

**ADSTEAM MARINE LIMITED**

ABN 87 065 888 440
An ISO 9002 Quality Assured Firm

Level 22, Plaza 2, 500 Oxford Street, Bondi Junction NSW 2022 Australia
PO Box 644, Bondi Junction NSW 1355 Australia

Tel: + 61 2 9369 9200
Fax: + 61 2 9369 9288

adsteam.com.au • info@adsteam.com.au

24 June 2002

Mr. A. Hinton
Commissioner
Productivity Commission
Harbour Towing Inquiry
Level 28
35 Collins Street
MELBOURNE VIC 3000

Dear Mr. Hinton

**Productivity Commission Inquiry into Harbour Towing
– Threat to National Salvage Capability**

The Commission's preliminary findings and recommendations in relation to exclusive towing licences and salvage capability raise critical issues of national concern. These findings and recommendations, if acted upon by State Governments and thereafter port authorities, could result in serious financial and social detriment requiring Federal Government intervention.

The essential problem is this: Exclusive towing licences, because of their port-specific focus, pose a serious threat to the on-going viability of Australia's existing national salvage and coastal protection capability. The Commission touched briefly upon this problem in its Position Paper when it noted:

"Where ports or users put their towing requirement to tender they normally would specify tugs that met the needs *of the port*. The contracts or licences also presumably would stipulate conditions under which tugs could be called away for any salvage work. While this would ensure efficient salvage capacity *for the port*, an issue remains about the optimal *national* salvage capability in ocean waters, and its location. Though well beyond the scope of the inquiry, this issue (and how salvage capacity should be paid for) may warrant further examination."

Position Paper, p.XXXVI (Emphasis added)

At present, there exists a comprehensive, privately-funded ocean salvage and coastal protection capability for all of Australia. It provides an efficient service for all ships and protection for all areas of the coastal environment, from environmentally-sensitive regions such as the Great Barrier Reef to the commercial trade routes leading to our major ports. This capability is provided despite - and arguably because of - the absence of exclusive towing licences in the majority of Australian ports.

It is of the gravest concern that the Commission's preliminary recommendation that port authorities be given the discretion to issue exclusive towing licences, could have the effect of undermining the coverage and effectiveness of existing national salvage and coastal protection arrangements. If more ports adopt inward-looking licensing regimes without regard to wider economic and community needs, our national salvage and coastal protection capability will be at serious risk.



Even now, there are signs that the Commission's preliminary recommendations may lead to the widespread adoption of exclusive towage licences. Although its support for such arrangements appears carefully qualified, the Commission's recommendations, as the Commission would be well aware, have already been interpreted by port authorities, ship operators and shippers as encouraging exclusive licensing in almost every instance. These narrowly focused interests are either dismissive or ignorant of the costs of such arrangements, including the costs to Australia's national salvage and coastal protection capability.

These issues are of such critical importance that further findings and recommendations by the Commission concerning towage licensing, salvage and coastal protection must take into account this issue. Without such action, the Commission's recommendations – even if carefully qualified and defined – could quickly lead to the dissipation of our national salvage and coastal protection assets. This in turn could lead to the requirement for Federal funding to guarantee salvage and coastal protection coverage for all of Australia's 36,000 kilometres of mainland coastline.

For these reasons, I request that the interaction between towage licensing and national salvage and coastal protection capability be subjected to more in-depth analysis. To ignore the issue of salvage and coastal protection and how salvage capacity should be paid for will in our view lead to sub-optimal and costly licensing arrangements in Australian ports at the very least. Alternatively a significant impost on State and Federal Governments will be created where it currently does not exist. To assist the Commission to understand the magnitude of this issue we attach a paper entitled "Adsteam Marine Limited Salvage Capability and Capacity – June 2002".

We intend to make other submissions to the Commission in relation to the Preliminary Recommendations in the Commission's Position Paper. We felt however that the importance of the issues identified herein required independent highlighting.

Please do not hesitate to contact me directly should you believe that I might be able to assist further in relation to these matters.

Yours faithfully

David Ryan
MANAGING DIRECTOR



**adsteam
marine**



**ADSTEAM MARINE LIMITED
SALVAGE CAPABILITY
& CAPACITY**

JUNE 2002

ADSTEAM MARINE
AUSTRALIAN SALVAGE CAPABILITY & CAPACITY - JUNE 2002

C O N T E N T S

Executive Summary

Introduction

1. What is a Marine Salvage Capability?
2. What is Australia's Salvage Capability?
3. What is United Salvage's Operational Record?
4. What Constitutes Salvage Expertise?
5. What are Salvage Capable Vessels?
6. What is the Commercial Structure of Australian Salvage?
7. What Other Salvage Service Models are Available?
8. What are the Contractual Arrangements for Emergency Towing Vessels?
9. What are the Merits of the Australian Salvage System?
10. What are the Potential Threats to the Australian Salvage System?
11. Where to from here?

Annex 1

- United Salvage list of incidents since 1.1.99 to date
- Charts showing Casualty locations 1.1.99 to date

Annex 2

- List of Salvage / Harbour Tugs

Annex 3

- United Salvage Marketing Brochure

ADSTEAM MARINE

United Salvage Salvage Capability & Capacity - June 2002

Executive Summary

When a ship runs into peril and requires outside assistance, marine salvage comes into action in an attempt to salvage the ship, its cargo, and to protect the environment. The subsequent salvage activities and the speed at which they are deployed will determine its success or otherwise. Marine salvage is the combination of professional salvage teams, salvage capable tugs and experienced crews – all of which must be available at short notice 24 hours a day, seven days a week.

Australia has over 36,000 kilometres of mainland coastline, with many intensely sensitive and highly vulnerable areas – Torres Strait, the Great Barrier Reef and Bass Strait. In the past decade, many ships have come into trouble in these waters, with successful salvages completed and pollution threats either minimised or eliminated.

United Salvage, wholly owned by Adsteam Marine Limited, is the only international standard salvage operator in Australia, with a reputation built on its many years of success. United Salvage has a large fleet of specially designed multi-purpose tugs at its disposal, located at strategic points around Australia. Some salvage tugs, have millions of dollars worth of special features built into them to support their operations in ocean salvage. The balance of Adsteam's fleet, along with its other resources, often also contributes to successful salvages around the coast.

Personnel are highly trained and experienced in marine emergency response, specific salvage techniques and environmental protection. They are on call 24 hours a day under the supervision of salvage masters, acknowledged as among the most experienced in the world.

The capability of United Salvage is borne by the company with no cost to government, port authorities or the shipping industry. United Salvage operates under commercial contractual arrangements, including the internationally accepted and recognised Lloyds Open Form whose primary feature is "no cure, no pay".

Contrast this situation to the United Kingdom and parts of Europe where salvage capacity is provided by a government funded towing service costing taxpayers US\$40,000 per day.

ADSTEAM MARINE

United Salvage Salvage Capability & Capacity - June 2002

Introduction

In practical terms, salvage is the act of attending a ship at risk at sea, in a voluntary capacity, and providing appropriate assistance to preserve the environment and the economic value of the vessel and its cargo. The ready availability and efficient deployment of purpose built tugs, along with expert salvors, is essential to effecting a successful salvage operation.

