering graphic displays. Allows user to address individual pixels to provide super graphics. Includes table of
CUR 1-25	graphic values to use.
Alarm Clock by:M. Peace	80 Time BB Set up a digital alarm clock on the screen.
CUR 1-31	
Direct Video/Aud	io Ckt. 80 Project BB
by:P. Morton	This add-on circuit gives the computer user a line level audio
T. Meeks CUR 1-33	signal output and a composite video signal output. This is for use with a video monitor.
Galactibattle	8Ø Game, Space 1P BB
by:B. Lathrope	You are a Galactic Warrior piloting a fighter on a critical
CUR 1-35	search and destroy mission. You are the last hope of your civilization and must destroy all the Cylon ships located in your quadrant of the galaxy. 7 commands using the keypad.
PRINT Statements by:F. Cornett	80 Tutorials BB Tutorial on PRINT statements. Covers "PRINT", "TV=A", inputing names into programs, and final quote requirements.
CUR 1-37	names into programs, and i mai quote requirements.
. 	

	THE BASIC CAN RESS TO THIS TY SHE CONSTRU
Othello by:B. Bilbrey	80 Game, Logic 1P BB,1H Version of Reversi in which you play against the computer.
:UR 1-38	The computer keeps track of the score and is fairly hard to beat.
SCII Conversion	Chart 80 Chart Conversion of the ASCII Code to the BALLY character set.
CUR 1-39	
Cursor Control Ch	nart 80 Chart BB
oy:F. Cornett CUR 1-39	Chart showing CX and CY values needed to position characters of the screen. This chart has a error in the CX values. Instead of \emptyset , 6, 12, 18, 24, 30, 36, 44, 50, 56, 62, 68, 74 it should be as follows 1, 7, 13, 19, 25, 31, 37, 43, 49, 55, 61, 67, 73.
ARCADE Golf	8Ø Game, Sport 1-4P BB,1H
y:M. Maslowski CUR 1-42	One of the most innovative games that we have seen for the BALLY'S 2K. This game utilizes graphics, allows you to select from 14 clubs, has doglegs, water hazards, sand traps, roughs, wind affects, and penalties. Keeps track of scores.
Shell-Metzner Sor by:M. Giwer	t 80 Math BB The program put numbers in ascending order. This is faster than the Bubble Sort.
CUR 1-46	than the bubble 301t.
Wavemaker's Mazen by:M. Peace	maker 80 Game, Maze 1P BB,1H Move thru the random maze using the handle in the fewest number of turns. Good sound effects.
CUR 1-46	
1111 D-1-1 M	ath 80 Math BB
y:B. TempletonTh	ath 80 Math his program allows you to add, subtract, multiply, and divide decimal numbers.
CUR 1-46	
CURSOR Inventory by:F. Cornett	Program 80 Business Used every day, input purchase order information, figures cost, updates inventory, lists unfinished orders. The first really useful application that is used daily.
	1 20 00 211
Connect Four by:R. Leake CUR 2-51	80 Game, Logic 1-2P BB,2H Based on popular Connect Four Game. The graphics, color, and sound are excellent. You must play very well to beat the computer. Uses hand controls to select move.
Spider Web by:A. Paul	80 Graphics BB Graphic art program.
CUR 2-58	
B	8Ø Game, Logic 1P BB,1H
Reverse by:	The computer will show a list of nine numbers. You must select how many numbers you want to reverse. The computer will
CUR 2-59	then rearrange the list and ask again. This is done until you get the list in ascending order. Keeps track of the # of moves
Design by:M. Ream	80 Graphics BB Graphic design program.
CUR 2-6Ø	
Math Quiz	8Ø Game, Math 1P BB
by:	Math Quiz allows you to select addition, subtraction, or both It also lets you select the size of the numbers and also the number of problems. Keeps score and gives you random problems
CUR 2-61	for bonus points. Sound effects and color.

· · · · · · · · · · · · · · · · · · ·	
Note Match by:	80 Game, Music 1P BB The computer will play a note and your are to recreate that note using the handle.
CUR 2-63	
Organizing Tape F by: F. Cornett	Files 80 Tutorial BB Method to index programs on tape.
CUR 2-63	
PEEK n' POKE by:F. Cornett	80 Tutorial BB Tutorial on PEEKing and POKEing values for use in graphics.
CUR 2-66	
Critter by:B. Bilbrey CUR 2-66	80 Graphics BB Using Peek and Poke commands to produce invader type critters which move rapidly about the screen. Lots of potential here for use in fast moving games.
Memory Expansion by:C. Anderson CUR 2-66	80 Tutorial BB Disccussion on using an endless tape loop as a memory expansion device. This method will not work with the new ASTROVISION BASIC.
Sideswipe by:M. Peace CUR 2-69	80 Game, Skill 1P BB,1H Drive your car through and around the other vehicles on the road without hitting them or the sides of the road. Try to get the highest score.
We Three Kings by:G. Moses CUR 2-69,1-17 2-61	80 Music, 3 voice BB Using the basic music program from CURSOR Vol. 1-17 you can set up "We Three Kings of Orient Are" to play back in three voices.
Machine Language by:B. Bilbrey	Graphics 80 Tutorial BB Tutorial on using machine language graphic routines.
CUR 2-7Ø	
Chessette by:C. Anderson CUR 2-83	80 Game, Board 2P BB Use the BALLY screen as a chess board to play chess. Castling, En Passant, and Pawn promotions are available. You can also set up chess problems using this program.
Biorhythm Compata by:A. Morales CUR 2-83, 92	ability 81 Personal 1-2P BB This program computes and displays the biorhythm pattern of two individuals and displays a bar graph showing percentages of compatability.
Tower of Hanot by:B. De Vries CUR 2-84	81 Game, Puzzle 1P BB,1H You must move all the blocks one at a time from the first rod to either the second or third rod. You cannot put a bigger block on top of a smaller block.
256 Colors by:J. Burianyk CUR 2-86	81 Graphics BB This program uses the PEEK command to store a machine language program and will produce 256 colors on your TV.
Exec. Time Card by:G. Moses	Calc. 81 Business BB You can figure your business payroll using this program. Input Wage, Time In, Time Out and the program will calculate regular pay, overtime pay and total pay.

Ones and Fives by:B. Mead	81 Game, Dice 1-4P BB,1-4H Using five dice try to accumulate a selected amount of points by throwing the dice and getting points for various
CUR 2-87	dice combinations.
Line Resequence by:M. Peace	81 Utility BB Utility program used to renumber a BASIC program.
CUR 2-89	
Perspectives by: ???	81 Graphics BB Graphic arts program.
CUR 2-89	
Metric Converter by:B. Templeton	81 Math BB This program converts American measurement units to metric units. A menu is used to pick the units you want converted.
CUR 2-92	
Dirty Programming	g Tricks 81 Tutorial BB Tutorial on PRINT statements and IF statements.
CUR 2-93	
Morse Code Simula by:A. Morales	Program will show you Morse Code for each letter of the
CUR 2-93	alphabet. You can enter a phrase which it will display along with it's Morse Code equivalent. You can play phrases back later to see how well another person can read the Morse Code.
Hamurabi by:B. De Vries	81 Game, Economic 1P BB Economic game in which you govern a kingdom and make decisions on buying and selling land, planting crops and
CUR 2-95	feeding the population. If you make a mistake you can be overthrown. Try to rule for twenty years.
Treasure Island by:D. Dreacher	81 Game, Hunt 2P BB The computer hides a treasure in a box of a matrix of sixty
CUR 2-96	boxes. Behind the other boxes are clues, cute little symbols, or nothing at all. The object of the game is to find the treasure before your opponent.
	Croudate before your oppositor
The Beauty of the by:D. Dreacher	e Loop 81 Tutorial BB Tutorial on loop routines.
TBE 3-2	
	01.0 01.1.1.1.1.1.8.88
Darts by:B. Mead	81 Game, Simulation 1-4P BB A one to four player simulation of a Dart game. Three different throws are availableHard Throw, Moderate Throw and
TBE 3-3	Very Hard Throw have been devised in an attempt to simulate realism. The first player to 500 points wins the game.
Z-GRASS Language bv:T. Meeks	81 Tutorial ZG Tutorial on the forthcoming Z-GRASS language which will be use
TBE 3-5	in the add-under unit.
÷.	
Diamond by:R.Sonnenblick	81 Graphics BB Graphics art program.
TBE 3-7	
Vahtzee by:B. De Vries	81 Game 1-4P BB,1-4H A dice game for 1-4 players who each have three throws of the dice to roll scoring combinations. After the first roll you ma
TBE 3-7	keep some, all or none of the dice and roll the others again to try and improve your scoring combination.

