Investigation into grounding of SOUTHERN BAY ROSE

on 25th June 2013



1.0 Summary

The small passenger vessel **Southern Bay Rose** departed from St Helier at 1400 with 41 passengers and two crew. After transiting the Small Roads and Breakwater End passage, it travelled across to the west Side of St Aubin's Bay, before turning on a SW heading in the vicinity of Grosse and Platte Rock beacons. It then proceeded along the outer edge of Belcroute Bay and grounded on a rock at 1442, on a falling tide. The vessel was later refloated, with minimal damage, at 1618, and proceeded under its own power back to St Helier, where its passengers were safely disembarked.

2.0 Background

Southern Bay Rose is a catamaran Class VI passenger vessel operated by Coastal Cruises Limited. It first appeared on the Jersey register in 2000 to replace the vessel **Pride of the Bay** previously operated by the same company. It has been inspected annually by UK's Maritime and Coastguard Agency (MCA) on behalf of the Jersey Register, although in 2013, this inspection was carried out by MECAL a UK Certifying Authority recognised by the MCA. The vessel was issued with its current Passenger Certificate by the Registrar of Shipping on 27th March 2013. The Harbour Master issued a Permit under Regulation 6 of the Harbours (Inshore Safety) Regulations 2012, on 25th April 2012.

2.1 The Vessel

Southern Bay Rose was built in 1985 in St Sampson Guernsey by Marine & General for Condor Hydrofoils and originally named **Condor Kestrel**. It was purchased from a Mr J A Thompson of Torquay in late 1999, where it had been operated as **Seaways Express** from 1990 onwards. It is a steel welded hulled catamaran with an enclosed aluminium and perspex housing of 14.6m LOA and 6.3m beam. It draws 1.5m fully laden. The vessel is powered by two 300hp DAF DKS 1160M turbocharged diesels and has a top speed of 12 knots. For cruising purposes the vessel usually operates at 8 knots. It is licenced to carry 100 passengers.

In 2003 the MCA surveyor concerned recommended the vessel operate using the principles of the Small Ships ISM code. Captain Peter Moore (of Jersey Harbours) assisted the skipper in producing an acceptable document for the MCA. Copies of this document are held in the vessel's file.





Figure 1 shows the general wheelhouse arrangement with the controls and instruments in a compact arrangement. Figure 2 shows the Garmin Fishfinder 400C echo sounder, which is kept running throughout the passage. Figure 3 shows the Garmin C3005C colour chart plotter, using "C-Map" display. The set is approximately four years old and the charts stored have not been corrected since purchase. Figure 4 illustrates the general view provided of the bow area from the conning position. Even when the seats are occupied the view forward is very good and small floating objects or obstructions can be easily spotted in sufficient time to react.

2.2 The Skipper

The owner and skipper of the vessel was first issued with a Jersey Boatmaster's Licence in 1975 by the then Deputy Harbour Master. There is no record of the skipper holding any formal RYA or other yachtmaster qualifications. He has historically been given "grandfather" rights to continue acting as a charter vessel skipper because of his years of experience.

Certification on file consists of a First Aid at Work issued by St John's Ambulance on 4 February 2013, with expiry date 4 February 2016. The skipper also possesses a Basic Sea Survival certificate issued on 22nd January 1992, issued by the Jersey Council for Safety & Health at Work together with the Short range VHF Radio certificate and a Fire Awareness Training certificate issued by the States of Jersey Fire & Rescue Service. He does not possess any medical fitness certificate.

3.0 The Incident

Southern Bay Rose (SBR) departed from No 5 linkspan at 1400 on 25th June 2013 with 41 passengers and two crew. Height of tide was 1.9m on the tide gauge on a falling tide. Sea conditions were flat calm, with wind at 9-12 knots from NNW and a cloudless sky with very good visibility. The vessel motored through the pier heads and proceeded down the Small Roads and passed between Elizabeth Castle Breakwater End and La Platte Beacon, before shaping up to cross St Aubin's Bay towards St Aubin's Fort.

The intended route to be used would take the vessel along the west side of St Aubin, through Belcroute Bay, south towards Noirmont Point inside the Pignonet Beacon. After passing south of Noirmont It would cross close to Portelet Bay, into St Brelade's Bay, visiting Ouaisne Bay and Beauport before exiting west inside Kaines Reef towards Corbiere Lighthouse. The return journey is made outside of all, via the NW and Western Passages.

