

**CHAPTER 26****NAVAL BASES AND MILITARY PORTS****CONTENTS**

## Para

- 1 NAVAL BASES AND MILITARY PORTS
    - 1.1 Introduction
  - 2 RESPONSIBILITIES
    - 2.1 Site Duty Holders
    - 2.2 Site Explosives Safety Representative
    - 2.3 Government Authorised Explosives Representative
    - 2.4 Commanding Officer of Visiting HM Ships
    - 2.5 Ship's Explosive Responsible Officer
  - 3 RELATIONSHIPS
    - 3.1 Naval Base and the Local Munitions Establishment
    - 3.2 Relationship with Contractors
  - 4 SPECIFIC EXPLOSIVES ISSUES
    - 4.1 Explosives Licences
    - 4.2 Explosives Handling
    - 4.3 Naval Armament Lighters
    - 4.4 Small Quantity Top Ups
    - 4.5 Maintenance and Repair Periods
  - 5 EMERGENCY ARRANGEMENTS
    - 5.1 Introduction
    - 5.2 Accident, Incident, Fault and Performance Failure Reports
  - 6 SEA MOUNTING CENTRE (SMC) MARCHWOOD
    - 6.1 General
  - 7 PUBLIC EVENTS IN NAVAL BASES AND MILITARY PORTS
    - 7.1 Introduction
- Annex
- A Management of Explosives Licences
  - B Explosives Handling
  - C Naval Armament Lighters
  - D Maintenance and Repair Periods
  - E Emergency Arrangements
  - F Public Events in Naval Bases and Military Ports

## **1 NAVAL BASES AND MILITARY PORTS**

### **1.1 Introduction**

1.1.1 This Chapter refers to HM Naval Bases (UK and Gibraltar), SMC Marchwood, Mare Harbour (British Forces Falklands Islands), Cyprus, DM jetties, explosives licensed berths/buoys situated within the confines of a Naval Port Authority and any Port Operations established by the UK Military Forces overseas. This chapter should be read in conjunction with JSP 800 Vol 4(b) (Transport of Dangerous Goods by Road, Rail and Sea Regulations), JSP 862 (MOD Maritime Explosives Regulations (MMER's) and other relevant chapters of this publication.

## **2 RESPONSIBILITIES**

### **2.1 Site Duty Holders**

2.1.1 Within the Port Area, as defined by the appropriate Port Order, the Naval Base Commander (NBC) or Military Port Commandant (MPC)/Director, in the context of this Chapter known as the Site Duty Holder, has responsibility for protecting all personnel from the consequences of any accident involving MOD owned or MOD controlled explosives (See also Chapter 3). This includes explosives moved within their geographical area of responsibility, both afloat and ashore. It also includes explosives stored within the Naval Base or defined Military Port area, including that held by lodger units. The Duty Holder also exercises overall responsibility for sanctioning the presence of vessels carrying explosives within the Port Area. On board explosives safety remains the responsibility of the Ship's Commanding Officer.

2.1.2 For UK warships carrying explosives in the quiescent state, the Warship in Harbour Regulations and Procedures are to be followed to ensure explosives risks to third parties in the harbour environment are both tolerable and As Low As Reasonably Practicable (ALARP). These are detailed in JSP 430 Chapter 8, supplemented on an interim basis, by Naval Authority Notice 10/2005.

2.1.3 Quiescent state is defined as all explosives, other than those required for ships security in harbour or sea safety, remaining in their dedicated stowages within the vessel and neither worked or moved throughout the period the vessel is alongside. JSP 862 Article 0801 also refers. The use of Ship in this Chapter applies to Submarines except where stated.

### **2.2 Site Explosives Safety Representative**

2.2.1 The Site Duty Holder must appoint an Explosive Safety Representative (ESR) in accordance with Chapter 3, who is responsible for ensuring the safe preparations for loading, unloading, ammunitioning, de-ammunitioning of all vessels in the port area. Managing explosives safety is a key business objective and therefore the ESR must be afforded "key post" status. The ESR is also responsible for advising Lodger Units and Service Providers on explosives safety and ensuring that they comply fully with JSP 482 and other regulations, as appropriate.

### **2.3 Government Authorised Explosives Representative**

2.3.1 A Government Authorised Explosives Representative (GAER), or Authorised Representative (AR), is responsible for the safe movements of all explosives by road and rail, in accordance with JSP 800 Vol 4(b).

### **2.4 Commanding Officer of Visiting HM Ships**

2.4.1 The Commanding Officer of a visiting ship is required to ensure that full compliance with JSP 862 regulations for the safety of embarked explosives is maintained whilst present in the Port area.

2.4.2 In time of war the Site Duty Holder will give instructions concerning the manning of defensive armament and for the retention of ammunition for the protection and safety of the ship whilst in Military Ports.

## **2.5 Ship's Explosives Responsible Officer**

2.5.1 All MOD maritime vessels have nominated in their complement an Explosives Responsible Officer (ERO), an officer designated in accordance with JSP 862, who ensures that all regulations for the safety of explosives held on board ship are enforced at all times.

