The Interface

"Taking 8-Bits Into The 21st Century"

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What's Hanging On Your Porch?

A Handy Decoration For Any Commodore Home

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Newsletter of the Fresno Commodore User Group – Fresno, California
www.dickestel.com/fcug.htm

THE EDITOR'S GODZILLA

- By Lenard R. Roach

COMPUTER BIBLE GAMES BOOK 2 vs. BIBLE BASIC

Round 2: The Comparisons

COMPUTER BIBLE GAMES BOOK 2

THE BAD

"Computer Bible Games Book 2," like I mentioned in my last article, seemed to be written in haste, like the author was on a time limit to get the finished manuscript to the publisher. So I assume the author, Mr. Conrod, wasn't given much time to debug the programs before they went to press. Also, the book seemed to be written using the standard font for the 1980's, meaning that after the code was written on a computer, it had to be rewritten on a typewriter or word processor in order to appear as regular text in the book. This led to many errors in the transposition. Just like me in 2026, those 1980's readers and users of the programs probably faced the same error problems which led to their pulling out their hair in frustration.

THE GOOD

"Computer Bible Games Book 2" came with easy to understand "How To Play" instructions along with a drawn picture of a screen shot which showed what the game should look like when in play. Mr. Conrod also focused on close to the two hundred different computer styles using the three BASIC platforms (Applesoft, Commodore BASIC, and Microsoft MBASIC) which broadened the use of the source code. Many of the games were fun, but some were hard if not impossible to win, challenging the patience of any player to play them.

MY FAVORITES

In "Computer Bible Games Book 2," I have a few favorites: The Quail Game, Daniel In The Lion's Den, and The Rapture Game. Each game challenges the player to strategically place his/her character (the character is usually a letter or a Commodore keyboard symbol) in the right place in order to win.

The toughest games that I have played from the book are Heavenly Mansions and The Church Growth games. These games are next to impossible to win and take a lot of brain power and observation. As of this writing, I have yet to win one game from either of these programs.

BIBLE BASIC

THE BAD

"Bible BASIC" was just that, BASIC programming with a Bible twist. Therefore, the focus was more on programming and less on game play. The author, Mr. Bangley, also focused more on the reaction of his students during his description of the games and less on the games themselves. All the games lacked How To Play instructions, so the player was on his or her own to find out how to play each game. Many were easy to figure out. A couple of games, "Password: Shibboleth" and "Sheep And Goats," definitely needed an article on how to play, because a player would get lost on how to proceed, usually coming against a "You can't do that" error message. I exited these games several times in frustration, because I could go no further than the start screen. The book also lacked a menu program to allow the gamer to access the game he or she would like to play. However, like any other game without a menu start, with a simple input of LOAD"$",8 and LIST, the player could see a directory of the games. It was a minor annoyance.

THE GOOD

According to Mr. Bangley, he has two reasons for writing "Bible BASIC" -- to teach the Word of God and to teach BASIC programming within a Christian setting. In his introduction to the book, Mr. Bangley mentions that the programs are developer's programs designed to be typed in, and as knowledge of the Commodore programming grows, these programs can be rewritten to grow right along with the computer's evolution. Programs start in simple BASIC, and as the coder goes through the book, the programs become more and more complex in their source code. Mr. Bangley shows great insight in that even the simplest code, when written correctly, can have a major impact on functionality.

"Bible BASIC" is fun and entertaining, as well as making you think. The Appendix is where the big fun is located. I love to run these programs just to entertain myself and see how I can make the display more amusing by adding some silly input. "Bible BASIC" is written for five formats: Commodore VIC-20, Commodore 64, TRS-80, Apple II, and the Atari 400/800. Please note that the Commodore gets two mentions on this list.

MY FAVORITES

In this compilation I have a couple of favorites: Who Was That? and Memory Verse. In Who Was That?, the name of a Bible character flashes on the screen, and you have to type in the name on the input line provided. Memory Verse is just that – memorizing short snippets of Scripture.