F 7	THE BASIC EXPRESS Formerly the Conson
Match by:E. Groebe TBE 3-9	81 Game, Board 1-2P BB Try to match cards with numbers and letters in this concentration type game. The player who gets the most matches wins the game.
Sound Port Study by:M. Peace	81 Sound BB Tutorial on use of the sound ports.
TBE 3-10	
Message from Los by:G. Cattanach	t Tribe 81 Game, Puzzle BB What does the message say?
TBE 3-15	
RUN Maker by:A. Guevara	81 Tutorial BB Tutorial on the :RUN statement.
TBE 3-15	
Fox and Hounds by:D. Dreacher	81 Game, Board 1P BB,1H Fox and Hounds is based on the old Checker Board game. You start with four pieces at bottom of board. You must box the c can only move forwards, while the Fox can also move backwards.
Connect-the-Dots by:G. Cattanach TBE 3-18	81 Graphics, Game 1P BB,1H Select a number of points between 30 and 120 and use the joystick to place them as an outline of a desired object. When the points have all been used, the program will connect the dots with a line.
Old Glory by:E. Groebe TBE 3-20	81 Graphics, Music BB Draws a color picture of the American flag and plays Stars and Stripes Forever. Explains how to determine the graphic values used in the flag display. A good tutorial on doing this.
What-Zit by:L&M Software TBE 3-22	81 Game, Logic 1P BB Mastermind type game using a four or a five digit number selected by the computer. Try to determine the number from the clues given and by logic, reason and deduction.
VIPER 1 by:F. Cornett TBE 3-26	81 Tutorial BB.V1,XB Examines the VIPER 1 System and the Extended BASIC Language. Tells how to load Extended BASIC into the VIPER 1, then what some of the new COMMANDS (NEW; ZERO; DEFAULT; DATA; CIRCLE; SCROLL; SHOW) will do.
Invasion Force by:M. Peace TBE 3-29	81 Game. Space 1P BB Space game something like Space Invaders in that characters march across screen, when they hit the sides they move down a row. If they get down to the gun emplacements, you lose!
Al's Poker Bandi by:A. Roginsky TBE 3-30	A simulation of the Poker slot machines that you find in Las Vegas and Atlantic City, with the exact same payoff ratio. Select your bet, then pull the trigger. Good Luck.
Tycoon by:A. Morales TBE 3-32	81 Game, Economic 1P BB Economic game in which you manage a company which produces products from raw materials. The selling price of the products, the cost of materials and the manufacturing costs vary. You try to manage the company to produce maximum profits.
Shangri-Logic by:P. D'Angelo	81 Tutorial BB Tutorial on Video interconnections.
TBE 3-33	

Monster Chase by:A. Morales	81 Game, Chase 1P BB,1H Keep away from the monster for $1\emptyset$ moves to win. Three levels difficulty.
TBE 3-34	
Sound Effects by:M. Peace	81 Tutorial BB A tutorial on making sound effects. Various effects are demonstrated.
	demonstrated.

SOURCE:

Alternative Engineering

PO Box 128

Gardiner, ME Ø4345

The prices and specifications of these products have not been determined as of November 1'st, contact Alternative Engineering for the latest specifications and prices.

VIPER Interface Card

BB VS Interface

DESCRIPTION:

This card contains the following: 8 I/O ports to control system operations, a 1K ROM monitor that is socketed to allow easy upgrading to 4K ROM, a 12 to 2400 baud audio interface with programmable speed selection, one keyboard input port for the VIPER Keyboard, one memory management system to allow up to 128K bytes of RAM expansion, one five watt audio amplifier plus several other features. This is included in the VIPER Five and Ten Systems.

VIPER RAM Card

BB-VS Memory

DESCRIPTION:

This card is a 16K addressable RAM board in 4K, 8K, 16K blocks. It is designed with the interface card for extended memory addressing up to 128K bytes(use up to 8 RAM cards), multifunction 8 position switch pack for enabling and disabling BALLY memory areas, and on board clock select.

VIPER Keyboard

BB-VS Keyboard

DESCRIPTION:

This is a 62-Key unit that is ASCII coded, has upper and lower case letters, plus alternate 128 user defined character

codes, one aluminum cabinet, one coiled cable with DIN

connector, and one status indicator.

A Parallel to serial interface card is available as a separate product to interface other keyboards to the VIPER

System.

VIPER System One

BB VS Add-on System

DESCRIPTION:

VIPER System One contains one 16K Ram card, one buss interface card, one VIPER One cabinet, power supply, VIPER to ARCADE 50 pin bus cable, one switched AC Outlet and one on/off indicator switch and a Keyboard input port. Extended BASIC 1.0 is included @ 300 Baud to be loaded under existing BALLY BASIC.

VIPER System Five

BB VS Add-on System

DESCRIPTION:

VIPER System Five contains the VIPER Interface card, one VIPER Five Power Supply, three status indicator tri-color LED's, one VIPER Keyboard Input, a VIPER Five Cabinet and one 5-slot card rack with guides and fan mount(fan is optional)

Extended BASIC 1.0 is included @ 1200 and 2400 Baud to be loaded under the VOS/VIPER Operating System(1K ROM).

VIPER System Ten

BB-VS Add-on System

VIPER System Ten is a 5 slot expansion cabinet to expand

DESCRIPTION: the System 5 to 10 slot capacity.

Preliminary Phon # (207) 622-5205 (207) 582-6327

	SOFTWARE and HARDWARE SOURCES G 2 **********************************					
Tic-Tac-Tollah DESCRIPTIO	Game, Board 1p BB The Ayatollah adds a new dimension to tic-tac-toe: cheating!! Can you exercise diplomatic restraint and beat him as he changes his mind, changes his moves and changes the rules.					
Video Rally DESCRIPTION	Educational, Game 1p BB This training aid and game simulates a 100 mile TSD (time-speed-distance) rally using Sport Car Club of America rules and conventions. Includes 8 pages of illustrated instructions					
Graphics Demo DESCRIPTIO	Graphics Utility BB Allows you to do complex graphics, 8 pixels at a time, without using BOX or LINE commands. Includes lower case letters and cartoon animation demos in BASIC.					

(312) 635-0859

MULTICOLOR GRAPHICS

COLOR FORMATTER

Z-80 MINICOURSE

You need not know machine programming to fully use and enjoy these programs. But if you'relooking for knowledge on how to use it with your Bally, the documentation provided alone is worth the price of this package. { Bound manual included }

You'll see over 100 colors on the screen at the same time, with moving graphic art. You'll find Utilities, Z-80 opcode discussion, explanations and applications. You'll be able to easily use the formatter to add dozens of colors to your existing programs, and more. You'll find full machine code documentation on the programs, charts, diagrams and experiments you can do on the Bally. DRAW AND <u>RECORD</u> FULL COLOR SCENES! Experiments and tutorials will teach you how to program the Bally in machine language, and how to do your own Screen Interrupt routines. Includes many time saving useful techniques for Machine Programming. Listings of short utilities included. And...... All you need is Bally Basic!

On C-20 TDK \$7.00 ppd.

Send to: Barry Ellerson 5017 N. River Rd. Schiller Pk., Ill. 60176

The first of its kind any-where! Guaranteed interesting and useful! PROGRAMS ON TAPE INCLUDE: COLOR TUNNEL and ART w/variation additions for down to 4 scan lines per interrupt. FORMATTING UTILITY w/variation addition for drawing and recording full color pictures. AMERICAN FLAG LOGO ... and more

---- 300 Baud Cassette for Bally Basic. Shipped First Class ----

CLOCK KLUDGE MODIFICATION KIT

If you have screen tearing, {loss of horiz, sync,}, this kit will cure your problems. If it went dead following these symptoms, it will probably fix it. *** NOTE *** This kit is for the old style boards. Newer boards have this modification already. Look inside the clock shield for a small board with 2 transistors on it. Extra parts needed included w/ both kit and assemb. version. Documentation: Instructions--Problems & Solutions. Double sided Quality P.C.B.

Send to: Barry Ellerson 5017 N. River Rd. Schiller Pk., Ill. 60176

KIT---#9-00 ppd-.bqq 00.11#---22A ----Shipped first class----

AVAILABLE SOON -TELEPHONE MODE M-

Finally...an inexpesive, yet versatile, and easy to use telephone modem for 300 Baud Bally Basic. Your Interface and tape recorder simply plug in, and the telephone jack is plugged in to your telephone outlet. A set of switches selects mode for Xmit or Rove. a both to and from computer And/Or tape, while you monitor your screen.Optional will be a Ring Detector and mode switching {Single duplex only} to allow you to recieve messages or a program: or do remote control via telephone-computer link.

PRICES: #35.00 kit - #45.00 assembled Please write to: Barry Ellerson- see above add ** NOTE ** We must recieve at least 100 prospectives before we commit to the ordering of the thousands of parts, so if interested please write Today..and you will be notified as soon as it becomes available.

*** TREBUTE OOO ***

AVAILABLE NOW!!

INSTRUCTIONS & LISTINGS INCLUDED WITH EACH TAPE

TAPE SI ... BOWLING SECRETARY

THIS PROGRAM FIGURES AVERAGES, HANDICAPS (INDIVIDUAL & TEAM), TOTAL PIAS AND GAMES BOWLED FOR AN ENTIRE BOWLING LEAGUE & STORES ALL DATA ON TAPE. CAN BE UPDATED AT ANY TIME. AVAILABLE TWO WAYS... AS WRITTEN (8 TEAMS - 4 BOWLERS GACH), OR CUSTOM. (SEND IMPO. WITH ORDER -- BOWLERS NAMES, TEAM NOS. & HANDICAP SYSTEM USED.)

WITH INSTRUCTIONS, LISTING & DOCUMENTION _____ \$6.95 AS WRITTEN \$12.95 CUSTOM.

LISTING ONLY \$3.95 (POSTPAID)

TAPE G1 ... QUICKDRAW & SKUNK

QUICKDRAW-TRY TO BEAT ANOTHER PLAYER OR COMPUTER TO THE DRAW! POINTS

ARE AWARDED ACCORDING TO HOW FAST YOU ARE. USES SOME MACHINE LANGUAGE FOR

FAST ACTION. I OR 2 PLAYERS.

SKUNK - BASED ON THE POPULAR DICE GAME. TRY TO ACCUMULATE POINTS

WITHOUT GETTING SKUNKED AND LOSING YOUR TURN, OR WORSE, DOUBLE SKUNKED AND

LOSING YOUR TOTAL SCORE!

PRICE.......*8.95 POSTPAID

(1-4 PLAYERS)

TAPE G2. HAUNTED HOUSE & GUESS FIVE

HAUNTED HOUSE - ADVENTURE GAME - TRY TO MAKE IT THROUGH THE HOUSE ALIVE!