2.5.2 The duties of the ship's ERO detailed in JSP 862 demonstrate in particular the officer's involvement with the explosives activities and associated safety considerations, which interface with the Naval Base / Military Port.

## **3 RELATIONSHIPS**

### **3.1 Naval Base and the Local Munitions Establishment**

3.1.1 A munitions establishment located adjacent to a Naval Base will operate in the afloat environment under the jurisdiction of the NBC. No movements of explosives by water are permitted without the authority of the Queen's Harbourmaster acting on behalf of the NBC. No ammunitioning or de-ammunitioning activities including collection and return of explosives stores, is to be conducted by the depot staff, without this prior authority.

3.1.2 Such establishments are accountable to NBC for explosives handling in harbour from when the lighter leaves alongside, up until the point when the stores are safely grounded on the deck of the ship (or in the case of submarines, the weapon is positioned on the weapons embarkation rail), as detailed in JSP 862.

### **3.2 Relationship with Contractors**

3.2.1 The MOD, in common with other employers, has obligations to its own employees under Section 2 of the Health & Safety at Work Act 1974, and additionally under Section 3 and 4 of the Act to the employees of other parties involved in work on MOD property. Obligations under these latter Sections require Site Duty Holders to make contractors personnel aware of any specific explosives hazards and for the same exchange of information from contractors to the MOD (See also Chapter 18).

## **4 SPECIFIC EXPLOSIVES ISSUES**

### **4.1 Explosives Licences**

4.1.1 The authority for licensing within Naval Bases and UK Military Ports is Inspector Explosives (IE) DE&S. IE (DE&S) has a letter of delegation from CIE (MOD) and is responsible for the licensing of all DM sites that store, handle or process explosives. Certain military ports overseas are licensed by the appropriate Service IE, under similar letters of delegation from CIE (MOD). Details of the Explosives Licensing criteria for Naval Bases and Military Ports can be found in Chapter 10, Section 4. Safeguarding is covered in Chapter 22. Duty Holder management of explosives licences is covered at Annex A.

### **4.2 Explosives Handling**

4.2.1 The handling and movement of explosives in Naval Bases and Military Ports is closely regulated. The need for this close regulation detailed in Annex B and JSP 862 stems from the complex and concurrent interaction of hazardous operations found in modern ports.

### **4.3 Naval Armament Lighters**

4.3.1 Annex C covers the movement of munitions by contractors in Naval Armament Lighters (NALs).

#### **4.4 Small Quantity Top Ups (SQTU)**

4.4.1 Small quantity top-ups of ammunition are permitted by prior approval of the Site Duty Holder at both licensed and unlicensed berths in Naval Bases and Military Ports. For further details see Annex B.

#### **4.5 Maintenance and Repair Periods**

4.5.1 HM Ships, Submarines, RFA's and RMAS vessels that are required to dry dock are to comply fully with the Regulations laid down at Annex D and JSP 862.

### **5 EMERGENCY ARRANGEMENTS**

#### **5.1 Introduction**

5.1.1 Emergency arrangements for Military Ports are to be established in accordance with Annex E, JSP 375 Volume 2 Leaflet 1 and JSP 498, if a MACR qualifying Establishment.

#### **5.2 Accident, Incident, Fault and Performance Failure Reports**

5.2.1 A regime of accident, incident, fault and performance failure reporting is to be implemented in accordance with JSP 375 and JSP 482 Chapter 25.

### **6 SEA MOUNTING CENTRE (SMC) MARCHWOOD**

#### **6.1 General**

6.1.1 The Sea Mounting Centre (SMC) at Marchwood is a strategic rail/road served facility, tasked through Defence Transport and Movement Agency, with the prior agreement of the Site Duty Holder, for the inload/outload of a range of military stores, including bulk explosives in support of the UK military effort.

6.1.2 The 17 Port and Maritime Regiment RLC provide manpower for port related activities within the SMC and undertake training on site, in readiness for deployment overseas.

6.1.3 SMC can effectively be described as a transit point for explosives and local procedures have been developed, where delivery and clearance from the port is achieved on the day of embarkation/disembarkation.

6.1.4 SMC is the home berth for the Landing Ship Logistics (LSL) Class and provides a facility for the embarkation/disembarkation of ammunition for HMS Ocean, Albion Class Ships and other warships, as required.

### **7 PUBLIC EVENTS IN NAVAL BASES AND MILITARY PORTS**

#### **7.1 Introduction**

7.1.1 The designated Heritage Areas in military Ports are subject to the additional Regulations laid down in Annex F. This Annex also deals with Public Events in a Military Port area.

