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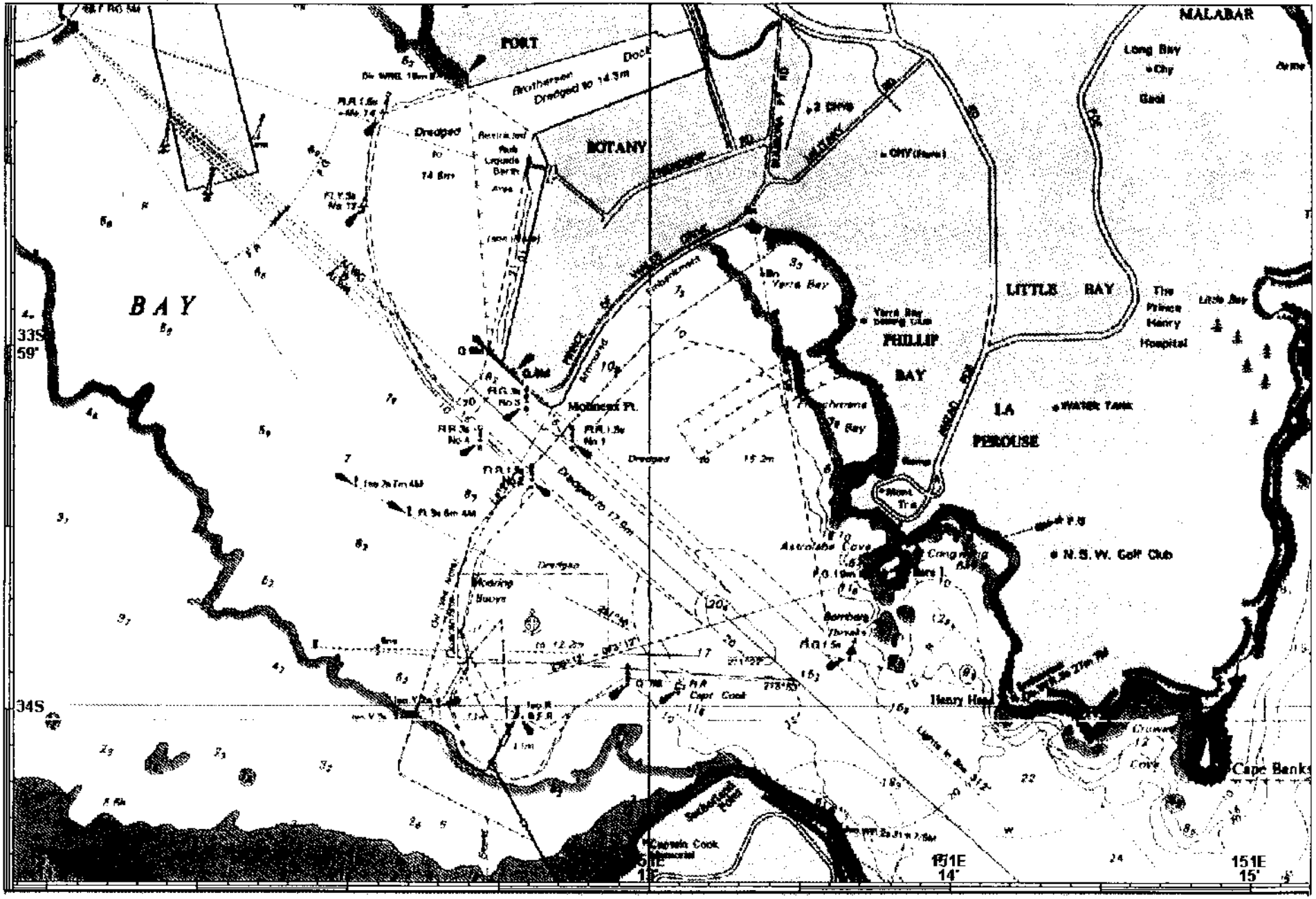

Portion of chart Aus 198
showing Port Botany

Summary

At 0840 on 29 September 1994, the Russian container vessel Kapitan Serykh sailed from Brotherson Dock, Botany Bay under the direction of a pilot of the Sydney Ports Pilot Service and with the assistance of two tugs. The wind was from the north-west at 20-30 knots.

The vessel cleared the dock stern first and was then turned to starboard to make the approach to the dredged departure channel. The two tugs were released as soon as the vessel had been turned in the swinging basin.

Kapitan Serykh failed to provide sufficient propeller thrust and to gain sufficient speed to fully execute the eighty degrees turn into the departure channel, despite the Pilot's repeated call for full ahead and grounded on the south side of the channel at 0900.

The vessel was refloated, with the assistance of tugs, after about half an hour and returned to Brotherson Dock, where divers ascertained there had been no structural damage to the vessel.

Information sources

Master, Mate, Chief Engineer, Helmsman and Pilot of Kapitan Serykh.

Brisbane Pilot Service.

NSW Maritime Services Board's Sydney Ports Authority.

Port Phillip Sea Pilots.

Sydney Ports Pilot Service Pty Ltd.

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Portion of hydrographic survey chart reproduced by permission of NSW Maritime Services Board.

The incident

The 14,066 grt, 1317 teu*, Russian container vessel Kapitan Serykh is engaged on a regular run between Japanese ports, Hong Kong, Manila and the Australian ports of Melbourne, Port Botany and Brisbane. The vessel has an overall length of 161.53m, a breadth of 25.21m and a summer load draught of 9.802m. It is powered by an eight cylinder, 8000kW Krupp Mak engine driving a single variable pitch propeller, controlled from the bridge, providing a service speed of 17.75 knots.