In the vicinity of Platte East Cardinal Beacon course was altered to pass east of the beacon but west of the drying rocks known as "The Slates" to skirt along the edge of the 0m contour line. A few minutes later the vessel grounded gently when the port hull made contact with a rock.

The skipper advised, at initial interview, that when the rocks at the base of Grosse and Platte Beacons are uncovered he would not attempt to pass between these and St Aubin's Fort.

SBR called Jersey Coastguard at 1442 to advise that the vessel had grounded but was in no immediate danger. As a precaution St Helier all-weather lifeboat (ALB) was launched at 1515. The Jersey Harbours vessel *Halcyon* also attended the scene and was able to make a close inspection of the hull for outward signs of damage. There was no damage visible.

As the passengers were not in any danger and the vessel grounded at a shallow angle of incline, the decision was made to keep them on board. The ALB was stood down at 1528. *SBR* floated free at 1618. The vessel was able to resume passage under its own power, and made a brief detour via the Pignonet Beacon towards Noirmont Point, before returning to St Helier linkspan No.5 where the passengers were disembarked.

TIME	HOT	TIME	HOT
1400	1.9m	1540	1.1m
1410	1.7m	1550	1.2m
1420	1.6m	1600	1.3m
1430	1.4m	1610	1.4m
1440	1.3m	1620	1.7m
1450	1.1m	1630	1.9m
1500	1.1m	1640	2.2m
1510	1.0m	1650	2.5m
1520 LW	1.0m	1700	2.9m
1530	1.0m	1710	3.3m

Low water was at 1518 BST and observed to be 0.8m on the St Helier tide gauge. This revealed that the high pressure being experienced had cut the tide by 20cm

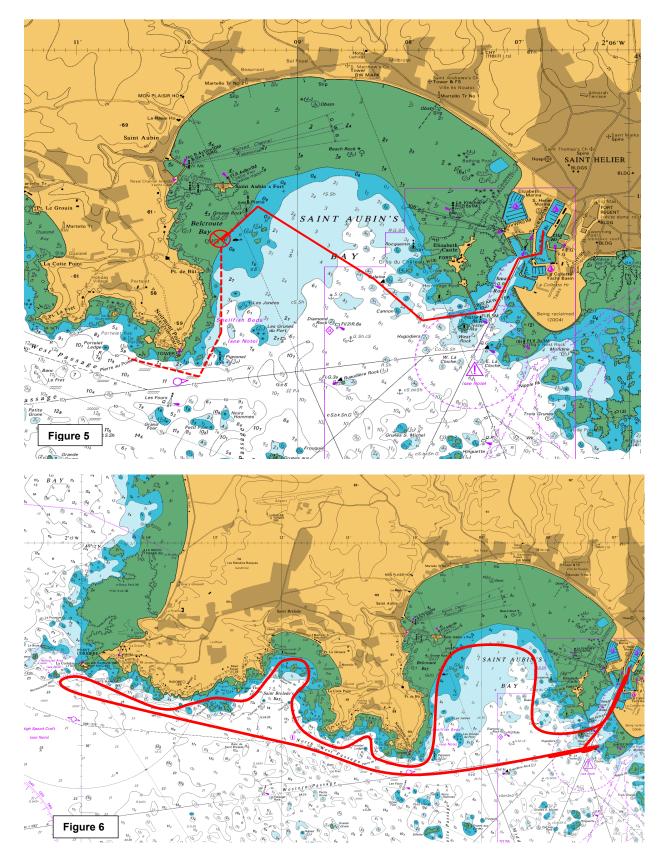


Figure 5 shows the actual track of the vessel on 25^{th} June with the approximate grounding position being shown by the red "X". Figure 6 shows the intended track followed by the vessel on an average day time excursion. The vessel passes close inshore on the outward

leg of the voyage, but on a more direct return route to St Helier. The actual grounding position was 49° 10.723'N 002° 09.648'W

In Figure 5 it can be seen that the vessel passed close east of the Platte and Grosse Beacons before turning South West to cross the outer edge of Belcroute Bay. The vessel passed inside (west of) "The Slates" and was operating in very shallow water with an expected under keel clearance of not less than 0.9m

The vessel specification provided to the Harbour's Department in 2002, by Coastal Cruises Limited, was 4.3 feet (1.3m). At initial interview, the skipper advised that his draft was "just under" 5 foot (1.5m). He had expected to operate in not less than 3 feet (0.9m) under keel clearance. Therefore the minimum safe depth for that day's operation should have been 2.4m.