Geoffrey Brice QC, the author of *Maritime Law of Salvage*, describes the process of salvage by noting that “a right to salvage arises when a person, acting as a volunteer (that is without any pre-existing contractual or other legal duty so to act) preserves or contributes to preserving at sea a vessel, cargo, freight or other recognised subject of salvage from danger”. He goes on to note that the word salvage is sometimes used to mean a salvage remuneration and sometimes to mean the salvage service or the cause of the action of salvage.

This paper principally looks at the resources necessary to maintain a salvage service and the structure through which those services are provided within Australia. It then goes on to compare the Australian salvage system with that in place within the United Kingdom and Europe.

Bunga Teratai Aground off Cairns (November 2000)



1. What is a Marine Salvage Capability?

Professional salvage depends upon competent experienced people responding to an emergency call on an immediate voluntary basis in all weather conditions with equipment and vessels suitable for the purpose. Its success is directly linked to commitment and forward planning and international experience clearly shows that it is not an area that treats part-time or amateur participants well.

Fully trained and experienced salvage crews are essential as is the prompt availability of high performance tugs fitted for all contingencies and capable of safely performing in extreme weather conditions at short notice.

At no cost to Government, Port Authorities or the Owners of vessels not at risk, Australia enjoys a high degree of environmental and property protection through the services provided by United Salvage with strategically located salvage / harbour tugs supported by a team of skilled professional salvors on call 24 hours a day, 7 days a week.

This no cost solution contrasts directly with high cost systems currently in place in the United Kingdom and parts of Europe where the cost of maintaining a Government funded 4 boat emergency towing service can exceed US\$40,000 per day.

2. What is Australia's Salvage Capability?

Within Australia, United Salvage is recognised as the primary salvage service provider. Wholly owned and operated by Adsteam Marine Limited, it has provided salvage services in the region for many years. Although some other minor players seek to participate from time to time, United Salvage is recognised by Commonwealth and State Regulators and Ship Owners alike as having the in-house expertise and experience necessary to successfully carry out hazardous operations in extreme conditions.

Through its ownership by Adsteam Marine Limited, United Salvage has access to all the towage vessels and resources within the Adsteam Marine fleet. This includes all the salvage / harbour tugs and the experienced salvage and towage personnel that are critical to successful outcomes in salvage.

In total, 14 front-line salvage capable tugs stationed around the country are available to respond. In financial terms, this represents an investment of tens of millions of dollars, based on current market value.

In addition to trained personnel and fleet units, United Salvage maintains major land based salvage equipment stores in Brisbane, Port Moresby and Suva. These stores hold significant quantities of critical gear including large capacity salvage pumps, stand alone power supplies, welding equipment, heavy ground tackle and wires, satellite communications systems, oil booms and skimmers and large quantities of small gear necessary for successful outcomes.

All this equipment is maintained at a “ready to go” status. It is also packaged so as to be readily transportable by air.

3. What is United Salvage’s Operational Record?

The record of United Salvage speaks for itself. In the past decade, major operations that it has been involved with as the primary salvage contractor, include the *Daishowa Maru* – February 1992 / bulk carrier aground at Eden; the *Peacock* – July 1996 / refrigerated cargo vessel aground in the Barrier Reef; the tanker *Kirki* – July 1991 / structural damage off West Australia; the *Iron Baron* – July 1995 / severe grounding damage off Tasmania; the *Ming Mercy* – August 1997 / fire off Port Kembla; the *Prince of Tokyo* – February 1999 / aground in Otago Harbour and the *Jody F Millennium* – February 2002 / aground off Gisborne, New Zealand.

Gazelle Coast Aground off Misima Island (December 2001)



In the last 3 years alone, United Salvage has provided successful casualty services on no less than 27 occasions within the Australian and Pacific island region. Of these, 3 operations were in the Coral Sea in reasonably close proximity to sensitive reef areas, 3 were within the Inner Barrier Reef, 4 were within PNG waters, 4 were off the Southern Queensland and NSW Coast, 4 were in the confined Bass Strait area, 2 were off Western Victoria, 2 were close to major ports in New Zealand and 5 were off the West Australian Coast (see Appendix 1 for a complete list of incidents since 1.1.99 and charts showing casualty locations 1.1.99 to date).

In the current financial year, 12 casualty operations have been completed. All have included towage assistance provided by salvage capable tugs drawn from within the Adsteam Marine harbour fleet.

Year to date operations have ranged from the high profile *Jody F Millennium* salvage off Gisborne, the *Mirande* in Port Phillip and the *Devprayag* off Portland, to less publicised but no less significant operations in the Coral Sea and PNG. Of these operations, 3 were performed under Common Law Salvage, 2 were Lloyds Open Form (LOF) with the Special Compensation Protection & Indemnity Club Clause (SCOPIC) invoked, 1 was Lloyds Open Form without SCOPIC, 4 were Baltic & International Maritime Council (BIMCO) Towcon and 2 were BIMCO Towhire contracts.

A number of significant observations can be drawn from the incidents completed in the 3 year period described. The first is that professional assistance was available at short notice and the assistance provided was successful; the second is that all services were provided under commercial contract between the vessel owner and salvor; the third is that all were dependent upon the activation of salvage capable tugs located at strategic locations drawn from within the Adsteam fleet and the fourth is that operational and technical support systems were in place within United Salvage to adequately manage the recovery.

Because of United Salvage's rapid professional response, significant pollution threats associated with these incidents were minimised or eliminated. Discounting the fact that there have been no third party costs involved in the salvage contracts themselves, this fact alone has been a huge cost saving to Commonwealth and State Governments and the community at large.

4. What Constitutes Salvage Expertise?

Salvage expertise is not something that is readily available nor is it something that can be developed at short notice. It depends upon commitment and long range planning to ensure that the necessary experience is in place so as to achieve positive outcomes.

Basically the necessary expertise can be split into 2 main areas. These are the salvage team itself and the support team on board the salvage tugs that support the salvage effort.

The salvage team is led by a salvage master. Other key members of this team include the on site salvage manager (usually shore based), the naval architect, salvage engineers, divers, deck riggers / foremen plus support staff as necessary.

The Salvage Master has overall command and control and his role is dependent upon skill development obtained via operations spread through many years. Not only must he have the necessary marine qualifications for command or an engineering role at sea, he must also have exceptional safety management, emergency response, communication and rigging skills. The other team members similarly need high level

professional skills and abilities that can be applied in difficult and often remote locations.

Rigging heavy ground tackle on Jody F Millennium (February 2002)



The support or tug team, lead by the tug master, need not only extensive tug handling experience, they also need detailed knowledge and experience of deep sea towage including wire and line handling, rigging and unrigging. All members of the team must also have a good understanding of the safety issues involved and the ability to safely respond when things go wrong.

The skills of both teams take years to develop. They also require financial and operational commitment so as to ensure that training is provided on an on-going basis so that skill levels are maintained at high states of readiness.

Via Adsteam Marine, United Salvage provides this commitment through funding obtained strictly by operations based on the user pays principle.

