EduCALC TECHNICAL NOTES

GOODIES DISC #3 DESCRIPTION

Goodies Disc 3 is best described as a continuation of Goodies Disc 1. It is a time ordered (with a few important items included ahead of their time) collection of programs. The two directories on the disc are HORN3 and MOVELEVL. HORN3 is the main directory. It contains 213 files. MOVELEVL contains 50 levels of play for the MOVE game (in HORN3).

Please help the many people who work very hard to bring this material to you by keeping the following in mind as you experience bewilderment and joy while exploring the Goodies Discs.

1. The Godies Discs are HIGH DENSITY. You must use a 1.2 M Byte 5 ¼" drive or a 1.44 M Byte 3 ½" drive to read the discs. Lower density drives will produce errors. If you have a machine with both high and low dinsity (360K for example) drives you may copy the Goodies Disc's to four or five low density discs. For obvious reasons it is not practical to provide Goodies Discs in a low density format.

2. The Goodies Discs are provided "as is." The people who have spent many hours of their time to make this material available do not have the time to provide answers to questions. Just like a salted peanut you will want more - there just isn't any more. You should look at the goodies discs as something to explore, study, test, and experiment with; not as something you must be able to use or understand. Do not call EduCALC, Joe Horn, or HP with questions about files on the disc. Use the HP BBS if you MUST communicate with somebody about a specific topic.

3. The Goodies Discs provide the best, most sophiciated advanced programs and information available on the HP 48SX for the lowest possible cost. The hundreds of donated hours, love, enthusiam, and dedication put into the Goodies Discs is priceless.

4. The Goodies Discs are for DOS machines. Apple (Mac) operating systems can not use these discs. There are radical differences that make "translating" these discs difficult. To date no one has offered a Mac version. If you are able to make these files useful to mac users there are a few Mac owners who would appreciate the Goodies discs being available for Mac use. Start with Goodies #1. In order for EduCALC to make Mac versions available we need to be able to offer ALL Goodies discs in Mac format. Who ever makes the conversions must be able to do the same for future Goodies discs as well as the existing first four.

A "Directory" listing of HORN3 follows.

Filename.ext	File Size	Date	Time	Description	-Author(s)
!readme! doc	3,464	6-27-91	12:17p	HORN3 Disk Overview - Read Me First	-Joseph K. Horn
address	3,563	5-30-91	12:00a	Address Book (uses Tool Library)	-Dan Ciarniello
address doc	2,918	5-30-91	1:25p	... ADDRESS documentation	
airfoil	2,139	5-30-91	12:00a	Airfoil Plotter	-Matt Nelson
airfoil doc	3,970	5-30-91	12:00a	... AIRFOIL documentation	
airfoil src	6,700	5-30-91	12:00a	... AIRFOIL source code	
argcheck doc	1,774	5-30-91	12:00a	Clean RPL Argument Checking	-Joseph James Ervin
array doc	2,250	5-30-91	12:00a	How To Convert 2 Vectors -> 1 Array	-Brittenson, Rostamian, Burke
astronut	9,168	5-30-91	12:00a	Lunar Lander Simulation Game	-Kevin Jessup
astronut doc	3,666	5-30-91	12:00a	... ASTRONUT documentation	
astronut src	5,849	5-30-91	12:00a	... ASTRONUT source code + comments	
backall	1,597	5-30-91	12:00a	Backup Main Mem & Ports to Your PC	-Darryl Okahata
backall doc	4,877	5-30-91	12:00a	... BACKALL documentation	
backall src	2,898	5-30-91	12:00a	... BACKALL source code	
badnames doc	1,193	5-30-91	12:00a	How to Create Illegal Names	-Rick Grevelle
bits	120	5-30-91	12:00a	Fast HP-16C-style BITS function	-Jurjen NE Bos
bits doc	774	5-30-91	12:00a	... BITS documentation + source code	
blackjac	12,750	5-30-91	12:00a	Blackjack Card Game (aka "21")	-David Sprenkle
blackjac doc	3,990	5-30-91	12:00a	... BLACKJAC documentation	
blackjac src	15,250	5-30-91	12:00a	... BLACKJAC source code	

