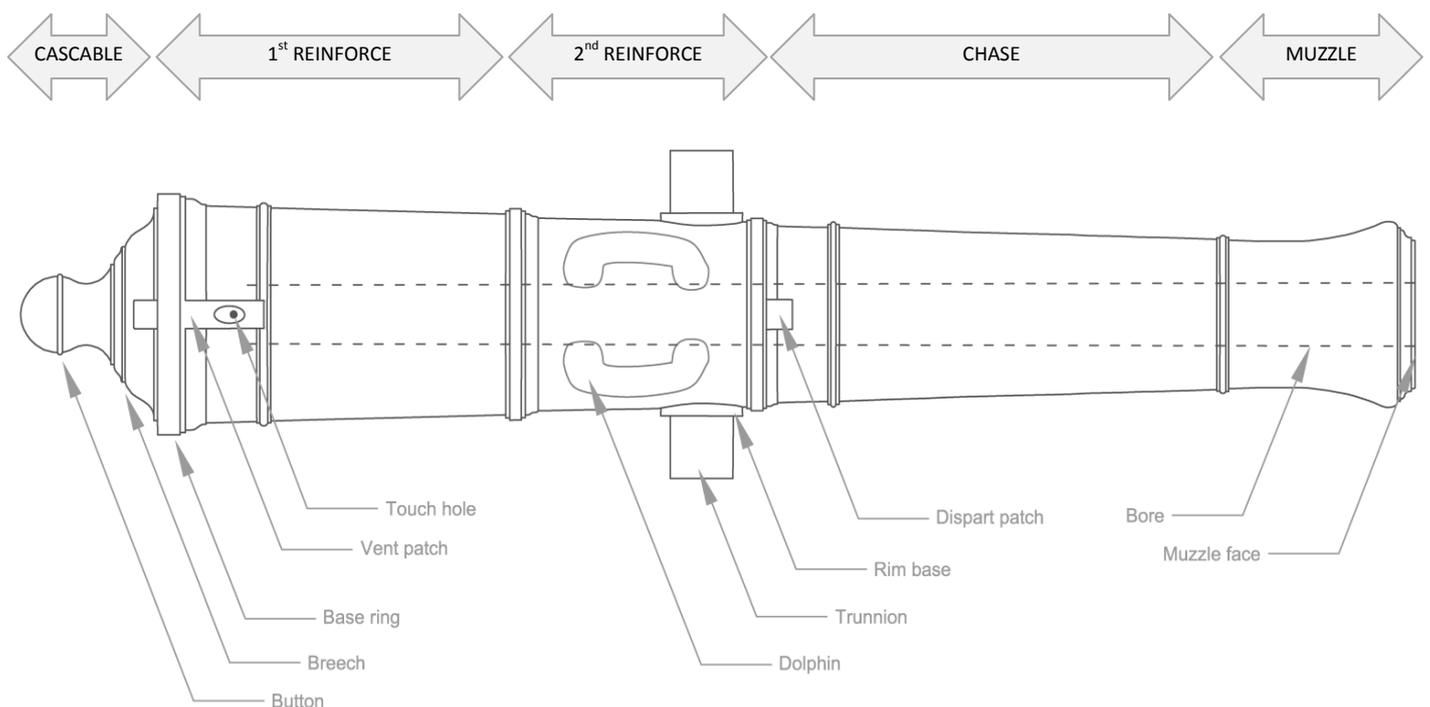


Notes on the use of the CISMAS Complex Cast Gun Recording Form (V2)

The complex cast gun form is intended for recording guns on land – for recording underwater, use the Simple Cast Gun Form. The aim of this form is to collect enough data from the gun to allow an engineering line-drawing of the gun to be made. It is anticipated that at some future date the data collected using this form will be transferred to a gun record database – in which case the detailed classifications used on the form can be used to search the database for similar guns.

The CISMAS complex gun recording form is a development of the system proposed by Steven Hoyt in his Texas A&M University thesis *An Empirical System for the Identification of Smooth Bore, Cast Iron Cannons*. The CISMAS form is still very much 'work in progress'. If you notice any problems or potential improvements please contact me (darkwright@btinternet.com).

The parts of a gun



Using the form

Record the measurements in the boxes indicated on the form, preferably in millimetres. If you use units other than millimetres make sure you record (in the tick boxes) which units you have used. The diameter measurements are best taken using a large pair of callipers. If you do not have callipers, then measure the circumference and precede the measurement with a large 'C'.

All references to the rear or aft of the gun refer to the cascable/button end of the gun. References to right and left sides are from a 'gunner's eye view' – looking forwards along the upright barrel towards the muzzle.

