

Ms Margot Kerley
Committee Secretary
Joint Committee of Public Accounts and Audit
Parliament House
CANBERRA ACT 2600

Dear Ms Kerley

Thank you for your letters of 13 April 2000 to me and Ms Rowena Barrell inviting AMSA and its business unit, AusSAR, to make a submission to the inquiry by the Joint Committee of Public Accounts and Audit reviewing the operations of Coastwatch.

As indicated in the Auditor-General's Audit Report No. 38 of 1999-2000, *Coastwatch – Australian Customs Service*, AMSA is regarded as a minor use client agency of Coastwatch services. These involve three main areas:

- Availability of Coastwatch resources in relation to AMSA's coordination of search and rescue services through AusSAR;
- Provision of information on the observation of ship-sourced pollution in the marine environment; and
- Provision of information relevant to marine safety.

The attached submission provides further background information about AMSA's functions and services, including those provided by AusSAR, and how these interact with those of Coastwatch. It focuses on the last point in Committee's terms of reference for this review and comments on relevant issues raised in the Auditor-General's report.

Yours sincerely

Clive Davidson
30 May 2000

**SUBMISSION BY THE AUSTRALIAN MARITIME SAFETY AUTHORITY TO
THE JOINT COMMITTEE OF PUBLIC ACCOUNTS AND AUDIT INQUIRY
INTO COASTWATCH - JUNE 2000**

AMSA Background

The Australian Maritime Safety Authority (AMSA) was established under the *Australian Maritime Safety Authority Act 1990* and commenced operations on 1 January 1991. As the national marine safety agency, AMSA is responsible for:

- **Promoting the safety of seafarers and shipping:** AMSA is responsible for promulgating national and international maritime safety standards and monitoring compliance of ships in Australian waters with those standards which relate to seaworthiness and safe operation. AMSA also provides a national network of integrated aids to navigation meeting the needs of commercial shipping for safe and efficient coastal navigation.
- **Protecting the marine environment from ship-sourced pollution:** AMSA is involved in developing, and monitoring compliance with, international environmental protection standards for ships in Australian waters. It also manages the National Plan to Combat Pollution of the Sea by Oil and Other Noxious and Hazardous Substances (the National Plan), a national integrated Government/industry organisational framework for response to ship-sourced pollution in the marine environment.
- **Coordinating aviation and maritime search and rescue services:** AusSAR, an AMSA business unit, coordinates search and rescue services for the civil maritime and aviation industries. AusSAR maintains and operates a 24-hour Rescue Coordination Centre and a maritime distress and safety communications network throughout Australia.

As a statutory authority, AMSA is largely self-funded through three levies on the commercial shipping industry corresponding to its marine safety, regulatory and environment protection services:

- The Marine Navigation Levy funds maintenance and management of Australia's navigational aids network;
- The Regulatory Functions Levy funds the regulation and surveillance of the shipping industry to ensure seaworthiness and safe operation of vessels operating in Australian waters and enhancing maritime safety standards;
- The Protection of the Sea Levy funds the operation of the National Plan.

About a quarter of AMSA's budget is derived from Commonwealth Government community service obligation funding, for aviation and maritime search and rescue operations, maritime safety radio communications and boating education activities. AMSA also receives revenue from fees for services such as marine surveys and other service contracts.

RELATIONSHIP BETWEEN AMSA AND COASTWATCH

Overview

AMSA shares a common heritage with Coastwatch since both organisations trace their origins to decisions in the late 1980s for the transfer of their respective responsibilities from the then Department of Transport and Communications. AMSA took over the majority of operational functions performed by the former Maritime Operations Division of the then Department, while Coastwatch assumed the Department's responsibilities for Australia's civil surveillance function.

In the Department, the search and rescue coordination functions now performed by AusSAR operated alongside the civil surveillance functions now performed by Coastwatch. There continue to be good personal relationships and a common understanding of purpose between the two organisations which enhances operational liaison.

Regular contact is maintained between AMSA and Coastwatch in the exchange of information at both the operational and managerial levels. AMSA participates in the monthly meetings of the Coastwatch Operations and Program Advisory Committee (OPAC). This provides a valuable opportunity for AMSA to gain insight into, and feedback from, Coastwatch and its other client agencies. AMSA sees value in the recommendation from the Auditor-General's report¹ for Coastwatch to review the functionality of the OPAC with the aim focusing its work on strategic administrative policy issues and devolving routine operational planning work to the Planning Advisory Subcommittee.

