

25. In 1953 KOOLS soothed the throat and refreshed the lungs.

This copy appeared in the third year in which Vardy allegedly smoked KOOLS. The copy writer was apparently referring to subjective feeling or sensation of the smoker. This was not intended to be either technical or medical copy.

26. LIFE with a cellulose acetate filter was marketed in January 1953. We seem to have no T&N data on this LIFE, and there appears to have been no significant advertising.

27. In 1954 VICEROY advertising said that the brand had 20,000 filter traps, providing double the filtering action of competitive cigarettes, and in 1955 VICEROY advertising said that the brand had twice as many filters as either of the next two largest selling filter brands, apparently WINSTON and L&M at the time.

At that time, a finer filter tow, which is the basis of these claims, was being used only by Brown & Williamson. The claims are, in that sense, solid.

"Double filtering action" was claimed on the basis that the cigarette itself filtered, as did the added filter. Thus any filtered cigarette could have made that general claim, though only VICEROY could then claim twice as many filter traps.

Through this period VICEROY continued to have relatively low tar and nicotine delivery. The advertising didn't claim that VICEROY was any healthier than other brands; it simply claimed superior filtration competence.

If the smoker thought it desirable to smoke a brand with lower range tar and nicotine delivery, VICEROY was offered as such a cigarette. It was sold that way.

28. In 1955 VICEROY had twice as many filters as the next two largest selling filter brands. (WINSTON and L&M seem to have been the next two largest selling, KENT the third.)

WINSTON was using a filter material of 8.0 dpf/70,000 total denier which provided less than 10,000 filter traps. We believe the same was true of the L&M product at that time. KENT continued, at that time, its use of an asbestos filter, switching to a cellulose acetate filter in 1956. When KENT switched to use of cellulose acetate, it used 18,000 traps, somewhat less than VICEROY.

29. In 1955 the VICEROY filter was also said to be "made from a pure natural substance--cellulose--found in delicious fruits and other edibles." And "No other filter like VICEROY! No cotton! No

asbestos! No charcoal! No foreign substances of any kind! Made from pure cellulose...snow white...natural."

While the foregoing claims don't make much sense, plainly they were aimed at the troublesome widespread rumor that the VICEROY filter was made of spun glass, fragments of which were said to come through in the smokestream. This was simply an advertising effort to counteract that untrue rumor.

30. There was then (1954-56) also copy on endorsement of VICEROY by doctors, dentists, and nurses. This was based again on postcard surveys of these professional groups.

The advertising represented that many of these respondents thought filtered smoke preferable. There was no claim or representation that smoking VICEROY was either good or bad for the smoker.

These endorsements tied into the fact that VICEROY delivered less tar and nicotine than most other leading cigarettes.

This "endorsement" advertising appeared only in medical and dental journals. It was directed at professional people, capable of critical judgments - not at smokers generally.

31. In 1955 it was claimed that "VICEROYS filter out what you don't want in for richer, smoother flavor." Apparently this theme was used only in railroad menu inserts, and the copy was flavor qualified.

This advertising didn't bother to say what was taken OUT or what the smoker didn't want IN, but the inference could be drawn, particularly in view of past VICEROY copy, that reduction of T&N was both desirable and accomplished. We seem to find no records of T&N testing at this time, but there is reason to assume that VICEROY continued lowest in T&N delivery, save for KENT.

32. In March 1955 LIFE was restricted to trademark sales. LIFE was again widely marketed in September 1959 with a 20mm paper filter.

33. In 1956 the FTC took the position that even copy about feeling soothed and relaxed contravened the 1942 FTC agreement. Brown & Williamson denied that, but we nonetheless agreed to stop talking about even throat feelings. An FTC "press release complaint" was, of course, the threat - never mind the "right" or "wrong" which might come of a protracted proceeding. (The courts have since put the brakes on such tactics, but that was no help in 1956.)

Shouldn't the position on this be that we have always acceded to the Government's requests and restrictions in advertising the KOOL brand - which doesn't mean that we agree with its position? It is

unfortunate that the FTC intervention of 1956 pertained to KOOL advertising during the years in which Vardy allegedly took to smoking KOOLS. However, we made no medical claims for KOOL, save for the unfortunate claim of 1952 that no other brand was any better for the lungs. Per above, it is hoped that that claim didn't get into the Cleveland area.

34. VICEROY stayed on old themes in 1956, but KOOL cellulose acetate filters (introduced as an 80mm version in August 1956) now afforded "All the benefits of KOOL, plus all the benefits of smoking."

