Meanwhile, my odd assortment of vintage listening tools includes a Rek-o-Kut turntable outfitted with an original General Electric VR-II mono magnetic cartridge featuring both a 1 mil (.001 inch) "Microgroove" stylus as well as a 3 mil "Standard 78" stylus. (This turntable also had a separate arm for playing stereo records!) Before doing any tests, I noticed how great my 45 collection sounded with this combination. Even the really scratchy ones sounded better than they did on my more sophisticated system. Why?

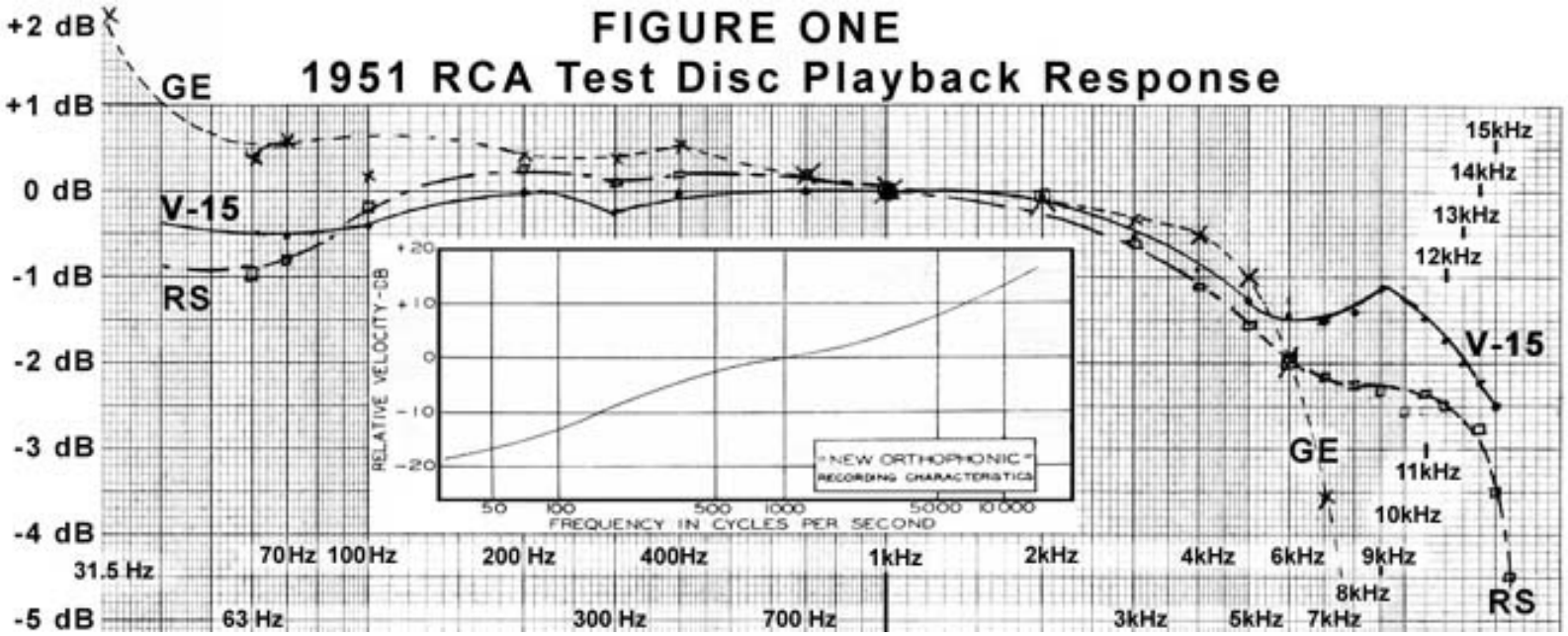

Figure One details the results of tests made in ***1997***.

Figure One is a hand-drawn frequency response chart of a 45 RPM RCA test record (circa 1951) played with three cartridge/turntable/preamp combinations. (The inset shows the record EQ curve.) A mixer permitted adjustment of playback levels using the 1 kHz tone as the reference. The "warmth" of the VR-II comes from a gradual rise below 1 kHz that, from 400 Hz down to 50 Hz (three octaves), is up 1/2 dB. (Notice the 2 dB "rise" at 31.5 Hz as well!) At the opposite end of the spectrum is a pretty serious roll-off hinging at 4 kHz. The VR-II's 1 mil stylus is too fat to track dainty high frequencies hence the response at 7 kHz is down 3 dB while 12 kHz is down 10 dB and off the chart! And that's where all the screetchies went!

In the late fifties, stereo records required not only a special cartridge but also a smaller stylus (.7 mils or .0007 inches) which improved high frequency response. Up until this point (he-he), the tip was still "conical" (cone shaped) but an elliptical stylus — as both of the modern cartridges are equipped — reveals that, even in 1951, extended high-frequency information made it to the record. The Shure V-15 Type IV, for example, delivered 9 kHz and 15 kHz at -1.25 dB and -2.5 dB, respectively.