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WIRED BY WEBER: The Story of the First Searcher and Searches for Gravitational Waves

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Joe Weber, the last child of eastern European immigrants, had a ham radio license at age 10. He also wired the mess hall of the US Naval Academy for sound, causing the chatter and clashing crockery of his fellow midshipmen to be drowned out by Schubert's Great C Major symphony. He kept a 6 cm radar (not standard equipment on submarine chasers) working before and during the Sicilian landing and ended "his" war in charge of electronic countermeasures for the Navy. Hired as a full professor of electrical engineering and ordered to get a PhD in something, somewhere, by the University of Maryland in 1949, he talked with George Gamow (a story for a different time), but ended up working with Keith Laidler at Catholic University of America on the inversion spectrum of ammonia, building and using a 2-meter traveling wave tube. That, plus a lecture by Karl Herzfeld on the Einstein A and B coefficients, led him to think about inverted populations as amplifiers and spectrometers. His talk at an IEEE conference and the subsequent paper were the first "open source" presentations of what we now call masers and lasers. Then came his interest in General Relativity and the desire to bring this beautiful theory into contact with laboratory science. He started building and then operating bar detectors for gravitational waves in 1965-66, and reporting results from 1968-69. The scientific community first took an enormous interest in his work, then "voted him off the island" starting in about 1973. He continued to operate bar detectors, and later perfect crystal detectors for neutrinos, until his death on 30 September 2000 (Rosh Hashonah that year). The first LIGO event was recorded on his 15th Jarhzeit. We had, by that time, been married for 28.5 years, and it was a joy to watch him pick the right resistor or capacitor out of a box of miscellaneous electronic components.