5. What are Salvage Capable Vessels?

Salvage capacity in Australia, New Zealand and the nearby Pacific Islands is provided by 14 frontline salvage / harbour tugs with offshore capability stationed at strategic locations around the coast. Although primarily used for harbour towage, each boat has the range, capability, equipment and power to operate off shore in extreme salvage situations.

These salvage / harbour tugs earn their keep through the supply of harbour towage services. They are fully fitted for such services and highly manoeuvrable in close quarters situations. The additional capability built into their design and the extra equipment carried is totally funded through the provision of salvage services on a user pays basis. As a result, Commonwealth and State Regulators, Port Authorities and harbour users enjoy an emergency / salvage response capability at no cost.

Supporting this fleet of ocean-going salvage capable tugs, is a large fleet of dedicated harbour tugs, the majority of which have some limited ability to provide emergency outside support as necessary. The harbour tugs often also perform a critical but not direct function in as much as they provide “cover” for salvage boats in their own ports or adjacent ports where Adsteam Marine operates, when the latter are committed to off shore operations. This ability to release salvage boats by drawing on the harbour tug fleet is essential in the provision of services that can respond at short notice.

A small number of offshore supply vessels in specific locations provide backup to the above vessels although their areas of operation are limited to those associated with the offshore oil industry.

Tarpan in Bass Strait (June 2002)



Each salvage/harbour tug is fitted with deep sea towing winches, wires, shackles, pennants and bridles suitable for towing the largest vessels that operate in the area. They are also fitted with fire fighting monitors capable of delivering of 60,000 litres of water per minute over an operational radius of 90 metres and long-range bunker tanks. Other critical systems on board include comprehensive navigational and communications equipment, spare towing and rigging gear, inflatables, minor oil spill containment gear, portable salvage & fuel pumps and back up power supplies.

Further, each boat is fitted with additional accommodation and stores spaces that allow for extra crew and support staff to be carried.

A list of the salvage capable tugs is contained in Appendix 2.

6. What is the Commercial Structure of Australian Salvage?

The salvage services provided by United Salvage are strictly on a user pays basis. There is no cost whatsoever to Government agencies, Port Authorities or Commonwealth or State Regulators.

The principal contract used for the provision of salvage services is Lloyds Open Form (LOF), a primary feature of which is no cure – no pay. This contract not only provides for the salvage of property but through clauses such as Article 14 and the Special Compensation Protection & Indemnity Club (SCOPIC) clause, it also provides for environmental protection by minimising salvors risk when responding to low value vessels. Other contracts or vehicles under which services are provided include Common Law Salvage, the Baltic & International Maritime Council (BIMCO) Towhire and BIMCO Towcon. In specific circumstances, BIMCO Wreckhire or other similar contract series may be used.

All the above contracts are of an agreed format and accepted and understood by the international shipping community and brokers servicing the industry. In particular, the Lloyds Open Form (LOF) is recognised as the international salvage standard mainly because its commercial outcome is dependent upon an independent Lloyds appointed Arbitrator, who after detailed review of the casualty circumstances, determines the salvors remuneration.

In settling financial outcomes under LOF, the Arbitrator takes into account the following key features of the services provided:

1. The salved value of the vessel and property.
2. The skill and efforts of the salvor in preventing or minimising environmental damage.
3. The degree of success obtained by the salvor.
4. The nature and degree of the danger involved.
5. The skill and efforts of the salvor in salving the vessel, property and life.
6. Time used and expenses incurred.
7. The liability risks and other risks run by the salvor.
8. The promptness of the services provided.
9. The availability and use of vessels or other equipment intended for salvage.
10. The state of readiness and efficiency of the salvors equipment and the value thereof.

Returns to the salvor are dependent upon successful outcomes (no cure- no pay) and they are directly proportional to the commitment involved and the willingness of professional salvors to maintain the capability and capacity to respond.

In cases where Lloyds Open Form (LOF) contracts can't be agreed for whatever reason, United Salvage remains willing to respond and provides services under common law salvage. In these cases, no arbitrator is involved and settlement is pursued through the courts. Such cases are few in number and are dependent upon a mature legal system being in place but there is a growing trend toward this process in Australia.

Other frequently used contracts include Baltic & International Maritime Council (BIMCO) Towhire and Towcon. Both contracts are specifically designed for deep-sea towage and both are fully understood and supported by Shipowner interests and Brokers alike. One provides for a day rate on an open ended period whilst the other is a lump sum contract for services rendered.

7. Other Salvage Service Models

Of most interest is the system of Emergency Towing Vessels (ETV's) now in place in the United Kingdom and other European nations.

In the UK, the original 2 Emergency Towing Vessels (ETV's) were introduced as a direct result of the recommendations arising from Lord Donaldson's "Safer Ships, Cleaner Seas" Report following the grounding of the fully loaded tanker *Braer* in the Shetland Islands in January 1993. After detailed analysis of traffic flows, weather conditions, navigational hazards and the location of response capabilities, Lord Donaldson found that emergency towing vessels should be positioned at Government cost in the Dover Strait and the Minches. In making this finding, his report particularly noted the availability and response times of harbour based tugs and professional salvors and measured these response times against the level of risk and the likelihood that these response times would negate any potential environmental threat arising out of a casualty.

Since Lord Donaldson's report, further studies have been carried out into the risks involved in select areas around the UK coast (see Coast Guard Report – Emergency Towing Study, Final Report dated May 1995). Today, 4 Government funded ETV's are in position in specific "chock point" locations around the UK coast as insurance against environmental pollution and for safety of life at sea reasons.

Both the Donaldson and Coast Guard Reports found that the location of port tug operations was a significant factor when assessing risk. The justification for the need to position ETV's was negated where investigation found that salvage capable boats with skilled crews were available on commercial terms at short notice. Similarly they found that the presence of active offshore support vessel markets at Aberdeen, Great Yarmouth, and Morecambe Bay, led to the decision not to base ETV's between the Fair Isle Channel and Dover on the East Coast, or between NW Scotland and Falmouth on the West Coast. (*These findings strongly support the current Australian arrangements*).

Today the UK ETV's are based in the following areas:

- Dover Strait – an area of high traffic density (> 400 vessel movements per day);
- Falmouth – a lee shore (high risk) for Europe bound traffic given the prevailing weather in the UK;
- NW Scotland – this has an appreciable amount of inter-island ferry traffic, fishing activity and it is in a lee shore (high risk) for Very Large Crude Carriers (VLCC's) and other large vessels too deep for Dover Strait going north-about to reach European ports;
- Fair Isle Channel – this is a favourite route for VLCC's bound for European ports and the terminal at Sullom Voe in the Shetlands. In addition, the Pentland Firth between the Orkneys and mainland Scotland is a notorious waterway with tidal currents reaching 15 knots at spring tides.

8. What are the Contractual Arrangements for ETV's?

In keeping with general maritime practice, ETV's are contracted by the relevant Government Agency on a "daily rate" over a fixed period. This rate is dependent upon the state of the offshore supply vessel market at the time of negotiation. Other factors affecting the commercial arrangements include the duration and timing of the charter, apportionment of any salvage awards achieved during the charter period and the Government's specification in terms of additional equipment.

