FIREARMS SECURITY HANDBOOK

2005

Produced by the Home Office, the Associations of Chief Police Officers in England, Wales and Scotland and the British Shooting Sports Council

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PART 1: INTRODUCTION & PRINCIPLES RELATING TO THE SECURE STORAGE OF FIREARMS

- 1.1 It is a condition of the issue of a firearm certificate that the firearms and shotguns to which the certificate relates must be stored securely at all times (except in certain circumstances) so as to prevent, so far as is reasonably practicable, access to the guns by unauthorised persons. This requirement is also to be found, in similar terms, in conditions attached to the registration of a firearms dealer and Home Office Approved Rifle and Muzzle-Loading Pistol Clubs. Anyone holding a Museum Licence is required to have secure, safe custody arrangements for firearms etc in their possession. Security conditions are expressed in the Authority for Section 5 articles, where both the premises and transportation of those items are subject to security satisfactory to both the Secretary of State and the Chief Officer of Police. A general duty of care for security applies to auctioneers, carriers and warehousemen when they have possession or control over firearms during the normal course of their business.
- 1.2 The term "unauthorised persons" means any person who does not have a certificate allowing them to possess the guns of the holder.
- 1.3 Shotgun (section 2) ammunition is *not* covered by this condition but it is sensible to store it safely.
- 1.4 This document addresses what may be considered to fulfil these criteria in the more usual circumstances. It is **not** a statement of the law but aims to provide general guidelines for the security of firearms. It is the responsibility of certificate holders in each case to ensure that they comply with the conditions of the possession of those firearms. This document provides a guide to the advice that might be given to those persons on the principles and mechanics of security. This advice must *always* be tempered with common sense and a view to the distinctive conditions that surround the application.
- 1.5 This guidance should be applied with full regard to the individual circumstances and the type and location of the premises subject to any recommendations. It is important that the proposals in each case take into account the safety of the occupants of the premises; in particular, attention is drawn to the provisions of the Fire Safety Acts, building regulations and the Occupiers Liability Act.
- 1.6 Your attention is also drawn to the building regulations in respect of provisions for emergency escapes from buildings including dwellings. For security purposes in this document, no requirement can be made in respect of a window or other opening which has been provided as an emergency escape that will in any way prevent the immediate and unobstructed use of that escape route. If there is a conflict between the need for firearms security and any regulations made for the safety of persons in that building, then advice must be sought from the agency responsible for the regulations.
- 1.7 There are *many* factors that require consideration, which may include the following:
 - a) A risk assessment based on the levels of property crime in the area. These may be subject to sudden temporary changes and it is helpful to look at the longer-term trends of property crime in an area, which are the more important factors;
 - b) The remoteness or otherwise of the premises, and the potential response to calls for assistance, either by police or neighbours;

- c) The manner in which the property is overlooked and/or illuminated. These are significant factors in deterring burglars;
- d) The extent to which the property is occupied or left unoccupied;
- e) The location of storage points within the property and where appropriate the distribution of firearms within each secure point;
- f) The attractiveness of the type of firearms to criminals. For example, modern multi-shot handguns may be more attractive to criminals than most other types of gun;
- g) The number of firearms held; and
- h) Whether it is generally known that firearms are stored on the premises.
- 1.8 Any references to commercial products in this document do <u>not</u> imply any approval of that manufacturer, but are given to illustrate what is available, or where such items may be acquired. Many other manufacturers and suppliers are available and so far as their products conform with or exceed any relative standards quoted they may be considered fit for the purpose.
- 1.9 The Security Handbook is divided into parts that cover specific areas, a number of which inter-relate. Setting aside this introduction, Part 2 deals with the application to private individuals' ownership of firearms, Parts 3 to 6 cover the more specialised areas (possession for professional purposes, firearms dealers, clubs, museums and collections) and Part 7 looks at security considerations for transport. Technical specifications are given in the Annexes.
- 1.10 The following abbreviations are used in this document:

FA1968 = Firearms Act 1968

F(A)A1988 = Firearms (Amendment) Act 1988

F(A)A1997 = Firearms (Amendment) Act 1997.

PART 2 – SECTIONS 1 AND 2 FIREARMS (FA1968)

- 2.1 The security of firearms, section 1 ammunition and shotguns within a dwelling can in most cases be achieved using a cabinet designed for this purpose. New cabinets should conform to the requirements of BS7558 (see Annex C for examples on points of construction). The cabinet should be fixed to the structure and located to frustrate attack or identification by persons visiting the premises. BS7558 was introduced in 1992 but many older cabinets will be built to perfectly satisfactory standards and, *if satisfactory, need not be replaced*.
- 2.2 As an additional level of security, ammunition and easily removable component parts such as rifle bolts etc may be stored separately from the firearms they fit. This could be either by use of a detached storage container fitted elsewhere in the dwelling, or one built into or onto the firearms cabinet.
- 2.3 Whatever the method of security, it should also involve the physical prevention of access to those firearms by persons who might lawfully occupy the property other than the certificate holder, as well as by intruders. This may be especially important when children are in the premises.
- 2.4 Security should not be located so inaccessibly as to deter the certificate holder from securing his or her guns after use.
- 2.5 Under most circumstances, it is preferable that firearms should be secured within the occupied part of the structure. Separate, detached buildings, or those attached but having only external access (eg outhouses, garages etc) should not be used unless the levels of security warrant it. If used, these could also be protected by an intruder alarm linked to the household.
- 2.6 In some modern houses, thermal block is used for the inner skin of main walls. This does not provide as substantial an anchorage point for security devices as those that can divide integral garages from living areas, for example. (Integral garages mean those built within the dwelling and providing internal door(s) to the other living areas). Whilst not usually a suitable location, if a garage is secured to the level of recommendations set out in paragraphs 2.36 to 2.46 of this Handbook then this option should be considered. It should, however, be considered as an option only after reviewing all other locations within the inhabited part of the premises.
- 2.7 If the certificate holder's dwelling is a mobile home or static caravan, a different set of security concepts should be adopted (see paragraphs 2.25 to 2.35). These are primarily concerned with the anchorage of the structure. That structure's capability to store items securely may well require an interim layer of security to 'target harden' the unit. It is unlikely that a gunroom can satisfactorily be constructed within such a dwelling or unit of this type.
- 2.8 There is a need to consider other alternatives for unusual firearms such as puntguns, cannon etc. In these cases, such items may be secured in buildings other than the dwelling. Suitable securing points may be required where the situation or construction of such buildings make it necessary. Where possible any removable part that would render the gun inactive should be stored separately.
- 2.9 When advising on the location of any security cabinet, remember that most steel gun cabinets have a high weight-to-footprint ratio. The average floor loading for a suspended floor on timber joists is 56lbs per square foot. A 9-gun cabinet with a 24" x 12" (608 x 304mm) footprint can be in the order of 126 lbs, which equates to more than a safe average suspended floor

loading. Obviously, any fixing to a wall will reduce this loading. Joist ends are a more suitable fixing location than joist runs. In a loft installation for a cabinet, care needs to be exercised. Not all lofts have joists calculated to include weight loading other than that of the ceiling below. It is not uncommon for joists in lofts to be 40% smaller in cross sections than joists carrying floors. Full use must therefore be made of the support from structural walls carrying such joists. If there is any doubt, the applicant/certificate holder should obtain proper structural advice.

- 2.10 Fixings for security devices form an important part of the overall resistance to attack. Fastening to timber studded walls should be avoided, unless some additional anchorage can be provided. Floor or roof joists (subject to the previous comments) are acceptable. Walls of brick, concrete or masonry are usually the best bonding materials. It is important that the fixing chosen is correct for that material (eg expanding bolts, chemical anchors, toggle bolts etc). With modern building materials, particularly breeze and thermal block walls, the materials are not particularly suited to normal fixing devices. Any firearm security cabinet etc should be sited out of view from people both inside and outside the building. Securing to suitable building walls within built-in furnishings, eg wardrobes, cupboards, etc can prove effective. Rooms such as lofts and cellars for example, that are unlikely to be visited by casual visitors, are options. However, when recommending such places, it is important to consider whether the environment is suitable. Extremes in temperature, dampness, condensation etc may militate against such use, as not only could it result in damage to the firearms and ammunition but particularly in damp areas, it may cause erosion of the fixings or the cabinet material, thus reducing its security.
- 2.11 When security devices are being fitted, consideration should be given to varying the method of fixing. For example, in buildings with only partition internal walls and modern insulation block lining or random stone walls, it can be perfectly acceptable to fix cabinets horizontally, as long as appropriate fixing devices are used. This will also assist when fastening into suspended wooden flooring, as it spreads the load more evenly. In this case, coach screws of at least 3/8" (8mm) diameter and not less than 2.5" (63mm) long will provide a suitable anchorage. Such fixings must of course be made into joists and not simply to the floor boarding. Another consideration should be the size and weight of the larger form of gun cabinet or commercial safe. Due to their very weight or size, fixing may be unnecessary in these cases, but they should be located in such a position that would further frustrate removal.

Layers and Levels of Security

- 2.12 As with any other valuable article, the security of firearms should be considered in layers:
 - **The Outer Layer**. The protection of the surroundings etc which are necessary for particular situations or risks. Exterior lighting, approaches overlooked etc;
 - **The Secondary Layer**. The protection of the surrounding structure (the building or part of a building) which contains the immediate or core layer for the firearms;
 - The Immediate or Core Area, which secures the firearms directly.
- 2.13 In most circumstances, the immediate and secondary layers are likely to be all that need to be addressed. However, conditions which affect either the ability of the outer structure to provide a defensive level commensurate with the particular risks, or any constraints upon the occupier (eg crime level, property style or type of construction, constraints in tenanted property etc) may require adjustments to either layer.

- 2.14 If the occupant can show that the house has been designed and built to the requirements of BS8220 (the 'secured by design' model, introduced in 1996) or has doors to BS PAS 24 and windows to BS7950, then those parts of the dwelling can be taken to have satisfactory security.
- 2.15 For the purposes of security in this document, no requirement can be made in respect of a window or other opening which has been provided as an emergency escape that will in any way prevent the immediate and unobstructed use of that escape route.
- 2.16 It may be helpful to think of security in terms of broad 'levels' to be applied according to the circumstances of each case. These are not intended to be prescriptive, but rather to provide guidance on what might be considered proportionate in each case. Level 1 would be considered the normal standard of security applicable to the majority of cases.

Level 1

- 2.17 A gun cabinet, or (where only one rifle or shotgun is held and a low level of risk is involved) a gun clamp or similar device fixed to the building is normally considered to be reasonable security. This should be located to frustrate or obstruct points of attack and identification by casual visitors to the premises. Other considerations might be:
 - Final exit doors of good construction secured with good quality locks and/or other types of deadlocking facilities;
 - Suitable locks/securing devices on ground floor windows and French/patio windows.
- 2.18 In the case of more modern houses, the above will be met in properties with PVCu doors or specialist doors with a multi-locking system which is secured by a deadlock. These requirements will also be met in properties with PVCu or specialist windows by a similar style of system, secured by a keyed lock, either handle or independently mounted.
- 2.19 If you give advice to fit locks to PVCu doors and/or windows you should stress that the manufacturer/supplier should be consulted about which locks would be appropriate, as the fitting of non-specified locks may cause damage to the article and invalidate the product warranty.

Level 2

2.20 Where the individual circumstances are such that additional security might be required due to factors such as:

repeat victimisation, high-crime location, building regularly unoccupied, a substantial number of firearms on the premises,

in addition to the provision of a suitable cabinet, gun room or safe, the following may be considered:

a) The final exit door locks should be to BS3621 or equivalent and any French windows/patio doors should have an integral locking system or be provided with supplementary locks to frustrate forcible opening, together with anti-lift blocks if applicable.