IT'S NOT EASY! DIFFERENT RESULTS EVERY GAME. I PLAYER.

GUESS FIVE - A 'MASTERMIND' TYPE GAME WITH MANY SPECIAL EFFECTS - VERY APPLICTING! INSTRUCTIONS INCLUDED. IPLAYER. \$8.95 POSTPAID

LISTINGS ONLY FOR ANY GAME --- \$2.00 POSTPAID PROJUTER OR CULTURE
MANY MORE PROGRAMS TO COME! SEND FOR FREE LIST (UPDATED MONTHLY.) ALSO ... SEND
US YOUR IDEAS. WHAT WOULD YOU LIKE TO SEE? WE WANT TO KNOW!!

WE ALSO SELL CUSTOM MADE, AIRBRUSHED (BY HAND) T-SHIRTS!
MADE FOR USER GROUPS, ETC. WRITE OR CALL FOR PRICES.

WHITE BOSTER Tashirts- \$8.00 EACH +\$1. POST. & HANGE SEND SIZES DESIRED

PUT YOUR IDEA
ON OUR SHIRT

DON GLADDEN 59400 NINE MILE RD. SOUTH LYON, MICHIGAN 48178 313-437-3984

ESOTERICA LIMITED

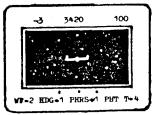
-Original Software-



TAPE # 1 \$ 15.95

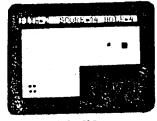
3328 Red Fox Run Warren, Oh. 44485

(216) 898-7165



STAR TREE

You are at the helm of the 400,000 metric ton star ship looking through the front viewscreen into deep space. It is a weary ship. You have siresdy done battle with a class I cruiser and destroyed a Klingon outpost. Buddenly, a siren sounds "Red Alert" "Klingon Battle Cruiser" flushes scross the sensor readout as the vessel appears on screen, very small at first, but getting larger. He's attacking ab warp factor 61 Before you react the enemy fires! An alarm soundal Engineer ing reports the hit damaged the photon torpedom & the forward shield is still weakened from the last battle. Another enemy blest fill: the screen as it's about to hit. You must act quickly! You are not yet in phaser range. What will you do? STAR TREX, the aggressive gene from Esoterica Ltd.



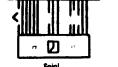
A game of computer putt-putt for one to four players. Use the joystick to line up your shet. Bit the bull hard or soft or with the perfect"Golfer's Touch." Bank it off the unde boards for those "tricky" shots but don't hit it too hard or you'll end up in the rough. Computer keeps running score for one to four players, including penalty strokes. It also prints player up and hole no.

Both progra s make full use of color graphic and sound effects, and perform more functions that : can be listed here. Send check or money order to:

Esoterica Ltd. 3328 Red Pox Run Warren, Obio 44465 The six program offering listed here represent the finest software yet developed in BALLY BASIC. They are not merely computerizations of existing games, but are original game concepts developed over months and designed to provide challenging computer entertainment that will endure the test of time. Although we have developed many programs and are testing still more, we have released only these six. At Esoterica, we are dedicated to quality; quanitity may come later-It all depends on your satisfaction.

All tapes are \$ 15.95 US funds





Odds of Oil 78% 8/Ft of Depth \$21.00 Est Depth of Res 7500 Ft

WILDCATTER **BOMB SQUAD**

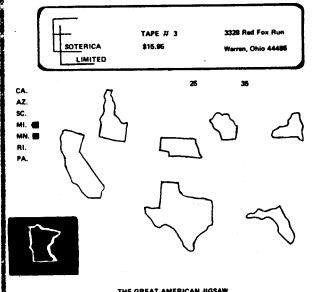
A Bomb has been discovered at police head quarters. In order to disarm it you will need: the eye of an eagle, the steady hand of a brain on, the deductive powers of Sherlock Holmes, and the heart of a Kama Kazi pilot. Oh yes, you will also need BADCOR (Bomb Analysing (disposable computerized robot). Can you diffuse the bomb before it blows you up? Try BOMB SQUAD from:

ESOTERICA LTD. 3328 Red Fox Run Warren, Ohio 44485

All the excitement of the old time oil wildcatters! Take charge of your small com-pany as you explore for oil. Study the geological data, calculate the risks, and make the smart investment. You could become a wildcat millionairel Computer gives all necessary data for one to four players; Holds production and income information for up to ten wells per player; Keeps running acnt of income and expenses right to the dollar. Full graphics and sound

ш

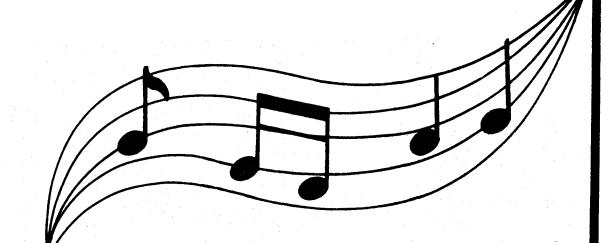
ESOTERICA LTD. Warren, Ohio 44485



THE GREAT AMERICAN JIGSAW

Everybody knows where California, Texas and Florida are located, but can you identify the state which the computer has selected at rando and drawn in the lower left hand corner of the map? It is surely easy with seven choices from which to pick, but if you really need help the computer will assist you by showing its exact location. 10 pts. for the geographer and 5 pts. for the duffer. We give you the three easy states and the other 45 go together like a jigsaw puzzle. Side 2 gives you topographic features and asks for major cities. Red, White and Blue graphics for a petriotic effect. This is the finest in educational software from:

ESOTERICA LTD. 3328 Red Fox Dr. Warren, Ohio 44485



2 AND 3-PART HARMONY MUSIC SOFTWARE!

Three 60-minute programming cassettes now available!

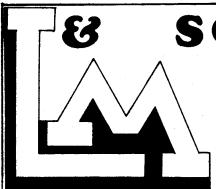
- 1. Bach's 15 Two-Part Inventions!
- 2. Christmas Music; 27 Carols!
 - 3. Scott Joplin Ragtime Piano!

§950 Each



GEORGE MOSES CO.

P.O. Box 686 • Brighton, MI 48116

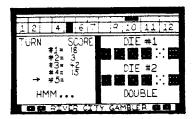


SOFTWARE

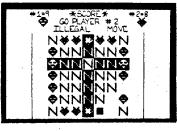
(reative Original Games for Bally/ Astrovision Arcade (omputer System on tape cassette, Postage Paid.

8599 Framewood Dr. Newburgh, IN. 47630 Visa & Master (hg. Accepted. Send # and Exp. Date.

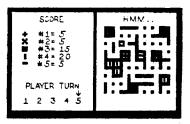
The Following Graphic Pictures are True Representations of the Games we Sell.



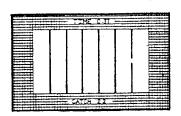
Piven City Gamblen



Space (heckers



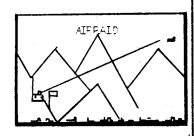
Claim Jumpen



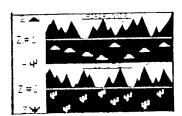
Crazy Ball



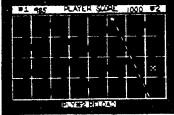
The Mummys Treasure



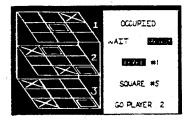
Air Raid



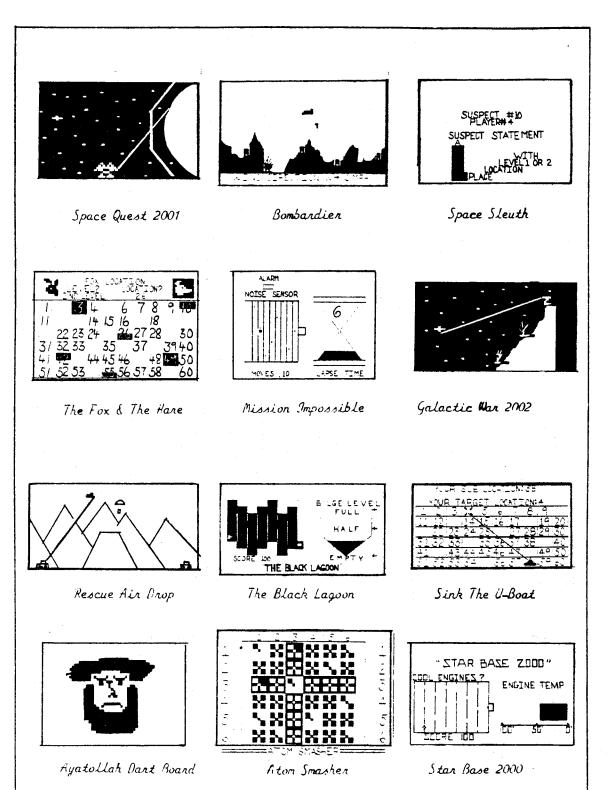
Coyote Roadrunner Race



Phantom Star Fighters



3-D Tic Tac Toe



LEM Acceptes Visa & Master Cha.... Send Acount # and Exp. Date and Signature.
OR Write for Free Catalog and order forme.