Within the UK system, each contracted ETV must have in place back to back contracts with a professional salvor for the provision of salvage equipment and experienced personnel. The salvor provides the expertise whilst the ETV provides the necessary "grunt" to undertake recovery operations.

The ETV's remain on-hire to the Regulator and under their operational control until they become involved in salvage (including rescue towage). In line with practice, any international commitment to salvage is dependent upon the ETV professional salvor entering into a commercial contract with the casualty owners. As soon as this contract is agreed, the MCA charter is suspended until the operation is complete. This suspension process protects the regulator from any liabilities that may arise out of the salvage operation.

Each ETV currently costs the UK Government approximately US\$9,000 per day excluding fuel and lubricants. Fuel costs run at about US\$30,000 per month per vessel, lifting the cost to about US\$10,000 per day. In addition, the charterer (Government) is responsible for all port costs relating to calls for bunkers, stores and water and additional insurance and administrations costs associated with live exercises and general management of the contract.

With 4 ETV's active 365 days a year under current arrangements, the total cost to Government is about US\$40,000 per day excluding add-on costs. With a new 8 year ETV contract recently finalized, the British Government has confirmed to industry that the total life costs for the project will be in excess of US\$112,000,000. This is a huge amount of money for a 4 boat service, particularly when it is compared to the system

and level of protection that applies, without cost to taxpayers and non-users, within Australia.

9. What are the Merits of the Australian Salvage System?

The Australian system provides for a comprehensive salvage response at no cost to Government, Regulators, Port Authorities or Shipowners other than those requiring the service. The record of United Salvage clearly shows that the competency of this salvage response is second to none and is in fact “world best practice”.

The equipment stores, salvage capable tugs and experienced salvage teams are supplied and fully funded by the company on a commercial “no cure – no pay” basis. The company manages all associated risk. There are no levies applied nor is there any cross-subsidisation from other services provided by United Salvage’s Owners, Adsteam Marine.

Jody F Millennium; afloat again! (February 2002)



Key features of the salvage response capability include:

- Fully privately funded / no cost to the tax payer;
- User pays;
- Rights and obligations as per the International Salvage Convention (Australia has been a signatory since 1998);

- Salvage capable tugs strategically positioned all round the Australian coast. These salvage tugs are supported by harbour tugs in every major port in the country;
- An ability to supplement local fleets during salvage operations with company vessels from other ports around the country;
- Large salvage stores maintained in key locations;
- Contracts used in responding to casualties are recognised and understood by Regulators, Ship Owners and Brokers alike;
- Ability to respond with experienced professional salvage teams at short notice 24 hours a day, 7 days a week;
- Proven record of performance over many years;
- Operations are fully consistent with the National Plan to Combat Pollution of the Sea by Oil and the National Maritime Chemical Spill Contingency Plan;
- All the obligations and potential liabilities that are part of salvage contracts are fully covered by United Salvage without any Government or Regulator exposure.

10. Potential Threats to the Australian Salvage System

The construction, positioning and operation of salvage capable tugs and the maintenance of professional salvage teams from the private sector is only made possible because of several key factors. These are:

- The acknowledgement by Port Authorities and other Regulators that a salvage response capability from within their own port tug fleets is a critical part of the services they provide to their stakeholders and the wider community;
- Where Port Authorities seek to introduce licensing in harbour towage, they must recognise that low cost harbour tractor type tugs are not acceptable across all fleet units. Outside capability must be maintained, preferably in all units;
- Acknowledgement that occasional “as needed” use of Port Authority salvage capable tugs is the most cost-effective towing resource for first line defence for marine emergencies outside port limits;
- Recognition by Commonwealth and State Regulators and Port Authorities that the existing Australian salvage system has protected the coastline from severe environmental damage and served the country well for many years
- An understanding that any change in the way salvage capability is maintained and delivered will in itself introduce additional risk and possibly impact on outcomes during any transitional period.

11. Where to from Here?

The salvage system within Australia and the Pacific Islands has served the region well over many years and through many operations. The record of United Salvage needs no enhancement nor does the level of protection that has been delivered to the environment through successful operations conducted by the company. The facts clearly show that significant pollution has been prevented and millions of dollars worth of property has been saved.

This success however does not come cheap to the service provider and it is dependent upon maintaining the ability to justify the construction and positioning of salvage capable tugs in key strategic “chock point” locations. It is also dependent upon the maintenance of user pays contracts and for the salvors ability to respond with salvage boats and trained crews on a prompt basis.

The current system works. All sensitive environmental areas around the coast are covered and it is cost effective particularly when measured against the ETV concept in place in specific European locations.

Salvage Tug “Woonna” at Sea in Bass Strait – June 2002



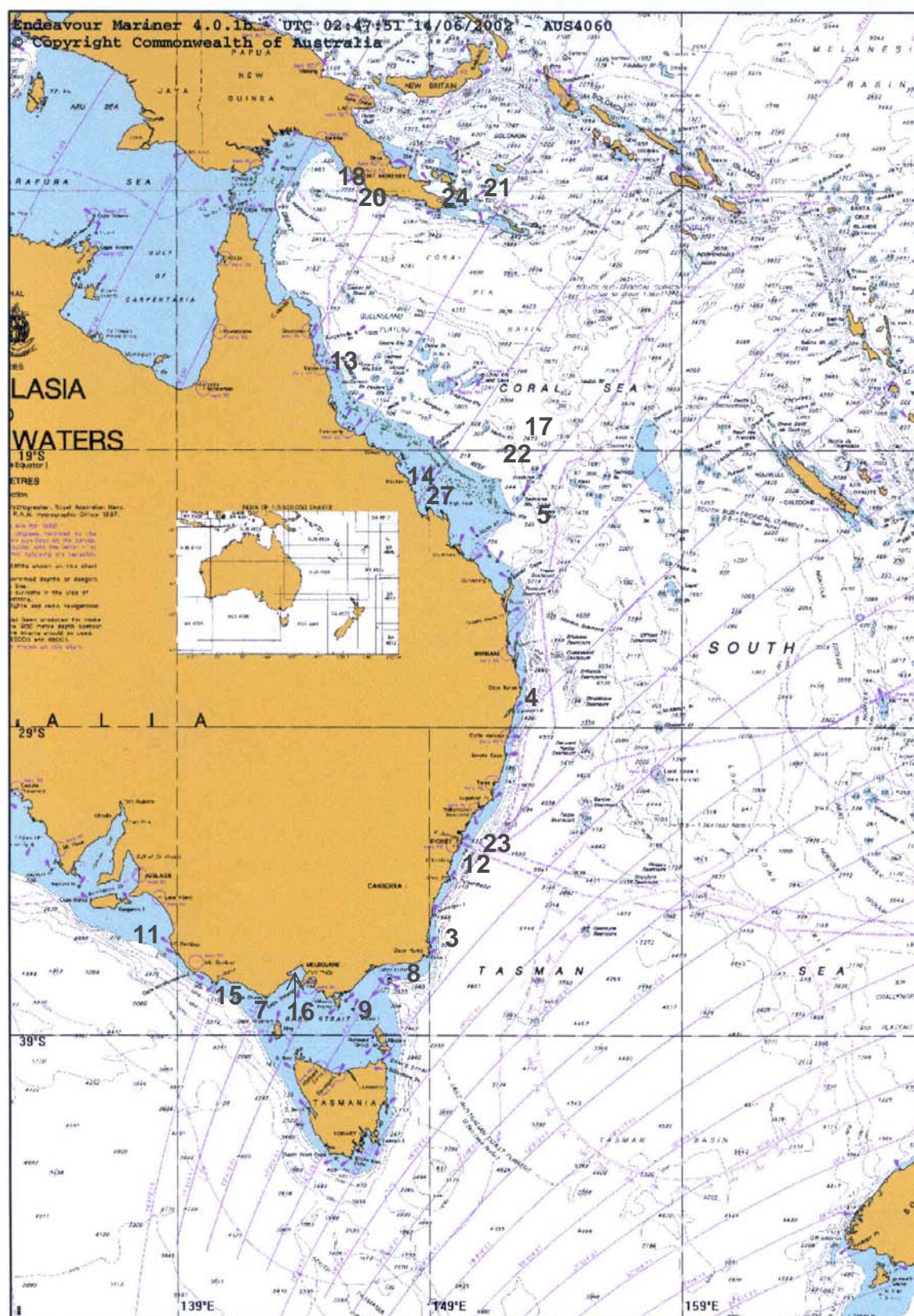
UNITED SALVAGE
DETAILS OF CASUALTIES IN AUSTRALIAN WATERS
1st January 1999 to 27th March 2002