Filename.ext		File Size	Date	Time	Description	-Author(s)
blinky		2,091	5-30-91	12:00a	A "PacMan" style Video Game	-Hans Christian Egeberg
blinky	asc	4,363	5-30-91	12:00a	... BLINKY in ASC form	
blinky	doc	4,811	5-30-91	12:00a	... BLINKY documentation	
bonusrnd		195	5-30-91	12:00a	Bonus Round for Roborun game	-David Liu
bonusrnd	doc	116	5-30-91	12:00a	... BONUSRND documentation.	
booz	exe	7,637	5-30-91	12:00a	Barebones ZOO Extractor	-Rahul Dhesi
booz	doc	287	5-30-91	12:00a	... BOOZ documentation	
cardfull	doc	1,623	5-30-91	12:00a	How To Write-Protect Your ROMs!	-Frank Wales
cflow		1,174	5-30-91	12:00a	Uniform Cash Flow	-Ted A Smith
cflow	doc	1,684	5-30-91	12:00a	... CFLOW documentation	
cflow	src	1,669	5-30-91	12:00a	... CFLOW source code	
changes	txt	4,709	5-30-91	12:00a	Some differences between 48SX & 28S	-William C Wickes
chipall	lib	5,673	5-30-91	12:00a	Video Game Collection library	-Ted A Smith
chipall	doc	505	5-30-91	12:00a	... CHIPALL documentation	
clear	doc	626	5-30-91	12:00a	Is CLEAR a Bad Thing?	-Joseph K. Horn
clk	lib	4,402	5-30-91	12:00a	Beautiful Digital Clock + Dissolve	-Dave Marsh + Joe Ervin
clk	doc	577	5-30-91	12:00a	... CLK documentation	
clok		1,464	5-30-91	12:00a	Another Analog Clock	-Jon Loschke
clok	doc	412	5-30-91	12:00a	... CLOK documentation	
compact		3,449	5-30-91	12:00a	Linked Array utilities	-Gadiel Seroussi
compact	asc	7,167	5-30-91	12:00a	... COMPACT in ASC form	
compact	doc	4,928	5-30-91	12:00a	... COMPACT documentation	
cube		3,087	5-30-91	12:00a	Sort the Letter Tiles Game	-Paul Lancaster
cube	doc	780	5-30-91	12:00a	... CUBE documentation	
cube	src	4,225	5-30-91	12:00a	... CUBE source code	
cutebug	doc	413	5-30-91	12:00a	A bug that creates System Binaries	-John Paul Morrison
d2f		279	5-30-91	12:00a	DEC2FRAC rewritten in "System RPL"	-Joseph K. Horn
d2f	1st	4,137	6-13-91	11:47a	... D2F Voyager listing	
dasm	lib	19,626	5-30-91	12:00a	HP-mnemonic Saturn Disassembler	-Jim Vaccaro
dasm	doc	2,509	5-30-91	12:00a	... DASM documentation	
dec2frac		305	5-30-91	12:00a	Improved ->Q, Complete & Faster	-Joseph K. Horn
dec2frac	doc	3,314	5-30-91	12:00a	... DEC2FRAC documentation	
dec2frac	src	1,493	5-30-91	12:00a	... DEC2FRAC source code + comments	
diss		393	5-30-91	12:00a	Screen Dissolver, ver 0.2	-Joseph Ervin
diss	asc	866	5-30-91	12:00a	... DISS in ASC format	
diss	doc	2,959	5-30-91	12:00a	... DISS documentation	
dissdemo		6,129	5-30-91	12:00a	Cute Demo of Joe Ervin's DISS	-Joseph K. Horn et al.
dissdemo	doc	759	5-30-91	12:00a	... DISSDEMO documentation	
