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MEMORANDUM

April 9, 1986

A.W. Spears A.M. Ihriq

FROM .

SUBJECT: Laboratory Test Results on Some Sample Cigarettes Used in the Technical Study Group for the 1984 Cigarette

A series of 32 cigarettes were prepared for the Technical Study Group as directed in the 1984 Cigarette Safety Act. Specifications of these cigarettes are given in the November 4, 1985 memorandum of Dr. A.W. Spears. The series of cigarettes were evaluated for smoke deliveries and linear burn rates. These results are given in Table 1 and 2 for the 21 mm and 25 mm circumference cigarettes.

This series covers a linear burn rate range of 3.40 mm/min to 10.63 mm/min. The linear burn rates between the corresponding 21 mm and 25 mm samples were similar except for the expanded flue-cured cigarettes (21 mm, 13-16) and (25 mm, 29-32). These differences are illustrated in Figure 1.

In this study, paper porosity influences smoke deliveries more than paper additives. A decrease in porosity from 75 to 10 CORESTA resulted in a 20 to 40 percent increase in nicotine, CPM and CO deliveries. The addition of citrate caused a modest increase in CO and a 5 to 15 percent reduction in CPM and nicotine.

Burn rate studies were conducted between FNLN-21, the slowest burning cigarette, and BNLC-21 whose linear burn rate of 5.79 mm/min is more consistent with commercial cigarettes. This study shows very little difference between FNLN-21 and BNLC-21 on a select group of fabrics. The results shown in Table III include a previous study involving a set of four cigarettes on 33 different

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Xc: C.I. Lewis C.L. Tucker

Inter-office Memorandum

Subject: Carlton 100's - American

Date: May 19, 1977

To: Dr. J. D. Woods

From: Ronald Sells

Project No.: 2938

Project Title: Product Evaluation Service for MRD

These cigarettes were manufactured in April, 1977 at Durham and are from the California market. These are the first Carlton 100's to be examined. The pack advertises 5 mgs. tar and 0.5 mg. nicotine.

The total cigarette length is approximately 100 mm. and includes a 27 mm. cellulose acetate filter plug which has a denier of 3.1 with an "I" cross section. The tipping is 32 mm. of white paper which is perforated by 2 rows of 27 each. The cigarette paper is not perforated and is a low porosity type.

The blend consists of burley, flue-cured, turkish, and G-7 with an average of 37.2 percent of these tobaccos being expanded.

The cigarettes smoke mild and with a weak tobacco flavor. The top note is a slightly high level of a sweet, commarin-like flavor which is characteristic of several other American products. The cigarettes have considerably more taste than the 85 mm. version, however, the flavor is still somewhat flat. The overall smoking qualities are rated fair.

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