

Atlantic City History: The Launching of Airship *America*, One Hundred Years Ago.

Introduction by John Dilks, www.ebthistory.org

Jack Irwin, Marconi Wireless Man

In August 1901 the Marconi Wireless Company built a station at Siasconset, on the island of Nantucket. Another station was installed aboard the *Nantucket Lights* No.66 forty-two miles away which would become the first point of contact for ocean liners bound for New York. Sometime around 1906 a young wireless operator named Jack Irwin was assigned to Siasconset as one of the four operators.



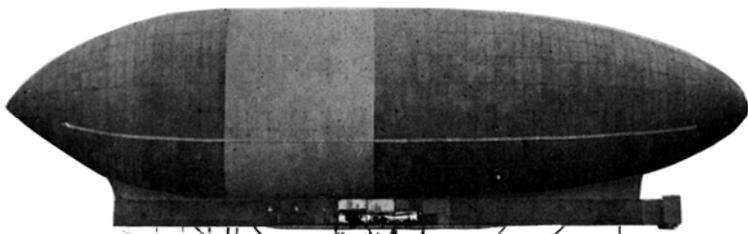
Jack Binns (left), wireless operator on the Republic and Jack Irwin meet after CQD rescue.

Just before 4 AM on January 23, 1909 while on the graveyard shift Irwin heard a weak call for help. “C.Q.D. C.Q.D. Attention all stations. Distress. The Republic rammed by unknown steamer 175 east of Ambrose Light. Lat. 40.7, Lon. 70.” It was from the White Star liner, the *RMS Republic* 60-miles away which had just been rammed by the Italian liner *Florida* and was sinking. Irwin quickly took charge and contacted the

Baltic and several other nearby ships which all headed towards the *Republic* in thick fog. Six people were killed in the crash, three from each ship, but because of wireless 1,500 people were successfully rescued. The wireless operator aboard the *Republic* was Jack Binns who was also quite a hero.

Jack Irwin returned to sea duty after that. But it was his next assignment that would make history in the field of radio: one hundred years ago this October he used wireless to call “CQD” himself from an airship to a ship at sea, the first such call in history. His airship adventure would begin in Atlantic City.

~When the 'America' Put Out to Sea~
Fog ~Wind ~Disaster~ and ~Rescue.



Told by Jack Irwin
~ The First Air-going Wireless Man ~

The First Air-going Wireless Man

By Jack Irwin, in his own words, edited by John Dilks

"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 shipmates, 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

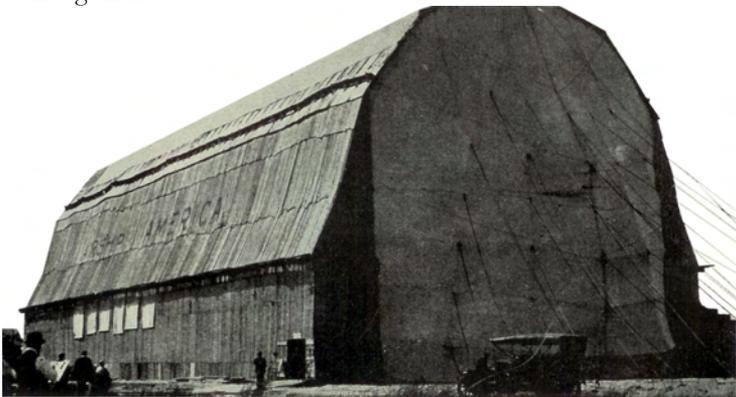
dirigible and committed to make the first attempt to cross the Atlantic by air line," So started Jack Irwin's recounts of his famous voyage in a 1924 *Radio Broadcast* magazine.

"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 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?

He 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, like 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) discovered the North Pole on April 6, 1909.

Then the idea stuck him, why not take the airship, have it rebuilt, and be the first one 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 where it would be put back together.



The hanger. Located in the northern part of Atlantic City near the inlet and Gardner's Basin, the airship was constructed here.

