



Aircraft

The Dornier 328-120 turboprop aircraft:

- is a 32 seater regional commuter that is in common use in Europe and America;
- has Pratt and Whitney 100 series engines with Hartzell six-bladed, carbon-fibre propellers;
- is certified for a single engine climb performance in case of one engine failure (USA Federal Aviation Regulation 25);
- has modern glass multifunction displays in the cockpit for flight management;
- is capable of speeds in excess of 600 kilometres per hour with a range of approximately 2,500 kilometres, 31000 ft ceiling;
- has specially designed large flat panel windows to enhance visual search operations; and
- has large growth capability in terms of space and weight for future operations.

Operational Capability

The aircraft and crew will be able to undertake the following main roles:

- visual and electronic search;
- direction finding and homing to distress beacons;
- deployment of emergency supplies such as liferafts, food and water to people in distress;
- on-scene coordination of pollution and search and rescue incidents and communications relay; and
- will be able to respond within 30 minutes.

The aircraft incorporates a comprehensive sensor package, including:

- an ELTA 2022 maritime search radar to provide wide area electronic searches, particularly over water but also over land. This radar includes functions for surveillance, navigation and weather and specialist modes that enhance detection and identification of targets in various environments (to be installed early 2007);
- a FSI Star SaFire III Forward Looking Infra Red (FLIR) camera system to provide for low light and night searches and target identification;



- an ARGON ST Infra Red/Ultra Violet scanner to assist in the detection of oil pollution and other environmental and bushfire monitoring;
- the ability to scan and locate transmissions across the radio spectrum and home into transmitting distress beacons;
- satellite phones that allows both the transmission and receipt of voice and data with AMSA's Rescue Coordination Centre in Canberra or any other base; and
- Automatic Identification System to enable tracking of vessels.

A Mission Management System (MMS) designed by AeroData AG in Germany that:

- is the interface through which the crew manages all of the on-board SAR sensor systems, such as the radar and the FLIR; and
- enables the crew to store, display and analyse the data collected by the sensors for tactical control of operations and along with the satellite communication system, provides for the real-time exchange of the collected information with the Rescue Coordination Centre in Canberra.

Complete navigation fit including:

- Independent navigation systems to enable operations in remote areas; and
- Traffic alert and Collision Avoidance System (TCAS) and Enhanced Ground Proximity Warning System (EGPWS) for enhanced safety.