As KOOL used the same filter as VICEROY, there should be no problem in this claim. We have no records indicating whether or not KOOL T&N delivery with the VICEROY filter was comparable to VICEROY levels, but as heavier leaf tobaccos were being used in KOOL at this time, it seems probable that KOOL's T&N delivery somewhat exceeded that of VICEROY. Nevertheless, with the incorporation of the filter on KOOL, the tar and nicotine delivery was somewhat reduced over that of the non-filter KOOL--even though the total cigarette length was increased.

35. During the years 1956-1960, KOOL copy also said:

"Smoking too much? You've got the hot cigarette habit. I stopped it by smoking KOOLS. Filter KOOLS taste clean and fresh and light."

"Snow fresh filter KOOL. America's most refreshing cigarette...as cool and green as a breath of fresh air. Mild, mild menthol...With every puff your mouth feels clean, your throat refreshed. Switch from hots to KOOLS."

"Tried regular cigarettes? Tried other menthol? Now come up, all the way up to the menthol magic of KOOL. You feel a new smoothness deep in your throat. Only KOOL gives you real menthol magic."

36. In 1957 VICEROY still talked about twice as many filters, 20,000 traps, maximum filtration, and a new Filter-of-the-Future that does for you exactly what you want it to. (WINSTON was then the largest selling filter, followed by L&M, VICEROY, KENT, SALEM, OLD GOLD and TAREYTON, in that order, ranging from 3 to 40 billion.)

At this time, VICEROY still had more traps than other cellulose acetate filters. We believe, however, that at this time KENT and L&M came up to about 18,000 traps and OLD GOLD to about 15,000, WINSTON and SALEM holding to 10,000. The cellulose acetate portion of the TAREYTON filter had relatively few traps and the paper/charcoal segment wasn't amenable to trap measurement of this sort.

The VICEROY copy in 1957 was taste-qualified for the most part, and 1957 was the last year in which we claimed twice as many filter traps. Presumably the claim was then dropped because other cellulose acetate filters were coming closer to (or surpassing) the VICEROY count.

37. In 1958 the VICEROY filter was lengthened and a finer tow was introduced to cut tar and nicotine delivery further. The advertising theme switched to VICEROY giving the smoker more of what he switched to a filter for - on the whole, an accurate claim. Given our advertising history, this must be understood as meaning substantial tar and nicotine removal.

38. In 1958 the VICEROY "Thinking Man" theme was introduced. "A Thinking Man's Filter and a Smoking Man's Taste"--in many variations. "Thinking Man" copy continued into 1961, when its use was discontinued because it proved ineffective against the advertising of competitive filter brands which were then leaving VICEROY far behind.

The "Thinking Man" theme used such copy as:

a. "VICEROY gives you the maximum filtration for the smoothest smoke of any cigarette, more taste, too, the finest tobacco taste of all. Maximum filtration for the smoothest smoke--and finest tobacco taste, more of what you change to a filter for."

b. "The fact is that thinking men and women don't let themselves get pushed and pulled by all those filter claims. They know what they want in a filter cigarette. And they know only VICEROY gives it to them. A thinking man's filter, a smoking man's taste. Makes sense."

c. "When you think for yourself, you can't be misled. That's why I smoke VICEROY. I checked on the filter and picked the one with the best filter for the finest taste, VICEROY."

VICEROY sales were weak at the time, particularly vis-a-vis the newer filtered WINSTON (a product of RJR) which had been built solely on taste advertising ("WINSTON Taste Gook Like a Cigarette Should"). Brown & Williamson's purpose was in fact to modulate the filter theme and to stress the balance VICEROY was accomplishing between reasonable filtration and satisfactory taste. (Any witness likely to get involved in "Thinking Man" copy might have in mind two or three of the humorous stories which developed about this theme.)

"Thinking Man" copy proved ineffective to arrest VICEROY's declining sales position, and it was abandoned in 1961.

39. In early 1958, both the VICEROY and KOOL filters were lengthened from 15 to 17mm and a smaller dpf tow was substituted to further cut T&N. Company and agency records do not indicate to what extent T&N delivery was cut by this filter change.

40. In 1958-59 KOOL suggested switches from hots to KOOLS to avoid dry, rough and raspy throat conditions (with no further objection from the FTC), and the brand claimed the world's most tested filter. This was the VICEROY filter, which certainly long led the field in filter development.

In April 1959, the KOOL cellulose acetate filter material was changed to reduce T&N delivery. The KOOL filter at this time was similar to the VICEROY filter, the thrust of the claim being that B&W's cellulose acetate filter, rather than the particular KOOL filter then used, was the most tested, whatever that means.