	Casualty Name	Date	Type of Casualty	Tugs used *	Tug Port of Origin	Work carried out
1.	Aurora Australis	14.01.99	Breakdown	Wambiri	Fremantle	Escort to Fremantle
2.	Karinya 2/ Karawa 2/ Shearwater/Osprey	23.03.99	Stranding in cyclone at Onslow	Nil	Fremantle	Refloated using ground tackle
3.	Capitaine Blythe	07.01.00	Breakdown - Bass Strait	Warringa	Eden	Nil - vessel repaired
4.	Southern Moana II	26.02.00	Breakdown - N. NSW Coast	Brighton	Brisbane	Towage to Brisbane
5.	Stolt Otome	26.02.00	Breakdown - Capricorn Passage, Qld	Nelia	Mackay	Towage to Mackay
6.	Bader III	22.04.00	Breakdown - SW of Fremantle, WA	Wambiri	Fremantle	Towage to Fremantle
7.	Stolt Otome	23.05.00	Breakdown - Portland	Keera	Melbourne	Towage - Portland to Melbourne
8.	North Head	02.07.00	Breakdown - Bass Strait	Warringa	Eden	Towage to Eden
9.	Feng Li	27.07.00	Breakdown - Bass Strait	Woonna Warringa	Sydney Eden	Towage to Melbourne Melbourne to Sydney
10.	Rakiura Maru	13.09.00	Breakdown - Bluff	Keera	Melbourne	Towage to Newcastle and Brisbane
11.	Pelander	30.09.00	Breakdown - SA coast	Tarpan	Adelaide	Nil - vessel repaired
12.	Tawe	01.11.00	Aground off Pt Kembla	Karoo	Pt Kembla	Refloat by towage
13.	Bunga Teratai Satu	02.11.00	Aground Great Barrier Reef, Qld.	Redcliffe Werra Pacific Salvor Otto Assman Hamilton	Brisbane Townsville Brisbane Mourilyan Cairns	Refloat by towage and ground tackle. Delivered to Sydney 20.11.00
14.	Umberto D'Amato	25.03.01	Aground Gladstone Hbr.	Wistari Tom Tough Kuttatubul	Gladstone Gladstone Gladstone	Refloat by towage

	Casualty Name	Date	Type of Casualty	Tugs used *	Tug Port of Origin	Work carried out
15.	Devprayag	22.04.01	Aground off Portland Vic.	Keera	Melbourne	Refloat by towage
16.	Mirande	29.06.00	Aground Port Phillip Bay	Keera/Gabo Macedon	Melbourne Geelong	Refloat by towage
17.	ANL Purpose	07.08.01	Breakdown - Coral Sea	Giru Bulimba	Townsville Brisbane	Towage to Brisbane
18.	Dewisari 1	21.09.01	Aground at entrance to Port Moresby Harbour	Masthead	Port Moresby	Refloat by towage
19.	All Green	21.09.01	Breakdown - WA coast	Wambiri	Fremantle	Towage to Fremantle
20.	Kaio	24.10.01	Breakdown - off Port Moresby	Masthead	Port Moresby	Towage to Port Moresby
21.	Gazelle Coast	09.12.01	Beached in Louisade Archipelago nr. Misima Is	Masthead	Port Moresby	Refloat by towage and escorted to Pt Moresby
22.	Bright Sky	26.12.01	Breakdown - Coral Sea	Giru	Townsville	Towage to Brisbane
23.	Canning Tide	05.01.02	Breakdown - off Sydney	Levanter	Sydney	Towage to Sydney
24.	Coral Trader	24.01.02	Aground in China Strait, PNG	Brighton Masthead	Lae Port Moresby	Refloat by towage
25.	Jody F Millennium	07.02.02	Aground off Gisborne NZ	Seatow 22 Seatow 25 Seatow 27 Turihaua / Titirangi Keera	Auckland Auckland Auckland Gisborne Gisborne Melbourne	Refloat by towage and towage to Tauranga
26.	Thor Simba	05.03.02	Breakdown - off Dampier	Wyola	Fremantle	Towage to Fremantle
27.	La Pampa	27.03.02	Aground in Gladstone Harbour	Wistari Tom Tough Kuttatubul	Gladstone Gladstone Gladstone	Refloat by towage

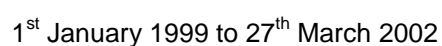
*** Note: Positioning and use of tugs varies from time to time due to commercial and operational reasons.**