THE FOX and the HAPE: The fox is trying to find the hane by searching a field, containing rabbit holes, that are two levels deep. The fox must guess in which hole and at what level the hare is hiding. After each attempt the location the fox guessed is eliminated from play, narrowing the places for the hare to hile. You decide the number of attempts the fox will get. Also, the have has the option to move or stay where he is after each guess the fox makes. 2 PLY 1 HC KEY Pril

GALACTIC WAR 2002: From your starship you must destroy two types of Klingon space our implacements as they appear on the planet by firing your missiles. When it is a megaton blaster you must try and avoid his rapidly firing gun. Many options are offered, enabling you to custom arrange the difficulty of play. 1 ML 1 MC

ATUM SMISH'R: This is a two player strategy game, where each player selectively nemoves radioactive particles from atoms. The atoms reach critical mass and explode shooting energy to adjacent atoms, causing a chain reaction. The score is displayed. Very fascinating and exciting! 2 PLY 2 H

SPACE SLOTH: Is a Who-Dun-It mystery game for 1 to 4 players. You won't believe the amount of features in this 1.8% game of strategy. There are over 75,(NN) combinations of suspect, clues, alibies and locations. In unique "Sherlock tye Piece" is employed to decode secret information displayed to each player, in turn. Game comes with one Sherlock tye Piece, one private question list and eight fact sheets to aid all players in solving the mystery. Unusual game of wit and logic. 1-4 PLY 1-4 HC Must have colon TV set

(RAZY BALL: Two games in one program! "(atch 22" and "Blockade" involve a crazy little ball that is constantly bouncing around and off walls. In action skill game that challenges eye to hand co-ordination. Score is displayed in game time, during or after the game, at your preference. 1 PL! 1 H.

TOUTE-MATPINER DESERT RACE: This is a two player game with all of the excitement and thrill that a race can generate. The race takes place over three screens or zones. All of the hand control functions are used on this one. 2 MLY 2 HC

PHANTOM STAR FXHITIRS: Is a two player maze game. The star fighters are cloaked to render them invisible, except when they bump into a barrier or when reloading. You have a choice of two types of lazer weapons. 2 PLY 2 HC

3D TX Tri(TO): The first L&M three dimension display, with three levels of game boards. Players can win in all three dimensions on one! This game will amaze you and is for two players. The computer will keep everyone from cheating and will indicate when there is a winner, who the winner is, and will light up the three squares that make up the Tic Tac Toe. 2 PLY 2 HC

(List JUNNER: rillows the players to construct 4 sided claims on the playing board. The object is to be the one to pur the 4th side on a claim, establishing numership of the claim and 5 points to your score. You choose board sizes 4-9. Bally can play, too, on this one, making it a possible 5 player game. 1-5 PLY 1-4 MC

RNER CTY GAMBLER: A fascinating dice game of chance. Each player, in turn, must eliminate as many numbers at the top of the screen by choosing numbers which equal the sum of the dice. The score and player turn is displayed. On this one the computer can play, too, making it a 1 to 5 player game. 1-5 PLY 1-4 M

SMIE (HECKERS: Is a strategy came where the object is to eliminate as many of your opponents "faces" from the playing board as possible by making adjacent moves. For one or two people. If only one person plays then the computer plays no. 2 position. 2 MI 1-2 MC

LXHT SHIM! PMX, RAM = 2: Many colorful displays designed to expand the visual/musical presentation in to the graphic art form. This is for use with the L&M Color Organ/Light Show Interface.

THE MULTY'S TREASURE: Do you like treasure hunts? There are three levels, 180 rooms total. (on you find the secret passages which lead to the dungeon, then find the treasure room before the mummy finds you? Or will you be carried to a different level by a mysterious force? Each replay is different and exciting! 1-4 PLY 1-4 HC

ATR PAD: In this game you can be a hero and save the people of a mountain village by marring the gun implacement on the mountain top and blasting the bomber out of the sky as quickly as possible. What will your rating be at games end: Expert, Sharpshooter, Marksman, or lower? 1 PLY 1 HC

<u>DART (N)ARD:</u> Electronically stick a hola in the Ayatollah! Well, here's your chance to punch Khomeini out. This 3D dart board with a picture of the Ayatollah on it is an excellent graphic game and conversation piece. Just watch what happens when you hit Khomeini in the right spot! 1 PLY 1 M

RESCUE AJR DROP: This is your chance to save a surrounded village located high on a mountain plateau. You must drop a load of supplies by parachute and hit the tiny plateau. There is difficulty in allowing for wind speed and direction. Also, being fired upon by the enemy, knowing that if your plane is hit it will explode and crash in the mountains. This is an exciting game of skill. 1 PLY 1 HC

TAMGET: This is a series of three games, Pop-Up, Deck the Duck and Skeet. The score is displayed in each section and totaled at the end of the 3rd game. Here is a chance to test your shooting skill and compete against friends for high score. 1 PLY 1 HC

KILL THE VILCAN: In this game you do battle with the deadly "Vulcans" on a Lonely outpost in space. Using our elevation, in degrees, you must fine at an approaching enemy and destroy him before he homes in on you. Over and under shot distance is displayed each time you fire your weapon to aid you in your next shot if you have one. 1 PLY 1 HC

SNK the U-BOAT: Did you get the opportunity to sink any U-Boats during World WarII? Trobably not, so here's your chance to do battle with a German U-Boat. Battle is done on a large grid where a game of elimination is played with the computer. Excitement builds the longer the game lasts. 1 PLY KEY PAID

SEARCH and DESTRIFE. The mad Dr. Oppenheimer has stolen a nuclear sub and threatens to destroy the world. Your job is to save the world by destroying the sub and avoiding the mines randomly located in the sector. 1 PLY KEY PAD

STAR BASE 2000: This game puts you in command of starship "riquila". You must reach the "Star Buse" by navigating thru force fields, black holes, and avoid overheating the engines in your starship. Points are deducted each time you use the cool down feature, but the cool down feature can only be used when passing through force fields. If your starship engine temp. exceeds 100°C the ship will be destroyed. I NLY 1 HC

BLACK LAGGOM: You are the pilot of a leaky bout which must reach the dock on the other side. Watching the bilge level and using the pump station located at each pussageway only as needed. When pumping down a monster surfaces moving toward you, limiting the amount of water you can pump from the boat bilge. Each new game finds a different shaped lagoon and waterway locations. 1 PLY 1 HC

mission in Missible: You must successfully reach the end of the corridor conatining rooms filled with poison gas and deadly robots. Your oxygen supply time is displayed by the hour glass. You may retreat any time and refill your supply. Nine difficulty levels, robot sensor alarms and low oxygen alarms all help to make this an exciting game. 1 PLY 1 HC

BOMBIRGIER: You're flying over mountains in a bomber. The area below contains Russian missile silos which you must bomb. You must allow for wind speed and direction. You're also being fired upon by the silos. If your plane is hit it will crash and explode in the mountains. With each new game the mountains and location of the missile silos will change. 1 TLY 1 HC

Strict QUEST 2001: Your interstellar space craft must save a friendly colony, on the planet, from the "Star Plunderer". You must break thru the forcefield and destroy the enemy, using lasers and missiles. The excellent graphics and the 35 difficulty levels, all in 1.8K, make this game one of you best. 1 NLY 1 HC

(OLOR ORGAN/LIGHT SHOW: Interfaces Bally to your Steres Amp.Does not effect Steres Quality TV. displays (olor & Light in step with music

Complete interface unit with Cassette Demo. & Tutorial. \$29.95 (Add your own graphics/Art).

Stere Organ W.

Stere Organ

On your with

Onter or Association

Association

MARK S. KELLER

Program Tape Number 1 (\$10.00)

1) Star Trek III Battle Klingons in up to 81 8x8 quadrants, using phasers and photon torpedoes to destroy them and Star Bases for re-supply. Features continuous situation display and moving Klingons. *

2) Chase III

Chase game with selectable number of robots and walls. *

3) Space Battle

Shoot down as many UFO's as possible in 50 time units. *

4) Bombardment II

A number guessing game, you verses the computer. *

5) Bullseye II

A non-graphic Dart game for up to 20 players.

* use Hand Controller number 1.

Program Tape Number 2 (\$10.00)

1) Wumpus II Hunt the Wumpus in one of six standard caves, a random cave, or a custom cave you create. Reads cave data from tape and programs are supplied for creating and copying data files.

2) Blackjack II

Play Blackjack against a computer dealer using Casino rules. Does not graphically display the cards. Uses Hand Controller number 1.

Full screen true sine wave display. Will show three standard and four experimental cycles. Displays 26 days at a time.

4) Life

The biological population simulation described in Scientific American and BYTE magazines. Flexible and easy to use.

5) Text Editor

Program to help in basic program development. You can edit any line without re-typing. The program is approximately 300 bytes long and features REPLACE, INSERT, and DELETE functions. Includes three machine language subroutines.

For further information, see the reviews in the ARCADIAN Newsletter Volume 3 pages 28,29, and 38.

Tapes are 300 Baud BALLY BASIC and include listings and instructions. 2000 Baud ASTROVISION BASIC tapes will be available in early 1982.

Shipments are made via FIRST CLASS MAIL.

To Order: use the SOURCEBOOK Order Form and send check or money order in US funds to:

> Mark S. Keller 9536 Shumway Drive Orangevale, CA 95662

PERKINS ENGINEERING

1004 Pleasant Ave., Boyne City, Michigan 49712

(616) 582-9832

Thank you for your interest in our products. They are designed to overcome some of the shortcomings of one of the best color graphics systems — the Bally Arcade. The only catalog that lists our products is the Sourcebook by Dick Houser, 635 Los Alamos Ave., Livermore, CA 94550 \$5.00. Our ads have appeared in the ARCADIAN and many editorials and tutorials can be found in Vol II and Vol III of that newsletter,

The Blue Ram is a small blue box with an edge connector that plugs onto the 50 pin expansion outlet on the back of the Bally. It contains 4096 bytes of static read-write memory (RAM) that can be protected from accidental writing (ROM mode) either by a switch or with software. An additional 128 bytes are not write protectable. A 24-pin Zero Insertion Force (ZIF) socket affords two 8-bit parallel input/output ports for controlling external devices. Under control of your program, any of these 16 bit lines may be read (input) or written to (output). The remaining 8 pins provide power and certain other connections for access to the Z80 microprocessor timing signals and the sound system.

