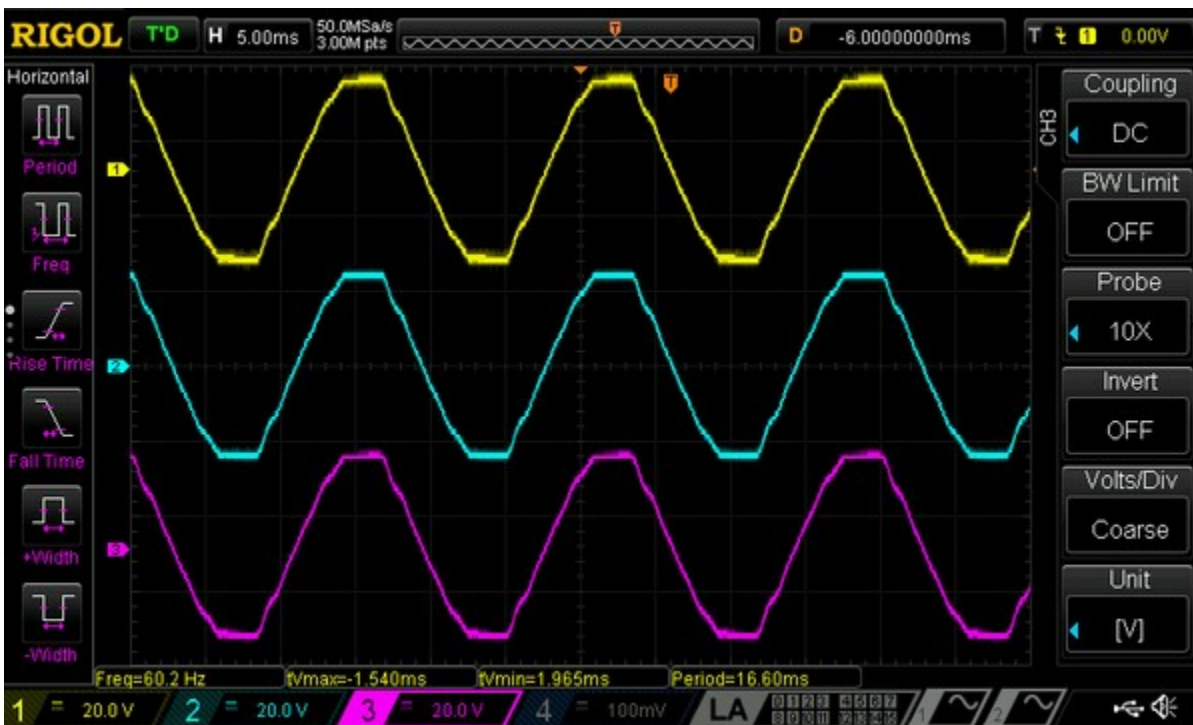


Notice in fixed mode, the outputs very closely track the input, so with a pure sine wave in, you should get a pure sine wave out. I think the diodes in the MRC transformer contribute to the flat-topping of the input waveform. The first shot is with no load.

- **Yellow:** Transformer output waveform
- **Cyan:** Variable channel output
- **Violet:** Fixed Channel output

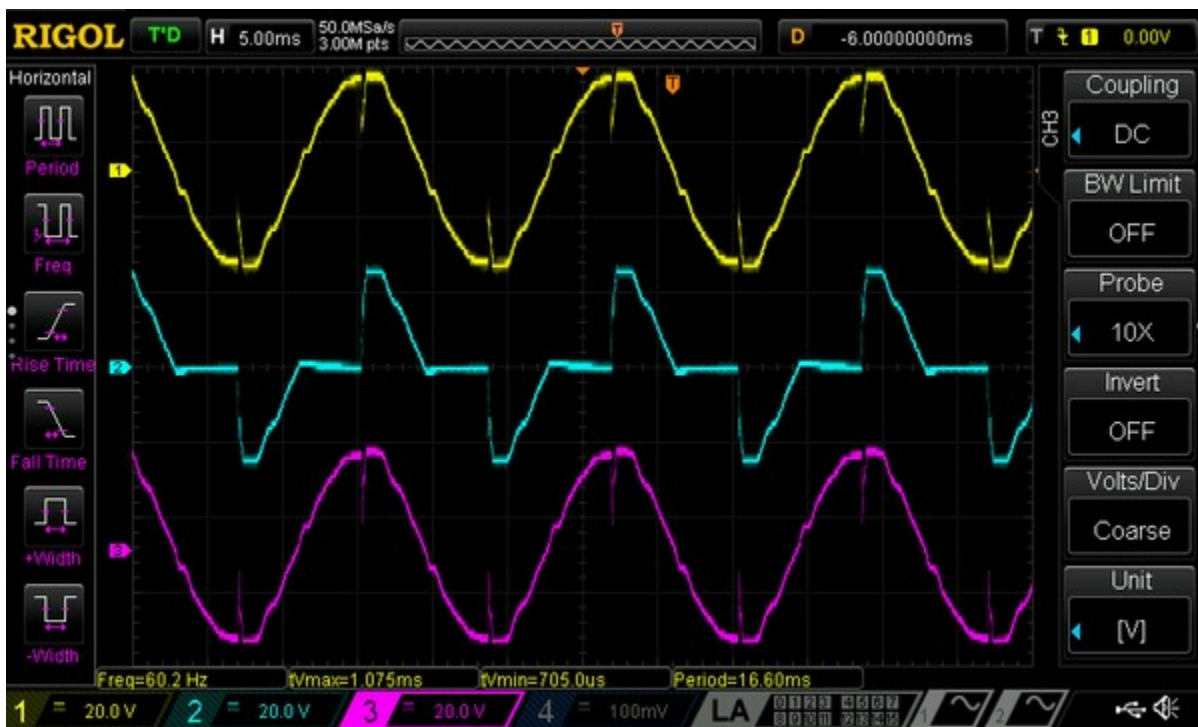
- 
- **Channel 1 Transformer output full throttle (MRC AH-501)**
  - **Channel 2 TIU Variable Output (fixed mode)**
  - **Channel 3 TIU Fixed Output**

**Same waveform with no load or a 2A load on variable Channel**



- **Channel 1 Transformer output full throttle (MRC AH-501)**
- **Channel 2 TIU Variable Output (variable at 1/2 throttle )**
- **Channel 3 TIU Fixed Output**

**No load on the outputs**



Note how the switching transients when less than full throttle whack both the fixed and variable channels, very odd. The spikes even affect the transformer output, which explains why they appear everywhere.

I added a 2A load, and it didn't improve anything, the switching transients look worse if anything! However, with a load in fixed mode, the outputs look exactly like the first screen with no noise spikes.

### Waveform with 2A load on variable Channel



I have a little trouble understanding why there are fairly high switching currents flowing when there's no load on the variable channel! There must be considerable capacitance across those FET outputs to cause that kind of spike.

All in all, an ugly output, one I didn't expect!