- b) The above requirements will be met in properties with PVCu doors or specialist doors by a multi-locking system, which is secured by a deadlock.
- c) Windows on the ground floor and those accessible from flat roofs etc should be fitted with an appropriate type and number of locks which are self-latching or key operated. These should have casement-to-frame locking along the opening edge.
- d) An audible intruder alarm to the appropriate standard protecting either the whole of the premises or those parts of the premises where the guns are stored.
- 2.21 For these purposes, a "substantial" number of firearms should be considered with regard to the type of firearms, their potential danger if misused and their likely attractiveness to criminals. At the lower end the number might vary between six and ten, depending on the type of firearm concerned, whilst anything over ten would rarely be lower than level 2. *It must be stressed, however, that it is not enough to base an assessment on the number of firearms alone all factors mentioned above and in paragraph 2.20 should be taken into account.* Sound moderators, spare barrels, spare cylinders and component parts should not be considered as part of the total.
- 2.22 A different form of security which equates to that above (such as providing a reinforced gun room or other area), may also be suitable.

Level 3

2.23 If the risk is assessed as being greater than the previous level due to additional factors such as:

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a higher crime rate,
certain high-profile certificate holders,
other factors which substantially increase the risk of burglary,
a larger number of firearms held,
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then the following should be considered as well as the previous level of security:

- a) Dividing the risk, for example by the provision of separate cabinets, perhaps in different locations within the premises, to break down the number of firearms per enclosure.
- b) Additional target hardening of the storage (cabinet with individual gun locks, or extending to a gun room).
- c) Installation of an audible intruder alarm to protect the whole of the premises.
- d) If there is a particular risk attached to the property or its area, then a system with signalling should be sought. The provisions of the current ACPO and ACPOS intruder alarm policy should be considered if a signalling system is to be installed.
- 2.24 For these purposes, a "larger" number of firearms may be taken as meaning more than twelve guns. As with level two, it is not enough to base an assessment on the number of firearms alone other factors in paragraph 2.23 are equally if not more important, and regard

must also be had to the type of firearms, their potential danger if misused and their likely attractiveness to criminals as well as the factors mentioned in that paragraph. Again, sound moderators, spare barrels, spare cylinders and component parts should not be considered as part of the total

Mobile Homes & Static Caravan Units

- 2.25 The unit should be site fixed or any wheels and towing assemblies removed or disabled to prevent its immediate removal.
- 2.26 Where there is doubt about the fixture, supplementary anchorage with industrial ground anchors, locking plates or security chains should be used.
- 2.27 The area between the ground level and underside should either be enclosed with secure cladding, or the area giving access to that part of the chassis securing the cabinet should be protected to prevent unauthorised access to that area.
- 2.28 A cabinet to BS7558 or better, or a commercial safe should be used in dwellings of this type. Ideally (because of the construction of some mobile homes) cabinets of heavier construction may be warranted or a dual layer system to protect the area of installation. When considering installing heavier cabinets or safes the load bearing capacity of these structures must be considered.
- 2.29 The cabinet should be located in a position making attack on it difficult.
- 2.30 The cabinet should be concealed in an area which is not easily/normally accessed (eg inside fitted lockers).
- 2.31 The cabinet should have the maximum number of its anchorage points attached to the chassis of the unit. The blind heads of any fixings should be outside, with the threaded nut within the cabinet. It may be prudent to have the fixing points welded to the chassis.
- 2.32 Alloy chassis require special consideration. If the structure is in doubt the provision of bearing plates not less than 4mm thick and large enough to span several adjoining chassis members can be fitted. Alternatively, the below method can be utilised.
- 2.33 Where the chassis is not substantial, a concrete pad containing securing bolts to attach to the security device should be made underneath the unit.
- 2.34 Industrial ground anchors can also be adapted for this purpose. These should have a protective enclosure to frustrate access from outside (see paragraph 2.27).
- 2.35 An intruder alarm should be considered the primary method of adding security to such premises.

Integral Garage Security

2.36 Such a garage should have all its external walls constructed to the same standard (or better) as those of the external walls of the remainder of the property (eg brick, concrete block, stone).

- 2.37 The internal adjoining walls, if they are to be used for fixing a cabinet, should be made of brick, stone or concrete block. Thermal block walls do not usually make a secure anchorage point unless specialist fitting methods are used.
- 2.38 The vehicle door of the garage should be secured internally to override the opening of the door from the outside. The arrangements must ensure that the door is locked to its frame.
- 2.39 On 'up and over' doors, the locking device should engage the frame and the floor.
- 2.40 The vehicle door should be of rigid construction, either of timber or of steel. Any weakness or flexing should be addressed either by reinforcement or by fitting bolting devices to lock the door into its surround at appropriate locations.
- 2.41 Any other doors allowing access from the outside should be constructed to the same specification as the main entry door for a dwelling. Such doors should be secured by locks of a similar standard to BS3621, or a combination of locks or other supplementary devices to ensure that the door offers maximum locking effect into its frame.
- 2.42 Any opening windows should be fitted with appropriate locks. Dependent upon the vulnerability of these to attack, consideration may need to be given to fitting grilles or bars.
- 2.43 When firearms are stored in such a garage, and the premises are alarmed, that alarm should include the garage.
- 2.44 Ideally, the firearms cabinet should be located as far as possible from the garage vehicle door.
- 2.45 The cabinet should be obscured from open view, preferably by enclosure in an unobtrusive screening device (eg a chest, locker etc).
- 2.46 The certificate holder should be advised to access the cabinet only when the outer doors are closed.

Ammunition

- 2.47 Ammunition for section 1 firearms must be kept secure. As a matter of best practice, it should be stored in its own individual secure storage, eg an integral, lockable compartment within a gun cabinet. Although secure storage of shotgun cartridges is not a requirement of the Firearms Acts, it is sensible to recommend that they should be locked away for both security and safety, especially where there are children in the house.
- 2.48 Although ammunition is not a serious fire hazard, it is advisable that ammunition containers are not in an area exposed to a risk of fire, nor should they be in the area of an escape route where there is a fire risk.
- 2.49 If there is any doubt on the safety or method of intended storage, the Explosives Liaison Officer may be consulted. This is also recommended in the case where a private certificate holder intends to keep reloading articles such as gunpowder, primers or large quantities of cartridges etc.

Private Collections of Section 1 and Section 2 Firearms

2.50 In the case of private collections, the provisions of this Part of this document should be employed with due regard to the individual circumstances of the collector and the collection. Where the collection includes any section 5 weapons, reference must be made to Part 6, Private Collections and Collections on Public Display.

Section 5 Firearms and Other Articles Requiring Section 5 Authority

- 2.51 Where any section 5 firearm is held in a dwelling, the provisions of Level 3 security should be applied.
- 2.52 The alarm system should include personal attack facilities for the safety of the occupants.

Exceptions

- 2.53 Where up to two small firearms are held by virtue of section 7(1) of F(A)A1997, Level 2 security should be considered, commensurate with the risk involved.
- 2.54 Note that the security considerations for expanding ammunition held by virtue of F(A)A1997 should be the same as in paragraphs 2.47 to 2.49 above.
- 2.55 Ammunition held as part of a collection should be subject to normal security provisions as in paragraphs 2.47 to 2.49 above.
- 2.56 Shot Pistols possessed for vermin control by virtue of section 4(1) & (2) of F(A)A1997 should normally be considered in similar terms to that found in paragraphs 3.2 and 3.3 below.
- 2.57 Self-Contained Gas Cartridge guns to which section 5(1)(af) applies should normally be subject to Level 1 security. The precise arrangements are for the police to determine based on the level of risk involved in each case, taking account of factors such as local crime rates and location of the property.
- 2.58 Where a single firearm is possessed as a trophy of war by virtue of section 6 of F(A)A1997, with no ammunition suitable for use with that firearm being kept, a minimum of Level 2 security should be considered, commensurate with the risk involved when small firearms are held.

Safe-keeping of keys

2.59 Only authorised persons should have access to any of the keys for any cabinet etc containing firearms and section 1 ammunition. Care needs to be taken in selecting locations for the storage of keys, particularly any spare sets, to avoid them being discovered and improperly used.

PART 3: FIREARMS HELD FOR PROFESSIONAL OR SPECIFIC BUSINESS PURPOSES

3.1 It is important to stress that every case should be dealt with on its individual merits – see Part 1 of this Handbook.

Slaughtering Instruments

- 3.2 Small firearms which are constructed or adapted as slaughtering instruments capable of firing up to two shots without re-loading, may be kept at dwellings under the same conditions as those applying to general section 1 & 2 firearms.
- 3.3 Where such slaughtering instruments are kept at business premises, the firearms should be in a cabinet to BS7558 within a part of the premises that is secured to at least Level 2 of that in the dwelling specification. If the premises are unoccupied, a signalling alarm to BS4737 may be considered, if required.

Firearms for Humane Killing or Treatment of Animals

3.4 Small firearms, as defined by section 5(1)(aba) of FA1968, kept solely for the humane killing of animals under section 3 of F(A)A1997, and adapted to fire no more than two shots without reloading, should be subject to Level 2 or 3, commensurate with the risk involved.

Veterinary Use

- 3.5 Firearms designed to discharge missiles containing drugs for the treatment of animals should normally be stored with the drug/missile separate from the firearm.
- 3.6 When stored in dwellings, or in surgeries attached to or containing the dwelling of the veterinary surgeon or resident staff of the practice, the conditions applicable to their classification as either section 1 & 2 or section 5 (modified or unmodified) firearms should be applied.
- 3.7 Where kept in the dwellings of other persons authorised to possess those firearms in paragraph 3.5 above (ie zoo and wildlife centres), the conditions applicable to the classification of the particular firearms can be applied.
- 3.8 Where the drugs are subject to any form of security requirement under the Drugs Acts, the provision of a storage unit to comply with that requirement is also acceptable for the missiles.
- 3.9 Where the above firearms are kept at a surgery or other place without a residential attachment, the firearms should be in a cabinet providing security to the level of BS7558, within a part of the premises secured to the appropriate level of the dwelling specification and a signalling alarm to BS4737 should be considered.

Starting Pistols (Small Firearms)

3.10 Modified or single shot pistols chambered for their original cartridge should be kept in dwellings secured to Level 2 or above, commensurate with the risk involved.

- 3.11 Unmodified pistols (capable of firing more than two shots without re-loading) should be kept in dwellings secured to Level 2 or above, commensurate with the risk involved.
- 3.12 Where such pistols are kept in non-residential locations, eg schools, sports facilities etc, the firearms should be in a cabinet providing security to the same level as BS7558, within a part of the premises secured to the level of the dwelling specification appropriate to their classification and a signalling alarm to BS4737 considered, if necessary for the individual circumstances.

Auctioneers

- 3.13 Where auctioneers hold firearms in the normal course of their business, they should be secured in either:
 - a) cabinets built and fitted to BS7558 or equivalent, or
 - b) a commercial safe, as detailed in Annex A, or
 - c) a store secured to the provisions of either a gun room or armoury as detailed in Annex A, dependent upon the quantity of firearms normally held there.
- 3.14 Where the premises are non-residential, they should be secured to a standard equal to Level 2, with an alarm to BS4737.
- 3.15 The premises of auctioneers who specialise in the sale/disposal of firearms should generally have security similar to that of a registered firearms dealer under Part 4 of this Handbook.

Warehousemen

- 3.16 The nature of warehouse storage is such that firearms may be deposited with a company in a number of ways. The security of the firearms is therefore conditional on how the articles are received.
- 3.17 Individual firearms should be stored in a secure area or cabinet which is equal to that provided for section 1 and 2 firearms. Consideration should be given to individual locking arrangements, where the owner has either sole or joint access to one key for a secure cabinet with two locks. The other key should remain with the warehouse operator.
- 3.18 Where premises are not continuously manned, the premises, or those parts used for the keeping of firearms should be alarmed to BS4737.
- 3.19 Where firearms are a part of the contents of a secure transit container, and the company are aware of its contents, arrangements must be made to regularly inspect the container whilst held.
- 3.20 Unless required by any explosives or carriage legislation, containers in storage containing firearms and ammunition should not bear labels or markers etc identifying their contents.
- 3.21 In the interests of both owner and company, the warehouse employees or others should not normally have access into locked/sealed containers. If this is necessary, there should be a system for recording:

- a) by whom, when and for what reason(s) access to the container has taken place,
- b) the result of any examination of the state of the contents and the notification made to the owner, or his authorised agent.
- 3.22 Whenever possible, containers with firearms should be located in positions where surveillance is possible by staff working in and around the area.
- 3.23 The company must have procedures to ensure that in addition to the owner, the police are advised immediately of any loss or theft of firearms, including any attack on containers known to include firearms.