41. Brown & Williamson had - without much success - marketed the LIFE cigarette for some years, and in 1959 a new LIFE filter (Millecel) was introduced. LIFE copy then read--

"YOUR FILTER CIGARETTE NO LONGER FILTERS BEST Yes, the Filter Cigarette You Are Now Smoking No Longer Gives You the Best Filtration. Today, there's a New Filter Discovery!

NEW LIFE FILTERS BEST BY FAR!

ONLY NEW LIFE BRINGS YOU AMAZING NEW MILLECEL FILTER

Here's the discovery that revolutionizes filter smoking--Life's New Millecel Filter! Millions of super-filtering cells that achieve filtration never before possible . . . far better filtration than the brand that used to filter best."

Early in 1959 a program was initiated in cooperation with the Peter J. Schweitzer Company to develop a new, more effective paper filter with many traps. This became the MILLECEL filter, which was then and remains the most efficient filter for T&N per millimeter length ever developed. The MILLECEL paper used in LIFE is a unique paper. We know of no effort either to count or scientifically to calculate the actual number of cells in this new filter. Upon microscopic observation, the number of fibers in this material would appear to run into millions.

In an R&D memorandum dated August 14, 1959, B&W R&D tests of the higher-filtration brands showed: LIFE 8.6 mg tar, SPRING 8.9 mg tar, SANO 12.3 mg tar, SPUD 12.2 mg tar, and KENT 13.5 mg tar, these being the higher filtration brands at that time.

42. In 1959 LIFE advertising used (a) a filter absorption drip test comparison to prove that LIFE filters best and (b) comparative copy based on figures on file with the U.S. Government to the same point. (The drip test attempted to show that LIFE filtered better than the previously most effective filter cigarette. That was in fact L&M's new DUKE cigarette, according to L&M's advertising and our own tests.)

On December 11, 1959, the FTC issued a complaint charging that these LIFE ads were false, misleading and deceptive in that the drip test didn't prove less T&N and that the Government had made no such finding and given no such implicit endorsement.

There ensued the agreement of January 28, 1960, which became a Commission Order interdicting use of such pictorial demonstrations when they don't in fact prove T&N absorption and representations that the Government has found any B&W cigarette to be lower in T&N content than any other filter cigarette. (The latter prohibition was relaxed by Order of February 26, 1968.)

In this instance, B&W did not admit violation of the law as charged. The FTC had requested each of the major cigarette manufacturers to test tar and nicotine delivery of a number of specified brands, the testing technique being specified. B&W simply produced in print advertising the table based on its own test results as filed with the Government, these showing that LIFE, at that time, had lower T&N than any of the other brands tested, the list including such then high-filtration brands as DUKE, SPRING and KENT.

The drip test, using a liquid dye, was intended to and did accurately reflect the relative absorption of the DUKE and LIFE filters of a water solution containing tar and nicotine.

While this LIFE/FTC episode might be useful in showing governmental blocking of efforts to publicize low T&N delivery, it must be in mind that we used a lot of other "health" copy which wasn't interdicted; we haven't come to use of T&N figures now that they are condoned; and the FTC squabble involves charges of misleading copy.

43. In early 1960, an attempt was made to market the LIFE cigarette with slits in the cigarette paper near the mouthpiece. LIFE's tar delivery was thereby reduced to 4.9 mg, thus continuing to have the lowest tar delivery of any cigarette on the market. The slit-paper LIFE did not find consumer acceptance, however. Notwithstanding subsequent discontinuing of slitting, LIFE continued to deliver less tar than any other brand.

44. In 1960 the VICEROY filter was called "Deep Weave."

The Deep Weave filter was the result of a joint development between B&W and Eastman. The fibers in the tow were interwoven, labeled "interlaced." Further crimping was added to the filter tow, giving the individual fibers a wavy effect. This made it possible to use a smaller individual fiber size which, in turn, increased the surface area, making a more efficient filter. During 1960, the tar delivery of VICEROY with the Deep Weave filter was reduced from 12.4 mg to 11.3 mg--still well above LIFE.

45. In late 1961, changes were made in the VICEROY filter so as to increase somewhat the T&N delivery. This change was made because VICEROY sales were slipping, each of WINSTON, SALEM, L&M and MARLBORO filters providing more T&N than VICEROY and selling at a substantially higher rate. While at that time KENT delivered less T&N than VICEROY and substantially exceeded VICEROY sales, KENT was the exception, still riding the crest of Reader's Digest endorsements. In 1961 the sales of WINSTON, SALEM, L&M and MARLBORO filters totaled 149.9 billion, whereas VICEROY had slipped from a high of 24.5 billion in 1957 to 17.9 billion in 1961. In 1957, total sales of filtered WINSTON, SALEM, L&M and MARLBORO totaled only 97.6 billion.

