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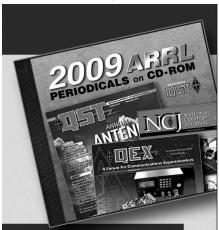
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## **OLD RADIO**

## The First Ham in Philadelphia

The late Tom Appleby, W3AX, claimed this title. And he claimed to have an Amateur Radio set in 1899. Pretty early? I thought so too, until I read his autobiography. It's impressive.

Tom's early radio was without anyone else to talk to, so he separated the receiver and transmitter and sent to himself. Therefore without anyone else to talk to, why did he build it?

Tom was born in England May 10, 1886 and immigrated to Pennsylvania about 1889. His family moved to Scranton, Pennsylvania, where his father was employed as a stationary steam engineer at the local coal mine. When he was about eight, Tom and his younger brother would visit their father at work and marvel at the steam engine with its polished brass accessories. Sometimes he would be allowed to start the engine by gently rotating the big hand wheel of the control valve.

The signal systems to the engine room were at first mechanical, and then later they were electrical with bells and lights. This captured his imagination, and soon was experimenting at home with electric bells, lights and batteries. In no time he had built his own wet-cell battery and had a working electric light in his room. His neighbors thought of him as a young Thomas Edison.

#### The Early Radio Days

In 1898 the family moved to Philadelphia and Tom became a messenger boy for the Western Union Telegraph Company. Like so many messengers before him, he learned to receive the code, and practiced until he had built up to a fair speed.

In 1899 the International Yacht races between the yachts Shamrock and Columbia were held off Sandy Hook, New Jersey. It was reported that the results would be sent ashore by wireless to the *New York Herald* newspaper. Tom figured that if they do this again next year, he wanted to have a station capable of receiving them in Philadelphia.

Tom studied library books and built a complete wireless transmitting and receiving station in his home. The only trouble was, there was no other station within a hundred miles, commercial or otherwise.

Shortly Tom had someone to talk to by radio. Walter J. Deery, a General ElecTom Appleby commented, "This is my homebrew station in 1908. Call 'HN' but listed in the 1909 Blue Book of the Wireless Association of America, as 'HNM.' Note the antenna helix on the right, then the rack of 4×5 glass photo-plate condensers, the 1 inch spark coil with ball spark gap across the secondary, the single receiver head phone with a pad for the other ear, the two slide tuning coil made from a rolling pin, the electrolytic detector in front of the spark coil; it had leverage action to raise the point of the



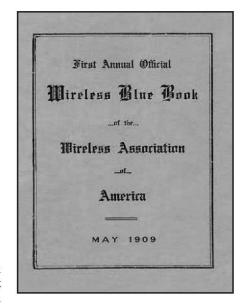
Wolleston wire from the acid in the platinum cup and last if not least, the copy of *Modern Electrics* magazine bearing the date, if your eyes are good, February 1908, or it could have been 1909 as it is close to the new year. But the outfit was in operation in 1908."



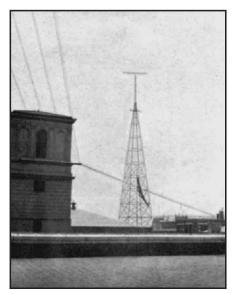
Tom Appleby, taken in 1911 at Atlantic City.

tric sales engineer, built a station. "With whom," Tom said, "I held many pleasant and interesting communications." Soon other amateurs began to show up.

About this time Tom became employed by an electrical novelty store on Arch Street (later Philadelphia's Radio Row). To Tom's delight, the store carried every imaginable electrical device and novelty of that time. In conjunction with the store there was also an electrical shop where they made batteries, electric bells, repaired motors and electrical trains, and sold gasoline engines, medical batteries and hot air engines. Tom eventually became foreman.



In May 1909 the Wireless Blue Book was printed, listing all the call signs of the commercial stations and about 79 hams. It was the first call book printed. Tom's listing read: "Thos. Appleby, West Philadelphia, Pa, call sign: HNM, Frequency: 360 meters, Transmitter: 1½ inch spark length." Tom's actual call used was "HN," not "HNM" as shown in the book. (Note, back then the call signs were mostly made up by the station owner. Duplicate call signs were



The east tower on the Wanamaker store.

worked out by gentlemen's agreements.)

