

## **Safety on Board**

Thames Passenger Boat Investigation Committee

December 2013



# Thames Passenger Boat Investigation Committee Members

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# Introduction

On Sunday 29 September 2013, an amphibious vessel operated by London Duck Tours carrying 28 passengers and two crew caught fire on the Thames between Westminster and Lambeth bridges. The vessel, the Cleopatra, suffered a fire on board. The Master was able to manoeuvre the vessel into shallower water close to the bank, enabling passengers to evacuate.

Three Thames Rib Experience boats were first on the scene and offered immediate assistance. These were promptly followed by other boats and London Fire Brigade's boat. The fire was extinguished within 8 minutes, 30 seconds of being seen by the Cleopatra's Captain. Tower and Chiswick Royal National Lifeboat Institute (RNLI) lifeboats and the police helicopter searched the water to ensure nobody was unaccounted for. All on board made it to shore and no serious injuries were reported. Also at the scene was a police boat, and on land were several police units and the ambulance service.

This report presents the findings of a cross-party Committee of London Assembly Members which was convened to look into these events. It held a meeting on 6 November 2013 to identify any lessons relating to:

- the response by emergency and other rescue services to the incident;
- the operation of amphibious passenger vessels on the Thames; and
- the regulation of companies operating such craft commercially on the Thames.

The Committee is also mindful of the Mayor's responsibilities with regards to the Metropolitan Police Service, the London Fire and Emergency Planning Authority, as well as his role with the London Resilience Forum whose purpose is to ensure there are plans in place to deal with disasters and emergencies in London and to ensure adequate co-ordination between responders.

The technical investigation into the cause of the fire is being carried out by the Marine Accident Investigation Branch (MAIB) which issued an interim bulletin on 28 October.<sup>1</sup> Our investigation does not deal in detail with any issues that are being investigated by MAIB but instead seeks to

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<sup>1</sup> Marine Accident Investigation Branch, Safety Bulletin SB3/2013, October 2013. See link.  
[http://www.maib.gov.uk/cms\\_resources.cfm?file=/Safety%20Bulletin%203\\_2013.pdf](http://www.maib.gov.uk/cms_resources.cfm?file=/Safety%20Bulletin%203_2013.pdf)

suggest priority areas for London Duck Tours, the MAIB and the Maritime & Coastguard Agency (MCA), as regulator, to consider in their responses to the incident, as well as lessons that may be learnt by the Mayor and the London Resilience Forum.

### Dukws

Within the UK, three companies operate amphibious tours. Each uses vehicles that were originally manufactured for the D-Day landings in 1944, which have been rebuilt and updated with new engines and other parts. The 'dukws' were an amphibious version of the General Motors Corporation 2.5 tonne, 6x6 truck and were successful in transporting troops and supplies directly to shore in both Europe and Asia. The original concept was to take a vehicle, already mass produced, and make it float, through fitting watertight hulls, marine propulsion system and pumps. About 22,000 dukws were originally built, but only a few hundred are still in operation across the world today.

#### **DUKW is a US Army acronym**

D = First year of production code "D" is for 1942,  
U = Body style "U" utility truck (amphibious),  
K = 6 wheel drive/ Front wheel drive,  
W = twin rear axles.

#### **Dukw on the Thames**



Source: Canthusus

London Duck Tours operates a fleet of nine dukws which offer a road trip followed by a river trip from the Lacks Dock slipway at Albert Embankment to the Houses of Parliament and back (see Appendix 2). Each vessel carries up to 28 passengers and there is a qualified Captain and a tour guide on board. According to a response to a written Mayor's Question, *"in the last five years the London Fire Brigade has attended 115 vessel related incidents in the River Thames, of which seven are known to have involved dukw passenger vessels. Three of these incidents were in 2013, two in 2012, one in 2011 and one in 2010"*.<sup>2</sup>

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<sup>2</sup>Mayor's Question Time, Wednesday 20 November 2013, Question ref MQ 2013/4029 asked by Stephen Knight

# The response to the fire on the Cleopatra

The initial call from the Cleopatra went to the Port of London Authority control room at Woolwich which passed the call onto the London Coastguard (part of the Maritime & Coastguard Agency). The Coastguard then made the incident known to emergency services and informed other vessels which were nearby. A number of passengers were treated at the river bank by paramedics, with no serious injuries. However four passengers were taken to hospital as a precaution for smoke inhalation.