**CHAPTER 26****ANNEX A****MANAGEMENT OF EXPLOSIVES LICENCES****CONTENTS**

Para

- 1 MANAGEMENT OF EXPLOSIVES LICENCES
- 1.1 Handling of Explosives in Naval Bases and Military Ports
- 1.2 Notification of ENEQ
- 1.3 Building Register
- 1.4 Explosives Licences
- 1.5 Occupancy of Licensed Berths
- 1.6 Authorised Quantity Explosives Licences

**1 MANAGEMENT OF EXPLOSIVES LICENCES****1.1 Handling of Explosives in Naval Bases and Military Ports**

1.1.1 As the Explosives Licence holder for the berths and buoys within the Port Area the Site Duty Holder and, where appropriate, his nominated ESR are to:

- (1) Ensure that numbers of personnel for explosives buildings, areas, berths, jetties and buoys are the minimum required, commensurate with carrying out the task safely.
- (2) Ensure that no facility or site is used for the storage or handling of explosives without an Explosives Licence, excepting Hazard Division (HD) 1.4 and Small Quantity Top-Ups (SQTU's) conducted at Unlicensed Berths, in full compliance with Annex B and JSP 862.
- (3) Maintain the integrity of the safeguarded zone around ammunitioning buoys and other approved explosives handling facilities in accordance with Chapter 22.
- (4) Maintain, in conjunction with the respective Inspector of Explosives, charts, maps or drawings showing the location of all buildings and distances to public traffic, ferry routes, shipping lanes, inhabited and uninhabited buildings on and off MOD property relevant to approved licences for the explosives facilities in the site.
- (5) Annually review Safe Systems of Work.
- (6) Establish and maintain an appropriate site-specific scheme of firefighting to meet all contingencies in accordance with JSP 482.
- (7) Maintain operating procedures to take account of local conditions to supplement national or other orders, affecting the operation of the site.
- (8) Implement a regime of accident, incident, fault and performance failure reporting in accordance with JSP 375 and JSP 482 Chapter 25.
- (9) Ensure vessels/crafts are berthed or moored, in full compliance with JSP 430 Volume 1 Chapter 8, supplemented on an interim basis by NAN 10/2005.

- (10) Ensure vessels/crafts are berthed in non-tidal basins, or dry dock in full compliance with Annex D and JSP 862.
- (11) Establish and maintain a programme for emergency exercises, based on an explosives incident, involving the local emergency services, in accordance with JSP 375 Volume 2 Leaflet 1, JSP 498 (if a MACR site) and Chapter 15.

## 1.2 Notification of Effective Net Explosives Quantity (ENEQ)

1.2.1 Information concerning the Ship Effective Net Explosive Quantity of HM Ships/Submarines, RFAs, RMAS vessels and civilian chartered vessels is required before berthing to enable the Site Duty Holder to allocate an appropriate berth. This information will be provided by the ship to the host Site Duty Holder via the LOGREQ Signal/Cargo and Stowage report and can be calculated using the Naval authority Explosives (NAExp) distributed ENEQ Calculator. Where a copy of the ENEQ calculator is not held then the vessel will use the aggregated Net Explosive Quantity (NEQ) of all HD1.1, 1.2 and 1.3 munitions held on board.

## 1.3 Building Register

1.3.1 Explosives Limits within the Site may be constrained by the presence of numbers of people in nearby offices, workshops, other inhabited buildings and places of assembly. It is imperative, therefore, to have an up to date record of all facilities, which could influence potential explosives limits within the Naval Base. In this respect, and in support of the Site Safety Case for Warships in Harbour (NBSSC (WIH)), a Building Register is to be produced and maintained by an officer nominated by the NBC/MPC, providing, as a minimum, the information detailed below. The Register will be made available to the Inspector of Explosives (IE) annually and the Warships in Harbour (WIH) Regulator, where appropriate.

- (1) Building / Facility No.
- (2) Description.
- (3) Vital / Non Vital.
- (4) Capacity occupancy.
- (5) Working Hours occupancy.
- (6) Silent Hours occupancy.

## 1.4 Explosives Licences

1.4.1 With certain exceptions for the most sensitive licences, the responsibility for authorising explosives licences for berths, buoys, anchorages and trots in Naval Bases and Military Ports has been delegated by CIE (MOD) to the respective Inspectors of Explosives. The licence will take into account the risks associated with the handling of explosives during embarkation and disembarkation. Chapter 9 and Chapter 10 Section 4 refer.

## 1.5 Occupancy of Licensed Berths

1.5.1 Other than warships, covered under the Warships in Harbour quiescent state (see Chapter 26 para 2.1.3) vessels/craft carrying explosives must be berthed or moored at suitably licensed sites. This licensing requirement also extends to berths/buoys occupied by warships, when intending to handle explosives. Berths and Moorings for vessels/craft carrying and intending to handle explosives should be selected to comply with the appropriate licences. The management of the allocation of explosives licensed berths is the responsibility of the Site Duty Holder, who will ensure that such licensed berths and moorings are not occupied inappropriately. No vessel/craft is to be berthed alongside a jetty without the permission of the Site Duty Holder.

