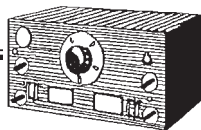


THE COMMUNICATIONS RECEIVER

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The Hallicrafters "Sky-Rider" S-1 Short Wave Receiver

Radio collectors strive to have the first of anything...and they like to have the provenance of the item to be clean and well documented. The Hallicrafters S-1, the first of the famous Skyrider series of receivers, easily meets these requirements.

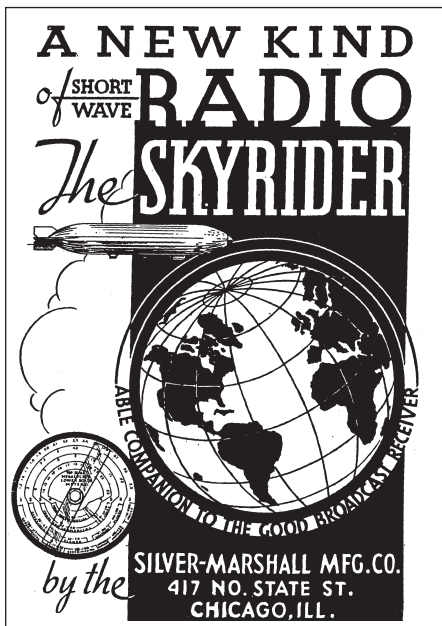
Sales and marketing are key to the success of any manufacturing company. Bill Halligan, an expert and experienced commercial radio operator, was also an experienced salesman, having worked in that capacity for the Tobe-Deutschmann Company selling radio-related products for five years. And he used this experience and his contacts in the industry to get his first radio products off the ground and introduced to the public.

He designed and then pre-sold his radios to radio retailers, such as Allied Radio, and with the orders in hand then went to the Silver-Marshall Manufacturing Company of Chicago to have the sets built. Why Silver-Marshall? They had the coveted RCA license, which Halligan did not. In due course he purchased an ailing radio manufacturer with the RCA license, another of the accomplishments of this remarkable man. Max de Henseler's book (see references) gives the details. And he did this in the midst of the world-wide great depression, with virtually no funds.

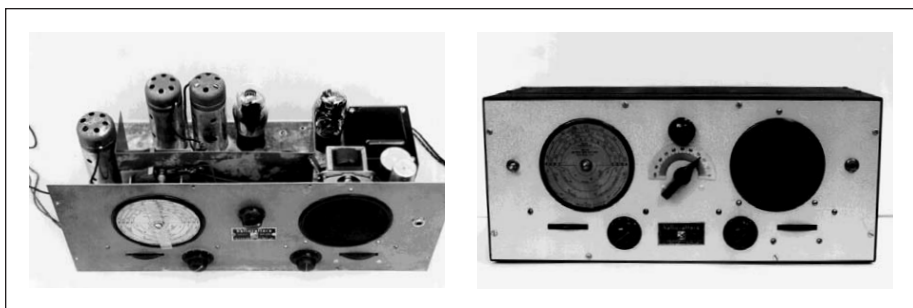
Bill Halligan formed the Hallicrafters Company in 1933 when he was 34 years old. The name has been described by one source as deriving from "Halligan's Crafters," or craftsmen. The "Skyrider" name was born in 1934, taken from the famous Sky Ride cars at the 1933 Chicago World's Fair. The first radio bearing the name, the Hallicrafters Sky-Rider (*as it was sometimes spelled in early advertising—Ed.*), was introduced in early 1934 and reviewed in *Short Wave Radio* in July, 1934. Ads were placed in *Radio* for June, 1934, and in *Radio News* for July, 1934.

Halligan had several things going for him. In addition to the timing, which was absolutely right, he was able to produce and market a complete short-wave receiver for the very low price of \$39.95. His knowledge of the sales and marketing process and his radio industry contacts were invaluable. His design appeared to be forward looking, while at the same time it retained the familiar regenerative circuit, but in an easy-to-use form. The only accessory needed, and it was optional, was a pair of headphones.

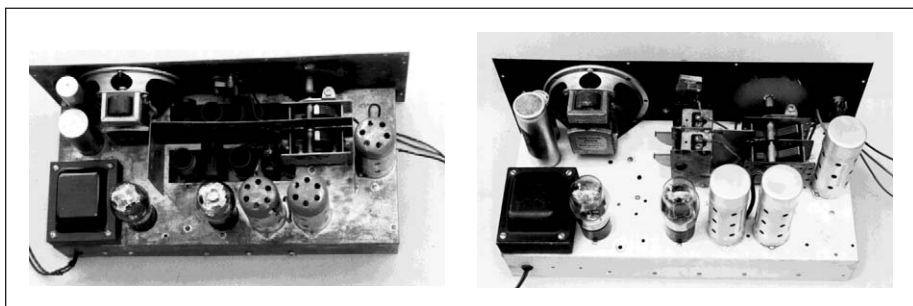
The tuning range was 1500 kc to 25 mc in four bands, switched from the front panel. No plug-in coils, and no BC band (this was a short-wave receiver). The five-tube circuit included the power pack, and a panel-mounted speaker completed the receiver. Edge-mounted tuning



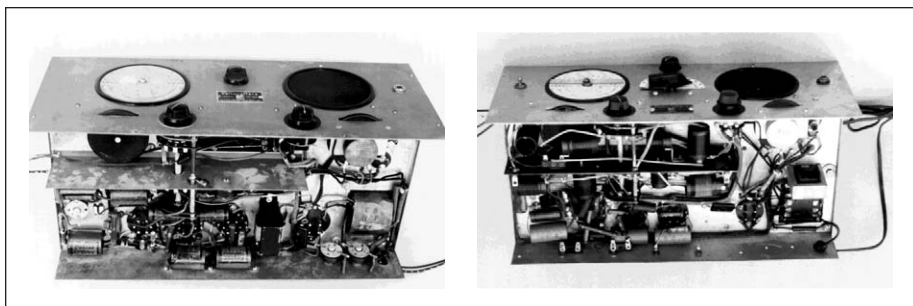
Cover of the S-1 manual. Hallicrafters name nowhere in sight!



