Report of the Inspector's Investigation into the death of one person on the cruise Ship

EDINBURGH CASTLE

while berthed in Southampton Docks

on 3 May 1999

### **Extract from**

# The Merchant Shipping

# (Accident Reporting and Investigation)

# **Regulations 1994**

The fundamental purpose of investigating an accident under these Regulations is to determine its circumstances and the causes with the aim of improving the safety of life at sea and the avoidance of accidents in the future. It is not the purpose to apportion liability, nor, except so far as is necessary to achieve the fundamental purpose, to apportion blame.

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# **GLOSSARY OF ABBREVIATIONS**

CPO Chief Petty Officer

m metre

MAIB Marine Accident Investigation Branch

mg milligram

ml millilitre

UK United Kingdom

UTC Universal Co-ordinated Time

### **SYNOPSIS**

At about 2315 (UTC+1) on 3 May 1999 a Polish crew member fell down the stairs leading from the disco club on *Edinburgh Castle*. The ship was berthed alongside in Southampton at the time. The Marine Accident Investigation Branch (MAIB) was informed of the incident at 0145 on 4 May 1999. The MAIB investigation began at 0945 on the same day and was carried out by Richard Barwick (Inspector).

Miroslaw Brzujszczak suffered a traumatic head injury as a result of the fall. No one saw the accident, but he was found a couple of minutes after he fell. First aid was administered, initially by the ship's crew and then by the local ambulance service. Despite strenuous attempts to save him, the crewman died shortly after midnight on 4 May 1999.

Miroslaw Brzujszczak had attended a barbecue on board, which started at about 1400 on 3 May, and went ashore in the early evening. From about 2030 he was in the ship's disco club which he left shortly after 2300, saying that he was going to bed. The post mortem report shows that the blood/ethanol concentration of Miroslaw Brzujszczak was very high; it is evident that he had been drinking heavily during the afternoon and evening, and this is considered to be a main cause of the accident. Miroslaw Brzujszczak was on medication for blood pressure; this may have lowered his resistance to the effects of alcohol.

Miroslaw Brzujszczak was wearing loose fitting footwear (flip-flops) with socks. The stairs were covered in a clear plastic protective sheet. These two factors may have been contributory to the accident. The ship's crew removed all the plastic sheeting from the stairways on 4 May 1999 as a precaution.

No recommendations have been made.



Edinburgh Castle

# **SECTION 1 - FACTUAL INFORMATION**

# 1.1 PARTICULARS OF VESSEL AND INCIDENT

Name : Edinburgh Castle

Type : Cruise ship

Port of registry : London (UK)

