

PROJECT TITLE : PRODUCT RESEARCH  
PERIOD COVERED : OCTOBER 24th - NOVEMBER 23rd  
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I. EXPERIMENTAL CIGARETTES

Nothing to report due to the absence of C. Jeanneret.

II. REACTION FLAVOUR

A programme on this project is being prepared and a proposition will be made next month.

III. SMOKER SATISFACTION

A set of experiments was effected using a limited number of test persons in order to establish a reproductivity level. In particular, the heart-rate and the skin temperature (finger tips) were measured when the test persons were smoking one cigarette (their own brand). The results are to show

- where are the base line values for each test person
- to what extent does the total puff number (dose of smoke) influence the physiologic parameters that can be measured

The results are not yet complete and the report will be issued at the end of next month.

A certain number of difficulties appeared when working with a small number of volunteers. Several planned experiments had to be cancelled because the subjects did not turn up as pre-arranged. It is therefore necessary to create a larger pool of test persons.

IV. HUMAN SMOKING BEHAVIOUR

The analysis of the nicotine content of the butts (1) collected at Suchard (pilot study) has been started. Unfortunately, the data system of the GC broke down and caused an important delay in the analytical work.

V. INSTRUMENTS

NO-Analyzer

The three prototypes have been successively used in the Product Research lab during this month. This test has shown that there were still problems with electrical instability due to noise induced into the AC supply by the ozone generator. These problems have been solved by installing high-frequency filters, both on the high-voltage transformer input and the power supply to the electronics.

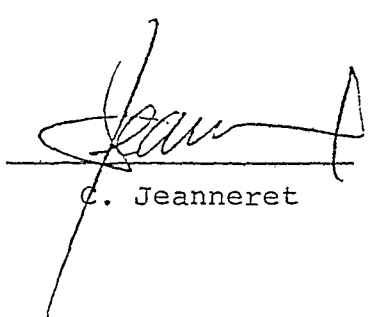
The digital section is being installed into the second instrument and will be into the third one too in order to ensure the direct interchangeability of the three instruments.

CO-Analyzer

The CO-Analyzers, as used for the analysis of cigarette smoke (model Siemens Ultramat-1), have an output signal which is not a linear function of the CO concentrations. This makes it difficult to measure precisely the results when these are recorded on a strip-chart recorder. Therefore, an electronic system has been designed (and is being tested) in order to transform the non-linear function (which is in fact of a parabolic form) into a linear one.

REFERENCE

- (1) Monthly Report, October 1978, p.1



C. Jeanneret