Front panels of basic model (left) and the amateur bandspread model are similar, except for presence of centered bandspread dial on latter.



Note physical design differences between the basic model (left) and the amateur bandspread model.



A look beneath the chassis of both sets. Potted bypass capacitors of the type installed in the basic model (left), were sold by Halligan.

and gain controls were not just design features; the main dial had an 18:1 vernier, making tuning of the short waves an easier task. The steel cabinet, of cane metal, provided adequate ventilation. To change tubes the top had to be unscrewed, the absence of a hinged lid contributing to cost cutting. The tube line-up was comprised of a 6D6 tuned r.f., a 6D6 as a regenerative detector, a 6C6 first audio, and a 42 audio output, with an 80 rectifier tube.

Three versions were offered: The basic receive-

er, which sold for \$39.95; a special amateur version with electrical band-spreading which sold for \$49.50; and slightly higher-priced battery models of each. In researching this article the owners of three S-1s were contacted and photographs obtained. These show significant design differences between the two basic models. The circuit (see schematic) is fairly conventional, but note the phone jack hook-up and the absence of audio interstage transformers. A very distinctive

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feature is the unique name plate, riveted to the panel, combining the hallicrafters (*already in the familiar uncapitalized style — Ed.*) and the Silver-Marshall names, along with the logo and the statement "handcraft makes perfect."

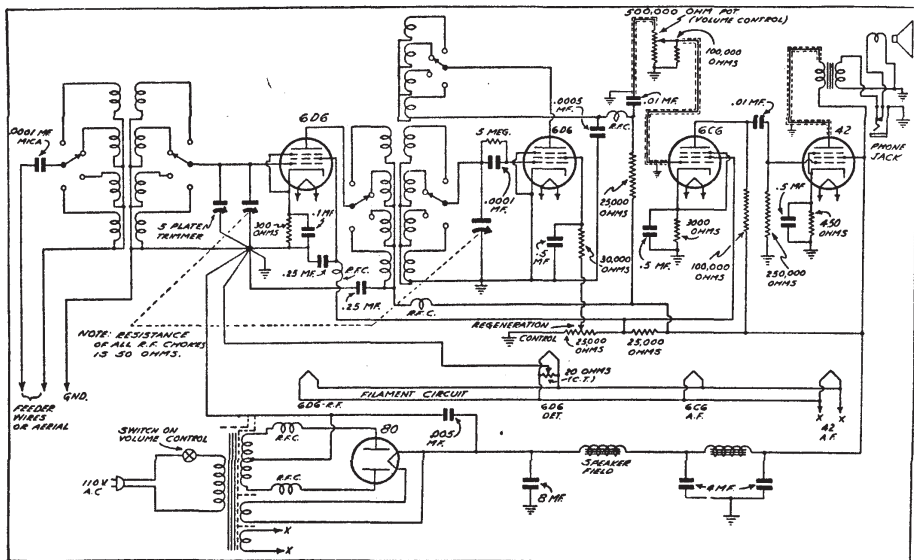
The Hallicrafters S-1 receiver is quite rare, but since the writer knows of three, there are undoubtedly more around. Keep your eyes open at the flea markets and in antique shops; as they do

show up! Price? Whatever it is worth to the seller...and to the buyer. 

REFERENCES:

Short Wave Radio, July, 1934.

The Hallicrafters Story by Max de Henseler, 1991. Obtainable from the Antique Wireless Association Treasurer. Write for details.



Circuit diagram of the Sky-Rider S-1.

LOOMIS, continued from page 29

supposed use of a demodulator or detecting device of some kind in his system. He does refer in his notes to a galvanometer, but his patent is silent on this point! Therefore, a reader of his patent, one "skilled in the art of land telegraphy," might guess that he simply placed a telegraph sounder in his aerial-to-ground circuit. After all, the title of his patent is "Improvement in Telegraphing." But if, as some Loomis fans urge, he used a very special galvanometer to detect electromagnetic radiation, one finds no support whatsoever for such conclusion in the patent specification or in the claim; and the patent contains no drawing.

It is significant that under the Patent Laws of the United States, "The specification shall contain a written description of the invention, and the manner and process of making and using it,

in such clear, concise, and exact terms as to enable any person skilled in the art to which it pertains ... to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention." The Loomis patent specification flunks this most basic and most elementary requirement of the Patent Law. Nor does the single claim of the Loomis patent call for any sort of galvanometer or other detecting element. Remember, the seventeen year patent monopoly is granted by the United States in return for the inventor making such a complete disclosure of his invention that one reading the patent would be enabled to practice that invention.

Accordingly, if that patent had ever been asserted against an alleged infringer it would surely have been found invalid.