UNITED SALVAGE CASUALTIES IN AUSTRALIAN WATERS - EAST COAST



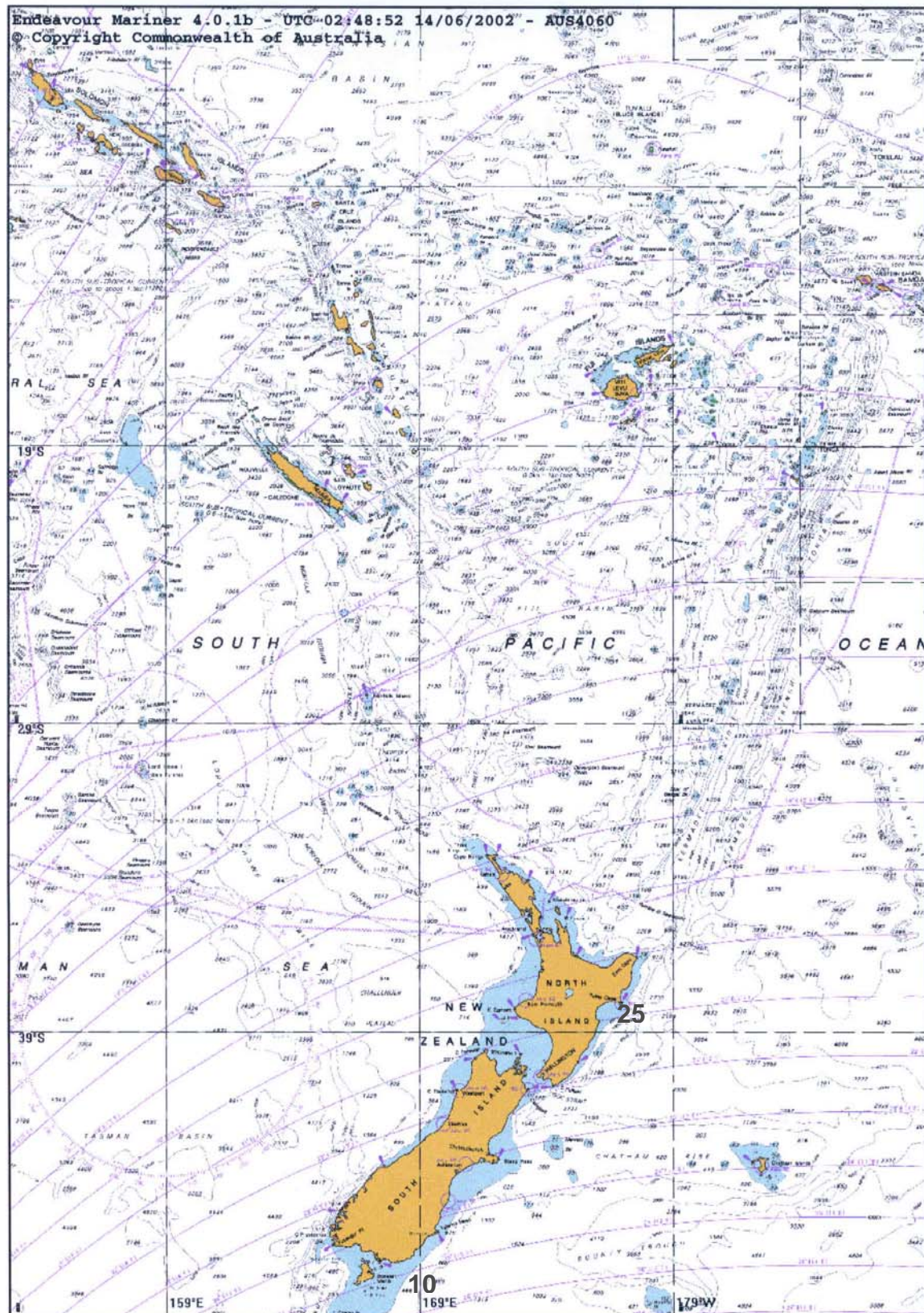
1st January 1999 to 27th March 2002

APPENDIX 1



UNITED SALVAGE CASUALTIES - NEW ZEALAND

APPENDIX 1



1st January 1999 to 27th March 2002

UNITED SALVAGE

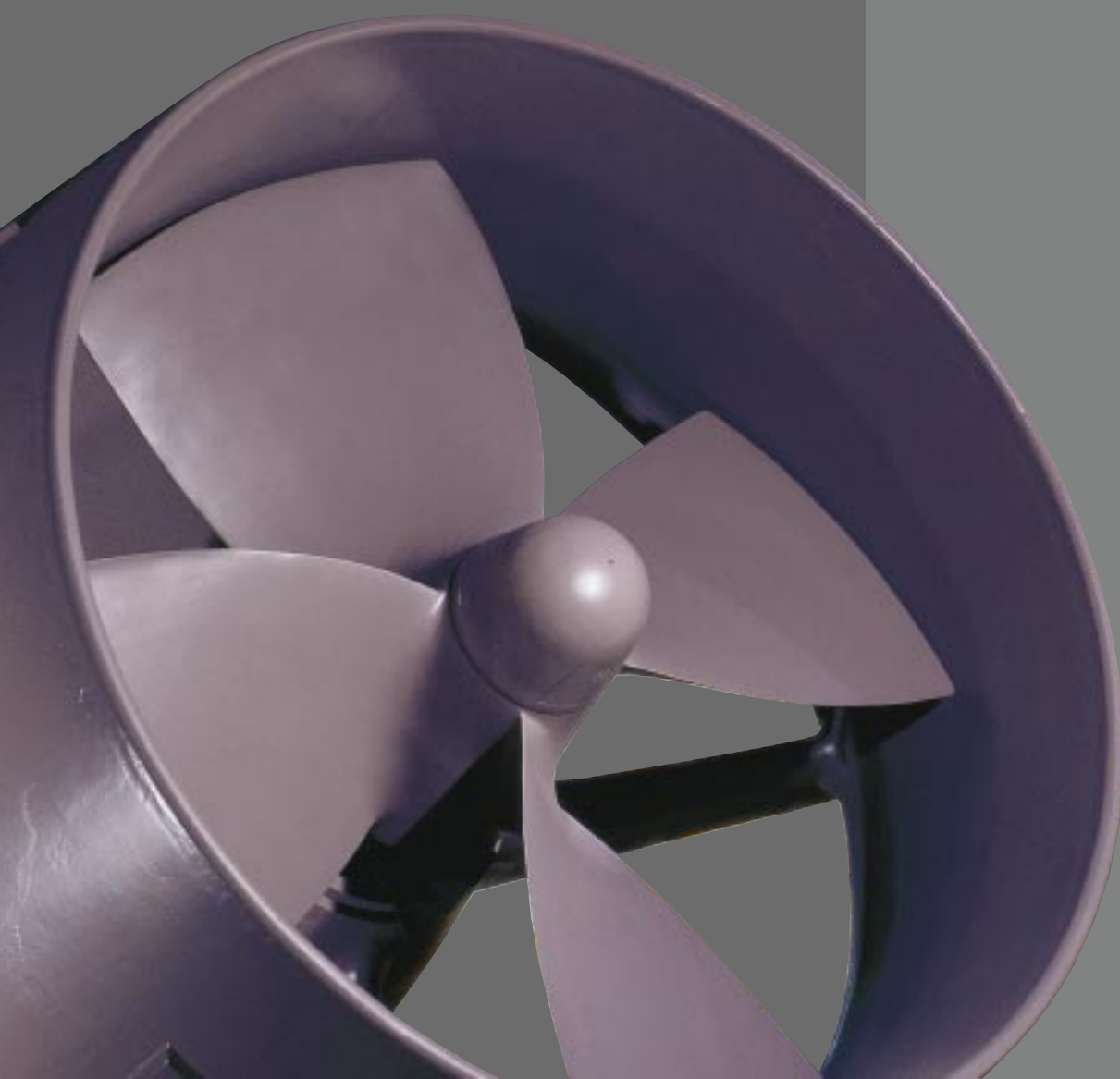
SALVAGE TUGS AND SUPPORT TUGS - June 2002



