



K2TQN

## VINTAGE RADIO

# The First Air-going Wireless Man

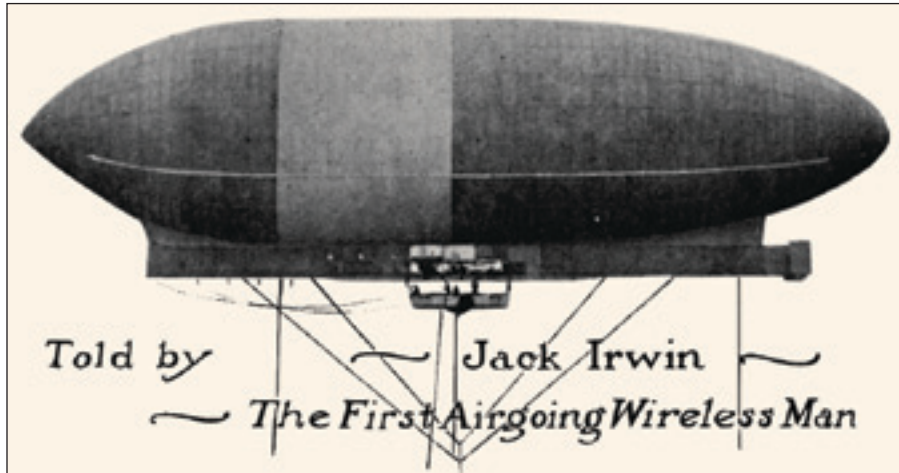
*Jack Irwin, edited by John Dilks, K2TQN*

In the spring of 1910 I received what, at that period in the history of radio, was the strangest assignment a wireless operator ever had. I had returned to New York after a trip to England as radio operator on the old American Liner St. Louis. The Marconi Wireless Telegraph Company of America was then a small organization and I was one of the four sea-going operators in its employ (there were only fifteen operators in the company's entire service). To be in charge of one of the four ship stations the company controlled was considered, in those days, a good job. I was contented with my lot and satisfied with what life offered, a fine ship, good fellows for ship-mates, and a pleasant run.

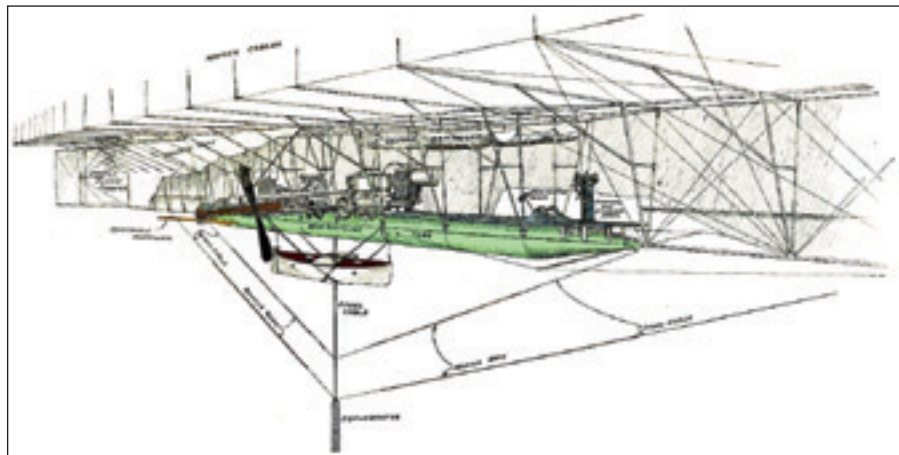
It was then customary, in that small family-like organization, for ship operators to report after each voyage direct to the Chief Engineer of the company, Mr. Frederick M. Sammis. He occupied a similar position to Poo Bah that extraordinary and versatile character in Gilbert and Sullivan's "Mikado." He acted in almost every capacity. Without any other thought in mind, except, perhaps, the usual operator's genius for smelling a salary advance, I entered Mr. Sammis' office and made the customary report. It was then I received the jolt he had prepared for me. He nonchalantly inquired whether I was prepared for a transfer to another ship, just as though it was an everyday duty with him. In a few words he tendered me the job of operator on the airship America, then being constructed at Atlantic City. Whether I jumped at this offer or not I cannot remember now, but I found myself in the course of a day or two in Atlantic City, duly signed on as a member of the crew of a dirigible and committed to make the first attempt to cross the Atlantic by air line.

So started Jack Irwin's recounting of his famous voyage in a 1924 *Radio Broadcast* magazine. He continued:

My contract with Mr. Walter Wellman, who commanded the expedition, called for my services not only as a wireless man, but as a general aide. And the months intervening between June, when I joined the crew, and October 15th, when



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**Details of Airship America's construction. For a larger view, visit [www.k2tqn.com](http://www.k2tqn.com).**

we sailed, found me handling many jobs and assimilating a knowledge of aeronautics. There was also born in me a love for the flying game that has persisted to this day.

### Who was Walter Wellman?

Wellman was a newspaper man from Chicago who also made the news. He did this by finding something exciting to do that no one else had done, for instance, discover the North Pole. To get funding he promised great stories to be written about

his adventures. Newspapers and magazines jumped on board and soon he was trying to cross the great ice expanses to find the North Pole. He was not successful the first time on foot, but pioneered on thinking he could float above the unforgiving ice in a balloon. Eventually he purchased a motor-powered non-rigid airship from a company in France. He was not successful this time either. As he was planning another attempt by air he found out that Robert E. Peary (accompanied by Donald MacMillan, later

of *Bowdoin* Schooner fame, and Matthew Henson, America's greatest African-American Arctic explorer) had discovered the North Pole on April 6, 1909.

