

# The Presidential Communications Railroad Car “Crate”

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Presidential Rail Car, U.S. Number 1  
Ferdinand Magellan  
a National Historic Landmark

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The Great Seal of the President of the United States as displayed in bronze on the rear gate of the FERDINAND MAGELLAN

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## A Brief history of the Ferdinand Magellan in Presidential Service (Or Life before "Air Force One")

The newly rebuilt Ferdinand Magellan was presented to President Roosevelt on December 18, 1942, exactly 14 years from the day it rolled out of the Pullman Company shops as a new unit. During World War II, for security reason, only the word "Pullman" appeared on the outside of the car so that from a distance, the rolling fortress looked like any other private rail car. Whenever it was part of a train, however, the train moved under the commodity code "POTUS" (the first letters of President of the United States.) Every railroad official knew that "POTUS" had the right of way over all other rail traffic. To lessen the chance of sabotage during the war, the car did not have a permanent storage location in Washington, D.C. It was moved around when not in use and stored on various sidings at Washington's Union Station, the Potomac Railroad yards, the Naval Gun Factory at the Navy Yard and in the sub-basement of the Bureau of Printing and Engraving.

Hitched to the end of a private train that included baggage cars, sleeping cars for staff and a communications car that at some point was replaced by a hospital car, the Magellan could function as a veritable White House on wheels—a reverberating fortress. And as “Presidential Rail Car U.S. Number 1,” it took precedence over all other rail traffic.



The Dining Room



The Presidents State Room

The last trip for the Ferdinand Magellan in government service was in 1954 when Mrs. Eisenhower traveled in it from Washington, D.C. to Groton, Connecticut to christen the world's first nuclear powered submarine, the U.S.S. Nautilus. After this trip, the car stood idle for four years. It was declared government surplus in 1958 and was offered to the Smithsonian Institution.

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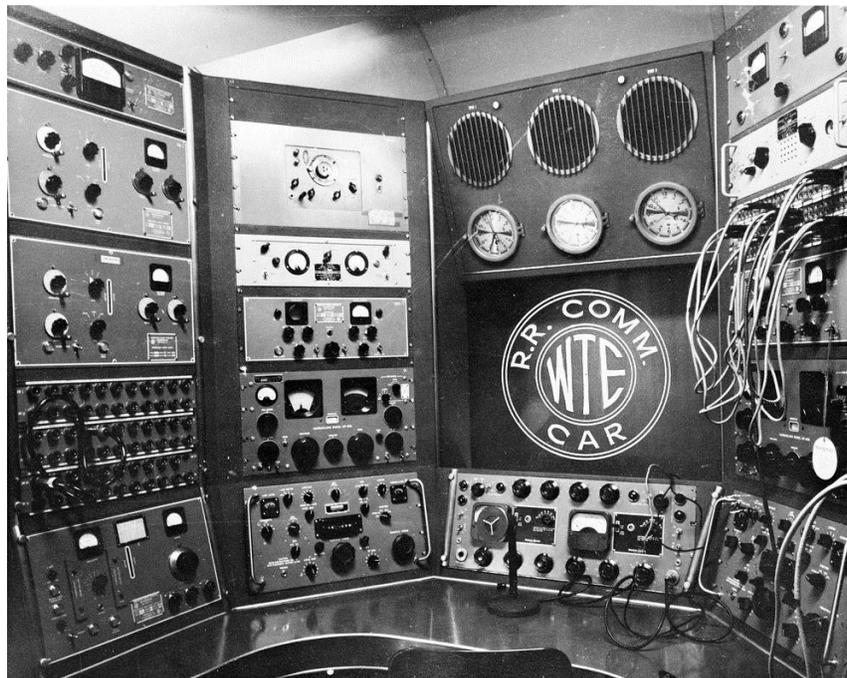
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**In recognition to the Army Signal personnel and their unusual assignment POTUS**

The Presidential Train Ferdinand Magellan - White House communications via, **3WTE** on wheels. We feature the U.S. Army Signal Corps., General Albert J. Myer, and Radio Railcar installation.

One fall day in October 1956 12noon EDT will long be remembered by hundreds of 14 MHZ SSB State side amateurs. It was the day W3WTE was, of all places, 60 feet below the Cleveland, Ohio, Railway Terminal Tower Station working the bands. The detail was called “Operation Earthworm” We have a QSL courtesy of W3WTE.

