



CASE STUDY.

# Marine Pilotage.

A ROBUST MODEL FOR MARINE PILOTAGE  
DUE DILIGENCE.



## BACKGROUND

“ R2A have developed a robust model for Marine Pilotage Due Diligence. ”

R2A have completed a number of marine pilotage due diligence reviews in Australia and New Zealand.

During these reviews, relevant legal counsel often refer to the statutory protection marine pilots enjoy in the event of a serious incident.

Such discussions invariably lead to the caveat that this is a complex area of the law (especially environmental law) and matters may not always pan out as ‘expected’.

R2A have developed a robust model for Marine Pilotage Due Diligence which provides an arguable case for pilots and pilotage organisations in the event of an incident.

Further details are provided in this case study.



# R2A PROCESS

The R2A approach assists an organisation to demonstrate that all requirements have been met.

R2A have developed a robust process for developing a Marine Pilotage due diligence argument which is outlined below. This generalised common law approach assists an organisation to demonstrate that all statutory, regulatory and common law requirements have been met.

This methodology consists of a number of arguments that demonstrate that all reasonable practicable precautions are in place.

## Marine Pilotage Process

### 1. Legal Briefing

The first step is a legal briefing with the legal counsel representing the pilots and pilotage organisation to discuss and outline what is being proposed to create the due diligence argument. The objective of this step is to get the legal ‘seems reasonable’ sign off.

### 2. Documentation Review

R2A undertakes a documentation review to ensure that a situation analysis is complete. This includes Port Procedure Manuals, existing port parameter documentation, pilot check & training and licensing arrangements.

### 3. Port Inspection and Observation of Pilotage Services

As part of this process, a typical pilotage is observed. This enables R2A to gain an independent view as to the way pilotages are conducted vis-à-vis other pilotage services.

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### 4. Generative Interviews

This essential component for the long term success of the review. A representative group of pilots are collaboratively involved in the determination of what constitutes good practice pilotage in that particular port.

Issues and precautions are tested on a geographic time sequence basis and testing for representative ship movements required at each stage of the pilotage are noted. Such a process takes into consideration that different pilotage sequences are required for various sized vessels and environmental conditions.

During this examination, good practice precautions are agreed and then form the minimum standard expected of pilots. These procedures are then taught to any new pilot to the port and also included in training and induction manuals.

The stakeholder workshop develops agreed to good practice pilotage.

## 5. Stakeholder Workshop to establish recognised good practice

The results from the generative interviews are then tested with a larger stakeholder group during a workshop.

This may include harbourmasters, regulators, corporate counsel and any other stakeholders. Participants in the process are made aware that, having identified and agreed to good practice for pilotages, the failure to adhere to such a code means that the individual pilot may be 'on their own' in the event of an incident.

## 6. Time Sequence and Threat-barrier modelling

R2A complete, as required, threat barrier modelling or similar which are then completed for particular area of concern. This modelling is a very powerful way to demonstrate the efficacy of existing and proposed precautions.

A case study is provided for South Port, New Zealand in 2003 is provided below.

## 7. Final Legal Review

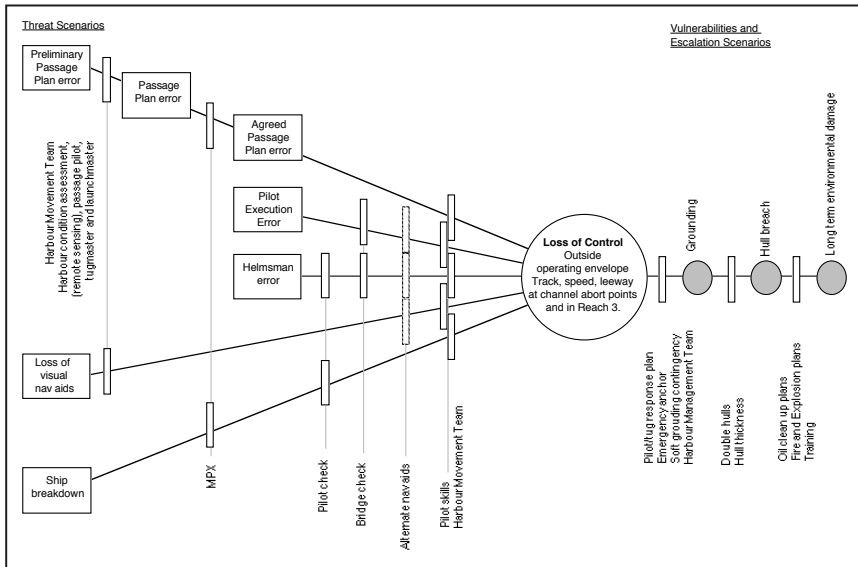
This is to confirm that what was presented in the initial legal briefing has been done and that what has resulted would enable the lawyers, in the event of an incident, to have an arguable case to present to the courts.

# CASE STUDY

## South Port, New Zealand Case Study

Featured here is a Threat Barrier Diagram for Loss of Control in Reach 3, South Port, New Zealand

In this diagram, each of the threat scenarios can be modelled as a fault tree. The vulnerabilities and escalation scenarios can be modelled as an event tree.





# CONCLUSION

The process that R2A has developed for Marine Pilotage Due Diligence enables an arguable case to be developed to demonstrate due diligence on behalf of pilots and pilotage organisations.


The process cannot guarantee all liability for a serious pilotage event will be eliminated as that is always up to the courts to decide.

What this process will do is give you a high level of protection against negligence and ensures a team approach and support.

Contact R2A for further information.



## WHERE TO NEXT



Talk to R2A  
about your  
next project.

If you would like to know more about how to manage due diligence in your business you can:

- Contact R2A to organise a briefing for your executive management team.
- Book an In-House Course or Private Briefing.
- Buy a copy of the 9th edition R2A text: Risk & Reliability: Engineering Due Diligence. Order online.
- Receive R2A's email newsletter.
- Attend the two day Engineering Due Diligence Workshop presented by Richard Robinson.
- Attend the one day Defensible Risk Management Techniques course presented by Richard Robinson on behalf of Engineering Education Australia.
- Enrol in the postgraduate unit 'Introduction to Risk and Due Diligence' Postgraduate Unit at Swinburne University, also presented by R2A.





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