PoW radio #1

Canteen

Country of origin:
USA

Remarks

World War 2 prisoners of war (PoW), interned in concentration camps were strictly forbidden of owning radio receivers which would bring the news of progress of the war, and eventual day of release. It was for this reason that technically knowledgeable prisoners attempted to build receivers, in spite of heavy penalties and even death in Japanese camps, to those found in possession of a radio.

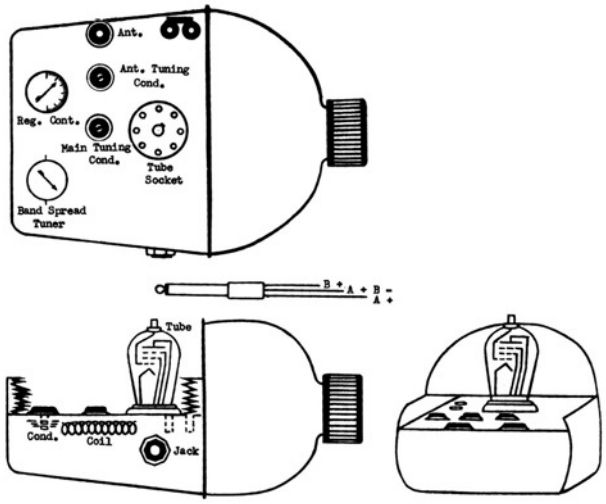
DATA SUMMARY

Developed and used by: Prisoners of War.
Year of Introduction: World War 2.
Purpose: Receiving news on progress of the war under the eyes of their guards.

Major parts for constructing a radio receiver were acquired or stolen from their captors, and bits and pieces from everyday use items such as aluminium foil from cigarette packages.
The receivers, which were concealed during the time when not in use, were usually of a simple design, and small so they could be taken apart for easier concealment. As the original canteen radio on which this chapter was based was lost, we must rely on drawings from '*The Outcome*', and replicas build by Tim N6CC, Al Klaase N3FRQ, David W. Cripe NM0S, Stefano Bianchini with Antonio, Hiroki Kato (AC6CY) and probably many others, using salvaged components, an original still readily available US Army canteen, and a 6SK7 or 12SK7 valve. Although there were numerous examples of PoW radio receivers, of which some will be described in future chapters in the WftW Supplement series, the 'canteen radio' will serve as a good example which was prominently described in literature.

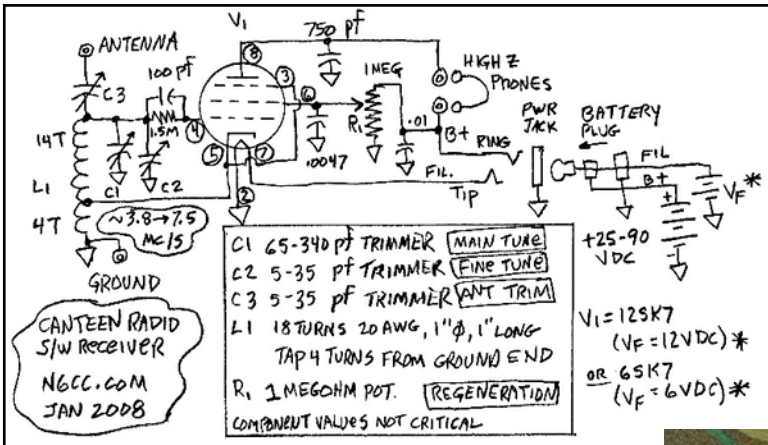
From: **The US Army in WWII, The Technical Series, The Signal Corps, *The Outcome.* George Thompson, Department of the Army, 1966.**

"….nor was concealed radio activity by Signal Corps men in the Philippines confined to the guerrillas. There was at least one incident of it in prison, involving a radioman, William D. Gibson, who had received his commission as a lieutenant in the Signal Corps only a few hours before the fall of Corregidor. A former U.S. "ham" working in Manila as a civilian radio technician, he had offered his services to the Army on Corregidor after the enemy invasion began. But his commission had been delayed till the last hours of his freedom because the medical officers, busily treating wounded men, had not given him the required physical examination. Subsequently, a prisoner in the Cabanatuan concentration camp, he came into the possession of a 1-tube regenerative radio receiver improvised by an officer of the Engineer Corps, Capt. Russell J. Hutchinson, who had built it of scrap parts and placed it inside a GI canteen. Hutchinson, on being shifted out of the prison, left it with Gibson. But the set no longer worked. Its single amplifying tube, a 12SK7, had burned out. Obtaining a different type of amplifier tube, a 6J7, stolen by an American sailor who had a prison job in a Japanese shop, Gibson, rewired the set to accommodate the tube; a cauterizing iron from the prison hospital served as a soldering iron. Looking like any ordinary canteen, the radio was kept hanging at the lieutenant's bed. Japanese inspectors passed it by, suspecting nothing. Its antenna was a No. 22 wire woven inconspicuously into a rope clothesline. Only the headphones had to be secreted separately. The prisoners furtively operated the receiver in the evening, using battery power, which was available in the prison hospital. The little set brought in radio programs emanating from Saigon, Tokyo, and San Francisco. Best of all was the Voice of Freedom broadcast from the Apache after the Leyte Campaign began. This treasured radio receiver was left behind when the lieutenant, suddenly freed with other prisoners departed in the pell-mell of the daring Cabanatuan raid, 30 January 1945…."



