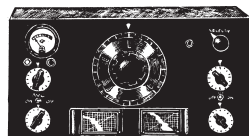


THE COMMUNICATIONS RECEIVER



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The All-Star Junior Communications Receiver: A Kit For Lean Depression-Era Purses

By H. Paul Bohlander, W3VVS and William B. Fizette, W2DGB

This column has more than once mentioned the financial hardships of the Great Depression of the 1930s. There was very little discretionary money available for interests such as amateur radio. Manufacturers in the growing radio field who catered to amateurs were constantly attempting to come up with products which would not only do the job, but were reasonably affordable.

One firm then in the short-wave radio kit business was the Thordarson Electric Manufacturing Co. of Chicago. (Heathkit was by no means the first in this area.) Thordarson had been in the communications products business since 1895, concentrating on transmitters, which of course were good markets for the company's transformers and chokes.

In retrospect it seems obvious that, in addition to their commercial and government customers, Thordarson would target the growing amateur community—especially those hams who had at least some funds to spend on the hobby.

The receiver kit products, all superheterodynes, began with the All-Star (Senior) in 1934. It was followed by the All-Star Junior in 1935 and a somewhat later variation having a regenerative i.f. This product line seems not to have received a lot of publicity.

The infrequent Thordarson ads in *QST* made no mention of the receiver, nor did the mid-1930s *ARRL* Handbooks that were searched. Lawrence Cockaday, a well-known writer for

Radio News, described the All-Star in an extensive article in the September, 1934 issue. A full-page ad by Thordarson in the same issue presented the receiver as a six-tube kit which could be purchased item-by-item as the constructor desired or could afford. A four-page construction folder was also available.

It should be mentioned that radio amateurs in



Front and rear views of the receiver with its Oxford dynamic speaker.

the early 1930s were still using regenerative receivers, mostly home-built using parts salvaged from broadcast radios. For many, the new and superior superheterodyne circuit seemed too complicated to build—at least from scratch.

The appearance of an affordable superheterodyne kit helped resolve this problem. The engineering was done, sheet-metal work was formed and punched, critical parts were included, and many of the common parts such as wafer tube

sockets could be salvaged from old BC radios.

The apparent success of this little radio led to the early 1935 introduction of the five-tube All-Star Jr. Once again, Lawrence Cockaday wrote an extensive introductory piece in *Radio News* (March, 1935 issue). And once again *Radio News* participated in the promotion by offering free-of-charge informative literature. Included

was a schematic diagram, three pictorial wiring diagrams, a parts list, and with wiring and alignment instructions.

This splashy introduction was not uncommon in the 1930s. But from then on the marketing effort of such a secondary-level product was often left to distributors such as Allied Radio and Newark. For example the 1935 Allied Radio catalogue devoted a full-page to the two All-Stars, detailing all the parts and options. The options included speakers, aerial kits, an "official" cabinet, and special etched panels. Frequency coverage was from 540 kHz to 30 MHz (550 to 10 meters), divided into six segments with two coils for each.

Allied listed the total cost of parts to build the Junior version at \$26.16 in 1935 (less tubes and a cabinet), with the All-Star Senior selling for approximately \$34.00, a considerable difference. The foundation kit for the All-Star Junior, listed at \$2.25, included a formed and punched metal chassis and an 8" x 16" front panel (identical to that used in the All-Star Senior), both with a black crystalline finish.

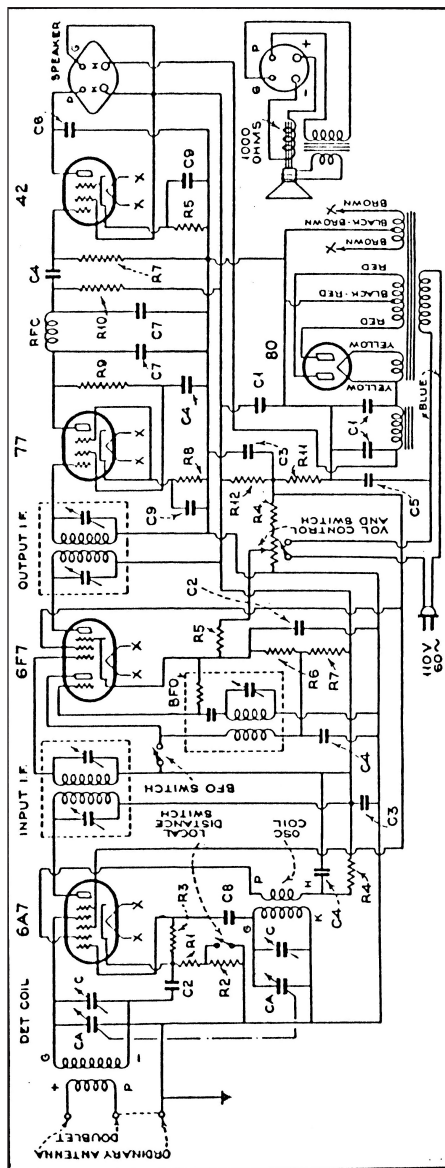
Cost-saving measures in the "Junior" circuit included using a 6F7 dual-function tube as both an i.f. and a BFO as well as the omission of the headphone jack and interstage audio transformer. One advantage of the circuit was the use of the more advanced six-volt tubes instead of the original 2.5-volt types.