Carriers

3.24 Security considerations applying to carriers are generally contained within Part 7 of this Handbook. Where the carrier is also providing storage or the temporary holding of firearms during the course of delivery, the appropriate recommendations in relation to warehousing may be considered.

PART 4: FIREARMS DEALERS

- 4.1 Dealers' security can generally be divided into three areas:
 - a) retail shop premises display
 - b) stock-secure storage
 - c) dealers operating from home.
- 4.2 Shop premises, particularly those which are lock-up, should be substantially built of brick or stone etc, and protected by an intruder alarm to BS4737 or equivalent, having regard to the general crime risk.
- 4.3 External access doors other than those in any shop frontage, should be constructed and installed to the requirements in Annex A, dependant upon the type of application.
- 4.4 Main doors in shop frontage may either conform to the above or contain glass panel(s). Glass panels and windows should be protected by internal security grilles as specified in Annex A or by ornamental iron grilles of bar or rod, not less than 10mm diameter or 8mm x 12mm cross section.
- 4.5 The use of grilles or bars may not be required where the premises are fitted with security glazing to comply with BS5544 and installed to BS5357.
- 4.6 Dependent upon the risk, grilles and bars may be either permanently fixed or removable when the premises are open.
- 4.7 Security shutters to LPS1175 level 3 or equivalent, may be substituted, as applicable.
- 4.8 Rifles and shotguns on display should be locked in racks either by:
 - a) security cable, or
 - b) welded link heavy duty chain, or
 - c) steel rod or bar not less than 10mm diameter.

The above to be secured by either padlocks or other fixed locking system.

- 4.9 Wall mounted or built in glazed display cases within a dealers premises should be:
 - a) locked to prevent access without supervision;
 - b) if fitted with ordinary glazing, have retaining devices for the firearms contained to frustrate smash and grab style attacks.
- 4.10 Section 5 small firearms when stored, must be kept in a locked cabinet or safe to an equivalent to BS7558.

- 4.11 Any display case for section 5 small firearms must provide security equal to BS7558 and the glazing should be to BS5544.
- 4.12 Storage for firearms not on display should be either by:
 - a) cabinet(s) constructed and fitted to the minimum of BS7558; or
 - b) gun room or armoury to the requirements in Annex A, dependent upon the volume of stock within the business, and the level of risk involved.
- 4.13 Section 1 ammunition must be stored in suitably secure conditions, preferably separate from firearms. This could be provided by a separately secure cabinet or a weldmesh/expanded metal security cage with separate locking, located within an existing protected area.
- 4.14 Propellants and powders, particularly gunpowder, must be kept in accordance with the requirements for the level of storage registered or licensed for the premises under the provisions of the relevant Explosives Act and Regulations. The Explosives Liaison Officer must be consulted when specifying security for this part of the premises.

Dealers Operating from Dwellings

- 4.15 The arrangements at the dwelling should normally provide for the business to be carried out in a part of the premises which is either wholly or partly set aside for that purpose.
- 4.16 In order to identify persons wishing to gain access, doors should either be within view from the windows or be provided with a door viewer or CCTV.
- 4.17 If possible, entry for business purposes should be separate from the normal domestic entry.
- 4.18 Where the premises do not have a wholly adapted part for the business, including storage of stock, provisions should be made to prevent, so far as is reasonably practicable:
 - a) customers being able to view the route to, or location of the storage for firearms;
 - b) customers being allowed to accompany the dealer or servant to the location of the storage area.
- 4.19 For the safety and security of the dealer and other occupants of the premises, personal attack buttons or remote devices should be considered within the alarm system requirements.
- 4.20 Where the property is within its own grounds, security lighting may be considered to aid both the detection of approach and the identification of any person(s), as well as for the protection of the occupants entering and leaving.
- 4.21 Where a line monitored alarm system is not employed, telephone lines should be sited to enter the premises above attack height from the ground or any adjoining building.
- 4.22 The applicant should be advised to consider the requirements of planning regulations before adapting domestic premises, eg change of use, structural alterations requiring planning, building regulations consent, etc.

Dealers Operating Under Section 5 Authority

- 4.23 Where a dealer holds a section 5 authority subject to any specific security requirement, the following should be applied, as appropriate:
 - a) if the dealer's display area or gun room also holds non-section 5 firearms, then the section 5 articles must be secured separately in cabinets to at least BS7558 to prevent access by those without section 5 authority;
 - b) section 5 items should not be on display in the sales area or other part of the premises nor should they be visible to the public;
 - c) the section 5 items must at all times be kept locked in the armoury, gun room or cabinet as applicable, other than when access is required to them;
 - d) the intruder alarm should be a monitored system to BS4737 or equivalent.
- 4.24 Where the authority permits the dealer to hold considerable stocks of articles under sections 5(1)(a), (ab), (ab), (ac), (ad) or any large quantity under 5(1)(b), or military/ordnance articles under that section, the following should be considered, as appropriate:
 - a) an intruder alarm designed to detect any physical attack on the armoury, storage area or building at the time the attack commences on the outer structure;
 - b) the intruder alarm should detect and give local warning of any unauthorised opening of any door giving access to the premises;
 - c) the intruder alarm should provide signalling by a monitored system;
 - d) the intruder alarm should provide either strategically placed fixed devices or an adequate number of wire free devices to signal personal attack on staff etc, present on the premises;
 - e) the intruder alarm should provide silent signalling in the event of a forced disarming of the system by a person with authority whilst under duress;
 - f) vehicle access the premises should wherever possible be designed so that no external door has to remain open to allow the delivery or collection of section 5 items. Ideally, it should be that a securable area in front of the delivery door is entered and then secured before entry is allowed into the main building. This will prevent unauthorised or criminal entry into the premises whilst staff are working.
 - g) where necessary for the security of the types/quantities of section 5 items on the premises, the intruder alarm should be linked to a CCTV system that can be monitored at all times by remote signalling at the alarm monitoring station and during operating hours by the staff on site. Cameras should be located to view all access to the premises, the internal area and armoury, and other areas at risk not otherwise visible to staff.

PART 5: HOME OFFICE APPROVED RIFLE & MUZZLE LOADING PISTOL CLUBS, AND CADET CORPS

- 5.1 Non-residential club premises where firearms are stored should have secure storage that is commensurate with the number of firearms the club will hold. The standard should equate to at least the appropriate level expected for domestic property. This level of security should depend on the individual risk factors.
- 5.2 Where there is residential occupation, account must be taken of the security and safety of the residents in formulating the appropriate level of protection.
- 5.3 In considering the storage volume, it is important to establish the maximum number of firearms owned by the club and/or those of members that are kept there either permanently, or in temporary storage. This should include, for example, those firearms normally held by members at home, but lodged at the club premises during a holiday.
- 5.4 A gun room should be established within non-residential clubhouses, or a stand-alone unit such as an armoury may be considered. Details for this provision are in Annex A.
- 5.5 A gun room should be within a building of substantial construction, eg brick, concrete etc. If the clubhouse is of other construction, eg timber etc, then the provision of a structure to armoury specification, as detailed in Annex A, could be considered.
- 5.6 Provision may be made for the separate securing of members' firearms within the gun room/armoury if appropriate. It should be made clear to each individual certificate holder that they are responsible for the security of their own firearms, and that this responsibility cannot be delegated to the club.
- 5.7 The above may be met by the provision of locked cabinets or racks, or of an armourer issue system.

Cadet Force Premises

- 5.8 The Ministry of Defence controls Cadet Force and Combined Cadet Force premises. The security for single Cadet Force units is the responsibility of the appropriate Service's (Army, Royal Air Force or Royal Navy) Security Unit in accordance with the Joint Services Publication 440, The Defence Manual of Security JSP 440 (DMS). For the information of Firearms Enquiry Officers (FEOs), a summary of the relevant parts of the manual is in the ACPO/MOD restricted circular.
- 5.9 The application of security measures in respect of the storage of firearms, subject to the requirements of the Firearms Acts, on such premises should be taken up with the appropriate department. Details are in the ACPO/MOD restricted circular.
- 5.10 FEOs visiting Cadet Force premises should normally view the MOD Inspection Certificate as satisfactory proof of security. Any queries in relation to the security provisions should be directed to the security unit issuing the Inspection Certificate.
- 5.11 Only those privately owned rifles necessary to meet or supplement the cadet forces training requirements are permitted to be stored. Details are in the ACPO/MOD restricted circular.

PART 6: FIREARMS HELD UNDER MUSEUMS LICENCE/PRIVATE COLLECTIONS

Museums & Galleries

6.1 The security of firearms in any museum must be a combination of elements directly related to the firearms and the building in which they are to be kept and/or displayed. With his widespread experience of museums' security and extensive records on many of the UK's museums, the Museums Security Adviser at Resource (formerly the Museums & Galleries Commission) is always available for consultation. Where extensive collections are involved it will usually be possible to arrange a personal visit by the Resource Security Adviser if required.

6.2 For further information about Resource and the Museums Weapons Group, contact:

Resource

The Council for Museums, Archives and Libraries 16 Queen Anne's Gate London SW1H 9AA

Telephone 020 7273 1444

Principles

- 6.3 Whenever handguns, automatic or semi-automatic hand-held firearms (section 5) are involved special consideration needs to be given to security provision as these types of firearms can attract those who would wish to acquire them for criminal purposes.
- 6.4 In many respects these guidelines are similar to those necessary to protect other valuable artefacts kept in museums.
- 6.5 Recommendations for physical protection that can either defeat an attack or at the very least delay the criminal sufficiently to enable the police to respond accords with the "onion" principle of security that makes provision for a number of intervening layers. These layers along with other security devices form part of an equation that provides for effective security in depth.
- 6.6 At the same time this security equation has to be flexible if it is to meet the security requirements arising from the need for museums to be open to the public. In addition, circumstances may inhibit the quality of some of the elements that will dictate compensation elsewhere in the equation.
- 6.7 Security provision for ammunition must be similar to that for firearms and the two are to be stored separately.
- 6.8 The very nature and scale of the collection must be taken into account in determining the extent of defensive measures.

Perimeter Security

6.9 In a minority of cases museums may benefit from some form of perimeter security in the form of walls or fences. Although it is difficult to provide totally effective perimeter defences,

full advantage should be taken if any are available but making certain that a provision for vision from outside the perimeter exists and that gates are properly secured.

Lighting

6.10 The use of security lighting can be a very cost effective deterrent. Activation by passive infra red (PIR) is preferred in areas that are contained by walls or fences as activations will be limited more to unlawful intruders than animals or passers by. Lighting and detectors should be, as far as possible, out of reach.

Physical Security

- 6.11 Wherever firearms are to be kept the shell of the host building and its apertures will need to have good attack resisting qualities. However, where listing for architectural merit, aesthetics or other reasons mitigates against the unfettered use of robust physical security measures, they may have to be modified and/or limited to a defined area within the building.
- 6.12 If firearms are to be stored (see below) or displayed in areas that feature an external wall at ground level or where there is some form of platform to mount an attack, very careful consideration will need to be given to the qualities of that wall as well as any apertures. Taking account of the level of threat arising from the issues identified about the quality of the wall required might range from cement mortar brickwork through to reinforced poured concrete or other specialist materials.
- 6.13 Wherever possible the criminal's progress through the building to the firearms should be impeded as much as possible by locked doors or other means.
- 6.14 The area(s) where firearms are to be displayed need to be separately secured according to the perceived level of threat.

