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Memorandum M-1607

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Digital Computer Laboratory
Massachusetts Institute of Technology
Cambridge 39, Massachusetts

SUBJECT: RAYTHEON TOUR CONDUCTED BY GEORGE FREEDMAN, HERB STARK

To: Transistor Group

From: Julius Woolf

Date: August 14, 1952

ABSTRACT: This note is an outline of a visit made by N.T. Jones, D. Eckl, I. Aronson, and J. Woolf to the Chapel Hill Raytheon Plant in Newton, and the discussion held on the Raytheon transistor.

The parameters on the CK1716 specification sheet are all small signal characteristics. These specifications are established to enable the greater majority of the production models to pass inspection.

At present, only the collector is formed. The forming process and the location of the cat's whiskers are done with the objective of maximizing the α .

The shelf life characteristic of the CK1716 is poor. They do not get any correlation between the shelf life and variation in parameters.

Some work had been done on temperature effects. If a transistor is cycled four times from room temperature to 75°C. and back to room temperature with each mode being established for a half-hour, the transistor is subjected to a more severe test than if the temperature were elevated and maintained at this level for a similar period.

The circuitry group at Raytheon is hardly under way. The Group has no specific objectives. At present they are trying to make a transistor that works. In the future, they hope to design transistors for specific applications.

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The Raytheon transistor package will be changed because the plastic has bad breathing characteristics.

Signed: Julius Woolf
Julius Woolf

Approved: J. F. Jacobs
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Approved: N. H. Taylor
N. H. Taylor

Standard Transistor Distribution

JW/cs