**1.6 Authorised Quantity Explosives Licences**

1.6.1 The regulations regarding Authorised Quantity Explosives Licences are described in Chapter 10.

**Intentional Blank Page**



**CHAPTER 26****ANNEX B****EXPLOSIVES HANDLING****CONTENTS**

## Para

- 1 EXPLOSIVES HANDLING
  - 1.1 Introduction
  - 1.2 Responsibilities
- 2 MOVEMENT OF EXPLOSIVES WITHIN NAVAL BASES AND MILITARY PORTS
  - 2.1 Introduction
  - 2.2 The Safe Handling of Explosives Alongside
  - 2.3 Handling Precautions During Embarkation/Disembarkation to/from Ships and Lighters
  - 2.4 Control of Non Essential Personnel on Vessels During Explosives Evolutions
  - 2.5 Alongside Berths
- 3 SMALL QUANTITY TOP UPS
  - 3.1 Introduction
  - 3.2 SQTU Alongside - Permitted Relaxation Berths
  - 3.3 SQTU Alongside - Unlicensed Berths
- 4 OTHER CONSIDERATIONS
  - 4.1 Forward Operating Bases
  - 4.2 Cranes Used To Embark/Disembark Munitions
  - 4.3 Electrical Equipment Installed on Jetties
  - 4.4 Thunderstorms

## Appendix

- 1 Interfaces Throughout the Lifecycle of a Conventional Naval Explosive

**1 EXPLOSIVES HANDLING****1.1 Introduction**

1.1.1 Explosives are not to be moved within a Naval Base or Military Port without the authority of the Site Duty Holder. Except for Small Quantity Top Ups (SQTU) of less than 10Kg Net Explosive Quantity (NEQ) (See para 3.3), explosives must only

be handled, embarked to and disembarked from HM Ships, Submarines, RFAs and Civilian Chartered vessels in Naval Bases and Military Ports at licensed explosives sites. Before working, embarking and disembarking explosives, even for quantities of less than 10kg NEQ, vessels are to obtain prior approval of the Site Duty Holder using the signal format in FLAGO Chapter 20. Apart from small arms ammunition of HD 1.4S, the simultaneous handling of explosives and fuel or flammables in harbour is not permitted.

## 1.2 Responsibilities

1.2.1 The responsibilities for the safe movement of explosives are:

- (1) The Site Duty Holder, as the explosives licence holder, is responsible for ensuring that all explosives activities are conducted strictly in accordance with the conditions specified on the licence. The Site Duty Holder has functional authority over all users and participants in the movement of explosives within the Site.
- (2) The Site Duty Holder has responsibility for the movement of explosives up to the point when the stores are onboard and in the charge of the ships personnel and conversely, at de-ammunitioning, from the point when the stores are removed from the ship.
- (3) The consignor is to seek prior approval from the Site Duty Holder on all occasions when explosives are moved by road through the site. Exceptionally, EOD Lodger Units in their normal business are dis-applied.

## 2 MOVEMENT OF EXPLOSIVES WITHIN NAVAL BASES AND MILITARY PORTS

### 2.1 Introduction

2.1.1 The Site Duty Holder has responsibility for protecting the public from any MOD initiated event, which may cause harm or injury. The movement of explosives has the potential for such an event. The Site Duty Holder has functional authority over all users and participants in the movement of explosives stores within the geographical area of his responsibility, for the purposes of both prescribing and adhering to the requirements of explosives safety associated with all risks carried out in that area.

2.1.2 The movement of explosives within Naval Bases and Military Ports must be kept to an absolute minimum commensurate with the As Low As Reasonably Practicable (ALARP) principle and Operational requirements. Any such movements by water must at all times be notified to the Queen's Harbourmaster. For explosives that are being loaded prior to movement on public roads, JSP 800 Vol 4(b) (Transport of Dangerous Goods Regulations) must be applied.

2.1.3 An effective control system must also be established to ensure that contractors are not able to deliver explosives to a non-explosives storehouse or move explosives through the site without prior approval from the Site Duty Holder. This will require informed scrutiny of vehicle documentation and consignment notes at the site entry point, together with operation on the 'Can Consignor Accept' (CCA) principles, as detailed in JSP 800 Vol 4(b).

### 2.2 The Safe Handling of Explosives Alongside

2.2.1 Evolutions (the embarkation or disembarkation or onboard working of explosives) are to be subject to Safe Systems of Work. The risk is to be reduced to a level that is ALARP to protect personnel, munitions, vessels and infrastructure.

2.2.2 Complex Weapons (Missiles and Torpedoes) are more susceptible to physical damage than most other armament stores and are to be handled with particular care by weapon handling parties. In many munitions there is a risk of deflagration or explosion if they are penetrated by a sharp object/spigot. Replenishment in Harbour (RIH) procedures have been developed and published by Chap 26 Annex B

Jan 2013

DM Head Office and take account of various trials undertaken to establish the effect of a drop onto a spigot or Response to Attack on Ammunition (RATTAM). Specific handling trials are undertaken that develop and prove safe methods of handling. RIH guides are to be used.

### **2.3 Handling Precautions During Embarkation/Disembarkation to/from Ships and Lighters**

2.3.1 Where unpackaged explosives are to be lifted over an area presenting risks from projections, consideration should be given to the use of shot mats.