Also in late 1961, the T&N delivery of KOOL was similarly increased somewhat as KOOL sales were running at a rate of only 14.1 billion, whereas SALEM in six years had moved to the leading menthol position with 1961 sales of 41.5 billion.

46. Abandoning the "Thinking Man" theme in 1961, VICEROY advertising turned to the "both ends" theme, as "VICEROY's got it end to end, special filter, special blend." When that copy proved ineffective to arrest VICEROY's declining position, the copy switched, in 1962, to emphasis on VICEROY having "the taste that's right." "Smoke all seven of the leading filter brands and you will agree...some taste too strong...some taste too light...but VICEROY's got the taste that's right." This basic theme continued in VICEROY advertising into 1966.

47. In 1962 polyethylene glycol was added to VICEROY and in 1963 to KOOL, RALEIGH, BELAIR and LIFE to minimize phenol delivery.

In 1963 Wynder published a study based on animal tests in which he concluded that phenol was a co-carcinogen. This study got considerable publicity and led to the "phenol crisis" of 1962. In response several manufacturers, including B&W introduced additives on filters to minimize phenol delivery. B&W continues to use additives for phenol removal. We have never advertised removal of phenols. Phenols were removable without affecting taste.

Changes in filter making equipment at this time increased the effectiveness of B&W filters, but there was not a significant resultant change in T&N delivery because the leaf tobacco then in use had a higher T&N content.

48. Whether or not to volunteer information on our use of polyethylene glycol to minimize phenol delivery isn't an easy question. Certainly today intelligent plaintiff's counsel can be expected to get into the gas phase and some of its awful-sounding constituents. Our basic position on that must be that we spend millions in research, first, to use today's ever-increasingly sophisticated

chemistry and research tools to learn what cigarette smoke is; second, to get quantitative fixes on these constituents (varying, of course, with a myriad of smoking factors, about which little is known); and, third, to devise practical and acceptable means of varying the smokestream content if and when there is solid scientific and medical finding that that would be useful.

Presumably, however, there is as much basis for reducing delivery of hydrogen cyanide, acrolein, formaldehyde, benzopyrene and isoprene as there is of phenol. And we can reduce these other constituents - but, on the basis of test panel findings, not yet with satisfactory resulting taste. What of carbon monoxide and nitrogen oxides, no less indicted, which we can't yet remove?

Why do we ask Celanese to mouse skin-paint SM-II? Why are we developing a mouse inhalation machine? Why is BAT "far out" in this sort of research? These and like questions must be considered in the context of a cancer suit.

We don't believe there's thing one wrong with cigarettes. Even unfiltered cigarettes. There is no clinical proof, and the epidemiological studies prove nothing. Yet over the years we were a leading proponent of filtration - millions upon millions spent in evidence of that.

No one has proven that more or less smoking - or more or less of all the "bad" constituents - makes any difference. Yet, of course, there's concern - governmental, public, and our own. We pioneered filtration. With our parent, we have long been in the van of sophisticated cigarette research. We chartered CTR. We finance its independent research. We finance AMA research. We want first the facts - and then the answers. Our quest is unending and unstinted.

Yet there's no point in offering a cigarette no one wants. Even the Government recognizes that. LIFE is our case in point. Minimal-filter WINSTON taking over from more effective-filter VICEROY is in point, too.

49. Between 1960 and 1964, KOOL copy said:

"Smokers...Come up, come all the way up to the menthol magic of KOOL. No other menthol cigarette has it. Only KOOL gives you real menthol magic...deep down in your throat. Has your throat been telling you it's time for a change? Have you tried what you thought was a real menthol cigarette? Come up to the real menthol magic of KOOL. Only KOOL has it."

As noted above, menthol does the throat no good; it produces no more than a subjective reaction of coolness and smoothness.

50. In January 1962, the pressure drop of KOOL was increased to further reduce T&N delivery. As the tobacco section of KOOLS was producing more T&N, there was no significant net delivery effect in these filter changes. KOOL T&N delivery moved up gradually as KOOL sales stayed more or less level, while sales of the newer and competitive RJR mentholated brand (SALEM) continued to increase sharply.

51. In March 1963, the VICEROY cellulose acetate material was changed to 3.0 dpf/47,000 total denier to further increase pressure drop and reduce T&N; but in August 1963 we switched to 3.3 dpf/44,000 total denier to increase T&N delivery. As a result, the T&N delivery of VICEROY was increased fractionally above that of WINSTON and MARLBORO. (VICEROY sales in 1963 were running only about 19 billion against 69 billion for WINSTON and 25 billion for MARLBORO.)

