

Departmental investigation
into the alleged collision between
an unidentified trading ship
and the Australian fishing vessel
JAY DEE
off Southport, Queensland
on 31 December 1995



Report 88



**Transport and
Regional Development**

Contents

Summary.....	1
Sources of Information	2
Narrative	3
Comment and Analysis	11
Conclusions.....	18
Submissions.....	20
Details of Vessel	21

Navigation Act 1912
Navigation (Marine Casualty) Regulations
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Summary

At about 1600 on 2 January 1996, the Owner/skipper of the Queensland fishing vessel Jay Dee was washed ashore, together with the vessel's "carley" float, about 3 km South of Brunswick Heads, New South Wales.

In a subsequent statement to the New South Wales Police, he stated that on the evening of 31 December (New Years Eve) 1995, he had been trawling for prawns about 16 miles east of Southport, Queensland, the only crew member of his trawler Jay Dee. At about 2200, while trawling in an easterly direction his vessel was hit on the port side by a large trading ship. He was unable to identify the ship in any way.

Jay Dee immediately started to take water into the forecandle accommodation space and the engine room. The Skipper had just sufficient time to release a parachute flare over the stern and towards the bow of the retreating ship, grab a short length of line and free the carley float from the wheelhouse top before jumping clear of the sinking vessel.

The trading vessel did not stop.

The Skipper was able to gain the carley float and secure the ice box, which had floated free and inverted.

He spent that night, the day and night of 1 January, in all over 40 hours adrift, before coming ashore south of Brunswick Heads on 2 January.

Sources of Information

Australian Maritime Safety Authority, Maritime Rescue Coordination Centre

Australian Maritime Safety Authority, Ship and Personnel Safety Services

Owner/Skipper Jay Dee

The Queensland Water Police

New South Wales Police Service

Queensland Department of Transport, Maritime Division

Dr George Cresswell, Division of Oceanography, CSIRO

CareFlight (Queensland)

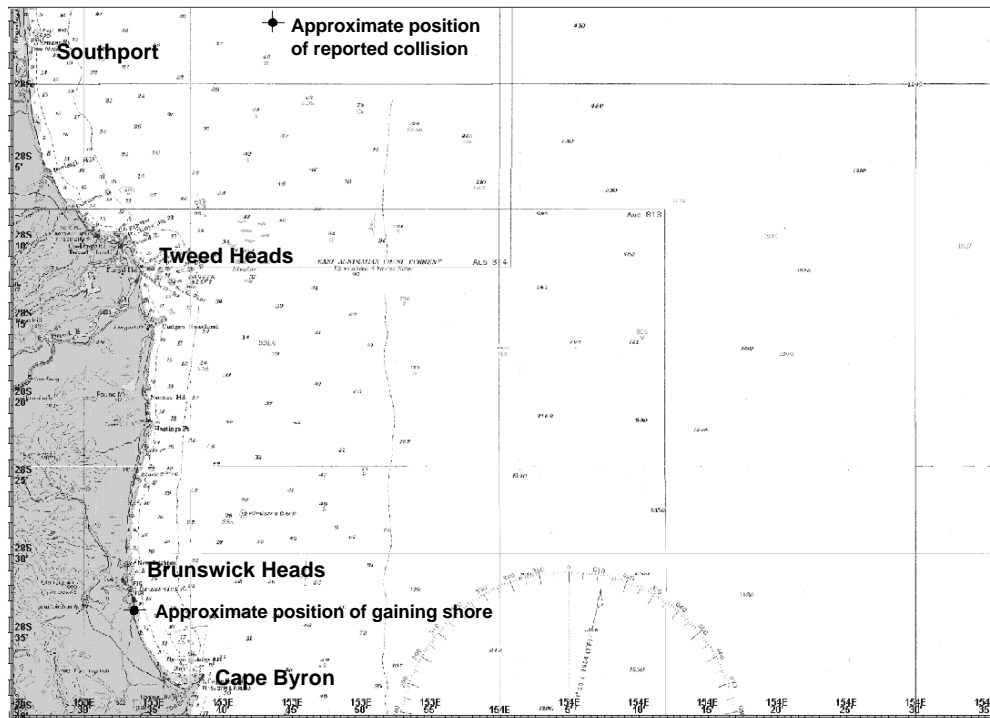
Master, CHL Innovator

Master, Ocean Prince

Master, Nand Nidhi

Master, Rubin Rosebay

Portion of chart Aus344 showing position of reported incident



Narrative

Jay Dee

Jay Dee was built in Deagon, Queensland in 1964 and was originally named Grandeur, working from New South Wales. It was bought by a new owner in 1974 and renamed Jay Dee, transferring to Southport, Queensland. It was then sold again in May 1994 to an experienced fishing skipper, also based in Southport.