IMO number : 6502024

Owner : Lowline Shipping

Morley House, Badminton Court, Church Street, Amersham, Bucks

HP7 0DA

Built : 1966 in Italy

Material of construction : Steel

Length overall : 217.39m

Breadth : 29.39m

Depth : 14.71m

Gross tonnage : 32,753

Position of accident : Berth 102 Southampton docks

Time and date : At about 2315 (UTC+1) on 3 May

1999

Casualty : One crewman lost his life when he

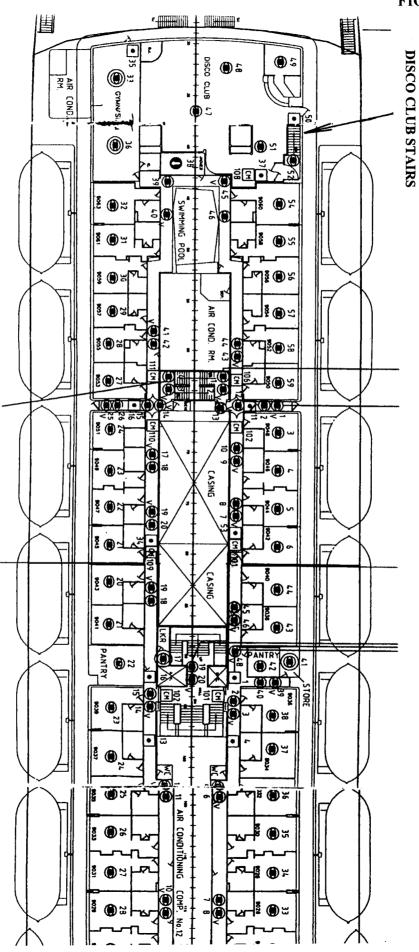
fell down the stairs leading from the

disco club

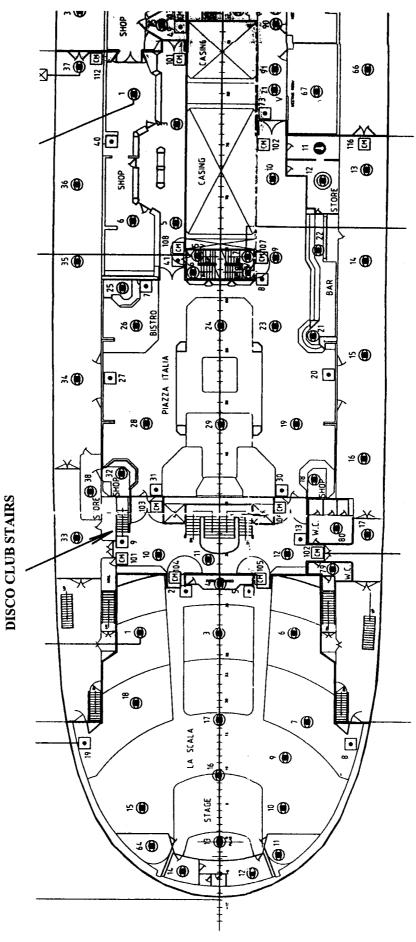
Cause of death : Traumatic head injury

(Figure 1) shows Edinburgh Castle alongside in Southampton.

The location of the accident is shown on the (part) general arrangement of Edinburgh Castle (Figures 2 and 3).



PART PLAN OF DECK 9



PART PLAN OF DECK 8

### 1.2 RECENT HISTORY OF THE VESSEL

Edinburgh Castle had been in Southampton docks since October 1998. The ship was initially undergoing maintenance, but on 18 February 1999 her owner went into receivership and she had to remain in Southampton. While docked in Southampton some crew remained on board; at the time of the accident there were about 120 crew, of which 18 - 20 were Polish. There were no passengers on board.

### 1.3 NARRATIVE TO THE ACCIDENT

On 3 May 1999 there was a barbecue on one of the open decks. This social event for the crew started at about 1400. Miroslaw Brzujszczak attended the barbecue, possibly from about 1600. His best friend, who was another Polish crew member, went ashore with him in the early evening during which time they had a drink. After he returned to the ship, Miroslaw Brzujszczak went to the ship's disco club at about 2030. The disco club was not normally open during the lay-up period, but on this particular evening it had been opened for a social gathering which followed on from the barbecue.

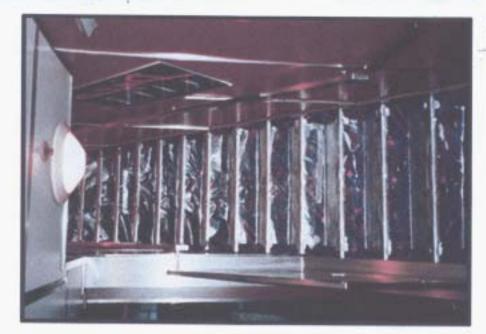
Miroslaw Brzujszczak was socialising with his friends in the disco club. He seemed quite normal and did not appear to be worried about anything. Shortly after 2300 he announced that he was off to bed. He left, and headed for the disco club stairs (**Figure 4**). He was found at the foot of the stairs, at about 2315, by another crewman, who went immediately to the disco club to raise the alarm. The first officer he saw was the hotel engineer, who on being informed of the accident, left the disco club, followed by a CPO plumber who realised that something dramatic had happened. On reaching the scene, the hotel engineer administered first aid, which included moving Miroslaw Brzujszczak to the recovery position, while the CPO plumber went back to the disco club and phoned the bridge. The officer of the watch informed the captain who was in his cabin.

Only about five minutes elapsed between Miroslaw Brzujszczak leaving the disco club and his best friend, who was still in the disco club, knowing about the accident.