52. The pressure drop of the LIFE filter was again increased in August 1963 to further cut T&N delivery. As the tobacco section was producing more T&N, there was no significant net delivery effect in this filter change.

53. In 1963 LIFE said that millions have read the report of the latest impartial tests and proclaimed LIFE to be the finest filter cigarette.

This advertising referred to the Reader's Digest article of August 1963 in which LIFE was listed as being lowest in T&N with 5.2 mg of tar and 0.3 mg of nicotine.

54. In 1963 B&W put triple-filter AVALON on test markets in California and Chicago. The mouthpiece section of this triple filter was made of cellulose acetate. The center section was a black-colored acetate with an 18% loading of carbon granules. The remaining filter section was a gray paper with a 5% potassium carbonate treatment.

Each section of the AVALON filter was designed to perform a specific filtration task. The paper section with potassium carbonate removed hydrogen cyanide.

At this time, Arthur D. Little had published a study which professed to show that hydrogen cyanide repressed cilia activity. Whether the Little report was valid and accurate and, if so, whether retardation of cilia activity is a significant health factor, we didn't profess to know. The AVALON filter was intended to remove gas phase materials which at the time were considered suspect by some medical writers.

The center section of the AVALON filter was designed to remove HCN, acetaldehyde, isoprene and acrolein from the gas phase.

The third or mouthpiece section removed phenol.

All three sections accomplished T&N removal.

Hundreds of variations of this multiple filter product were designed and tested, and testing in these areas continues today. The AVALON cigarette used in these test markets removed acrolein, HCN, and phenol, but was not very effective in the removal of acetaldehyde and isoprene.

The tar level of AVALON got down to 10 mg and nicotine to 1 mg. VICEROY, KOOL, WINSTON and SALEM were in the 14 to 15 mg tar range and nicotine of all four brands about 1.3 mg.

At this time LIFE, as well as competitive high-filtration brands were delivering only about 5 mg tar and commensurately lower nicotine.

In 1963 and 1964, the three-part filter of AVALON was featured in advertising as employing three distinct filter units, "to refine harsh flavor, to absorb hot taste and to smooth the smoke." The MILLECEL was "Science's Newest Filtering Material." (The MILLECEL filter was the highly effective paper filter which was developed for and was already being used on LIFE cigarettes. It had been in use for about five years but still remained both the newest and the most effective filtering material.)

B&W spent \$1.6 million advertising AVALON in the test market period of approximately 14 months during 1963 and 1964, this equivalent to promotional expenditure at the rate of about \$18 million on the national market. Total AVALON sales during 1963 were 76 million; during 1964, 84 million. Sales remained so low that the brand was discontinued.

In fact the story of the AVALON marketing experience isn't likely to serve any useful purpose. The work that went into the product of this multi-purpose filter was, as indicated, but part of the continuing effort to accomplish selective gas phase removal, should any reason for that be established or seem important to health authorities or the smoking public. The AVALON brand was placed rather hurriedly on the market. Its T&N removal was only mid-range, and we are not in a position to say that the gas phase removal of the AVALON triple filter was either very effective or particularly significant. Furthermore, the Company doesn't believe that anything needs removing from cigarettes anyway. At the time (in 1963) publications of Arthur D. Little (who was under contract to L&M) indicated that hydrogen cyanide, acetaldehyde, isoprene and acrolein apparently suppressed cilia activity. But Brown & Williamson doesn't accept such findings as significant, and there has been little publicity on cilia suppression since 1965. Brown & Williamson R&D continues work in the area, however, because of such current reports as those of the Leuchtenbergers.

RJR was, at the same time, marketing charcoal-filtered TEMPO which was far more effective in gas phase removal. TEMPO with an effective charcoal filter did not sell well either.

55. In 1964 the Surgeon General's Report on Smoking and Health was issued. This report was not based on any new research. The Surgeon General's committee, through staff assistants, did no more than review and seek to correlate previous studies, and practically all of those were merely statistical studies. There had also been some mouse skin-painting work at that time, but its pertinence was then - and now remains - doubtful.

Most of the statistical studies on which the Surgeon General relied, have since been sharply criticized by eminent statisticians for the inadequacy of methods and techniques and the inconclusiveness of results even on statistical grounds. The fact is that medical science didn't know then - and doesn't know now - what causes any cancer. More and somewhat better statistical studies have since been completed by various agencies, but the facts still remain that no one knows what causes lung cancer and any number of non-smokers develop cancer of the lung.