Jay Dee was classed as a “3B” vessel (seagoing fishing vessel for use in all operational areas up to and including offshore* operations), it was 12.03 m in length, 3.81 m in beam and had a depth of 1.2 m from

* Offshore: a limit of 200 miles to seaward, or within such lesser limits as may be specified by the Authority.

the main deck. It was powered by a Gardner Diesel engine developing 65 kW, from which the trawl winch was operated by a belt drive. The three trawl nets, two wing trawls and a centre trawl, were deployed from an “A” frame and side booms. As a vessel over 12 m, under Queensland and Uniform shipping Law Code requirements, the minimum designated crew to be carried at any time was two.

According to the Skipper, he normally employed a crew member. However, before Christmas 1995, the regular deck-hand had gone home for Christmas. Jay Dee, being a small vessel with relatively small nets was so set up that a person working the boat alone could operate the fishing equipment and recover the nets and associated otter boards.

Records show that the last statutory survey by the Queensland Department of Transport was conducted in August 1993. The vessel had been inspected by a private surveyor for insurance purposes on two occasions, in May 1994 and May 1995. However, the insurance was allowed to lapse in the spring of 1995.

The Incident

All the times related by Jay Dee’s Skipper are very approximate as he carried no watch and only knew approximately what time he set out from Southport. Vessels leaving Southport are not required to file any report and vessels reporting to Southport Sea Tower do so on a purely voluntary basis.

The Skipper and his family were in the process of moving home. He spent Christmas with his family and after Christmas the family left for their new home in North Queensland. Thereafter, the Skipper used Jay Dee as accommodation.

Before Christmas and in the period between Boxing Day and the New Year the skipper worked Jay Dee alone, fishing for short periods, without taking ice and delivering the catch on a daily basis to the wholesaler in Southport. On the days after Christmas he left Southport in the evening, trawled during the night and returned to Southport in the early morning to sell his catch.

On New Years eve, with his family away and the knowledge that a rock band would be performing for New Year celebrations close to the trawler wharf, he decided to go fishing that night, particularly as the moon, being nine days old, would be favourable for trawling for prawns in deep water between 12 and 16 miles off the Gold Coast. At about 1800 on 31 December 1995, Jay Dee left its berth in Southport, following another trawler to sea. As on previous nights the Skipper was alone.

Jay Dee was equipped with echo sounders, a radar and a global positioning system receiver. The radar, however, was not operational as the scanner drive motor had failed before Christmas and the Skipper was awaiting a replacement part for it.

The trawler Wave Rider left the Southport trawler wharf at about 1800 on 31 December, with a crew of three. The skipper was aware of a trawler following his vessel, but did not know which trawler it was. Wave Rider was a faster and larger vessel than the other and tended to leave the smaller vessel behind. No radio contact was made between the two vessels, although the smaller vessel could be seen initially on the radar. Wave Rider shot away its nets 8½ to 9 miles off the coast and 15 miles north of Point Danger. It trawled in a northerly direction. Apart from Wave Rider and the trawler that followed it out, there were no other fishing vessels visible.

At about 2000, Jay Dee had reached a position 12 miles from Southport and a similar distance north of Point Danger and had shot

away three trawl nets (two wing nets and a centre net) in about 42 fathoms (77 m) and started to trawl in a northerly direction. The vessel was reportedly showing the lights required under the provisions of the International Regulations for Prevention of Collisions at Sea and also afterdeck working lights.

After about 20 minutes the Skipper noticed that the engine temperature was above normal and he suspected that one or more of his nets had fouled weed or rock. He recovered the centre net and the two side nets by means of the “lazy line” attached to the cod end of each trawl. The centre net was damaged so he turned Jay Dee in an easterly direction and shot away the two side trawls and, standing on the after part of the deck, started to make temporary repairs to the centre net.

The sea conditions were good with a north-easterly wind and a slight sea. The Skipper did not deploy the stabilisers and was quite comfortable with the gentle motion of the vessel.

