

As a follow-up to our reading of the 1936 Koch study we attempted to research the writings of Donald R. (Russ) Farnsworth (SK) in order to reconcile Koch's findings with our use of modern Farnsworth techniques. No books, reports, or papers were written by Farnsworth.

Farnsworth did not invent the technique of lengthening the spacing between letters and words to facilitate recognition of character patterns and words in the early learning stages. According to William G. Pierpont N0HFF as written in his book *The Art & Skill of Radio-Telegraphy*:

"This is actually an old procedure used by many teachers long before Farnsworth, who popularized it. It appears that the first clear mention of this approach is by Thomas Edison, a highly skilled telegrapher himself in 1902. He hit the nail on the head when he wrote as follows about his punched tape course called "Audio Alphabets" (by Frederick J. Drake & Co.) for teaching the American Morse code:- "It is not the speed at which a letter is sounded that perplexes the learner, but the rapid succession in which they follow each other."

"So this is actually an old procedure based upon the experience of many teachers long before Russ Farnsworth (W6TTB), whose name apparently became attached to it because of his Epsilon Records Code Course consisting of 3 LP phonograph records in an album put out in 1959."

Pierpont described the Epsilon Records Code Course as follows:

"In that course the characters were from the very first sent at 13 wpm, widely spaced, and the time between them gradually reduced as the student became more proficient."

We were not able to find the actual LP phonograph records, but we found a YouTube video of the Farnsworth's Epsilon Records Code Course (<https://www.youtube.com/watch?v=1INx7IJuNhs>) and analyzed it.

We found the words sent became progressively more complex as the recording progressed, but the code was sent at a constant speed of approximately 13 WPM with no Farnsworth spacing. To verify our findings, we asked Bob WO6W to analyze the video. Bob used PCW Fistcheck and Audacity and confirms the CW was sent at 12.6 WPM with no Farnsworth. An image of the timing values is attached. Any Farnsworth would have registered

as a variance in Character Space Length and Word Space Length, but none was noted. Measurements were made at various portions of the video recording and remained constant.

It is our assessment that Russ Farnsworth did not invent or use the method of enhanced character and word spacing named after him.

WORD SPEED	
elements	49
time (ms)	4661
element (ms)	95.122449
speed	12.6

