

# RJR CONFIDENTIAL

## INTEROFFICE MEMORANDUM

SUBJECT: Weekly Highlights - Cigarette  
Design Technology

DATE: September 4, 1985

TO: Dr. M. E. Stowe

FROM: J. P. Wheeler

### CENTURY-Lights 100 Menthol

*— Not correct/invalid sample*

Problems were encountered with translation to production for the CENTURY Lights 100 Menthol product. The 'tar' delivery was specified at ~11 mg but early production samples delivered ~14 mg. Results of "base" 'tar' delivery measurements showed a ~4 mg difference between Phase II and Phase III samples. We have made by-puff measurements of the smoke deliveries from Phase II and Phase III samples and have found little difference in the profiles for these products. All findings have been reported to Brand R&D. Additional testing will be conducted if required.

### Perforation Methods Study

Cigarettes made with pre-perforated tipping have been shown to have lower smoke deliveries at a given ventilation level than those made with on-line laser (post-) perforations. These results are in agreement with research reported previously by workers at Hauni. We have also found that delivery differences owing to the perforation method increased when the cigarettes were smoked at a 50 ml puff volume. Measurement of ventilation levels during smoking have been made for the samples at the standard 35 ml puff volume. The results show that ventilation measured during smoking are slightly higher for cigarettes made with pre-perforated tipping. The ventilation differences between the pre- and post-perforated samples account for the delivery differences found. It is believed that the ventilation and delivery differences found arise from variation of the flow dependence of ventilation between the perforation methods. Measurements of the ventilation levels during smoking at the 50 ml puff volume are in progress.

### Adjustable Filter Project

A design in which the location of the "active" air dilution vents is varied was disclosed to the Law Department. The advantage of this concept is that it is possible to configure the product so that the cigarette pressure drop remains essentially constant despite increased air dilution and decreased 'tar' delivery on adjustment. Demonstration models of five designs have been made and tested.

Weekly meetings with PT&D staff have been established to discuss ideas and to combine approaches to the adjustable filter problem. The first of these was held 8/29/85. Two disclosures of concepts discussed at the initial meeting are in preparation.

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Miquel-y-Costas Plugwrap Qualified

Grade '626' plugwrap manufactured by Miquel-y-Costas (Barcelona, Spain) has been fully qualified for use in regular production. This qualification provides two sources of supply (with Ecusta) for this grade of plugwrap.



J. P. Wheeler

JPW:tml

xc: Applied R&D Managers

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