The Skipper stated that, at a time put at about 2200, he felt an impact and looked up to see the side of a large ship passing down Jay Dee’s port side. The Skipper ran into the wheelhouse and to the companion way to the forecabin accommodation. Looking down he could see water pouring into the space. The lifejackets were out of reach on top of one of the bunks. He grabbed two rocket flares from a locker at the head of the companion way and immediately, and urgently, returned to the deck, switching the VHF set, positioned by the port door, to channel 16 as he passed.

He checked the engine space, looking down a hatch aft of the wheelhouse and saw water entering the engine room. He ran to the after part of the deck and fired one of the flares over the stern of the retreating vessel, towards its bow, and along the line of the retreating ship. He then went to the forward end of the boat and untied the

carley float, which served as a liferaft and was secured to the wheelhouse top. He also grabbed a short length of small diameter synthetic rope. At about this time the lights failed and Jay Dee started to sink rapidly by the bow. The Skipper jumped clear of the sinking boat.

Both the carley float and the vessel's ice box, which had turned upside down, floated clear. The Skipper swam to the carley float and also grabbed the ice box, which he managed to secure to the carley float with the length of rope. The Skipper did not wear a watch, had no water, food or survival equipment and was dressed in only a shirt and shorts.

The ship did not stop.

The Search

Between 2148 and 2157 on 31 December, Queensland Water Police received three reports of a red flare having been sighted. The reports varied in their assessment of whether the flare was probably hand-held or parachute and whether or not the trajectory was high or low. The Police, however, instituted a communications check on 27 and 73 megahertz and a search by boats and a helicopter of an area ten miles to seaward of Southport bar down to Point Danger on the New South Wales border. Two boats left Southport within 20 minutes and a helicopter search of the area was also undertaken by CareFlight.

The helicopter crew was alerted at about 2215 and was airborne shortly before 2300. The helicopter conducted a line search at between 500 feet and 1000 feet between the Seaway and Palm Beach. The helicopter was equipped with a scanner receiver to locate radio beacons, which would have located any EPIRB transmitting on 121.5 kHz within line of sight. The helicopter conducted a visual search using a "Nightsun" light of 30 million candle power.

Neither the boats nor the helicopter found any trace of a vessel in distress and the helicopter saw no other ships.

In Southport the following morning, 1 January, the wholesaler, who normally bought the Jay Dee's catch, rang the Police at 1030 and reported the Jay Dee was overdue. He gave a description of the vessel and, in discussing the situation, mentioned that Jay Dee may have gone north to Amity Point on North Stradbroke Island, had trawling not been successful further south.

The Police checked the trawler wharf and efforts were made to contact Jay Dee by radio. The Police also patrolled areas of the Broadwater, in case Jay Dee had anchored or moored over the New Year rather than continued trawling.

Survival

Once on the carley float and with the ice box acting as a drogue, the Skipper was able to see the lights of the Gold Coast. He realised that without his EPIRB and not having sent a distress call, he was totally reliant on somebody having seen the flare or somebody becoming concerned when he did not return the following morning. Rescue did not come and at midnight he could see the rockets of the New Year fire work displays on the Gold Coast.

The Skipper was drifting to the south in the prevailing current. The following morning, New Years day, he saw a ship approaching from the north. It seemed that the ship was heading straight for him and he became alarmed. He managed to tear some of the insulation from the ice box and used the pieces to paddle out of the ship's line of advance, before standing on the ice box and, with his singlet tied to a timber batten, trying to attract attention. The ship, a container ship, apparently did not see him. He estimated this encounter was about 0630, as it seemed to be about two hours after sunrise. He recalled

the buff coloured hull and some of the black letters of the ships name which ended in “HE” with Chinese characters above.

On the carley float, the Skipper continued the drift to the south in a light (10-12 knot) north-easterly breeze. The ice box had sunk and had been cast adrift. It rained a little and the Skipper was able to lie on his back and get some moisture into his mouth. He saw some floats, which he assumed were attached to fish traps, and tried to paddle over to them, but the current and breeze carried him past them.