Thordarson's marketing for these products included other manufacturers or sponsors, namely Belden, Cornell-Dublier, Crowe, Electrad, Eric Can, Hammarlund, Meissner, Oak, and Ohmite. Oxford supplied a 6" dynamic speaker with a 1000-ohm field, an output transformer matching the type-42 output tube, and a four-conductor cable and plug.

The Crowe airplane-type dial located in the center of the front panel operated the Hammarlund dual 35-pF band-spread capacitor, with two 140-pF variables used to band-set the local oscillator and the antenna circuits. The gain of the 6F7 370-kHz i.f. stage was controlled by a potentiometer in the cathode circuit.

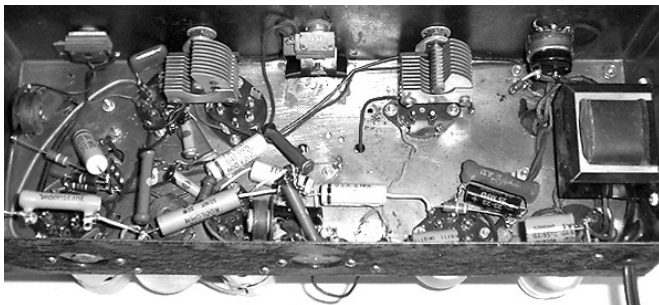
While the Meissner plug-in coils were generally similar to those used in the All-Star Senior, they did differ somewhat in the number of turns and the placement of the windings on the coil forms. A "local-distance" switch, which changed the cathode bias on the 6A7 converter, acted to prevent overloading on strong signals. Other front-panel controls included a BFO switch, a gain-control with an AC power switch, and the oscillator and detector tuning capacitors.

The All-Star Junior pictured here was resurrected and rebuilt in recent years by W3VVS. It



The All-Star Junior's 5-tube circuit utilized the dual-purpose 6F7 as i.f. amplifier and bfo.

is an energetic little set, bringing in lots of signals. There is no selectivity on this model to speak of, although the later version with i.f. regeneration would probably fare better. The lack of a preselector or r.f. stage limits performance on the higher frequency bands. (For a time separate preselectors were marketed for low-cost receivers



A peek under the roomy chassis. Most of the old wax-covered paper caps have been changed out.



The Meissner plug-in coils in what looks like their original box along with the lid from the Oxford speaker carton.

such as the All-Star.)

For awhile, the two All-Star receivers satisfied an important need among hams and SWLs. They allowed access to cutting-edge technology at a time when individual resources were at an all-time low. Not too many of these radios are seen any more, and that is unfortunate. We would certainly like to hear from any readers who have had experience with the All-Star receivers. ☐

REFERENCE

Bohlander, H. Paul, "The 'All-Star Senior-A Depression Receiver.'" *The Old Timer's Bulletin*, Vol. 32, No. 2, August 1991.

OBITUARIES, continued from page 32

He began his engineering career at Western Electric Company in Lookout Mountain, TN.

SIR JOHN MILLS, 97, (4-23-05) actor. The celebrated British actor appeared in a variety of film, stage and television roles during a career that spanned 70 years. A sampling of his more than 100 film credits include *Forever England* (1935), *Goodbye, Mr. Chips* (1939), *In Which We Serve* (1942), *This Happy Breed* (1944), *Great Expectations* (1947), *The History of Mr. Polly* (1949), *Hobson's Choice* (1954), *Above Us the Waters* (1955), *Tunes of Glory* (1960), *Young Winston* (1972) and *Gandhi* (1982). Sir John's last film was *Bright Young Things* in 2002. He was awarded an Oscar for Best Supporting Actor for his performance of an Irish village mute in David Lean's 1970 romantic epic *Ryan's Daughter*. Sir John made his stage debut at the London Hippodrome in 1929 and soon was performing in Noel Coward's reviews and plays, including *Cavalcade* (1931). In the late 1930s he appeared in *She Stoops to Conquer*, *A Midsummer Night's Dream* and *Of Mice and*

Men. Sir John was offered the lead in *Key Largo* on Broadway but WWII intervened and he joined the Royal Engineers and later won a commission in the Royal Monmouthshire Rifles. He made his American television debut on *Producers' Showcase* (NBC) in 1956 and was a cast member of *Dundee and the Culhane* (CBS 1967). Some of his multiple American TV appearances include: *This is Your Life* (NBC), *Tales of the Unexpected* (NBC) and *The Dupont Show of the Week* (NBC). Sir John's British TV credits include *Quatermass*, *The South Bank Show* and *Young at Heart*. He received many awards including a prize at the 1960 International Film Festival in Venice and Queen Elizabeth II named him a Commander of the British Empire in 1960 and knighted him in 1976.

JOHN F. WHITE, 87, (4-22-05) educator and public television executive. White was President of the National Educational Television and Radio Center, the forerunner of the Public Broadcasting System, from 1958 to 1969. While serving as Vice President at Western Reserve University (now Case Western Reserve) he pio-
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