The Blue Ram comes with two programs on tape, a regulated power supply and an instruction manual. Included in the programs are a Diagnostic for the Blue Ram and a Utility program to assist in machine language programming. The Utility also includes support program routines for generating multicolors with BRSIC and hexidecimal write to tape. An arcade game can be transferred to the Blue Ram, modified and dumped to tape for later loading and running in the Blue Ram. Price is \$180.00. Also available in kit form at \$140.00 for EXPERIENCED wire-wrap kit builders (there are 14 IC's from 14 to 40 pins each, all in wire-wrap sockets, plus 13 discrete components in a box just over 1"x2"x4"),

Our keyboard is a "standard" 62-key typewriter style assembly mounted on wooden end blocks and fitted with a 3-foot ribbon cable to plus into the ZIF socket on the Blue Ram. All 62 keys are active and will be used with the MODEM, etc., even though the Bally doesn't understand some of them (ESC, BREAK, lower case chatacters, etc.) Bally's words are added to the keyboard with attractive stickers. With documentation and tare, it is supplied wired and tested for \$89.95. If you prefer a kit, this one is a little easier to wire and will save you about \$30.00. The kit is \$24.95 (excluding the keyboard itself - Model K62 wich can be ordered from JAMECO, 1355 Shoreway Road, Belmont, CR 94002).

The BLUE RAM Operating System (1.0) is a machine code program on tare which facilitates writing Bally Basic programs of 5200 to 5600 bytes! 1776 bytes so in Bally memory and 3400 to 3800 in the Blue Ram. With the editor (included in this program) you can change, delete or add any number of characters within a line without rewriting the whole line. You can also restructure your programs by moving entire lines up or down! Price is \$9.95.

The BSR Controller is a system that communicates with the BSR X-10 ULTRASONIC Remote Control System. At \$19.95, this controller comes ready to plus into the Blue Ram and be aimed at the BSR control console. The included taped program allows you to program up to 16 lights or appliances for up to 24 hours, in 10 minute increments. This is a form of break-in protection when you are away from home.

The Blue Ram MODEM/Printer Interface connects the Blue Ram to a STAR MODEM by Livermore Data or to a BRSE 2 model 800B Printer or both. Now your Arcade can "talk" to other computers by 'phone or explore the world of the SOURCE! The Blue Ram now acts as a 3071 byte buffer to store incoming traffic. The printer will automatically make hard copy. It also becomes a typewriter and will repeat a page or two with a single keystroke! Wired and tested——\$99.95 (\$89.95 without printer option). The kit saves you \$20.00.

All of these products come with taped programs and operating manuals.

SOFTWARE FOR 1981 FROM RICH TIETJENS

NEW better Graphics!

Better sound effects!

Faster responses!

DUNGEONS & DRAGONS Game Aid Package	
TRAVELLER'S AID PACKAGE (game aid)	
GAMES:	
SpaceFlight Package #1	8.00
SpaceFlight Package #2	8.00
SpaceFlight Package #3	8.00
Lion Country (simplified Adventure)Find the Treasure but don't get eaten by the Man-Eating Lion! 1-4P, 4H, BB	5.00
All SpaceFlight packages use special User-defined Graphic characters.	
UTILITIES:	
Graphic Assembler	5.00
Music Assembler	5.00

R & D ENTERPRISES INTERNATIONAL

presents

The Universal SERIAL/PARALLEL Interface Adapter

With a few connections to your Bally Audio Interface, the US/PIA allows you to connect a parallel ASCII Keyboard or printer; connect a serial terminal or printer at other than 300 baud (110 to 1200 baud); and use a simple switch

to select the AIF or Handle #3 - no more changing plugs for 3 or 4 player

games in BASIC!

The US/PIA is based on the Gemini Industries 1014 UART and draws power from either the Arcade (thru the AIF) or from your external 5-volt supply, at less than 100ma.

Complete specifications free with a self-addressed stamped envelope; full schematic with do-it-yourself instructions for \$2.00. Design by Rich Tietjens. Order from Rich Tietjens, PSC Box 542, APO Miami 34004

COMING SOON!

M	M	EEEEE	M	M		X	X	TTTTT	EEEEE	N	N	DD	D
MM	MM	E	MM J	MM		X	X	T	E	N	N	D	D
M M	M	E	M M	M		X	\mathbf{X}	T	E	NN	N	D	D
M	M	EEE	M	M	===	2	ζ	T	EEE	N :	N N	D	D
M	M	E	M	M		X	X	T	E	N	NN	D	D
M	M	E	M	M		X	X	T	E	N	N	D	D
M	М	EEEEE	M	M		X	X	T	EEEEE	N	N	DD	D

(MEM-XTEND)

MEM-XTEND is a 32K memory board which allows you to intermix RAM and EPROM in 4K blocks. Occupying the undefined area of the Arcade's memory space, it will accept Blue RAM software, and give you the ability to put most-often used utility routines into non-volatile Read-Only Memory. Target price is in the vicinity of \$350 assembled and tested, with power supply and cabinet. As a bonus, the MEM-XTEND power supply will also be able to supply power to the Arcade, allowing you to dispose of the wall transformer, or use it for other projects. Watch for the MEM-XTEND announcement in the Arcadian!

SOFTWARE FOR 1981 FROM RICH TIETJENS

Warranty Service: All software tapes sold by Rich Tietjens or by R & D Enterprises, International, are waranteed to be free of defects in software and hardware. If at any time the tape fails to load and/or run properly on any unmodified Bally ARCADE with Bally BASIC and Audio Interface, the tape will be replaced at no charge upon return of the defective cassette.

We welcome suggestions for improvement of current software or for programs or applications to be developed.

See our hardware ad in the appropriate section of the Sourcebook.

		ORDER FORM		
FROM:	Name		Date	
	No. & Street/Rte/Box no.			
	City & State ZIP			
TO:	R & D Enterprises Internat % Rich Tietjens PSC Box 542 APO Miami 34004	ional:		
SOFTWA	ARE: Item		Price Qty	Tota1
DUNGE	ONS & DRAGONS Game Aid Packa	age	@\$10.00 x	_ =
TRAVE	LLER'S AID PACKAGE		8.00 x	=
SPACE	FLIGHT PACKAGES:	#1 #2 #3		_ =
LION (COUNTRY		5.00 x	_ =
Graph	ic Assembler		5.00 x	_=
Music	Assembler		5.00 x	_ =
HARD W	ARE:			
Seria	1-Parallel interface adapto	r	50.00 x	=
		TOTAL:		\$

All prices include shipping & handling. Make check or money order payable to Richard C. Tietjens. PLEASE DO NOT SEND CASH THROUGH THE MAIL!



NEW SOFTWARE SOURCES NOT INDEXED

Edge Software 12046 Flambeau

Write for program descriptions

Palos Hts., IL 60463

Tape # 1

Bowl and Match

Tape # 2

Dots and Mastermind

NEW Z-80 Machine Language Programming Cartridge

The Bit Fiddlers
P. O. Box 11023
San Diego, CA 92111-0010

Send for complete details.

This tutorial explains what the XY command does and then how DESCRIPTION: to use it. Contains 6 programs and 12 pages of material. Package contains: Cartesian to XY conversions, video art, charts, listings of all programs, 3-D Simulations, and more!!

These programs will only runusing the electricity (300 band)

SPECTRE SYSTEMS

!!!!!Introduces a new addition for the Bally Arcade!!!!!

A game handle that provides:

- (1) True X-Y joystick operation!
- (2) A numeric keypad!
- (3) Arcade pinball buttons!

Our new handle provides your Bally with more flexibility. It operates with Bally BASIC, Astro BASIC, Viper System, Blue Ram, or just the Arcade.

Play PINBALL using real pinball buttons, and write games using controls just like in the commercial arcades!

Includes complete instructions for using with your own games. Our handle is supported with our quality software and backed with a 90 day warranty!

INTRODUCTORY GIMMICK:

And, until March 15, 1982, order the handle and get FREE our newest software release...



ICBM ATTACK was written by Brett Bilbrey!

This is a machine language cassette program, (just like the cartridges), and goes beyond all previous Bally programs. (We're modest.) Fire missiles from three bases to intercept enemy attacks and save your cities. But watch out for cruise missiles and nermals.

THIS IS AN ARCADE QUALITY GAME!

ICBM ATTACK allows one to four players. Four colors, sound, and non-blinking graphics make it the best Bally game to date!

ICBM ATTACK will sell separately for an additional \$19.95 after March 15, 1982.

Note: The handle is required to run ICBM ATTACK.

Custom design and dealer discounts available. Please inquire.

SEND TO: SPECTRE SYSTEMS	★ 7740 Littlefield Blvd. ★ Dearborn, Michigan ★ 48126
INCLUDE: \$49.95 (Check or Money orde	r) for handle and ICBM ATTACK (until March 15, 1982)
NAME	
ADDRESS	
CITY STATE ZID	

Super Software

Box 702 Plainfield, NJ 07061-0702

(201) 755-2430

Quality programs for the BallyTM

Program sets-\$10.00

Listing sets-\$5.00

Starship Bally Super Slot

Starship Bally- Find the enemy and guide your ship so that he is in your sights, and blast him with a photon torpedo.

Super Slot- The Bally Casino wants you to play its latest slot machine. Up to four players can participate. Great Fun!!

Football Super Craps

Football- Now you can play the hand-held version of football on your Bally. Includes more features than its electronic counterpart. Two players.

Super Craps- Try your hand at rolling the dice. Graphic dice are displayed as up to four people bet on the outcome.

We also carry all of the Videocade Cartridges for the Bally Arcade. These include Galactic Invasion, Grand Prix, and the new BASIC Cartridge. Please write to the above address for a free fact-filled catalog explaining all of our products.