The vessel arrived at Port Botany, on its scheduled routine visit, on 27 September 1994. The wind at the time of the vessel's arrival was from the south-west at 30-40 knots. While inbound to the berth at Brotherson Dock, the pilot experienced difficulty in turning the vessel to starboard, the vessel failing to respond to maximum starboard rudder and full ahead after passing no.6 beacon. The pilot had to order full astern, to stop the vessel, and then he manoeuvred the vessel around towards Brotherson Dock using the tugs. The fact that the vessel was difficult to handle was attributed by the pilot to the effect of the strong wind acting on the vessel's superstructure and container stack.

The vessel berthed at berth no.5, starboard side alongside (head in) and discharge of containers commenced shortly after arrival. Discharge and back loading continued throughout 28 September, with scheduled departure time 0800 on 29 September.

Apart from a short visit to the agent's office on 28 September, the Master remained on board. On 29 September he awoke at 0630, in anticipation of the agent arriving on board, to complete departure formalities, at 0700. He was well rested, having slept well on both the nights the vessel was in port.

The Mate, who had commenced duty as watch officer at 0400, went to the bridge at 0700 in order to test controls and equipment preparatory to sailing. Included in the testing of controls was a test of the steering gear, for which the electrician went to the steering flat to check that the rudder moved correctly according to the settings on the bridge.

A pilot of the Sydney Ports Pilot Service boarded at about 0730, having commenced duty at 0600 and having just piloted another vessel into Botany Bay. The Mate advised the Pilot that loading was not yet completed, that there were still some containers to be loaded and the Pilot said that he would wait on the bridge. At 0735, the Pilot contacted the pilot launch on VHF and advised the pilot proceeding to the inbound container vessel Australian Advance of the delay, and also advised Harbour Control. During the wait, the Pilot advised the Mate that three vessels were waiting to enter, but that would not pose a problem.

The Mate handed the Pilot the "pilot card", containing the vessel's details but, as loading had not been

*Twenty-foot equivalent unit.

completed, the draught had not been included. He also advised the Pilot that the bow thruster was inoperative. As soon as loading was completed, at 0810, the Mate advised the Pilot that the draught was 9.3m forward and 9.75m aft, and completed the pilot card.

The crew was called to stations at 0826, the Master arriving on the bridge shortly afterwards when, rather than discussing the departure plan with the Pilot, he started to discuss the latest information regarding the Baltic ferry Estonia foundering. On the bridge for departure were the Master, the Mate, a helmsman and the Pilot. The Master operated the variable pitch propeller control from the bridgewing stations, while the Mate relayed messages to the helmsman from the wheelhouse doorways. The tugs, one forward and one aft, were made fast at 0835 and the vessel cast off from the berth at 0840. The tugs pulled the vessel from the berth, to clear other vessels moored ahead and astern, and then the vessel was moved, stern first, the 650m to the turning basin. The wind was from the north-west at 20-30 knots, causing broken water in the turning basin.

Accounts on what followed differed between those of the Master and Mate and that of the Pilot.

Master's and Mate's account

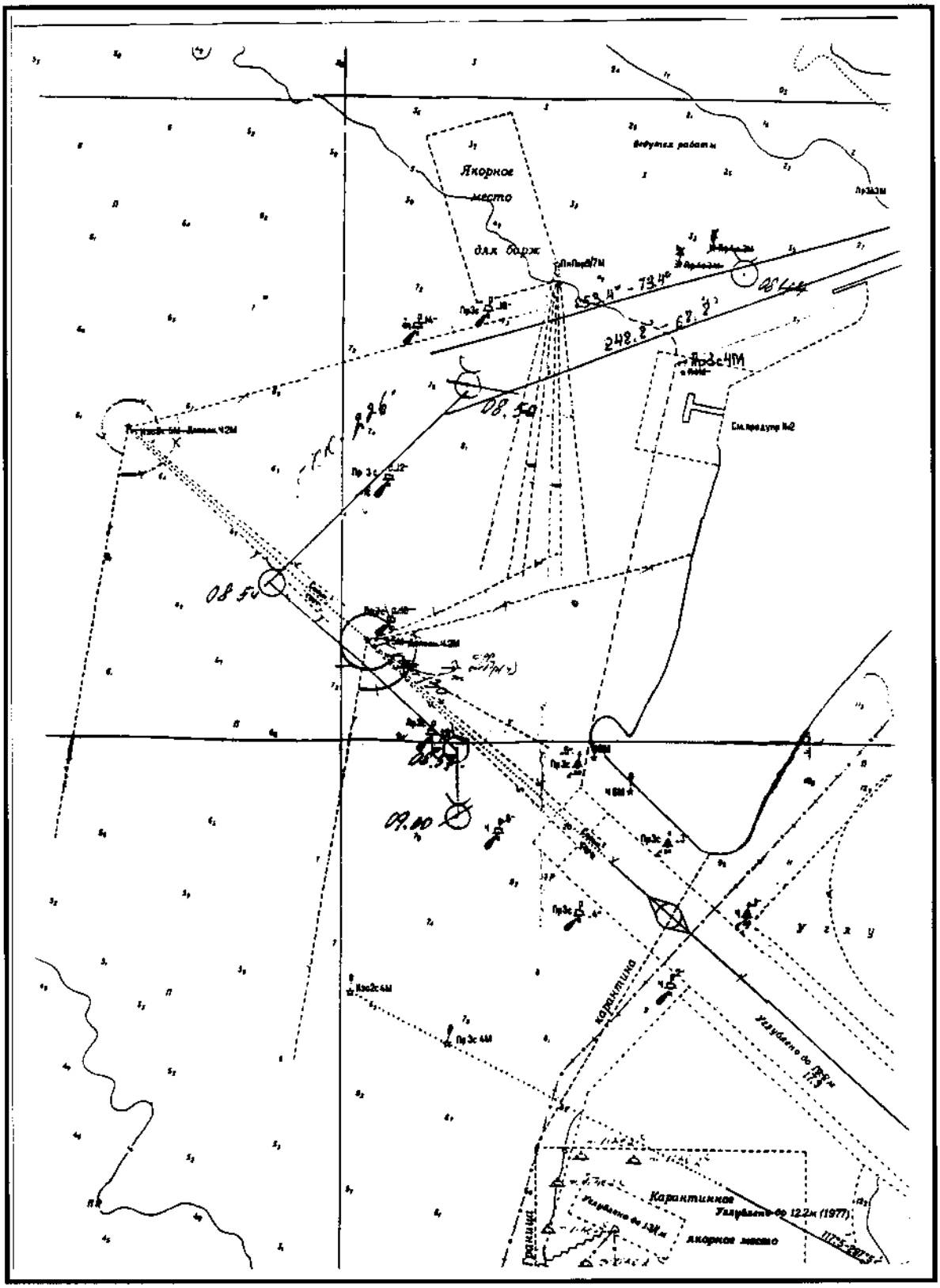
According to the Master and Mate, the tugs turned the vessel around to starboard, close to no.16 buoy, to a heading of 226° at 0850, after which the tugs were let go. The vessel then proceeded at dead slow ahead and slow ahead to pass to the north of no.12 buoy, then made a slow turn to port under hard to port wheel and, at 0854, had come to a heading of 130°, on the leads in a position 3.6 cables (667m) north-west of no.8 buoy.
While making the turn to 130°, the inbound container vessel Australia Advance was seen entering through the Heads, which was the first the Master said he knew of any vessel entering. The two pilots made VHF contact and agreed to a port to port passing.

