Build Plane or Take Name Off Country, Is Comment

Many Fear That Canada Without Arrow Will Be Committed to U.S.

By HAROLD GREER

"If Canada doesn't build the Arrow, we will soon be so committed to the United States that we might as well take the name off the country."

That comment was made by an experienced, nationally respected politician. This reporter heard it in various forms from many other politicians, government officials, RCAF officers, scientists and industrialists during an investigation into Canada's defense policy.

Their concern was not just for the Arrow interceptor itself, nor for the Avro manufacturers, nor even for the workers involved. The company, it was felt, would not go out of business and layoffs, while painful, could be cushioned by other work.

Their fear is that without the Arrow, the integration of Canada's air defenses with those of the United States will lead inevitably to Canada's being submerged in a military and diplomatic concept with which the Canadian Government (either Conservative or Liberal) has never fully agreed, and which it has resisted for the past 10 years.

The real issue, they said, is whether Canada, after years of trying to keep alive a decent flexibility in Western military and diplomatic strategy, must now give up the ghost and accept the basic precept on which U.S. military power is organized —use of the nuclear weapon.

Since the Second World War, the paramount objective of Canadian military policy has been to prevent nuclear war situations from developing.

Canada, after some initial hesitation, sent a large contingent to Korea and was thereby able to help persuade the United States that the action there should be kept limited. It made a substantial commitment and contribution to NATO in the hope that the Western alliance would not have to rely solely upon U.S. nuclear power.

It has supplied more truce observers and armistice supervisors in Kashmir, Indo-China and Palestine than any other country, and it formed the mainstay of the UN Emergency Force in the Middle East.

Now the government must decide how this role can be reconciled with Canada's participation in arrangements where the nuclear weapon is paramount.

The integrated, continental air defense system to which Canada agreed last year is nothing more than a gigantic effort to protect the U.S. Strategic Air Command bases, to assure that enough nuclear retaliation can still be brought to bear that the Soviet Union will be deterred from attacking.

If, as the government currently intends, the Arrow is not produced, it will not be because Canada was unable to sell it to the United States. It will l because the United States nev had a requirement for a lon range interceptor such as t Arrow, and will not have o once the U.S. air defense syste is extended into Canada.

The Arrow is already almo two years late—due largely, a cording to company sources, cutbacks in Government expe ditures. An answer to th supersonic bomber, it woul not be available in significar numbers until 1961, by whic time the chemical-fuelled, hy personic (2,000 miles an hou plus) bomber will be in produc tion.

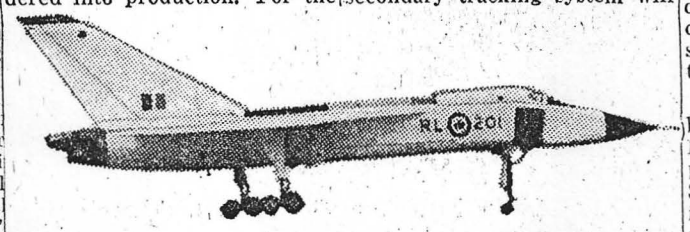
The United States recentl cancelled further productio and development of its super sonic interceptor, the Convai F-106C and F-106D, and wil push development of the Nort American Aviation company' hypersonic aircraft, the F-108 Ottawa, informed of this de velopment, saw little future fo the Arrow.

The RCAF makes little secre of the fact that it thinks th Government is wrong and i basing its plans on faulty an inadequate information. Unti the arrival of the F-108, the ai force argues, the only defens against supersonic aircraft wil be the Bomarc guided missile which can be spoofed by coun ter electronic measures.

But the manned, two-seate interceptor, carrying its own radar control system, can avoid jamming by switching fre quencies. In addition, the ai force says, the manned inter ceptor can identify unknown aircraft; with the guided missile there is really no alternative to shooting an unknown down or taking a chance and letting it through the defensive system.

But Prime Minister Diefenbaker, estimating that it would cost $900,000,000 more to provide 100 aircraft which would be obsolescent in a few years, has not been impressed by these arguments.

Even if the Government accepts the company's figure of $375,000,000, it is questionable whether the Arrow will be ordered into production. For the



Arrow is but one of many new and expensive military problems facing the government.

The Pinetree radar umbrella is being strengthened and the SAGE electronic control and computing system introduced in order to standardize with the U.S. system. Two Bomarc bases in Northern Ontario and Quebec are only the beginning. A guided missile defense against low-flying aircraft, such as the U.S. Hawk, will have to be incorporated. More manned interceptor squadrons will likely be required.

And none of this will be of any use against the intercontinental ballistic missile which, according to U.S. estimates, will be operational in the Soviet Union some time this year.

A defense against the ICBM, it is agreed in military quarters, is possible. Gen. James Gavin, then chief of the U.S. Army's research and development division, told a Congressional committee in June, 1957: "A completely effective anti-missile defense can be developed. We now know the job can be done."

But it will prove fantastically expensive. A separate initial warning radar system — three two-cone, 3,500-mile radar stations in Alaska, Greenland and Scotland — is being built. A secondary tracking system will be required somewhere across the continent.

The Nike-Zeus is being designed to intercept oncoming ICBMs before they re-enter the earth's atmosphere above their target area. The problem is such that Zeus will be of no use against manned bombers or air-breathing missiles.

In short, two quite separate defensive systems will have to be maintained, unless the Soviet Union foolishly decided to junk its manned bombers. The ICBM is not launched from airfields, and there is no inherent conflict in building bombers and missiles at the same time, as Russia has dramatically demonstrated.

Possibly the greatest problem of all, however, is the long-range submarine (either nuclear or conventionally powered) equipped with 1,500-mile ballistic missiles which can be fired from under water. The warning time expected from the intercontinental missile will be at least 15 minutes; but for the intermediate missile fired from submarines off the coasts, the warning time will be about four minutes.

Again, the problem is not considered insuperable. The Canadian Navy already has, in its St. Laurent and Restigouche class destroyers, ships capable of effecting certain kills on submarines—if they can find them.

Considerable progress has been achieved by the Defense Research Board, and the comparable agencies in the United States and Britain, on detection improvements. The effectiveness of sonar—high-frequency sound wave echoes—will soon be measured in miles instead of yards.

Variable depth sonar has been developed to overcome the fact that changes in water layer temperature can bend a sonar beam. A towable sonar buoy will soon be produced. Research would indicate that it may be possible to anchor sonar buoys on the ocean floor. Work is proceeding on ultrarange sonar emitted from powerful land-based stations.

The object is to create, throughout the 90,000,000 square miles of water assigned to NATO's Atlantic command, the same kind of warning net which now covers the Arctic. Eventually, a similar network will have to be established in the Pacific.

It wil cost, according to scientific estimates, somewhat less than the Arctic system but its total cost could soar immeasurably if Canada buys or builds nuclear submarines. Naval experts say the only adequate answer to the nuclear sub is another nuclear submarine.

Finally, the Government is being told that the Canadian brigade group in NATO (which means the entire army, since the brigade must be rotated every three years) must either be equipped with the air and land transport, missiles and electronics to meet and fight a nuclear war, or else it must be taken out of the NATO system.

Senior army officers say that unless the new nuclear tactical concept of great dispersal, mobility and firepower is accepted, the brigade is not only ineffective but dangerously vulnerable.

Thus Canada is being thrust into the embrace of the nuclear weapon—to protect it at home, to use it abroad.

Is there no alternative? The possibilities will be discussed in the concluding article of this series.

Fifth of a Series