56. In 1964 VICEROY said that the "Deep Weave" filter was scientifically designed for taste.

Starting in 1964, with VICEROY sales still weak in contrast to WINSTON, MARLBORO and other competitive brands, the Company decided to keep VICEROY's tar delivery at about mid-range of the major filter brands. (This was basically a marketing decision to improve VICEROY's taste vis-a-vis its principal competition, yet to hold T&N delivery at a level hopefully acceptable to filter smokers concerned with published comparative data, whether by Consumer Reports, Reader's Digest or later the FTC.) This was done and has since been accomplished from time to time through adjustments in the pressure drop of the filter, paper changes, blend changes, etc., as necessary or useful to maintain the VICEROY taste level in this middle position of the larger selling filters.

Starting back in 1962 and continuing today, the nicotine delivery level of VICEROY has been somewhat higher than that of the leading competitive filters. This higher nicotine delivery was intentional. Whether higher nicotine delivery was helpful or harmful to sales is now under review.

57. From 1962 through 1966, KOOL--for the same marketing reasons--was intended to deliver slightly more tar than SALEM, but beginning in 1967 it has delivered fractionally less tar than SALEM. The decision to keep the tar delivery of KOOL somewhat under that of SALEM was made in 1966.

From 1962 into 1968, KOOL delivered somewhat more nicotine than SALEM.

58. The Cigarette Advertising Code became effective January 1, 1965. As a member of the Code, B&W's advertising was subjected to careful screening to assure, among other things, that no health claims were made. While the "health" sections of the Code were removed in 1968, B&W--like RJR and PM--has continued to follow a no-health-claims policy.

59. The LIFE cigarette, with its effective paper filter for many years maintained a very low tar delivery. In the period 1965-1966, various changes were made in the LIFE filters.

First, an acetate filter was substituted for the more effective paper filter. This increased the tar delivery from about 5 mg to about 12 mg.

Next, the pressure drop of the acetate filter was increased a bit, minimally reducing T&N delivery.

In September 1966, a dual filter was substituted (part cellulose acetate and part paper) which brought the tar delivery level down to about 10 mg - still double that of the single paper filter used for many years.

With this, LIFE's tar delivery was brought in line with that of TRUE and other then popular cigarettes delivering less tar than the major middle-range brands. No significant advertising promotion was put behind LIFE during the period of these changes and they had no significant effect on sales, which remained minimal.

There is the problem throughout the LIFE story that we haven't put any significant promotion behind the product for many years.

60. Between 1964 and 1968, KOOL said:

"Your cigarette's not tasting cool enough 'til you come up to KOOLS. With rich tobaccos, KOOL's white filter, extra coolness, too. Taste extra coolness as you smoke, let KOOLS come through for you."

"Come up to the KOOL taste. The coolest taste in any cigarette. Get KOOL's white filter, rich tobaccos, too. Taste extra coolness. Let KOOLS come through for you. Come up to the KOOL taste. The taste to stay with every time you smoke."

61 In 1966 VICEROY claimed use of flavor fresheners.

"Flavor fresheners" seem to be an advertising concept. There was no change in VICEROY or use of any new additive which would support such a claim. VICEROY cigarettes remain essentially unchanged since 1962.

62. As of January 1, 1966, all packages and cartons of cigarettes manufactured in the United States bore a notice, as required by Federal law, reading "Caution: Cigarette Smoking May Be Hazardous to Your Health." This Congressional action followed extensive propagandizing and pressure by some bureaus in the Government for various restrictions on cigarette merchandising.

63. In 1967 and 1968 VICEROY advertising featured the "Right Any Time of Day" and "The Good Taste Never Quits" themes--innocuous copy.

64. In 1968 the VICEROY filter length was increased from 20 to 21mm and otherwise modified, this resulting in a reduction of wet TPM delivery by two or three mgs. At this stage, TPM (total particulate matter) measurements had come into vogue rather than the old tar measurements. This resulted from the switchabout of the FTC position on publication of T&N data and its decision to use a TPM measurement rather than a tar measurement. (This was essentially a refinement of measuring technique.)

Nicotine was also reduced somewhat. These adjustments were made in keeping with the policy of holding VICEROY T&N deliveries in line with those of its larger selling competitors.

At about the same time, similar changes were made in the KOOL filter for the same reason.

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#### PATENT POSITION

Further to R&D work, Brown & Williamson holds many patents in the tobacco products field. Of these, six may be of interest to plaintiff's counsel:

a) Patent No. 3,320,961, issued in 1967, treats the filter with sodium phosphate, claiming that this reduces acids, tars, nicotines, and phenols. To that, Brown & Williamson, through other means, long ago minimized phenol delivery and controls T&N delivery in keeping with the public's preferences.