Australian Customs Service/AMSA Service Level Agreement

The Auditor-General's Report comments on the formalisation of arrangements between Coastwatch and its client agencies through the development of a Memorandum of Understanding with each agency outlining the respective roles and responsibilities.²

AMSA entered into a service level agreement on 21 December 1999 with the Australian Customs Service (ACS) which includes a schedule covering services provided to AMSA by Coastwatch (copy at [Attachment A](#)). The agreement identifies working arrangements between AMSA and ACS and, as far as practicable, the level of service to be provided. The term of the agreement is five years with provision for an annual joint review.

There are three areas where AMSA utilises Coastwatch civil surveillance services:

- Provision of assets for search and rescue activities;

¹ Auditor-General's Audit Report No. 38, 1999-2000, *Performance Audit, Coastwatch – Australian Customs Service*, page 45

² Auditor-General's Audit Report No. 38, pages 40 to 43.

- Reporting, monitoring and collecting evidence of marine pollution; and
- Information exchange promoting marine safety.

Search and Rescue Activities

AusSAR is responsible for coordinating search and rescue activities for the maritime and aviation industries over the internationally agreed Australian Search and Rescue Region. This covers some 53 million square kilometres, representing over one-tenth of the earth's surface, comprising the East Indian, South-west Pacific and Southern oceans.

AusSAR maintains and operates a 24-hour Rescue Coordination Centre (RCC) which is staffed by search and rescue specialists who have extensive experience in the navy, merchant marine, air force or civil aviation fields. On receiving a distress signal or being notified of a missing civil aircraft or seagoing vessel, the RCC will assess the situation and, as appropriate, organise and coordinate a search.

Since AusSAR has no dedicated resources to conduct search and rescue missions, it employs and regularly trains selected general aviation operators called Search and Rescue Units (SRU) around Australia in search and rescue techniques. Provision of assets, particularly in long-range rescues, may be requested from the Australian Defence Forces and Coastwatch. In providing these services, AusSAR works in coordination with Federal, State and Territory agencies, including the Australian Defence Forces, police forces, the aviation and maritime industries and volunteer rescue groups.

Coastwatch Involvement

Coastwatch provides assets to participate in search and rescue incidents on an availability basis, without AMSA having to bid for Coastwatch resources through its Planning Advisory Subcommittee (PASC) for inclusion in the development of Coastwatch's strategic flight programs. AMSA only requests Coastwatch assets when the task is beyond the capabilities of civilian resources.

The usual procedure involves AusSAR's RCC making an initial inquiry to the Coastwatch Operations Centre in Canberra regarding availability of its assets. If the Coastwatch Operations Centre confirms that an asset is available, the AusSAR RCC informs Coastwatch as soon as practicable that the asset is required for tasking. Coastwatch Operations Centre authorises the temporary transfer of the co-ordination of that asset to the RCC, which provides direct briefings to the crew of the asset to be tasked and keeps Coastwatch informed of the task details. The Coastwatch aircraft are highly regarded for their search capabilities.

AMSA provides appropriate training to any Coastwatch aerial surveillance contractor participating in the AusSAR SRU program. Coastwatch authorises its aerial surveillance contractors to participate in the program and AusSAR liaises

with Coastwatch and the relevant aerial contractors in scheduling appropriate training sessions.

AusSAR is responsible for the cost of any Coastwatch contracted asset tasked by AusSAR. This applies for the duration of the search and rescue operation, or in the case of an in-flight diversion of an aircraft, until it returns to the point of departure from the original Coastwatch mission or lands immediately after completion of the search and rescue operation. The Coastwatch aerial surveillance contractor and AusSAR negotiate an aircraft hire rate and AusSAR liaises with Coastwatch on the hours to be tasked for the asset. AusSAR also is responsible for the cost of training that it provides to the Coastwatch aerial surveillance contractor under its Search and Rescue Unit training program.

Marine Pollution

AMSA manages the National Plan to Combat Pollution of the Sea by Oil and Other Noxious and Hazardous Substances, which involves providing oil pollution preparedness and response services in consultation with State/Northern Territory governments, their port corporations and authorities, the shipping, oil, exploration and chemical industries, and emergency services. AMSA's programs supporting National Plan activities include: contingency planning, equipment purchase and maintenance, a comprehensive national training program and fixed wing aerial dispersant spraying capability.

AMSA is responsible for the development of international standards governing ship design and construction and operational requirements aimed at pollution prevention. It promotes measures to improve implementation and enforcement of these environment protection standards.

The major international convention governing marine environment protection from the perspective of controlling ship operations is the International Convention for the Prevention of Pollution from Ships 1973/78 (MARPOL 73/78)³. This deals with the standard of construction and equipment of ships and with ship operational practices in relation to preventing pollution from disposal of oil, noxious liquids, harmful packaged substances and garbage, other than by dumping at sea.

