

VISIT TO IMPERIAL TOBACCO CO.. MONTREAL

7th - 9th April. 1981

These notes will cover the specific items for discussion set out in the visit brief dated 27th February, 1981 and sent to I.T.L. on 2nd March. 1981.

1. Secondary Automation Project

We discussed (with Cliff Warren and Yves Primeau) the relationship between I.T.L. and AccuRay. (See previous notes on meeting with AccuRay in Columbus.) I.T.L. have had problems with control of their Oscar storage systems and asked AccuRay to investigate the possibility of using spare capacity in the 7000 Micro system to carry out this control activity (the sort of facility claimed in AccuRay's publicity literature). AccuRay agreed to do this on a no-charge basis but then found that I.T.L.'s Oscars were, in their opinion, unique in that they needed new control systems for the two motors. Because of this AccuRay said that they would charge approximately \$50,000 for this service.

I.T.L. have discussed their problems in this regard with other B.A.T. companies and are of the opinion that similar Oscar designs with similar problems exist, at least in Ahrensburg; Molins agree with this view. In fact what has happened now is that I.T.L. have worked with Molins to modify the design along the lines suggested by Philip Morris and have achieved a satisfactory solution. They will not now, therefore, need AccuRay.

In this same context some remarks were made about the service which had been provided by Molins. Apparently after identification of the problem and considerable persuasion, Molins produced a rather crudely modified circuit board for the Oscar control system; I.T.L. have now designed a properly printed version of this circuit board and have sent it to Molins and asked

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them to make future modifications on this basis.

In a broader sense I.T.L. want to try to consolidate the various electronic control systems associated with secondary manufacturing unit and were hoping that the AccuRay 7000 Micro system could be used for this purpose. It was pointed out (ARS-C, drawing on the ANTIC design exercise and fairly recent conversation with AccuRay) that their spare capacity in the AccuRay system is very far from sufficient to handle such a task. I.T.L. accepted this view.

We outlined the latest situation with regard to alternative partners following AccuRay's withdrawal from this work. ARS-C then presented in some detail the latest cost benefit analysis of the ANTIC system. This was accepted by I.T.L. who expressed great enthusiasm for the concept and design as it now stands. Unlike B & W they are now totally committed to installation of the 7000 Micro system on their making machines; 33 units are already installed and a further 12 are on order. In this situation it was agreed that it would be unreasonable for them to move away from the AccuRay system and every effort should be made to design the ANTIC system to be compatible with the basic 7000 Micro units which I.T.L. will have installed. It was agreed that this scheme would involve a greater capital expense than the use of a straight-forward ANTIC system but I.T.L. said that they would find this acceptable. It was noted that the 7000 Micro systems that are installed and on order are the most basic form of the system which is available. It is to be expected that if the ANTIC system is successful a total of 12 units would be required in Quebec and 30-35 in Guelph.

ARS-C  
on-going

It was made clear that in its first phase of development the ANTIC system will not be designed in such a way as to be a ready made solution to I.T.L.'s desire for consolidation of maker/packer electronics. The central processing capacity of the system will, however, be totally adequate for this consolidation exercise in phase II of this development.

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2. Energy

ND/WJR  
on-going

Bill Ross is the I.T.L. man responsible for energy matters. He had not yet seen a copy of the final energy report. I gave him a draft copy and it was agreed that we should rely on ad hoc communication to maintain awareness of mutually useful energy conservation techniques.

A few specific items were noted:-

- that Quebec has very low energy costs and electric heating is actually cheaper than oil. Bill Ross is of the opinion that automatic energy management systems would not be cost effective.
- I.T.L.'s blends are 99% Virginia; they feel it would be very difficult to reduce the amount of flue cured tobacco used.

3. Expanded Tobacco

There is great interest in DIET in I.T.L. at present. They are planning to install a plant at Guelph and are in the process of finalising details of a building to house it. Unfortunately, as yet, they have not decided on exactly what size of plant will be required. I discussed with them Peter Davy's economic model of the DIET process at a meeting involving a large number of the relevant staff. Their first estimates are that a 10% add-back rate across all their blends would require a plant of around 1200lbs. per hour capacity.

