# TRANSISTOR MUSEUM™
# *"DONATIONS AND ACQUISITIONS"*
# PRESERVING HISTORIC TRANSISTORS

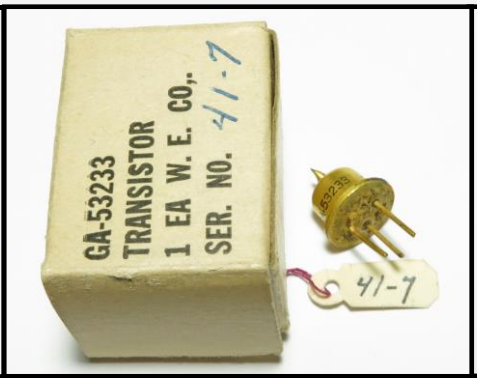
## "Transistors in a Drawer"

### Donated by Neil Walgenbach – February 2022

**Donation Comments:** "Jack, I joined Bell Labs in 1977. My first officemate talked about some of the government projects he had worked on over the decades. After a couple years, he retired, cleaned out his desk, and he gave me a box of transistors from the Western Electric Co. plant in Laureldale, PA. The transistors are individually boxed, some wrapped with spec sheets logging the unit's electrical parameters as measured on the bench. They appear to be engineering samples sent out to Bell Labs circuit designers. While searching the internet for my transistor numbers, I saw your writeup of WECo transistors used in the Vanguard I and Explorer I satellite programs. I have several GA-53233 units from that period. I appreciate the work you're doing to document and preserve the historical impact of leading-edge technology. I'd be happy to donate these units to you".

**Donation Description:** The photos below document the unique and historic early Western Electric transistors donated by Mr. Neil Walgenbach to the Transistor Museum. These three types are representative of some of the first transistor technologies developed in the 1950s. The two diffused types (GA-53194 and GA-53233) were instrumental in the success of the first earth satellites launched by the U.S in the late 1950s and the third type (2N66) was one of the first power transistors available. The Transistor Museum wishes to thank Neil for his generous and thoughtful donation of these historic devices – see below for additional information we have complied to help preserve this important history.


**Device ID:** WECO GA-53194
**Type:** Germanium PNP diffused
**Case Type:** Gold plated
**Vintage/Date Code:** 1958
**Use:** Explorer I satellite
**Notes:** The GA-53194 was one of approximately 29 transistors used in the Explorer I satellite, which was launched in Jan 1958 and was the first successful U.S. satellite. The GA-53194 was designed for high frequency applications and was used as the telemetry transmitter for the satellite.




**Device ID:** WECO GA-53233
**Type:** Germanium PNP diffused
**Case Type:** Gold plated
**Vintage/Date Code:** Mid-1950s
**Use:** Vanguard I satellite
**Notes:** The GA-53233 was used in the telemetry transmitter on the Vanguard I satellite, which was launched in March 1958. This transistor type was designated for military use only and early units were individually serialized (see above photo). Later versions were released as 2N509 and 2N 1195.


**Device ID:** WECO 2N66
**Type:** Germanium alloy junction
**Case Type:** Grey painted metal
**Vintage/Date Code:** 1957
**Use:** Early power amplifier
**Notes:** The 2N66 transistor was developed in 1955 by Western Electric and was one of the first high power transistors available, with power dissipation up to 1/2 watt. This type used a vacuum sealed case, and was intended for power conversion, transmission, switching and industrial control.