Stores

- 6.15 Museum stores often contain concentrations of material which dictate greater protection arrangements than might be appropriate elsewhere in the building. This principle is equally applicable to firearms. Therefore arrangements are needed that provide for the store to be kept in a separate secure alarmed state even when other parts of the building are in use.
- 6.16 Attention will have to be paid to the strength of the walls, ceiling and floor although it would be right to take account of the benefits gained from the intervening layers of the "onion". If the store features an external wall, close attention will need to be paid to the construction. Although its replacement may not be practicable there are ways of giving it considerable additional strength.
- 6.17 Consideration must always be given to bricking up or otherwise boarding over window apertures with substantial materials which will very often find favour as it may improve the environmental factors.
- 6.18 The doors together with their frames must be of security quality but again scale will come into this with large collections in unattended buildings having strongroom quality doors and gates. It can be expected as a minimum for the door to feature mortice locking at one third and two third levels, with matching hinge bolts.

6.19 As with the domestic situation, a small collection of firearms housed in a store that has only limited attack resisting qualities can be compensated for by the use of cabinets that conform to BS7558. In the case of extensive collections the provision of secure racking will depend on the quality of other physical elements of the equation (eg doors) and the nature of the use of the area in which they are housed (eg presence of unlicensed staff).

Intruder Detection System

- 6.20 The museum will need to have an intruder detection system that conforms to BS4737 and connects to an alarm-receiving centre over monitored line (eg BT Redcare) which will provide for a police response. Although trap protection will necessarily feature, the system needs to provide for the monitoring of the shell of the building in support of its physical security features in order that there might be the earliest notification of attack.
- 6.21 Whenever firearms are present, either on display or in store, staff need to have immediate access to a personal attack device linked to the intruder detection system.
- 6.22 Chief officers may wish to have contingency arrangements for the response to museums housing firearms featuring high priority and armed response units. Where such arrangements are made, to minimise the potential for false alarms it should normally be required that alarm systems include verification.

Automatic Fire Detection System

6.23 The museum will need to have a fire detection system connected in a similar manner to the intruder detection system.

Manned Guarding

- 6.24 An out of hours security presence can provide for an efficient monitoring of the site but those involved must not have the direct means of entering any stores or areas where large collections are stored. In some circumstances it may be necessary for security guards however to have access to areas where firearms are in display conditions.
- 6.25 Night guarding will often mean that an extensive collection of firearms is housed in the museum, in which case it is particularly important that the guard(s) have the means of monitoring the building by intruder detection devices and CCTV as appropriate.

Close Circuit Television (CCTV)

- 6.26 Resource does not see CCTV as a panacea to the threat of crime as perceived by some others, but it does recognise that it can be a valuable aid especially in support of invigilation when the museum is open to the public as an element in a basket of security measures. To be effective in post-incident investigation it needs to feature multiplex recording where a number of cameras are in use and pictures produced need to be of evidential quality.
- 6.27 Security for firearms not on display will be in accordance with the level appropriate to the type and number of the firearms involved. Standards should be not less than that expected for the security for registered firearms dealers or Home Office approved clubs.

Exhibiting of Firearms etc

- 6.28 There will be occasions when museums will seek to display large firearms that cannot be easily carried. In such cases, the museum should be required to provide attack resisting security fixings, although obviously the point will come where a firearm cannot be moved without mechanical assistance and its criminal use is highly unlikely.
- 6.29 Small firearms, ie rifles, handguns etc, should only be displayed in cases having good attack resisting qualities and are to the requirements of the Security Advisor to Resource as outlined in Annex A.
- 6.30 Display cases holding handguns or similar sized section 5 firearms should not normally be installed in entrance foyer areas or close to exit or other doors from the building.
- 6.31 Display cases should be firmly attached to the fabric of the building with appropriate fixing devices, or secured on substantial frames to prevent their removal
- 6.32 Small arms displays should not normally be located in areas where surveillance either by staff or remote devices, ie CCTV is not provided.
- 6.33 All display cases housing firearms should be fitted with alarms, with preference being given to vibration detection in order that there is the earliest notification of attack.
- 6.34 Staff should, where appropriate, be provided with personal attack and/or alarm activation devices.
- 6.35 Museums not specially or mainly used for the display of firearms etc should plan for displays of firearms to be within the areas furthest from the entrances, points of access, eg window skylights, to provide maximum response for the police when any alarm is activated.

Invigilation

6.36 Display cases containing firearms are to be the subject of, at the very least, frequent attention by patrolling attendants, but ideally by someone having direct line of sight.

<u>Keys</u>

- 6.37 Security arrangements should include a system for ensuring the safe custody of keys, both to display cabinets and the building. As a rule only keys sufficient to enter should be taken from the premises.
- 6.38 Internal keys need to be in a key safe or cabinet that is out of general view and in a secure area.
- 6.39 Keys are to be only issued to authorised persons and never to contractors or outside agencies.

Private Collections and Collections on Public Display

- 6.40 The security of premises housing private collections of or including section 5 firearms must be not less than that required for other firearms of similar type and quantity. This is also relevant to section 7(1) firearms.
- 6.41 Where individual collections containing a number of firearms under section 7(1) or trophies of war are kept in domestic premises, they should be secured to the standard applicable at Level 3.
- 6.42 If the collection is kept on other premises and exhibited to the public on those premises the appropriate requirements of museums & galleries must be considered.
- 6.43 When not on display collections should be secured in cabinets which are either manufactured and installed to BS7558, or provide equal or better security.
- 6.44 Any display cases for such collections should be equal to the resistance offered by cabinets to BS7558 with glazing to BS5544. General requirements are contained in Annex A.
- 6.45 Display cases whose glazing does not conform to the above should only be considered where arrangements exist to close the glazed area with a steel door/cover which provide appropriate locking, or internal security which prevents the firearms removal within the limits expected from a BS7558 cabinet.
- 6.46 Where collections are to be exhibited at venues, secure display cases as provided in Annex A should be fully closed and locked. Where possible they should be anchored to bases or tables to prevent easy removal.
- 6.47 Counter top style display cases should be designed to allow access only from the exhibitor's side.
- 6.48 Display cases should not normally have tops with lifting glazed panels unless the firearms are secured to the case with restraints or key operated toggles.
- 6.49 Firearms display cases must be under the constant supervision of the exhibitor or his servant/employee.
- 6.50 Where collections are to be displayed for a number of days and not returned overnight to their normal place of keeping, the exhibitors must arrange continual supervision of the articles, if they are kept on premises which do not have security applicable to their usual storage.
- 6.51 When presentations etc are part of the exhibition, firearms should not be on unsecured display unless:
 - a) the firearms are in the possession of the person delivering the presentation and/or an authorised assistant:
 - b) the audience is arranged so that no person may gain access to the firearm(s) subject of a presentation; and

c) arrangements are provided that allow for the return of the firearm being used to a secured exhibition container or safe at the conclusion of its use in the presentation.

Conditions on movement & display of section 7(1) firearms

- 6.52 An exhibition of firearms held under this section may only take place with the permission of the chief officer of the police of that area.
- 6.53 The organiser of such an exhibition must be a person with proven experience of handling and security of firearms (eg a registered firearms dealer).
- 6.54 Permission for such an exhibition will be subject to a satisfactory risk assessment of the proposed venue by a person nominated by the chief officer of police.
- 6.55 Excluding events open to the public, a list of all persons attending the exhibition must be provided to the chief officer of police seven days prior to the event.

Conditions for sites designated under section 7(3) (Historic handguns)

- 6.56 The security of the site must be of a standard agreed by the Home Office in consultation with the chief officer of police of the area concerned, and must be comparable to the security required for the storage of substantial numbers of prohibited firearms under an authority from the Secretary of State under section 5 FA1968.
- 6.57 The security of the site shall be sufficient to prevent the unauthorised access to the site and removal by the owner or by any other person of any firearms and ammunition stored on the site.
- 6.58 In particular, where any part of the site is to be used under section 7(3), security measures must be sufficient to prevent unauthorised access to firearms subject to section 7(3).
- 6.59 The site authorities must provide adequate storage facilities for the preservation of the firearms concerned, and take all reasonable steps and exercise all due diligence to prevent damage to the guns.
- 6.60 The site authorities must provide adequate facilities for the firearms concerned to be shot, maintained and studied by their owners.
- 6.61 The facilities and arrangements at the site must be approved by the appropriate local licensing authority and fire authority as appropriate for the storage of explosives and for the safety of those present on the site.
- 6.62 If members of the public are to be admitted to any part of the site to attend displays or exhibitions, then security arrangements must be such that members of the public cannot gain access to firearms or ammunition.

PART 7: FIREARMS AND AMMUNITION IN TRANSIT

Carriage by Road – Section 1 & 2 Firearms & Ammunition

Private Individuals

7.1 When carrying firearms etc in a vehicle, the following steps are considered to accord with the duty to ensure the safe custody of the items.

Vehicles Left Unattended

- 7.2 Whenever possible, the vehicle should not be left unattended for long periods.
- 7.3 Vehicles containing firearms and left unattended for any length of time should ideally have an immobiliser and/or alarm fitted.
- 7.4 Where possible, they should be parked in a position that would frustrate attempts to enter the vehicle unlawfully. (eg with the boot close to a wall).
- 7.5 Where possible, they should be parked where they can be overlooked.
- 7.6 For preference, the firearms should be stored in the locked boot or other secured load carrying area of the vehicle. They should be out of sight from passers-by.
- 7.7 In the case of estates, hatchbacks and similar vehicles, the certificate holder should ensure that:
 - a) where fitted, the lid or cover of the load carrying area should be in place, or the firearms are covered and concealed to prevent their identification;
 - b) if the vehicle is to be left unattended for any length of time, the firearm and ammunition should not be stored together;
 - c) where the boot or load carrying area is the most practical place, ammunition should be secured in an appropriate container ideally, but not necessarily, secured to the vehicle;
 - d) where it is practical, the bolt magazine or other operating part should be separated from the firearm and either carried on the person, or kept in a locked container, ideally secured to the vehicle, or concealed elsewhere.
- 7.8 Where firearms and ammunition are being carried on a journey which involves their being kept away from their usual secure storage, the certificate holder should make arrangements to ensure that they are, so far as is possible, secure. Considerations when firearms are being taken to venues involving overnight or longer accommodation include:
 - a) obtaining accommodation that already provides secure facilities;
 - b) separating and retaining possession of integral parts of the firearm, eg the fore-end of a shotgun, bolt of a rifle etc;
 - c) utilising portable security devices, ie security cords etc.

Commercially

- 7.9 If not personally transferred, section 1 firearms and ammunition and section 2 firearms should be consigned for carriage with a reputable carrier.
- 7.10 Where the operations or journey require re-direction between depots, especially when different vehicles are used, the carrier should operate a system that provides a method of back tracking items in transit.
- 7.11 The consignor should have a verifiable proof of despatch from the carrier and a recorded proof of final delivery.
- 7.12 Consignment/delivery confirmation should be by signature of the respective consignor and consignee or their servant/employee.
- 7.13 Firearms must not be delivered to or left with any third party who is not authorised to be in possession of such firearms.
- 7.14 The items should be detailed on the consignment note, which should travel with the consignment.
- 7.15 The packaging should not readily identify the contents, unless required by any Hazardous Goods or Explosives transportation regulations.
- 7.16 Any parcel lost in transit must be reported to the police as soon as the discovery is made.
- 7.17 Any carrier who regularly, as a general part of his business, takes on transportation of firearms should ensure, so far as is possible that the vehicle(s) used for that purpose is of a type offering secure stowage of the goods in transit.
- 7.18 Carriers which have depots where firearms are kept between different stages of their transportation should have secure facilities similar to those that are applicable to warehousemen.

Section 5 Firearms and/or Ammunition - Commercial Carriage by Road

- 7.19 Carriers of prohibited weapons, component parts and ammunition are required to take all reasonable precautions for the safe custody of the articles in their possession.
- 7.20 Vehicles carrying prohibited weapons, component parts and ammunition must have these articles either:
 - a) secured out of sight in the load carrying area; or
 - b) within the secure area of the vehicle.
- 7.21 These areas must be secured with high security locks, padlocks of not less than level 4 of CEN 12320:1997 (commonly referred to as CEN 4), or other deadlocks.