This drawing taken from '*The Outcome*' was an inspiration for building replicas and compiling this WftW Supplement chapter.

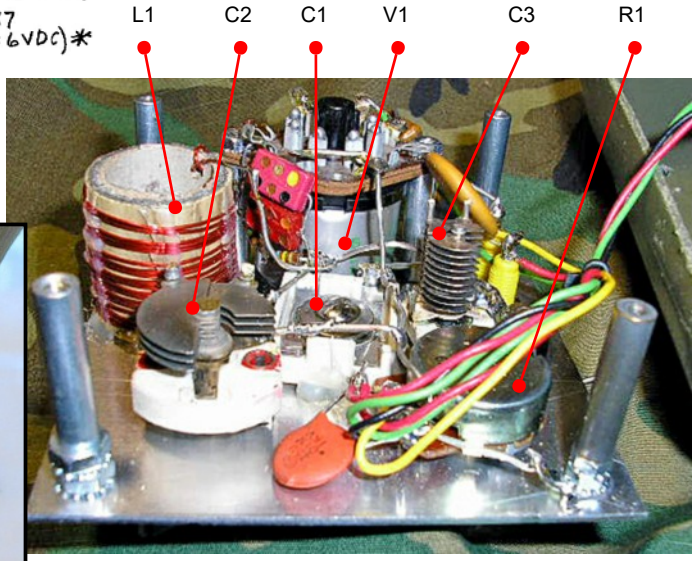
PoW canteen radio replica's.



Circuit diagram of N6CC's replica, based on common pre-war designs published in radio amateur magazines and literature (above).

'Tim J. Sammons, N6CC, replica'.

In 2007/8 Tim J. Sammons, N6CC, made this replica following closely the details of the drawing and general description depicted in *'The Outcome'*. Apart from an original US canteen, a surplus 12SK7, and an old high impedance pair of headphones, he used as much as possible WW2 production components and a few readily available modern parts. His design and circuit diagram inspired others to build their own replica.

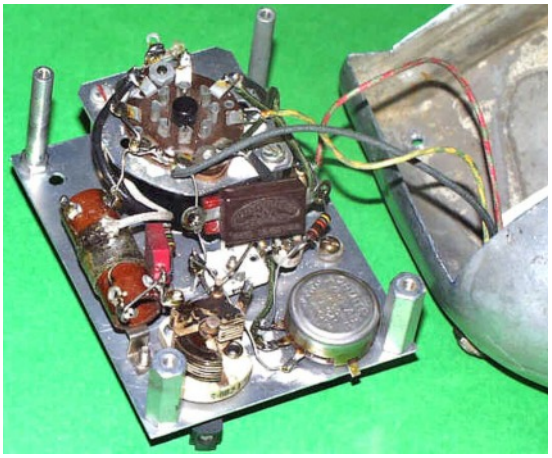


Bottom chassis view of N6CC's canteen radio. (above) For main tuning a mica compression trimmer (C1) was used, adjustable by a screwdriver. Fine tuning (C2) and aerial coupling (C3) was accomplished by two small variable condensers. The coil was wound on a piece of 1-inch bamboo.

Close-up top view of Tim N6CC's replica of the PoW canteen radio (above).

The replica built by N6CC is currently on permanent display at Danville CA Veterans Memorial Building Museum (right). It utilizes a ''captured" earpiece from a common telephone handset for an earphone.

'Al Klaase, N3FRQ's replica'.



Al Klaase, N3FRQ, also built a replica that looks very similar to the sketch in the book. He used a different coil and as far as can be seen WW2 era components.

Another fine replica was constructed by Stefano Bianchini and Antonio of www.usarmy1944.com, based on the N6CC design and circuit. Vintage components were used throughout; the frequency range was changed to cover 6-18MHz

Hiroki Kato (AH6CY) built a reproduction of the canteen radio and wrote articles in the Nov. 2012 and March 2013 editions of *Electric Radio*, including some of the historical background of the Cabanatuan camp operation.

A search on the Internet will provide more detailed, interesting and recommended reading on the topic of clandestine PoW radio receivers.

A replica of the canteen radio receiver constructed by David W. Cripe, NM0S, was an *Ozarkcom* 2012 overall 'Homebrew' contest winner.

References:

- The US Army in WWII, The Technical Series, The Signal Corps, *The Outcome.* George Thompson, Department of the Army, 1966. https://history.army.mil/html/books/010/10-18/CMH_Pub_10-18.pdf
- https://www.n6cc.com/canteen-radio-receiver
- http://skywaves.ar88.net/SPY/spy.htm
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