

HOBART, Tasmania – Feb 13, 2013 – On first glance it could be mistaken for a grandfather clock, but this early feat of electronic and mechanical mastery is far from what you'd expect. The quiet highland village of Bothwell might just possess the oldest known computer in the nation.

"At first I didn't know what I was looking at, then as I started to piece it all together, I couldn't believe what I found," marvels electrician Craig Ferguson, when he was asked about this project. "The Golf Museum up at Bothwell had bought this old arcade game from the 1930s and asked me to have a look to see whether it could be restored. They described it as a ball on the end of a rope, connected to a big display. But this fascinating technology, and is now leading to a trail of research around the world."

Called a 'Spotlight Golf Machine,' when a ball connected to a string is hit from the tee, the machine measures elevation, angles, distance and spin. The game can be selected for one or two players. The players scroll through a reel of diagrams of each hole from the first tee, to the 18th green, of Britain's most famous courses; such as St. Andrews, Royal Troon & Muirfield.

As Craig peels back the layers of technology, he's been astounded at the intricacy of the 1930s machine. "Some of its pretty primitive," he describes. "The wiring is delicately wrapped in very fine cotton as an insulator, and there is mechanically weighted movements similar to a clock. Most of the precision componentry appears to be custom-made"

"But it's the machine in its entirety that is so fascinating; it seems to apply so many different technologies that were in their very formative stages of development. And for it all to come together in a golf simulator...it's as if some brilliant scientist, and one who had both mechanical and electrical knowledge, got tired of the travelling or playing golf in rainy London on his day's off, and as a hobby, decided to apply all the latest and greatest new technologies towards creating an indoor golf game."

The Oxford Dictionary defines a computer as "an electronic device which is capable of receiving information (data) in a particular form and of performing a sequence of operations in accordance with predetermined but variable set of procedural instructions (program) to produce a result in the form of information/ signals."

"It definitely meets all this criteria," Craig confirms, "And the earliest known computer we've identified in Australia is from 1949, which the CSIRO developed, whereas this is from 1936" As Craig explains the chronology of computing, you can tell it's been a genuine journey of discovery for him to understand the evolution of computers.

"Some of the first computing machines were weaving looms from the mid-1800s, where the pattern would be controlled by code set by punch-cards. Similarly, the Spotlight Golf Machine has code punched into the edges of the scroll diagrams of the golf holes, which we're still trying to make sense of. It appears that combined with the inputs received as the golfer hits the ball and the status of the 10 multi-contact relays, the machine responds to represent the position of the golf ball on the hole being played".

The machine also applies electro-magnetic solenoids to control mechanical functions, at a time when electro-magnetic technology had only just been integrated by the leading industrialists of the time. Craig continues, "The dedication of time and effort that must have been spent on developing this machine is so impressive. It's intricate, it's handmade and it works. Enormous time was invested in its creation, maybe years of somebody's life and using the latest cutting edge technology of the day, all for an indoor golf game!"

Looking at this makes you realise how immense the advancements have been in less than 80 years, for computers to now be a daily part in so many facets of most people's lives. The Spotlight Golf Machine doesn't particularly look like a computer in today's style, but the elements that make up this original 'golfing arcade game' are much the same as a modern computer game; an input device, a processing core or hard drive, and a display monitor.

This combination and its inner workings offer a powerful argument that it is a very significant early computer whose evolution appears to have been stunted by the onset of World War II. "All innovators working on these kinds of technologies became absorbed by the war effort" Dorothy Evans of the Golf Museum explains "Several of the earliest computer developers used their technology to break the German codes, and ultimately defeat the Nazis"

"But we have so few leads, there's very little information available online. Amongst the machine we found the address of the company in London that developed it, so we've got lots more sleuthing to find out its story; it appears we have

the only one in the world. We'd appreciate anyone's help! Craig has lots more to do in working out how it works- and whether we can get it all going again."

Is it one of the first computers? Or just significant in the development of such technology? Which pioneering thinkers created it? These are the mysteries that are still unfolding. "Once Craig has gently unravelled and pieced together the full anatomy of it, we'll then get a Computer Science academic from the University to assist"

Bothwell already has the country's first community library & oldest chook-house, Australia's first herd of Angus cattle, the country's oldest golf course and it had the world's first broad-acre radio-telescope, so it's a fitting location to also showcase the oldest computer in the country. "Once we know its place in the evolution of computers, and which early inventors were involved, then we'll try and raise some money from the computing industry like Sony or Microsoft or the Steve Jobs Foundation, to sponsor the restoration and housing of it for future generations" Dorothy Evans concludes.

The Australasian Golf Museum is a volunteer run museum housing the most comprehensive golfing memorabilia collection in the southern hemisphere.

Images are available upon request. For more information on the Australasian Golf Museum visit ausgolfmuseum.com

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Pictures: Craig Ferguson with Spotlight Golf Machine, and also some early British Computer Scientists