“POTUS” an acronym, stands for President of the United States! The special railroad car of the White House away from home, luxury living, rolling home, and lecture platform, communications, safety, press corps and energy car. This amazing city on wheels was at times a nightmare for the Secret Service, Railroad and logistics involved in the Presidents safety. There was an advanced two car train and each crossing was inspected by the Secret Service and rail authorities.



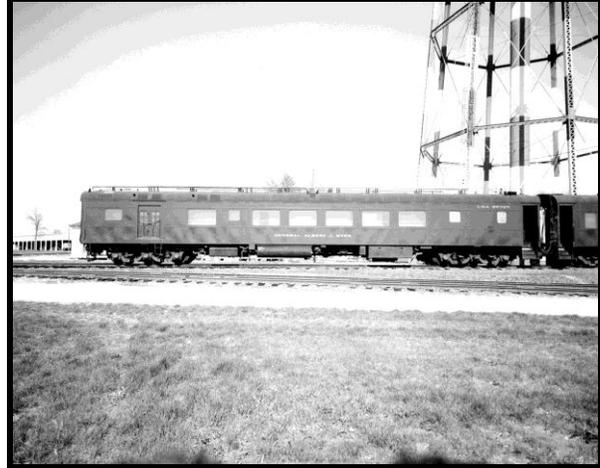
Above radio control console occupies part interior of presidential communications General Myers Car. Multiple control panels, a maze of gadgets for radio broadcasts, radio photo transmission, tape recordings of presidential speeches and incoming and outgoing teletype printer copy.

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The generator room



The WHCA communications car (Crate)

Two diesel AC generators are on the right side of car, can supply enough power to operate the train in any capacity. Mr. Charles Clemens K6QD spoke of his duties much earlier when first assigned to Presidential Communications in 1942. He was chosen to be the first CW operator between the Presidential Train and the White House via HF radio in railroad Car 1401, “The White House on Wheels.”

Clemens explained some front seats had been removed and an operating table installed full of radio devices in there place. Telegraph lines alongside the tracks provided a lot of clicks that made it difficult to copy poor signals, mainly in the southwest part of the U.S.A. The clearance requirements for railroad cars prohibited using a real antenna. The radio operators used a wire inside an insulating tube mounted on standoffs about six inches above the metal roof of the car. This was later changed to a copper tube, the same size as the insulating tube, with much better results. Continued the frequency complement ran from 3 MHZ to 17 MHZ. (Car 1401 built in 1914 would be replaced in the 50s by the modern General Albert Myer car) Myer was the first Signal Corps Commander. Clemens K6QD Signal Corps operator said “I was supposed to contact a number of Army stations along our shakedown trip in 1942 riding the rails, none of them more than a couple of hundred miles from our route. As might be expected, results were poor and it was decided to contact WAR in the Pentagon at Washington direct. Successful contacts were made from New Orleans and on the way home.

The small detachment that Clemens knew had evolved into the White House Army Security Agency and finally White House Communications Agency. They wouldn’t believe how much equipment they could eliminate by satellite communications today.

The only real difficulty came when we were close to Washington DC.” Clemens added “Overall, our results were encouraging and we were assigned the task of accompanying President Roosevelt on his swing stumping around the country visiting military bases and aircraft plants.

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Equipment and facilities were improved over the years and when Clemens left in 1948, the car had a small operating room, a code center, a small bunk room with four bunks, a lounge room and the baggage half of the car packed with equipment.

Clemens continued “To make a long story quite short, I worked six years on the Presidential Train, traveling with Presidents Roosevelt and Truman in the United States, Canada and Mexico. We logged well over a hundred thousand miles.” Today, the train is no more, Old 1401 is gone, only known by gild of 1401 above the entry door, Gen. Myer car has been retired and the Ferdinand Magellan is restored and on display in Florida.

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Copy of the POTUS QSL W3WTE

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Partially scripted from March, 1975 Ham Radio Magazine article, “Brass Pounding on Wheels”, by K6QD CC Jr., and Railroad Magazine February 1953. Thanks to Glenn Laser W3WTE for a copy of the POTUS QSL. Glenn advised the card was found at a yard sale or Ham fest in WV and presented to him. - It would be a pleasure to sit and talk with Mr. Clemens today, but I believe he is a silent key because the call has been reissued several times. I can’t come up with anything on the two communications coaches whether they avoided he cutters torch.

When the Ferdinand Magellan was taken out of service in 1958, The two communication railcars were moved and during the 1960’s and 70’s and stored at the New Cumberland Army Depot just outside of Harrisburg, Pa. The communications car was to be maintained by WHASA/WHCA out of Camp David. Their mission was to provide communications for the President, while on trips, whether campaigning for office, or traveling via rail.

