

# The Iconic BC-348 Receiver at War

By Bart Lee, K6VK, CHRS Archivist



Enhanced Graphic Copyright John Schneider and CHRS 2022

CHRS features a WW-II BC-348 aircraft “liaison” receiver in the Hall of Communications. The wiki says: “The BC-348 is a compact American-made communications receiver, which was mass-produced during World War II for the U.S. Army Air Force. \*\*\*

Installed in almost all USAAF (and some USN, some British and some Canadian) multi-engined transports and bombers used during the fifteen-year period from before World War II through the Korean War, BC-348 radio receivers were easy to operate and reliable. Designed as LF/MF/HF receivers for use in larger aircraft (B-17, B-24, B-25, B-26, B-29, C-47, etc.), they were initially paired with a BC-375 transmitter in the SCR-287-A system.”\* (CHRS also displays the companion liaison transmitter BC-375 — see below).



†

Post-war, the BC-348 became U.S. amateur radio operators’ favorite surplus receiver: a great performer, especially on the 80 and 40 meter bands, and readily available: “**War Surplus!**” (Of course, the smaller inter-aircraft “Command” receivers also found much favor; way cheaper, and easy to modify, etc.)

\* <https://en.wikipedia.org/wiki/BC-348>; See also:

[https://www.radiomuseum.org/r/military\\_bc\\_348\\_generic\\_model.html](https://www.radiomuseum.org/r/military_bc_348_generic_model.html)

† 3D rendering: By Tesler --

<https://3dwarehouse.sketchup.com/model/4dac9b2658bd3b89ec0c65c47cb443c2/Radio-BC-348-Q>



# ★ ★ BC-348 RECEIVER



(About \$650 in today's, 2022 money)

See the E-ham reviews: Reviews For: BC-348 WWII MW/SW Receiver [--] Category: Receivers: non-amateur adaptable for ham use.<sup>‡</sup> It wasn't quite a Hammarlund SP-600 or a Hallicrafters R-274, but almost as good. It employed two RF stages and hence hams found it a very "hot" and selective receiver. EBay

---

<sup>‡</sup> <https://www.eham.net/reviews/view-product?id=6014>

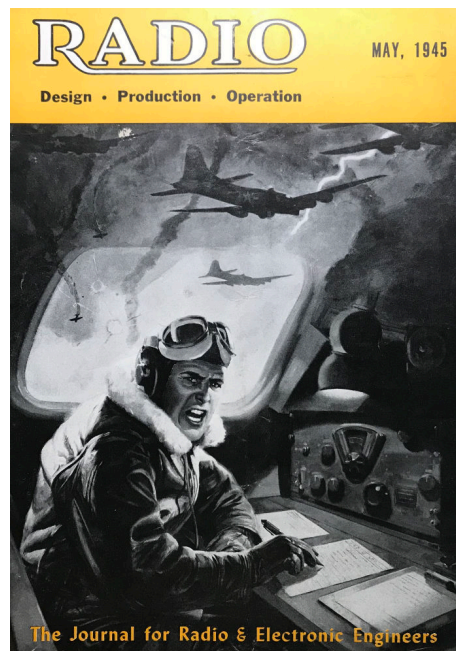
today sells the BC-348 for up to \$2,000,<sup>§</sup> but usually an order of magnitude less, around \$200, depending....

Some years ago, my AWA colleague, the late Marc Ellis (SK) wrote up the BC-348 for *Monitoring Times*, in a splendid series of articles:

Radio Restorations [--] *Bringing Old Radios Back To Life* [--] "Introducing the BC-348" [and several subsequent BC-348 restoration articles].\*\*

Marc was a master of radio restoration, and gave much of himself to the radio hobby.

There follows the *Radio* magazine cover that John Schneider colorized for CHRS for this note (copyright John Schneider and CHRS). **Thank you, John!!**



---

<sup>§</sup> EBay [https://www.ebay.com/sch/i.html?\\_nkw=Bc-348%20Radio%20Receiver](https://www.ebay.com/sch/i.html?_nkw=Bc-348%20Radio%20Receiver) [...]

<sup>\*\*</sup> Reprinted by: <https://www.nonstopsystems.com/radio/pdf-radio/article-bc348-MT.pdf> . See also: <http://www.hpfriedrichs.com/radioroom/bc348/rr-bc-348.htm>

The companion liaison transmitter, the BC-375, is another story, although the CHRS artifact is in good shape, with tuning units. It used the Modulated Oscillator and Power Amplifier configuration – simple, effective, and no longer legal. The transmitter performed poorly on AM, and all too frequent put out FM instead of AM. But in service, it usually emitted only Morse code, CW, and not voice. The amazing auto-tune T-47/ART-13 by Collins replaced it. At CHRS RadioCentral's Communications Central, the BC-375 could serve as a long-wave (630 meters amateur band) beacon. (But the 211 tubes are hard to find...)



**BC-375 GE MOPA TRANSMITTER**

The most famous of all surplus transmitters. Was used by the Army bombers and ground stations during the War. Frequency range is covered by means of plug-in tuning units as shown below. Each tuning unit has its own oscillator and power amplifier coils and condensers, and antenna tuning circuits all designed to operate at top efficiency within its particular frequency range. Transmitter and accessories are finished in black crackle, and the milliammeter, voltmeter, and RF ammeter are mounted on the front panel. **Frequency Range:** 200-500 Kc. and 1500-12,500 Kc. (Will operate on 10 and 20 meter band with slight modification). **Oscillator:** self-excited, thermocompensated, and hand calibrated. **Power Amplifier:** neutralized class "C" stage, using 211 tube, and equipped with antenna coupling circuit which matches practically any length antenna. **Modulator:** Class "B"—uses two 211 tubes. **Power Supply:** Dynamotor which furnishes 1000 V. at 350 Ma. **Conversion** instructions and diagram for 110 V. AC furnished upon request for **\$1.00**.

**PRICES:** As follows—

Transmitter only.....	<b>\$12.50</b>
Tuning units TU-5B, TU-6B, TU-7B, TU-8B, TU-9B, TU-10B, TU-26B, choice .....	<b>\$2.50</b>
Dynamotor PE-73C.....	<b>\$3.95</b>
Antenna tuning unit (BC-306A).....	<b>\$4.95</b>

(13 IX 22 de K6VK) ##