	Salvage Tugs	Support Tugs
Queensland		
Cairns		Babinda / Hamilton
Mourilyan		Otto Assman
Townsville	Giru	Werra / Burdekin
Mackay		Challenger / Wyambi
Bowen		Denison / Gloucester
Gladstone	Tom Tough	Kuttabul / Wistari
Bundaberg		McLarty
Brisbane	Austral Salvor / Redcliffe	Clontarf / Willara / Bulimba
New South Wales		
Newcastle		Wato / Watagan / Carrington / Mayfield / Wickham / Koonah / Ballina
Sydney/Port Botany	Woonah / Wongah	Beltana / Wooree / Wolli / Wilga / Walan / Warrawee
Port Kembla		Bullara / Korimul / Karoo / Kembla II
Eden	Warringah	Weela
Victoria		
Westernport		Cooma / Hastings
Melbourne	Keera / Gabo	Gurrong / Marimba
Geelong		Edina / Macedon
South Australia		
Adelaide	Tusker / Tarpan	Tingari / Tapir / Corsair
Whyalla	Taminga	Turmoil
Port Pirie		Tanunda
Thevenard		Wiabuna
Western Australia		
Fremantle	Wambiri	Wyong / Burra
Albany		Elgin / Wandilla
Kwinana		Bunbury / Champion
Geraldton		Beacon / Pelsaert
Onslow		Wyola
New Zealand		Titirangi / Turihaua / Seatow 22 / Seatow 25 / Seatow 27
Fiji		Dretia / Maika Tora
Papua New Guinea	Brighton	Masthead / Sprightly

Note: Positioning and use of tugs varies from time to time due to commercial and operational reasons.

COMPREHENSIVE **MARINE SALVAGE** SERVICES TO SHIPPING
THROUGHOUT AUSTRALASIA, THE SOUTH PACIFIC, THE
UNITED KINGDOM, EUROPE AND THE ATLANTIC





UNITED SALVAGE

- Casualty refloating
- Damage control
- Underwater damage survey and repair
- Pollution control
- Ocean rescue and towage
- Wreck removal
- Underwater search and recovery
- Cargo stabilisation and lightening
- Survey and repair
- Fuel bunker draining and removal
- Fire fighting
- Controlled scuttling
- Contingency planning with regulatory authorities

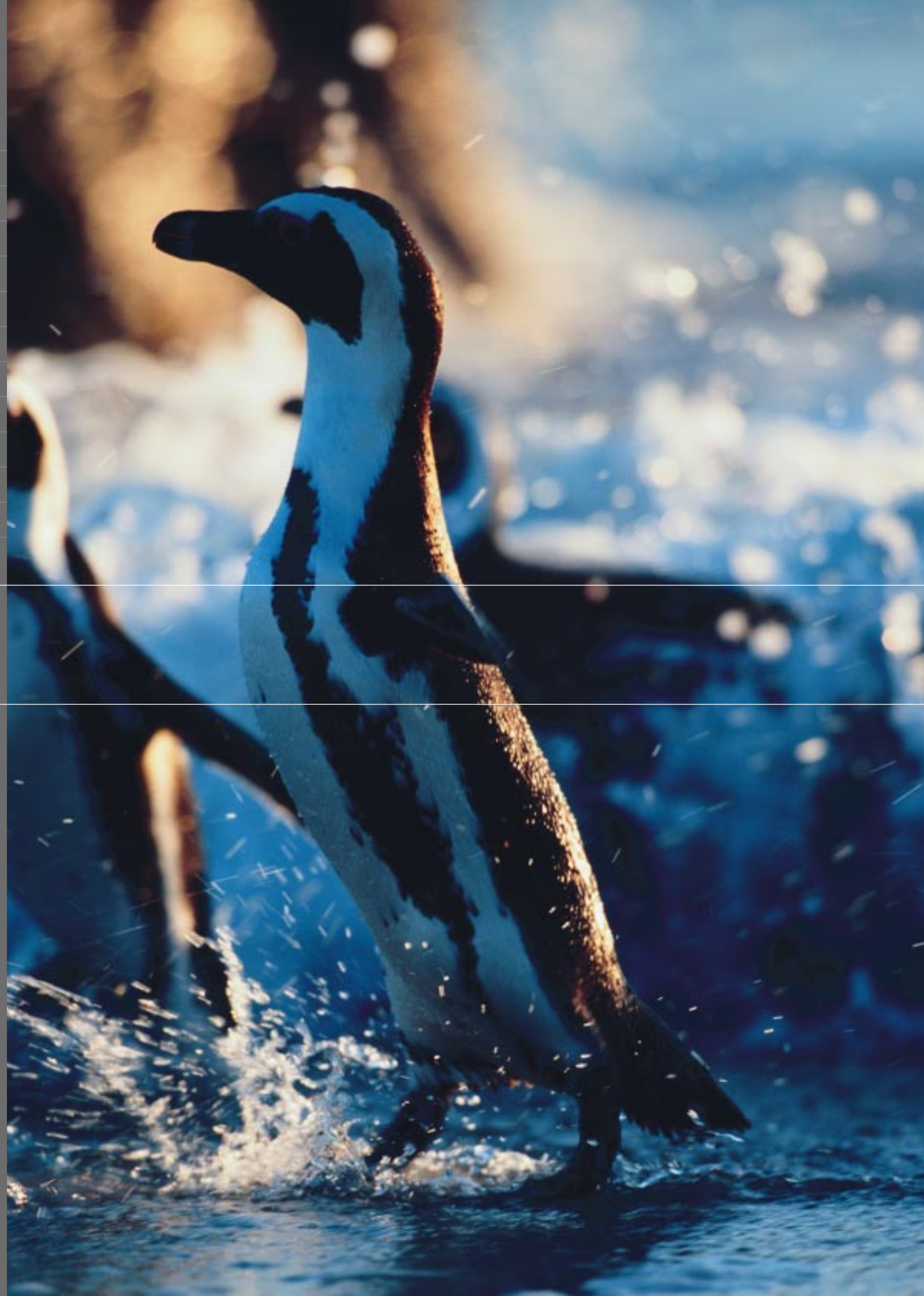
PROTECTING THE ENVIRONMENT

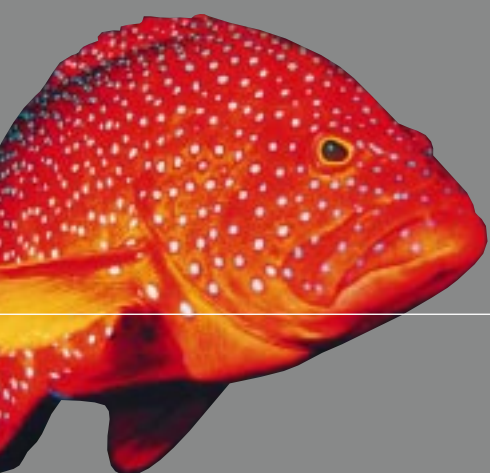
Fires, explosions, collisions, groundings or breakdowns. Any of these events can have catastrophic impacts for a ship and the environment. United Salvage provides 24 hour assistance throughout Australasia, the South Pacific, the United Kingdom, Europe and the Atlantic for such incidents.

United Salvage believes care for the environment is a priority when undertaking any salvage operation. Often, protecting the environment will dictate the specifics of how the salvage should be carried out. The extent to which the environment is protected will be a major factor in gauging the overall success of a salvage.

