## 11.1 Airborne maritime patrol forces

The Subcommittee understands that no final decision has been taken whether to replace the Argus with a new maritime patrol aircraft in the near future or to modify the equipment in the Argus in order to extend its useful life. The Minister of National Defence reported to the Standing Committee on External Affairs and National Defence on March 10, 1970, that his Department was evaluating the Orion and the Nimrod. Evidence indicated that the Orion P3C (developed by Lockheed Corporation U.S.A.) and the Nimrod (developed by Hawker Siddeley, U.K.) are both appropriate aircraft to replace the Argus and are currently available. Although members of the Subcommittee had an opportunity to inspect an Orion in Norfolk, Virginia, the Subcommittee realizes that it is not in a position to evaluate the merits of each aircraft on technical grounds. Nor does it feel able to make a recommendation as between procuring a new aircraft or extending the life of the Argus. It is, however, convinced that Canadian maritime forces must be equipped with an adequate number of effective maritime patrol aircraft.

Working in conjunction with bottom-based detection systems, the Subcommittee regards maritime patrol aircraft as providing a considerable surveillance and identification capability for the Atlantic and Pacific areas, as well as providing limited localizing, tracking challenge and/or destruct capabilities. These capabilities can be supplemented for an interim period by the use of shore based CS2F Tracker aircraft presently available.

Maritime patrol aircraft are also able to provide a considerable *surface* surveillance and detection capability in the Arctic, and the Subcommittee has been told that maritime patrol flights in the far north have been sharply increased. However, in view of the large size of the area involved and the absence of shipping activity, the Subcommittee doubts whether the use of an aircraft with expensive specialized equipment is justified when visual observations are essentially involved. However, it does recognize a need for some training experience and a requirement for basic intelligence on the Arctic region to which such flights undoubtedly make some contribution.

The Subcommittee suggests that the possibility of using observation satellites to provide regular surveillance of the Arctic regions should be examined. It is aware of the high cost of such systems and recognizes that a specialized observation satellite programme is out of the question. However, it understands that the possibility of using satellites to conduct earth resources surveys over Canada's North is being carefully studied. The Subcommittee suggests that equipment capable of conducting such surveys might with minor adaptation offer some capacity for regular surveillance at slight extra cost. The definition would, however, be coarse so that activity on a small scale would not be detected. Nevertheless, if an adaptation could be made to a satellite programme intended primarily for other purposes, the Subcommittee believes that the more extensive flights now being scheduled in the Arctic could be cut back. It would be necessary, however, to complement the surveillance capability of a satellite with aircraft (probably operated by Canadian ground forces) which would be capable of inspecting any suspicious activity and perhaps even have some capability of landing on ice for close investigation. The Subcommittee believes such a system would provide for more effective coverage of Canada's Arctic regions at reasonable cost than the present maritime patrol flights now offer.

The Subcommittee has learned that arrangements have been made for maritime patrol aircraft to use facilities at the airport at Frobisher Bay. The 21366—741