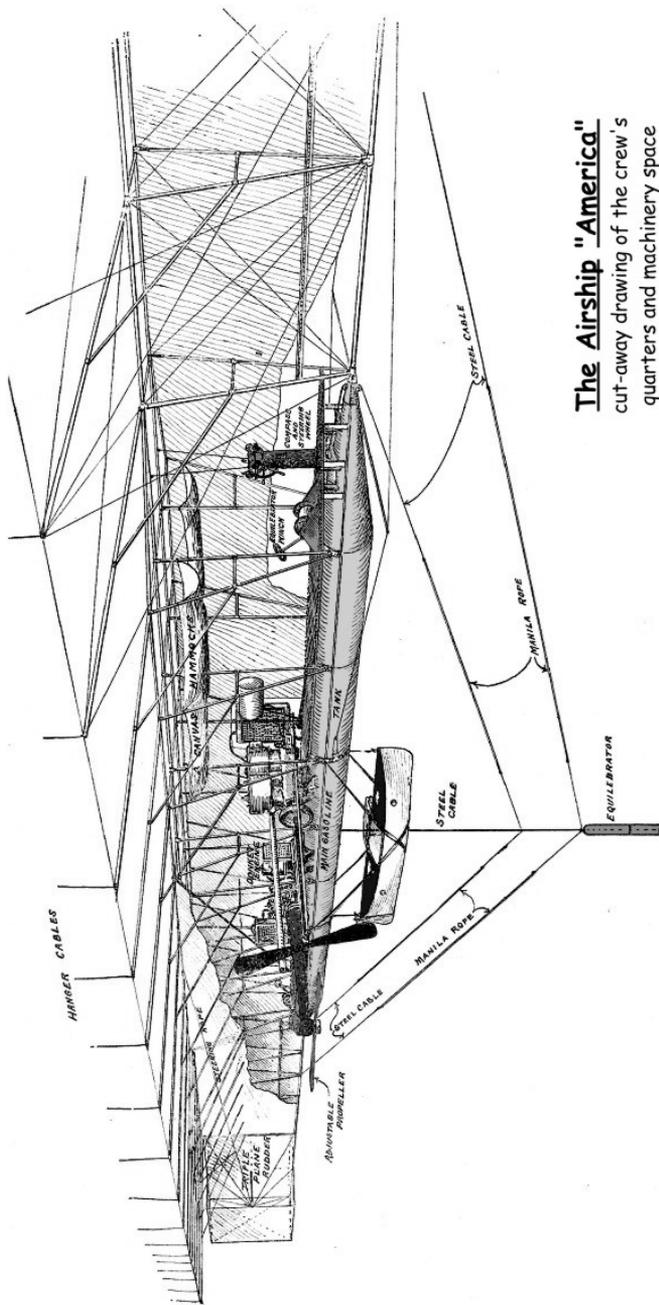
Atlantic City was chosen because there was a Aero club there who would fund the building of a giant hanger for Airship *America's* construction, and the prevailing winds would assist the airship with its journey eastward to Europe. Another factor I'm sure is, that summer Atlantic City hosted a huge gathering of air pioneers, 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 another was by Glenn Curtiss who flew 50 miles and returned in one 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

"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 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. Noninflammable 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.

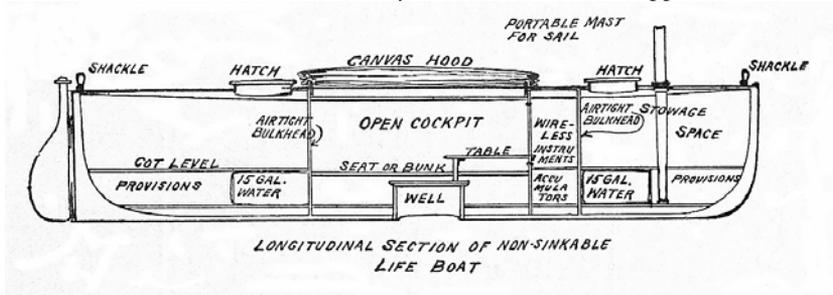


The Airship "America"
 cut-away drawing of the crew's
 quarters and machinery space



America's lifeboat in the hanger next to the airship.

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 which 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.

"On the morning of October 15, 1910, I was awakened about 4 o'clock and told to go aboard. There was not a breath of wind. A dense fog dripped down over everything. The crew of the ship consisted of Messrs. Walter Wellman, commanding; Melvin Vaniman, chief engineer; Louis Loud and Fred Aubert, assistant engineers; Murray Simon, navigator; and the writer.



This is an artist's conception of the launch of the America. Police and firemen help pull the America out of the hangar.

With the help of a few hundred police and firemen we proceeded to launch the largest non-rigid airship ever constructed. At 8 AM all was in readiness and the crew climbed aboard. The last to embark was our mascot, a pretty foundling kitten that had been a pet around the hangar. The crew had jokingly told visitors that the kitten was going along with us and just as the word to "let go" was passed, somebody in the crowd threw the kitten into the lifeboat where I had taken my station. Up we went and the cat was one of us! Kitty, at first, appeared scared and raised an awful "holler," but he (yes, it was a Tom!) soon settled down. In the long days and longer nights that followed, I will admit I was grateful for that kitten's affectionate company. It was always to be found cuddled up to me in the wireless corner of the boat.