The Committee was pleased to hear how effectively the emergency services responded to this incident and we commend the London Fire Brigade, the Maritime and Coastguard Agency, the RNLI, the London Ambulance Service, the Marine Policing Unit and the police helicopter for their role. The degree of co-ordination across so many agencies was exemplary and lessons have clearly been learned from previous experiences. As the Assembly has highlighted in many investigations, communication within and between agencies is the key to successfully managing incidents. In this case, communication clearly worked well both over telephone and radio channels and between staff at the scene. The search and rescue operation was stood down after 18 minutes when the Coastguard received confirmation from the police that everyone had been accounted for. In light of how busy the Thames is, the complexity of the river and its tidal nature, it is vital that the Mayor and the London Resilience Forum are satisfied that the co-ordination mechanisms and necessary plans for dealing with a major incident are in place and regularly reviewed.

## **Recommendation 1**

The Committee commends the work of the emergency services in responding to the incident promptly and effectively, and recommends that the Mayor and the London Resilience Forum reassure themselves that adequate co-ordination is maintained across all emergency services in London in the event of a serious incident involving river craft.

This partnership working extended to the involvement of privately-owned boats. Three Thames Rib Experience boats<sup>3</sup> were at the scene and rescued many of the passengers. While they are obliged to do so under the International Convention for the Safety of Life at Sea,<sup>4</sup> the Committee was pleased to see the extent of mutual help existing on our river. Several agencies at our meeting were very positive in their praise for the Rib boats: for example David White from the MCA said,

*“Thames Rib Experience boats did play a particularly important role. Because they were close to the scene, they reacted to it very quickly. It is commendable, ... very public-spirited and because they are good vessels for rescue, both the crew and the passengers on board those vessels did an excellent job in recovering the people from the water. They cannot be commended enough, from my point of view.”<sup>5</sup>*

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<sup>3</sup> Rib stands for Rigid Inflatable Boats

<sup>4</sup> Chapter 5, paragraph 33

<sup>5</sup> David White, Thames Passenger Boat Investigation Committee – 6 November 2013, Transcript of Item 6: Amphibious Passenger Vessels on the Thames

# The conditions surrounding the incident

London Duck Tours and its passengers were fortunate, not just because of the presence of three Rib boats, but also in the conditions surrounding the fire. It was summer and the weather was clement. It was not high tide and so there was exposed foreshore that the Master was able to manoeuvre towards, enabling the passengers to wade ashore. And, as the Marine Policing Unit told us in a written submission, the incident *“could not have occurred in a better location from the perspective of its close proximity to Lambeth LFB Pier. This meant that the casualties could be quickly taken to a safe and warm environment that would have undoubtedly reduced the trauma incurred by them”*.<sup>6</sup> Had the conditions been different, the consequences of the fire could have been much worse.

While the Committee heard positive evidence about the response to the incident, the London Duck Tours’ safety record and the role of regulation, we are concerned that some lessons do need to be learned to safeguard against future problems. There are clearly risks for companies operating on the tidal Thames. This report therefore highlights three areas which we think could be usefully addressed in the review by MAIB and in the responses by MCA and London Duck Tours.

## 1) The suitability of safety equipment needs to be reconsidered

The Committee was concerned how many passengers were not wearing life jackets (also called buoyancy aids) when they entered the water. While we were assured by the Maritime & Coastguard Agency that the lifejackets were stored appropriately and the packets they were in were a *“practical consideration to make sure that they are always in good condition and they do not deteriorate,”*<sup>7</sup> we were surprised that passengers did not choose to wear them.

There is a question in our minds whether passengers should be asked to wear buoyancy aids throughout the time on the water, as they do on other craft such as the Rib boats. There are arguments for and against this. The Committee was informed by the Maritime & Coastguard Agency

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<sup>6</sup> Mick Berry, written submission to Thames Passenger Boats Investigation Committee - London Duck Tours Incident, 31 October 2013.

<sup>7</sup> Philip Naylor, Thames Passenger Boat Investigation Committee – 6 November 2013, Transcript of Item 6: Amphibious Passenger Vessels on the Thames

that “*it would not have been usual*”<sup>8</sup> for passengers of this type of boat to be wearing lifejackets. And John Bigos, Managing Director of London Duck Tours highlighted that one of the risks was generating unnecessary anxiety among passengers. However, the Committee felt that the easy and immediate accessibility of buoyancy aids needed to be revisited.