### **2.4 Control of Non Essential Personnel on Vessels During Explosives Evolutions**

2.4.1 Only essential personnel are to be onboard any vessel which is embarking, disembarking or working explosives. Commanding Officers may, at their discretion and when the work is urgent, allow workmen onboard for a particular purpose, provided that they are kept clear of all ammunition routes or compartments containing explosives and there is no "Hot Work" Permit involved.

2.4.2 Where reasonably practicable, explosives natures other than Hazard Division (HD) 1.4 should not be handled by ships which are double or triple berthed. Where, exceptionally, this is unavoidable, the Commanding Officer(s) of the non-handling vessel(s) must be made aware of the evolution and minimise exposure of personnel to risk. This is of particular importance if cross-decking of explosives to or from an outboard vessel is proposed.

2.4.3 Physical access restrictions should be applied to the adjacent jetty area to ensure that non involved personnel are excluded while explosives natures other than HD 1.4 are being handled.

### **2.5 Alongside Berths**

2.5.1 Warships are not required to occupy an explosives licensed berth because of their exemption under the Dangerous Substances in Harbour Areas Regulations (DSHAR). Explosives need not therefore be removed when berthing/berthed alongside. However explosives other than Hazard Division 1.4 may not be handled or moved alongside except for the purpose of permitted embarkation or disembarkation in strict accordance with the appropriate Explosives Licence, JSP 862 or as indicated in JSP 862 Ship Explosives Store Safety Instruction (SEXSSI) for specific stores. Any operationally essential exceptions to this rule must be specifically approved by Inspector of Explosives (DE&S).

2.5.2 Before arriving in a Naval Base or Military Port, gun bays and ready use magazine lockers are to be emptied of explosives and returned to their appropriate main magazine, excepting those munitions to be disembarked under SQTU regulations. All explosives which cannot be properly stowed in their main magazine stowage are to be returned to the nearest Munitions Depot before occupying the alongside berth. However, if operational circumstances dictate that munitions cannot be struck down, the Commanding Officer of the vessel is to request a temporary dispensation from the Site Duty Holder.

2.5.3 When HM Ships, Submarines, RFAs or RMAS vessels berth in Naval Base non-tidal basins, explosives other than those required to be held on board for use in an emergency or Ships Protection may only be retained on board by permission of the Site Duty holder. However, in wartime and, when ordered, at high degrees of readiness during an operational deployment in peacetime, close range weapons may be required to keep their ammunition on the mounting and even loaded into the gun (JSP 862 Chapter 6).

2.5.4 In granting such approval the Site Duty Holder must make an assessment of the risk taking into consideration the following:

- (1) Explosives must be landed if there is no effective means of operating the ship's fire main or satisfactory alternative available from Naval Base sources.

- (2) The ship's company is required to be retained at sufficient strength to comply with the regulations contained in JSP 862 or International Maritime Dangerous Goods Code (IMDG). If there is any chance that this cannot be achieved then explosives are to be landed before personnel are withdrawn. This is particularly relevant to Minor War Vessels during leave periods and the Site Duty Holders should issue the necessary directives to Ships Commanding Officers.
- (3) Any special precautions are to be identified in accordance with JSP 862 Volumes 1 and 2, and IMDG respectively.

### **3 SMALL QUANTITY TOP UPS (SQTU)**

#### **3.1 Introduction**

3.1.1 During embarkation and disembarkation operations, no explosives stores other than those to be embarked or disembarked are to be handled in any way.

#### **3.2 SQTU Alongside - Permitted Relaxation Berths**

3.2.1 Many Naval Base berths have a Permitted Relaxation Licence that allows a Small Quantity Top Up. The criteria for authorising a SQTU at a licensed berth and the maximum NEQ's by Hazard Division allowed can be found at Chapter 10 Section 4 Annex C.

#### **3.3 SQTU Alongside - Unlicensed Berths**

3.3.1 A limited SQTU may also be undertaken with prior approval of the Site Duty Holder at unlicensed berths provided the conditions laid down in JSP 862 Chapter 7 are met. These operations are permitted under DSHAR. The reduced NEQ's and additional restrictions to be followed can be found at Chapter 10 Section 4.

3.3.2 The Commanding Officer of the vessel remains responsible for ensuring that compliance with the JSP 862 regulations for the safety of embarked explosives is maintained.

### **4 OTHER CONSIDERATIONS**

#### **4.1 Forward Operating Bases**

4.1.1 At military harbours and ports overseas, the handling and conveyance of explosives may be governed by Host Nation regulations. In the absence of specific regulations on handling/conveyance of explosives in such facilities, HoEs/COs are to be guided by the regulations applicable to military ports and harbours in the United Kingdom (see also JSP 800 Vol 4(b) for conveyancing of explosives on public roads). HoEs/COs will comply with the UK Explosives Regulations, in addition to host nation standards, as far as reasonably practicable.