While it has not been scientifically established that any particular level of T&N is more or less healthier than another, Brown & Williamson has long been a leader in the filtration field. We have tried various additives for the control of various acids in the smokestream, and continue full-scale experimentation in gas-phase control.

There is not yet a practical means of acid control which leaves a salable cigarette.

This patent, like a number of other developments, stemmed from the continuing efforts of BAT and B&W research to find means of removing or decreasing various smoke ingredients against the day when one or some of them may be found to be harmful to health in the smoking context.

b) Patent No. 3,340,879, issued in 1967, pertains to means of removal of phenol. As indicated, Brown & Williamson has for some years held phenol delivery to a minimum.

c) Patent No. 3,327,718, issued in 1967, is an invention for removing nitrogen dioxide from cigarette smoke by means of a zeolite filter. So far it hasn't proven feasible to use zeolite in a salable cigarette produced in volume. Again this is a product of continuing research to enable us to control mainstream smoke in keeping with future scientific dictates.

d) Patent No. 3,353,542, issued in 1967, is an invention which, it is claimed, may also be useful in the catalytic decomposition of...constituents of smoke. This development is still under study.

e) Patent No. 3,353,544, also issued in 1967, is an invention relating to reduction of T&N and various gas phase components of mainstream smoke. This invention is pertinent to use of a charcoal-type filter should its scientific worth be established in terms of health. Charcoal filters have not, so far, found substantial consumer favor because of the sharp change in taste imparted.

f) Patent No. 3,403,690, granted in 1968, covers another means of removing acids from mainstream smoke. Tests to date indicate that the additive required produces a very unpleasant taste.

The six patents noted are all of recent date and each of them are BAT inventions assigned to B&W.

There are four health-oriented patent applications pending, again all BAT inventions. Plaintiff's counsel has no access to these, however, through the Patent Office.

Several patent applications based on Brown & Williamson's recent R&D work are now in preparation, some of them health-oriented.

Finally, Brown & Williamson has abandoned some patent applications before issue. These, too, are unavailable to the plaintiff through the Patent Office.

SPEECHES BY B&W OFFICIALS

1. The Brown & Williamson position on smoking and health has been stated by its President and others in these terms:

Crume - 1963 - (Michigan Tobacco & Candy Distributors & Vendors Assoc. in Detroit)

"Our industry has reacted in its traditionally responsible manner. It has energetically turned to research, in the belief that science rather than propaganda will find the answers to questions about tobacco and health."

"In its search for truth, the tobacco industry will continue to support scientific studies for whatever period necessary to solve the many complex factors concerning the issue of tobacco and health."

Finch - 1965 - (Burley & Dark Leaf Export Association in Gatlinburg, Tennessee)

"From the scientific and medical communities, there came forth an impressive group of researchers and specialists who testified in Congress as to the unsoundness of the assumptions made by our adversaries. As eminent men of science, they pointed out the absolute lack of laboratory and clinical evidence to support those assumptions. How can the search for truth be continued if smoking is to be condemned on the basis of purely statistical correlations? Look at the public record of those hearings, and you will find a substantial body of medical and scientific testimony and statements that trumpet the call for more reason, sounder judgments, and more facts through research."

"But I tell you this with all firmness and sincerity: we are more interested in the truth--whatever it is--than our enemies appear to be. The search for truth about the whole question of tobacco and health must continue unabated and at all possible speed."

Finch - 1966 - (Flue-Cured Tobacco Cooperative Stabilization Corp. in Raleigh, North Carolina)

"Yet, despite these expressions of scientific doubt, our enemies continue to draw or advocate certain statistical correlations between the use of tobacco and human diseases. Doesn't it seem very odd indeed that these critics fail to recognize the absence of clinical or laboratory proof of such association--that they choose to ignore even the Surgeon General's own caution to the effect that vastly more research is needed to explain this statistical correlation!"

"Let's state one thing boldly for all to hear: We believe ourselves to be in an honorable business, whose products have given solace and comfort for hundreds of years. If those products are damaging to human health, we want to know the truth. But--we

will settle for nothing less than the truth. Statistics alone will not do. We demand scientific truth as the result of laboratory and clinical research."

Crume - 1966 - (Louisville Rotary Club)

"We just aren't willing to cease business because of an assemblage of statistical information and correlations that link certain diseases with cigarette smoking. Prior to 1964 and since that date, the only 'proof' that cigarette smoking is a causal factor in lung cancer or other diseases is based on statistical association--and every businessman knows how dangerous it is to make decisions on statistics alone."