Similarly, the Committee was concerned that a child was seen not wearing a life jacket and we spent some time at the meeting discussing this. London Duck Tours allows a maximum of two babies on its tours, who have to be registered ahead of time, and it carries the requisite number of infant lifejackets to cater for them. There should have also been a suitable buoyancy aid on board for the child. Under the Merchant Shipping (Life-Saving Appliances For Passenger Ships of Classes III to VI(A)) Regulations, every ship should carry:

- a lifejacket suitable for a person weighing less than 32 kilogrammes for each such person on board;
- a buoyancy aid suitable for a person weighing 32 kilogrammes or more, and a buoyancy aid suitable for a person weighing less than 32 kilogrammes.<sup>9</sup>

### **Recommendation 2**

LDT should consider whether there is a case for passengers to wear life jackets as a matter of course on the water part of the tour.

We wait to hear whether the automated fire system worked on board the Cleopatra and would expect this to be verified as part of the MAIB investigation. We would also expect MAIB to comment on whether the system was sufficient and appropriate for this kind of incident and vessel.

## **2) The evacuation procedures aboard the dukws should be reviewed**

In order to be in charge of a dukw, the captain must be a holder of a current Boatmasters’ Licence with associated years of mandatory

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<sup>8</sup> Philip Naylor, Thames Passenger Boat Investigation Committee – 6 November 2013, Transcript of Item 6: Amphibious Passenger Vessels on the Thames

<sup>9</sup> The Merchant Shipping (Life-Saving Appliances For Passenger Ships of Classes III to VI(A)) Regulations 1999 (SI 1999/2723) apply to London Duck Tours ships which are Class V passenger ships. Regulation 10(c)

training. The training and the tests to qualify are rigorous.<sup>10</sup> On a dukw, one other crew member is present on a standard tour and they have a key role to play in any evacuation of the vessel. The footage of the incident on 29 September suggests that there was a rather disorganised response from the vessel's crew to the emergency and that evacuation procedures could have been better implemented. One passenger's view was that *"there was total chaos on board"*.<sup>11</sup>

### **Recommendation 3**

MCA and London Duck Tours should reassure themselves that crews on these vehicles are proficient in evacuation procedures and are regularly tested on how they manage an evacuation.

### **3) Mayday, pan-pan and other calls**

The call from the Cleopatra came into the Port of London Authority control room at Woolwich as a 'fire call'. The Committee heard discussion about whether that initial call, from the Cleopatra's Captain, should have been a mayday, or at the very least, a pan-pan call. The protocol says that if a situation is serious, for example someone's life is at risk, a vessel should send a mayday voice message. If it is urgent, but not life-threatening, for example the mast snaps, you should send a pan-pan message.<sup>12</sup>

While the Committee accepts that emergency situations can be confusing, it is important that the level of call reflects the gravity of the situation. It appears that the sector may benefit from increased levels of knowledge on this.

### **Recommendation 4**

London Duck Tours should review whether its employees are correctly using pan-pan, mayday and other distress calls and whether further training is required on this matter.

### **New requirements from the MCA**

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<sup>10</sup> The level of firefighting training required to hold a Boatmasters' licence is set and regulated by the MCA. In order to meet the MCA's conditions of licence, operators have to undertake an approved level of training delivered by a suitable training provider.

<sup>11</sup> Passenger, written submission Thames Passenger Boats Investigation Committee - London Duck Tours Incident, 6 November 2013

<sup>12</sup> How to call for help in an emergency at sea. <http://www.nidirect.gov.uk/how-to-call-for-help-in-an-emergency-at-sea> accessed 7 November 2013

The day after our meeting to look at the 29 September incident and the safety of London Duck Tours vessels, the MCA informed the company that it was reconsidering the Merchant Shipping Regulations in relation to the fleet of dukws. In a letter, it said, *“Given the recent incidents, and current public interest in the safety of dukws in general, it is necessary to reconsider the application of these regulations to your ships before we can certify them to be safe for operation.”*<sup>13</sup> It deemed that London Duck Tours would need to add additional buoyancy foam to the dukws to demonstrate that they comply with standards for buoyancy and stability.