#### **4.2 Cranes Used To Embark/Disembark Munitions**

4.2.1 See Chapter 16 Paras 4.8.

#### **4.3 Electrical Equipment Installed on Jetties**

4.3.1 See Chapter 8.

#### **4.4 Thunderstorms**

4.4.1 In the event of an imminent thunderstorm (where the Met Office warning system is in use, this is a Met Office Level 1 risk warning), explosives evolutions must be suspended.

CHAPTER 26 ANNEX B APPENDIX 1

**INTERFACES THROUGHOUT THE LIFECYCLE OF A CONVENTIONAL NAVAL EXPLOSIVE**

<b>REGULATIONS</b> JSP 482 / JSP 800 Vol 4(b)	JSP 430	JSP 430	JSP 482	JSP 430 / JSP 862	JSP 482 / JSP 800 Vol 4(b)	
<b>REGULATOR</b> IE (DE&S)	NA EXP	NA EXP	IE (DE&S)	NA EXP	IE (DE&S)	
<b>DUTY HOLDER</b> DM	NBC	NBC	NBC	PDH (Platform Duty Holder)	NBC	
<b>NAEAC</b> ADVISORY	ADVISORY	ADVISORY	ADVISORY	ADVISORY	ADVISORY	
1	2	3	4	5	6	7
STORAGE & HANDLING AT LICENSED SITE	MUNITION TRANSIT	MUNITION TRANSIT – MOORING AT BUOY	4 – AMMUNITIONING AT SEA 5 – RISKS FROM MUNITIONS IN QUIESCENT STATE STOWED IN WARSHIPS ALONGSIDE		6 – AMMUNITIONING ALONGSIDE (SQTU) 7 – AMMUNITIONING BY CRANE ALONGSIDE	

**Intentional Blank Page**

**CHAPTER 26****ANNEX C****NAVAL ARMAMENT LIGHTERS****CONTENTS**

Para

- 1 NAVAL ARMAMENT LIGHTERS
  - 1.1 Storage of Explosives on Naval Armament Lighters
  - 1.2 Operations During Hours of Darkness
  - 1.3 Hazard Division Signs
  - 1.4 Training of Tug Masters and Crews
  - 1.5 Emergency Procedures for Naval Armament Lighters in Tow
  - 1.6 Emergency Procedures for Moored Naval Armament Lighters

**1 NAVAL ARMAMENT LIGHTERS****1.1 Storage of Explosives on Naval Armament Lighters**

1.1.1 Lighters that have explosives embarked are only to be moored at licensed berths and in accordance with the licence prescriptions.

**1.2 Operations During Hours of Darkness**

1.2.1 Only those lighters that have been fitted with an approved lighting system are to be used during hours of darkness.

**1.3 Hazard Division Signs**

1.3.1 When lighters are loaded with explosives they are to show the correct hazard division signs at all times.

**1.4 Training of Tug Masters and Crews**

1.4.1 Masters and crews of tugs engaged in the towage of Naval Armament Lighters (NAL) are responsible for the safe transit of the vessels and cargo in the port. They must receive information and training relating to explosives safety and associated local procedures to a level prescribed by the Site Duty Holder and implemented by Defence Munitions acting on behalf of the Site Duty Holder. The training shall be recorded and refreshed at not more than 3 yearly intervals.

**1.5 Emergency Procedures for Naval Armament Lighters in Tow**

1.5.1 The Site Duty Holder remains responsible for Explosives safety whilst a NAL is in transit in the Harbour. Shipborne Emergency procedures for the mitigation of a serious incident whilst a Naval Armament Lighter containing explosives is under tow shall be agreed with the MoD NAL Regulator and Site Duty Holder. They will be applied by the Queen's Harbour Master, acting on behalf of the Site Duty Holder.

1.5.2 The Site Duty Holder has a responsibility to conduct Emergency Procedure exercises and review them at least annually, to ensure a requisite level of safety in the harbour domain. Where there is more than one duty holder within a harbour area, they should liaise on exercises.

**1.6 Emergency Procedures for Moored Naval Armament Lighters**

1.6.1 The Site Duty Holder is responsible for the development and promulgation of the Emergency Procedures to be adopted when NAL's are moored.

**Intentional Blank Page**



**CHAPTER 26****ANNEX D****MAINTENANCE AND REPAIR PERIODS****CONTENTS**

Para

- 1 MAINTENANCE AND REPAIR PERIODS
  - 1.1 Care of Explosives on Board During Maintenance and Repair Periods
  - 1.2 Retention of Explosives on Board During Dry Docking
  - 1.3 Emergency Docking
  - 1.4 Emergent Work
  - 1.5 Damaged Vessels

**1 MAINTENANCE AND REPAIR PERIODS****1.1 Care of Explosives on Board During Maintenance and Repair Periods**

1.1.1 If it is necessary to retain explosives on board during Maintenance and Repair Periods in which Military Port or contractors' workmen are employed on board, the precautions laid down in JSP 862 Volumes 1 and 2 are to be observed for work in magazines or adjacent compartments.