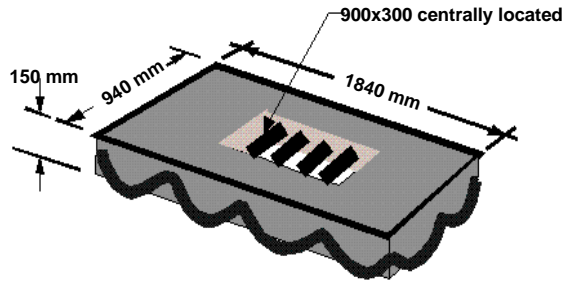


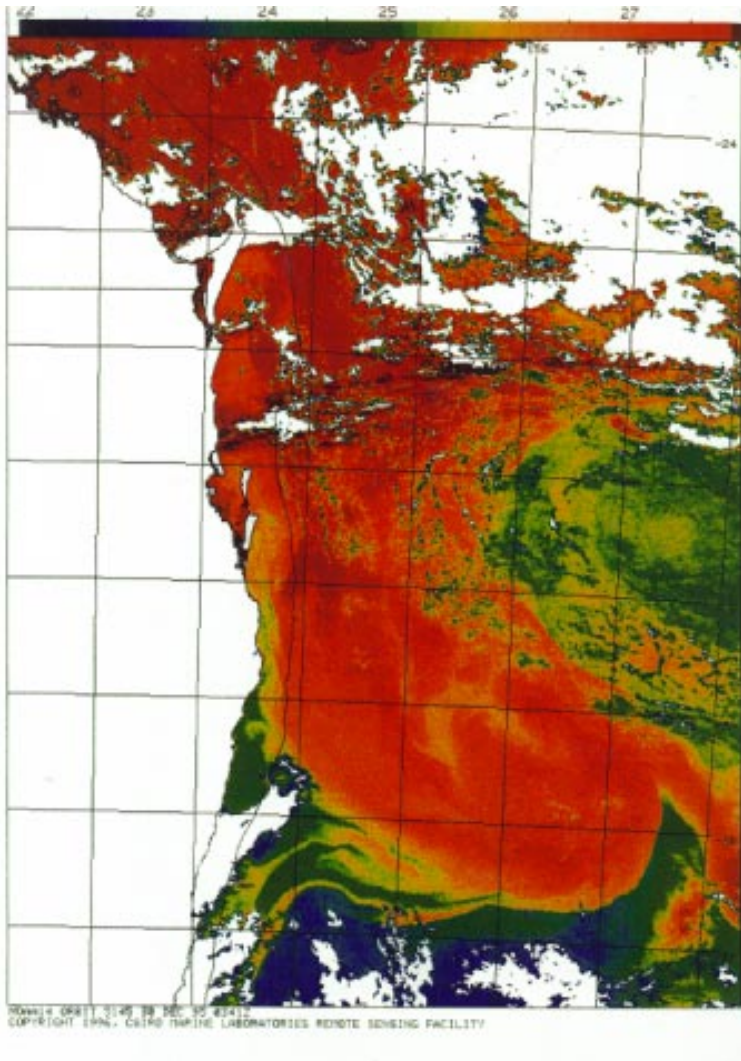
Diagram of Carley Float

Later, he saw a yacht in the distance and aircraft flying along the coastline, all too far away to attract attention. With dusk, he entered his second night adrift.

