

Gibson Girl World War Two Survival Radio, in the Comm Center*

by Bart Lee, K6VK, Manager, Winchell Communications Center



"A reaction to the suffragette movement at the turn of the century, Charles Dana Gibson's pin-ups combined a series of features ideal at the time: a slender figure with broad hips and bust, a sultry face, and a mass of wavy hair the model struggled to contain above.

"Gibson's pin-ups usually featured women performing athletics or lording over men with their feminine wiles. In concept, Gibson's ideals were no different than those of today's sex-based advertising.

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^{*} Much text and many pix from: http://hangarthirteen.org/odds-ends-2/

"These drawings used several women as models but the most popular was Belgian-born Camille Clifford, shown here in 1906. Famed for her 18 inch waist, she retired from public life after her husband was killed in the Great War."



AN/CRT-3: "Gibson Girl"

"The SCR-578 was the standard emergency radio for large US aircraft in the Second World War. The system was built around the BC-778 transmitter, a small yellow radio with a distinctive hourglass shape. This is the origin of the nickname "Gibson Girl," a reference to the old 1900s pin-ups with the sharply pinched waists. A close-up of the BC-778 Transmitter. The door holds the spool of wire to connect to the balloon or kite antenna. Radios were rarely given a coat of primer,

and since the Gibson Girl was stored on the floor by the ball turret, it is not uncommon for wartime examples to be heavily scuffed."

This was originally a German design, adopted by the British. See below, and for more pix >>>

"The idea behind the radio was rather ingenious. The airman was to squeeze the unit between his legs and turn the crank on top to charge it. The next step depended on the weather. On a still day, he was to use a pair of hydrogen generator canisters to inflate a small balloon, but on a windy day he was to use a collapsible box kite; both were designed to serve as antennas. In theory, the Gibson Girl unit would allow a downed airman to convey that he was alive and awaiting possible rescue."

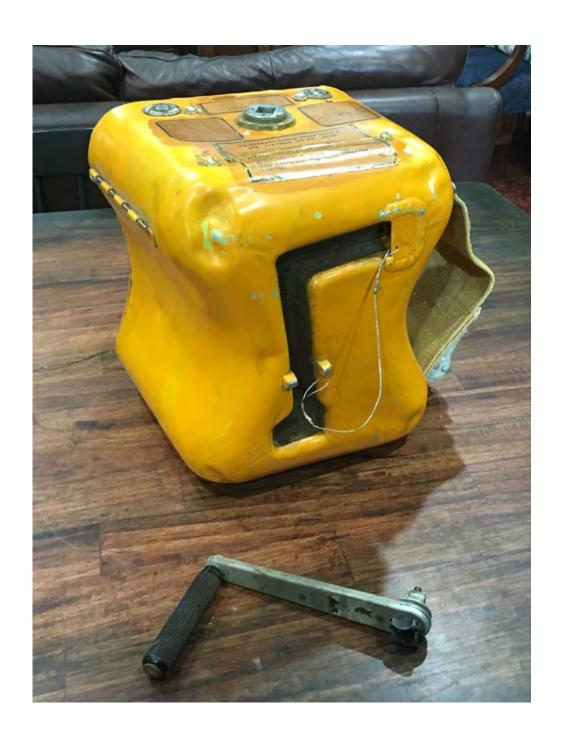


A manual excerpt shows the BC-778's spooled wire being connected to the M-357 box kite.



A manual excerpt shows how the BC-778 Transmitter is held between the legs and cranked for a charge.

"Gibson Girl sets are highly prized today and the most common are B models and postwar AN/CRT-3s. ***"



"A close-up of the back of the BC-778 Transmitter. The handle stowed here (the safety pin is missing) is used to turn the hand crank on top of the radio, charging the transmitter."