Thank you, Robert Rosenhouse

Super Software

Box 702 - Plainfoeld, NJ 07061-0702

Robot Alert! Simon Says

Robot Alert! - Yet another funfilled arcade-type game is
adapted to the Bally. You are
in a maze-like room and must
kill all of the robots before
they get you. But, you can
never beat this game.

Simon Says- The electronic game
of a similar name can now be
played on your Bally. Notes
will be added to a series which
you must repeat.

Mystery Maze Hustle!

Mystery Maze- A maze is shown on the screen and you must navigate your starship through it while watching your fuel and avoiding electrical storms.

Fuel thieves may come to steal some fuel, so be wary!!

Hustle!- Your pitted against time as boxes light on the playing field for you to colect from. You must move as the name implies, so Hustle!!

Cosmic Zap Barracade

Cosmic Zap- You planet is tossed into a meteor field and meteors are coming from every direction. It is up to you to use your laser and destroy all of the oncoming rocks before your planet is destroyed.

Barracade- It's you against the 'Space Guards'. Run for your life as these aliens come at you in increasing numbers. Watch out for the particle beam.

Falling Stars Laser Battle

Falling Stars- Your city is in danger of being destroyed by the radioactive stars. The city is covered by a shield, but that is not enough. You must move your cannon and destroy as many stars before your city turns into a ghost town.

Laser Battle- A new version of tank battle. Each player is guarded by a shield which must first be destroyed. 2 players.

Super Software

Box 702 - Plainfield, NJ 07061-0702

Smack-Up Beatle Quiz

Smack-Up- Guide your droid thru the maze-like passages and scoop up all of the gold in your path. Beware of the guard that is constantly pursuing you. Similar to 'Pac-Man' (by Midway).

Beatle Quiz- This program is designed to test your knowledge on the 'Fab-Four'. See if you can answer all of the questions asked. Questions deal with all aspects of their carears.

Bally Slot Dog Racing

Bally Slot- A real slot machine is displayed on your television. See how luckey you are by spining the reels graphicly and see the results. This game is very realistic, as the I.R.S. man comes to claim you winnings.

Dog Racing- It's off to the Bally track for a night of Dog Racing. Four people place their bets and the dogs fly across the track. All bets are displayed.

Tic:Tac.Dough Maze-A-Matic!!

Tic-Tac-Dough- Based on the game show of the same name. Pick one of nine squares and uncover a money amount, a bonus word, or the Dragon. If you pass \$1,000 you win!! Find the dragon and you lose.

Maze-A-Matic- Your Bally Arcade will draw a simple maze that you must survive; but it is not that easy! Walls will constantly be added to hinder your path.

Missile Attack Reverse

Missile Attack- Now one of the most popular arcade games is now available for your computer. Defend your cities from death by intercepting the computer's missiles with your's. Great fun and graphics.

Reverse- Reverse is a challenging puzzle which will probably take you many, many hours to master. We know the secret, but will you?? SOURCE:

THE BASIC EXPRESS formerly the The CURSOR GROUP (714) 868-3826-

P.O. Box 1763

Big Bear Lake, CA 92315

Contact THE BASIC EXPRESS for current offerings and prices.

Cassette Tape Eraser

Accessory

Bulk magnetic tape eraser. Will erase tape without having to

DESCRIPTION: run thru tape machine.

PRICE: \$ 21.95

Cassette Tape Recorder

Accessory

AC/DC Portable Tape Recorder, featuring Ultra Slim Design,

DESCRIPTION:

Built-in AC Adaptor, Cue and Review Functions Fast Wind the Sound, Built-in Microphone, Auto-stop at end of Tape, and

Automatic Record Level Control.

PRICE: \$ 44.95

C-3Ø Tape

Accessory

High quality computer digital tape cassettes. 10 tape case

DESCRIPTION: with individual poly boxes.

PRICE: \$ 15.99

Hand Control Cables

Accessory

Replacement cables for your hand controllers, just remove old

DESCRIPTION: old cable and solder in new cable. Make sure you get the

colored wires connected to the proper connections.

PRICE: \$ 6.99 for set of 2 PRICE: \$ 10.49 for set of 4

Heat Sinks

Accessory

Set of three heat sinks to put on the custom IC's of the DESCRIPTION: older BALLY ARCADE Units to stop heat related problems.

PRICE: \$ 3.95 for set of 3

HD-1 Head Demagnetizer

Accessory

First quality head demagnetizer to keep your tape machine in

DESCRIPTION: first class condition.

PRICE: \$ 27.95

Machine Language Manager

Cartridge

DESCRIPTION:

This cartridge along with the 42 page manual allows you to program the BALLY in machine language. It allows you to make use of the BALLY's on board subroutines and write arcade type games in four colors. Provides a rather complete programming course. Games will be available shortly which in conjunction with this cartridge will produce arcade type quality games.

PRICE: \$ 54.95

Without case, use game case.

PRICE: \$ 49.95

Tape # 1 Moon Landing Cassette

Game, Simulation 1p

BB

Bio-rhythm

BBPersonal

Moon Landing: You are awaiting instructions to break away

DESCRIPTION:

from the mother ship. Once you do, you have to quickly scout for a safe landing spot. After landing you take off and head back to the mother ship if you have enough fuel. Graphics. Bio-rhythm: Program to predict your physical, emotional, and intellectual behavior at peak and critical times. Gives

graphic plots showing peaks and critical days.

PRICE: \$ 8.95

California residents add 6% sales tax.

Prices will probably go up when postage rates go up on November 20th.

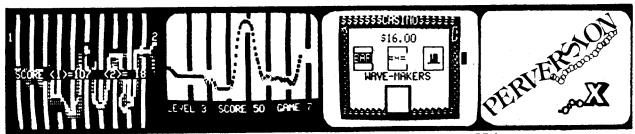


ALL WAVEMAKER TAPES ARE RECORDED IN BOTH BALLY AND ASTRO BASIC. THE COMPUTER WILL AUTOMATICALLY SELECT THE CORRECT PROGRAMMING FOR EITHER CARTRIDGE BEING USED.



TAPE 1 Max (Robot from Space) - Horse Race

TAPE 2 Clue - Flying Ace



TAPE 3 Maze Race - Obstacle Course Space Chase

TAPE 4 Slot Machine - Perversion

TAPE - 1 \$10.95 + .50 Postage and handling

MAX ROBOT FROM SPACE-YOUR MISSION: TO DESTROY HIM. WE KNOW THERE ARE SOME FLAWS IN HIS CONSTRUCTION, BUT WE DON'T KNOW WHERE THEY ARE. (SOMEWHERE ABOVE THE BELT) TO DESTROY HIM THREE SYSTEMS MUST BE TERMINATED, YOU CAN USE THE HIGH POWER BLASTER WITH 10 SHOTS, THE MEDIUM HAS 20 SHOTS AND THE LOW HAS 30 SHOTS. IF YOU FAIL MAX WILL WAKE UP AND TERMINATE YOU!! IF YOU CAN DESTROY HIM BEFORE YOU RUN OUT OF SHOTS, MAX GOES OUT IN FLASHES, ELECTRONIC AND MECHANICAL NOISE. GOOD LUCK!!!!

HORSE RACE-4 HORSES RUN 5 RACES. 1 TO 4 PLAYERS CAN BET ON THE HORSES FOR ALL RACES. THE WINNING OR LOOSING STATUS OF EACH OF THE PLAYERS IS SHOWN AFTER EACH RACE. GET RICH QUICK OR LOOSE IT ALL! YOU NEVER KNOW UNTIL THE FINISH LINE AND THEN THE LOOSER JUMPS ACROSS TO BECOME THE WINNER JUST AT THE LAST SECOND.

TAPE - 2 \$10.95 + .50 Postage and handling

CLUE-BASED ON THE MILTON BRADLY GAME. YOU MUST USE DEDUCTIVE REASONING TO COME UP WITH THE RIGHT COMBINATION AND SOLVE THE CRIME. THERE ARE NO GRAPHICS BUT THIS ADDS UP TO HOURS OF FUN. CAN BE PLAYED BY ANY NUMBER OF PLAYERS.

FLYING ACE-(1) OR (2) PLAYERS. THIS GAME PUTS YOU IN THE COCKPIT OF A FIGHTER PLANE CHASING AND SHOOTING AT THE ENEMY. YOU MUST SHOOT THE ENEMY QUICKLY TO GET THE HIGHEST SCORE. CHALLENGING GAME WHEN PLAYED WITH A GOOD OPPONENT.

TAPE - 3 \$10.95 + .50 Postage and handling

MAZE RACE & OBSTACLE COURSE-THO GAMES IN ONE. RACE THROUGH A MAZE WITHOUT TOUCHING A WALL. IF YOU TOUCH A WALL YOU LOOSE POINTS PLUS BLOW A HOLE IN IT WHICH YOUR OPPONENT CAN USE TO HIS ADVANTAGE. OBSTACLE COURSE-IS PROBABLY OUR MOST POPULAR GAME SO FAR. IT REQUIRES A GREAT DEAL OF PRACTICE. THERE ARE SEVEN SKILL LEVELS PER GAME. STARTING AT LEVEL ONE AND INCREASING EACH GAME. SO FAR NOBODY HAS MADE IT THROUGH ALL SEVEN LEWELS. BUT IF YOU CAN, YOU CAN TRY THE INTERMEDIATE LEVELS.

SPACE CHASE - USES FEW GRAPHICS, BUT GOOD SOUND EFFECTS AS YOU TRY TO GUIDE YOUR SHIP THROUGH 200 LIGHT YEARS TO YOUR DESTINATION. YOU MAY BE ATTACKED BY ENEMY SHIPS, RUN OUT OF FUEL, COLLIDE WITH METEORS, ETC. YOUR AT THE CONTROLS. WARP 1, WARP 2, WAIT FOR HELP, FIRE PHAZER OR EVASIVE ACTIONS, ITS A LONG WAY TO GO BUT A GOOD CAPTAIN CAN MAKE IT WITH A LITTLE HELP FROM FRIENDLY ALIEN.