Immediately after passing no.8 buoy close to starboard, the Pilot ordered "hard to starboard" at 0857. Both the Master and the Mate queried this action, stating there was insufficient water, that the vessel was at deep draught. However, the Pilot assured them that there was sufficient water for them to pass outside the beacons (marking the south side of the the section of dredged channel locally known as the "cut") and so allow the inbound vessel to pass. This advice was accepted.

The Pilot then ordered "hard to port", but the vessel did not respond and the vessel was found to be stopped in the water. The Master advised the Pilot that the vessel was aground and stopped the engine.

Pilot's account

According to the Pilot, as the vessel was moving stern first from Brotherson Dock, the vessel's bow started falling off to starboard, which he attributed to the effect of the wind on the port side, the effect of the transverse thrust of the propeller and the stern seeking the wind. As soon as the vessel cleared the knuckle of the dock, he ordered the



Portion of Russian chart No.59356 in use aboard Kapitan Serykh

on 29 September 1994

forward tug to push on the port bow, to start the swing around to starboard. As the stern of the vessel swung up towards no.16 buoy with some stern way, the Pilot ordered "half ahead", then "full ahead". As the stern way came off, the stern tug pulled on the port quarter, assisting the swing, which was accomplished fairly quickly, about one vessel length (160m) from a vessel moored at the bulk liquids berth. Kapitan Serykh was then steadied by the tugs, on a heading in the direction of no.10 buoy.

Once past the bulk liquids berth, and satisfied that everything seemed in order, the Pilot dismissed the two tugs, to allow them to proceed towards the inbound Australian Advance. During the swing and while letting go the tugs, the Pilot and Master were standing on the port bridgewing. As the tugs cleared, the Pilot looked over the side, noted there was little wake astern and asked for "full ahead", but the Master assured him the engine was on full ahead. Shortly after this, the Pilot noted that the vessel had a tendency to fall off to starboard and that the helmsman was continually applying and removing port helm to counteract this. He therefore ordered "port 10", which only steadied the vessel slightly, so he ordered "hard to port", after which the vessel steadied and then started to swing slowly to port.

The Pilot, aware that the vessel was not picking up speed, again asked for "full ahead" and was again assured by the Master that the engine was on full ahead. At this point, the vessel was still north of the line of the embankment. Moving to check the position of the pitch control, the Pilot noted that it was set at 5.5, or "half ahead" according to the notice next to the control and the details on the pilot card. The Master advised him that the vessel had only a small rudder ($24m^2$) and on slow speeds the vessel turned very slowly. The Pilot then told the Master that if they did not have "full ahead", the vessel would not make the turn into the dredged channel.

The vessel was approaching the east side of the lead lights for the channel at an estimated speed of a little under four knots, and the Pilot realised the vessel would not make the turn and would probably hit no.6 beacon with the vessel's port side. He advised the Master accordingly. He had to decide whether to maintain his present action and collide with the beacon, also possibly with beacons 4 and 2, with the possibility of rupturing the hull below the water line, or to steady the vessel and run aground on the sand bank ahead. He decided the latter option was likely to cause the least damage and, with the vessel on a heading of about 170°, ordered "midships, starboard 10" to stop the swing and avoid collision with no.6 beacon, and "dead slow ahead".

Because of the vessel's evident lack of power, he decided that to put the engine astern would have little effect, other than to cause loss of steerage. Although the crew was still at stations forward, he decided against using the anchors, because of the possibility of the vessel then sitting on them and rupturing the hull plating in way of the double bottoms.