A SIDE BY SIDE COMPARISON

Each book had its own unique strengths and weaknesses. I mentioned a few above, and I'm sure there are more. If I put each code book side by side like a referee deciding a boxing match, I'd have to say the "Bible BASIC" comes out the winner. Mr. Bangley had one big advantage over Mr. Conrod in the coding of his programs: "Bible BASIC" was copyrighted 1983, one year after Mr. Conrod's

work. Mr. Bangley likely had access to a lot of Commodore computer developments that had occurred during those twelve months. I also liked Mr. Bangley's attitude that these programs are meant to be developed and not to sit "as is." He seemed to be looking forward to what other coders would do with his works and how the computer software industry would respond on what he had already done.

CONCLUSION

In short, one book seems to be a hybrid of the other. "Computer Bible Games Book 2" is straight gaming code while "Bible BASIC" is not only gaming but also the teaching of BASIC, so any good coder can change any or all the programs to match the need of the moment. To me, as an amateur BASIC coder on the Commodore 64, I see that both books provide a lot of potential, along with providing Christian education as well as fun, and each book would be a good fit for anyone's Commodore collection.

COMMODORE CALLBACK 8020 FLIP PHONE

by Steffen Herget

Commodore is launching the Callback 8020, a flip phone for retro fans. With no browser or social media, digital detox is the focus.

Commodore Callback 8020 (Image: Commodore)

Commodore aims to combat smartphone addiction with an unusual mobile phone. The newly announced Callback 8020 deliberately omits web browsers, email, and social networks. Instead, the flip phone is intended to serve as a middle ground between a classic feature phone and a smartphone. Market launch is planned for the fourth quarter of 2026.

The manufacturer explicitly positions the device as a response to constant availability and what it considers problematic mechanisms of modern smartphone platforms. In conversation with Heise Online, Commodore CEO Christian "Peri Fractic" Simpson describes the Callback 8020 as a "not stupid dumbphone" for people who want to spend less time scrolling and more time in the real world. It is envisioned as a secondary device for staying reachable without being constantly exposed to the temptations of a smartphone with its notifications, apps, and games. The decision was influenced by his young daughter and his own behavior: "I was addicted to my smartphone," says Peri Fractic.

SAILFISH OS INSTEAD OF ANDROID

Technically, the device is based on Sailfish OS from Jolla. The Finnish company was founded by former Nokia employees and has been developing the Linux-based operating system for over a decade. According to Commodore, Sailfish OS has been adapted for the Callback. Sailfish OS includes its own layer that enables the installation and execution of Android apps, naturally without official Google services. With the Jolla C2 [smartphone], the operating system manufacturer also sells this phone with its OS.

Despite forgoing Android, the phone is said to be compatible with over 99 percent of all Android apps via the Android runtime environment. Commodore names WhatsApp, Maps, Uber, and Spotify, among others. This is intended to ensure that despite all the retro feeling and the avoidance of smartphone complexity, the usability is not completely lost. However, browsers and social networks are blocked at the system level, according to the company. Commodore refers to this as a patent-pending technology.

The phone is operated primarily via the classic mobile phone keypad with T9 input. For those who find typing too cumbersome, text can also be dictated using voice recognition. The display technically supports touch operation, but this is deactivated by default, according to the CEO. However, apps that do not function without touch can enable it.

FOCUS ON PRIVACY

Commodore promises a consistent data protection approach. Neither the manufacturer itself nor Sailfish OS should be able to collect user data without consent or evaluate it for advertising purposes. The operating system is not used for data monetization and does not share information with third parties, it is stated.

Another feature is an LED notification system on the outside of the flip phone. Instead of pop-up messages, a simple light display using five LEDs in Commodore's rainbow colors informs about new events. The external display only shows the time, date, battery status, and network reception. The device does not support 5G reception.

RETRO DESIGN WITH REPLACEABLE BATTERY

Visually, the Callback 8020 is inspired by mobile phones from the early 2000s; the colors of the beige-brown variant are likely to warm the hearts of retro fans. The device features a replaceable battery, interchangeable housing shells, and a 3.5mm headphone jack. Commodore also integrates an FM radio receiver and a Hi-Res audio DAC for music playback. Unlike many phones, the Callback does not use the headphone cable as a radio antenna: it is housed in the small stub antenna, which has no other function. Thus, you can listen to the radio with the Commodore phone even without headphones plugged in.

