

L.C.F.B.  
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FILE  
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COPY Q's & A's  
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Mr. R.L.O. Ely  
Public Affairs  
Millbank

CIA/AIB/46J

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RESTRICTED

Human Smoking

You will recall that, during your last visit to Southampton, we discussed the potential implications of the activities of Mr. Ed Harriman and similar people.

We recognised that our "public stance" on what we are doing (and why) in the area of puff-duplication might be less than totally clear.

As an initial step, it was suggested that we might jointly identify potential questions and then, with Lionel Blackman's help, agree on the answers.

I sought help from one or two colleagues to think of "questions". The flood-gates opened and attached is a copy of the "help" I received. Apart from putting them into five categories, I have not edited the questions, as I thought I might eliminate, as trivial, a question which from a Public Affairs viewpoint was important.

I am now seeking your views on shortening the list to a dozen or so questions for which we should generate the necessary answers.

*C.I. Ayres*

Enc.

cc: Dr. L.C.F. Blackman  
Mr. A.L. Heard  
Dr. D.G. Felton

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## I. METHODS

1. How realistic are laboratory measurements of smoking behaviour?  
e.g. People might take smaller puffs if they know they are being observed.
2. People do not normally smoke through holders. How much difference does it make (a) in general, (b) in particular, by stopping people from closing ventilation holes, etc. on filter?
3. How can you monitor number of cigarettes smoked per day when the act of monitoring tends to make people reduce the number anyway?
4. Are experiments conducted in which cigarettes are 'spiked' to alter the proportions of various smoke constituents? If so, have the added substances been passed for use by the appropriate agencies?
5. What is puff duplication and how good is it?
6. What made it necessary for the industry to require such equipment?
7. Why do you need human smokers if you already have machines?
8. Are smoking machines, puff duplicators, etc. recognised as relevant by the medical profession?

## II RESULTS

9. What is the largest puff volume someone can take from a cigarette and, therefore, the highest delivery of tar and nicotine, etc. obtainable?
10. What is the average puff volume people take from cigarettes, especially low delivery cigarettes? If this is over 35 ml, should standard smoking engines be changed? If so, what volume should be used?
11. Is it true that people always 'compensate' for reduced delivery by increasing puff volumes, number of puffs, depth of inhalation, number smoked, etc.? If they do, what can be done to stop them?
12. Are there any identifiable smoking patterns which are particularly 'dangerous'? If so, should people be warned and can they be persuaded to change?
13. It has been suggested that it is 'cheating' to use white edged overwrap, especially for long filters, as the machine smoking is by definition to overwrap + x mm. People, however, are encouraged to take an extra puff(s) as they don't know where the filter is. Is this true and how much difference does it make to deliveries?
14. It has been suggested that nicotine 'dose' required may be related to body weight/size. If this is true, does it mean that larger people are relatively more exposed to the tar they take in with the nicotine?

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15. What is the actual 'dose' of tar, nicotine, etc. that actually goes into the body and stays in? Does the proportion of the 'dose' retained vary according to cigarette type?
16. It is suggested that 'milder' smoke is more easily inhaled and this is one reason why people inhale more when they change to low delivery cigarettes. Why are irritants therefore not added to the smoke to prevent this?
17. What information are you looking for from puff duplication?
18. Are you using the information to identify methods of encouraging people to smoke more or more people to smoke?
19. If smokers are getting deliveries different from the League Tables, what steps have you taken to alert people to this fact?
20. You've had this equipment at least since 1978 (Smoking Behaviour book) - what do the results show and how have you used it?
21. Have you used this to deliberately design a cigarette which cheats the League Table (e.g. is BARCLAY an example of this)?
22. What is the maximum delivery a smoker can get from a 'low' tar cigarette?
23. How does this compare with the maximum a smoker can get from a Middle tar cigarette?
24. If the ratio of Maximum Delivery/League Table is different for Middle and Low tar, what have you done to improve this?
25. Why haven't you yet produced a cigarette which guarantees a maximum delivery = delivery quoted?
26. How relevant are the League Tables?
27. If not, why haven't they been made more relevant?
28. Do low tar smokers smoke more cigarettes?
29. Do men compensate more than females?
30. Have you a current research programme on this subject and what are its objectives?
31. Do figures on packs, etc., relate to actual smoke inhaled?
32. What do BARCLAY give on inhalation?
33. Do cell types of cigarettes (English, French, American) give the same smoke? Which is least dangerous?

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34. Does a lower delivery mean its safer?
35. Does a filter make smoke safer? especially charcoal?
36. Humans smoke different cigarettes in different ways - how do the machines smoke?
37. Does the average smoker absorb carbon monoxide and other poisons from cigarettes? and is this more than other possible sources, e.g. traffic fumes?
38. Does the chocolate and other materials, e.g. saltpetre, make the tar more or less dangerous?
39. Are low tar cigarettes low in everything?
40. Does your puff duplicator (research work, etc.) help to sell more cigarettes?
41. Do people smoke more under stress?
42. How do you make animals stressed?
43. Is the nicotine removed from low tar?
44. Has BAT applied any of its research as of benefit to the smoker?
45. Are lozg cigarettes dangerous?
46. Are cigarettes smoked at CRA (by your panels, etc.) more dangerous than those in the shops?
47. I understand that a former director of your company, Dr. S.J. Green, has published a paper showing that smokers can get as much tar from a low-to-middle tar cigarette as from a high tar cigarette. Doesn't this make league tables a nonsense?
48. I see that two of your company's research staff have shown that male smokers obtain quite similar amounts of nicotine regardless of which of three cigarettes they smoked. Doesn't this also make league tables a nonsense?