The captain, chief officer and master-at-arms, were all in the captain's cabin watching a video when the alarm was raised. They were on the scene in a couple of minutes. An ambulance was called at 2330. The captain took over administering first aid, which included mouth-to-mouth resuscitation. Shortly after midnight the ambulance crew arrived and they took over; first aid was continued for about 15 minutes when it was decided that nothing more could be done.

The police were called at 0006 and arrived at 0028. At 0115 a police doctor pronounced Miroslaw Brzujszczak dead.









During the administering of first aid it was noted that Miroslaw Brzujszczak's right eye was swelling up. When discovered he was lying on his back, on deck 8, with his feet at the bottom of the stairs.

### 1.4 POSTMORTEM REPORT

The main feature of the postmortem report is the blood/ethanol concentration which is a measure of the amount of alcohol consumed. The level is recorded as 300mg/100ml which is 3.75 times the legal driving limit in the UK. A guide produced by a Canadian study into the effect on performance (Figure 5) shows that the 300mgm% level would have produced confusion and gross incoordination

### 1.5 MIROSLAW BRZUJSZCZAK

He was 51 years old and had been on board *Edinburgh Castle* for just over two weeks prior to the accident. He had served on the vessel before, and was known to be a reliable crew member. Miroslaw Brzujszczak was an air-conditioning engineer officer on *Edinburgh Castle*. He was popular, and got on well with the rest of the crew.

He had a large quantity of medicines in his cabin. The labels on the packages were in Polish, but it could be deduced that some were prescription medicines while others were non-prescription for common aliments like headaches. There were about 30 packages of medicines of about 15 different types. Miroslaw Brzujszczak was probably taking medication regularly for high blood pressure; he may also have been taking regular medication for other ailments. He wore glasses.

### 1.6 FOOTWEAR

Miroslaw Brzujszczak was wearing loose fitting footwear normally referred to as "flip flops" (**Figure 6**). He was also wearing socks. One shoe was found lodged at angle about four steps up from the bottom of the stairway, the other was lying on the deck close to his body.

### 1.7 PLASTIC SHEETING

Protective plastic sheeting had been laid over most of the ship's carpets at the start of the maintenance period.

The maintenance period on *Edinburgh Castle* had developed into a lay-up due to the owner's financial difficulties. This meant the plastic sheeting had been in place longer than normal (refit periods for cruise ships are normally quite short) and, as a

# A BRIEF GUIDE TO THE UNITS AND THE INTERPRETATION OF BLOOD ALCOHOL MEASUREMENTS

FIGURE 5

BY

Operational Life Support Unit
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1133 Sheppard Avenue West, P.O. Box 2000
DOWNSVIEW, Ontario

# BLOOD ETHANOL CONCENTRATIONS AND EFFECT ON PERFORMANCE (ABSORPTIVE STAGE, 150 LB PERSON, MODERATE DRINKER, UNLESS OTHERWISE STATED)

12-18 FLUID OZ. PURE ALCOHOL TAKENIN SHORT PERIOD OF TIME	600 MGM %		FATAL
	650 MGM %	Approx. upper limit	
	600 MGM %	"Dead drunk"	
	450 MGM %	Possible coma, general anesthesia	
	400 MGM %	Stupor	"UNDER THE
	300 MGM %	Confusion, gross incoordination	INFLUENCE"
	250 MGM %	Possible sedation, sleep	
,	200 MGM %	Stumbling and falling	
6 OZ. WHISKEY OR 6 BOTTLES BEER	150 MGM %	Above 150, certainly "under the influence", possible gross evidence of intoxication, incoordination, increase of 30 % in reaction time	PROBABLY "UNDER THE
	120 MGM %	Observable speech impairment	INFLUENCE"
	100 MGM %	Denmark penalizes all drivers above 100	
<b>,</b>	80 MGM %	Sweden and Ontario penalize all drivers above 80	POSSIBLY "UNDER THE INFLUENCE"
2 OZ. WHISKEY OR 2 BOTTLES BEER	50 MGM %	Norway penalizes all drivers above 50, slight impairment for complex tasks, increase of 10% in reaction time	
	40 MGM %	Reduction in visual acuity for heavy drinkers, 30% impairment of "precision" driving ability	PROBABLY NOT "UNDER THE
	30 MGM %	Reduction in visual acuity for moderate drinkers	INFLUENCE"
	20 MGM %	Reduction in visual aculty for abstainers	
	1 MGM %	"Normal" body content less than 1 MGM %	







Footwear

result, the sheeting had become ragged in some places. One of these areas was near the top of the disco club stairs; where the plastic was torn in places and some of the "Duck Tape" strips, used to hold down the sheeting at the edges, had become unstuck (Figure 7).