- 7.22 Where, due to the size/shape of the prohibited weapons, it is impractical to move them in a closed vehicle they must be carried securely fastened down on open vehicles and covered to obscure them as far as possible.
- 7.23 The load carrying area of car derived vans and other goods carrying vehicles must be separated from the driver's compartment.
- 7.24 The vehicle must not be left unattended at any time when weapons, components or ammunition are carried except:
 - a) within a site licensed under explosives legislation, or exempt under the Explosives Acts (Exemption) Regulations 1979;
 - b) within an area under control of the Ministry of Defence; or
 - c) within premises authorised by the Secretary of State for the storage of that quantity of prohibited firearms or ammunition.
- 7.25 The vehicle should be equipped with a two-way communication system or vehicle tracking system.
- 7.26 If neither is viable due to the length of journey or terrain, the vehicle should be capable of being immobilised from inside the driver's compartment.
- 7.27 If explosives are being carried, then the necessary warning symbols should be displayed. Otherwise there should be no external indications of the contents of the vehicle.
- 7.28 The vehicle must always be double manned, save for the provisions covering small loads and particular articles specified in paragraph 7.37.
- 7.29 A sign must be carried indicating:
 - a) that the occupant(s) will not open the doors for anyone and if necessary, will follow a police car to the nearest police station; and
 - b) the police telephone contact number for use in the event of any incident involving the vehicle.
- 7.30 The vehicle will only make dedicated journeys with no unnecessary stops or delays.
- 7.31 When regular collections/deliveries have to be made, times and routes should be varied as often as possible.
- 7.32 When weapons are being loaded/unloaded this should be carried out discretely and whenever possible in secure conditions. When this is not possible, weapons must be boxed or covered to conceal their contents.
- 7.33 When large consignments are being carried, consideration should be given to informing police who may be able to assist in facilitating a safe route and/or delivery or collection point.

- 7.34 The dispatcher must inform the receiver of the expected time of arrival and having checked the bona fides of the recipient, advise the vehicle crew of those details.
- 7.35 The vehicle crew must ensure the bona fides of the person accepting delivery.
- 7.36 The consignment must be accompanied by documentation to validate the cargo and its journey and the transfer from consignor to carrier and from carrier to consignee must be in person and against signature confirming receipt.
- 7.37 When fewer than 6 section 5 weapons, or expanding ammunition in no more than 20 cases/boxes/cartons containing no more than 10,000 rounds per unit, or the component parts of prohibited weapons (not capable of being assembled into a working firearm) are carried, the following will apply on low-risk journeys:
 - although double manning is regarded as safest, the items may be carried in a vehicle which is single manned.
- 7.38 When single manning is used, the carrier must ensure that:
 - a) the journey can be properly accomplished within the limits which may apply to the permitted work hours for a single driver; or
 - b) the consignment must be kept between any work periods in a location which provides suitable security for the consignment, or the consignment and vehicle carrying it.
- 7.39 Carriers may use goods carrying vehicles which, in order to carry handguns and component parts have either:
 - a) a steel security container permanently attached to the vehicle's bodywork; or
 - b) a commercially manufactured lock on/lock off steel security container, which may have a common securing plate in a number of vehicles.
- 7.40 All prohibited ammunition must be secured out of sight in the load carrying area of the vehicle.
- 7.41 The vehicle must not be left unattended when firearms and/or ammunition are being carried. When this is unavoidable, the vehicle should be properly locked with the alarm set and immobilised.
- 7.42 When moving section 5 items, commercial or Heavy Goods Vehicles should display an orange 12" diameter disc clearly on the upper surface of the vehicle to enable identification from the air in the event of an emergency.

Section 5 for Professional Purposes

- 7.43 Vehicles where section 5 firearms are carried for professional use, eg vets, should be fitted with a vehicle immobiliser and alarm.
- 7.44 Firearms should always be stored in the locked boot or other secured, preferably unglazed, load carrying area of the vehicle.

- 7.45 The firearm and ammunition should not be stored together. Where the boot or load carrying area is the most practical place, ammunition should be locked in an appropriate container, secured to the vehicle.
- 7.46 If a handgun, it should be kept in a locked container secured to the vehicle.
- 7.47 Provision should be made for the securing of other firearms to the vehicles structure, eg security case, cage, cable or clamp.

For Display Purposes

- 7.48 Collections of firearms being transported for display or exhibition should be carried in accordance with conditions (given above) which are applicable to the class of weapon being carried.
- 7.49 Where articles are being transported within display cases, the vehicles selected should allow for all cases to be within the closed luggage or goods area of the vehicle.
- 7.50 Where the vehicle has windows into the load carrying area, the cases should be covered to prevent identification of the contents.
- 7.51 Whilst loading/unloading, the vehicle must either be continuously attended or be secured between each operation.

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations

7.52 When transporting ammunition and propellants, care should be taken to ensure that the limits applicable to the class of vehicle being used comply with the permitted amounts in the Regulations. Guidance for commercial carriage can be found in the above Regulations and the current edition of the international carriage regulations, ADR. For the individual carrying the limited quantities permitted for their own use, a summary of the safe and secure carriage requirements published by the Health and Safety Executive can be found in Annex B.

SECURITY: GENERAL CONSTRUCTION & STANDARDS

- 1. These specifications are a guide to the types of construction which provide a good standard of security and do not exclude other methods which would afford a similar standard. The security required should be reasonable for the individual situation, but these specifications should provide a standard against which to measure any alternative proposals.
- 2. Certain recommendations in this section involve structural adaptation. You need to ensure that any recommendation you make will not cause any damage to load bearing of floors or walls. It is important that applicants are advised professional advice should be sought before embarking on projects of this nature.
- 3. When proposing security for domestic and commercial premises, no requirements can be implemented that compromise the provisions for safe exiting from such premises, required in both the Building and Fire Safety controls.
- 4. Any proposals involving increasing levels of resistance by security devices should take account of the fact that steel doors are likely to be found inappropriate within a normal domestic situation, but may be relevant to areas such as cellars, where substantial anchorage may be present.
- 5. The style of security required must be reasonable for each situation.

Illustrations

6. The illustrations provided with this document are not necessarily to scale, but are produced to give visual information on the items to which they relate.

Cabinets

- 7. Cabinets which may be considered to be suitable for the security of firearms, shotguns and ammunition should be expected to provide the resistance equal to:
 - a) a cabinet manufactured and fitted as certified to comply with BS7558:1992; or
 - b) a cabinet fabricated to the following:
 - i) sheet steel body of not less than 2mm (14swg), formed by either folding, continuous welding or a combination of these methods;
 - when fabricating the body, the door case should be constructed to provide a
 continuous rest plate the length of the opening edge to prevent attack on the
 lockbolts by inserting a hacksaw blade;
 - the door frame may be formed by return bending of the bodysteel or the provision of a bar or angle frame, welded to the carcass with sufficient relief to the edges to provide for door locking and hanging. The frame should be designed so that the door, when closed, can resist attempts to force it inwards (see Illustration 1);

- doors should be formed from the same material with either bent, folded or
 post formed edges, or the provision of a bracing frame of bar or angled steel,
 or ribs welded to the inside of the door to prevent the flexing or bending of the
 door when closed;
- ii) doors hung on (see <u>Illustration 2</u>):
- hinges internally fitted;
- hinges externally fitted, with either hinge bolts, anti-bar plates or interlocking formed door edge, along the hanging side of the door;
- swivel bars or rods with return fold anti-bar plate. The frame should be fabricated to prevent, so far as possible, the insertion of tools to cut the pins; or
- for slot in type doors, not less than 2 steel pins of 12mm dia or full width welded steel foot plate not less than door thickness.
- iii) secured by:
- locks to BS3621 or 7 lever safe locks with not less than 38mm x 9mm cross section steel bolts; or
- locks in the approved list under HELA Tech Doc 26/5; or
- padlocks not less than CEN 4. Close shackle padlocks should be selected on open ring or plate staples.

Locks specified above, with the exception of padlocks, should be mounted on steel brackets or pockets, providing strength equal to that of the door and welded to the door (*see Illustration 3*).

- 8. Hinged full-length doors for rifles/shotguns, should be fitted with two locking devices fitted at points to divide the locking edge into equal parts. Alternatively, the door may have a driven bolt/multi-point locking system, either key or lever operated, providing:
 - a) three bolts operating equally along the opening edge or opening edge, top and bottom;
 - b) the bolts to provide resistance equal to that in BS3621;
 - c) a lever driven system to be secured by a lock to BS3621 or equivalent (see illustration 5 & illustration 6).
- 9. On slide-in, fully braced doors, the number and location of the lock(s) will be determined by the degree of absence of flexing in the door.
- 10. Padlocks should have steel staples, hasp/staple, or padbars fabricated to equate to the protective strength of the lock.

- 11. Provision of at least 4 fixing holes to take not less than 10mm diameter fastening devices. The holes to be spaced to provide maximum binding of cabinet to structure.
- 12. When ammunition or firing mechanisms are to be kept separately from the firearms, a smaller cabinet of similar construction or a separately lockable container, either as an extension of the cabinet, or internally fabricated, can be manufactured.

Safes

- 13. Assuming they are physically capable of containing a firearm, commercially manufactured safes may be considered suitable for the securing of firearms. Even early models, if tight and in good condition, can provide physical protection that would be above that expected on a cabinet constructed to BS7558. The following considerations should be applied as appropriate.
- 14. Safes weighing less than 20cwts should be secured in accordance with the manufacturer's instructions, or in the case of one already possessed, that from a manufacturer or safe engineer.
- 15. Safes have a considerable floor loading implication. Advice must be sought for any proposal to fit a safe other than on a solid ground floor.
- 16. To protect those safes with thinner plate backs, they must always be installed with the back against a solid wall or be built into a wall or recess to prevent attack at the rear.
- 17. Where the safe is secured by driven boltwork, a single key lock or dial lock (either combination or digital) is often provided. Unless there is some particular requirement, double locking is not necessary.

Display Cabinets

- 18. Cabinets which may be considered to be suitable for the display of firearms, shotguns and ammunition should be expected to provide resistance equal to:
 - a) a cabinet manufactured and fitted as certified to comply with BS7558:1992 with laminated glazing to BS5544 with a minimum thickness of 11.3mm; or
 - b) a cabinet certified to Loss Prevention Standard LPS1175, Level 3.
- 19. Cabinets which can be expected to provide these standards are most likely to be constructed by:
 - a) cabinet case manufactured from not less than 2mm (14swg) steel, formed by either folding, continuous welding or a combination of these methods with either post formed, welded angle or box section front frame; or
 - b) 60mm x 60mm x 4mm thick mild steel angle forming all edges, top back & sides with 2mm steel infill panels with box section front frame, all edges, joints and mitres, welded;
 - c) steel box section door (eg 40mm x 40mm in a 1500mm x 650mm door) with post formed flange or continuously welded external steel bar beading of 20mm;

- d) locking side to have either post formed or a continuous seam welded overlap plate to prevent insertion of tools between door and frame along that edge;
- e) door to be hung on good quality steel hinges with captive pins and secured with engineers screws;
- f) a minimum of two hinge bolts of not less than 12mm diameter, welded and mounted to pass through the section of the doorcase, located to provide maximum retention on the hanging side should an attack on the hinges succeed;
- g) glazing secured into door by solid steel internal beading/flanges (30mm x 15mm as in c above) screwed into section with 6mm diameter countersunk engineers screws at 50mm centres:
- h) laminated glass panel to BS5544 (15mm in above case);
- i) locks should be mounted in cabinet frame and not in the door. Door to be slotted to receive lockbolt only;
- j) fitted with two locks giving physical resistance to a level expected in BS7558.
- 20. Where small firearms or concealed firearms are displayed, separate devices/fixtures should be fitted to secure the exhibit(s) to the body of the cabinet.

Clamps

- 21. Clamps which may be considered to be suitable for the security of a single firearm or shotgun should be:
 - a) steel plate construction, not less than 2mm (14swg), all external joints to be seam welded or of bend construction:
 - b) secured by a lock to BS3621; 7 lever safe locks with not less that 38mm x 9mm cross section bolts; a lock on the HELA Tech doc 26/95; security padlocks not less than CEN 4;
 - c) configured to enclose weapon action and trigger(s);
 - d) provided with at least two fixing points to allow fixing devices not less than 10mm diameter being used.