dissdemo	src	12,567	5-30-91	12:00a	... DISSDEMO source code + comments	
dlist		62	5-30-91	12:00a	Display List, up to 9 Strings, Fast	-Joseph K. Horn
dlist	asc	510	5-30-91	12:00a	... DLIST in ASC format	
dragon	gro	10,587	5-30-91	12:00a	Large GROB of a Warrior on a Dragon	-Sean Ahern
dragon	doc	368	5-30-91	12:00a	... DRAGON.GRO documentation	
dragon	src	21,174	5-30-91	12:00a	... DRAGON.GRO source code	
eigen		728	5-30-91	12:00a	Eigenvalue/vector Decomposition	-Ted A Smith
eigen	doc	1,240	5-30-91	12:00a	... EIGEN documentation	
eigen	src	1,492	5-30-91	12:00a	... EIGEN source code	
error		5,904	5-30-91	12:00a	Uncertainties Calculations	-Jay Kyle
error	doc	2,227	5-30-91	12:00a	... ERROR documentation	
extract2	exe	30,663	5-30-91	12:00a	ZIP, ARC, & LZH File Extractor	-Freelance Programming
extract2	doc	2,396	5-30-91	12:00a	... EXTRACT2 documentation	-Joseph K. Horn
fact	lib	504	5-30-91	12:00a	Fast & Accurate Complex Factorial	-Jurjen NE Bos
fact	asc	1,110	5-30-91	12:00a	... FACT in ASC format	
fact	doc	2,755	5-30-91	12:00a	... FACT documentation	
faq	doc	47,282	5-30-91	12:00a	Frequently Asked Questions + Answers	-Darryl Okahata
fft		1,044	5-30-91	12:00a	Very Fast Fourier Transform	-Jurjen NE Bos
fft	doc	906	5-30-91	12:00a	... FFT documentation	
fft	src	2,216	5-30-91	12:00a	... FFT source code + comments	
fileinfo	fi	16,615	6-27-91	12:25p	File comments for Norton FI owners	-Joseph K. Horn
fileinfo	doc	247	5-30-91	12:00a	... FILEINFO documentation	
fileinfo	src	11,690	6-27-91	12:26p	... FILEINFO in printable text form	
frac		228	5-30-91	12:00a	Slow but Complete version of NEW2Q	-Juergen Koslowski
frac	doc	1,779	5-30-91	12:00a	... FRAC documentation	
frac	src	325	5-30-91	12:00a	... FRAC source code	
fractals		9,061	5-30-91	12:00a	Mandelbrot Generator + Sample Pix	-Dan Ciarniello
fractals	doc	1,929	5-30-91	12:00a	... FRACTALS documentation	
fractals	src	24,888	5-30-91	12:00a	... FRACTALS source code + comments	
gateway	lib	1,777	6-13-91	11:56a	Power-On Password Security System	-Erik Bryntse
gateway	asc	3,754	5-30-91	12:00a	... GATEWAY in ASC form	
gateway	doc	4,458	5-30-91	12:00a	... GATEWAY documentation	
go	doc	1,039	5-30-91	12:00a	Commercial "Go" Game Announcement	-Robert F. Stellingwerf
goose	doc	1,574	5-30-91	12:00a	The Cybernetic Mother Goose	-Lincoln Spector
gse1		756	5-30-91	12:00a	Goal Seeking Engine data partitioner	-Jeff Duncombe
gse1	asc	1,603	5-30-91	12:00a	... GSE1 in ASC form	
gse1	doc	8,148	5-30-91	12:00a	... GSE1 documentation	