President Kennedy used Crate on one of the last official trips when he went to the Army Navy football game in Philadelphia in 1961.



President Kennedy departing Philadelphia

The official call sign of the Presidential Train was City Hall this was used when the train was actually in use, but Crate was used as the un-official call sign by the Camp David (Cactus) personnel that maintained the communications equipment onboard. Crate consisted of two old WWII train cars. They were 85' in length, painted Olive Drab, with three axel trucks. One was a converted Hospital Car. This car was converted into living quarters for SS and WHASA / WHCA personnel. It had a small kitchen, some bunks for sleeping, a small bathroom with a shower and a living area. An old Hallicrafters SX-63 was installed for entertainment.

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The Presidential Rail Car “Crate” is shown at the Thirteenth Street Station in Philadelphia (1961)

The Radio car was a converted something and appeared to have been gutted and then built as required. There was a window installed so the operation could be viewed from the hallway that passed between the rail cars. As you were sitting at the console behind you, there was a large glass window which was by the walkway in the left side of the car. Looking out that glass window past the walkway was another large glass window which was on the car body. If anyone on the platform were to look into the car window, they would see the whole console and operators.



Lounge Area (1961)



Radio Room (1961)

The Radio Car had to be placed on the tracks, so it faced the Hospital car because of the coax connectors on the front end. The train had to be configured with the Hospital car toward the train engine and the Radio or Communications Car following. The coax connectors on the Hospital car were connected by coax jumpers to the coax connectors on the Communications Car. This was also because on the opposite end, (from the coax connector end) were connectors which carried audio to the end of the train.

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The last car would be an Observation Car where the President would ride, stand and speak to the crowds, who would come to see him while on campaign trips.



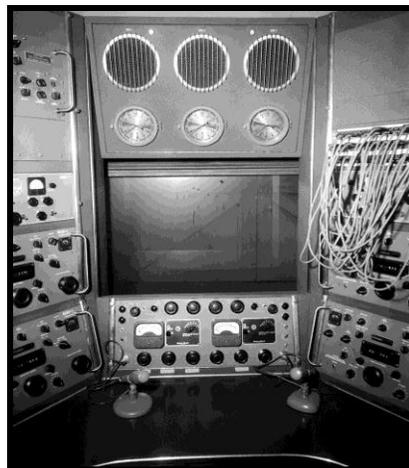
Switchboard Room



View of the Comm. Center

The Radio Car had a console installed which handled all the HF Comm. equipment, the audio amps and VU Meters for the audio PA function and two patch panels for audio routing. It also had rooms for the AC power generators, radio equipment, switchboard and a small Comm. Center.

The radio console consisted of two HF Receivers (R-390A), two SSB/ISB Converters (CV-157) and a TTY converter (CV-116). Two TMC (GPT-750) 1KW transmitters were used for phone patch audio and TTY traffic.



The radio Console in (1961)

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On the top of this car was two HF antennas designed by Collins Radio. Hard to explain, but in the center of the roof of the car the antennas were grounded to the roof using three 90degree elbows. A total of six, three for each antenna about 6 to 8 inches in diameter which fed three pipes in each direction to the end of the cars. About 3' from the end of antennas, the three pipes were bonded together and fed at that point, with 50 ohm coax, to connectors on the trailing side of the car. The pipes were supported by insulators from the center ground, out to the ends.



The Communications Car on the siding in VA. (1961)



Radio Antennas on Radio Car

The two cars were stored at Indian Town Gap Army Depot near Harrisburg, Pa. primarily because President Eisenhower used it several times and it was close to Gettysburg and his farm. In early 1967 I actually took a trip on the Presidential Train (Crate) from Harrisburg to Union Station in DC, and back. All of the guys from M Street came down for a tour we spent the night and went back the next day. It was a total farce, I think the officers wanted to get away for a couple of days and have a party. There was some story about LBJ taking a train ride to Philadelphia for the Army - Navy game, but of course it never happened. I have always wondered if LBJ ever knew that he had something other AF-1 at his disposal.

In the late 1960's the TMC (GPT-750) 1KW transmitters, R-390's and CV-157's were replaced with a Collins Radio state of the art transmitter/receiver, with automatic antenna tuners. The control units were mounted in the console, with the main TX / RX equipment mounted in two 6' 19" racks.

There is no confirmation as to when “Crate” was removed from service or the disposition of the railcars.