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Any communication on the  
subject of this letter should  
be addressed to :—

The Under Secretary of State  
Home Office  
(Fire Brigades Division).  
Cleland House.  
Page Street,  
London, S.W.1.

and the following number  
quoted :—

HOME OFFICE,  
CLELAND HOUSE,  
PAGE STREET,  
LONDON, S.W.1.



F.B.GEN.16/11.

26th June, 1940.

Sir,

Addenda to F.B.Circular No.61/1940.  
Ship Fires.

In continuation of paragraph 33 of the Home Office Memorandum on the subject of fires in ships transmitted with F.B.Circular No.61/1940 of 29th May, 1940, I am directed by the Minister of Home Security to forward, for your information, the accompanying copies of a note, prepared by the Ministry of Shipping, dealing with precautions against ships on fire capsizing in dock, and of an earlier Admiralty memorandum referred to therein. Copies of this note and memorandum have been circulated by the Ministry of Transport to Port Emergency Committees and to the Dock and Railway Authorities who may be interested.

I am, Sir,  
Your obedient Servant,

*J.B. Macdher*

The Clerk of the London County Council,  
The Town Clerk,  
The Clerk to the Council,  
The Chief Officer of the Fire Brigade.

Copies for information sent to Chief Constables  
in England and Wales.



SHIP FIRES (Ministry of Shipping Note).

PRECAUTIONS AGAINST CAPSIZING IN DOCK.

The attention of those concerned with the fighting of fire aboard ships in dock has already been drawn by the Admiralty Memorandum distributed by the Ministry of Transport in November, 1939, to the danger that a ship on fire in harbour may be capsized by the top weight resulting from the flooding of higher docks and compartments by fire hoses.

The Memorandum recommended that in view of this risk vessels seriously on fire should be scuttled or preferably beached and then scuttled while the fire fighting continued unless there are important reasons to the contrary.

The object of this Note is to afford guidance as to the conditions of submersion that offer a reasonable safeguard against capsizing, and thus to assist the Officers concerned in deciding whether a ship on fire should be removed or may be allowed to remain unless other reasons dictate her removal. In dealing with ship fires in docks it is of the utmost importance that there should be close co-operation between the fire-fighting officers and the dock officers in order to avoid the possibility of interference with the working of the port through the blocking of docks and fairways by a capsized ship; and immediate co-operation with the ship's officers must be sought in regard to the measures to be taken to prevent this.

It may be necessary to subordinate fire-fighting requirements to the question of the safe disposition of the burning ship which may be endangered by an accumulation of water on board from rapid and indiscriminate pumping.

Generally there will be no serious risk of a ship capsizing if the water introduced for fighting the fire can be confined wholly to one main water-tight compartment below deck, but when this is impossible, prompt decisions have to be made to prevent capsizing and the following comments are circulated for guidance.

- (1) If a ship can be given sufficient bodily sinkage rapidly to bring her keel at amidships to within a distance from the dock bottom not exceeding about one ninth of her breadth by flooding a single main watertight compartment, and this can be started at an early stage of the outbreak before large quantities of water have accumulated in her different parts, the risk of the ship being subsequently capsized will be remote. For a cargo ship of full form, especially of she has a large trim, a somewhat greater depth of water under her keel amidships, approaching one eighth of her beam, may be considered a sufficient safeguard.
- (2) If the amount of sinkage indicated above cannot be achieved by flooding a single compartment or if the operation would be prolonged, the risk of capsizing may be serious and it would be advisable to move the ship away from dock entrances and fairways and, if possible, to beach her. Ships with sharply rising bottoms, such as trawlers should be beached in all cases, preferably on soft ground to prevent capsizing.
- (3) The ship's officers will generally be in a position to advise which compartment is the most suitable for flooding, what weight of water can be admitted, what sinkage it will produce and what means are available for flooding the compartment. As flooding a compartment through its bilge suctions will usually be slow, flooding the machinery spaces through their bilge injections will generally be the quicker method of submersion.
- (4) If the dock bottom at a ship's berth slopes outward from the quay and there is a danger that the ship may be tipped outward and possibly capsized if she settles down, the advantages of pulling one end well out from the quay should be considered



in a case where it may not be necessary to move the ship altogether.

(5) All sidescuttles (including their deadlights), cargo ports and other openings in the ship's sides, and, as far as possible, openings in the deck, should be closed, immediately on an outbreak of fire or in the case of bombing attack, irrespective of whether the ship is to be scuttled.

(6) The risk of a ship being capsized if a fire occurs may be lessened beforehand by filling the water ballast compartments on arrival in port. A further safeguard would be to give the ship a slight list towards the quay and maintain this while alongside.

Ministry of Shipping.

June 20th, 1940.

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MEMORANDUM (Admiralty, November, 1939).

Passive Defence against Air Attack.

Precautions in Docks and Harbours.

When a ship is in dock or is moored against a wharf or quay the following precautions should be observed:-

- (a) Steam should be kept in the main boilers sufficient to enable the ship to be shifted under her own power at short notice. (Before opening up important machinery the Port A.R.P. authorities should be consulted.)
- (b) So far as the work of loading or discharging allows, all watertight compartments should be kept closed.
- (c) Experience in salving Merchant Vessels sunk in Spanish ports by air attack has shown that difficulties in plugging leaks may arise through divers being unable to squeeze into the narrow space between the ship's side and the quay wall. To obviate this contingency ships lying alongside dock or quay walls in ports liable to air attack should at all time (if possible) be held fended off to a distance of six feet by suitable wooden fenders.
- (d) Whenever possible the ship should be listed against the dock side, wharf or quay so that if she were holed she would not turn outwards and possibly block the fairway.
- (e) Ships on fire in harbour may easily be capsized by the top weight resulting from the flooding of higher decks and compartments by fire hoses. This occurred in the case of the liner "Paris" at Havre and may disorganise the work of the Port. Vessels seriously on fire should therefore be scuttled or preferably beached and then scuttled as soon as possible while fire fighting continues unless there are important reasons to the contrary.