Then the idea struck him: Why not take the airship, have it rebuilt and be the first to cross the Atlantic Ocean by air. Knowing he was not alone in this idea, he rushed the rebuilding in France and had it transported to America onboard the liner *Oceanic* then sent to Atlantic City, New Jersey where it would be put back together.

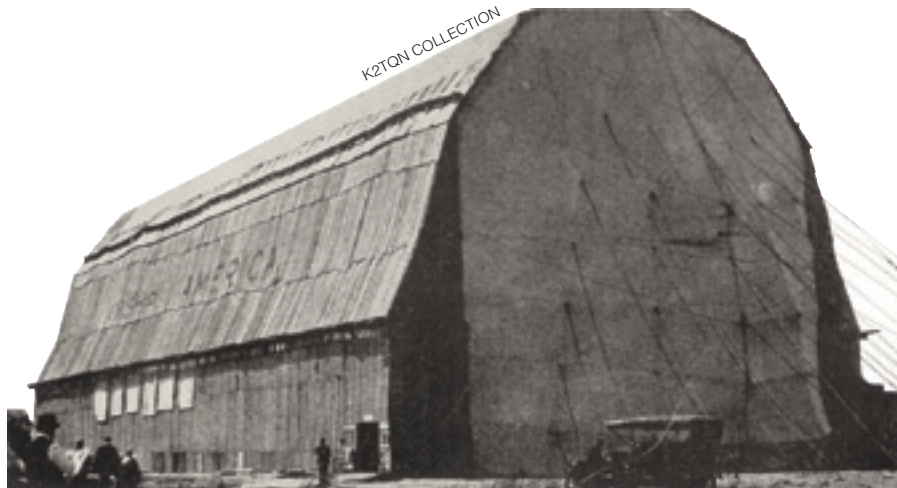
Atlantic City was chosen because there was an Aero club there that would fund the building of a giant hangar for Airship *America's* construction and the prevailing winds would assist the airship with its journey eastward to Europe. Another factor I'm sure is that Atlantic City hosted a huge gathering of air pioneers that summer, who of course brought their airplanes with them. Everybody who was anybody in the airplane business was there that summer. An "Air Carnival" as it was called was held on the beaches and flying boats landed in the inlet. Since this was the first event of this kind several records were recorded: Walter Brookins set an altitude record of 6175 feet and Glenn Curtiss flew 50 miles and returned in 1 hour and 14 minutes. Atlantic City was air crazy and the airship project fit right in. (Bader Field in Atlantic City became known as the first "air-port" in 1919, a name given it because of its close proximity to the ocean and because it could also service seaplanes.)

### The Airship *America*

Quoting again from Irwin:

The *America* was what is known as a non-rigid type of dirigible, cigar shaped. She was 228 feet long and 52 feet in diameter at the central or thickest part. This great gas reservoir was made of cotton, silk and rubber and beautifully tailored, all seams being wide lapped, sewn and gummed, and extra strips cemented over to cover the stitches and prevent leakage of hydrogen. The huge envelope contained when fully inflated, 345,000 cubic feet of hydrogen gas. This lifted a load of 28,000 pounds.

Under the balloon or gas envelope was built a huge steel frame, enclosed with varnished linen, and attached to the balloon by eighty steel cables fastened to the balloon about ten feet below its equator and extending its full length. This frame was fashioned of the best steel tubing and wires, strung as a bridge, the whole being 156 feet long, 8 feet wide at the top, V-shaped, and at the bottom of the V there was a staunch steel cylinder two feet in diameter, divided into ten compartments, with a capacity of 1,500 gallons of gasoline. Along the top of this cylinder ran a thin boardwalk 2 feet wide, forming the



This is the hangar built by the Aero Club where the Airship *America* was constructed. It was located in the northern part of Atlantic City next to the inlet, which provided tugboat access. A tugboat would later tow it out to the ocean for the first part of the journey.



*America's* lifeboat being prepared for the Atlantic crossing. Jack Irwin's "shack" was located amidships in the lifeboat; from there he would operate a spark transmitter directly under a huge bag of hydrogen gas.

floor or deck of the car. Celluloid windows were placed at intervals in the linen sides of the car enclosures; and about the engine rooms, amidships, steel screenings replaced the linen. Non-inflammable paint was employed to minimize fire risks. In this car were the crew's quarters, engine rooms, dynamo, and control or navigating bridge.

Slung under the central portion of the car was the lifeboat. This lifeboat was then the last word in boat-building. It was built of hewn, laminated mahogany - 27 feet long, 6 feet wide, with a depth of 3½ feet amidships. Each end was decked over and made into a water-tight compartment by simply battening down a circular hatch in each deck. Amidships was a spacious cockpit in the center of which was a self-baling device and in the forward end a cubby-hole for the wireless apparatus.

This lifeboat is where Jack Irwin would be the first airborne wireless operator to use a "spark wireless" transmitter with a huge bag of hydrogen gas hanging above. I can't imagine having guts enough to push that key for the first time. The antenna was the steel framework that was all around the gas bag. The ground was the trailing equilibrator, designed to help stabilize the airship and carry additional gasoline and fresh water.

To be continued next month — K2TQN

### Correction

In the July "Vintage Radio" column the name of Dr John Mauchly was misspelled. I apologize for the error.<sup>1</sup>

<sup>1</sup>J. Dilks, K2TQN, "Vintage Radio," QST, Jul 2010, pp 95-96.

