Scharnberg Strauss – the 1950 model 52 manufactured in South Australia.

By Graham Parslow



In 1929 two brothers Ernest and Oswald Smith decided that they would diversify from their trade as builders. They had an office in central Adelaide at 70 Currie Street and began selling "RWG" radios made by a friend named Reginald George (hence the initials). Sales picked up and radio became the Smith brothers future. They moved to an even more central location at the end of the Adelaide Arcade in Grenfell Street in 1930 and opened under the trading name Ernsmiths. Ernest Smith owned a Scharnberg piano so he added Strauss for good measure to create their in-house brand name. Business was so good that they created a subsidiary registered as National Radio Corporation with no links to any other manufacturers using that name overseas. National Radio is reported to have become the largest single radio manufacturer in Australia in the 1930s (see Adelaide's Early Radios and Tape Recorders by Neville Ellison (c) 1996). National Radio used its own name as a separate trading company selling throughout Australia. National also shamelessly badge-engineered any label a wholesale customer requested. Those other labels included Myer Air Player,

The Citizen, Eddyola, Cremona, Regent and Claritone. They sold back to their parent company Ernsmiths as Scharnberg Strauss. Electronic Industries of Melbourne bought out the National Radio Company in 1939, but allowed Ernsmiths to keep the name Scharnberg Strauss. After the war Ernsmiths opened a small radio manufacturing workshop in 1946 associated with their retail shop in North Adelaide. Around 1949 they moved manufacture to the industrial suburb of Brompton and remained there until closing in 1978. The radio featured here would have been made at Brompton.

I grew up in South Australia and Ernsmiths was a household name in my childhood. The metal badge at the back of this model 52 radio proclaims "Ernsmiths, Adelaide's busiest Radio House". South Australians living through the 1960-70s may recall that Ernsmiths sponsored the German Hour on 5DN 6-7pm on Saturday nights. By association, at that time, I assumed that Scharnberg Strauss was a German brand. You can fool most of the people most of the time.



As shown in the advertisement, my radio started off as a radiogram. It remained as a potential project for seven years stored in a ceiling space.



After some reflection on the multiple difficulties of keeping the unit as a radiogram the decision was made to give this one rebirth as a radio only. Unlike the magician who joins ladies back together after cutting them in half, this one lost its rear end.



The Collaro turntable built into the table-gram is a monument to solid engineering. Even so it is not a prospect for seriously playing vinyl records in this millennium.





The rebuilt case was a delight to sand back to bare wood and respray with matt polyurethane. The impressive plastic dial has slots to act as a grille for the 8 inch Rola speaker behind it. The grille is well illuminated by 4 dial lamps. The five knobs control On-Off and tone, volume, PU-radio, tuning and band switch. Completing the association with its Germanic name is an eagle on the badge. The more common Bakelite Scharnberg Strauss radio has the same dial, but the model 52 badge and escutcheon are specific to the tablegram.

The radio made an attractive display unit after the cabinet was restored, but restoration of the chassis was initially too daunting. It was left as display only for another two years. The problem was that the radio had hosted nesting mice. They had nibbled miscellaneous components that took their taste. Several capacitor coverings were shredded and one of the two chokes had been chewed through to expose broken wires. Most obvious was that the speaker cone had become the main course of the mouse diet.







The corroded chassis was sanded back to remove rust then refinished in an Estapol antirust formulation of Brunswick Green that needed no primer.

This unit is a high end design and has nothing in common with the rather economically constructed Bakelite Scharnberg Strauss units. There are five valves, an ECH33 mixer, 6SK7 IF amplifier, 6SQ7 demodulator and preamplifier, a 6V6 power tetrode output valve and a 5Y3 rectifier. The circuit is not in the AORSM compilations and exhaustive web searches only found requests for the circuit of this model. Those two chokes had me flummoxed and I wanted a circuit to guide me. However two years was a goodly time to reflect on what would be needed to restore the radio. The catalyst to complete the restoration was acquiring an 8 inch Rola model H speaker at an HRSA swap meet.

The replacement Rola speaker did not have a transformer mounted on the frame so the first step was to recover the original output transformer and mount it on top of the chassis in the space where the discarded damaged choke was mounted.



The discarded choke was stamped 16 APR 1950 giving a reliable time of manufacture. It was inserted in the HT line to IFT2 that subsequently leads to the plate of the 6SK7 IF amplifier. The remaining choke was measured as having a DC resistance of 538 Ω . The open circuit choke was replaced with a 1K Ω power resistor.

The circuit had three 8μ F high voltage electrolytics. The two electrolytics placed before and after the main choke were replaced with 33μ F modern electrolytics. In the working radio the raw HT out of the 5Y3 was measured as 322V. The third filter electrolytic is connected to the 6V6 screen grid and a 22μ F replacement was installed. The working radio had no appreciable hum so the filtering was adequate in the absence of the damaged choke.

Several paper capacitors were replaced before attempting switch on. First power up was with no 5Y3 installed to ensure a lack of HT. Dial lights and valve filaments came on and the power was low and steady for several minutes with no warming of the transformer. Then came the much anticipated moment of adding the 5Y3 rectifier and crossing fingers. Sheer joy, it worked first time and tuned across the dial. However at this stage my finger did not stray far from the power-off switch. Just as well because the power meter was slowly climbing from 50W. A 0.05µF capacitor installed in the RF section connected from earth to 246V was warm and on removal gave a comforting confirmation that it was faulty by displaying blebs of melted wax on one of its axial leads.



That was it. A magnificently mellow sounding radio was now completely stable as well as a delight to behold. The radio still had a few mouse-nibbled components in place, but that is part of the unique heritage of this radio.





There are subtleties in the HT power filtering that I did not get on top of so it would be nice to find a circuit diagram for this radio. Even so the lesson I learnt from this restoration is not to be timid in the face of uncertainties.