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OLD RADIO

William B. Gould III, Radio Pioneer

Seeking freedom under the cover of darkness on September 21, 1862, eight slaves rowed a boat 21 miles down the Cape Fear River from Wilmington, North Carolina, to the Atlantic Ocean. It was daybreak when they reached the mouth of the river where the USS *Cambridge*, a US Navy ship blockading the Confederate fort there picked them up. Once on board, the slaves were termed "contrabands of war."

They were offered a chance to join the US Navy and fight in the Civil War. One of them, William B. Gould, a literate slave, would keep a diary of his Civil War service. His great grandson William B. Gould IV recently published this diary as *Diary of a Contraband: The Civil War Passage of a Black Sailor*. (More information about the book is available at www.amazon.com, and more on the diary may be found at www.law.stanford.edu/library/gouldldiary/.)

After the war William B. Gould married and settled in Dedham, Massachusetts. He was first employed as a plasterer, a trade he had learned in Wilmington, and later became a contractor. He was a dedicated family man who strongly believed in education. His grandson would become a ham radio pioneer and an electrical engineer.

1NP

Born on March 14, 1902, young William B. Gould III (Bill) would have his first two-way radio contact at the age of 13 using a buzzer as a transmitter. He used the call WG. Later in 1919 at the age of 17, he would pass his Amateur Radio test and be issued the call 1NP. His license (see Figure 2) authorized him to transmit spark not exceeding 500 W into an antenna with a single lead-in wire, an "L" shaped antenna 30 feet high, 50 feet long and made up of 6 wires. See Figure 3. He was very active on ham radio from the beginning, contacting stations all the time.

I'm sure it was due to his location and ham radio activities that he decided to enroll in the Worcester Polytechnic Institute (WPI). This was in 1920 or 1921. WPI was the third college in the country with a wireless club, starting in 1909, and used the call letters WPI. In 1913 the government issued the call 1YK and required that only licensed operators would be able to use the



Figure 1—William B. Gould III, 1NP, in a photo taken on November 22, 1929 as he went to sea.

Figure 2—The original 1919 license for 1NP.

station. The Wireless Association immediately started radio classes for the students. On the air almost every day, it's logical that Bill would have been in frequent communications with 1YK at WPI and would have made many friends there.

The 1922 Transatlantic Tests at WPI

During the December 1921 tests, Godley heard 1YK in Scotland. This came somewhat as a surprise to the Wireless Association, as they were only using 20 W at the time. They later attributed their success to the experimental antenna system they were using.

By 1922 Bill had a "Radio Operator, Commercial First Class" license, as he was the Chief Operator at 1YK for the years 1922 and 1924; this was a requirement. Under Bill's leadership in December 1922, 1YK was invited to participate in the Transatlantic Tests. The WPI Wireless Association had been experimenting with their antennas during that year, and had qualified earlier, with their 50 W transmitter being heard clearly in the Mississippi valley.

From the original letters sent out by ARRL Traffic Manager F. H. Schnell, 1YK, was assigned to transmit under group "N" at very specific times. (You can see the original assignment letter and schedule on my Web site, www.eht.com/oldradio/arrrl/index.html.) From the handwritten notes, Bill participated in the Transatlantic Tests with his assignment to send on Thursday, December 14, 1922 from 0515-0530 GMT.

A Career in Radio

Bill's first job after college was as Engineer with Worcester's radio station WTAG; this was from 1925 to 1929. During this time he also enlisted in the US Naval Reserve as a Radioman. He served on the USS *Eagle*.

In 1929 he followed the path of so many other young radio operators, that of going to sea. Figure 4 shows his *Service Record and Identification Certificate of Radio Operator*. His first assignment was on the SS *Edith*, a coastal steamer that also traveled to the Caribbean. He stayed here until December 1930. Bill also served for a short time on the SS *Gov John Lind* in 1931. Figure 5, scanned

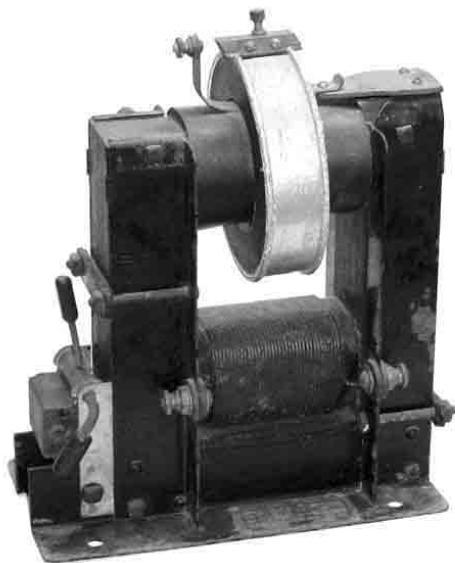


Figure 3—This spark transformer belonged to 1NP and dates back to 1919.