**1.2 Retention of Explosives on Board During Dry Docking**

1.2.1 When HM Ships, Submarines, RFA or RMA vessels proceed into dry dock, they are to be free of explosives. Explosives may only be retained on board in exceptional circumstances by permission of the Site Duty Holder, having sought Naval Authority Explosives (NA Exp) advice, in accordance with JSP 862 and FLAGO Chapter 20. Commanding Officers of HM Ships, RFAs and RMA vessels remain responsible for ensuring that the regulations for the safety of embarked explosives are maintained. Where the integrity of magazine safety systems may be compromised, then the appropriate magazine is to be emptied of all explosive items.

1.2.2 To ensure that a Safe System of Work is maintained when in a Military Port, Commanding Officers of HM Ships, RFAs and RMA vessels are to fully comply with the instructions contained in JSP 862 Volumes 1 and 2.

**1.3 Emergency Docking**

1.3.1 Occasionally HM Ships/Submarines are required to dock during operational periods for the undertaking of emergency repairs or inspections. These dockings are categorised by a short notification period and are to be of a short duration with the work undertaken confined to specific areas. In such cases explosives may be retained on board provided that:

- (1) A Risk Assessment for the specific work package has been conducted by the CO of the docking vessel and advice sought from key stakeholders (at a minimum the Platform PT, NA Exp and vessel ERO are to be consulted.) It is the responsibility of the Site Duty Holder to ensure that this has been undertaken.
- (2) The relevant regulations in JSP 862 Volumes 1 and 2 can be applied.
- (3) Prior approval is obtained from the Site Duty Holder in accordance with FLAGO Chapter 20 and JSP 862.

1.3.2 When conducting the Risk Assessment, factors such as the extent of work, maintenance of temperatures in magazines and lockers, capability to jettison and the

continued provision of magazine safety systems, when compared with the risks associated with disembarkation and subsequent re-embarkation of the munition, are among those to be considered before the retention on board or the landing of all or part of a ships outfit of explosives is ordered.

#### **1.4 Emergent Work**

1.4.1 Should additional work emerge during the course of the approved work package, the Risk Assessment is to be updated and authorised by all the original stakeholders, to ensure that the safety of explosives is not compromised before the emergent work begins. The only exception to this rule is when delaying the work would threaten the safety of personnel, when the Site Duty Holder may authorise the emergent work package.

#### **1.5 Damaged Vessels**

1.5.1 An emergency that requires a vessel to dry dock during Fleet Time is an exceptional event. This may mean the vessel has suffered significant damage which has rendered the vessel incapable of offloading weapons at a buoy or jetty. Consideration should however be given to a partial offload should circumstances allow. A Safety Case endorsed by the Site Duty Holder should be produced and reviewed by Platform PT, Fleet and NA Exp prior to docking down. The only exception to this rule is when delaying the work would threaten the safety of personnel.

**CHAPTER 26****ANNEX E****EMERGENCY ARRANGEMENTS****CONTENTS**

Para

- 1 EMERGENCY ARRANGEMENTS
  - 1.1 Introduction
  - 1.2 Emergency Exercises
  - 1.3 Damaged Ships
  - 1.4 Casualty Weapons
  - 1.5 Emergency Movements of Ships Carrying Explosives from Jetties and Moorings
  - 1.6 Standby Tugs
  - 1.7 Safety of the Ship

**1 EMERGENCY ARRANGEMENTS****1.1 Introduction**

1.1.1 Emergency arrangements for Naval Bases and Military Ports are to be established in accordance with JSP 375 Volume 2 Leaflet 1 and JSP 498, if a MACR qualifying Establishment.

**1.2 Emergency Exercises**

1.2.1 In order to test and maintain the efficiency of Establishment /Local Authority Fire and Rescue Service (LAFRS) arrangements, test calls and joint fire brigade exercises should be arranged by the Site Duty Holder at six monthly intervals, where practicable, but in any case, at intervals not greater than 12 months. In the event that financial constraints imposed on LAFRS preclude their involvement in these exercises, the relevant IE should be notified, to ensure that a senior member of the fire brigade concerned is invited to visit the unit, in lieu of a full scale fire practice, in order to be acquainted with any changes to explosives licensed sites or associated fire plans. For MACR qualifying sites, the mandated MACR exercise will meet this requirement.

**1.3 Damaged Ships**

1.3.1 HM Ships which arrive at a Naval Base in a damaged or wrecked state as a result of enemy action or catastrophic accident are to be thoroughly searched for explosives by competent ships staff before MOD personnel or contractor's staff are permitted on board. The explosives search party is to be in the charge of the vessel ERO and a representative of the Site Duty Holder is to be present.

**1.4 Casualty Weapons**

1.4.1 Damaged stores or suspected damaged stores are categorised as Casualty Weapons and are to be reported to the relevant DE&S Munitions PT in accordance with the requirements in JSP 482 Chapter 25 and JSP 862 Chapter 11. The relevant Munitions PT will advise on the actions to be followed with the casualty

weapon. In the event that the casualty weapon is considered to be 'unsafe', the actions given in JSP 862 are to be followed.

