## The Girl at 6BB

## By Bart Lee, K6VK, CHRS Archivist and Fellow, AWA Fellow



Barbara Stoddard Burks, *circa* 1921 at University of California Amateur Radio Station 6BB

Barbara Stoddard Burks at about 19 years of age, operated the University of California amateur radio station 6BB. She was born in 1902 but died young in 1943. Lewis Terman wrote:

The death of Barbara Stoddard Burks on May 25, 1943, at the early age of 40 years, was a truly serious loss not only to psychology but also to biology, sociology, and education. Her record for creative productivity, which has rarely been equaled by one of her years either in quantity or quality, was made possible by an extraordinary

combination of intellect, energy, and scientific enthusiasm. As Dr. Florence Goodenough has expressed it in a personal letter to me, "In the short span of her life Dr. Burks' contributions would have done credit to one of double her age. Her zeal in research, her fine technical skill, and her clear insight into the basic principles underlying the problems which she set out to solve won the unqualified admiration of her colleagues both in this country and abroad."



Dr. Stoddard in her Maturity.

Fritz Sommer, K6EE, the trustee of W6BB, the Cal Berkeley amateur radio station, identified Barbara Burks as the girl at the 6BB operating desk. He places the photo circa 1921.

2

<sup>\*</sup> Emil O.W. Kirkegaard, Clear Language, Clear Mind, [blog]: *Celebrating an early female pioneer: Barbara Stoddard Burks.* She had to her credit over 80 publications. (https://emilkirkegaard.dk/en/?p=6595)

## The W6BB website<sup>†</sup> says:

"1921 First commercial wireless operator's license to woman, Barbara Burks '24." 1

Federal authorities granted her this license in January 1921.

In 1971 a retiring professor wrote:\\$

"In August of that same year [1927] Herman [Ramsperger] and Barbara Burks were married in Palo Alto, where Barbara was a student in psychology, and obtained her doctorate a year or two later. We attended their wedding..."\*\*

Dr. Burks was widowed in 1932. A decade later she planned to marry again. Her fiancé, a friend and colleague, wrote:

"During her college years she was granted a commercial radio operator's license, the first woman to receive such an appointment on the Pacific Coast. ... She even had the unusual experience of seeing the world, dressed in the gaudy attire of a Barnum & Bailey maharani, from the wobbly top of a circus elephant."††

<sup>&#</sup>x27;www.w6bb.org/history/

<sup>&</sup>lt;sup>‡</sup> This somewhat telegraphic comment likely refers to Cal Berkeley students, because Kathleen Parkin of San Rafael held both commercial and amateur licenses in 1916. See https://en.wikipedia.org/wiki/Gladys Kathleen Parkin which notes she was the third such female licensee. Two others were P. L. Baker (1912, Los Angeles) and Isabel Kelso (Seattle). See Oakland Tribune, Oakland, California, January 12, 1921, page 4. (www.newspapers.com/newspage/82309737/)

<sup>§</sup> AGAIN THE SCENE Some informal memoirs of my life by Denis L. Fox [1971 typescript at Scripps Institution, San Diegol (http://scilib.ucsd.edu/sio/biogr/Fox Again Scene.pdf)

<sup>\*\* &</sup>quot;Burks and Ramsperger were thought to have had an idyllic marriage. He was known to have great pride in her achievements as well as always providing support and encouragement to her." So says Laura Ball in Psychology's Feminist Voices (2010) at http://www.feministvoices.com/barbara-stoddard-burks/

