

COMMENT ON THE FTC PROPOSAL
TO CHANGE CIGARETTE TESTING METHODOLOGY

Submitted By

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We have previously submitted comments on behalf of Liggett & Myers Tobacco Corporation regarding the FTC cigarette testing program. We now wish to comment with regard to the FTC's proposals as outlined in the October 8, 1985, issue of FTC News.

Our comments will focus on "filter-ventilated" cigarettes, i.e., those cigarette brands that are designed to introduce outside air in order to dilute smoke and thereby lower the delivery of constituent levels.

The testing protocol adopted long ago by the FTC is but one way to provide relative values of deliveries of smoke constituents. The parameters are standardized and there is no particular correlation between those parameters and how individual smokers actually smoke. The protocol was not even intended to replicate average human smoking.

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Ventilated cigarettes were introduced long after the adoption of the current testing protocol and this protocol has not been changed to take into account the dynamics of smoking a ventilated cigarette versus smoking a traditional non-ventilated cigarette.

Thus, ventilated cigarettes are tested on the standard smoking machine as if smokers never in any way interfered with the ventilation system. It has now become clear that this assumption is not scientifically sound.

Most studies have demonstrated that human smoking behavior may cause interference with air inlet ventilation of all filter-ventilated cigarettes. This behavior changes the relationship between the machine related yield and smoker bioavailability of uptake of smoke ingredients.

We understand that the current FTC proposal was generated by the controversy over the new filter technology embodied in the ACTRON filter used on BARCLAY. However, it is unfortunate and unfair for the FTC to propose a new system of testing that focuses, as it does, solely on that technology and not on the issues presented by all ventilated cigarettes.

Therefore, we propose that all filter-ventilated cigarette brands be tested with the inlet holes on the filter in the

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blocked and unblocked condition and that the average of the two resultant numbers be used to establish brand yield. The following paragraphs provide data which support this proposal.

Cigarette brands with standard smoking machine yields below 15 mg tar have filter ventilation which dilutes the mainstream smoke by between 10 to 20 percent for the higher tar yields to as much as 80 to 85 percent for the ultra-low tar yield values near 1 mg. Air is introduced into the smoke through inlets that are generally centered around 10mm from the mouth end of the filter. The standard smoking machine test procedure establishes an insertion depth into the cigarette holder of 8mm. Thus, filter air dilution ventilation is not intefered with during machine testing.

Work by Dr. Lynn T. Kozlowski and colleagues has pointed out that approximately 50 percent of smokers of filter ventilated cigarettes interfere with the dilution system, thus reducing the effectiveness of this procedure as a means of reducing the delivery of smoke ingredients¹. Moreover, recent studies carried out with a large sample size of European smokers² provide support for the findings of Dr. Kozlowski. These studies use amylase deposits on the butts of cigarettes to estimate the position of the lips in natural smoking. Results indicate an average maximum insertion depth of 11 mm.

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Obviously, any system of machine testing that does not take this into account seriously distorts the relative comparison of filter-ventilated cigarettes with non-filter-ventilated cigarettes.

It would be logical to take the system propounded in FTC Proposal B and apply it to all filter-ventilated cigarettes. That system produces an average of two numbers: The first is obtained by testing cigarettes using the current method. This number represents the ventilation in its pristine condition; no encroachment of the ventilation system is possible. The second represents the other extreme, the ventilation system is completely closed down. The resulting average of these two numbers represents a practical approximation. To be sure, it does not produce an average number for actual human smoking.

Still, such a system applied to all filter-ventilated cigarettes would produce more accurate relative rankings of ventilated and non-ventilated cigarettes. It would also avoid unfairly characterizing cigarettes using the ACTRON filter technology. We, therefore, urge the Commission to adopt the changes proposed in this Comment.

¹ L. T. Kozlowski, W. S. Rickert, M. A. Pope, J. C. Robinson, and R.C. Frecker, "Estimating the Yield to Smokers of Tar, Nicotine, and Carbon Monoxide from 'Lowest Yield' Ventilated Filter-Cigarettes," 77 British Journal of Addiction 159 (1982). A copy of this article is annexed hereto.

² U. Haevecker, Variability in Human Smoking Behaviour (Technische Fachhochschule, Berlin 1985). A copy of this article is annexed hereto.

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