Subject: Re: Class A, AB1, B, C Operation/Modes Posted by positron on Fri, 03 Nov 2023 17:22:38 GMT View Forum Message <> Reply to Message

Just to reinforce my previous post, Chapter 13, of the RCA Radiotron Designers Handbook, section 5: "Push Pull Triodes Class A, AB1".

"A Class A amplifier is an amplifier in which the grid bias and alternating grid voltages are such that the plate current of the output valve or valves flows at all times. The suffix 1 indicates that grid current does not flow during any part of the input cycle."

Notice, no mention of center of load line, nor any mention of power output nor maximum power output.

From the Radio Amateur's Handbook, 1969:

" A Class AB audio amplifier is a push-pull amplifier At low signal levels the tubes operate as Class A amplifiers, and the plate current is the same with or without signal."

Wiki, Push Pull AB:

"Class AB is..... since much of the time the musical signal is quiet enough that the signal stays in the "class-A" region."

What is quiet enough?

As mentioned in my first post, Push Pull 6L6GC in triode, can output some 7.5 watts rms in Class A before cut off of each tube, and into AB1 operation (cut off is substantially less than 180 degree of each tube).

Academia classroom, the same definition. Any device(s) can be operated Class A as long as the device(s) operate over 360 degrees, all of the musical signal waveform.

cheers

pos