To match the brand, selected Commodore 64 games are pre-installed, along with the mobile classic Snake. A SID music player for chiptunes is also part of the functionality.

For the Callback, Commodore has designed matching headphones. (Image: Commodore)

PRICES STARTING AT 500 EUROS

The Callback 8020 is set to be released in five variants. The BASIC Beige, ProtoPET White, and SX Silver models will each cost €499.99 ($499.99 US). Commodore is charging €549.99 for the transparent Starlight Edition. The Founders Edition, with a gold-plated “C=" key and gold-colored casing, will be offered for €640.

Pre-orders are expected to start soon; interested parties can register with Commodore.net. According to the manufacturer, delivery is scheduled for the fourth quarter of 2026. The Commodore 64 Ultimate, the first device since the brand's revival, is already available.

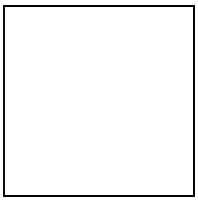
(Commodore, Int’l continues the numbering tradition with the 8020 Flip Phone. There was the classic Commodore 8010 Modem for the PET computer.)

C64 (AND VIC-20) PADDLES

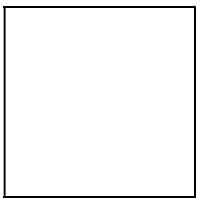
by Jan Derogee

Like many other platforms, the Commodore 64 also has it's history of paddle games. Although not always known, there are various kinds of these paddle games. Paddles are analogue; this means they do not use switches like a joystick but potentiometers to sense which direction you are steering. Where a joystick can only do left, right, up, down (or combinations), a paddle can steer between left and right in 256 steps. This means that paddles are much more sensitive or precise. And when the position of the character of the game is directly coupled to the position of the paddle, then character can be moved very fast; it moves as fast as you can turn the paddle. This makes it perfect for those nasty pong-like games that are almost impossible to play

with a joystick. But also racing games are much more enjoyable with a paddle as the steering becomes more smooth. Unfortunately, paddles are very dull to operate. You can only turn them left or right and press the fire button, and that's it. A joystick offers more freedom in its movement. So where you can direct you game character in all directions with a joystick... with a paddle you simply can't. This eventually makes paddle games very limited and therefore not many paddle games have been developed ("not many" compared to joystick-based games, that is).



Commodore paddles



Atari paddles

Each joystick port holds two paddle inputs. This means that you can connect up to 2 controllers into one joystick port. So in practice you can play paddle games with four players at the same time. Unfortunately, there are not many of these games. Actually at the current time, there is only one; that game is called Space Lords. If for any reason you don't have a paddle, you can make one yourself; it is not difficult, and it’s very cheap.

As the images above show, there is not much difference between the Atari paddles (black) and the Commodore paddles (white). The only real difference is that the potentiometers inside the Atari paddles are 1M ohm, and the Commodore paddles are 470K ohm. The Atari paddles can be used on the Commodore 64 without problems; only the usable range is limited, but practically most people won't even notice. Sometimes the limited range is an advantage in that you do not need to turn your wrist that far to achieve the same movement of your character.

BUILD YOU OWN PADDLE

For those of you who don't own a paddle but wish to play these games, here are the schematics how to build your own paddle system. As you can see, it is nothing more then a potentiometer and a button connected via simple wiring. Depending the game you want to use it for, you may need the fire button. As you can see, you can make 2 paddles and connect them to a single joystick port. So this means that a C64 can use a total of four paddles. Paddles and analog joysticks have lots in common. They work exactly the same; the only difference is that the paddle has a single axis which is projected on a circular movement and an analog joystick has two perpendicular axis (X and Y) with a much more limited range.

Analog control is much more fluent, and I

often wonder why the analog joystick never caught on, as it would be great for racing games. Instead, I played all sorts of racing games on my C64 but always with a digital joystick. And although that worked, I would have had much more control over the game if I could have used analog. But (most) games simply weren't designed to use paddles and considered digital joysticks as the standard input device. However, analog joysticks were available but only for PC's. Well, perhaps in the future somebody might write a paddle racing game, using one paddle for steering and the other for throttle. Perhaps a custom paddle, looking very like a modern RC-car controller.