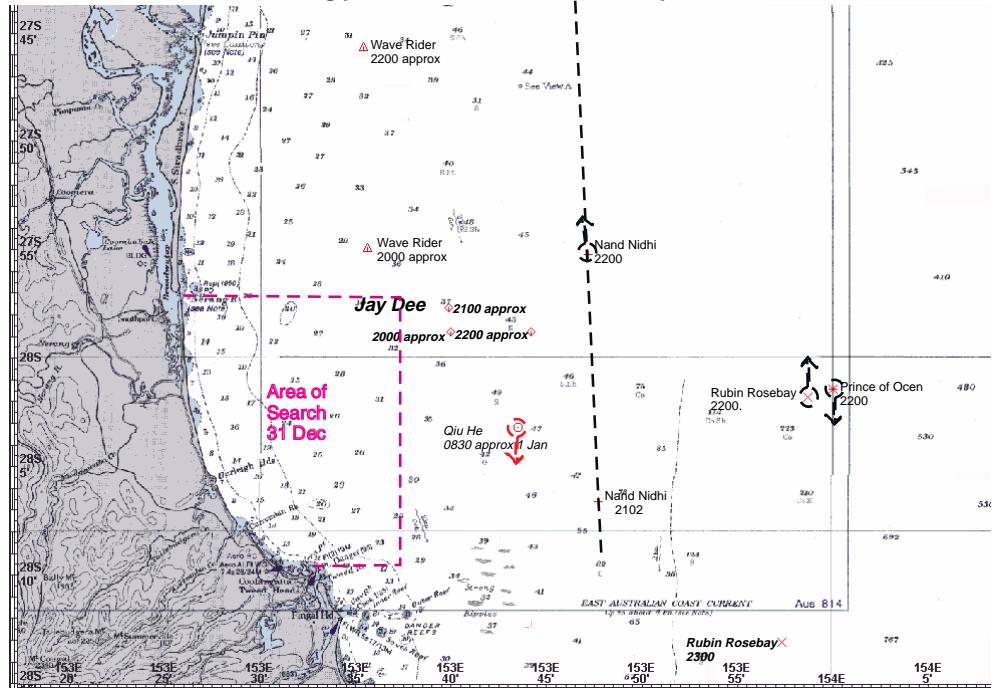
The next day he was off Brunswick Heads. Without food or water and knowing that once past Cape Byron the current would carry him out to sea, he became desperate and began to paddle the carley float in the direction of the coast. He later tried swimming, pulling the carley float behind him. He estimated that he got within two miles of the beach north of Brunswick Heads before being overcome with exhaustion. After some rest he tried again. Despite both North and South beaches at Brunswick Heads being patrolled by lifesavers and there being some pleasure craft reportedly offshore, he was undetected and eventually came ashore between 1.5 and 3 kms south of the Brunswick Heads.

After regaining the use of his legs he walked to the surf lifesaving club, from where, after drinking water and making phone calls to his wholesaler and contacting friends to pass a message to his wife, he reported to the Brunswick Heads Police Station.

Map of Sea Temperatures - East coast of Australia 30 December 1995
reproduced by kind permission by the Department of Oceanography CSIRO



Portion of chart Aus344 showing position of vessels in area of reported incident



Comment and Analysis

The account of the collision and his survival is drawn, of necessity, from the evidence presented by the Skipper, as the only person aboard Jay Dee. Based on the information available, it is estimated that Jay Dee sank in approximate position 27° 58' South, 143° 44' East.

Jay Dee was not insured. With its loss the Owner/Skipper suffered the financial loss of the boat and its equipment. His only asset left after the incident was the vessel's fishing quota points.

The story of the Skipper's survival and perseverance is quite remarkable. He was fortunate that the water temperature in the south going current was between 25.5° and 26.5°, a temperature at which hypothermia would not be a problem. The wind was from the north-

east and relatively gentle reducing the effect of any wind chill. The sea was relatively calm reducing the chance of seasickness and the consequent loss of fluid from the body.

Even so the effort of swimming and paddling the carley float on the second day was a feat of considerable endurance.

Vessels in the area

The only other fishing vessel known to be in the area was the trawler Wave Rider, with a crew of three. Initially Wave Rider had a radar return from the trawler that followed them out that night. At 2000, approximately the time that Jay Dee turned on to an easterly course, the two vessels were between

7 and 8 miles apart. Given the height of Wave Rider's radar scanner and Jay Dee's size radar contact between the two vessels would have been lost at about this time. By the time of the reported collision, Jay Dee would have been about 16 miles to the south-south-east of Wave Rider and well out of Wave Rider's radar range.

Unfortunately, the two day delay between the reported incident and notification complicated the investigation. Ships in the general area of the reported incident were identified through the Marine Rescue and Coordination Centre. This only accounted for ships complying with the Australian Ship Reporting Scheme, which is not compulsory for foreign flag vessels on voyages to their first port in Australia.

However, the vast majority of ships do comply with the scheme. To try and ensure that no other vessel was in the area of the incident, Australian ports were checked for ships arriving that had not complied with the scheme. Although a few ships were so identified, none of them could have been in the vicinity of Jay Dee on 31 December.

With the cooperation and assistance of AMSA, four ships were boarded in Australian ports by either surveyors of the Australian Maritime Safety Authority or Unit investigators. Three were

established as having been outside a twenty mile radius of the alleged position.

In all, three ships were identified as being within 20 miles of Jay Dee's probable position at 2200 on 31 December. One, Prince Ocean, berthed in Bell Bay, was inspected by the Harbour Master on 3 January and boarded by both an AMSA surveyor and a Unit investigator on 4 January. It was established that this ship had been about 14 miles to seaward of Jay Dee. The Master stated that he did not see anything unusual and the watchkeeping officer confirmed that he saw no flares and could not recall seeing any other ships.