#### Going to Sea

In 1909 Tom applied to the United Wireless Telegraph Company in New York City for a position as a wireless operator aboard a ship. He was sent to the Bellevue-Stratford Hotel in Philadelphia (call sign "BS") for a first assignment and for training. Here he met David Heilig, who would later become his partner in business. David had also started as a Telegraph messenger boy, so they hit it off from the beginning. David had been to sea and trained Tom on all the procedures.

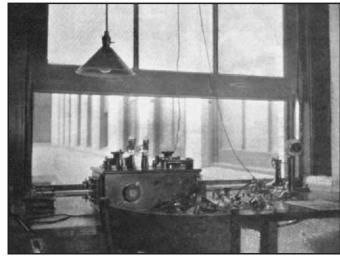
#### Aboard the SS Captain A.F. Lucas

After a few weeks at "BS" the long anticipated radiogram arrived from New York instructing Tom to report there for a ship. Hustling over to the main office at 42 Broadway, he was told to go immediately to Bayonne, New Jersey, and board a large Standard Oil tanker the SS Captain A.F. Lucas (call sign "GB") which was scheduled to sail that evening for New Orleans with some million gallons of gasoline aboard.

Handing his orders to the skipper, Captain Sandburg, he was shown to the wireless room where, and much to his surprise, he found instead of the usual 1000 W transmitter, a large one of twice that power. This being his first ship, he never forgot how he sweat receiving the last minute message of instructions for the Captain from the shore station "NY" through the terrific din of many other transmitters on ships in that busy port. He remembered that he requested over half a dozen repetitions of various portions of that message before it made enough sense to present to the Captain.

The SS Captain A.F. Lucas carried dif-

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The Wanamaker Station where Appleby copied the survivor list of the Titanic.

ferent cargoes at times ranging from crude oil and gasoline to crude molasses. The skipper learned that he had received a diploma in electrical engineering from a correspondence school. Thereafter the skipper never failed to inform his friends and visitors to the ship that "Sparks," as he called him, "learned to swim by correspondence."

Tom said, "The wireless transmitter aboard the Lucas employed, as did all such transmitters at that time, a brilliant but terribly noisy high-tension spark every time the transmitter key was depressed. It was because of this that the skipper nicknamed me Sparks."

#### **Back on Solid Ground**

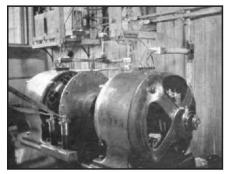
Tom next worked at station "AX" in Atlantic City. Then in 1911 he started his first business with friend David Heilig, a radio school called "Philadelphia Wireless." (I'll have more on these stories in a later column.)

#### The Wanamaker Station

One evening early in 1912 while Tom was still at Philadelphia Wireless, he received a telephone call from Jack Irwin who had been sent from New York by the Marconi Wireless Co., to open their new powerful spark station "HE" atop the Wanamaker department store in Philadelphia. This station would be in daily contact with the Wanamaker store in New York City, "HI."

#### The Titanic Sinks

On April 15, 1912 all wireless stations on the Atlantic coast were silenced due to the sinking of the RMS Titanic when it struck an iceberg in the mid-Atlantic on its maiden voyage resulting in a tremendous loss of life. Among the passengers were many of notable families. Upon learning of the disaster John Wanamaker



The huge 5-kW rotary spark gap transmitter at the Wanamaker store.

asked Tom to try and ascertain whether certain of his friends who were aboard the *Titanic* were on the list of those saved.

Carefully tuning for the signals of rescue ships he was able to intercept the signals from the Salem, which was acting as a relay between the shore stations and the rescue ship Carpathia, which had only a very low powered transmitter. For three days and two nights without sleep or relief Tom Appleby kept the headphones glued to his ears and managed to copy the list of survivors. The friends that John Wanamaker was looking for unfortunately were not among them.

#### Wrapping Up

This introduction to Tom Appleby, W3AX, is just a short portion of his interesting life. I will share more about Tom Appleby in future columns, as I continue to learn about him.

I want to thank Tom's friend, Johan K. V. Svanholm, N3RF, for making the Appleby autobiography available to me. Without Johan, this interesting history would have been lost. Much of the text in this column was taken from this document. I also want to thank an anonymous private collector friend, who has provided many of the photos for this story.—*K2TQN*