TAPE - 4 \$10.95 + .50 Postage and handling

SLOT MACHINE-THERE ARE A LOT OF SLOT MACHINE GAMES AVAILABLE ON TAPE. THIS ONE IS SAID TO HAVE SOME OF THE BEST GRAPHICS AND REALISTIC ODDS. THE HIGHEST JACKPOT IS \$1000.00 BUT IT IS RARELY HIT. YOU CAN PLAY \$25,00 AND IT SHOULD LAST ABOUT 15 MINUTES BEFORE THIS BANDIT CLEANS YOU OUT. LIKE IN VEGAS IT PAYS JUST ENOUGH TO KEEP YOU INTERESTED. YOU MIGHT GET LUCKY. GIVE IT A TRY...

PERVERSION-THE GAME WHICH HAS DRIVEN SAMMY SWEETCAKE MAD. YOU MUST DISCOVER WHO DID IT WITH WHAT AND WHERE. THE POSSIBILITIES ARE ENDIESS AND THE ANSWERS ARE A RIOT. JUST FOR FUN.



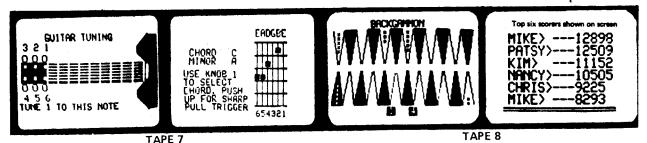
BOX 94801 SCHAUMBURG, IL 60193

ALL TAPES ARE RECORDED IN BOTH BALLY AND ASTRO BASIC ON THE SAME SIDE. THE COMPUTER WILL SELECT AUTOMATICALLY THE CORRECT PROGRAMMING FOR EITHER CARTRIDGE BEING USED.



TAPE 5 Music Composer - Yahtzee

TAPE 6 Mouse in the Hat - Speed Math Note Match



Guitar Course - Tuning - Course-Note Match & Chord Progressions

Backgammon - Obstacle Course Tournament

TAPE - 5 \$10.95 + .50 Postage and handling

MUSIC COMPOSER-AWAKEN THE MUSICIAN IN YOU. YOU GRAPHICALLY PLACE NOTES ON A MUSIC STAFF AND ONCE YOU HAVE FINISHED YOUR MASTER-PIECE, YOU CAN PLAY IT BACK IN ALL IT'S GLORY WITH EACH NOTE PRINTING ON THE STAFF, AS IT PLAYS, YOU CAN ALSO SAVE EACH COMP-OSITION ON TAPE TO BE PLAYED BACK LATER WITH JUST A FLICK OF THE HANDLE AND A PULL OF THE TRIGGER. ONE PLAYER ONLY.

YAHTZEE-BASED ON THE MILTON BRADLEY GAME.FIVE GRAPHIC DICE FOR EACH PLAY AND TWO PLAYING FIELDS. YOU TRY TO GET THE HIGHEST SCORE DETERMINED BY VARIOUS COMBINATIONS OF THE DICE. ONE TO FOUR PLAYERS, USE SEPARATE HAND CONTROLS.

\$10.95 + .50 Postage and handling

MOUSE IN THE HAT-COMBINES STRATEGY, MEMORY AND LUCK AS YOU TRY TO SHOOT THREE MICE, HIDDEN BEHIND ELEVEN TOP HATS. CUTE GRAPHICS ATMED AT PLEASING A YOUNGER CROWD BUT 11!S A TOUGH CHALLENGE FOR EVEN THE OLDER FOLKS. ONE PLAYER ONLY.

SPEED MATH/NOTE MATCH-FAST THINKING IS REQUIRED TO BEAT AN OPPONENT OR THE COMPUTERS TIMER. THE TIMER CAN BE SET FAST OR SLOW DEPENDING ON YOUR SKILL. NOTE MATCH-ALSO IN THIS PROGRAM; TEST YOU MUSICAL EAR BY TRYING TO MATCH YOUR NOTE AGAINST THE COMPUTERS.

TAPE - 7 \$19.95 + .50 Postage and handling

GUITAR COURSE-WHY SPEND \$15.00 OR MORE PER WEEK ON GUITAR LESSONS? WHY GO SOMEPLACE ELSE TO DO IT?? NOW WITH THE HELP OF YOUR COMPUTER 8 T.V. WE'LL TEACH YOU ALL THE MAJOR CHORDS MYNODS AND THATAGE OF SUCH AS A SECOND OF SOME SECOND OF SUCH AS A COMPUTER 8 T.V. WE'LL TEACH YOU ALL THE MAJOR CHORDS, MINDRS AND TUNING, WE EVEN PLAY A FEW CHORD PROGRESSIONS TO PLAY ALONG WHITH, ALL AT YOUR OWN PACE IN YOUR OWN HOME. YOU'LL SEE WHERE TO PLACE YOUR FINGERS FOR ANY CHORD YOU SELECT. YOU'LL HEAR ALL SIX STRINGS PLAY (THE STRINGS EVEN YIBRATE). ALSO INCLUDED IS NOTE MATCH AND CHORD PROGRESSIONS

TAPE - 8 \$15.95 + .50 Postage and handling

BACKGAMMON-IT IS AMAZING THAT WITH THE SMALL AMOUNT OF MEMORY THAT IS AVAILABLE THAT THIS PROGRAM EVEN EXISTS. BUT AFTER MUCH BALEGAMMON-II IS AMAZING THAT WITH THE SMALL AMOUNT OF MEMORY THAT IS AVAILABLE THAT THIS PROGRAM EVEN EXISTS. BUT AFTER MOUNT THE TAY DEMAND WAVEMAKERS IS PROUD TO BRING YOU BACKGAMMON THIS IS NOT A GAME PLAYED WITH AN OPPONENT, BUT AGAINST THE COMPUTER MATCH SFILE AND LUCK AS YOU MOVE YOUR PIECES AROUND THE BOARD WATCH AS YOU GET CLOBBERD BY THE COMPUTER AND SENT BACK TO START OVER, NO CHEATING ALLOWED. (THE COMPUTER MON'T LET YOU) USES ALL STANDARD RULES OF BACKGAMMON, RANDOM STARTING, EXCELLENT GRAPHICS, SOUNDS ALL MOVES, STOPS ALL ILLEGAL MOVES, PENALIZES ILLEGAL MOVES ATTEMPTS, THROWS DICE AT END OF EACH TURN AND MORE...

TOURNAMENT OBSTACLE COURSE-WE TOOK OUR MOST POPULAR GAME AND IMPROVED IT TO TOURNAMENT QUALITY. NOW IT HAS HIGHER SCORING CAPABILITY. IT GIVES HIGHER SCORES FOR MORE DIFFICULT MANUVERS. IT STILL PLAYS THE SAME AS IT DID REFORE BUT NOW YOU WILL BE ABLE TO ENTER YOUR NAME (UP TO SIX LETTERS) IF YOUR SCORE IS ONE OF THE TOP SIX SCORES. IT KEEPS IN MEMORY THE TOP SCORES.



"WHAT'S MORE IMPORTANT, BUSINESS OR PLAYING GAMES?"

HERE AT WAVEMAKERS PLAYING GAMES IS OUR BUSINESS. WE CREATE A GAME AND THEN WE PLAY IT. WE PLAY FOR HOURS AND HOURS JUST. TO MAKE SURE IT'S FUN FOR YOU OUR CUSTOMER. WHATEVER WE'RE DOING, IT MUST BE WORKING BECAUSE OVER 60% OF OUR BUSINESS IS ORDERS FROM PREVIOUS CUSTOMERS. MAYBE IT'S BECAUSE WE'VE GOT SOME OF THE MOST FUN GAMES IN THE BUSINESS. GAMES LIKE PACK-RAT, LOOK-OUT FOR THE BULL, AND OBSTACLE COURSE TOURNAMENT, JUST TO NAME A FEW. WE ARE NOT ONLY CONCERN WITH HAVING FUN BUT WE ALSO WANT TO MAKE IT EASY. ALL OF OUR GAMES USE A LOADING TECHNIQUE THAT ALOWS THE PROGRAMS TO LOAD IN ABOUT HALF THE TIME STANDARD LOADING PROCEDURES TAKE, AND USE THE CONTROL HANDLE FOR ALMOST EVERY FUNCTION OF THE GAME. ALL HAVE AUTOMATIC RUN FEATURES SO AFTER YOU START YOUR RECORDER THE ONLY THING YOU'LL HAVE TO TOUCH IS THE CONTROL HANDLE. ALL OUR TAPES ARE RECORDED IN BOTH BALLY AND ASTRO BASIC BOTH ON THE SAME SIDE. YOU DON'T EVEN HAVE TO WORRY ABOUT THAT, JUST START THE TAPE FROM THE BEGINNING AND THE CORRECT PROGRAMMING WILL LOAD AUTOMATICLY WE KNOW ALSO THAT ONE PROGRAM USUALLY DOESN'T FILL A TAPE. SO WE GIVE YOU A SUPRISE FREEBEE AT NO EXTRA COST ON ALMOST ALL OF OUR TAPES. GAMES LIKE: MAZEMAKER, SIDESWIPE AND INVASION FORCE. WE WANT TO MAKE SURE YOU KEEP COMING BACK FOR MORE, SO, "WHAT'S MORE IMPORTANT, BUSINESS OR PLAYING GAMES?" IT BETTER BE PLAYING GAMES OR WE'RE OUT-A-BUSINESS. OH YEAH, WE DO TAKE CARE OF BUSINESS TOO, WE'LL GET YOUR ORDER OUT THE SAME DAY WE RECIEVE IT, AND THAT'S A PROMISE.