They have been doing some comparative experiments between G13 and DIET but do not yet feel that they have completed a sufficiently extensive set of experiments to be able to decide exactly what percentage add-back they could use in the short and longer term future.

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They have received fairly detailed proposals from AIRCO for plants of various sizes and configurations. I have copies of the essential parts of these proposals. They are very keen to obtain all possible information and assistance on experience with the plant at Southampton and on the design of the plant proposed for Malaysia. We agreed, however, that it is important to obtain this information in a planned and sequential manner. We agreed on the following steps (some of which will be carried out in parallel):

SMC  
asap

- Stan Candlish will devise a factorial experimental design to determine what percentage add-back they could expect to use in the short and longer term future and to investigate the possibility of identifying a core blend (or minimum number of blends) which would be expanded by the DIET process and would cover all of their brands. I will then arrange for as many of these samples as possible to be run at Southampton.

ND following  
receipt of  
details

RMG

- Bob Gibb will lead an activity to crystallise I.T.L.'s thinking about the maximum and minimum usage levels and the associated risks (in terms of effect on sales and on the other hand possible over investment) for the short and long term future. EHD and PJD will then meet with a Canadian team, either in Canada or in England, to go through a series of iterations to assess the most economic plant size and the relationship between cost and risk thus enabling them to make a judgement about what size plant they actually want. It was agreed that this should take place as soon as possible and certainly within two months.

RMG/EHD  
by mid June

why?

- The I.T.L. team were very keen to visit the Southampton DIET plant and meet with the people who have actual experience of running it. It was agreed that this should not be done until further consideration has been given to the possible size of the plant required by I.T.L.

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I.T.L. are keen to maintain contact with the DCL development for Malaysia. I agreed to investigate the possibility of sending them minutes of the meetings of the Steering Group on this subject being led by EHD. It was to be clearly understood that these documents will be minutes and not definitive papers.

A brief examination of the AIRCO proposals indicate that they are coming out with much lower process costs than the DCL system. A study of this comparison should be made as soon as possible.

Some other points emerged from a general discussion on DIET. Stan Candlish remarked that he originally wanted DIET for the purposes of delivery control. On this basis, apparently the I.T.L. Board agreed to pay for DIET without any expectation of direct financial savings. Another remark was made suggesting that the Philip Morris expanded tobacco appears to have a higher nicotine content than ours; there is an hypothesis that P.M. are using high nicotine scrap for their expansion process.

ND  
asap

I agreed to ask EHD to send an outline of the DCL/Malaysia plant building design to I.T.L. It was noted that Benson & Hedges (in Toronto) have a 2,000lb. per hour plant which has been in operation for one month. Relating this to their normal leaf throughput suggests that they will be putting a fairly large percentage add-back into their products. Towards the end of our meeting a telephone call was received from Philip Morris in Canada suggesting a visit by two or three I.T.L. people to their DIET plant. Apparently I.T.L. have some experience of loss of expansion when DIET tobacco is added back to the blend before the final cooler. The question was asked as to at what temperature does this expansion loss occur.

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4. Product Development

I.T.L. evidently has a very active market research department with good links to production and R & D areas. They feel that their product range covers all consumer needs (more completely than the competition). (See Appendix.)

Their view is that the main change over the next few years will be a steady increase in the proportion of ventilated cigarettes. At the end of 1980 12% of I.T.L.'s products were ventilated. All major brands will be ventilated by 1983, taking the total to 50%.

The technique they propose to use is "skip tipping" with laser pre-perforated material. They prefer laser perforation to electrostatic because it is more consistent and controllable. They found, however, that they lost 15% productivity on a MK9 machine with pre-perforated tipping - mainly due to the need to clean the skip-tip head and the changeover from ventilated to non-ventilated paper and vice versa on the same machine. They have now reduced this loss to around 9%. In this context Cliff Warren made a strong plea for bonding systems research; if a controllable, 100% efficient bonding system could be devised it would be worth around £9 million/year to them.

I.T.L. feel that the Hauni laser would give them problems because it produces rather large - and visible - holes; this would be unacceptable to their customers.

