I felt I'd as soon listen to the Vendetta as my tube unit, which, for a die-hard tube freak, is blasphemy!

see some wiggles along the positive half-cycle of the top trace in Fig. 3, these were produced by my 'scope and not the SCP-2B.)

Next I looked at THD + N. It is quite difficult to measure this in a phono preamp with moving-coil gain and not have some hum contamination limit the resolution. At 3 V output, THD + N was less than 0.01% in either channel. (Both channels of this preamp were very much alike in all respects.) I pushed the unit to higher output levels, and you can see from Fig 4 (which shows THD + N at 10 V out) that distortion rises at the higher frequencies. Results were virtually the same for either my instrument load or the IHF load. This preamp can drive the IHF load (10 kilohms in parallel with 1,000 pF) with impunity. The fall-off in distortion below about 500 Hz is due to the use of a 400-Hz high-pass filter to get rid of some 60-Hz noise in the setup. The results are valid above, perhaps, 1 kHz. If the hum were not present, I would estimate distortion at 0.01% or so below 1 kHz. A spectrum analysis of harmonic distortion for a 1-kHz signal at 5 V output appears in Fig. 5. Notable here is the lack of higher-order distortion products, the plot indicating only second and third harmonics being present. These data all suggest that the SCP-2B would have vanishingly low distortion at working levels of 0.5 to 2.0 V output.

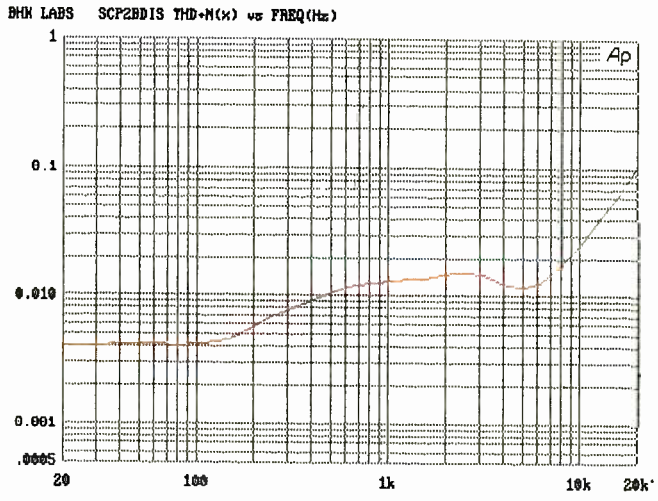

Fig. 4—THD + N vs. frequency at 10 V output into IHF load, measured with 400-Hz filter; see text.

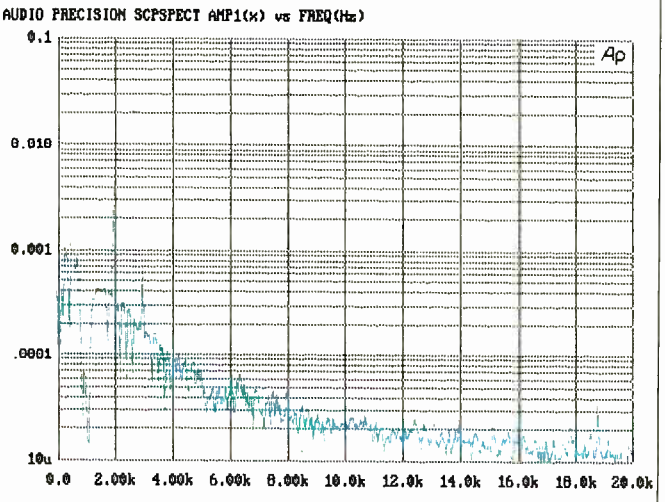

Fig. 5—Spectrum of distortion residue for 1-kHz signal at 5 V out into instrument load.

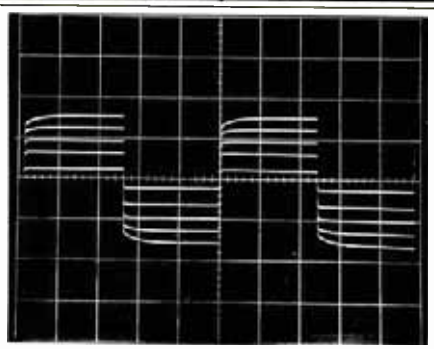

Fig. 6—Results of deliberate high-frequency overload from 1-kHz square waves at four different input levels. Note the symmetrical clipping; see text. (Scales: Vertical, 2 V/div.; horizontal, 200 μS/div.)

The SCP-2B clipped at about 15 V rms with either instrument or IHF loading. When loaded with 600 ohms, it clipped sooner, at 13 V. Although distortion is higher with a 600-ohm load, the SCP-2B will drive it competently. I got less than 0.1% THD + N at 4 V output over most of the audio range.

Table I shows the data for phono overload versus frequency. Results are the same for both channels and for instrument or IHF loading. As can be seen, the behavior is ideal in that the attainable output level at visual onset of clipping is constant with frequency. Related to the sine-wave overload with frequency is the reproduction of pre-equalized square waves at increasing output levels. As I have mentioned in other reviews, it can be argued that the high-frequency content of this signal is rather out of band, i.e., above 20 kHz. Yes—but so is the distortion that results from mistracking in many moving-coil pickups; the high-frequency distortion test is one measure of circuit (or cartridge) excellence. In Fig. 6 we see that the Vendetta puts out a healthy ±2 V before high-frequency compression sets in. As can be seen, the waveform stays symmetrical in shape when compression does occur, a desirable trait.