

PLANE PATTTER

by *Ernie Thompson*



The Bomarc-Nike controversy with which the United States Defence Department is beset raises vital problems for Canadian defence officials. This despite the denial of Defence Minister George Pearkes, VC, that the assault on the Bomarc program and subsequent reduction in immediate U. S. funding has had any effect on Canadian plans.

Our feeling is that if the current U. S. soul-searching has not been taken into consideration by Canadian planners it should be—and right now, before we become immersed for several unrecoverable millions of dollars.

This is not to say that the Bomarc is an ineffective weapon. At least it was not considered so as relatively short a time ago as last October when it was chosen by Canada's defence planners as the prime weapon in our NORAD arsenal.

We must assume this choice was made with full knowledge of the capabilities of the other weapons available to Canada through its NORAD partnership; and with no illusions as to the fact that in its current marks at least, the Bomarc is intended for defence against air-breathing vehicles and is not generally considered an anti-missile weapon.

The crux of the problem appears to be that Canada, in limiting itself to the products of other nations in its choice of weapons of the future, has left itself open to a situation in which it may not be able to obtain the hardware that it feels is best suited to the nation's defence requirements. Or at best may not be able to obtain the weapon of its choice without paying the same premium that would apply if we developed and produced it ourselves.

In the Bomarc situation, for example, is there any guarantee that the U. S. companies engaged in the prime development work on this system are prepared to continue the project if the potential Canadian order represents their total market?

And if they are, and the Canadian requirement for this particular weapon remains valid, is its procurement likely to be more economical, in terms of effective hardware for defence dollars, than a continuation of the Avro Arrow project would have been?

The big attraction about defence production sharing, in its broadest application, is that the forces of both Canada and the United States draw their weapons from a common production pool. In this way Canada gets the advantage of weapons suited to its requirement without the economic penalties which accompany limited production runs.

It now appears that we may no more have our cake and eat it under defense production sharing than we could when we went our own way.

Readers'

Reaction

Turnbull Propeller

The Editor,
Canadian Aviation.
Sir,

On page 67 of your issue for January 1959 there is an illustration of the Turnbull variable-pitch airscrew fitted to an Avro 504K. I am about to write a book on the Avro 504, and my aim is to include as many illustrations as possible of variants, experiments and modifications. Your Turnbull prop photo is just the sort of thing I am looking for, and I wonder whether it would be possible for me to obtain a print of the photograph from which your illustration was made.

Just one small point — the Turnbull wasn't the world's first variable pitch propeller by quite a long way. Early in 1918 a B.E.2c (No. 4122) was fitted with the first Royal Aircraft Factory variable-pitch airscrew at Farnborough.

Later that year the R.E.8 B. 738 was fitted with a supercharged RAF 4d engine and later an RAF v.p. prop', and no fewer than three S.E.5As were also fitted with v.p. prop's. The first of these had the Hart v.p. prop' in 1918, but apparently was unsuccessful and not flown. The third was flown not later than 1920.

The RAF prop' fitted to the B.E. 2c may not have been a very good one, but it was the first! (See page 368 of my book "British Aeroplanes 1914-18", published in 1957 by Putnam.)

J. M. Bruce,
Birmingham 32,
England.

Defense Spending Doubts

The Editor,
Canadian Aviation.
Sir:

Your Current and Candid column in the May issue (regarding production sharing) prompts me to make a rejoinder.

In common with the contemporary magazines covering the small Canadian aircraft industry — so small one would think one sound trade magazine plus a technical journal like that issued by the CAI would amply cover the lot — your paper seems to have turned with the tide quite easily. But I can assure you that more and more people, and particularly those with an engineering background and some perceptive powers of observation and thought, are questioning the validity and true worth of the massive Defence contracts that you seem to hold so dear to your heart.

Maybe you, like many Avro employees (I was one of them) were able to earn a satisfactory income and enjoy a pleasant occupation due to the steady flow of taxpayers' money for the 692 CF-100 aircraft that I believe were built. But do

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Current & Candid

by Veni Vidi

Once in a while a man, or a nation, has to take time to examine where he is going next. Basic plans can be drawn up and held to for long periods. But it is the inflexible and stupid man—or nation—that is unwilling to haul the plan out for reconsideration when it no longer seems quite right.