"...I repeat that to date no hard, scientific evidence to point an irrefutable finger at cigarette smoking has been found. We have tried and they have tried, but the statistics have not been supported by laboratory facts. This is not just our contention. A sizable group of highly reputable medical and scientific men is very dubious of the significance of mere statistical correlations."

Yeaman - 1966 - (Virginia State Chamber of Commerce in Richmond)

"The burden of the attack is the charge that cigarette smoking is in some undisclosed and unknown way causally related to human health."

"Working from seven basic statistical studies, whose validity has been questioned by reputable scientists, our critics have drawn certain statistical correlations between the use of tobacco and human diseases. There is not a businessman here who doesn't know that you can prove very nearly any thesis you like from statistical correlation."

"Now despite this statistical correlation, there is no clinical or laboratory proof of association between the use of tobacco and diseases. Mind you, there are those who say that there is such clinical proof, but the Report of the Surgeon General's Committee said, in effect, that there was not such clinical or laboratory proof and that vastly more research was needed to explain this statistical correlation. More than 30 of this country's most eminent men of medicine and science have testified before Congress that the charge against tobacco remains unproved."

"Let me assure you: The tobacco industry will not be supine to statistical attack but when the day comes, if it ever does, when it is known that tobacco products contribute directly to human diseases, the vast resources of the tobacco industry will instantly be devoted to its correction."

Crume - 1967 - (Rotary Club, Frankfort, Kentucky)

"...the fact remains--no clear cut evidence--no convincing proof has been found that the use of tobacco is injurious to the health of any adult unless he already has some respiratory or heart condition or some other malady which obviously restricts his activities and requires special attention."

"It is our business to make the very best product possible to meet the demands of the consuming public."

"The tobacco industry simply wants to preserve the right of the adult consumer to make a free choice in enjoying the pleasures and comforts of smoking. That is our goal and we expect to achieve it."

Yeaman - 1967 - (Tobacco Growers Information Committee in Raleigh, North Carolina)

"What is the truth? It is simply that no one--and I mean no one--knows whether cigarette smoking causes any human disease. All the statistics that can be amassed cannot prove a cause-and-effect relationship. Figures may prompt suspicion, but they are not proof."

"Of all the examples of outright statistical nonsense, a recent public health service report really captures the booby prize. ...it claims to show an association between smoking and a variety of chronic and acute illnesses. The fact is that it is based largely on self-diagnosis and second-hand information. It is devoid of ascertained medical facts and abounds with many obvious errors and misrepresentations."

"The word 'bamboozled' is a particularly apt description of what a host of studies, by means of anti-smoking propaganda, have done to the general public--and, even worse, to a large segment of the medical community. Statistics, through repetitious claims and ballyhoo, have now assumed the face of scientific fact."

"I say this whole thing has gone far enough! Medical science has got to be brought back into the picture through basic research. Unwarranted attacks on tobacco have got to cease. Self-serving bureaucracy must not be tolerated. The people deserve the truth, and must be given it."

Yeaman - 1968 - (Television documentary "Tobacco & Health: The Economy & the Controversy broadcast by WAVE-TV in Louisville, Kentucky)

"We are doing all we can through scientific research and other means to find out the truth, because we want to have the most acceptable products possible. In the meantime, we simply are not willing to let anti-smoking propaganda assume the role of scientific facts. And I might say that so far the facts do not support the position of our critics."

ADDENDUM

B&W's basic litigation position must be that there is no evidence showing cigarettes to be harmful to human health. We have promoted cigarette filtration over the years in response to an increasing segment of the market which prefers a filtered product for reduction of tar and nicotine. We nonetheless hold that there is no proof that the quantum of tar and nicotine or that of any other constituent of mainstream smoke is injurious to health.

With the increasing concern and propaganda about smoking and health, B&W has for some years contributed millions of dollars to the American Medical Association and to the Council for Tobacco Research to support the quest for facts about smoking and health.

B&W does not itself engage in medical research. We do extensive research work in the areas of (a) constituency of tobacco smoke, (b) filtration of smoke, and (c) organoleptic properties. Filtration research is directed at control of the constituents of mainstream smoke, and the purpose is to provide mechanics for selective removal of various constituents in the event medical science establishes that as desirable. Research in the area of organoleptic properties is directed in part at the preservation of a satisfying product notwithstanding such selective filtration as may become advised.

B&W has commissioned limited work in the biologic (mouse testing) and ciliastasis areas by way of tracking the considerable work done by others.