The application of starboard 10 rudder, aided by the effect of the wind, stopped the port swing and the vessel grounded at approximately 0900 in a

position 30m west of no.6 beacon, on a heading of about 180°. He stopped the engine and only then did the Master question his actions, asking what was the depth of water. He called Harbour Control on VHF13, to advise them of the grounding, but received no reply. He then advised the pilot aboard Australian Advance, after which he contacted Harbour Control on VHF8, the tugs' working channel, and requested tug assistance. The draught forward was read as being 8.95m.

Low water had been at 0831, therefore the tide was now on the flood, with a predicted rise of 0.7m to a high water of 1.37m above datum at 1506.

Initial attempts to refloat the vessel using two tugs were unsuccessful, the vessel eventually being refloated at 0936 with the assistance of three tugs. The Pilot then took the vessel back to the berth in Brotherson Dock, the pilot from Australian Advance having boarded to offer assistance should this have been necessary. During the movement back to the berth, the Pilot found the engine had little effect on manoeuvrability or speed, going full astern to take way off from a speed of two or three knots made little difference. The move back to the berth was conducted mainly with tug assistance.

An inspection by divers of the forward, underwater part of the hull plating indicated that the vessel had not suffered any structural damage, other than scratching of paintwork, and the vessel was permitted to sail for Brisbane at 1900 on 29 September 1994.

Comment

The two accounts of what occurred are completely different. Both the Master and Mate maintained the Pilot had brought the vessel on to the leads of the departure channel and then, because of the inbound Australian Advance, had made the conscious decision to go hard to starboard, to take the vessel outside the beacons marking the channel. They supported their accounts with positions on their navigation chart, stated to have been plotted at the actual times indicated, not after the event.

When testing the controls and equipment in preparation for sailing, the Mate had not switched on the variable pitch propeller recorder and the vessel is not equipped with a course recorder, therefore there was no record on board to verify either the Master's or the Pilot's statements.

As part of the investigation, the investigating officer was provided access to the Maritime Services Board tape recording of radio transmissions for the morning of 29 September 1994. However, transmissions from vessels in Botany Bay were not picked up by the recording equipment and therefore the investigation was unable to substantiate either content or times of messages.

Port procedures

The practice of the Port, and one which is commonly followed, is for one vessel to enter Botany Bay as another is leaving one of the berths. The departing vessel has priority in the "cut", the narrow dredged section of channel boarded on the north side by the embankment adjacent to Molineux Point. Should it be necessary, the inbound vessel, once past the Bumbora buoy, will move to starboard of the channel, to wait in the bay off La Perouse and Yarra Points, until the departing vessel has cleared the "cut".

There are no instructions or guide-lines to pilots, either by the Port Authority or the Pilot Service, on when the tugs should be released after clearing Brotherson Dock, the decision is left entirely to each individual pilot. The pilot uses his own knowledge and experience to judge the situation.

The area outside the buoyed turning area to the west and south of no.14 buoy has been dredged to a greater depth, to provide infill for the Kingsford Smith airport new runway, but it is not the practice of the pilots of the Sydney Ports Pilot Service to take vessels outside the buoyed turning area.

Advice from the Maritime Services Board's Sydney Ports Authority is that vessels departing from Brotherson Dock stern first should preferably be

turned in the area delineated by the two sets of Brotherson Dock leads and Nos. 14 and 16 buoys. A vessel turned in that area is turned to a heading of between 170° and 180°, providing a better approach to the departure channel and a turn of only 38 to 48 degrees on to the leads.

Australian Advance

Having been advised of the delay in the departure of Kapitan Serykh, the Pilot who boarded Australian Advance steamed that vessel in a slow circle to the east of Cape Banks until advised that Kapitan Serykh was letting go.

The Master and Pilot on board Australian Advance could see Kapitan Serykh moving in a south-south-westerly direction towards the departure channel as their vessel entered Botany Bay on the line of the leading marks (312°). On passing Bumbora buoy, the Pilot brought Australian Advance to a heading between 315° and 320°, reduced to dead slow ahead and used the bow thruster to maintain position.

Watching Kapitan Serykh approaching the inner end of the "cut" and noting the slow speed and slow rate of turn, the Pilot remarked to the Master that he did not think Kapitan Serykh would make the turn.