PROGRAMMING

Using the registers below, you'd get all the info you'd need for reading out the paddle related registers, allowing you to incorporate paddles into your own game. Although... there is a catch. In theory, reading the "position" of paddles is as easy as reading byte values from the SID registers at 54297-54298 to allow for a total of four paddle knobs/potentiometers, the C64 hardware uses a multiplexer to "switch" between the two control ports.

The two most significant bit lines in port A of CIA-1 are used to "tell" the multiplexer which of the joystick ports to connect with. At the same time, these lines are involved in the scanning of the keyboard matrix, and so gets manipulated constantly as the computer scans for key presses. So reliably reading the paddles implies temporarily disabling the keyboard scan as the reading takes place.

Decimal value

Hex value$

Specification

Status

56320 $DC00 Control-Port 1 selected Control-Port 1 selected (bit7=0 and bit6=1)
Control-Port 2 selected (bit7=1 and bit6=0)
54297 $D419 Paddle X value
bit7...0 = value range 0..255
54298 $D41A Paddle Y value
bit7...0 = value range 0..255
56321 $DC01 Paddle in port-1
Paddle X fire button = bit2 (0=Firebutton pushed)
Paddle Y fire button = bit3 (0=Firebutton pushed)
56320 $DC00 Paddle in port-2 Paddle X fire button = bit2 (0=Firebutton pushed)
Paddle Y fire button = bit3 (0=Firebutton pushed)

The SID measures the two analog inputs once per 512 machine cycles or about 1950 times a second, independent of (and thus asynchronous with) the timing of the program the CPU is running, i.e., when the program commands the multiplexer to switch to the other port. So the programmer has to "assume" that the keyboard scan and/or other activities have recently caused the multiplexer to switch ports, set up the multiplexer and disable anything that may interfere with it,

then wait for 512 machine cycles to allow the SID to do a full reading, before finally reading the analog input register.

According to the Programmers Reference Guide, paddles can not be read out reliably from BASIC. So that's a bit of a disappointment. A piece of machine language below demonstrates how to do this -- https://janderogee.com/projects/paddle/files/example_code.txt

DOWNLOADS

Considering how hard it can be to find these games, I've made them available to those who want to play them; everything is combined in one large .zip file -- https://janderogee.com/projects/paddle/files/paddles.zip

(Note: Classic paddles are available on eBay. Also modified controllers with an installed paddle are available.)

MONTHLY MEETING REPORTS

By R. Bernardo, R. Van Pelt, and/or Dick Estel

MAY 2026

Robert and Roger first appeared at the meeting venue and set up the computer equipment. At first, he and Robert thought they may be the only ones at the meeting, but after awhile, they were joined by screenwriter Joshua Mejia who had appeared at the April meeting. Around noon, member Bruce appeared and stayed for about 90 minutes. Small talk ranged from the Star Trek Sprayser (with this 3-D printed phaser, you can irrigate your garden!) to Robert's edit of Joshua's video, "Like What You See?", to Joshua's intent to use Commodore computers to display screen information to actors in his proposed sci-fi movie.

Robert talked about the highs and lows of the Commodore Los Angeles Super Show which was held a few weekends ago. Highs – the first ever demo competition for CLASS and the beta version of the C128 80-column game, Busted Boulders, created by Richard Goedeken of the Southern California Commodore and Amiga Network. Lows – equipment not working right just before the CLASS demo competition and the lower attendance which meant less money to break even for the room rental. His station wagon packed with gear for CLASS, Robert said that he will keep all of that in his car for the June 20-21 Seattle Pacific Commodore Expo NW. He also reported about the new TeensyROM+ for the C64/128 (an upgrade of the original TeensyROM) and the upcoming Commodore 64C Ultimate from Commodore International.