Two other vessels were north bound.

From information gained from the owners and cross checked from the MRCC plot, it is evident that the Panamanian ship Rubin Rosebay passed about 13 miles to seaward of Jay Dee at about 2200, on passage to Japan. Prince of Ocean and Rubin Rosebay should have passed within a few miles of each other at about 2200, however, because of the time lapse and the routine nature of sighting other ships, it is not too surprising that an officer could not recall sighting another ship.

The third ship, Nand Nidhi, an Indian bulk carrier passed about three miles to seaward of Jay Dee's estimated easterly position, on passage to Papua New Guinea. There is no evidence that this ship was involved in the incident and those on board could not recall sighting any flares or seeing or hearing anything unusual. Further, it was northbound and, from the Skipper's evidence, the probability is that the vessel involved was southbound, having struck Jay Dee on the port side while the fishing vessel was on an easterly course.

It is quite possible for a ship to be unreported, but despite the checking of ports around Australia, no ship could be identified.

Search

Three sightings of flares to seaward of Southport were reported to the police a little before 2200. At least two people, who did not report the flare but subsequently confirmed sightings to the Inspector, assumed that the flares were to do with premature New Year celebrations and took no notice. However, the Queensland Water Police responded promptly to the flare sightings and instituted a search. Although the area of the search was limited to ten miles offshore, given the limited information upon which the search was based this would seem, without the benefit of hindsight, to have been a reasonable decision.

The skipper recalled seeing some of the fireworks set off on the coast to mark the New Year, when adrift on the carley float. Although some six miles to seaward of the search area, it is surprising that the Skipper did not see the CareFlight helicopter, whose 30 million candle power search light would have been highly visible. At 500 feet (152m), its minimum search height, there would have been a direct line of sight to a radius of 26 miles from the helicopter. The helicopter was also operating radio beacon scanning equipment.

Safety issues

Since 1 January 1991, the Marine Incident Investigation Unit has investigated four other incidents of collision between trading vessels and fishing vessels. Whatever the responsibility of the trading ship, none of the trawlers maintained a proper lookout and were struck without the trading vessel being seen before collision was inevitable.

It may seem somewhat churlish to level criticism of Jay Dee's Skipper after his ordeal and in the face of his financial loss. However, notwithstanding the Skipper's loss and ordeal, there are a number of important safety issues that emerge from this incident.

Lookout

The evidence is that Jay Dee was showing the lights for a vessel engaged in trawling, the sidelights, sternlight and the all-round green light over an all-round white light on a mast, prescribed by the International Regulations for Preventing Collision at Sea, 1972 (as amended). In addition the trawler was stated to be using deck working lights. It is therefore difficult to see how an approaching ship, keeping a proper lookout, would not see such a vessel.

Under Rule 18 of the Collision Regulations, a power driven vessel must keep out of the way of a fishing vessel when the fishing vessel is engaged in fishing, except when in a narrow channel or traffic separation scheme or when a trawler is the overtaking vessel. However this does not relieve the fishing vessel of the need to maintain a proper lookout:

Rule - 5 Lookout

Every vessel shall at all times maintain a proper lookout by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision.

The term “all other means available” includes the use of detecting other vessels by radar, equipment that can often detect ships before they are sighted visually. Such equipment would be important for a person operating a vessel single handed. However, Jay Dee’s radar was not working and this deprived the Skipper of a potentially valuable lookout aid.

Investigations into collisions have shown that fishing vessels do not always keep an effective lookout, even when crewed with more than two people and all too often unqualified persons are left in charge of the navigation of a vessel. The Collision Regulations place an absolute

obligation on all vessels, regardless of crew size, to keep a lookout, even where a vessel is in a situation where other vessels must give way to it. The practice requiring all crew members to work the nets and sort fish on the after deck provides no excuse for breaches of the law.

