

Capehart/Clavier R-390A noise issue with RCA 6DC6 tubes – 04/25/2022, Larry Haney

Tom Marcotte found an interesting article in Google Books in the 'Armed Services Board of Contract Appeals' (ASBCA) Decisions section. The ASBCA was created by a joint directive of the Secretaries of the Army, Navy and Air Force. It is the authorized representative of the Secretaries in hearing and determining contractor appeals. Thus the Board, with its three contract appeals panels, has a key role in settling disputes for defense procurement. Unfortunately, the source is out of focus, lengthy and full of legal ease.

What it briefly says is: Clavier (previously named Capehart) was unsuccessful in obtaining additional compensation for additional time and costs incurred due to a faulty component it was required to use (the RCA 6DC6), so is appealing that decision at this time 2-16-1970.

Capehart Corp was renamed to Clavier Corp shortly after 7-10-1964. The contract in question is DA 36-039-SC-79141 on 3-21-1961 for 2,964 R-390A's at the cost of \$900 each. This is most likely for Order Number 21582-PC-61 awarded to Capehart. 6,100 6DC6s were ordered from RCA on 7-17-1961. There was no 'noise level requirement' in the government specs for this tube. Clavier delivered about 575 R-390A's and were accepted by the government during 5/1963 to 8/1963.

Shortly thereafter, Clavier returned 38 6DC6s to RCA (due to high noise below 8 MH) and amended its Purchase Order to require the future 6DC6s to have a minimum Gm of 5500 (this was presumed to resolve the noise issue). Clavier delivered 2,568 R-390A's and were accepted by the government by 9/1964. Clavier received 880 6DC6s from RCA on 9/15/1964. Clavier returned 860 6DC6s to RCA (due to high noise below 8 MH) on 9/25/1964. Clavier received 700 replacement 6DC6s from RCA on 10/19/1964, but RCA said it is making them in accordance with the commercial specs at that time (no noise spec). Clavier delivered 40 more R-390As and were rejected by the government on 11/1964 due to failing the S/N test. The government changed the requirements for the 6DC6 tube to have an acceptable noise level below 8 MH on 12/1964, but RCA would not change for this contract. Clavier failed to deliver 186 more R-390A's on 3/1965 due to 6DC6 noise issues, but were able to deliver them on 6/1966 (not a mistake, 1+ year later).

Because the government had purchased 36,000 R-390A's by 1964 and were accepted by them (this includes 1 spare 6DC6 per unit), Clavier's appeal has been denied due to lack of proof that the problem was solely due to the noise issue of the 6DC6s. Remember though, the governments testing procedure was to select about 10% of those delivered to test. It would be reasonable to assume that some bad ones made it to the field.

So, what happened to those bad 6DC6s (returned or not to RCA)? If some one knows for sure , please let me know. Were some or all of them destroyed?

If you're interested in looking at a copy of the original document that I'm referring to, here's a link to it in our website: [R-390A Clavier Capehart Appeal](#)