1.4.2 Casualty Weapons are not to be offloaded for return to a Munitions Establishment without prior approval of the Site Duty Holder and without a certificate confirming that the weapon is suitable / safe for transportation and storage. Advice on the damaged store must be obtained from the relevant Munitions PT. Casualty Weapons must be off loaded at a suitable explosives licensed site, unless the delay in moving to that site would place personnel at serious risk.

1.4.3 In the event that an emergency offload is necessary the operation is to be supported by a full and comprehensive Safety Case produced through the relevant Platform PT. The relevant Inspector of Explosives will need to be consulted to grant any temporary explosives licence required to cover the offloading operation. The Site Duty Holder is required to establish a safe system of work with the assistance of relevant technical authorities to minimise those assessed risks associated with the disembarkation and subsequent movement through the Naval Base (afloat by lighter or by road) of a casualty weapon.

## 1.5 Emergency Movements of Ships Carrying Explosives from Jetties and Moorings

1.5.1 Regulation 15 of the Dangerous Substances in Harbour Areas Regulations (DSHAR) requires that a vessel carrying explosives, other than a lighter, is to be kept in a state of readiness to be moved at any time, tidal conditions permitting. Therefore the Commanding Officer of any vessel carrying explosives should, while the vessel is berthed, ensure that his vessel is not immobilised and is maintained in a state of readiness to move away. He should also ensure that at all times there are sufficient crew or other personnel to maintain a proper watch for:

- (1) The adequate supervision of the vessel; and
- (2) To enable it to be moved in an emergency; and
- (3) To man any shipboard appliances relevant to the safety of the vessel in case of emergency.

1.5.2 Although the Site Duty Holder is allowed to exempt certain vessels from the need to maintain a state of readiness, this exemption does not cover vessels carrying more than an aggregated NEQ of:

- (1) 10 Kg or HD 1.1; or
- (2) 250Kg of HD's 1.2,1.3 and 1.5

## 1.6 Standby Tugs

1.6.1 Where a vessel is capable of either berthing or leaving a berth without the use of a tug the mobility requirements of Regulation 15 of DSHAR are deemed to be met and use of a standby tug during explosives transfers is not required.

1.6.2 However, when a bulk ammunition ship is alongside an explosives jetty a standby tug must be in attendance when explosives<sup>1</sup> are:

- (1) Being embarked/disembarked/handled aboard.
- (2) Present on the jetty.

Note: In cases where standby tug assistance is required, the local Queen's Harbour Master advice is to be sought on the adequacy of the number and type of tugs required.

1.6.3 At other times a tug need not be in constant attendance provided one can be in attendance, if required, in two hours.

---

<sup>1</sup> This does not apply to ship's SOLAS stores

## 1.7 **Safety of the Ship**

1.7.1 Notwithstanding the instruction above, it remains incumbent upon the Commanding Officer of a vessel at any jetty to request assistance of a tug or tugs as and when, in his opinion, navigational circumstances, weather and the state of the ship's engines warrant such insurance for the safety of the ship.

**Intentional Blank Page**

**CHAPTER 26****ANNEX F****PUBLIC EVENTS IN NAVAL BASES AND MILITARY PORTS****CONTENTS**

Para

1 PUBLIC EVENTS IN NAVAL BASES AND MILITARY PORTS

**1 PUBLIC EVENTS IN NAVAL BASES AND MILITARY PORTS**

1.1 The movement of military explosives through Naval Base Heritage Areas or designated areas holding events where the public have access is forbidden.

1.2 All Public Events must be authorised in writing by the Site Duty Holder.

1.3 The local Explosives Safety Representative (ESR) is to be involved at the earliest opportunity in the planning of any Public Events. The ESR will provide direction to event organisers and any outside agencies on the mandatory adoption and implementation of MOD Explosives Regulations. This may result in a reduction of site core activity for the duration of the Public Event.

1.4 The responsibility for ESR involvement in the planning of events lies with the Site Duty Holder. IE (DE&S) is to be consulted regarding all proposed Public Events which involve the use of explosives (commercial or military) in UK Naval Bases or SMC Marchwood. For overseas military ports, the appropriate Service IE should be consulted.

1.4 No explosives used in Public Events are to be brought onto the site without prior consultation with the ESR. Storage of commercial explosives in Naval Bases and Military Ports will not normally be permitted. Prior to using any explosives, a Safe System of Work must be demonstrated, backed up with documentary evidence. This evidence is to include Risk Assessment, types and quantities of explosives to be used, Hazard Data Sheets, storage requirements and contingency arrangements.

1.5 The responsibility of removing all unexpended and blind explosives from the Site area rests with the Event Organiser, who is to provide a certificate confirming that all unexpended and blind explosives have been removed and that the site area / facility is CFFE. Removal is to be achieved within 24 hours of the event finishing and only the appropriate IE can authorise an extension to this deadline.

**Intentional Blank Page**