

difficult to track and intercept on the basis of NWS information. It follows that the difficulty of detecting the cruise missile would be even greater if it were submarine-launched, since in that case there could be little or no expectation that other surveillance systems would have detected the mother craft.

There are two obvious responses to this on the part of US planners. In times of crisis AWACS aircraft would be deployed to the north of NWS, and would take responsibility for surveillance and command and control to the south. Second, the NWS is not itself a survivable system. Excluding the distant prospect of a single, precursor surprise attack against selected US strategic forces which would take the chance of proceeding undetected through the NWS, the function of NWS would be served when it was destroyed immediately prior to the arrival of hostile bomber forces.

In sum, from the US point of view, NWS is a peacetime surveillance system designed to give reasonable assurance that a precursor or surprise attack is ruled out. Only when, or if, the United States moves to partial or full-scale defences will the threat of bomber attack become a war fighting problem, and at that point the technologies currently under investigation in the ADI will have replaced the NWS as the means to counter the air-breathing threat.

To the extent that NWS is a peacetime system, developed to ensure that the north of the continent is not left open in such a manner that US retaliatory forces are put at risk, Canadian interests are compatible with those of the United States. There are, however, two major points of divergence. The first concerns the Canadian interest in national surveillance of Canadian territory. The second raises the issue of Canadian acceptance and participation in nuclear war-fighting doctrines, and is addressed later in this paper.

While NWS undoubtedly provides improved coverage for military purposes in the North, in terms of general surveillance for sovereignty purposes it has serious deficiencies. Aircraft operating in or crossing the Canadian Arctic including commercial aircraft on scheduled flights and agreed flight paths, cannot be detected by the NWS radar envelope. As is clear from the above, there are also large areas between the present DEW and Pinetree lines in which there is no assured capability to monitor even civilian aircraft if they fail to respond at regular checkpoints.

Monitoring the Canadian interior (that is south of NWS) for general purposes of the assertion of sovereignty has so far evoked little interest in Canada. But knowledgeable Canadian commentators have argued that NWS is based too far south, and that, for purposes of national sovereignty, the line should either be relocated further north on the true periphery of the country — namely the Canadian Arctic islands — or that additional stations should be added on Melville and other Arctic islands.<sup>25</sup> If so, the

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<sup>25</sup> See B. Gen. (Retd) C.E. Beattie and B. Gen. (Retd) K.R. Greenaway, "Offering Up Canada's North", *Northern Perspectives*, Vol. 14, Number 4, September 1986, pp. 5-8.