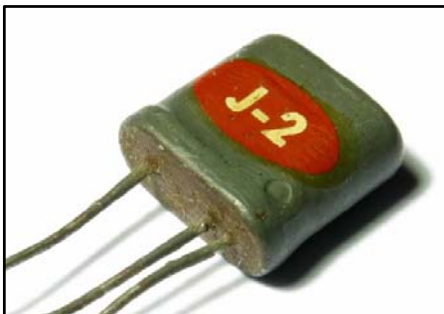
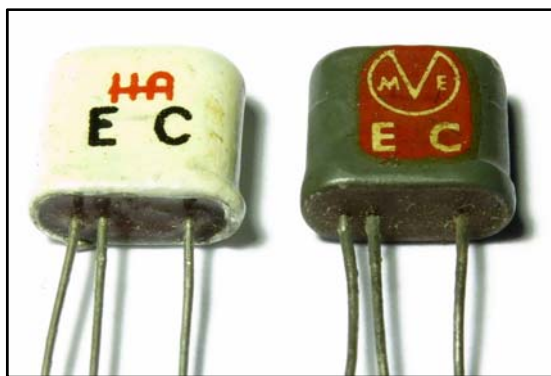


**MR. ROBERT CRUZ**  
**TRANSISTOR MUSEUM DONATION**  
**October 2013**



Transistor Size (3/8"D X 5/16"W 5/16"H)  
No Date Code Stamp



Comparison with predecessor CQ-1 type (at left)  
manufactured by Hydro-Aire Co.

**MARVELCO J-2**

TYPE

Germanium PNP  
Alloy Junction Transistor

DATE INTRODUCED

Mid 1950s

AVAILABILITY

Rare (Limited Production)

DONATION COMMENTS

" Glad it got there ok. I don't have much info on it. That came from a ham estate down here in Miami. It was an old airline electronics guy and those were actually all intertwined in a resistor "tumbleweed" that often litters the back corners of old workbenches. I decided to pluck apart the tumbleweed to save the carbon comps as those are getting hard to find and found those oddball transistors in the mess. Being a collector of early transistor radios, they got my attention. The case was unlike any I'm used to seeing. 73 de ke4mcl "

HISTORIC NOTES

During the first few years after the introduction of the transistor by Bell Labs/Western Electric in June 1948, numerous small industrial firms with little or no experience in semiconductor technology entered the transistor manufacturing business and produced small quantities of germanium transistors. Shown above is a fine example of one of these unique mid 1950s transistors recently donated to the Transistor Museum by Robert Cruz. The J-2 is a very rare transistor type, produced in 1955 or 1956 by the Marvelco Electronics Division of the National Aircraft Company located in Burbank, Ca. Marvelco was a spinoff of the Hydro-Aire Electronics Division of the Crane Company, which had begun limited production of point contact transistors in 1952. It is likely that the combined transistor production of Hydro-Aire and Marvelco totaled a very few thousand units, and devices from either of these companies represent a little known but important part of transistor history. See this excellent Mark Burgess article for more information on these companies: [Mark Burgess Hydro-Aire Transistor History](#). Thanks to Robert Cruz for the historic J-2 transistor. Here is a link to additional transistor work by Robert: [Robert Cruz Historic Transistor Radio Reconstruction at Instructables](#).