However, the MCA’s analysis was that it may not be possible to meet these requirements given the limited space available for the foam to be inserted within the vessels. The Managing Director of London Duck Tours said the following to the Committee:

*“I believe the demands [of the MCA] are disproportionately punitive for a company which has an exemplary track record these last 10 years. I fear the outcome of these the new requirements being imposed upon us will not enable London Duck Tours to return as a tourist attraction to our Capital. Any changes should now be restricted to eliminating the fire risk and not revisiting the regulatory platform which was agreed upon and has proved to be perfectly safe these last 10 years.”*<sup>14</sup>

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<sup>13</sup> Letter from the MCA to John Bigos, Managing Director of London Duck Tours, 7 November 2013

<sup>14</sup> Email from John Bigos to the Chair of the Committee, 8 November 2013

## Conclusion

The Thames is an increasingly important asset for London and we support the Mayor's ambitions to boost the number of people using the river. The diversity of users on the river is one of the distinguishing features of London and the role of London Duck Tours and other leisure operators is a key part of the city's tourism offer. The vast majority of trips pass off without incident and the Committee is keen for this type of business to continue to operate. At our meeting, London Duck Tours had accepted that modifications would need to be made and hoped that it could "*come back for the New Year in a positive way*".<sup>15</sup> The Committee therefore hopes that it can now agree a reasonable accommodation with the MCA so tours can safely resume.

Regardless of the outcome of discussions between London Duck Tours and the MCA, it is essential that all the organisations involved in safety on the river learn lessons from the fire aboard the Cleopatra to ensure that safety equipment and crew are better prepared for any future incidents. The Committee therefore looks forward to the results of the MAIB investigation and urges the relevant organisations to take our points on board.

Finally, we commend the response of the emergency services and the Thames Rib Experience to this fire. The degree of partnership and interdisciplinary working was clearly key to the success of the rescue. It represents good practice in search and rescue and in promoting the concept of mutual help in our city.

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<sup>15</sup> John Bigos, Thames Passenger Boat Investigation Committee – 6 November 2013, Transcript of Item 6: Amphibious Passenger Vessels on the Thames

# Appendix 1 Recommendations

## **Recommendation 1**

The Committee commends the work of the emergency services in responding to the incident promptly and effectively, and recommends that the Mayor and the London Resilience Forum reassure themselves that adequate co-ordination is maintained across all emergency services in London in the event of a serious incident involving river craft.

## **Recommendation 2**

LDT should consider whether there is a case for passengers to wear life jackets as a matter of course on the water part of the tour.