The convention has six annexes dealing with the different potential sources of marine pollution from ships:

- Annex I, *Prevention of Pollution by Oil*, prescribes criteria for the discharge by ships of oil and oily waste at sea. It requires ships carrying oil to be fitted with approved equipment for retaining oily wastes on board for discharge at shore facilities. Oil tankers are required to have separate ballast tanks of a capacity to preclude carrying ballast water in oil cargo tanks.

³ MARPOL is a convention of the International Maritime Organization (IMO), a specialised agency of the United Nations. Australia ratified MARPOL 73/78 on 14 October 1987.

- Annex II, *Control of Pollution by Noxious Liquid Substances*, applies to all ships carrying substances in bulk and provides criteria for their discharge and measures to control pollution. It lists 250 substances that are required to be discharged only to onshore facilities unless certain concentrations and conditions are met and then not within 12 nautical miles of land.
- Annex III, *Prevention of Pollution by Harmful Substances in Packaged Forms*, requires specific packaging and stowage requirements to be met for harmful substances and compliance with other standards detailed in the International Maritime Dangerous Goods Code. Discharge of harmful substances is totally prohibited in any area, except in limited safety circumstances.
- Annex IV, *Prevention of Pollution by Sewage*, prohibits ships from discharging sewage waste, including waste from the carriage of live animals, and requires retention on board in holding facilities and discharge to onshore facilities. This Annex is not currently in force either internationally or for Australia.
- Annex V, *Garbage*, regulates discharge by ships of “garbage” which is broadly defined to include a wide range of operational waste. This includes cargo residues discharged through deck or hold washing at sea, which is prohibited, except in limited safety circumstances, until the ship is more than three nautical miles from the nearest land. There is provision for controlled discharge on the high seas of some forms of garbage, including glass, metals, timber and food wastes, but a complete ban on the discharge into the sea of all forms of plastic. Otherwise garbage has to be retained on board for disposal by approved methods.
- Annex VI, *Air Pollution*, sets limits to the level of sulphur oxide and nitrogen oxide emissions from ship’s exhausts. It also prohibits deliberate emissions of ozone depleting substances and the incineration on board ship of certain products such as contaminated packaging materials and polychlorinated biphenyls (PCBs). This Annex is not in force either internationally or for Australia.

Australia also has adopted a number of measures applying to shipping activities in the Great Barrier Reef region. These are based on the declaration in November 1990 by the International Maritime Organization (IMO) of this region as a ‘particularly sensitive area’ and inclusion in the MARPOL Convention of special environment protection measures applying to this area. These measures include the prohibition on all discharges into the sea by ships in the vicinity of the Reef, operational discharges from oil tankers within 50 nautical miles and cargo residues less than three nautical miles from the outer edge of the Reef.

The aspects of the MARPOL Convention dealing with ship operations are given effect in Australia principally through the Commonwealth *Protection of the Sea (Prevention of Pollution from Ships) Act 1983* and complementary State and Northern Territory legislation. Under the terms of the legislation, the master and

shipowner are guilty of an offence where the discharge occurred other than in limited safety circumstances. A duty is imposed to report discharge incidents and it is an offence not to do so.

There are substantial penalties for breaches of the MARPOL restrictions on discharge contained in the *Protection of the Sea (Prevention of Pollution from Ships) Act 1983* and the *Great Barrier Reef Marine Park Act 1975*. Both AMSA and the Great Barrier Reef Marine Park Authority have undertaken campaigns targeting the illegal disposal of cargo residues within the Great Barrier Reef region.

Suspected pollution incidents are investigated and, where circumstances allow, are photographed and sampled for possible legal action. When samples of oil from the sea and from a suspect ship are available, they are analysed by an authorised chemist with the aim of obtaining a match as to the type and origin of the oil. The results of such analyses and statements from witnesses to a pollution incident represent valuable evidence in a prosecution. There have been some 90 successful prosecutions over the last ten years in relation to the MARPOL requirements, either brought by AMSA or State and Northern Territory authorities.

AMSA coordinates pollution surveillance operations and receives reports from many sources including Coastwatch, the shipping industry, civil and military aircraft and the general public. AMSA maintains an OILSPILL database to provide accurate statistical data required for oil spill response strategic planning and in the assessment of current and projected risks. This makes a valuable input to Government projects such as the *State of the Marine Environment Report* and can be used to measure the effectiveness of the pollution prevention measures being progressively implemented.

The OILSPILL database currently contains some 4,700 records involving reported pollution sightings from maritime incidents. In the five years between 1994-95 and 1998-99 inclusive, there were 1,649 oil discharge sightings and oil spills reported. The direct source of 1,046 sightings (63 per cent) could not be determined, although the majority was assumed to be ship-sourced.