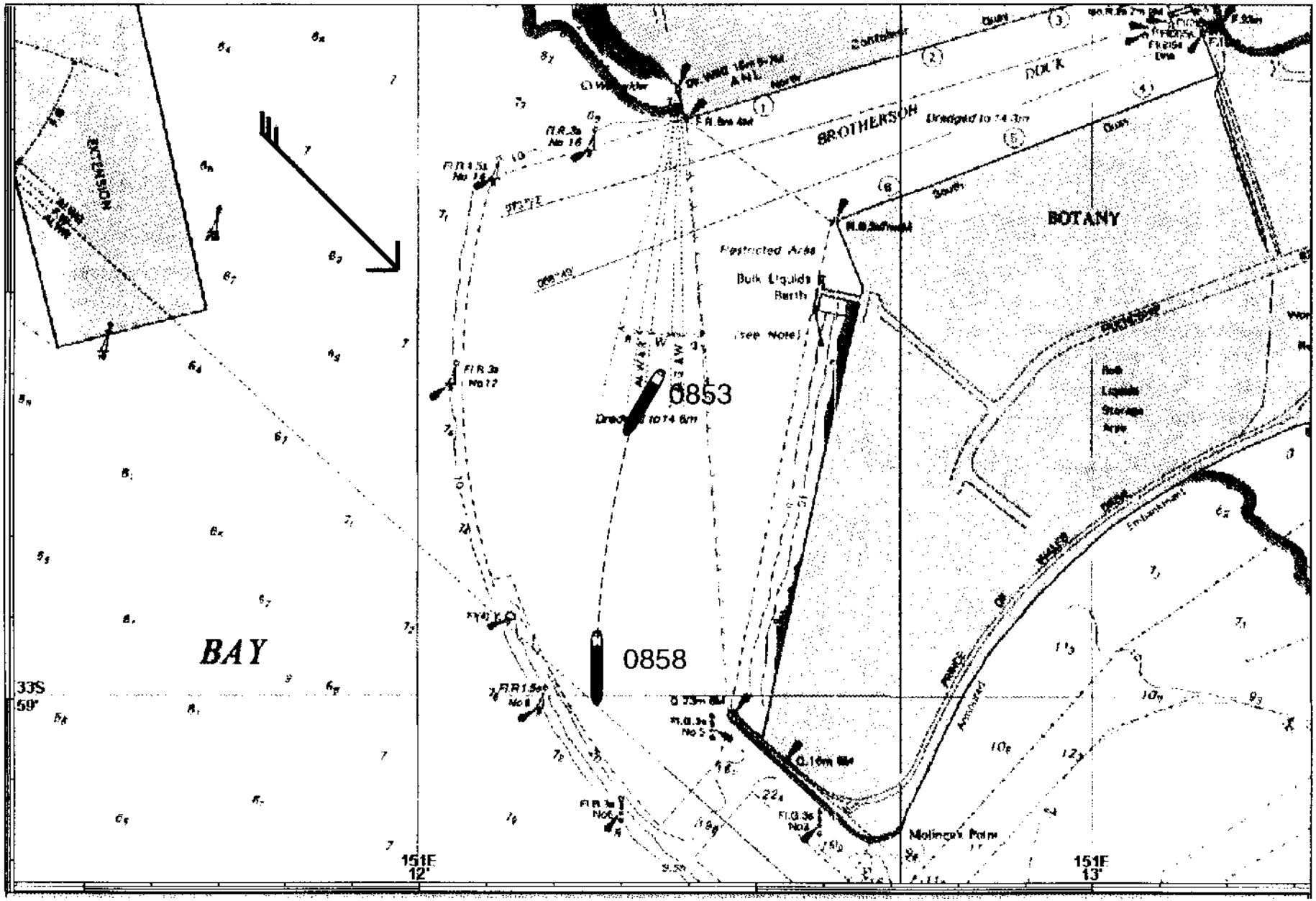
According to both the Master and Pilot of Australian Advance, Kapitan Serykh maintained a broad aspect, never attaining a heading anywhere near the line of the leads (132°).

Analysis of events

The positions plotted on the vessel's navigation chart indicated the vessel had been steadied on 130° for some three minutes. Although both the Master and Mate of Kapitan Serykh were adamant the positions had been plotted at the times written on the chart, the positions also indicated the vessel had proceeded outside the turning area. It is worthy of note no positions were plotted on the chart when the vessel departed from the berth that evening, after being found to be seaworthy. Also, the chart in use on board was not the latest edition available, did not show the berths on the north side of Brotherson Dock and did not show the newly dredged area westward of the turning basin.

According to the accounts provided by the Master and Mate on 1 October 1994, the vessel executed a slow turn to port and was steadied on 130° at 0854. However, in a written statement signed by the Master on 29 September 1994, after the vessel had returned to the berth, he declared "At about 0853 the pilot ordered tugs lines to be let go. At 0854 the pilot ordered helm hard to port course 130° and both tugs were let go". This written statement is more in keeping with the account as described by the Pilot.

The only independent evidence on what course Kapitan Serykh took after releasing the tugs is that provided by the Master and Pilot of Australian Advance. Their evidence is supportive of the account provided by the Pilot of Kapitan Serykh.



Portion of chart Aus 199
showing probable track of Kapitan Serykh

The Inspector is satisfied that the Pilot's account of the incident is the more accurate one and that Kapitan Serykh failed to make the turn required to bring it on to the line of the leads of the departure channel.

As the vessel made the turn towards the "cut", the Pilot estimated the vessel's speed as being a little under four knots (123m/min), while the Master and Mate stated the GPS indicated a speed of three knots (93m/min). The tugs lines were cast off at 0853 and the vessel grounded at approximately 0900, seven minutes later. Therefore, at 0853 the vessel had to be within 900m of the grounding position.

The decision to abort the turn, as the vessel entered the east section of the leads, would have been made at about 0858. At this point, the bow would have been only about 260m, or a little over one and a half vessel lengths from no.6 beacon.

Kapitan Serykh manoeuvring characteristics

According to the information contained on the pilot card and on the plate attached to the propeller pitch controls in the wheelhouse and on the bridgewings, the speed details for the vessel are:

Engine order	Pitch(setting)	Speed(loaded)
Full Ahead	7	17 knots
Half Ahead	5.5	12 "
Slow Ahead	4	7.5 "
Dead Slow Ahead	2	4 "

Astern power = 75% Ahead

Engaged on a regular liner trade, Kapitan Serykh calls at the three Australian ports every six and a half weeks. The call at Port Botany in September was the fifth the Master had made since joining the vessel in Japan in February 1994.

Prior to September 1994, there had been no adverse reports by pilots on the handling of the vessel. In fact, in the past, the vessel had been considered to have handled within normal expectations.

