## FOREWORD Assistance from the air

by Rear Admiral Max Hancock

The primary task of Coastwatch is the coordination of civil maritime surveillance and response service. The bushfires that confronted the ACT earlier this year provided the Government with an opportunity to exploit the flexibility of the Dash 8 aircraft to detect the new fires and to plot the movement of existing fire fronts. In this role Coastwatch provided an important contribution to the firefighting effort.

The January 2003 Canberra bushfires posed a considerable threat to Canberra residents and stretched the Emergency Services ability to track the numerous fire fronts that existed across the ACT. With the forecast of extreme fire weather conditions, the Australian Federal Police (ACT Division) approached Customs Coastwatch to discuss the potential for aerial assistance to the fire-fighting effort. Coastwatch had one of its Dash 8 aircraft operating from Canberra at the time and agreed to test the effectiveness of the aircraft's advanced electronic surveillance systems for monitoring movements of the fire fronts. A short flight over the bushfire area clearly demonstrated that the equipment could provide fire-controllers with valuable images of the fire's behavior with the added advantage that the newly fitted satellite communications system could immediately relay the images back to the National Surveillance Centre. The Coastwatch aircraft provided assistance to the emergency services by flying over Canberra at considerable altitude while using an infrared sensor to locate fire-fronts that may affect life or property. Due to the considerable amount of smoke produced by these fires, fire

crews on the ground and water-bombing helicopters were hampered in their efforts to locate fires of concern. With the capability to view through the thick smoke, the Coastwatch aircraft instantaneously reported significant fires back to the National Surveillance Centre. This information was immediately passed to the ACT Emergency Services Headquarters.

At the conclusion of the bushfire battle, the following letter was received by the senior management of Coastwatch from the Deputy Chief Police Officer, Andy Hughes.

> "Just a quick note to convey my personal thanks for the excellent cooperation and assistance Coastwatch provided ACT Policing during the recent bushfires.... I know that my troops on the ground, who were bracing themselves for a potential repeat of the disastrous events of Saturday 18 January, were encouraged in the knowledge that there were some friendly eyes in the sky that were tracking the movement of the firefronts. ACT Policing is indebted to you both, your professional team at the Coordination Centre and the flight crew."

Although not a usual task for a Coastwatch aircraft, both the aircraft crew and the staff in the National Surveillance Centre met the challenge and felt highly satisfied that they assisted in preventing further loss of life and property in Canberra.

The success of the flying provided by Coastwatch during the bushfire crisis was achieved due to the sophisticated array of electronic equipment that the Coastwatch

Dash 8 aircraft supports. This equipment allowed the crews to conduct enhanced surveillance that would otherwise have been impossible to achieve. Electronic sensors such as radar, infra red, day television (DTV) and Inmarsat satellite technology create a formidable platform for conducting surveillance operations in all types of weather conditions. Inmarsat in particular has enhanced the Coastwatch decision-making process through reliable, high-speed transmission of data and imagery previously unable to be attained.

This electronic equipment is also used in the support of the search and rescue (SAR) operations occasionally performed by Coastwatch. In 2002-2003 alone Coastwatch aircraft responded to over 100 requests for SAR support in one form or another. With flight operations 365 days of the year covering an area of over 15 million square nautical miles, Coastwatch is often able to provide a rapid response when a call comes through from AUSSAR for search and rescue support, particularly in areas hundreds of miles offshore.

While the main responsibility for Coastwatch will continue to be the ongoing surveillance of the Australian coastline and territorial waters it has demonstrated a capacity and ability to provide important aerial support to emergency service organisations in times of crisis.

Rear Admiral Max Hancock is Director General of Coastwatch