September 5th, 1959.

MEMORANDUM FOR THE PRIME MINISTER:

Re: The 105 problem

You asked me yesterday what I thought should be done about the "105" and related matters in the light of what I have heard and seen of it in recent weeks. While I feel some of the perplemities you yourself express about the matter, in the light of the changes in military advice and the inevitable difficulties in forming judgments on such important yet uncertain information, I have tried to come to a reasoned conclusion.

In brief, for reasons noted below,

- (a) Cancelling forthwith the contracts for the Arrow airframe, the Iroquois engine, the Astra control system and the Sparrow 2 missile.
- (b) Sharing with the United States the establishment of the 2 Borarc batteries already proposed for the North Bay and Ottawa areas, and urging on the United States the re-location northwards into Canada of others of their Borarc bases in Northern United States, if necessary bearing some of the cost of such re-location.
- (c) Ordering forthwith, at the lowest prices possible and with the best possible cancellation rights, about 80 or 50 Flosc aircraft from U.S. production, as used by the U.S.A.F. for air defence.
- States to commence to negotiate arrangements

to make available to the R.C.A.P., under arrangements similar to those in the United Kingdom, nuclear warheads for use on the Bonards and air-to-air weapons to be used on the F106C's.

- (e) Initiating immediately negotiations with the United States to share in an integrated defence production programme with them in the field of air force and missile weapons systems.
- (f) Instructing the appropriate senior military and civilian officers to consider urgently the whole Canadian defence and defence production programme in the light of these decisions and report on it later in the Autumn.
- (g) Announcing formula that
 because of the improvement in missiles (both
 defensive and offensive) in recent years, and
 the changes in the size and nature of the
 Russian bomber threat, we are introducing the
 Bomarc missile and proposing to introduce atomic
 warheads into Ganadian air defende, and will
 require very much fewer supersonic interceptor
 aircraft conty a rew dozen; consequently it
 is quite uneconomical to try to complete the
 development and undertake production of the
 log and its engines, control system and special
 missile and therefore it is being terminated
 despite the fact that it has shown promise of
 being a good aircraft, probably better in some
 respects than any alternative but not enough
 better to justify the huge extra cost.

As to the reasoning, again in brief, I would argue the following:

- l. The changes in the missile possibilities and the Russian threat are substantial enough to revise our air defence requirements for aircraft in terms of numbers, but they are not, I would suggest, sufficiently sure or complete as yet to justify even appearing to give up manned interceptors completely.
- 2. Despite my earlier willingness
 to support the Chiefs of Staff on the apparent adlantages of the 105 and its special systems, I am
 now convinced it is so expensive that its advantages
 are not worth the extra costs.
- J. The economic disadvantages of cancellation are offset by economic and financial disadvantages of continuing thedevelopment and production; our borrowing problem is very formidable already and it is vitally important to keep the confidence of both the Canadian and U.S. financial community. The action proposed will help to do this.
- and socially unpleasant and will probably give us a modest see back in general employment during the winter; but on the other hand there is some of idence of recovery in our own general situation and in the United States. In any case, if this aircraft expenditure is as wasteful as it now appears, it is a very poor and unfair means of promoting employment because it is located so largely in one or two areas, and in a high wage group. This aircraft production and employment must be reduced at some time during the next four years; it is a question of timing.

- . I appreciate the reasons thy Mr. Pearkes would play for time and defer ordering 71060's now, two I want there are counter arguments of real importance: we are not sure enough to justify the risk of having no supersonic fighter on the way; we have entered into NORAD with much fanfare and should appear to be doing our part, with the United States, on what most peole will continue to think is the main job; we won't really reduce our total defence expenditures because, in the end, we have to knep up to a reasonable level in relation to the United States. Moreover, it helps greatly I think in presenting our case to our public to make it in terms of quantities (as suggested in (g) above) and also it gives us a very good basis on which to argue production sharing with the United States if we are going to buy some airtraft produced in the United States instead of our own.
- that use of the U.S. alworaft instead of our own would be a slap in the face to the sanadian industry, but I think that can be answered best if the numbers to be bought are an small that the cont of the Canadian planes are obviously out of all proportion to the U.S. planes, even if the 10- is a somewhat better plane.
- 7. This suggested programme could be undertaken I would estimate within a total for defence expenditures (cash dispursements) of about 11800 million dollars for next year, the detailed figure depending on the cost sharing arrangement with the United States on Homars and Sage. This would be less than 27 more than the estimated defence disturtements this year and, of course, far less than the cost of continuing with the 105 system, which

would be some \$125 or \$200 million more (depending on whether or not the Astra-Sparrow contracts were cancelled.)

8. I think it should help in putting across this difficult decision to the public and perhaps help somewhat in deterring the Russians, if we could announce at the same time our decision to make arrangements to use nuclear defensive weapons in Canada, though not to produce them.

Mote: There will be a real problem in the timing of any announcement on this issue. It seems too late to make it in Parliament even if a decision is reached Friday, though it would be worth great efforts tonight to get it ready for the House Saturday. You are to be away nearly all of next week and I think you rather than Mr. Pearkes should do it. May we aim at Monday morning? It will leak immediately action is taken and delay is very expensive.

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