The pilot who conducted Kapitan Serykh inwards to Port Botany on 27 September 1994 experienced considerable difficulty in getting the vessel to turn to starboard after clearing the "cut" and had to rely largely on the tugs to line the vessel up for entering Brotherson Dock. Although he considered something to be wrong, he attributed the poor handling to the strong south-westerly wind and made no report of the matter at the time.

Because of the grounding incident in the morning, the pilot who conducted the vessel outwards at 1900 on 29 September retained the tugs until passing Molineux Point, although there was little or no wind. He considered the steering to be sluggish. Although full ahead was requested after passing Molineux Point, speed

attained by the time the vessel reached the open sea was only about 9 knots, the pilot being able to disembark without reducing the vessel's speed. The pilot noted the variable pitch propeller setting was on 5 for the requested full ahead. In that particular pilot's opinion, the variations in the settings experienced during the departure were extreme and liable to seriously affect the safe manoeuvring of the vessel in any but ideal conditions.

On 1 October 1994, the inwards pilot at Brisbane submitted a pilot's "Defective Ship Report" in which he remarked that Kapitan Serykh had very poor handling qualities, a most unusual characteristic with the vessel, there being no wind or tide of significance. He also noted that the harbour speeds were significantly slower than indicated for pitch and RPM settings.

Similarly, during the vessel's call at Melbourne, prior to the call at Port Botany, the inwards pilot found the handling to be "sluggish", while the outward pilot was of the opinion that he was not getting the power requested.

The Pilot on board on the morning of 29 September repeatedly called for full ahead, being aware that he was not getting the propeller thrust/speed needed to execute the turn. Although assured by the Master that the vessel was at full ahead, the Pilot noted that the variable pitch propeller setting was on 5.5, or half ahead.

While Kapitan Serykh was being manoeuvred in Botany Bay on the morning of 29 September 1994, the Master did not provide the manoeuvring full ahead pitch, as indicated on the pilot card, requested by the Pilot. As a result of this, the vessel did not gain sufficient propeller thrust/speed to execute the turn on to the leads of the departure channel.

Neither the Master nor the Mate advised the Pilot, nor was anything included on the pilot card, to the effect that there were mechanical problems which meant the Pilot would not be provided with the manoeuvring propeller pitch settings indicated on the pilot card. According to the Chief Engineer, there were no problems or faults with the vessel's propulsion machinery. Therefore, there appears to have been no readily apparent reason, other than unexplained over-caution on the part of the Master, why the Pilot was not provided with full ahead, requested on three occasions.

Planning and exchange of information

Although the Pilot had talked to the Mate on the bridge and had advised him of the three vessels waiting to enter Port Botany, the Master did not go to the bridge until after stations were called. The Master did not discuss the departure operation with the Pilot, or the handling characteristics of the vessel, instead he discussed the Estonia disaster of the night before.

The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), Chapter II, Regulation 10 states in part:

> "... The master and the pilot shall exchange information regarding navigation procedures, local conditions and the ship's characteristics..."

The International Chamber of Shipping's (ICS) "Bridge Procedures Guide" states in paragraph 2.2.2:

> "After his arrival on board, the pilot, in addition to being advised by the master of the manoeuvring characteristics and basic details of the vessel for its present condition of loading, should indicate the passage plan he intends to follow. The general aim of the mastershould be to ensure the plan is safe and the expertise of the pilot is fully supported by the ship's bridge personnel"

and in paragraph 3.10.2, in part:

> "... The master should request information from the pilot regarding local conditions and his navigational intentions. This information should be in a form to enable the master or officer of the watch to monitor the planned passage."

The exchange of information between the Master and the Pilot did not conform to the requirements of the STCW Convention or to the ICS guidelines. There was no discussion of the plan for turning the vessel, or where the tugs would be released, or of the need for speed/full thrust to make the turn into the dredged channel, or of any limitations of the vessel that may require an adjustment of the Pilot's normal procedure.

It is of the utmost importance that a pilot fully discuss his pilotage plan with the master, so that the latter is fully aware of the operation and of any particular requirements. Similarly, where reasons exist that are likely to affect a vessel's speed or manoeuvrability, it is imperative that a pilot be informed of these before the pilotage commences, so that the pilot can amend his plan accordingly.

Pilot reporting systems

A number of ports, including Sydney and Port Botany, operate a reporting system where pilots remark on any incidents or problems experienced with a vessel. This has the advantage that other pilots are made aware of such problems and are forewarned.

However, no report was lodged on 27 September. Had the inwards pilot lodged a report of the difficulties he had experienced, the outwards pilot would have been warned of possible problems, particularly as the wind was still strong.

Pilot's decisions

The Pilot had considerable experience. As a master on the Australian coast, he had held pilotage exemptions for 13 ports. He had joined the Sydney Ports Pilot Service in 1987, had been cleared for unlimited tonnage in early 1990 and had conducted a total of 1800 pilotages in Port Jackson and Botany Bay.

On 29 September 1994, he made three decisions which had a bearing on the incident.

In the first instance, following his normal practice, after excuting the swing with the tugs and being satisfied the propulsion and steering systems were in order, he dismissed the tugs.

Unaware of the experience of the inwards pilot, he had no reason to believe that he would not be provided with the requested "engine movements", and therefore the necessary power/speed, or that Kapitan Serykh would not handle effectively.

However, proceeding towards no.10 buoy, the 20-30 knots north-westerly wind would have been on the starboard quarter, which could be anticipated to affect a vessel's turning characteristics. It would appear to be appropriate, under strong wind conditions, for a pilot aboard a high windage area vessel to retain the tug(s) until the turn on to the Port Botany leads has been seen to be progressing satisfactorily and for the Port and Pilotage authorities to have a written policy on the subject.