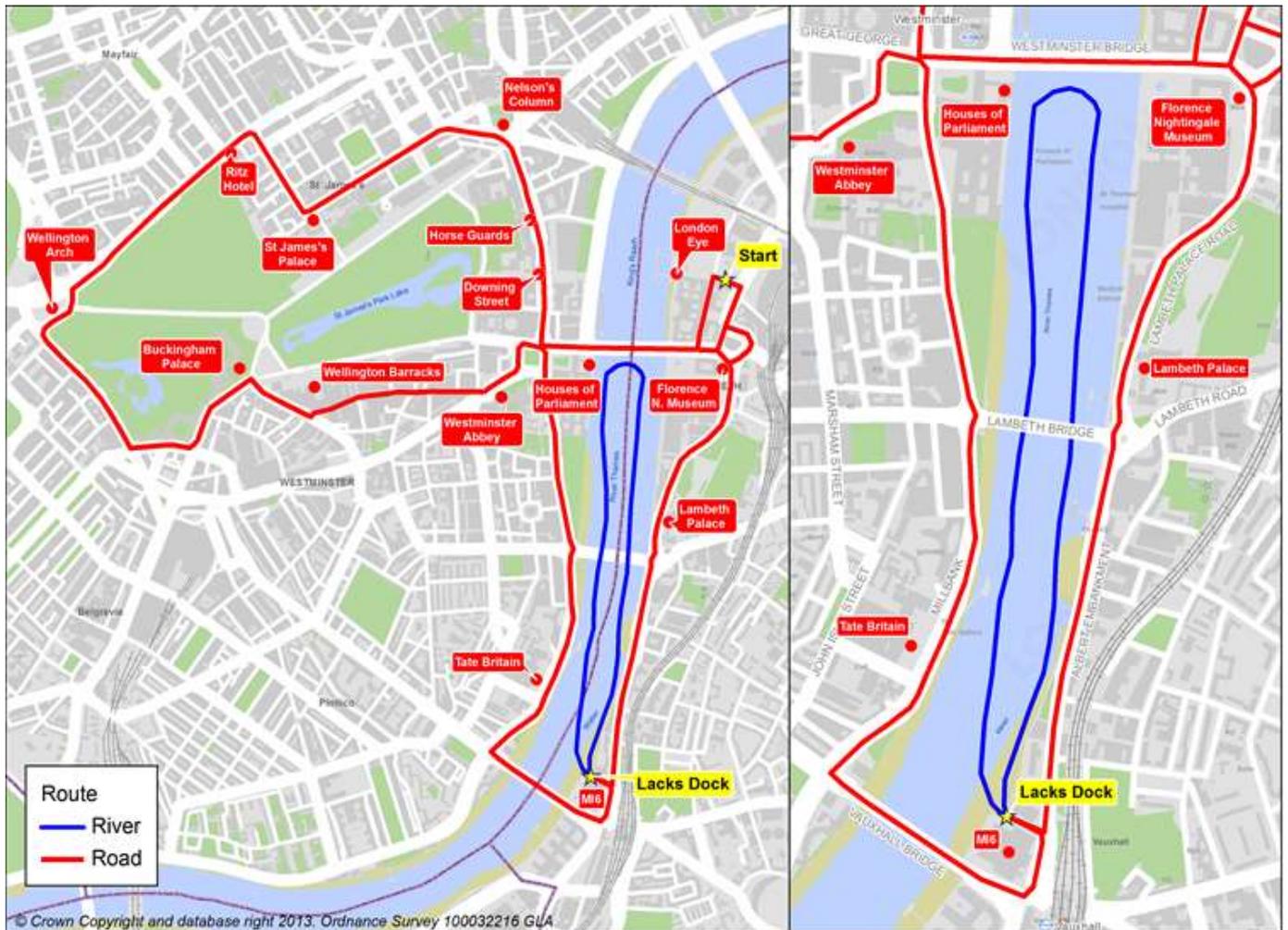
## **Recommendation 3**

MCA and London Duck Tours should reassure themselves that crews on these vehicles are proficient in evacuation procedures and are regularly tested on how they manage an evacuation.

## **Recommendation 4**

London Duck Tours should review whether its employees are correctly using pan-pan, mayday and other distress calls and whether further training is required on this matter.

## Appendix 2 Route of London Duck Tours



# Orders and translations

## How to order

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### Vietnamese

Nếu ông (bà) muốn nội dung văn bản này được dịch sang tiếng Việt, xin vui lòng liên hệ với chúng tôi bằng điện thoại, thư hoặc thư điện tử theo địa chỉ ở trên.

### Greek

Εάν επιθυμείτε περίληψη αυτού του κειμένου στην γλώσσα σας, παρακαλώ καλέστε τον αριθμό ή επικοινωνήστε μαζί μας στην ανωτέρω ταχυδρομική ή την ηλεκτρονική διεύθυνση.

### Turkish

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### Punjabi

ਜੇ ਤੁਸੀਂ ਇਸ ਦਸਤਾਵੇਜ਼ ਦਾ ਸੰਖੇਪ ਆਪਣੀ ਭਾਸ਼ਾ ਵਿਚ ਲੈਣਾ ਚਾਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਇਸ ਨੰਬਰ 'ਤੇ ਫੋਨ ਕਰੋ ਜਾਂ ਉਪਰ ਦਿੱਤੇ ਡਾਕ ਜਾਂ ਈਮੇਲ ਪਤੇ 'ਤੇ ਸਾਨੂੰ ਸੰਪਰਕ ਕਰੋ।

### Hindi

यदि आपको इस दस्तावेज़ का सारांश अपनी भाषा में चाहिए तो उपर दिये हुए नंबर पर फोन करें या उपर दिये गये डाक पते या ई मेल पते पर हम से संपर्क करें।

### Bengali

আপনি যদি এই মণিলের একটি সারাংশ নিজের ভাষায় পেতে চান, তাহলে পরা করে যোগ করবেন অথবা উল্লিখিত ডাক ঠিকানা বা ই-মেইল ঠিকানায় আমাদের সাথে যোগাযোগ করবেন।

### Urdu

اگر آپ کو اس دستاویز کا خلاصہ اپنی زبان میں درکار ہو تو، براہ کرم نمبر پر فون کریں یا مذکورہ بالا ڈاک کے پتے یا ای میل پتے پر ہم سے رابطہ کریں۔

### Arabic

الحصول على ملخص لهذا المستند بلغة،  
فارجاء الاتصال برقم الهاتف أو الاتصال على  
العنوان البريدي أو عنوان البريد  
الإلكتروني أعلاه.

### Gujarati

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