

Canadian waters between the early 1970s and the April 1990 by Trackers flown by both Canadian Forces and Air Reserve pilots. It has been argued that the airframes could have given many more years of service, but the old piston engines were causing problems. There were plans to install new turboprop engines, but the April 1989 budget put an end to this project.

As noted in its interim report tabled on 20 December 1989, the Committee views with concern the withdrawal from service of the medium-range patrol aircraft and the lack of any immediate plans for a replacement. At a time when the surveillance of Canada's coastline is more important than ever in the face of new threats to Canadian sovereignty, this need ought to be addressed on an urgent basis. During the Committee's visits to the East and West coasts and its sittings in Ottawa, the implications of the retirement of the Trackers were fully discussed, as were the measures taken by the Department of Fisheries, the Department of the Environment and other departments who benefitted from the surveillance provided by the Trackers. Some of the measures taken by departments other than National Defence to compensate for the loss of the Trackers' surveillance capabilities are described in other sections of this report.

However, despite the loss of the Trackers, Maritime Air Group will still be involved in general surveillance of Canada's coastline. Indeed, before 1 April 1990, the surveillance patrols carried out by the Trackers were supplemented by patrols by Aurora aircraft which among other things provided up to 400 hours of patrols per year to the Department of Fisheries and Oceans. With the phasing out of the Trackers, the number of hours flown by Auroras to assist in the monitoring of fishing and other activities in Canadian waters will be slightly increased. However, the four-engine long-range Aurora aircraft equipped with sophisticated sensors and the latest torpedoes are primarily used for anti-submarine patrols as part of Canada's commitments to the defence of North America and the protection of NATO's sea lines of communications in the Atlantic. In addition to long flights over the Atlantic and the Pacific, the Auroras also carry out long patrols in the Canadian Arctic which assert Canada's sovereignty over the area. These Arctic patrols, known as NORPATs, flown a few times a month, provide surveillance of activities on land and in Arctic waters. The Auroras can detect submarines in open Arctic waters, but have limited anti-submarine capabilities when flying over the Arctic ice cap which hampers the operation of their sensors. Thus, Aurora operations in the Canadian Arctic are mainly of a general surveillance nature where activities are monitored visually, using visual aids like forward-looking infrared when flying at night or in bad weather conditions.

Maritime Air Group's fleet of 18 Auroras is often stretched to the limit in order to provide anti-submarine patrols in the Atlantic and the Pacific Oceans, surveillance flights in the Canadian Arctic to assert sovereignty and flights over Canadian coastal waters to