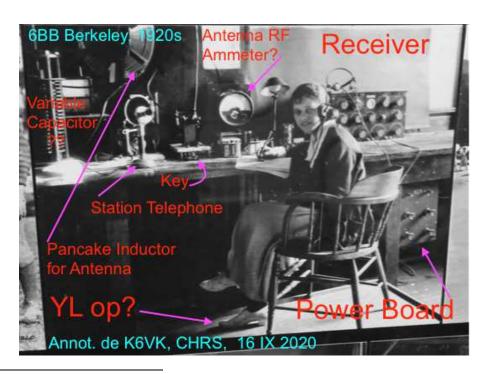
<sup>&</sup>lt;sup>††</sup> D. Brett King et al., Barbara Stoddard Burks: Pioneer Behavioral Geneticist and Humanitarian (this is a chapter 15 in in unidentified book) at https://www.gwern.net/docs/genetics/heritable/1996-king.pdf

Her many biographies tell of her early life in many places including the Philippines, as the daughter of active, intellectual and peripatetic parents. Her academic work included pioneering research and publication in behavioral genetics, statistics, intelligence, heredity and genetics. Some was controversial.

She worked in a world of sometimes unappreciative and perhaps hostile senior men.<sup>‡‡</sup> In a situational personal depression, she appears to have died by her own hand.

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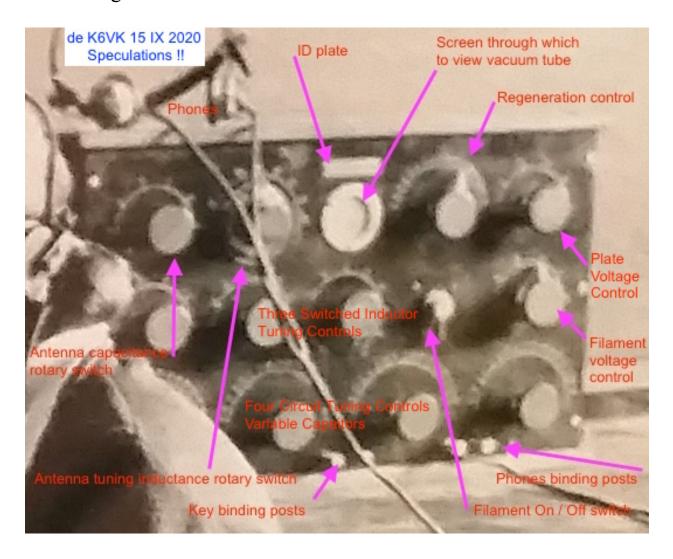
What was it that she had mastered at age 19 at radio station 6BB? We have only the one photograph, but we know that the federal government licensed her as both an amateur and as a commercial radio operator. She had to pass muster as a radio telegraphist at likely 20 words a minute in Morse code. She also had to pass the radio theory test about radio itself, transmission modes such as spark and carrier, the appropriate equipment and engineering, and the different legal regulations for both radio services.



<sup>\*\*</sup> See Laura Ball (2010), *supra*, and the wiki, *supra*.

4

She sits at an operating desk with a state-of-the-art radio receiver at her right. To her left appear the tuning elements of a transmitter, most of which is unseen farther left. In those days amateurs could operate only above the broadcast band, at 160 meters wavelength and down, in the frequency range just below 2 MHz, and above. This apparatus seems to be in that range.



The receiver offers twelve controls. One cannot be certain of the function of each control. Nonetheless educated guesses may be made (as they have in the above annotated photos). Beyond the On /Off switch, the available combinations and permutations are large.

The Berkeley amateur radio station helped to pioneer amateur radio on the West Coast. The W6BB history (above) notes:

1914 First wireless messages from government station in Arlington are received on long-wire stretching from top of unfinished Campanile to Mechanics building. 1916 First mention in Daily Cal of University Radio Society.

Club broadcasts Big Game (with Washington) from bleachers. Club enters Carnegie foundation sponsored League of University Wireless Clubs to relay news, sports, etc.

1917 Club helps government radio inspector to rid Bay Area of pesky, interfering unlicensed radio stations!

(and of course, Miss Burks).

In 1921, Miss Burks was in good technical company at Berkeley. For a social history of what student life on campus was like, see Professor Fox's memoir (above). It was a different world – but then they always are. (de K6VK) ##