Cable Locks

- 22. Flexible or semi-rigid devices for the secure fastening of single weapons which provide the restraint equal to:
 - a) spun steel security cables, not less than 8 mm diameter excluding any sleeve;
 - b) fitted with integral anchorage plate suitable for fastening with non-return security fixings;

c) secured by a close fitting padlock not less than CEN 3 or in-built security locking device.

Gun Enclosure

- 23. The adaptation of an existing enclosure within the fabric of a building which may be considered to be suitable for the security of the firearms, shotguns and ammunition where:
 - a) the enclosure is not to be formed by any walls being of timber and/or plasterboard construction (studded wall) unless the area has been rendered secure to standards similar to the recommendations in paragraph 29 below;
 - b) the door fitted is constructed either as:
 - i) a security class, laminated or solid timber core door of not less than 44mm thickness; or
 - ii) a timber door lined with sheet steel not less than 16swg, the sheet to be folded round the locking edge of the door and secured to the door structure with non-return screws or dome head bolts if externally lined, or steel screws if internally lined. The fixings to be not more than 125mm apart. (See illustration 4 & illustration 4a).
- 24. Hung on good quality hinges. A minimum of two in the case of half height and three if a full height door is fitted.
- 25. If the door is outward opening, hinge bolts must be fitted sufficient to retain the door in the event of an attack on the exposed hinge pins.
- 26. To be secured by:
 - a) two mortice locks to at least BS3621 or its equivalent;
 - b) two locks from the HELA Tech doc 26/5;
 - c) driven bolt/multi point locking system, either key or lever operated, providing:
 - i) three bolts operating equally along the opening edge or opening edge, top and bottom;
 - ii) the bolts to provide resistance equal to that in BS3621;
 - iii) lever driven system to be secured by a lock to BS3621 or equivalent (see illustration 5 & illustration 6).
- 27. Long plate lock boxes, or a 1.6mm (16swg) thick bolt protection strip to be fitted to the frame on the opening side.
- 28. If the ceiling of the enclosure is accessible from a vulnerable area, eg a loft, its security should be enhanced by the fitting of an expanded metal mesh, not less than 4mm (8swg) or equivalent. The mesh/grill section size to prevent any of the contents being removed. Secured to

the walls of the enclosure or if an alarm is fitted, protected by a device for detecting an attack on the mesh.

Gun Room

- 29. The adaptation of an existing room within a building which may be considered to be suitable for the security of the firearms, shotguns and ammunition where the enclosure does not have any walls of timber and plasterboard construction (studded wall) unless the area has been rendered secure by:
 - a) the fitting of expanded metal mesh, not less that 4mm (8swg) or not greater than 30mm by 50mm section, secured to the studding at not more than 300mm centres by suitable screw fastenings; and
 - b) if the wall may be subject to sustained attack, consideration should be given to tying the mesh to adjoining walls, floor and ceiling, or mounting in a frame secured to these areas (see illustration 7).
- 30. The room is accessed by an internal door within the building, or door within a protected area.
- 31. The door should be, according to risk and location, either:
 - a) a solid core timber barricade or laminated security door of not less than 44mm thickness;
 - b) a timber door lined with sheet steel not less than 16swg, the sheet to be folded round the locking and hanging edge of the door. It should be secured to the door structure with steel screws, non-return on the external surface. The fixings to be not more than 125mm centres. (See illustration 4 & illustration 4a);
 - c) a door to Loss Prevention Board Standard LPS 1175, Security Rating 4; or
 - d) a sheet steel door (subject to constructional strength of walls) of either:
 - i) 10mm minimum thickness sheet steel door; or
 - ii) 6mm minimum thickness sheet steel door, stiffened by the provision of a 50mm by 50mm by 6mm steel angle or channel welded as close as possible to the four edges of the door, allowing a minimum of 20mm of the door edges overlay onto the angle of the frame on an outward opening door. The stiffening to be continuous. (See illustration 8).
- 32. Solid timber, security class and steel lined doors must be fitted with good quality steel hinges. At least three to provide the necessary support.
- 33. Doors of sheet steel fabrication will need to be:
 - a) hung on robust steel hinges continuously welded to the door and door surround. Hinges may be either externally or internally fitted. Doors over 1.5 metres in height should be fitted with not less than 3 hinges. (See illustration 8, illustrations 9& 10);

- b) where external hinges are chosen, hinge bolts must be fitted to prevent the door being opened on the hinge side if the hinges have been destroyed/removed. The hinge bolts of not less than 40mm by 20mm cross section must be continuously welded to the inner surface on the hanging side of the door. The hinge bolts should fit snugly against the door surround, passing at least 20mm behind the surround. (See illustration 8, illustrations 9& 10);
- c) hinge bolts should be fitted to support each hinge provided on the door and in the case of only two being required, they must be positioned either at or above the level of the upper hinge, and at or below the lower hinge on the door;
- d) when a 6mm door pattern is chosen, steel lock pockets must be fitted so that the edge of the angle is not cut through, but slotted to receive the lock (see illustration 11);
- e) for inward opening doors, lock bolt receivers fabricated to the standards above must be continuously welded to the surround. They should be constructed to permit only necessary play in the door. Their vertical opening should allow for any flexing/expanding the door may need. (See illustration 10).
- 34. Solid timber and steel lined doors must be hung in a heavy duty timber frame fitted to the surrounding walls by appropriate fixing devices of not less than 150mm length at no more than 400mm centres with such devices not more than 150mm from the corners.
- 35. Steel door frames for up to 6mm thick steel doors fitted in walls not less than 125mm thick can be fabricated by 100mm x 100mm x 6mm angle, ideally fitted with the fixings inside the room. If this is not possible, the heads must be welded or splayed to prevent removal.
- 36. Steel door surrounds to be fitted in solid or cavity walls not less than 230mm thick, may be fabricated, dependant upon 6mm or 10mm construction of either:
 - a) 100mm by 75mm by 6mm/10mm steel angle with a 100mm by 6mm/10mm plate continuously welded to the "L" to produce a "T" section frame 200mm by 75mm by 6mm/10mm;
 - b) 200mm by 75mm by 6mm/10mm steel "T" section;
 - c) the surround must be secured by ragbolts or similar high strength masonry devices both on the external and internal faces of the "T" section surround. The outer side ones welded or splayed to prevent removal. The fixings should not be greater than 400mm apart, and not more than 150mm from the corners. (See illustration 8, illustrations 9& 10).
 - d) if the door is outward opening, hinge bolts must be fitted sufficient to prevent door failure in the event of an attack on the exposed hinge pins (See illustration 8, & illustrations 9)
- 37. Gun room doors should normally be secured by:
 - a) two mortice locks to at least BS3621 or its equivalent; or

- b) two locks from the HELA Tech doc 26/5.
- 38. It is acceptable for a door to be secured by a system of driven boltwork which is to the following standard:
 - a) the boltwork can be either lever or key driven (see illustration 5 & illustration 6);
 - b) the bolts should operate:
 - i) along the opening edge, driving a minimum of 3 bolts, set equally spaced down that edge; or
 - ii) along opening edge, top and bottom, of the door.
 - c) where the door has no bottom channel or frame, a bolt operating in the lower section of the opening edge of the door to replace that in the preceding paragraph;
 - d) the boltwork may include driven bolts acting as hinge bolts down the hanging side of the door. The number of such driven bolts must be the same as on a door with fixed hinge bolts;
 - e) the bolts must be of good quality steel;
 - f) on solid timber/steel lined doors, the boltwork can either be internally secured to the door or morticed into the door either during construction or at fitting;
 - g) on sheet steel doors the bolts must be installed either:
 - i) in steel pockets constructed from similar material to the door, continuously welded to the door:
 - ii) on a 10mm plate door, in at least 2 steel carriers constructed from 50mm by 10mm steel angle continuously welded to the doorplate (see Illustration 6); or
 - iii) on a 6mm steel door with framing, the outer carrier may be the existing angle with a 6mm reinforcing plate welded continuously to the inner face of the angle and extending at least 25mm above and below the bolt slot top and bottom edges (see Illustration 6).

Where round bolts are fitted, the steel angle should be not less than 60mm on that side through which the bolts pass.

- h) the boltwork must be secured by a lock to BS3621, engaging into the driving bars. It must effectively detain the whole of the linkage in the locked position when operated. The lock to be fitted in either a steel pocket or carrier welded to the interior of the door;
- i) in the case of a handle operated locking system, it must be designed so the handle is of a weak construction and cannot be used to place leverage on the mechanism when the door is locked:

- j) any handles fitted to either timber or steel doors should be of weak construction to prevent their being used in any attack on the door;
- k) on timber door frames, long plate lock boxes, or a 1.5mm (16swg) thick bolt protection strip should be fitted to the frame on the opening side;
- l) if the door is outward opening, an anti-bar strip may be incorporated to frustrate attacks on the locking side.
- 39. Where the ceiling of the room is accessible from a vulnerable area, eg a loft, its security should be enhanced by the installation of a weldmesh grille secured to the walls of the room or if an alarm is fitted, by a method of detecting any attack at this point.
- 40. Ideally, there should be no windows in the gunroom if at ground floor/basement level. Secure ventilation to the following standard would be suitable:
 - a) the fitting of a steel grille and internal baffle as in *illustration 15*; or
 - b) an arrangement where the internal and external ventilation openings are not in line, the external ventilator facing a solid inner wall for at least the whole of its surface area.
- 41. Any windows serving this room should be fitted with either:
 - a) steel bars of not less than 19mm diameter or section at a maximum of 125mm vertical centres. Horizontal steel straps or crossbars to be welded to each upright at a maximum of 450mm spacing to resist jacking. The bars may be individually fitted, grouted in not less than 50mm and 50mm from inside edge; or mounted in a steel plate or angle frame fixed to the wall surround at no more than 250mm centres; or
 - b) welded or expanded steel mesh grilles of at least 8swg (4.5mm) maximum 50mm x 50mm mesh, welded into an angle iron frame and installed as above.

Armoury Building

- 42. **Building:** the following criteria can be applied to a stand-alone armoury to store firearms and ammunition.
- 43. **Walls:** the walls of an armoury should be constructed in any of the following ways, to satisfy the requirements of Part A of the Building Regulations:
 - a) solid reinforced concrete of 250mm minimum thickness;
 - b) walls of solid bonded brickwork or masonry of 325mm minimum thickness; or
 - c) cavity walls of dense concrete block, brick or stone, not less than 275mm excluding the cavity. The construction should be an external leaf of 100mm and an internal leaf of 175mm minimum thickness.
- 44. In an existing solid bonded brick/masonry or cavity wall not fulfilling the requirements of the preceding two paragraphs, one of the following provisions should be selected:

- a) increase the internal leaf material thickness to provide a wall of 275mm minimum thickness; or
- b) in the case of solid bonded brickwork etc additional material, bonded to the existing thickness to produce a wall of not less than 325mm; or
- c) fitting of a substantial internal wire mesh reinforcement of not less than 2.3mm thickness, and of 50mm by 20mm maximum mesh size to be fixed either:
 - i) directly to the wall at 300/400mm centres with mild steel washers and proprietary fixings or resin anchors. Each sheet should be butt jointed; or
 - ii) to steel angle frame of not less than 50mm by 50mm by 3mm with cross rails at not more than 1.2 metre centres to form an internal lining cage.
- 45. **Roof/ceiling:** the roof or ceiling of an armoury should be constructed by any of the following methods:
 - a) solid reinforced concrete of 150mm minimum thickness, tied into the walls. Where this forms the roof of a building, the concrete may be sloped to assist in draining of water. In this case, the thickness at the roof edge shall not be less than 120mm;
 - b) vaulted brickwork or masonry, providing a ceiling of solid materials of not less than 300mm thickness;
 - c) in the case of an existing roof/ceiling:
 - i) upgrading by reinforced concrete to give a resistance comparable with a) above;
 - ii) fitting of a substantial internal wire reinforcement of not less than 4.5mm thickness and of 50mm by 20mm maximum mesh size, secured to the floor joists using washers or proprietary steel clips held by screws of not less than 10 gauge giving a penetration into timber of at least 60mm at not more than 300mm centres;
 - iii) the reinforcing should be laid so that the mesh, when reaching the edges of the ceiling/roof is either:
 - folded down and secured to the walls with masonry or other heavy duty fixings; or
 - welded onto steel angle which is secured to the wall with masonry or other heavy duty fixings (see illustration 12).
- 46. **Floor:** the floor of an armoury should be constructed either by:
 - a) solid reinforced concrete of 150mm minimum thickness, tied to the walls. Where this forms part of the floor for any other part of the premises, this required thickness need only extend so far as is necessary to ensure the integrity of the bond between walls and the floor of the armoury; or