Filename.ext		File Size	Date	Time	Description	-Author(s)
hackit	lib	2,720	6-26-91	9:29p	48 Hacker's toolbox	-Rick Grevelle
hackit	asc	5,663	6-27-91	3:57a	... HACKIT in ASC form	
hackit	doc	27,559	6-27-91	3:58a	... HACKIT documentation	
iferr	lib	442	5-30-91	12:00a	Improved (Ver.B) Bulletproofer	-William C. Wickes
iferr	asc	963	5-30-91	12:00a	... IFERR in ASC format	
iferr	txt	7,659	5-30-91	12:00a	... IFERR documentation	
imagunit	txt	1,561	5-30-91	12:00a	Q&A About Imaginary Units	-Bill Gribble / Bill Wickes
indef		81	5-30-91	12:00a	Indefinite Integral Routine	-Michael Andrew Lowry
indef	src	335	5-30-91	12:00a	... INDEF source code + comments	
iterate	doc	761	5-30-91	12:00a	Note about "Iterate Loop" in Voyager	-Derek S. Nickel
joust		2,387	6-09-91	11:23p	"Joust" Arcade Video Game, version 2	-Erin S. Catto
joust	asc	4,936	6-05-91	11:35p	... JOUST in ASC format	
joust	doc	4,629	6-27-91	4:02a	... JOUST documentation	
julie	doc	754	5-30-91	12:00a	On-line Reverie	-Derek Nickel / Pete Ashdown
kangaroo	txt	998	5-30-91	12:00a	More from HP-75 Internal Docs	-"Roo-man and Joey" (HP)
lastx		74	5-30-91	12:00a	HP-41-style LASTX for the HP 48	-Darryl Okahata
lastx	doc	711	5-30-91	12:00a	... LASTX documentation	
lastx	src	164	5-30-91	12:00a	... LASTX source code	
memcards	doc	8,025	5-30-91	12:00a	How CMT RAM Cards Differ from HP's	-Steven J Thomas & CMT
memgraph		1,049	5-30-91	12:00a	Fast Graph of Main Memory Available	-Bill Menees
memgraph	doc	976	5-30-91	12:00a	... MEMGRAPH documentation	
memgraph	src	1,208	5-30-91	12:00a	... MEMGRAPH source code	
mldl	lib	6,938	5-30-91	12:00a	Machine Language Development Library	-Jan Brittenson
mldl	doc	14,914	6-27-91	4:08a	... MLDL documentation	
modebrow		2,635	5-30-91	12:00a	Mode Browser	-Bill Wickes
modebrow	asc	5,469	5-30-91	12:00a	... MODEBROW in ASC form	
modebrow	txt	1,413	5-30-91	12:00a	... MODEBROW documentation	
move		7,078	5-30-91	12:00a	"Box Jockey" / "Sokoban" Video Game	-Gilles Kohl
move	doc	6,718	5-30-91	12:00a	... MOVE documentation	
movelevl	doc	149	5-30-91	12:00a	... a note about MOVELEVL	
mskermit	ini	46	6-27-91	4:10a	Kermit Initialization File	
mskermit	doc	805	6-27-91	4:14a	... MSKERMIT documentation	
nav4		19,382	5-30-91	12:00a	Celestial Navigation, version 4.2	-Tom Metcalf
nav4	doc	21,941	5-30-91	12:00a	... NAV4 documentation	
nav4	src	21,844	5-30-91	12:00a	... NAV4 source code	
new2q		624	5-30-91	12:00a	Hybrid of DEC2FRAC and ->Q	-HP 48 Design Team
new2q	src	2,041	5-30-91	12:00a	... NEW2Q source code + comments	
new2q	txt	2,341	5-30-91	12:00a	... NEW2Q documentation	
nyquist		377	5-30-91	12:00a	Nyquist Plotter	-Raymond Wong
nyquist	doc	696	5-30-91	12:00a	... NYQUIST Documentation	
nyquist	src	957	5-30-91	12:00a	... NYQUIST source code + comments	
pbk		2,072	5-30-91	12:00a	Phone Book utility (uses ToolKit)	-Robert Noe
pbk	doc	3,140	5-30-91	12:00a	... PBK documentation	
pbk	src	2,738	5-30-91	12:00a	... PBK source code	
piper		1,841	5-30-91	12:00a	H. Piper!, a Super-CHIP Video Game	-Paul Raines
piper	asc	3,854	5-30-91	12:00a	... PIPER in ASC form	
piper	doc	9,889	5-30-91	12:00a	... PIPER documentation	
polygons		1,913	5-30-91	12:00a	Regular Polygon Generator	-Bill Menees
polygons	doc	1,051	5-30-91	12:00a	... POLYGONS documentation	
pow2		57	5-30-91	12:00a	Tests for Exact Powers of 2	-Joseph K. Horn
pow2	doc	672	5-30-91	12:00a	... POW2 documentation + challenge	
qfl		15,688	5-30-91	12:00a	Quest For Liela video game	-Paul Pankratz
qfl	doc	3,708	5-30-91	12:00a	... QFL documentation	
qfl	src	163	5-30-91	12:00a	... QFL source code	
radicals		1,738	5-30-91	12:00a	Radical Expression Simplifier	-Michael Andrew Lowry
radicals	doc	661	5-30-91	12:00a	... RADICALS documentation	
radicals	src	1,998	5-30-91	12:00a	... RADICALS source code	
ratpac		1,858	5-30-91	12:00a	Rational Number Package (directory)	-Ted A Smith
ratpac	lib	2,656	5-30-91	12:00a	... RATPAC in library form	
ratpac	doc	1,684	5-30-91	12:00a	... RATPAC documentation	
ratpac	src	3,307	5-30-91	12:00a	... RATPAC source code (directory)	
reset	doc	2,676	5-30-91	12:00a	Secret Reset Switch hidden inside!	-Frank Wales, Ray Depew,-jkh-
revf	txt	1,283	5-30-91	12:00a	HP 48 Revision F ?? False Alarm !!	-Bill Wickes
ripple		8,884	5-30-91	12:00a	Awesome Jellyfish 3D Graphics Demo	-Sean Ahern
ripple	asc	18,361	5-30-91	12:00a	... RIPPLE in ASC form	
ripple	doc	819	5-30-91	12:00a	... RIPPLE documentation	
roborun	doc	1,472	5-30-91	12:00a	ROBORUN video game, version 2.1	-David Liu
roborun2		23,018	5-30-91	12:00a	... ROBORUN, short version	
roboruns		16,799	5-30-91	12:00a	... ROBORUN2/S documentation	
rpl	doc	13,792	5-30-91	12:00a	Answers about "System RPL" coding	-Jan Brittenson
rpl	txt	913	5-30-91	12:00a	What "RPL" Really Stands For	-Bill Wickes
rpldevel	txt	1,662	6-27-91	4:26a	HP "System RPL" Development Package	-Bill Wickes

