

Product Development Specialists Meeting

Canada

30 January - 2 February 1989

Agendas

1. U.S.A.

- (a) There is evidence that PM are building a supercritical CO₂ plant for nicotine extraction. PM own the main patents via General Foods (expiration 1991). A new market opportunity (following the Surgeon-General's report that nicotine is 'addictive') is normal tar/low nicotine and B&W are following this goal via extractive routes. (Commercial low nicotine varieties are no longer grown - varieties must yield approximately 475T of average of 102326 and 10996).
- (b) VICEROY and BELAIR are converting from full price to the value-for-money 'branded generic' segment. VICEROY now comprises 50% CUTTER - style blend.
- (c) VANTAGE EXCEL (ROR) (low sidestream) was seen as mediocre in smoking quality terms with very poor ash.
- (d) 1986 MARLBORO is considered inferior in smoking quality terms to the 1986 MARLBORO. This may be due to the elimination of ACET (ammonium carbonate expanded tobacco) and its replacement by urea in paper-type reconstituted tobacco. 1986 MARLBORO is, therefore, the target for Project SUPERIORITY work.
- (e) 'Red' flue-cured grade studies are being conducted by Marcos Campos (Souza Cruz) on a year's secondment to HCSU, working with Willard Weeks.
- (f) The DICAMBA limit has been raised to 5.2ppm and regular testing is carried out. A problem area is 'pool' tobaccos which B&W and others are committed to taking - some of these show ~20ppm levels.
- (g) Germany limit NH30 to 20ppm. Some U.S.A. tobaccos are double this since some growers have switched from DICAMBA to NH30 - both materials provide a false ripening effect.
- (h) 1987 crop Oriental tobaccos show Cs 134/137 levels of 2-6 Bc/Kc i.e. almost back to pre-Chernobyl levels.
- (i) DAP is now being used as a component of the Burley casing in Project SUPERIORITY work.
- (j) A new ET has been developed which is considered superior to the existing MET-3. This is ETX-21 which is downstalk tobacco (50:50 flue/Burley) with brown/invert sugar added to the Burley side pre-expansion.
- (k) Y1 (high nicotine variety) is now being grown in Zimbabwe, Venezuela and Honduras as well as U.S.A. and Brazil. Blends containing 20% Y1 provide Marlboro parity at only 11mg tar.
- (l) New concepts under development include Magnum (high circumference) with masculine orientation (converse of DAPRI), low level menthol (for occasional menthol smokers) and large number of short cigarettes per pack (for 'one men in a hurry').

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2. Canada

- (a) Bill C-51, in addition to ending advertising, restricting sponsorship, increasing prominence of pack health warnings and including CO data on packs (in addition to the already present tar and nicotine), also requires the use of the ISO butt mark, which is appreciably shorter than the current Canadian butt mark. Deliveries will rise significantly unless products are modified. I.T.L. currently intend to allow this to happen and explain it to consumers. The danger is that competitors may choose to transfer the brand identifier to white edge tipping and thereby retain current numbers.
- (b) The best Project VISA sample (goal: to reduce visible sidestream) was considered to have good smoke quality, but ash quality is still very poor. Consumer information suggests that smokers will be impressed and non-smokers not impressed.

3. Brazil

- (a) RITZ Slims (with Suvalan fruit extract casing) has taken 2.5% market share in little over a year. CAPRI (ultra-slims) and BARCLAY (with original Actron filter) have recently been launched.
- (b) Oriental is grown in the N/NE of Brazil and is now segregated into 3 grades, AG1, BG and Kappa. High chloride content creates burning problems but partial replacement of YAB by AG1 appears promising.
- (c) Research has shown that nitrosamines in Low Alkaloid Burley 21 smoke is 10-fold less than By 21. However, Va/By 21 blends deliver higher smoke nitrosamines than predicted from blend components, due, it is believed, to intra-blend migrations and synthesis.

4. Germany

- (a) In the ultra-low segment, it is now believed that, whilst compensatable designs offer 'strength', cavity filter designs provide 'fullness'. The fullness approach appears to be winning but both approaches have viable market shares.
- (b) Exploratory work on sidestream has shown a minimum sidestream tar of 7mg (CAPRICE, lowest on market is 21mg). The 7mg design is completely radical, comprising 44mm rod in papirossi paper, 40mm filter and all-stem blend. Normal puff number is possible because of very slow burn. 'Normal' blends increase sidestream tar to 10+mg.
- (c) High temperature drying (HTD) is in use in Bayreuth at 6600 Kg/hr, 20-28% input moisture, 200-250°, 2:1 gas/solids ratio and 5 sec. dwell time. This is claimed to match fill value of 10% ET in blend without pressure drop increase associated with ET inclusion, plus better ends stability, less coal fall-out, less dust/waste and less smoking hot collapse. With respect to ET, there is a smaller loss in e.m.c. and lower losses of nicotine and sugar. Avoidance of lamina blending and longer strand length are other advantages. Flavour loss is equivalent to ET.

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5. Australia

- (a) STRADBROKE 35's have achieved 5% market share in one year. Rothmans have responded with BRANDON 40's (four rows on ten) but circumference has been noticeably trimmed, and Philip Morris' response is TWINS, comprises 2 x 20 packs strapped together - these are at very low density and very low firmness. Wills superiority in density/firmness terms appears to be paying off.