With the vessel obviously not going to make the turn and likely not only to run aground but also to collide with no.6 beacon, by this stage still on the port bow and only some 420m distant from the bridge, the Pilot had to make a quick decision. Collision with the beacon not only would have most probably destroyed the beacon, but the beacon structure could have penetrated the vessel's hull plating below the water line. The Pilot ordered starboard rudder to prevent such a collision and this action is considered to have been appropriate to the situation.

The Pilot made two further quick decisions, not to go astern and not to use the anchors, both of which were judgements that he had to make at the time. The basis of the judgements would appear to have had validity, considering the situation which faced him.

The decision not to go astern was based on the evident poor power available and the likelihood of losing steerage control.

His decision not to use an anchor was based on the possibility that, on grounding, the vessel could sit on the anchor, which could have penetrated the hull. He also felt that use of the port anchor would veer the vessel to port, with the possibility of the bow colliding with the beacon, while use of the starboard anchor would veer the bow to starboard, with the possibility of the stern colliding with the beacon.

Whereas the use of a single anchor would probably have had the effect envisaged, the dredged depth in that area is 21.6m. Had both the anchors been let go while the vessel was still within the dredged area, providing there there was sufficient time and sufficient cable veered, then there would have been no likelihood of the vessel sitting on them. With both anchors down, direction should have been maintained and the engine could have been put astern.

To have been effective, the anchors would have had to have been let go immediately and simultaneously and to have been supported by good astern power. Whether there would have been sufficient time for the crew to execute the orders to let go both anchors, and whether that would have averted the grounding or contact with No.6 beacon, are both open to speculation.

Conclusions

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

It is considered that:

1. The grounding was the result of Kapitan Serykh not attaining sufficient propeller thrust/speed to execute the turn on to the leads in the wind conditions at the time.

2. The exchange of information between the Master and the Pilot did not conform to the requirements of the International Convention on Standards of Training, Certification and Watch keeping for Seafarers, or with the guidelines contained in the International Chamber of Shipping's "Bridge Procedures Guide".

3. For reasons unknown, the Master did not provide the manoeuvring full ahead pitch, as indicated on the pilot card, repeatedly requested by the Pilot.

4. The option of putting Kapitan Serykh aground on the sand shelf, as against colliding with no.6 beacon, was the one less likely to cause damage to the vessel.

5. Had the Pilot been informed of the steerage problem during port entry in the high winds on 27 September 1994, he would have been forewarned of a possible problem during departure.

6. It would appear to be appropriate, under strong wind conditions, for a pilot aboard a high windage area vessel to retain the tug(s) until the turn on to the Port Botany leads has been seen to be progressing satisfactorily and for the Port and Pilotage authorities to have a written policy on the subject.

Submissions

Under sub-regulation 16(3) of the Navigation (Marine Casualty) Regulations, 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 the person a copy of the report or the relevant part of the report. Sub-regulation 16(4) provides that any such person may provide written comments or information relating to the report.

The report, or parts of the report, were sent to the Master, Mate and Owners of Kapitan Serykh, also to the Pilot, the Sydney Ports Pilot Service and the Sydney Ports Authority.

Submissions were received from the Pilot and from the Sydney Ports Pilot Service.

Where considered appropriate the text of the report has been amended.

Both the Pilot and the Sydney Ports Pilot Service supported a written policy on tug usage (conclusion 6), while both disagreed with the suitability of the Port Botany turning area as defined by the Maritime Services Board's Sydney Ports Authority. These two subjects are matters for discussion between the Ports Authority and the Pilot Service.

On the subject of "Planning and exchange of information", both drew attention to the problems of discussion caused by language difficulties. This undoubtably can cause significant problems, which is one of the reasons why the pilot card was introduced. It is essential that masters complete these cards accurately and inform the pilot of any mechanical or instrument problems, while an explanation of the pilotage, referring to the chart, briefs the master on what is to happen.

The Sydney Ports Pilot Service also submitted:

> "... Although apparently no formal pilotage plan was discussed, it was that master's 5th visit to the port on that vessel, and he should have been aware of it, as all vessels follow a similar operational procedure, and he could have questioned the pilot if in doubt."

while the Pilot submitted:

> "... after the fifth time in Botany Bay, the Master had been as fully informed of the navigation procedure and local conditions as he was likely to encounter in that port.
>
> I also note reference to a "passage plan" in 2.2.2. of the ICS "Bridge Procedure Guide".
>
> No doubt this is highly appropriate to pilotages in the nature of Barrier Reef pilotage, North Sea, and various N.E.M.D.R.I. channels, the Baltic Sea, the inland sea of Japan etc but I think it is difficult to equate these pilotages with a 3,000 metres pilotage in and out of Port Botany.
>
> There is a limit to the amount of information to be discussed with a "professional" mariner who has

previously, on several occasions, been in a port. The vessel going to the same berth along the same route in and out of port. There is no alternative swinging basin and the speed expected is that it will be variable from time to time depending upon the manoeuvre intended."

The passage plan referred to in the ICS "Bridge Procedures Guide" applies to all pilotage situations and regardless of the number of times a master has been to a port, the pilotage plan should be discussed and confirmed, particularly where external forces may affect operations.