- b) vaulted brickwork or masonry, providing a floor of solid materials of not less than 300mm thickness; or
- c) in the case of an existing concrete, brickwork or masonry floor, by the provision of suitable upgrading to ensure that the provisions in the forgoing paragraphs are met; or
- d) in the case of an existing suspended timber floor:
 - i) fitting of a sheet steel flooring, not less than 3mm in thickness, secured to the joists of the floor by screws of not less then 10 gauge giving a penetration into timber of at least 60mm at not more than 300mm centres; or
 - ii) fitting of a substantial internal wire reinforcement of not less than 2.3mm thickness, and of 50mm by 20mm maximum mesh size. The panels to be overlaid by timber flooring of not less than 18mm thick secured to the floor joists by screws of not less than 10 gauge giving a penetration into the joist timber of at least 60mm at not more than 300mm centres. The finished floor being a sandwich of floorboard, mesh, overlaid floorboard (*see* illustration 13) laid so that the mesh, when reaching the edges of the floor is either:
 - folded up and secured to the walls with masonry or other heavy duty fixings;
 or
 - welded onto steel angle that is secured to the wall with masonry or other heavy duty fixings;

Any adaptation of existing floors must be calculated to ensure that the work proposed does not compromise the strength of the structure, existing timbers or supports.

47. **Doors:** the door or doors and surround of an armoury should be constructed as follows:

Doors should be of sheet steel and fabricated either as a:

- a) 10mm minimum thickness sheet steel door; or
- b) 6mm minimum thickness sheet steel door, stiffened by the provision of a 50mm by 50mm by 6mm steel angle or channel welded as close as possible to the four edges of the door, allowing for a minimum of 20mm of the door edges to overlay the angle of the frame on an outward opening door. The stiffening to be continuous and unbroken. (See illustration 8).
- 48. Doors of either fabrication should be:
 - a) hung on robust steel hinges continuously welded to the door and door surround. Hinges may be either externally or internally fitted. Doors over 1.5 metres in height should be fitted with not less than 3 hinges. (See <u>illustration 8</u>, <u>illustration 9</u>, <u>illustration 10</u> & illustration 14);
 - b) if external hinges are chosen, hinge bolts must be fitted to prevent the door failing if the hinges have been destroyed/removed. Hinge bolts of not less than 40mm by 20mm cross section must be continuously welded to the inner surface on the hinge side of the

door. The hinge bolts should fit snugly against the door surround, passing at least 20mm behind the surround. (See illustration 8, illustration 9, illustration 10 & illustration 14);

- c) hinge bolts should be fitted to support each hinge provided on the door and in the case of only two being required, they must be positioned either at or above the level of the upper hinge, and at or below the lower hinge on the door;
- d) doors must be secured by at least two multi-lever mortice locks which comply with:
 - i) British Standard 3621 or its equivalent; or
 - ii) HELA Tech Doc 26/5 or other recognised equivalent; and
 - iii) the locks must have a minimum 20mm bolt throw, measured from the face of the lock:
 - iv) doors over 1.5 metres in height should be fitted with 3 locks (see <u>illustration</u> 8);
- e) doors secured by a system of driven boltwork to the following standard are acceptable:
 - i) the boltwork can be either lever or key driven (see illustration 6);
 - ii) the bolts should operate:
 - along the opening edge, driving a minimum of 3 bolts, set equally spaced down that edge;
 - there should be a minimum of 1 bolt operating along the top;
 - where the door has a bottom channel forming part of the frame, a minimum of one bolt operating along the bottom;
 - iii) the boltwork may include driven bolts acting as hinge bolts down the hanging side of the door. The number of such driven bolts must be the same as on a door with fixed hinge bolts;
 - iv) the bolts must be of good quality steel, not less than 20mm by 30mm cross or 25mm diameter round bar. The bolts must pass not less than 20mm behind the frame when operated;
 - v) the bolts must be installed in steel pockets constructed and fitted to the standard for lock pockets provided in paragraph 49 below, either:
 - on a 10mm plate door, in at least 2 steel carriers constructed from 50mm by 10mm steel angle continuously welded to the door plate (see illustration 6); or
 - on a 6mm steel door with framing, the outer carrier may be the existing angle with a 6mm reinforcing plate welded continuously to the inner face of the angle and extending at least 25mm above and below the bolt slot top and bottom edges (see illustration 6);

- vi) where round bolts are fitted, the steel angle should be not less than 60mm on that side through which the bolts pass;
- vii) the boltwork must be secured by two locks of the types specified in paragraph 37 or in (d)(i) or (ii) above, engaging into the driving bars at two separate locations within the driving linkage. It must effectively detain the whole of the linkage in the locked position when operated. The locks to be fitted in reinforced pockets, welded to the interior of the door.
- 49. Locks must be enclosed in steel lock pockets that are continuously welded to the door. The two side plates should have a thickness of 6mm. The top and bottom edges should be steel blocks which are of a size to allow the lock to fit snugly into the pocket and provide sufficient height for the lock screws to be tapped into them. (See illustration 11).
- 50. Lock pockets should be positioned as close as possible to the vertical edge of the door, while permitting the door to be opened without obstruction. When in the thrown position, the bolt of the lock should pass into a hole cut for this purpose in the steel angle stiffener fitted to the adjacent part of the surround of the door. The size of the hole should be such that it forms a snug fitting for the lock bolt and does not permit any movement of the door when locked.
- 51. Where a Banham, Chubb or Erebus lock is fitted, it must be protected by an anti-drilling plate. This plate can be built into the lock pocket or may be welded on to the outside of the door.
- 52. When the 6mm door pattern is chosen, the lock pockets must be fitted so that the edge of the angle is not cut through, but slotted to receive the pocket (*see* illustration 11).
- 53. For inward opening doors, lock bolt receivers fabricated to the standards above must be continuously welded to the surround. They should be constructed to permit only necessary play in the door. Their vertical opening should allow for any flexing/expanding the door may need. (See illustration 10).
- 54. Door handles should be of weak construction to prevent their being used in any attack on the door.
- 55. Door surrounds may be fabricated of either:
 - a) 100mm by 75mm by 10mm steel angle with a 100mm by10mm plate continuously welded to the "L" to produce a "T" section frame 200mm by 75mm by 10mm; or
 - b) 200mm by 75mm by 10mm steel "T" section.
- 56. The surround must be secured by ragbolts or similar high strength masonry devices both on the external and internal faces of the "T" section surround. The fixings should not be greater than 400mm apart, and not more than 150mm from the corners. (See illustrations 9 & 10).
- 57. The surround should be constructed to ensure that the edges of an outward opening door overlap the receiving face of the frame by at least 20mm (see illustration 9 & illustration 14).
- 58. If a double door unit is required, then the following additional items are required:

- a) the first closing leaf should have bolts fitted with a diameter or respective sides not less than 20mm. The bolt cases should be welded to the internal faces, top and bottom, engaging behind the frame or into a strong steel housing for a distance of not less than 20mm;
- b) a flat steel strip should be welded along the length of the edge of the first closing leaf to provide a rest-point for the second door and to conceal the location of the lock bolts;
- c) the doors require a minimum of three locks.
- 59. **Ventilation/lighting:** unless specifically required for air circulation, control of moisture etc there should be no ventilation openings in the armoury.
- 60. In adapting existing premises, windows and other ventilation provisions should be removed and the opening made good to the level of the surrounding masonry etc.
- 61. Where ventilation is specifically required, the preferred options are:
 - a) ventilation in a wall already within another part of the premises;
 - b) secure staggered ventilation in an external wall.
- 62. Ventilation openings should be constructed in the following way: external openings of all ducts or openings should be protected by metal grilles of not less than 2.5mm steel plate, secured into the surrounding walls with non-return fixings or ragbolts not less than 75mm long and 15mm diameter fitted, dependent upon the type of ventilation opening, to conform to <u>illustration</u> 15.
- 63. The course of a ventilation opening must either be:
 - a) in solid walls, ventilation shafts must be staggered upwards or sloped from outside. The inner opening(s) must be protected by the provision of a steel baffle plate of not less than 6mm steel plate mounted so that the plate overlaps its fixing bolts by at least 25mm in each direction. Ragbolts of not less than 20mm diameter must be anchored into the walls at not less than 230mm from each side of the opening. The plate should stand off from the surface of the wall by not more than 50mm. (See illustration 15.);
 - b) cavity walls should be constructed so that the openings in the outside and inside section of the wall are not in direct alignment vertically or horizontally with one another. In this arrangement, the external opening should be placed below the line of the internal opening;
 - c) in an existing cavity wall constructed with a 'straight through' ventilation opening, the inner opening may either be:
 - i) bricked up, with the brickwork being tied to the surrounds to ensure uniform strength. A new internal opening then being formed to comply with the above; or
 - ii) the provision of an internal steel baffle as specified above and external metal grille (see <u>illustration 15</u>.);

Where vents form part of piped connections in an air conditioning or circulation system which is operated by powered fans or similar electrical arrangements which do not give direct passage between the armoury wall(s) and the outside of the building, then it will be sufficient to provide protection to the immediate point of entry to the armoury.

- 64. Lighting should be provided to ensure that persons in the armoury can operate safely and securely. Any lighting system must provide sufficient illumination in the armoury to allow for proper supervision. Enclosed fittings must be used in such areas.
- 65. A system of secondary lighting, to comply with the requirements of BS5266, must be provided in the event of a power failure.
- 66. In the event of any person being closed in the armoury, there must be an alarm to give indication that this has occurred.
- 67. **Steel Armoury:** the following should be considered with a steel armoury manufactured to the standards of HELA Tech 26/5, where the material is not less than 10mm.
- 68. As a general principal, such a unit should be protected from the weather. The provision of a weather resistant surround, eg timber building, could reduce the necessary maintenance and assist in reducing the internal temperature variations which such metal enclosures generate.
- 69. The general principles applying to the fabrication of a steel armoury are:
 - a) constructed from mild steel plate to BSEN 10025 FE 430 A or equivalent;
 - b) welding to be completed to a Welding Approved Accreditable Recognised Standard such as EN 287 ASME Section 9 or equivalent;
 - c) each unit should be fitted with strong, steel channels securely welded to the base. At four points, suitably-spaced holes should be drilled through the channel and the adjacent parts of the steel base. The diameter of these holes should be just sufficient to accept a 20mm diameter bolt. The unit should stand on a base of good quality concrete at least 300mm thick. The 20mm ragbolts should be fixed firmly to a depth of at least 150mm. The threaded upper ends of the bolts should pass through the holes in the steel channel and terminate just below the wooden floor level. The concrete base should be thoroughly cured before fixing the unit in position, otherwise distortion can occur and doors may not fit properly. (See illustration 16);
 - d) the opening for the door should be stiffened by steel angles of not less than 50mm x 50mm x 6mm welded to the walls so that, when the door is closed, its inner surfaces meet at the top and at the vertical sides for a distance of about 20mm inwards from the edge. Alternatively, the horizontal parts of the framework maybe stiffened by a steel bar, 10mm to 15mm thick, welded to the inner surface of the roof and, at each end, to the walls on either side of the door. (See <u>illustration 17</u> depicting suitable arrangements);
 - e) the door should be of a minimum 10mm thick steel plate and should be stiffened by the provision of steel angles or channel (50mm x 50mm x 6mm) welded to the inner surfaces of the door as close to the four edges as possible. The angle should be continuous and unbroken. (See illustration 18);