5.0 Identical voyage.

5.1 On the advice of the Harbour Master, the investigating officer, who is a qualified local pilot travelled on the vessel the following day, 26th June 2013. It should be noted that this officer is also the author of the general Pilot Syllabus used for training General Pilots and PEC holders, as well as the Small Boat Passages, used for training marine section personnel, who are often required to work close inshore.

5.2 The vessel departed at 1400 with 47 passengers on board plus three crew, which included the investigating officer. The route followed upon departure from St Helier, passed via the breakwater end, across St Aubin's bay in a NW'ly direction. Baleine Buoy was left to starboard. The vessel headed directly towards Gross Rock beacon and slowed when about 10m off this rock, where course was altered SSW to cross Belcroute Bay. The drying rocks known as "The Slates" were already showing which indicated that the tide was now below 2.4m. The skipper pointed out the extent of the reef to the east and the rocks could be seen clearly beneath the surface. He explained that he grounded on a fourth head on the east side of this reef that he didn't know was there. He was aware of three other heads. Examination of the chart BA 1137 provides very little detail in this area. The Garmin chart plotter provided little detail also.

5.3 The vessel continued on passage using only the port engine (the starboard was running but out of gear) at a speed of 3-4 knots. The vessel passed between the Outer Pignonet Rocks and Noirmont Point using a recognised safe passage. After passing south of Pierre au Poisson rocks the vessel entered the east side of Portelet Bay, rounded Janvrin's Tomb and passed inside of the half tide rocks before exiting the bay on the west side. Recognised marks were used to keep the vessel in safe water.

5.4 The vessel made a broad circuit of St Brelade's Bay, again using the recognised marks before passing into Beauport Bay and continuing west using the recognised passage north the Kaines Reef. Progress continued west where the vessel entered La Rosière Bay passing inside some of the larger drying rocks, before approaching just south of La Corbière Lighthouse. Due to tidal conditions the vessel stood off the lighthouse and none of the inshore passages were used.

5.5. The vessel then routed back to St Helier using the NW and Western Passages and berthed back at No.5 at 1630.

6.0 Findings

6.1 The skipper does not hold any Certificate of Competency. Unless exempted, this is a requirement for operating a Class VI passenger vessel on a domestic voyage. Records show he was issued with a Jersey Boatmaster's Licence (BML) as far back as 1975. The Jersey BML was renamed Local Knowledge Endorsement (LKE) in 2012, to avoid confusion with the UK's BML which is a Certificate of Competence. His current BML was revalidated on 2nd July 2012 on the grounds of evidence of continuous sea service as skipper of *SBR* and exercising the "grandfather rights" applied previously based on experience.

6.2 There is some doubt as to whether the true draft of the **SBR** was known on the day of the grounding. This coupled with the 0.9m minimum UKC left little room for navigational error. The builder's specification shows a draft of 4.3 feet, the owner considers his draft to be nearer 5 feet. There are no draft marks on the vessel.

6.3 The Skipper knew the time and height of low water, but was probably not appraised of the fact that the tides were cutting by 20cms.

6.4 During the investigation the skipper was able to demonstrate a high degree of local knowledge, and described a passage plan that would be modified depending on the state of tide. He uses rocks of known drying heights to determine whether it is safe to use a particular inshore passage or not. Unfortunately this plan is not recorded formally anywhere and it would make sense for it to be written down so that it could be referred to when required

6.5 The Admiralty chart BA 1137 Approached to St Helier does not provide sufficient detail to navigate safely in this area at extreme low water situations.

