

## Bart Lee, A Vintage Vignette

### Early de Forest Audions in Service, 1909:

These are two very early Lee de Forest Audions. They provided wireless receiving capability in Puerto Rico about 1909.



Lee de Forest and his engineer Frank E. Butler put in wireless circuits in the Caribbean including Cuba (Guantanamo – they hated the place for its heat and misery) for the U.S. Navy as early as 1905. De Forest could no longer use the electrolytic detector he stole (adopted?) from Fessenden's laboratory by reason of an injunction. Providentially his new employee, General Dunwoody (just late of the Signal Corps), invented the Carborundum detector just in time in 1906.

But de Forest in 1907 +/- put a grid into Fleming's 1904 vacuum valve diode and enhanced its ability to act as a detector (it was gassy). The grid is plainly visible in the photo. De Forest used the term because the zigzag wire reminded him of the grid of the Yale football field.

Soon United Fruit Company shipboard operators used the new Audions as detectors with strange amplifying powers. Edwin Howard Armstrong heard about this and worked out the principles of regeneration. See "The RJ-4 Mystery" by Gerald F. J. Tyne, AWA Monograph New Series No.1, published June 1978.

These Audions were on display at the Antique Wireless Association Convention in 2006. (de K6VK, my photo) ##