

My name is Tom Apel. I began building and experimenting with electronics when I was in grade school. I was first licensed in 1963, when I was fourteen, as WNØHKS. I have been active in ham radio ever since. My first receiver was a BC-455 with home-brew power supply. My 40M transmitter was a 6146 final (actually a pair of), 12BY7 Driver, and 6C4 XTAL oscillator. The Power supply used a color TV power transformer. My second band was 80M using more ARC-5 surplus gear: BC-454 and BC-696. Later that year I acquired a Harvey-Wells Bandmaster Deluxe multiband transmitter.

I passed my advanced class amateur and first-class radio-telephone exams on the same day. My first HAM phone station was on 6M. The receiver consisted of a Drake 1A and home-brew nuvistor down converter. The transmitter was all home-brew. It produced DSB (suppressed carrier) from a pair of 2E26's in a high level balanced mixer circuit followed by four 6JB6 sweep tubes. The frequency source was a VXO circuit with continuous tuning between half dozen XTAL steps. My first "real" transceiver was a Drake TR-3. I later extended operation of the TR-3 to 160M with a home-brew (all vacuum tube) transverter built in a matching MS-4 cabinet. The final stage was a pair of 6JB6's.

Over the years there have been many home-brew projects. These days my projects are mostly surface mount technology. The pages of this web site document some of those projects.

After completing undergrad degrees in Physics and Math, I completed an advanced degree in EE at U.Wisc (Madison). My thesis was "GaAs FET mixers at X-Band" (when MESFETS were *NEW!*). Although I did some LNA development, my professional career concentrated on RF and microwave power.

In 2010, I retired from Triquint Semiconductor and moved back to Texas. At that time, I was a Senior Engineering Fellow and managed an advanced RFIC technology development group.

'Hope you enjoy the web site,

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