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Subject: Re: Class A, AB1, B, C Operation/Modes  
Posted by [positron](#) on Fri, 03 Nov 2023 17:22:38 GMT  
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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

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