Filename.ext		File Size	Date	Time	Description	-Author(s)
saturn	gro	1,138	5-30-91	12:00a	Digitized GROB of the planet Saturn	-Frank G. Baird
saturn	doc	211	5-30-91	12:00a	... SATURN.GRO documentation	
saturn	src	2,304	5-30-91	12:00a	... SATURN.GRO source code	
scatter	doc	839	5-30-91	12:00a	Scatter Plots with Connected Points	-Jurjen NE Bos
schip		2,178	6-09-91	11:12p	Super-CHIP ver 1.1: A Better CHIP48	-Erik Bryntse
schip	asc	4,533	6-27-91	4:03a	... SCHIP in ASC form	
schip	doc	7,914	6-27-91	4:04a	... SCHIP documentation	
schipdmo		161	6-09-91	11:16p	Pole Position: A Super-CHIP Demo	-Erik Bryntse
schipdmo	asc	396	6-27-91	4:15a	... SCHIPDMO in ASC form	
schipdmo	doc	2,645	6-27-91	4:16a	... SCHIPDMO documentation	
spelchkr	doc	802	5-30-91	12:00a	HP 48 Spell Checker? Almost!	-Tim Bobay
spkr		6,972	5-30-91	12:00a	Speaker Enclosure Designer Toolkit	-William K. McFadden
spkr	doc	11,511	5-30-91	12:00a	... SPKR documentation	
spkr	src	3,850	5-30-91	12:00a	... SPKR source code	
spline		2,120	5-30-91	12:00a	Piecewise Cubic Spline Generator	-Rouben Rostamian
spline	doc	4,963	5-30-91	12:00a	... SPLINE documentation	
spline	src	5,019	5-30-91	12:00a	... SPLINE source code + comments	
support	doc	1,574	6-27-91	4:20a	EduCALC "Goodies" Customer Support	-Joseph K. Horn
tetris		2,712	5-30-91	12:00a	Tetris Game in Machine Language	-Per Konradsson
tetris	asc	5,632	5-30-91	12:00a	... TETRIS in ASC form	
tetris	doc	3,014	5-30-91	12:00a	... TETRIS documentation	
tetris3		8,268	5-30-91	12:00a	Feature-loaded version of Tetris	-Andrey Dolgachev
tetris3	doc	5,848	5-30-91	12:00a	... TETRIS3 documentation	
tetris3	src	10,361	5-30-91	12:00a	... TETRIS3 source code	
tetrisx		6,834	5-30-91	12:00a	Tetris with Best Graphics	-Jon Loschke
tetrisx	doc	1,707	5-30-91	12:00a	... TETRISX documentation	
tetrisx	src	7,943	5-30-91	12:00a	... TETRISX source code	
tif2grob	exe	22,709	5-30-91	12:00a	PC Graphic to 48 GROB Converter	-Hewlett Packard
tif2grob	doc	300	5-30-91	12:00a	... TIF2GROB "documentation"	
trap		298	5-30-91	12:00a	Sample Error Trap for IFERR.LIB	-Bill Wickes
trap	doc	375	5-30-91	12:00a	... TRAP documentation	
trap	src	487	5-30-91	12:00a	... TRAP source code	
truchet		1,604	5-30-91	12:00a	Random Wallpaper Pattern Generator	-Bill Menees
truchet	doc	772	5-30-91	12:00a	... TRUCHET documentation	
truchet	src	2,424	5-30-91	12:00a	... TRUCHET source code	
ttt		12,827	5-30-91	12:00a	Tic-Tac-Toe for Two 48's via IR	-Paul Pankratz
ttt	doc	1,324	5-30-91	12:00a	... TTT documentation	
uflags		25,502	5-30-91	12:00a	System Flags Utility	-Scotty Thompson
uflags	doc	25,313	5-30-91	12:00a	... UFLAGS documentation	
uudecode	exe	2,306	5-30-91	12:00a	Unix-to-Unix Decoding DOS Program	-Theodore A. Kaldis
uuencode	exe	2,542	5-30-91	12:00a	Unix-to-Unix Encoding DOS program	-Theodore A. Kaldis
uuencode	doc	3,075	5-30-91	12:00a	... UUENCODE/DECODE documentation	-James H. Cloos
valnc		173	5-30-91	12:00a	Atomic Number -> Valence Electrons	-Michael Andrew Lowry
valnc	src	340	5-30-91	12:00a	... VALNC source code	
wayne	doc	2,554	5-30-91	12:00a	Info on Wayne's Mail Server	-Wayne H. Scott
xlib	doc	8,229	5-30-91	12:00a	Whoops! Missing from Goodies Disk #2	

