

V.

CURRENT AND NEAR-TERM SURVEILLANCE SYSTEMS

General Observations

Historically, the Canadian contribution to surveillance systems has been portrayed as both responding to the needs of assured deterrence and contributing to the maintenance of Canadian sovereignty. Although, as indicated earlier, the link between 'deterrence' and 'war-fighting' has always been stronger than Canadians preferred to contemplate, a number of current trends seem likely to make this traditional distinction less and less persuasive.

First, it is well understood that progressive Soviet developments in ICBM and SLBM capabilities have shortened warning times and raised doubts about the survivability of key elements in the US retaliatory forces, thus increasing the importance of surveillance, early warning and threat assessment. Paradoxically, this has been accompanied, at least temporarily, by a decrease in the need for Canadian territory and, perhaps, Canadian co-operation in surveillance systems.

Table 7 seeks to demonstrate at an elementary level the small contribution that Canada now makes to continental surveillance systems reporting to NORAD.

In summary, as US surveillance assets have increased through such major developments as the Navy Space Surveillance system (NAVSPASUR), the Air Force Space Track System, and particular programmes such as BMEWS modernization, Canadian assets have become less relevant. The operation of the Pinetree line, for example, is no longer supported by the United States, and will be progressively phased out. The Baker-Nunn Camera System will also be phased out soon, and the OTH-B radars on the East and West Coasts will be entirely US owned even though there will be limited Canadian participation in the manning of them. The North Warning System (NWS), which is itself an interim response to the evolving nature of airborne threats, soon will be the only tangible Canadian contribution to the surveillance assets reporting to NORAD.

Second, as illustrated in the ADI, surveillance systems are likely to change in the foreseeable future. Within the time frame of the ADI tests, therefore, Canada may need to face decisions about how much it wants to be involved in the new US technologies of surveillance to ensure an adequate flow of information concerning Canadian territory.

Third, *independent* Canadian decisions about follow-on systems designed to ensure adequate *national* surveillance of Canadian territory may be extraordinarily difficult without full knowledge of US programmes. Since major procurement decisions by Canada (for example, NWS, or AWACS) may be quickly overtaken by new developments in US research