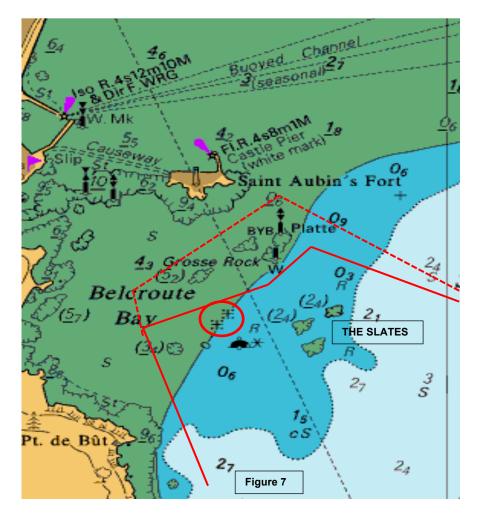


Figure 7 shows the route taken by *SBR* on 26th June. A similar track was followed on the 25th June. The encircled area shows the outcrop of rocks, which the skipper described as three heads, but unfortunately turned out to be more extensive. It was the east side of this reef that the vessel grounded on the previous day. The dashed red line shows the track used by *SBR* on days when the tide is above half tide.

6.6 The Garmin colour chart plotter fitted to **SBR** does not provide sufficient detail to navigate safely in this area at extreme low water situations.

6.7 A previous recommendation to the skipper was that sufficient distance should always be maintained from obstructions especially during periods of I o w water. This recommendation was not followed.

6.8 In general terms the vessel is well run and maintained. There is evidence that the safety features and procedures are adhered to. Although no formal passage plan was evident, the skipper does have an above average level of local knowledge in the areas where the vessel operates. Certainly the assessment carried out in respect to the permit issued under Regulation 6 of the Harbours (Inshore Safety) Regulations 2012, showed that **SBR** was manned by persons with sufficient local knowledge to make them competent to act for that purpose.

7.0 Recommendations

7.1 The skipper does not hold a Certificate of Competence as would normally be required under STCW 95 (as amended). It is recommended that a Certificate of Service is considered, under a Ministerial exemption, be issued until such time as the individual undergoes some form of recognised training, to enable him to plan and execute more robust passage plans. It is unlikely that the skipper, now aged 66, would be prepared to undertake formal training to gain an STCW 95 compliant Certificate of Competency. It is recommended that any new skipper should have a recognised commercial Certificate of Competence.

7.2 The vessel **SBR** has grounded twice in 13 years in the same approximate area, in similar states of tide. The vessel should be prohibited from using this inshore route, when there is insufficient water to pass safely between St Aubin's Fort and Grosse and Platte Rocks. This occurs at tide heights below 3.0m. On such occasions the vessel should remain to the eastwards of The Slates. The Permit issued under Regulation 6 of the Harbours (Inshore Safety) Regulations 2012 should be amended to reflect this.

7.3. The hydrographical data provided on Admiralty Chart BA 1137, Approaches to St Helier, is insufficient to permit safe navigation in this area in all states of tide. It should be noted that the data provided in most electronic chart display systems will be similarly unreliable. It is therefore recommended that detailed surveys are carried out in this area. The Harbour Master has permitted the laying of up to 90 moorings inside this bay for leisure users.

7.4 There is a discrepancy between the specification draft and the draft perceived by the skipper. The vessel can carry 100 passengers. Therefore there is 7.7 tonnes difference between lightship and fully loaded displacement with a corresponding change in draft. Draft marks should be applied to the vessel and recorded on each voyage.



Footnote: Figure 8 shows the Southern Bay Rose aground on 5th June 2000, whilst Figure 9 shows the same vessel aground on 25th June 2013.

8.0 Actions

Following consideration of the Report the following actions have been taken:

8.1 A restriction on the operation of the Southern Bay Rose was put in place with immediate effect so that no approach is made to the inshore route off Belcroute Bay and St Aubin's Fort at tidal heights of less than 3.0m.

8.2 New operating conditions have been agreed.

8.3 An 18 month short-term Certificate of Service is to be issued during which time a local Day Skipper theory course should be undertaken.

8.4 A valid Medical Fitness certificate such as the ENG 1 or ML5 must be maintained.

8.5 The Certifying Authority is to advise on appropriate draft marks for the vessel taking into account operations when fully laden.

8.6 The situation is to be reassessed at the end of the summer season 2014.

Harbour Master, Jersey Harbours

26 February 2014

End of report