This is Joe Horn's personal collection of favorite HP 48 goodies, disk #3. It contains many excellent programs by many excellent programmers. Most of these files were downloaded from HP's Corvallis bulletin board system.

**Note: Everything on this disk is either freeware or shareware.
If you use the shareware, please register as instructed.
PLEASE DO give copies of this disk to everybody!**

FILENAME EXTENSIONS

*.	(no extension) = raw binary downloadable HP 48 object.
*.DOC *.TXT	Documentation for HP 48 file (or an article) not written by HP.* Same as .DOC, but by written by an HP employee. * If a file has no DOC, look for comments in its SRC or LST file
*.SRC	HP 48 Source Code (user code) in downloadable ASCII format.* * If a file has no SRC, look for its source code in its DOC file
*.GRO	HP 48 Graphics Object (GROB) in binary format
*.LIB	HP 48 Library in binary format (load, store in a port, & purge)
*.LST *.ASC	Voyager-unthreaded "source code" listing with comments Assembly Language uncommented hex listing in Wickes ASC format
*.EXE	IBM PC executable; not for HP 48, MacIntosh, Amiga, etc.

Notes: Files with the same name before the extension are all related. For example, FRED would be a downloadable binary; FRED.SRC would be its source code (possibly commented); FRED.DOC would be its documentation; etc.

Do not include any comments in GROBs' SRC files; they make GROB2TIF fail.

All other listable files have their authors' names somewhere in the first few lines. If I couldn't figure out who wrote it, it'll say "By ?".

I have tried to provide documentation of some sort for every file on this disk. Any help would be appreciated in writing docs for those files missing them; for example, if you know who wrote a file "by ?", please let me know so that proper credit may be given.

Apologies to those whose files I accidentally mangled or miscredited. Warm thanks to all authors whose works lurk herein. Good job!

These files are not guaranteed in any way; use at your own risk.

For EduCALC Goodies Disk Customer Support, see SUPPORT.DOC on this disk.

- - - Joseph K. Horn
Email: akcs.joehorn@hpcvbbs.vc.hp.com
Snail: 1042 Star Route / Orange, CA 92667 (USA)