6. Switzerland

- (a) B.A.T. (Suisse)'s 4/0.4mg development to compete with the very progressive PHILIP MORRIS EXTRA was seen as a good match to competition.
- (b) B.A.T. (Suisse) have developed Maryland tobacco in Brazil and now use 50:50 U.S.:Brazil sources. Surplus is available from the Brazilian growing region and interest was shown in its possible suitability for modified Virginia developments. If necessary, this can be cased at GLT stage by Souza Cruz.

R.A. Crellin

Alan Stephenson

R.A. CRELLIN

A.G. STEPHENSON

Copies:

Dr. R. Sinns
Dr. T. Hings

*No highlights from UK
Did UK attend?*

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DAILY AGENDA

Meetings will start at 08:30 hrs in the morning.

Coffee break at around 10:15.

Lunch is from 12:30 to 14:00 hours.

Coffee at 15:30.

Finish at 17:30.

Dinner from 18:00 to 21:00.

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Monday, January 30, 1989

Approx.
Time

I - MARKET

BRA	Brazilian market trends and new products (Filipi)	45
D	German market trends and new products (Köhn)	30
UK	Middle East market / product trends (Cousins)	20
USA	US market trends and new products (Rienl)	30
AUS	Australian market trends and new products (Bickhoff)	45

LUNCH BREAK

CAN	Canadian market trends and new products (Lepich)	45
UK	New BAT(UKE) products and launches (Cousins)	20
D	Possible influences of the EEC single market on product development after 1992 (Köhn)	15

UK	UK Project GLOBE - Survey of competitive product strategies (Orellini)	45
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II - LEAF & PROCESS

CH	Important principles to keep in mind when designing cigarette leaf recipes (Bizon)	15
USA	Developments in leaf grades (Black)	45
BRA	Brazilian Oriental tobacco (Oliveira)	30

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Tuesday, January 31, 1989

Approx.
Time

II - LEAF & PROCESS (Continued)

USA	Leaf regulatory issues (Black)	30
BRA	Characteristics of Comum tobacco cured like fire-cured (Oliveira)	20
USA	Developments in casings (Chakraborty)	20
BRA	Casings and flavors - New developments (Oliveira)	30
UK	Project PARK - Evaluation of the product potential of HVD (high velocity drying) treated blend components (Stephenson)	45
D	Product advantages in using HTD (high temperature drying) processed tobacco (Zimmermann)	45
USA	SDS status (Riehl)	10

LUNCH BREAK

USA	Improvement of expanded tobacco (Black)	15
UK	Projects FLITE and AMTECH - Spin-off technology from the DEER process (Stephenson)	45
USA	Ammonia disposition in Marlboro (Chakraborty)	20
CH	Maryland tobacco characteristics, properties in a blend. New sources of supply (Bizon)	15

III - INNOVATION

USA	New product concepts (including AIRBUS) (Riehl)	25
UK	Projects FELT and HINIC - Development of reduced tar delivery products (Crellin)	45
USA	Developments with Y1 tobacco (Black)	15

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Wednesday, February 1, 1989

		Approx. Time
<u>III - INNOVATION (Continued)</u>		
D	Filter additives for reducing smoke nicotine deliveries (Köhn)	30
USA	Low nicotine products (Chakraborty)	15
D	Consumer test results on ultra low delivery brands and products with hollow tube filters (Zimmermann & Köhn)	45
USA	Filter additives (Chakraborty)	15
BRA	Smoke of cigarettes with taste and aroma of tropical fruits (Oliveira)	20
CAN	Project SATURN - Development of flavored cigarettes (Smith)	30
D	Some preliminary results on capillary type prototype cigarettes for reducing sidestream smoke emissions (Köhn)	30
LUNCH BREAK		
UK	Projects LESS and LEAST - Development of low sidestream products (Stephenson)	45
CAN	Project VISA - Low sidestream (McSride)	30
BRA	Reduction of unpleasant cigarette butt odor in ashtrays (Oliveira)	20
UK	Project LMASA - Blend and cigarette design influences mainstream biological activity (Crellin)	45
BRA	Effect of Virginia and Burley blends on cigarette smoke deliveries of N-nitrosamines (Oliveira)	30

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Thursday, February 2, 1989

Approx.
Time

IV - GENERAL

BPA	STORR project - Restructuring of the Product Development system within Souza Cruz (Filho)	30
USA	B&W's identification process for new products (Rien)	15
AUS	Product briefs - translating consumer wants into product specifications (Bickhoff)	30
BPA	Quality inspection system (Filho)	30
D	Cigarette biodegradability (Könn)	30
GROUP	Discussion on the following topics: <ul style="list-style-type: none">- Product quality as perceived by the consumer.- Product briefs - how does Marketing translate consumer wants into product specifications?- Survey of product testing methodologies, from the use of expert in-house smokers to consumer evaluation. (Comments on "Measurement of taste character with consumer panels" by E. Könn)- Procedures or processes used to identify new product opportunities. How do you decide to work on project X or Y? What guidance do you receive?	

LUNCH BREAK

GROUP what have we learned?
 what have we accomplished?
 which areas are the most promising for the future?
 what work priorities do we recommend?

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PARTICIPANTS

Australia : Doug Bickhoff

Brazil : I Voipon Filho
Paulo de Oliveira

Canada : Pierre Leblond
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Part Time: Linda Bussière
Eve Lemay
Cécile Létourneau
Jean Marcil
Catherine McBride
Yves Prineau -

Germany : Erhard Koehn
Lorenz Zimmermann

Switzerland: Willy Bizon -

U.K. : Anthony Cousins
Robin Crellin
Allan Stephenson

U.S.A. : Roger Black
Baran Chakraborty
Tilford Riehl

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