Mike Peace

DEALER:

ABC Hobbycraft

(812) 477-9661

2155 E. Morgan Ave. Evansville, IN 47711 (812) 477-9661

ABC Hobbycraft has the most complete line of BALLY/ASTROVISION Computer Equipment in the Midwest. We stock the ARCADE Units, all available Videocades, and accessories that are available. Contact Guy or Dave at (812) 477-9661 $ilde{ ilde{r}}$

Software and Hardware from the following SOURCES is stocked.

George Moses Co. L & M Software

DEALER: Randy's TV

P.O. Box 11Ø9

El Centro, CA 92244

(916) 944-2001

Schwenk Enterprises 6988 Lincoln Creek Circle

Carmichael, CA 95608

DEALER: SFP

1064 N. Alta Ave.

DEALER: Super Software

P.O. Box 702

Plainfield, NJ 07061 (714) 866 5826

DEALER: THE BASIC EXPRESS

P.O. Box 266

Big Bear Lake, CA 92315

THE BASIC EXPRESS has the following items available:

BALLY ARCADE Units Videocades Accessories Tape Cassettes Cassettee Tape recorders Tutorials Back Issues of CURSOR and THE BASIC EXPRESS Tape Head Demagnetizer Software

THE BASIC EXPRESS also services and repairs all BALLY/ASTROVISION equipment

John Smith. TV (804) 794-1603 217 North Washington Highway Ashland, VA 23005

CONFIRM CURRENT PRICES AND ADDRESSES BEFORE HAVING SERVICE!!!!!!!!

SERVICE: David Stocker

(812) 838-3192

333 Coronado Dr. Mt. Vernon, IN 47620

Hand Controllers: Cleaned (Fixes "shakey" knob)

And hole drilled in bottom

for cleaning fluid.

\$ 2.50 each

See postage rates below

Broken Cable: Replaced (If some movements of

controller do not register).

\$ 4.00 each

See postage rates below

Postage Rates: \$ 1.50 for first controller + \$.50 for each additional unit.

SERVICE: THE BASIC EXPRESS (714) 866 5826

The Old Ice House

711 Pineknot

Big Bear Lake, CA 92315

Hand Controllers repaired: \$ 8.5% per pair plus \$ 2.75 shipping.

Replacement cables for your Hand Controllers: 2 Cables \$ 6.99 4 Cables \$ 10.49

BALLY Arcade Units Repaired and Tuned Up: For \$ 34.95 (plus \$5 return postage) we will Tune-Up your unit to include: bonding custom heat sinks on the three major chips; modify your RF shielding to reduce heat build-up; remove the on-off Switch from the circuit (this causes untold problems); tune the RF modulator to improve your TV picture; and make general repairs as necessary. This does not include major parts such as a new Custom Data Chip, etc. If your unit requires extensive repairs not covered by the above fee, we will ask your permission to complete the work.

Please do not include unnecessary items with your unit such as dust cover, cartridges, handles (unless your are having them repaired), etc.

PLEASE NOTE !!!!!

Ship to the following addresses:

By Mail

By UPS

THE BASIC EXPRESS P.O. Box 1763 Big Bear Lake, CA 92315

THE BASIC EXPRESS c/o The Old Ice House 711 Pine Knot Big Bear Lake, CA 92315

CA Residents add 6% tax.

QUESTIONAIRE	J 1
This is for my information, but I will results to the ARCADIAN, THE BASIC EXP just purchased your ARCADE please wait questionaire.	RESS, and ASTROVISION. If you have
What have you thought about your BALLY	so far?
What problems have you had or are stil	1 having?
What kind of expansion do you want?	
Mainly Graphics Remarks	
Mainly Business	
Other	
Like APPLE II or ATARI 860	
What have you generally thought of th	e BALLY produced ROM cartridges?
Are you hoping more will be produced?	If so, what types?
Chess/Check ers	Languages (Pascal, etc.)
Extended BASIC	Other
Music Composer	Word Processing
What have you thought about the ARCAD	IAN and THE BASIC EXPRESS Newsletters?
•	
	The state of the s
Other remarks you might have?	

	What do you think Content, laye	c about the BALLY SOFTWA but, price, any other id	RE AND HARDWARE	SOURCEBOOK?
- .			en e	· · · · · · · · · · · · · · · · · · ·
:				
	OPTIONAL	Name:		
		Address:		
		City	State	ZIP
		Phone # ()		
	Please fold, put	in envelope, add a star	np and send to:	
		RMH Enterprises		
		635 Los Alamos Ave	.	
		Livermore, CA 945	5 <i>0</i>	

Contact for further information, me	eting times and places.
os Angeles Area; California Gary Caton	Home: (213) 763-0734
or THE BASIC EXPRESS Fred Cornett	Work: (714) 866-5826
San Francisco Bay Area; California Richard Houser 635 Los Alamos Ave. Livermore, CA 9455Ø	Work: (415) 422-2009 Home: (415) 447-8493
Chicago, Illinois Area	Meetings: 3rd Sunday every month at DeVry Technical Institute 3388 N. Campbell
Mike Maslowski	Work: (312) 930-3750 Home: (312) 654-8937
Brighton, Michigan Area George Moses 110 East North St. Brighton, MI 48116	Work: (313) 227-1575
Detroit, Michigan Area Ron Pallack	Home: (313) 629-5767
Central and Upper Midwest BALLY/ASTROVIS C. J. Anderson Coordinator P. O. Box 21151 Saint Paul, MN 55121	SION Club (CUMBAC)
Central New Jersey Area Rob Rosenhouse 44 Forestbrook Dr. N. Plainfield, NJ Ø7Ø6Ø	Home: (201) 755-2289
Long Island, New York Area Bill Rueger 336 Beach 38th St. Far Rockaway, NY	
Westchester Co. Area NY Dan Simpson Box 229 Somers, NY 1 <i>0</i> 589	Home: (914) 248-7Ø58
Raleigh, North Carolina Area Larry Kall 3200 Octavia St. Raleigh, NC 27606	Work: (919) 829-Ø6ØØ Home: (919) 851-5Ø39
Berea, Ohio Area Steve Wilson 346 Edgewood Berea, OH	Home: (216) 234-8462
Sinking Spring PA Area Gerard A. Heere 2802 Avon Ave. Cornwall Terr Sinking Springs, PA 19608	Home: (215) 678-5Ø68

Dallas, Tex	kas Area Dennis Galvan	Work: Home:	(214) (214)	767-4946 596-9147	
Kent, Wash	ington Area Steve Bryan 11501 S. E. 230th Pl. Kent, WA 98031			433-1253 854-8006	
Washington	DC Area Jim Coughlin	Work: Home:	(8ØØ) (2Ø2)	638-8Ø3Ø 678-4972	• • • • • • • • • • • • • • • • • • •
Milwaukee,	Wisconsin Area Doug Alexander 2911 Parkshire Dr. Racine, Wis.	Home:	(414)	886-5973	

Please send in information on user groups.

SOURCE: ARCADIAN

3626 Morrie Drive San Jose, CA 95127

Check on prices.

Manual Title	Price (includes 3rd'Class Postage)
BALLY Service Manual	\$ 1.00
Executive Software (27pp)	\$ 2.50
Hacker's Manual (21pp)	\$ 2.00
Manual of Hardware and Software (>3%%pp)	\$30.00
BALCHEK (6Ø+pp)	\$ 6.50
BALLY BASIC (63pp)	\$ 6.50
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	**********

SOURCE: THE BASIC EXPRESS (714) 866-5826

P.O. Box 1763

Big Bear Lake, CA 92315 Check on current prices.

Manual Title	Price	
BALLY On-Board Subroutines	\$ 4.49	
Hacker's Manual	\$ 3.99	
Disassembled TINY BASIC	\$ 8.49	
Disassembled Brickyards and Clowns	\$ 9.99	
Disassembled Demo Cassette	\$ 8.49	
Disassembled System Software	\$13.49	
Disassembled On-Board Games	\$15.99	
BALLY System Description Book	\$ 8.99	
BALLY Service Manual	\$ 3.50	
PEEK n' POKE Manual	\$ 8.25	

All manuals include FIRST CLASS POSTAGE.

Price will go up when postage rates increase on November 20th.

#### SOFTWARE and HARDWARE ORDER FORM

I would like to order the following items as you advertized in the  $\ensuremath{\mathsf{SOURCEB00K}}\xspace.$ 

Page	l Description		l Price	•
	I I		 	l ! Order each Software
	I I			l I or Hardware item from
	1 		l l	l l the appropriate
	l 		!	SOURCE as given in
	I			the listings.
	! !			•
	! !			! !
		SUBTOTAL	1	r ·
		STATE SALES TAX	1	<b>l</b>
		TOTAL	1	I
Enc 1	ose check, cash	or money order in	US Funds p	lease.
IMPO	RTANT: Fill This	in the following information is nee	mformation. ded to prop	erly fill your order.
My U	nit is a:			
	LLY Professiona ssette Interfac		Y BASIC and	the external Audio
ВА	LLY Professiona	al ARCADE Plus with	ASTROVISIO	N BASIC Cartridge.
-	BASIC Cartride	ne 2000 baud ASTROV ge ( this cartridge jack on top) Please	has	box.
		Send to:		
		N		
		Name		
		Address		
		City, State		
		ZIP CODE		

Thank you for ordering thru the SOURCEBOOK.

Copy this form as needed.

Enclose this order form with payment, in an envelope and mail to the appropriate SOURCE, not to RMH Enterprises.