There was no plastic sheeting in the disco club, nor on the landing at the top of the disco club stairs.

As a precaution, the master, in agreement with the owner, had the plastic sheeting removed from the stairways on *Edinburgh Castle* on the day after the accident.

### 1.8 OTHER CIRCUMSTANCES

The drinks were paid for from the "officers fund". The officers fund was run by a committee and was used to buy drinks wholesale from ashore; this supply was then used to stock the crew bars. Drinks were normally sold at a profit which built up a surplus which sometimes was used to supply drinks on special occasions. This was the case on 3 May 1999; and drinks at the barbecue and in the disco club were free

The shipping company had a policy on drug and alcohol use (**Figure 8**). Paragraphs 3, 5, 6 and 7, under "Implementation" are especially relevant. Copies of this document were displayed in various locations on board *Edinburgh Castle*.

Miroslaw Brzujszczak's spectacles were broken during the accident. They were found close to his body. He was not carrying anything at the time of the incident.

The ship's lighting was switched on at the time of the accident, and the stairway was illuminated. One of the light fittings is shown in (Figure 4).

Handrails were fitted on both sides of the disco club stairs (Figure 4).



Protective plastic sheeting at the top of the disco club stairs

#### LOWLINE LIMITED

#### **Drugs & Alcohol Policy**



Appendix F

#### **PURPOSE**

It is widely known that drug and alcohol abuse can:

- adversely affect the safety of the ship and those on board;
- affect performance and behaviour and lead to disciplinary problems;
- become extremely costly to both the Company and to personnel and their families;
- lead to ill-health and premature death.

Additionally, the presence of illicit drugs in any Company location, afloat or ashore, will have serious legal implications for any individual involved and could damage the Company's reputation. In this connection it will be appreciated that a ship could be used by outsiders as a means of transporting illicit drugs to their contacts.

### **OBJECTIVES**

The Company's objectives are:

- to promote the health and welfare of personnel;
- · to eliminate any drug or alcohol abuse;
- to maintain a safe and effective working environment, afloat or ashore;
- to make known the harmful effects that can arise from the use of drugs or the excessive use of alcohol;
- to identify any person with a drug or alcohol related problem;
- to ensure the Company does not retain in its employment an abuser of drugs or alcohol;
- to render full co-operation to HM Customs and Excuse (or other appropriate authorities) whenever it, or any member of the crew suspects the presence of illicit drugs.

### **IMPLEMENTATION**

- 1. Day by day operation of the Company's policy on board ship rests with the Master. He should feel free to discuss any queries that may arise with the Company's Management.
- 2. Any person aboard a Lowline vessel who is found to be using illicit drugs, or brought drugs on board ship, or into an office, or to have dealt in drugs is committing an offence and therefore is in breach of the Company's code of conduct, is guilty of gross misconduct and will be summarily dismissed, quite apart from any criminal charges brought by the authorities who would be informed as a matter of course.
- 3. The consumption of alcohol onboard Lowline vessels by vessel staff is prohibited except that a moderate amount may be permitted at the Masters discretion provided that this is not contrary to Charterer's policies or any requirements of law.
- 4. It is prohibited for any member of a vessel's crew to bring alcohol on board a vessel without the express permission of the Master.
- 5. It is essential that all the ship's company are fit and able at all times to deal with any emergency that may arise. It follows that, when assigned to a ship but ashore, they must keep a sensible control of their drinking, in order that on return to a ship, they are capable of dealing with any circumstances with which they may be faced.
- 6. It is prohibited for any member of a vessels crew to undertake or plan to undertake their duties where the level of alcohol in their blood exceeds the Company alcohol limit.
- 7. The Company's blood alcohol limit is 40 milligrams of alcohol per 100 millilitres of blood. This represents about half the current limit for drinking and driving a car in the UK.
- 8. The company conducts unannounced searches for drugs and alcohol on Company locations. It also requires employees to submit to alcohol and drug testing where good reason exists to suspect alcohol or drug abuse. Unannounced periodic or random testing will be conducted when an employee;
  - holds a safety and environmentally sensitive position
  - holds a designated management position
  - holds a position where testing is required by law.
- All contractors are required to ensure that their employees do not create a presence of drugs or alcohol abuse on the Company's vessels.