They even say "smokers have altered their smoking patterns in response to both increased delivery by decreasing the intensity of smoking and for reduced delivery by decreasing the intensity of smoking. These alterations have involved almost every method that can be used on a single cigarette." Why then do you bother to market your State Express cigarettes in three delivery versions?

49. In a book edited by one of your staff, some French workers talk about low delivery cigarettes compared to high delivery cigarettes. Yet there is an increase in carbon monoxide uptake measured for the low delivery product. Doesn't this suggest that such cigarettes have little advantage?

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50. You have obviously bought a robot smoker from CGC Projects Ltd. What work are you carrying out on the health side?
51. Since you are carrying out work on the health side, you must obviously consider that you have a problem here. Is that so?
52. I notice that the incidence of diseases associated with smoking is falling, and doctors attribute this to lower delivery cigarettes. Isn't this the best evidence for the causal effect of smoking yet? How does BAT interpret these trends?
53. I hear that you are talking to MPs. What are you telling them about smoking behaviour?
54. I understand that your American parent company has launched a cigarette called BARCLAY which cheats the league tables, because of the way the filter works. Will they be telling you to launch this cigarette in the UK? How much tar does it produce? I have heard 1 in the USA and you state 8 in one of your handbooks. Is 1 the machine figure and 8 the actual human figure?
55. Incidentally, I hear that smoking affects the male sexual function and causes genetic damage in sperm. Is this true? Will low tar cigarettes be more efficacious? Ed. Harrimans, April 1, 1982.

### III SUBJECTS IN EXPERIMENTS

56. Are members of the public used in the experiments persuaded to either: smoke cigarettes they would not otherwise wish to smoke or: continue to smoke for experimental purposes when they might wish to give up smoking?
57. If subjects are paid or given free cigarettes is this not effectively an inducement to smoke or encouragement to smoke more than they might otherwise do?
58. Are BAT employees encouraged to smoke for experiments which, given a free choice they might not participate in, in order to be seen as 'co-operative' and improve their 'image' within the Company?
59. Are the subjects who are used in experiments really representative of the population? It could be suggested that only those people who smoke in a particular way (e.g. only those taking small puffs) are chosen for experiments.
60. Are the results obtained for subjects smoking 'realistic' brands? If people are presented with products which are different from those which they might choose for themselves, misleading results might be obtained.
61. Are subjects instructed to smoke in any special way during experiments or are any 'clues' given to them concerning the type of smoking which might be 'acceptable'?

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62. What sort of informed consent is obtained before either members of the public or BAT employees take part in experiments?
63. Can the puff duplicator and other smoking machine be applied to animals?
64. Can you force animals to smoke?
65. Are your smoking panels paid or otherwise encouraged to smoke?
66. Can panel members opt out whenever they wish?
67. Are the Unions informed of which people are on smoking panels?
68. Do you use psychologists for psychiatric testing?
69. Do your smokers undergo regular health tests?
70. Do your staff have to smoke? How many do? How many have given up?
71. Do you check the health of your staff?
72. Do you give your staff any free samples? if so, do you insist on these being low tar?
73. Do you force animals to smoke and to smoke using human patterns?
74. Why don't you use tissue culture instead of animals?

IV ASSOCIATION WITH M.A.H. RUSSELL AND I.H. MILLS/R. STEPNEY

75. On what basis are these associations maintained? What financial arrangements are made and is this a way of getting 'cheap' research? To what extent are BAT instructing people in medical establishments as to the content of experimental work?
76. How much freedom, in practice, to MAHR and RS have, to publish results from collaborative studies? Under what circumstances might 'permission' to publish be withheld?
77. To what extent do MAHR and RS have access to all results, processed at GR&DC, from the experiment in which they have been involved? Are any results withheld by BAT, for instance, if these could prove to be embarrassing?
78. Do MAHR and RS have access to all data concerning design and composition of any products provided to them by BAT for experimental work?
79. I see from the Scientific Literature that you work with Michael Russell on smoking behaviour. Yet he advocates the use of nicotine chewing gum to give up smoking. Do your shareholders know you are supporting this man? Are you spending the company's money wisely?

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V MISCELLANEOUS

80. If BAT wish to maintain their stance with respect to serious research into smoking, why do they not employ medically qualified staff (cf. Gallahers)?
81. If GR&DC is the research centre for BAT worldwide, is it to be assumed that research there concerns products from BAT associates? If so, how much testing/measurement on new products is conducted before they are put on the market?
82. On what basis are decisions made regarding what can be published by BAT employees? There must be large amount of information of a non-commercial nature which are gathered by BAT. If this was made public, it might be of considerable value to non-company researchers working on smoking.
83. Any relevance of nicotine as a poison and the Medicines Act?
84. Does BAT inform the Government of its research work? If not, why is it kept secret?
85. Why do you not help people to smoke low tar by making them cost less?
86. How much does BAT spend on human smoke tests?

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