



CONFIDENTIAL

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To Mr. C. H. Mullen  
Chairman and Chief Executive Officer

From R. S. Sprinkle, III  
Senior Vice President - Research and Development

Ref Progress Report - Product Development and Product Improvement

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PRODUCT DEVELOPMENT

1. Project RCL - Nothing specific to report.
2. Project TC - Top-line data from consumer testing of 2-mg "tar" delivery CARLTON 100's Filter Cigarettes versus Now indicates that CARLTON, Now and Benson & Hedges Ultra Lights smokers perceive the two products to be equal in smoking appeal. Kent III, Vantage, Merit and Winston Ultra Lights smokers prefer Now over the modified CARLTON product. SIR's complete report will be available early next week for review and analyses.

Approximately 4 million CARLTON 100's Filter Cigarettes delivering 1-mg "tar" and packaged in current 3-mg "tar," 0.3-mg nicotine soft pack wrapping materials have been produced for market testing in the Jacksonville, Florida warehouse area. Laboratory testing indicates smoke delivery and quality parameters were on target.

For contingency planning purposes, laboratory work has been initiated to establish specifications for king size CARLTON cigarettes having slightly more "tar" delivery than ULTRA CARLTON. Several models are being prepared with "tar" deliveries ranging from 0.05 mg to 0.2 mg per cigarette to evaluate cigarette lighting and smoking characteristics.

3. Filter Cigarette Development - Recent laboratory work has indicated that freon is an effective solvent for reducing nicotine content of tobacco and may have less detrimental effects on smoke taste than other methods previously investigated for nicotine removal. Arrangements are being made to set up a small pilot operation to more fully explore this extraction process and make available sufficient quantities of tobacco for cigarette fabrication to study effect on smoke deliveries and taste characteristics.

Affidavit analysis reflecting smoke yield for ULTRA CARLTON Box of less than 0.01 mg "tar" and less than 0.002-mg nicotine has been forwarded. Also forwarded were affidavit analysis of CARLTON King Size Filter soft pack and box cigarettes substantiating recent changes in packaging disclosure of 1-mg "tar" and 0.1-mg nicotine.

Export cigarette production during the last two weeks includes 28 million AMERICAN Super Lights - 9 mg Tar, 13 million AMERICAN Lights - 12 mg Tar,

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and 11 million CARLTON 100's Menthol - 4 mg Tar for Japan; 8 million AMERICAN Filter - 17 mg Tar and 8 million CARLTON 100's Filter - 9 mg Tar for China; 1 million CARLTON King Size Filter - 4 mg Tar for Korea and 200,000 CARLTON 100's Filter - 1 mg Tar for Hong Kong.

4. Menthol Cigarette Development - We acknowledge approval of our product recommendation for 3-mg "tar" delivery CARLTON 100's Menthol Cigarettes for market testing in the Jacksonville, Florida warehouse area. The cigarette incorporates 35-mm tipping, a revised casing formulation, and an alteration in amount of menthol applied to the tobacco to yield 0.04-mg menthol per puff in smoke. The test product will utilize current soft pack wrapping materials indicating 5-mg "tar" and 0.5-mg nicotine. Formulas for the preparation of tobacco blend and complete cigarette specifications have been forwarded to the Department of Manufacture. Production of approximately two million cigarettes is scheduled for early November.

#### PRODUCT IMPROVEMENT

SIR has located 85 of the 150 smokers requested for participation in benchmark studies of PALL MALL Famous Cigarettes. Panel recruitment and distribution of product are expected to be completed within the next two weeks.

Model cigarettes and our recommendation to market test an alternate tobacco blend formulation in PALL MALL Gold Cigarettes are being forwarded today. We propose to utilize PALL MALL Red Filter tobacco blend and cigarette specifications designed to yield 17-mg "tar." The product would be packaged in current PALL MALL Gold wrapping materials for limited testing in the Jacksonville, Florida warehouse area.

#### PACKAGING

Nothing specific to report.

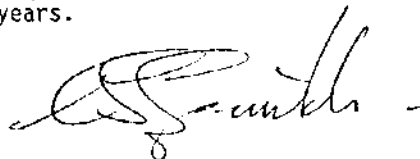
#### OTHER

Georgia/Florida and South Carolina/Border flue-cured auction markets have closed for the season.

Chinese flue-cured leaf samples representing proposed 1988 crop purchases have been received for research testing and evaluation. Compared to previous purchases, leaf appearance, texture, body and quality are improved. Nicotine content averages 1.4% versus 0.7% for prior years.

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cc: Mr. C. C. Kern, Jr.  
Mr. W. J. Moore  
Mr. R. H. Morrison



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