5. The HEE and Barclay Filters

Their view of the HEE filter was discussed. Their experience is that its performance tends to be inconsistent because of twisting during manufacture. They also feel that any process involving thermal deformation of plastic will lead to instability in this product. They are, nevertheless, keen to apply the filter and would like to see an alternative production method devised.

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We discussed the policy with respect to introducing Barclay in Canada. (They are going through the process of obtaining the registered name from another company and propose to distribute cigarettes under the Barclay name in the legally required quantities to maintain use of the name.) They are of the opinion that the Barclay filter could be seen as a device that would mislead the public - since it is possible for a smoker to obtain much higher than quoted deliveries from the cigarette by (perhaps unconsciously) modifying his smoking style. If this were perceived to be the case then some antagonistic Government action could be anticipated.

There may also, however, be an argument for the opposite viewpoint. Actual deliveries could surely be increased by "auto compensation" in smoking behaviour (in response to lower perceived delivery or satisfaction) in other highly ventilated cigarettes - e.g. I.T.L's "Medallion". (It was confirmed that this is true.) In that case, if the Barclay filter is really doing what it is supposed to do in terms of providing higher satisfaction with lower delivery by delayed mixing of smoke and air, one would expect a lower degree of auto-compensation with Barclay than with other "ultra light" brands. Hence the tendency to obtain higher actual deliveries would be reduced and it could be argued that Barclay (as produced by B & W and provided the outer paper skin does not collapse in use) makes a significant contribution in this respect.

It might be said that the introduction of any product making claims as bold as Barclay's could precipitate Government intervention - but, apparently, there is already something of a press campaign suggesting that the low delivery claims of conventionally ventilated cigarettes are questionable, so there is a fair probability that Medallion et al will be attacked anyway and Barclay could be used as a defence as outlined above.

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Apparently no tests have been done in I.T.L. to determine whether there is any difference between the "auto-compensation" in smoking behaviour that takes place with Barclay and other 1 mg products. If such tests were done (or have already been done elsewhere) and indicated that the "Barclay effect" is not strong enough to eliminate auto-compensation then Barclay would not provide any support against attack on the image of the low delivery cigarette. If there were, however, a reduced degree of compensation then it could be a very useful tool in this respect.

6.1. Hauni Tunnel:

I.T.L. say they have spent 2 years trying the tunnel as part of the W.T.S. process but have now concluded that they can get the results they want by other means. (They have difficulty in getting temperatures above 95°c in the tunnel - possibly because of high throughput, even though this rate is below the Hauni spec.) Hauni engineers also had problems.

CW  
15 May

I.T.L. staff agreed to send a report on their alternative equivalent to the tunnel to EHD by 15th May.

6.2. Stems Shredding:

There was some confusion over the patent situation on this process. An up-to-date view would be appreciated by I.T.L. During my visit the second experiment with B.A.T. tobacco was due to run at Rothmans. Unfortunately this trial had to be postponed (for 4 weeks) due to a strike there.

6.3. Continuous Conditioning:

I.T.L. have had problems (particle size degradation at the doffer stage) with the Dickinson equipment. A report has apparently been sent to E.H.D. It was evident that a system along the lines recently proposed by Legg (the "air knife") would be viewed with interest by I.T.L.

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6.4. Once-only drying of stem:

They have been experimenting with adding stem before and after the cooler. A report will be completed soon.

6.5. Hauni fluidised bed Cooler/Drier:

The Swedish monopoly has apparently claimed good results in terms of reduced loss of expansion. Rothmans have a Hauni vibro cooler in their Darlington plant. Does EHD know of their results?

6.6. W.M.S. Cost Reduction:

They felt that any move to eliminate the foil would be attractive.

6.7. Hauni Steam Cutter Feed System:

EHD on-going I.T.L. have one of these special conveyors and would be happy to share experience of its effectiveness.

6.8. Cost Reduction Project Control Scheme:

The I.T.L. system of control of cost reduction projects is impressive - mainly from the motivating effect it must have through ensuring that such a project, however small, is brought to the attention of management and is followed through with recording of actual results.

N. DAVIS/APP

15th April, 1981

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