### **SECTION 2 - ANALYSIS**

- 2.1 It is obvious from the postmortem report that Miroslaw Brzujszczak had had a great deal to drink prior to the accident. He probably had difficulty in walking, and negotiating the disco club stairs would have presented further problems. His intoxication is considered to be the main reason for him falling down the stairs. The nature and severity of his injuries indicate that he fell forward from the top of the stairs.
- 2.2 On 3 May 1999 the drinks at the barbecue and in the disco club were free. This might have encouraged Miroslaw Brzujszczak to drink more than normal before the accident.
- 2.3 The medication that Miroslaw Brzujszczak was taking might have reduced his resistance to the effects of alcohol.
- 2.4 The company policy on alcohol was not followed in this case.
- 2.5 The footwear that Miroslaw Brzujszczak was wearing might have contributed to the accident. Flip-flops are not a secure form of footwear, and when the wearer is intoxicated can lead to trips and falls. The wearing of flip-flops with socks is considered especially hazardous, because grip between the foot and the flip-flop is substantially reduced.
- 2.6 It is common practice to use plastic sheeting to protect carpets on board while ships are under maintenance or in refit, because contractors, shippard staff, and others are normally wearing soiled footwear. Plastic sheeting does not present an undue hazard, provided it is maintained in good condition and held down effectively, and also provided those on board take extra care and wear safe footwear. The plastic sheeting on the stairway to the disco club, although showing signs of wear and tear, would not have been unduly hazardous to an alert and properly attired person.
- 2.7 It was unnecessary to use plastic sheeting in that area since the stairs led only to the disco club, and there was no sheeting there. The decision to remove the plastic sheeting from the stairs after the accident, was a wise precaution.
- 2.8 The lighting of the disco club stairs was inspected by the MAIB on 4 May 1999, and was considered to be adequate.

### **SECTION 3 - CONCLUSIONS**

# 3.1 FINDINGS

- 1. The accident happened at about 2315 (UTC+1) on 3 May 1999 while *Edinburgh* (*'astle* was laid up at berth 102 in Southampton Docks. [1.1]
- 2. Miroslaw Brzujszczak died after falling down the stairs leading from the disco club on deck 9. [1.1]
- 3. The postmortem report showed that he had a blood ethanol concentration of 300mg/100ml. [1.4]
- 4. The provision of free drinks might have encouraged Miroslaw Brzujszczak to drink more than normal. [2.2]
- 5. He was taking medication which could have reduced his resistance to the effects of alcohol. [2.3]
- 6. The company policy on alcohol was not followed in this case. [2.4]
- 7. Miroslaw Brzujszczak was wearing loose fitting footwear, which presented an additional hazard in his intoxicated condition. [1.6]
- 8. The disco club stairs were fitted with protective plastic sheeting, which had become ragged near the top. This caused a further hazard to Miroslaw Brzujszczak in his intoxicated condition. [1.7]

### 3.2 CAUSES

The primary cause for the accident was the excessive amount of alcohol consumed by Miroslaw Brzujszczak during the afternoon and evening of 3 May 1999. [2.1, 2.4]

Possible contributory factors:

- 1. The provision of free drinks. [2.2]
- 2. The effects of the alcohol consumed by Miroslaw Brzujszczak might have been exacerbated by the medication he was taking. [2.3]
- 3. The wearing of loose fitting footwear and socks. [2.5]
- 4. The protective plastic sheeting on the disco club stairs. [2.6]

# **SECTION 4 - RECOMMENDATIONS**

**4.1** There are no recommendations.

Marine Accident Investigation Branch July 1999