Like all member companies of the International Salvage Union, United Salvage believes pollutants are usually best retained in the ship. If a collision or grounding does result in the release of pollutants, United Salvage has the expertise and equipment to minimise any impacts on the environment.

Developments in the shipping industry have resulted in safer ships, and thus fewer incidents. However, when an incident does occur, public interest is immense. In recent years, public awareness of the impacts and effects of incidents has increased substantially, which means a successful salvage is even more pertinent.





Their significant salvage expertise is provided across all vessel types – general cargo ships, bulk carriers, fishing vessels, container ships, tankers, ro-ro vessels, car carriers, passenger liners, barges, work boats and ferries.

United Salvage, owned and managed by Adsteam Marine Limited, has offices in Australia, the South Pacific and the United Kingdom.

United Salvage is a prominent member of the International Salvage Union.

ABOUT UNITED SALVAGE

United Salvage provides comprehensive inshore and offshore emergency marine response services throughout Australasia, the South Pacific, the United Kingdom, Europe and the Atlantic. Its successful track record, established over the last few decades, has made United Salvage one of the leading international salvors.

AUSTRALASIA AND THE SOUTH PACIFIC

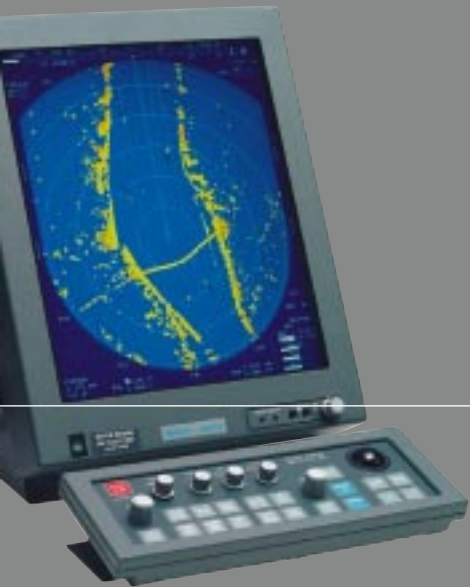
In Australasia and the South Pacific, United Salvage is the largest and most experienced maritime salvage company. They cover the 60,000 kilometre coastline of Australia, shipping lanes in the geographically vast area of Papua New Guinea, Fiji and New Zealand and the intensely sensitive and highly vulnerable areas of Torres Strait, the Louisiade Archipelago, the Great Barrier Reef and Bass Strait.

The island nations of the South Pacific require salvage operations to be undertaken by locally registered companies. To this end, United Salvage has operating companies in Papua New Guinea – Pacific Towing (PNG) Ltd, Vanuatu – Marine Pacific (Vanuatu) Ltd, New Zealand – Sea-Tow Ltd and Fiji – South Sea Towage.

UNITED KINGDOM, EUROPE AND THE ATLANTIC

United Salvage will respond to salvage situations within the United Kingdom, Europe and the Atlantic. It has developed salvage co-operation agreements with other towage companies within the UK and abroad and also has a rapid response capability to ensure mobilisation commences within minutes of a call.





CAPABILITY

United Salvage has a large fleet of specially-designed composite tugs at its disposal. This is the first line of defence against the specialist task of managing maritime oil and chemical pollution, or assisting fully laden vessels which are adrift, disabled, on fire, flooding, aground or otherwise totally immobilised.

The primary salvage tugs in Australia and the South Pacific, while undertaking harbour-based duties, are specifically designed with appropriate displacement, navigation equipment, free-board, full ocean salvage gear and fuel and water capacity, to work effectively at sea well beyond protected coastal waters. These tugs can reach a casualty and secure it faster than any other means available to authorities and are the most cost effective towing resource.

The UK has a modern tug fleet, with a number of tugs on call 24 hours a day, seven days a week, for emergency response and salvage work.

The salvage tug fleet varies from 2,440 bhp to 5,500 bhp vessels of between 40 and 70 tonnes bollard pull.

TECHNOLOGY

Technology plays an important part in any salvage operation. The use of satellite communications, electronic charts, dive support and databases underpin the work carried out by all United Salvage teams, to ensure a safe, efficient and effective job.

ALL-WEATHER

In Australia and the Pacific, all the primary salvage tugs are of a raised forecastle design with substantial increased displacement compared to harbour tugs – ensuring their suitability to deep sea operations in all weather conditions. More than A\$2.5 million worth of special features is built into each tug by United Salvage to specifically allow these vessels to engage in ocean salvage.

In the UK, nominated tugs are equipped for sea towage, salvage and fire fighting.

PERSONNEL

Salvage personnel, who comprise the salvage teams, are drawn mainly from within Adsteam Marine. They are supplemented, when necessary, by specialists with whom United Salvage has pre-existing agreements. The multi-disciplined team, typically comprises a salvage master, salvage engineers, salvage officers, naval architect, divers, salvage hands and any specialists required.

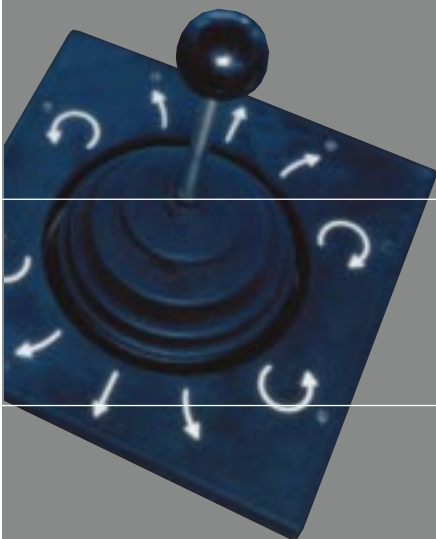
The teams are highly trained and experienced in marine emergency response, specific salvage techniques and environmental protection. They are on call 24 hours a day under the supervision of salvage masters, acknowledged as among the most experienced in the world.

CONTRACTUAL ARRANGEMENTS

United Salvage operates in accordance with

- the International Salvage Convention 1989
- guidelines contained in approved international emergency response codes
- Australia and New Zealand's oil spill plans
- The environmental protection policies of Australian, New Zealand and South Pacific governments
- The national contingency plans of the UK and European Union
- The environmental protection policies of the UK Government and European Union

United Salvage operates on Lloyd's Open Form as well as internationally recognised commercial contracts between the company, the vessel's owner/operator and/or the vessel's insurance company.



CONTACT UNITED SALVAGE

Corporate Office – Adsteam Marine Limited

Level 22, Plaza 2, 500 Oxford Street

Bondi Junction NSW 2022 Australia

PO Box 644 Bondi Junction NSW 1355 Australia

tel +61 2 9369 9200

fax +61 2 9369 9266

united.salvage@adsteam.com.au

3 Marina Court, Castle Street

Hull HU1 1UA

United Kingdom

tel +44 1482 224 181

fax +44 1482 324 669

salvage@adsteam.co.uk

www.adsteam.com.au

For 24 hour assistance in Australia and the
South Pacific call **+61 7 3895 1031** in the
United Kingdom call **+44 1482 224 181**