Figure 4—Gould's *Service Record* book. All Radiomarine Corporation of America radio operators carried this book.



Figure 6—The newspaper is dated Monday October 7, 1957. Engineers in the Countermeasures Division, US Army Engineering Laboratories, have been pinpointing the satellite orbit with radio direction finders. On the left is Walter T. J. Day, operating the oscilloscopes, and on the right is William B. Gould III, who is directing the operation.

Vessel	From	To	RATE	Division Controlled By	Supt. or Manager's Signature
515 Fuel EDITH	10/14/57	11/20/57	#	Eastern	W.B. Gould
Edith	2/14/58	2/17/58	#	Eastern	W.B. Gould
Resigned to accept employment with					
A. H. Buel and Co.					

Figure 5—The Vessel Record form from Gould's *Service Record* book.

from a page in Bill's *Service Record*, shows his ship assignments. He remained active with the Naval Reserve for a few more years, attaining the rank of Chief Radioman.

His next big job was with the Metropolitan District Police Radio in Boston 1936-1940. I understand he was instrumental in setting up the communications system for the Boston police.

In 1940 he moved his family to New Jersey, where he was to begin a long career in the government, with the Signal Corps Labs in Fort Monmouth. He worked on the Army's first radars and supervised the design and development of the first weather radar equipment. It was here he would come to work with Dr Harold Zahl, the Director of Research from 1948 to 1966 at Fort Monmouth's Camp Evans.

October 4, 1957

On October 4, 1957, *Sputnik* was put into orbit by the Soviet Union. Dr Zahl was awakened by a telephone call from co-workers Hans Ziegler and Bill Stroud. Hearing the news, Zahl joined them for a ride to the home of Edward Rich in Farmingdale, New Jersey. There on a Collins R-390 they heard the *beep-beeps*, as they called them, for the first time. They listened all night, calling their team one by one, until all were alerted. Those who were hams ran to their stations, as Bill did, and listened.

The next day the entire team was in place, tracking the satellite for the government. Figure 6 shows a newspaper dated October 7. Dr Zahl would later say:

But perhaps most important of all during these early hours on October 5 were the efforts of a few of our Countermeasures people operating an experimental direction finding station at Collingswood, N. J. In the open, and in freezing weather, Bill Gould, Harold Jaffe and associates, day after day, all through the long nights, week after week, gave out bearing information—information vitally needed by the Vanguard Computing Center at NRL to determine orbits and make predictions. Yes, the

Soviets had kicked off, but before we could really play in the game, we first had to find the ball.

Retiring to Ham Radio

Bill's calls changed over the years. 1NP became W1NP. Eventually, after moving to New Jersey, he changed his call to K2NP. Retiring in 1969, Bill and his wife Leah enjoyed many trips around the country and around the world. They would always find time to visit ham radio friends, friends who were made on the air. Bill continued to be on the air and active with many organizations, including Life Member of the IEEE, director and vice president of the Old Old Timers Club, member of the Quarter Century Wireless Association and the Antique Wireless Association, where he was a close friend of founder Bruce Kelley, W2ICE. Bill remained active and on the air until the end. He became a SK on August 15, 1983.

His obituary would read:

William B. Gould III, Radar, Radio Expert

William Benjamin Gould III, now deceased, was also one of the early Black electronic engineers at Fort Monmouth. Coming to Fort Monmouth in 1940, he was responsible for the installation and operation of early warning radar systems on the West Coast of the US. During the 1950s, Mr. Gould directed research involving instrumentation of long-range guided missiles at Cape Canaveral. Before his retirement in 1969 he was a section chief in the Electronic Warfare Laboratory, directing research and development involving the application of radio and radar for meteorological purposes. During his 29-year career he contributed to the development of radar equipment from the old spark gap transmitter to the vacuum tube and the modern solid state devices.

(August 16, 1983, *Asbury Park Press*, Asbury Park, New Jersey.)

Check my Web site for more photos and information about 1NP and links about the book: www.eht.com/oldradio/arrrl/index.html. **QST**