It is the experience of accident investigation, that in many cases, pilots and masters tend to give only cursory attention to discussing the pilotage operation. Discussion of the pilotage plan promotes confidence, the full exchange of information and a better informed assessment of the effects of the environmental conditions; also it guards against assumptions and actions being made on expectation, rather than on circumstances as they exist at the time. Most importantly, such an exchange of information promotes a greater level of awarenesss and alertness, which leads to quicker reaction should things not go according to plan or should an emergency situation arise.

Subsequent voyage

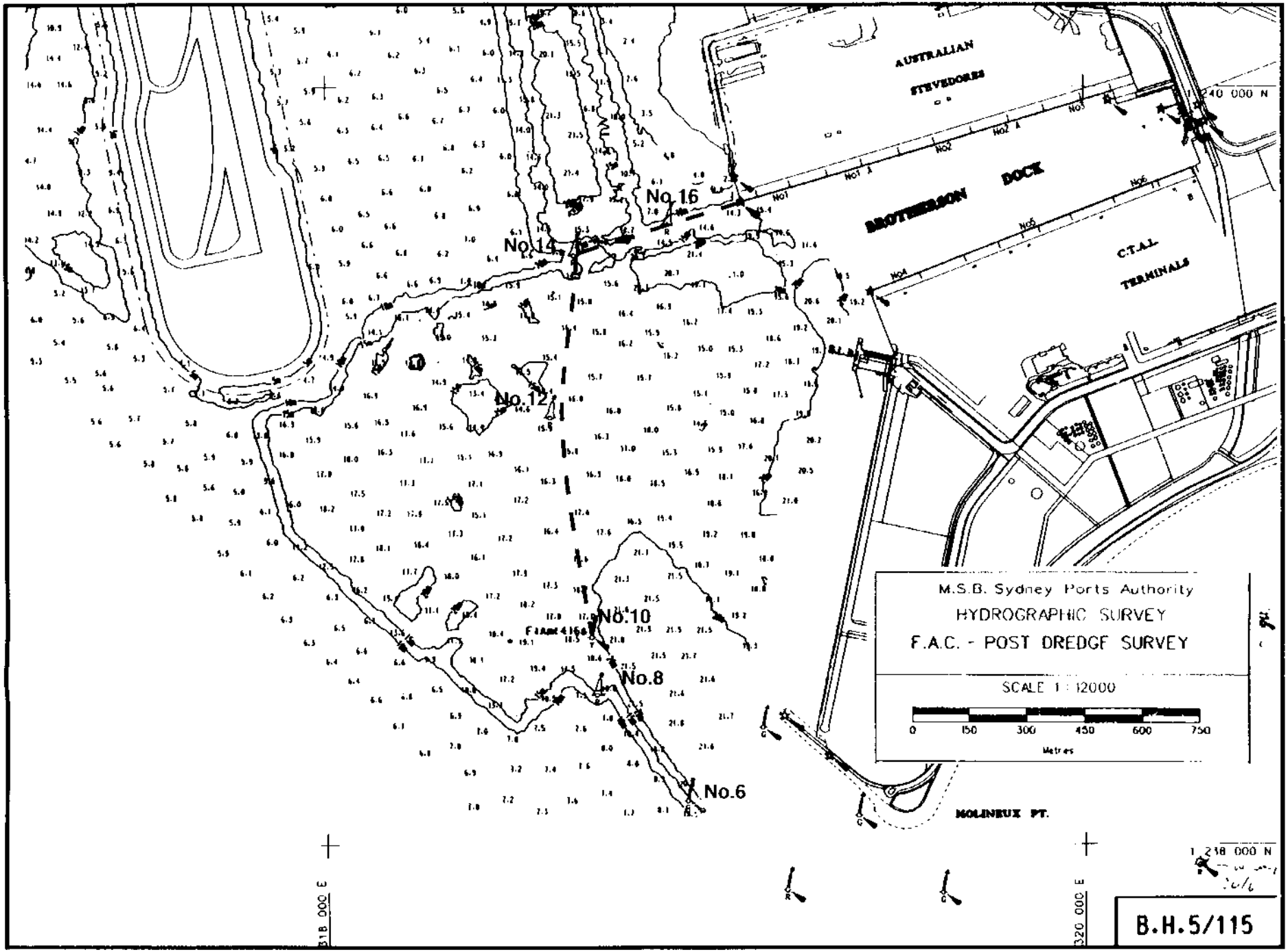
When Kapitan Serykh departed from Botany Bay on the subsequent voyage (25 November 1995), the pilot lodged a "Defect Ship Report" in which he stated that the vessel had no steering capability under six knots and at full speed required 20 degrees of helm to commence the swing for even small alterations of course.

No problems were reported by the pilots at either Melbourne or Brisbane, or by the inwards pilot at Botany Bay.

The "Defect Ship Report" of 25 November 1995 was passed to the Sydney Office of the Australian Maritime Safety Authority (AMSA), which in turn passed it to the Brisbane Office. The report provided by AMSA Brisbane and based on a report by the Brisbane Pilot Service, indicated that all items of equipment were working on that occasion.

Details of vessel

Name	Kapitan Serykh
IMO Number	8504961
Flag	Russian
Port of Registry	Vladivostok
Classification Society	Russian Register
Type of vessel	Container
Owner	Far-Eastern Shipping Co.
Crew	23 Russian
Year of build	1986
Place of building	Travemunde, Germany
GRT	14066
NRT	8676
Length overall	161.53m
Breadth	25.21m
Engine	Krupp Mak. 4SA 8cyl
Engine power	8000kW, providing a service speed of 17.75 knots



Portion of MSB Survey Chart
(Buoy numbers and turning area limit added)

Attachment 1