- f) the door should hang by means of robust steel hinges continuously welded both to the door and to the door surround. The hinges may be fitted internally or externally;
- g) for doors with external hinges, hinge bolts should be provided. Hinge bolts should be continuously welded to the inner surface at the hinge side of the door and extend to a distance of at least 20mm behind the door surround. When the door is in a closed position, the hinge bolts should fit snugly against the door surround. The bolts to be of not less than 20mm by 40mm cross-sectional. The upper bolts should be positioned at or above the level of the hinge; with lower hinge bolts at or below the level of the lower hinge. The number of hinge bolts fitted should be dependent on the height of the door, but in no case should there be fewer than two. Where there are more than two, it is desirable that they be equally spaced;
- h) the door must fit flush with the walls and any gaps around the door must be the minimum necessary to permit the door to open and close freely;
- i) some manufacturers fit internal hinges. The design of these hinges should be such that they must not straighten if subjected to a lever-attack on the hinge side of the door. *Illustration 14* gives an indication of a suitable hinge and the means by which it may be fixed to the door surround. It should be noted that, in order to provide additional strength, the hinge is also welded to the adjacent parts of the steel angle stiffening pieces;
- j) at least two hinges must be fitted. Doors with a height of 1.5m or over should be fitted with three hinges, whether they be internal or external;
- k) the doors should be secured by at least two mortice locks as specified for steel doors in buildings constructed as armouries (see *illustration 19* if fitting a Chubb 3G 227 lock);
- l) each lock should be enclosed within a steel lock pocket, fabricated and fitted as specified for steel doors in buildings constructed as armouries;
- m) the end of the lock bolt should be protected by means of a piece of 6mm steel angle or plate welded across the door surround stiffening angle in such a position to prevent end-on attack on the bolt (see illustration 14);
- n) door handles should be of weak construction to prevent their being used to assist in an attack on the door.
- 70. Where for safety reasons a steel unit must be ventilated, the simplest form of ventilation is a number of 5mm diameter holes drilled through the front and rear walls of the unit. Whatever form of ventilation is used, it should be protected by a 6mm thick steel cover-plate welded to the outside of the walls, covering the area of the ventilation holes and open only at the bottom (see illustration 15).
- 71. All steel armouries should be lined with timber walls, floor and ceiling, of at least flooring strength, fitted to timber bearers to allow at least 75mm air gap between steel wall and inner surface. Where increased resistance is deemed necessary, a metal mesh liner as previously defined can be installed between timber walls and the backs of any racks or weapon cabinets fitted inside the armoury. An example is shown in *illustration 20*.

72. The following requirements are applicable to Armouries of any construction where circumstances warrant an enhanced level of security.

Internal Firearms Security: within any armoury there should be provided a system for secure separation of individual person's firearms, where there is more than one user. This may be achieved by:

- a) individual lockers or cabinets for each person sharing the facility;
- b) weapons racks with individually locked anchored chain or security cord;
- c) wire mesh cages or weapon racks with separate lock (for multiple weapons, ie clubs sharing same facility).
- 74. **Alarming** (where appropriate): the armoury and all areas deemed part of a "secured area" should be protected by an intruder alarm installed to at least British Standard 4737 by a compliant installer.
- 75. The alarm should be so designed and installed that its components and system will:
 - a) detect any physical attack on the structure of an armoury at the time the attack commences on the outer surfaces;
 - b) on all other secured areas, provide detection by suitable motion detection devices;
 - c) provide signalling by a secured and monitored system to the current ACPO and ACPOS Intruder Alarm Policy;
 - d) any safety alarms activated by a person locked inside a secured area must provide audible warning which, if not cancelled within a specific safety time, signals out to the monitoring station or police;
 - e) provide either fixed or wire free devices ("panic" buttons or pendants) for signalling personal attack on persons on or at the premises;
 - f) provide silent duress coding in the event of a forced disarming of the system;
 - g) give suitable local visual and audible warning that an attack on the premises has been detected.

CARRIAGE (BY PRIVATE INDIVIDUALS) OF BLACK POWDER & SMALL ARMS AMMUNITION FOR USE IN SMALL ARMS AND MODEL ROCKET MOTORS

Guidance on Good Practice drafted by representatives of the Police and the Shooting Sports, in conjunction with HSE

- 1. The transportation of explosives by private individuals in their own motor vehicles for leisure activities is permitted within certain weight limits. Explosives include black powder (gunpowder), smokeless powders, small arms ammunition for use in small arms, and model rocket motors. It is the responsibility of the individual carrying the explosives to ensure that the prescribed limits are not exceeded. Given the instances of road accidents, care must always be taken to prevent the presence of explosives from increasing the hazard produced by the accident to the driver, passengers and any other persons.
- 2. To that end, the following are recommended methods of transporting those explosives in a safe and secure manner by road. They do not cover the restrictions placed on the carriage of explosives by rail or by any form of public transport.
- 3. The person who is in lawful possession of the explosives must ensure that the vehicle, when parked and unattended, is locked and any immobiliser or alarm should be set. If possible the vehicle should be parked within the sight of the responsible person and not left unattended for any longer than is necessary for the immediate comfort or refreshment of that individual(s).
- 4. Where a vehicle is to be left unattended, the explosives must be removed. Failing this, the explosives must be held in a locked container secured to the vehicle so that the container, together with the vehicle, provides a secure place of keeping.
- 5. Only classified explosives may be carried and they should always remain in their original packaging. This packaging displays the appropriate hazard warning and security labels. The packages of explosives, or where required their contents may also be placed in one of the following accepted containers:
 - a) a container, not the original, but displaying the appropriate carriage and security information;
 - b) powder flasks or containers designed or adapted to throw a measured or measurable charge, having a fully closed plate or removable stopper;
 - c) closed or stoppered tubes or phials designed to contain sufficient powder or propellant for one shot;
 - d) gunpowder twists carried in a closed container;
 - e) in the case of small arms ammunition and cartridges, in a robust bag designed for the purpose.

- 6. The package, with original hazard labels, or the above, suitably identified must be kept out of view and properly restrained to prevent any movement likely to result from any normal motion of the vehicles or impact in the event of collision. The object is to avoid having the explosives in a position that it is close to those parts of the vehicle likely to be subject of impact.
- 7. Explosives should be separated from and protected from any other hazardous materials or sources of vehicle fire. Only items classified as UN Hazard Code 1.4S (eg, small arms cartridges) may be carried with other dangerous goods (eg, fuel cans, gas bottles, paints, solvents etc). Black powder is *not* classified as 1.4S, so separation of black powder, propellants and rocket motors from hazardous materials is required so as to prevent the accidental initiation of one by the other.
- 8. Containers and the areas in the vehicle in which the explosives are to be carried should be kept clean and free from contamination, particularly by grit.
- 9. For security of the explosives, they should be kept in the boot or any other lockable storage area within the vehicle. In the case of an estate car or similar, where the Explosives are being carried in the load carrying area, the responsible person should ensure that the lid or cover is in place. In the absence of such a lid or cover, the items should be covered or concealed in such a way as to prevent their identification.
- 10. In the interests of safety, the person possessing the explosives in carriage should ensure that all occupants of the vehicle are aware that potential hazards, such as smoking, naked flames or sparks are strictly forbidden inside or close to the vehicle.

Annex C

Key points in a typical steel firearms cabinet

(Illustration with internal ammunition/component locker) A cabinet is usually made from steel sheet, by continuously welded or bend construction to prevent insertion of bars. chisels etc

> Swing pin hinges should be welded not riveted. Hinges should normally be welded to door and

Cabinets with exposed hinge barrels and those with piano hinges which have been fitted using rivets require anti-prise plates.

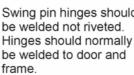
Any internal compartments for the storing of ammunition rifle bolts, etc. should be as strong as the main body of the cabinet

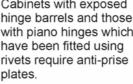
The lock mountings to be welded to the door of the cabinet, ensuring the lock is so secured to prevent its movement if attacked. Two locks are required on full length rifle cabinets fitted at 1/2 and 2/3rds of the doors

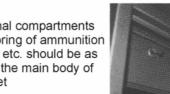
> Fastenings must be appropriate to the size and structure. 'Rawl' and expanding bolts should be utilised in stone, brick and concrete. Coach screws and bolts for timber joists. The cabinet manufacturers will usually include recommendations for fixing devices

Hinge bolts, full anti-prise plate or return bends should be fitted to protect the hinged side of the door















If you are asked or if you are advising on locating any cabinet. Remember - consider the load bearing. On suspended floors locating over joist ends is preferred to placing over the mid points in the joists run



LOCKS SUITABLE FOR USE IN HELA 26/5

Banham M/101 or M7 Exp Banhams Patent Locks Ltd

233/235 Kensington High Street

London W8

Tel 020 7937 4311

Bramah MD17 Bramah Security Equipment Ltd

31 Oldbury Place London W1M 3AP

Tel 020 7486 1739

Erebus E2553 Bramah Security Centres Ltd

(repair only; manufacture if sufficient demand) 31 Oldbury Place London W1M 3AP

Tel 020 7486 1757

Chubb 3G 317 005/04 (*left hand*) Security Lock Division

3G 317 006/04 (right hand) Chubb Safe Equipment Co Ltd

PO Box 61

Wednesfield Road

Wolverhampton WV10 0EW

Tel 01902 455111

Chubb 3G 227 Chubb Locks Ltd

(this lock requires to be fitted with PO Box 197 the modifications in illustration 19) Wednesfield Road

Wolverhampton WV10 0EW

MANUFACTURERS OF STEEL STORES TO HELA 26/5

H & G Explosives Services Ltd Elsham House 1 Elwes Street Brigg North Lincs DN20 8LB

Tel 01652 640644 Fax 01652 659345

J G Turnbull Ltd Station Approach East Boldon Co Durham NE36 0AD

Tel 0191 5367149 Fax 0191 5190218

Zone Power Ltd High Road Bressingham Diss Norfolk IP22 2AT

Tel 01379 687796 Fax 01379 687437

ANNEX E

STANDARDS REFERRED TO WITHIN THE TEXT OF THE HANDBOOK

BS 7558 : 1992 Specifications for gun cabinets

BS 3621: 1980 Thief resistant locks for hinged doors

CEN 12320 : 1997 Specifications for padlocks

BS 4737: 1987 Intruder alarm systems in buildings

BS 6799 : 1986 Wirefree intruder alarm systems

BS 8220 Security of buildings against crime Part 1 – Dwellings

BS PAS 024: 1999 Specification for doors of enhanced security

BS 7950: 1997 Windows of enhanced security

BS 5544: 1978 Specification for anti-bandit glazing (glazing resistant to

manual attack)

BS 5357: 1976 Code of practice for the installation of security glazing

LPS 1175 Loss prevention standard – The Loss Prevention

Certification Board Specification for testing and classifying the burglary resistance of building components, strong

points and security enclosures

ANNEX F LIST OF ILLUSTRATIONS

Illustration 1	Suggestions for forming door framing
<u>Illustration 2</u>	Suggestions for hinge bolt / protection strips
<u>Illustration 3</u>	Suggestions for lock mounting
Illustration 4	Example of metal cladding timber doors
<u>Illustration 5</u>	Multi-point locking systems – commercial manufactured
<u>Illustration 6</u>	Examples of arrangements for driven boltwork
<u>Illustration 7</u>	Gunroom wall – proposal for reinforcement
<u>Illustration 8</u>	Steel door
Illustration 9	Steel door – outward opening
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Illustration 11	Lock pockets
Illustration 12	Reinforcement of timber roof and ceiling
Illustration 13	Reinforcement of timber floor
Illustration 14	Steel armoury door hinges – external hinge and bolt end protection
<u>Illustration 15</u>	Ventilation protection
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Illustration 19	Amendments to steel door when fitting Chubb 3G227
Illustration 20	Layout in steel armouries