Coastwatch Involvement

Coastwatch provides AMSA with a range of information on the location and characteristics of marine pollution sightings, such as oil slicks or other discolouration of the sea. It also advises of the presence of oil pollution on the shoreline, and deliberate discharges or disposal at sea of wastes and other matter, including ships' refuse.

In the case of an oil spill which has potential to damage marine or bird populations or foul nearby beaches, information is passed without delay to AMSA (via the Coastwatch Operations Centre and AusSAR's Rescue Coordination Centre). Otherwise, pollution reports are made through the normal Coastwatch post flight reporting procedures.

Subject to tasking levels and priorities, Coastwatch aircraft and vessels of the Australian Customs Service (ACS) on routine patrols obtain for AMSA photographs, videos, oil samples and other supporting documentation as evidence of oil spill coverage. In addition to providing photographs of pollution incidents, Coastwatch aircraft observers or other crew members may provide statements about their observations of the incident which are used in criminal prosecutions under relevant environment protection legislation.

Coastwatch also can task ACS or Australian Defence Force vessels to obtain oil samples and provide these to AMSA on suspected oil spills during routine surface patrols or specific taskings.

Under the service level agreement between AMSA and ACS, Coastwatch is responsible for the cost of any Coastwatch aircraft hire cost in respect of tasking an aircraft to photograph oil spill coverage. In practice, AMSA does not ask Coastwatch to undertake dedicated flights to specifically gather evidence about marine pollution. Regular Coastwatch surveillance flights report details of pollution sightings but in most cases this does not require a substantial diversion from the established flight route or additional flight time.

Marine Safety

There are a number of areas of AMSA's marine safety mandate to which Coastwatch provides valuable input.

AusSAR provides a maritime distress and safety communications network which consists of terrestrial coast radio stations and the ground segments of the Inmarsat satellite system and the Cospas-Sarsat satellite distress beacon detection system. AusSAR's Rescue Coordination Centre broadcasts safety and navigation information to ships at sea on a wide range of incidents such as faults with particular aids to navigation, ship breakdowns, marine pollution, and distress situations.

AusSAR is involved with the ship reporting systems, AUSREP and REEFREP. AUSREP is a voluntary reporting system enhancing the safety of participating ships which report their position every 24 hours. This assists search and rescue activities by providing a starting point for a search for a missing ship or identifying ships within a search area which can respond to distress calls. REEFREP is a mandatory ship reporting system operated by the Queensland Department of Transport covering the Torres Strait and Great Barrier Reef.

The AMSA network of aids to marine navigation comprises some 400 aids including lights, buoys, RACONS (Radar Beacons), tide gauges and Differential Global Positioning Systems. AMSA aims to maintain a high degree of availability of the network in accordance with international standards. As the navigation aids operate automatically and are unattended, AMSA relies on advice from industry and other sources of damage or malfunction of aids to navigation occurring outside its regular maintenance program.

AMSA is responsible for coastal traffic management measures for traffic separation and ship routing around the Australian coast, which have been established through the International Maritime Organization. Foreign flag ships which transgress these schemes may be reported to their flag State. This includes the maintenance of the 500 metre mandatory safety zone around offshore oil production platforms, Floating Production Storage and Offloading facilities (FPSOs) and offshore drilling rigs and the designated 'area to be avoided' around the Bass Strait offshore oil production platforms..

The removal of wrecks which may present a hazard to navigation and potential pollution risk to the marine environment is another responsibility of AMSA. The *Navigation Act 1912* (section 314A) provides AMSA with powers to order a shipowner to remove any ship or part of a ship wrecked on or near the Australian coast within a specified period of time. If the owner fails to comply, AMSA may cause the wreck to be removed or destroyed and may recover the expenses from the owner or may sell the wreck and pay the proceeds, less expenses, to the owner.

Coastwatch Involvement

Coastwatch provides reports to AMSA with information on:

- Vessels, aircraft or persons in distress or difficulty;
- Floating hazards to navigation including large logs, shipping containers, buoys adrift;
- Malfunction or damage to aids to navigation;
- Unauthorised presence of persons at unattended/isolated navigation aids stations;
- Intrusions into exclusion zones or other restricted areas around offshore facilities;
- Violations of traffic separation and ship routing schemes including 'near misses' and potential collisions between vessels;
- Ships wrecked or abandoned on or near the Australian coast.

AMSA supports the recommendation in the Auditor-General's report⁴ that Coastwatch process Post Flight Reports (PFRs), photographs and videos in a timely fashion so they can be readily available for use by client agencies. This is particularly important to AMSA in promulgating safety information to the maritime community, as input to strategic planning for responding to an oil spill, and providing material to expeditiously progress legal action in relation to a pollution incident.

⁴ Auditor-General's Audit Report No. 38, page 55