In any case where the vessel that is required under the rules to give way does not do so, the Collision Regulations state:

Rule - 17 Action by Stand-on Vessel

- (a) (i) *Where one of two vessels is to keep out of the way the other shall keep her course and speed.*
- (ii) *The latter vessel may however take action to avoid collision by her manoeuvre also, as soon as it becomes apparent to her that the vessel required to keep out of the way is not taking appropriate action in compliance with these rules.*
- (b) *When, from any cause, the vessel required to keep her course and speed finds herself so close that collision cannot be avoided by the action of the give way vessel alone, she shall take such action as will best aid to avoid collision.*

While it was clearly the duty of the unidentified trading ship to keep clear of Jay Dee, the Skipper did contribute to the accident by failing to keep a proper lookout and by remaining for the most part at the stern of Jay Dee mending the trawl net. He did not see the approaching ship and was not in a position to take action to avoid collision or to signal the approaching ship to attract attention, as permitted under Rule 36 of the Collision Regulations.

It was obviously impractical for the Skipper, working the vessel alone, to maintain the lookout as required by the Regulations. Under Queensland requirements and the Uniform Shipping Law Code,

vessels of Jay Dee's size require a minimum of two people to work the boat. A second person would have theoretically allowed one of those on board to maintain a lookout and detect any ship in time to take avoiding action.

Life saving equipment

Although Jay Dee was out of survey, this in itself does not seem to have contributed to the incident in this particular case. It appears that the lifesaving equipment met the Queensland requirements for a vessel of that size. The evidence is that the survey life of the rocket flares had not expired and they worked when required.

However, two important items designed to save life were stowed in places dangerous to access in the event of the vessel sinking. The life jackets were stowed on a bunk in the forecastle space and the Skipper took to the carley float in just a shirt and shorts.

More importantly, given the circumstances of the collision, the EPIRB was stowed on the after bulkhead of the wheelhouse. The Skipper's first reaction was to grab the flares, which was sensible, given that the ship that ran Jay Dee down should have seen the distress signals, and then to turn the VHF to channel 16. However, his most reliable piece of equipment to ensure a rapid alert to his situation was the EPIRB which was not stowed in an easily accessible place. Had the EPIRB been switched on and allowed to float clear, its signal would have been located by both the CareFlight search helicopter and the Cospas/Sarsat satellite system. A rescue would have been initiated at an early stage.

EPIRBs have proved themselves time and again as an effective alerting and homing aid, which maximise the chance of rescue in the minimum of time.

Conclusions

These conclusions identify different factors contributing to the accident and should not be read as apportioning liability or blame to any particular organisation or individual.

With the inability to identify any particular trading ship that may have been involved with an acceptable degree of probability, these conclusions are based on the premise that an unidentified trading ship was involved.

The following factors contributed to the causes of the collision:

1. The trading vessel apparently not maintaining a proper lookout by sight, sound and radar.
2. The trading vessel, as the vessel required to give way, not taking action to avoid a vessel engaged in trawling.
3. The Skipper of the Jay Dee not keeping a proper lookout and not detecting the presence of the trading vessel.
4. The unserviceability of Jay Dee's radar which, if operational, switched on and observed, could have shown the approaching target.
5. The decision to operate the vessel alone, which was unsafe and meant that a proper lookout was not possible.

The following factors contributed to the length of time that Jay Dee's Skipper was adrift on the Carley float and/or increased the risk to his life:

1. The lookout/officer of the watch not seeing/responding to the flare fired by Jay Dee's Skipper.
2. The inaccessibility of the lifejackets carried on board Jay Dee.
3. The inaccessibility of the EPIRB carried at the after end of Jay Dee's wheelhouse.
4. The inappropriate nature of the Carley float as an offshore survival aid, resulting in prolonged time in the water, with no means of attracting attention, and the absence of food, water and shelter.

Submissions

The provision of sub-regulation 16(3) of the Navigation (Marine Casualty) Regulations require, if a report, or part of a report, relates to a person's affairs to a material extent, the Inspector must, if it is reasonable to do so, give that person a copy of the report, or relevant part of the report. Sub-regulation 16 (4) provides that such a person may provide written comments or information relating to the report.

The final draft of the report, or parts thereof, was sent to the Owner/Skipper of Jay Dee. However, no submission was received from him.

Details of Vessel

Name	Jay Dee
Former name	Grandeur
Flag	Australian
Ship type	Class "3B" trawler
Year of Build	1964
Place of Build	Deagon, Queensland
Length overall	12.03 m
Breadth extreme	3.81 m
Depth	1.2 m
Engine	Gardner Diesel
Engine Power	65 kW
Crew	1 Australian