I wonder if this isn't the time to haul our national defense plan out for a good piece of basic rethinking. Perhaps that is exactly what is going on right now in Ottawa. Let's hope so.

It has been suggested that in this age there is no longer room for big, middle and small powers. A nation is either big or small. It's military and diplomatic effect is directly related to that rating. Since World War II we in Canada have worked hard to win an important place in the ranks of the middle powers. Now, it is said, that is an obsolete view—particularly in the defense business. We can only be a cog attached to one or other of the major wheels.

It isn't easy to put down our bright new Canada's first drum and stop thumping it. It was a great feeling to be a military power in our own right. But it seems 17 million people can't have their economic cake served as richly as we have come to expect and still support a giant military machine. Actually, even if we were prepared to give up the lure of chromium fins and a TV set in every room, it is a dangerous thing to let the military growth unbalance the normal run of things.

So we face a clear problem. We can keep running in ever-decreasing circles trying to provide a bit of this and a dash of that. On the surface at least—we would seem to have a military force comparable to that of our contemporaries. Or we can decide now that we can only hope to make a real contribution to the state of the art in one of two fields at any given time.

I don't think that is accepting defeat. Rather it is facing up to reality, which, while sometimes painful, isn't always a bad thing.

We have on the credit side a very great deal of experience in practical flying, though not in the new world of ultra sonics and space. We know, too, almost as much as anybody about the hard work of transport flying in remote areas. And we know plenty about how to find and kill submarines.

Would it not seem reasonable then to turn our full defense effort, both industrial and military, into those two directions? If war comes—either big or little—the Allied forces are going to need good logistical support, and as things stand now Britain and our other NATO partners have only the framework of suitable air transport, especially short and medium range equipment. Ten squadrons of Caribous and five of CL-44s would make an impressive addition to the Western fighting ability.

And while we are at it, we could use three times our present planned Argus force, and use it to real advantage. In a general conflict the West is going to have to watch a lot more sea than is now under surveillance. Canada could do a lot to help.

Only a fool could really imagine Canada fighting a war by itself on the present budget. Let's face that; and get down to intergrating our forces into the big Allied picture. Sub patrols and air transport are not glamorous jobs. The sleek fighter and massive missile will win the headlines. But they belong to the big boys and we have a way to go yet. Let's at least do something we can do well now.

Readers' Reaction

(Continued from page 64)

you honestly believe this aircraft was technically suitable, easy enough to fly in the hands of an average service pilot, and offered a reasonable chance of real defence to the Canadian taxpayers?

Do you know on how many airfields in Canada it could land safely, or take off at full weight? Do you know how few squadrons were formed and why—from 692 aircraft!

Does it not occur to you that although there are many bona fide engineers and business men who sincerely desire that the right technical decisions be taken in the light of the best current information, there may be far more powerful influences whose over-riding interest is in securing the best profit possible for the maximum duration, together with a powerful industrial and political position? I think it must, otherwise you would hardly write the words you did toward the end of your column of May, and I think you should face up to it that there is an obvious difficulty in a free-enterprise democracy when there is a conflict between the real necessity of making a profit and the usefulness of the end product that makes any profit feasible.

What has happened in Canada has been happening throughout the world since the first World War. It just depends on one's point of view and interpretation of proven facts whether one regards the aircraft industry as being "healthy and progressive (and profitable)" or "a parasite industry almost entirely subsidized by the taxpayer." "Quo Vadimus," Dundas, Ont.

The CF-100 is capable of taking off at gross weight from all military airfields from which it was intended that it should operate. The number produced was reasonable for the equipment of the 13 squadrons maintained, plus training command. There was wastage of a number of the earlier types produced—this is normal and inevitable—some 50 were sold to the Belgian Air Force (in competition with contemporary U. S. aircraft), and some crashed—this also, is normal and inevitable.

We have spoken to many pilots who have considerable regard for the CF-100. Easy to fly? What modern military aircraft is? But "average service pilots" are the best trained pilots in the world.

We believe the contribution made by Canadian taxpayers for the defence of the nation to be modest, and that they have so far received full value for their money.

The cost of armament is a burden every nation would rather do without—but one that so far no people throughout the history of the world has escaped.

We have not turned with the tide. Our philosophy is simple and constant: If we must spend money on defence—let us spend it in Canada.—Ed.