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https://www.ima-usa.com/products/original-u-s-wwii-army-air-forcegibson-girl-scr-578-survival-radiotransmitter?variant=14963469025349

A Gibson Girl (above), complete; according to International Military Antiques, Inc. (ima-usa.com):

"The Gibson Girl design was based on a captured German emergency transmitter called the Notsender NS2, easily recognizable

with the same hourglass shape. The British designed an improved version, but lacked the manufacturing capacity. A contract was let to Bendix Aviation for an American version, the Radio Set SCR-578-A. Bendix began deliveries in May 1942. The updated AN/CRT-3 became available in 1945. The Gibson Girl transmitters were used by military and civilian aircraft and ships into the 1960s."

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The schematic diagram:

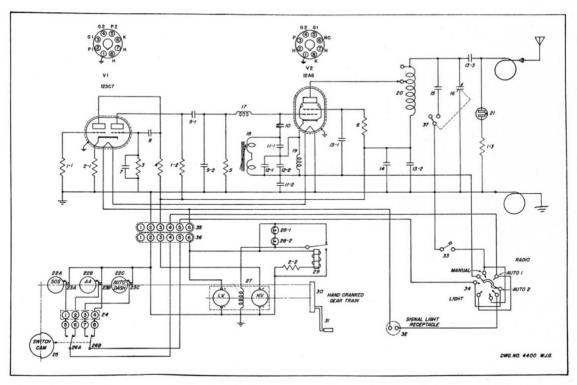


Fig. 15 - Radio Transmitter BC-778-A, Schematic Diagram

From the manual.

RadioMuseum.org notes:

"Used by US Army Air Force. The transmitter was not crystal controlled. It consisted of an ECO RF oscillator-RF output valve 12A6, operating on 500 kHz, grid modulated by a 1000 Hz tone oscillator valve 12SC7. Equivalent to US Navy Model TCY."

In addition to the kite or balloon antenna, sea-water ground could be had, much improving performance:

"... a small round compartment on the front opens up to reveal a ground wire with a weight on the end. These would have been dropped into the water and made a big difference in the efficiency of the antenna. An aircraft flying at 2,000 feet could pick up one of these transmitters from 150-200 miles away. After the war they made a dual channel model that could have transmitted over one thousand miles, but ... the short range transmission was probably better for search aircraft with radio direction finders: the long range frequency channel often was not audible to receivers close to the transmitters (one of the quirks or shortwave radio frequencies)."

https://www.usmilitariaforum.com/forums/index.php?/topic/46103__gibson-girl-scr-578-survival-radio-transmitter/ . For a complete history, see: Louis Meulstee, WIRELESS FOR THE WARRIOR -- (1995, at least two volumes); http://www.wftw.nl/gibsongirl.html .

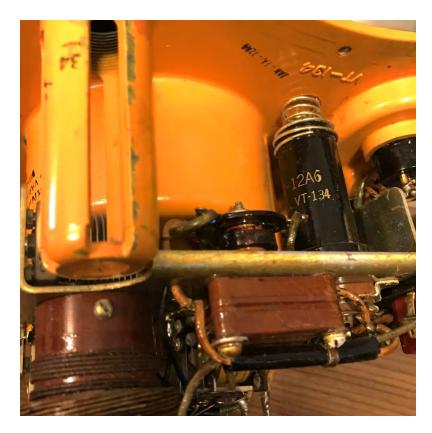
Note that the Russians soon copied the US Gibson Girl, as the British had copied the original German lifeboat radio. Surplus Sales of Nebraska will sell a complete set for about \$895 (if still available): Gibson Girl Emergency Radio - (EQP) AN/CRT-3. Ebay sells the transmitter and components much cheaper. Three manuals are available for download from jamminpower.org; e.g., https://www.jamminpower.org/PDF/Gibson%20Girl/SCR-578%20preliminary%20manual.pdf

The Communications Center features two Gibson Girls. One is complete with the leg strap, without which it is very hard to crank (the crank takes a lot of strength no matter what). This one pictured came as a donation from the Quebec Radio Museum, via Gilles Vrinaud (Bart Lee photos, 2023).











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