Roger ran the Eric Blase VIC-20 game, Fisherman, which had been played from tape at the last meeting. Now it worked perfectly as a .D64; one BASIC line was changed so that it wouldn't run from a tape. They looked at new C64 games downloaded from itch.io and the latest version 7.2 of TeensyROM. They tried out Jupiter Fracture, a Lunar Lander-type game which was distributed with the C64 Ultimate.

The meeting ran long, and after the equipment had been packed, Robert left as Roger and Joshua continued talking.

JUNE 2026

In attendance for June were Robert Bernardo, Dave Smith, Dick Estel, Bruce Nieman, plus a rare appearance by life member Keith Sohm, who was in the club near the beginning in the 1980s. He took over the job of SYSOP on the club's bulletin board system (BBS) around 1989, and we briefly discussed the fact that the system had operated from a DOS machine, pre-dating Windows. (If only it were a Commodore PC…) Even so, it had some type of file and folder "tree."

For Show and Tell, Robert brought six cans of soda – but not just any soda. The labels all referenced various computer games, including Space Invaders and Breakout. Flavors included Galactic Cola and Rocket Fuel. The source was the Rocket Fizz candy store in Robert's city of Visalia. The soda was to be distributed at the June 20-21 Pacific Commodore Expo NW (PaCommEx) in Seattle.

Robert reported that Commodore plans a big announcement for June 16, two days after the meeting. (It was the Commodore Callback 8020 Flip Phone.) At the end of the year, the company will be distributing the Commodore 64C Ultimate, the 64C having the slimline beige case, or for extra money, the translucent "Starlight" case or the golden "Founders" edition.

Dick had been late due to a flat tire. He put in air at a mini-mart near his house and made it across town, but after two hours, the tire had gone down by ten pounds. He used Robert's little air compressor, which plugged into what we used to call the cigarette lighter, and left early. A shout out to Les Schwab Tires, which fixed the flat the next day at no charge.

Robert continued with the meeting by running the latest Amiga demos from Revision 2026, a European demoparty. By using the A600GS, he easily ran All Roads Lead to Roma, an animated invitation to a demoparty in Italy. Then Bruce wanted to see Arte, a classic Amiga 3D demo; Robert ran a few minutes of that. Next up was Autumn Nights which started off with some dreamy animation but then shifted over to the view of an audio equalizer readout beating in time with the music. Robert then played CPE1704TKS which showed off various 3D effects, followed by Bacon of Hope by the demogroup, Desire. Bacon of Hope's main characters consisted of pigs! Finally, because the members were leaving relatively early, Robert finished up with High Score which began with a screen that looked like that from a game, a rocketship blasting off through the atmosphere and into a starfield.

He did not get into the other Amiga demos nor into the C64 demos from the X'2026 party. He was to show all demos in two presentations at PaCommEx.

ON THE COVER

Flags all over America will be flying on Memorial Day this year. Why not add our own into the fray? A mock-up done in Photoshop, this superimposed Commodore flag over another flag would make a perfect addition to any home

Club Officers

Officers and Keypersons

President …..... Robert Bernardo
Vice-president ..... Roger Van Pelt
Secretary/Treasurer …..... Dick Estel
The Interface Editor ….... Lenard Roach
Librarian …..... Roger Van Pelt
Club equipment …..... Roger Van Pelt
Meeting place reservation ..... Dick Estel

-The Small Print-

The Fresno Commodore User Group is a club whose members share an interest in Commodore 8-bit and Amiga computers. Our mailing address is 185 W. Pilgrim Lane, Clovis, CA 93612. We meet monthly in the meeting room of Panera Bread, 3590 West Shaw, Fresno, CA. The meetings generally include demonstrations, discussion, and individual help.

Dues are $12 for 12 months. New members receive a "New Member Disk" containing a number of useful Commodore 8-bit utilities. Members receive a subscription to The Interface newsletter, access to the public domain disk library, technical assistance, and reduced prices on selected software/hardware.

 Club members are encouraged to submit articles, tips, or ideas for articles.

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Our disk library contains over 3,000 public domain programs for the C64 and C128. Members are entitled to copies of these disks at no cost if a blank disk is provided. We do not deal with pirated, copyrighted, violent, or obscene programs. Please call our attention to any programs found in our library which may violate these standards.