We did not start our motors immediately, but preferred to be towed out through the narrow entrance called "The Inlet" at Atlantic City. Reaching the open water our tug cast off our line and we started our engines, We were flying at an altitude of only 200 feet, with a portion of the equilibrator trailing on the surface of the ocean. This low altitude was due to the heavy cargo we carried and the fact that the morning was cold and wet. The moisture of the fog contracted the hydrogen with a consequent loss of lifting capacity.



*Engineer Melvin Vaniman and Kiddo,
the adopted stray cat.*

Not everyone was happy having the cat aboard. His name was Kiddo. He was at first caught and placed into a sack; and with a rope attached was lowered down toward the tug's deck. But by now the wind was pushing the airship out to sea faster than the tug could go to keep up. So rather than drop him into the water, he was pulled back up to become a member of the crew.

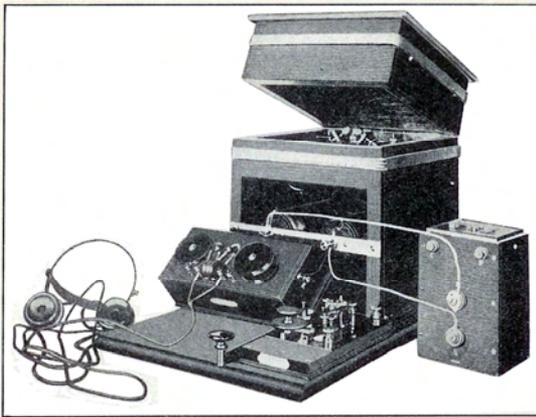
Irwin continues: During the first hour of the flight I was busy making various adjustments. Listening in, I could hear "Bobby" Miller, at the old United Wireless station "AX," on Young's Pier at Atlantic City calling "W," the call letter assigned to the *America*. The signals dissipated any doubts I may have had regarding the receiver.



*Atlantic City wireless station "AX" located at the ocean end
of Young's pier.*

For months we had discussed the possibility of sparking in the rigging and the risk of burning a hole in the fabric of the balloon, so when the moment came to "sit" on the key of the transmitter, I think I can be pardoned for my nervousness. I am sure I experienced the moment that a suicide passes through when he is about to pull the trigger. Stationing the crew in different parts

of the ship to report any sparking, I threw in the sending switch and answered Miller's repeated calls. I shall never forget my expansive satisfaction when he came back and told me my signals were clear and strong. I had opened the coupling of the transmitter for a minimum radiation; therefore, with only a few miles separating us from the nearest station, I had established radio communication for the first time between a ship of the air and the earth. I had plenty of power in reserve and knew that we had reliable communication within certain limitations. Mr. Wellman, during the time I had been engaged in these preliminary tests, had been sitting at my elbow, anxiously waiting the result. But as he afterwards wrote in his book describing the trip, he could tell by the pleased grin on my face that we had succeeded in establishing communication.



Details of Marconi wireless set used in the America's lifeboat.

By reference to my log, I find that communication was established with AX at 10:30 AM and that at 11:05 AM I had sent eight messages to Miller; At 12:30 PM I made an entry of receiving two messages from AX, while at 1:30 PM, there was this notation in the log, "Received one message and sent two to Atlantic City. Everything going fine, sensation very fine, all happy."

Thus was the first airship traffic conducted, and it had soon developed into the ordinary routine. I had been very busy, these hours, without time to reflect upon my strange surroundings or give thought to the unusual experience of flying. I have spent hundreds of hours in the air since and been asked innumerable times what my first sensations were, but I can truthfully say I cannot recall them, if I had any. My only anxiety was regarding the success of the installation of wireless; once that was assured I felt nothing but elation. While I was busy at the radio key, successfully maintaining constant touch with Atlantic City, things were not going so smoothly with the engineering department of the ship.

After several hours in the air the dense fog in which we started condensed upon the huge surface of the dirigible, adding a great weight to an already overloaded ship. Instead of steadily rising, as the heat of the sun increased and expanded the gas, we slowly descended and lost altitude. We

were compelled to jettison some of the cargo. Due, also, to the lack of trial flights, the engines required tuning and we proceeded very slowly during the morning of the first day. Several times during that morning either one or the other of the engines had to be stopped, caused by sand in the bearings. Our hangar at Atlantic City was in a most exposed spot where every wind that blew brought clouds of sand. However we continued to make progress.



