



5. FRED J. Weisbecker (1972 and 1974) FRED

The earliest home one-button video games were found on FRED “The Flexible Recreation and Education Device”. Bowling (1972) and Jackpot (1974).

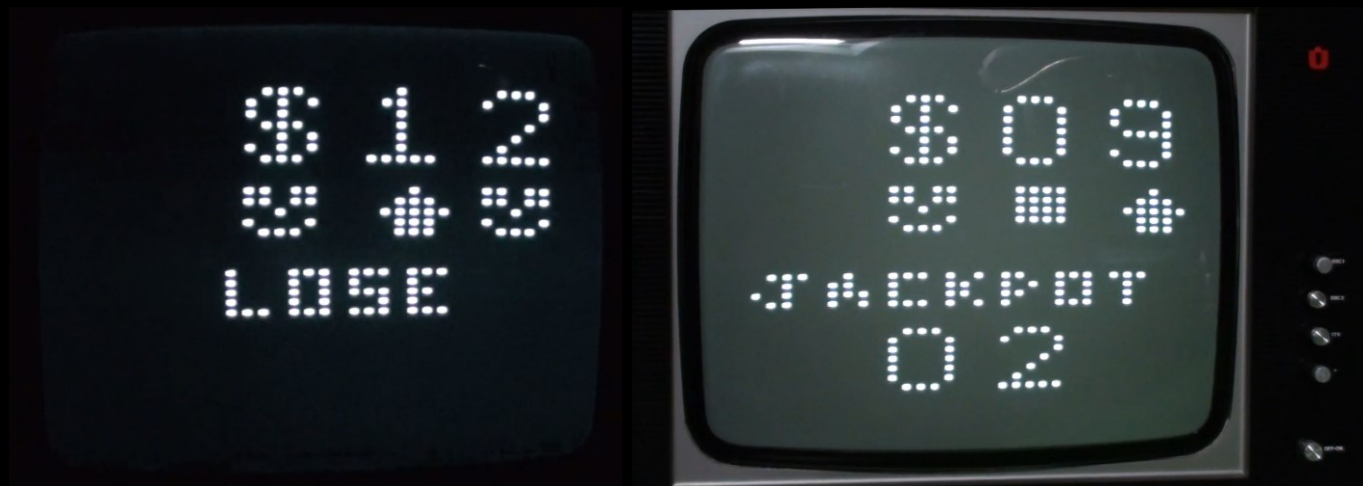
RCA engineer Joseph Weisbecker launched the FRED project in 1969 out of his own pocket. By 1972 with RCA onboard, FRED was a working template for a (more) friendly and affordable computer. It could display graphics on a standard TV in 16x64 or 32x32 resolution. The most refined version of FRED (pictured above) had a detachable 16-key keypad for user input, and a punch-card reader for inserting the likes of YES and NO communication cards. It could use a standard tape-recorder for loading software and for playing sounds. Recordings included sound effects, quiz questions and predictions for the future of computing.



Bowling was one of 18 initial programmes written to give a taste of computing to come. Joe Weisbecker squeezed a simplified but fun game of bowling into 1K of memory. Two players (X vs O) competed across five frames. One button control was facilitated by a pioneering aiming method. Each ball continuously moved from side to side before the foul line (somewhat drunkenly to make it less predictable). To throw the player would press any key on a 16-key hexadecimal keypad. When

the ball started rolling on-screen a short burst of real-life bowling ball alley sounds would sound from the cassette recorder.

Immediate beneficiaries of FRED included Joe's two daughters Jean and Joyce. It was Joyce who most fell in love with the system. In 1974 she wrote a one-button game of her own: **Jackpot**. Play was simple. Start with \$10. \$1 a play. Press a key to spin. Press again to stop each reel in turn. Match three for a win. Three different symbols for a small win. Nothing for a pair. Get to \$50 to break the bank.



FRED had huge aspirations. The manual mentions the concept of “smart TV” with the system being integrated into consumer televisions a possibility for the future.

Once RCA managed to shrink the core circuitry down to a chip or two, notably the RCA 1802, affordable computing projects started to seem realistic. A prototype coin-operated video game system, the FREDOTRONIC, with interchangeable games was dabbled with. Kit computers were sold for hobbyist and educational use. Later the RCA Studio II game console would be released.

Of note, Joyce Weisbecker was paid in 1976 to write some games for the RCA Studio II. TV Schoolhouse I quiz, Speedway and Tag. With this, she became perhaps the first ever paid indie games programmer in history.



Bowling and Jackpot are low pressure games. Emulated in Emma 02.

BIBLIOGRAPHY and PICTURE CREDITS

5 “FRED”

FRED computer photo, Joe Weisbecker collection, AVD_246409_040_12, Hagley Museum and Library.

https://digital.hagley.org/AVD_246409_040_12#page/1/mode/2up.

Screenshots via: https://www.youtube.com/watch?v=h_VKDanjSRU&t=3s

SEE: [OneSwitch.org.uk/page/100](https://www.oneswitch.org.uk/page/100) for the full story

Special Effect

