

overlapping Canada and the United States are Canadians; and, in the fifth overlapping region, with headquarters at North Bay, Ontario, the region commander is a Canadian. Procedurally, there is evidence to suggest a high degree of Canadian participation at the senior-officer level. This involves not only details of administration but also the planning and programming functions of NORAD.

Discussions of NORAD tend to be

characterized by a surplus of answers to questions that are never asked. The purpose of this article is to ask, and answer, the three most basic questions about NORAD: What are its origins, what is its statutory authority and how does it operate? This background information will, it is hoped, provide the reader with at least a minimal base upon which to draw his own conclusions about the future viability of NORAD.

NORAD: Choices for Canada

By Roger Swanson

Analyzing the ingredients and possible outcome of Canadian-U.S. negotiations over NORAD's renewal is rather like analyzing the finger painting of a pre-school child. No one is sure what the end product will be, but the process is certain to be elusive, if not messy. As already indicated in the foregoing background review, NORAD symbolizes a profound Canadian-U.S. consensus of purpose. However, NORAD also symbolizes a bilateral organizational tie with the U.S., which many Canadians would like to avoid. NORAD's history is one of perpetual battle against shifting threat-perceptions and technological obsolescence.

If NORAD's immediate antecedents coincided with the Russian detonation of an atomic device ending the U.S. nuclear-weapons monopoly, its conception coincided with *Sputnik I* and the advent of the ICBM. If NORAD's five-year renewal in 1968 coincided with the advent of the anti-missile age, its 1973 renewal coincides with the advent of the SALT age and increased *detente*. Preliminary discussions at the working level are now under way, and again Canadian-U.S. officials are addressing themselves to the two congenital NORAD considerations: To what extent is there a joint Canadian-U.S. assessment of a strategic threat to North America? And what is the military "state of the art" on the part of the U.S. and Canada in meeting this threat?

It is generally agreed that NORAD has been waging a losing battle against technological obsolescence. In short, modernization is essential if NORAD is to remain effective. There are three modernized systems constituting the new U.S. area air-

defence technology: the Airborne Warning and Control System (AWACS), Over-the-Horizon Backscatter Radar (OTH-B) and the improved Manned Interceptor (IMI). All of these systems would involve Canada. That is, their deployment over Canadian territory and air-space would be regarded by the United States as important, if not essential.

U.S. approach

However, it should be emphasized that U.S. defence policy does not currently include the deployment of these systems. Although there is general agreement among U.S. planners on which systems should be deployed, there is no certainty whether the funding and authority to proceed with their deployment will be forthcoming. Moreover, these three systems are not operational at present but are still in advanced stages of development. It is this uncertainty on the U.S. side, not Canadian recalcitrance, that is complicating Canadian-U.S. negotiations over NORAD's renewal.

The first system, AWACS, would consist of converted aircraft, probably Boeing 707s. According to some U.S. estimates, a total of 25 AWACS would be needed. The AWACS have a control facility that would direct interceptors to their targets, and a radar facility. Their value is based on their invulnerability in flight, their detection efficiency regarding low-flying aircraft, and their flexibility in directing an air battle.

The second system is referred to as OTH-B. It would probably comprise four sites, the most important of which would be in Canada (assuming that the Canadian