Artist's conception of airship America under way

At 3:30 PM on that first day, I received my last message direct from Atlantic City. At that time I find that a notation in the log states that I was no longer able to hear him, because his signals were weak. The motors made a fearful noise. The only means I had of deadening the sound of those big engines was the slight protection provided by the cotton battens, I had fashioned. From then until 8 PM, with the exception of intermittent motor trouble, the voyage was uneventful. At that time, still in a dense fog, we almost ran into a

large sailing ship. So close did we pass that we could see the crew running round the decks. Later we passed very close to a large steamer, which we eventually learned was the *Coamo*. From time to time I tried to get into communication with various shore stations, without success. It is quite possible that some of them answered me, but the engines killed anything but the very strongest signals.

An Engine Gone Bad

During the night, our best engine had to be stopped, permanently out of commission. It appears that the bearings of the propellers had broken, causing one of them to wobble alarmingly. Up to this time there had been no wind at all, but now it began to freshen up a bit which drove us eastward, but in a northerly leeway. The fog still persisted and we were compelled to jettison some fuel to prevent descending into the sea. Another danger which became apparent when night fell was the stream of sparks from the exhaust. We were afraid that they would cause an explosion and Wellman wanted to stop the remaining engine. Vaniman, however, talked him out of this, explaining that we

had been running all day and that, if we stopped the engine we would undoubtedly drift over Long Island. Furthermore, the balloon by this time was so saturated with water from the condensed fog that we ran little risk of fire. So, through all that night we proceeded under one engine. The engine that had gone bad on us was the one to which the dynamo was belted and that meant that we would be unable to charge our battery. With this in mind, I began to hoard the battery juice and used the wireless only when positive that there was something to use it for: As subsequent events proved, it was well I did.

The CQD and Rescue

At 5:05 AM on the 16th, my log shows that the engines had stopped and that I was listening to all stations talking about us and calling W. I heard the Sagaponack (Long Island) station inform Siasconset that we were 60 miles South of Scotland Light at 6:50 PM the previous night when we had been sighted by a steamer and reported by radio. All this time the wind was steadily increasing but was in our favor and we made such good time that we decided to allow our remaining engine to cool off. I waited until Siasconset station was very strong before I attempted to communicate. At 10:35 AM I established communication with SC (Siasconset, Nantucket Island) sending him several messages. We were very close to that island during the day, so close, indeed, and so strong our signals, that I afterwards learned that the boys at the stations



The flight of the America from its liftoff from Atlantic City, New Jersey to the crew's rescue at sea by the SS Trent.

ran outdoors to try to sight us.

Our expedition had been financed by several newspapers and Mr. Wellman, a newspaperman himself, commenced to file voluminous messages to them. I sent the short ones, but as they became lengthier I protested that the batteries were running down and that we should conserve our power in case we needed help. He promptly agreed with me.

The wind now increased to a gale and began to bear us southeast. When night fell we again experienced trouble in remaining in the air. We were compelled constantly to throw supplies overboard.

C Q D

That night I attempted to obtain assistance, calling C Q D, which at that time was the signal of distress. Our engines were now useless. The voyage had failed and our one concern was to get away with our lives. I early realized that there was no hope of assistance while we were in the air and that we would have to take to the lifeboat. However, with the sea then running and the gale blowing, we simply had to stay in the air. Engineers Loud and Aubert commenced to take the large motor apart and throw it overboard, to lighten the ship. At daybreak on Monday, the third day out, I find I made a note reading, "7 AM All ready during the night to leave in the boat, but the breeze too strong for launching. Listened-in and heard the *SS Main* (German) very strong. Now hear Cape Sable sending a message to some ship for us. Copy it. It is from the *New York Times* and is about the weather."

At 7:20 that morning our navigator took his first sight for position and made us in Longitude 65.51 West. This was 210 miles east of Nantucket. We were steadily drifting south in a beautiful sunny morning.

From that time on, we drifted in a southeasterly direction. From my log I find that I listened in all day and into the evening. The last note made in the air in the radio log reads: "7 PM Hear wireless stations working from Cape Sable to the Southern States." In that early day, that meant that I heard just about every station in North America.

The following, taken from my log, tells the remainder of the story:

"October 18th, 1910. Notes made after arrival on board the Royal Mail S S *Trent*, made from memory and the log of the *Trent's* wireless operator."

"Remained on watch until 3 AM, 18th, listening to various stations working, static very bad. Unable to read Cape Cod but hear him working. I turned in at

3 AM, but was awakened about an hour later by calls of a ship in sight. Descended into the lifeboat and called C Q D. Nothing doing. Then got an electric torch and commenced calling in Morse lamp fashion. Was eventually answered by the *Trent* and signaled him that we were in trouble and required help. Also conveyed to him that we were equipped with wireless. The *Trent's* operator was awakened, and he called us.”

When Wireless Stepped in to Rescue



Louis Ginsberg, wireless operator on the Royal Mail Steampacket Line's SS Trent who received the "CQD" from Jack Irvin, operator of Walter Wellman's airship America on October 18, 1910.

As I had my head phones on all this time, I answered him and instant radio communication was established. I am indebted to Mr. Louis Ginsberg (the *Trent's* operator) for copies of the following messages which were copied

and sent by him; I did not do so, merely reading out

his messages to Mr. Wellman as he sent them.

Trent: Do you want our assistance?

America: Yes. Come at once, in distress, we are drifting, not under control.

Trent: What do you want us to do?

America: Come ahead full speed, but keep astern, we have a heavy tail dragging.

Trent: OK. Am standing by wireless in case of trouble.

America: You will pick us up at daybreak, you will be better able to see us then.

Trent: OK.

America: Come in close and put your bow under us, we will drop you a line but do not stop your ship as you will capsize us.

Trent: OK.

America: Who are you and where bound?

Trent: *SS Trent* bound for New York.

America: Have one of your boats ready to launch, as we will probably capsize when we launch our boat.

Trent: OK boat manned.

America: We are going to launch the boat, stand by to pick us up.

Wireless communication then ceased. I cut the antenna and ground wires, put the watertight doors on the wireless cupboard, and stood by. The boat was successfully launched, a most hazardous operation. We were drifting fifteen miles an hour, with the boat swinging beam on to the sea and behind us the ton-and-a-half trailer. At the signal to "let go" both clutches holding the boat to the car were jerked. The boat fell into the water, lurched gunwale under, then righted. The trailing equilibrator hit us, stove a hole in the boat above the water line, and bruised Loud and myself. The *Trent*, ploughing along at 16 knots, almost ran us down. We fell astern and waited for the steamer to come about and pick us up. After considerable maneuvering she came alongside, and with her derricks, lifted the lifeboat aboard. Thus was I able to save the entire wireless equipment.

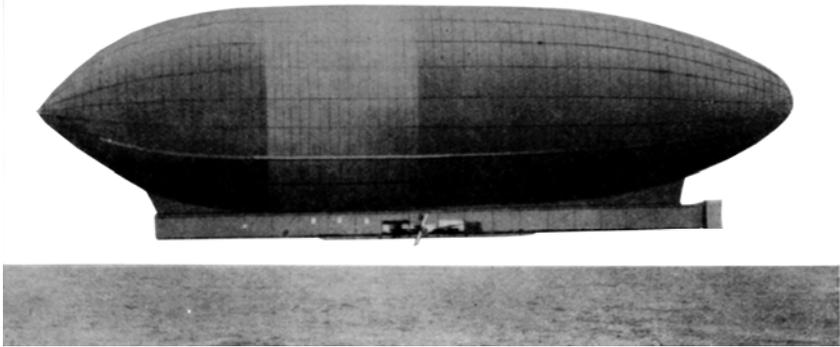


America's crew after dropping the lifeboat into the sea.

The *America*, with the weight of the lifeboat and crew released from it, shot up in the air several thousand feet and soon drifted out of sight. Before leaving her we opened the gas valves so that, eventually she would come down on the sea and not cause damage by landing or dragging over a city. We never heard of her again.

Nobody but those who have experienced it, can imagine the feeling we had upon arriving on the *Trent*. We were overwhelmed with kindness. Two days later we arrived in New York where we found that our attempt to reach Europe in an airship had attracted extraordinary interest. We had occupied the

front pages of the press of the world for several days. We failed, but in later years I had the gratification of knowing that other Americans accomplished what we had attempted.



The America drifting away after the crew dropped the lifeboat.

First radio distress call from aircraft

In a 1950 letter, early flight and wireless pioneer Elmo N. Pickerill, said, "Louis Ginsberg of 218 Main Street, Hackensack, NJ, who was the retired operator on the Royal Mail Steampacket Line's SS Trent and received the "CQD" from



Wellman tipping his hat upon arrival at New York, surrounded by wife and daughters. A smiling Jack Irwin is seen on the extreme left.

Jack Irwin, operator of Walter Wellman's airship America on October 18, 1910. He sent the story of the rescue of the six-man crew to me at the "WA"

Waldorf-Astoria hotel in New York for the Associated Press and the United Press. The

Trent picked them up and brought them back to New York.

The airship travelled 1008 miles after taking off from Atlantic City enroute to Europe and was caught in a tropical hurricane off the coast of Nova Scotia and blown down to a point midway between New York and Bermuda when they were sighted and rescued. No doubt that was the first radio distress call ever handled from any type of aircraft and one which proved successful."