Site - The name of the site. If the gun is on an archaeological site, the site code should be used.

Gun number - On sites with more than one gun, the guns should be given numbers.

Recorded by - The name of the person (or persons) recording the gun.

Date of record - The date the gun was recorded

Location - Give a position derived from a hand-held GPS if possible: latitude and longitude at sea or an OS grid reference if on land. If you do not have access to a GPS then estimate the position from a chart or OS map. Please state in the notes section how the position was obtained (GPS or estimated). If on land, give the street address of the gun in the notes section.

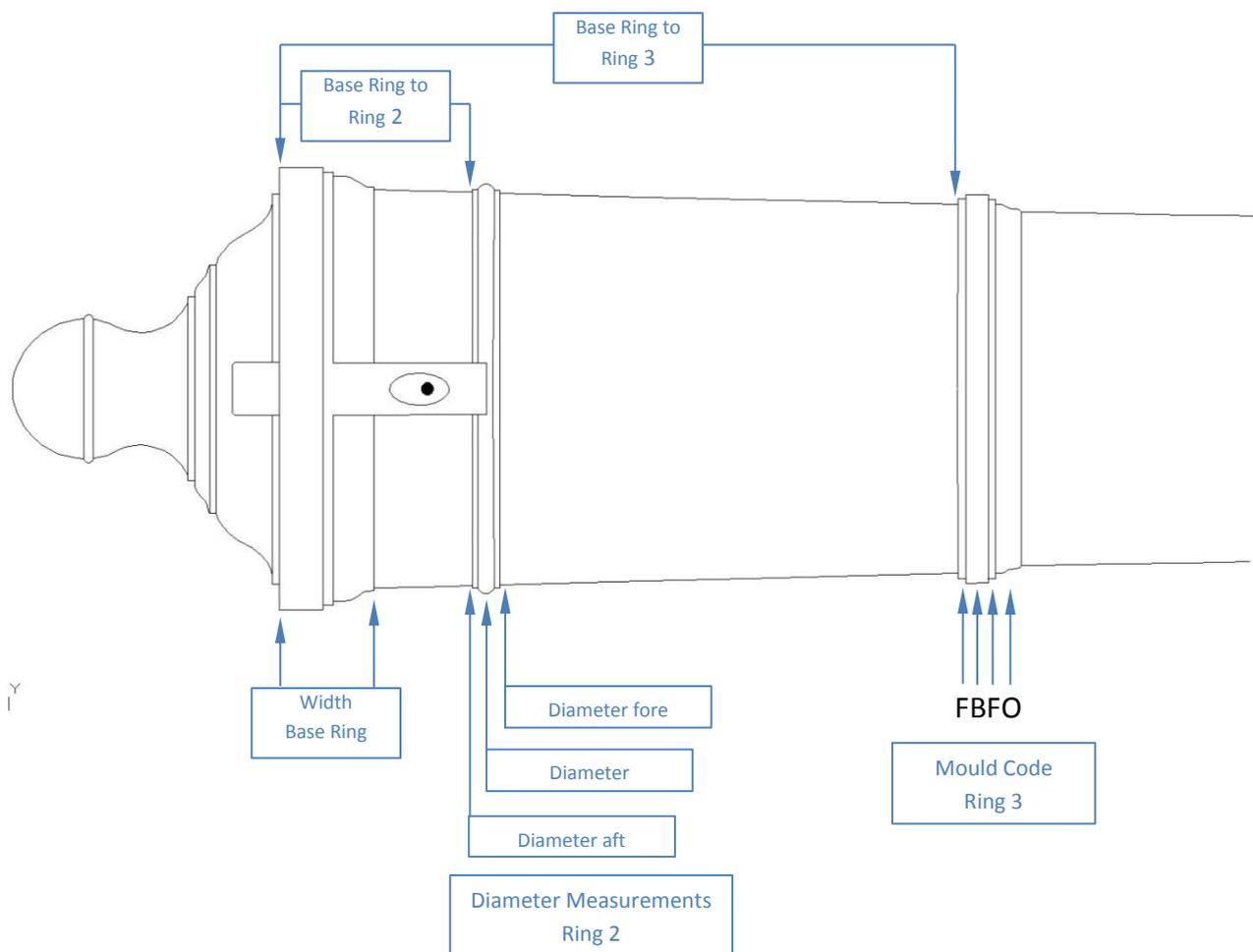
Units - Tick one of the boxes to indicate the units in which the measurements are recorded

Gun Info – Is there an information sign or plaque associated with the gun? If there is it should be photographed. Tick YES or NO.

Material - Tick cast iron or bronze. If unsure put '?' in the box you think most likely.

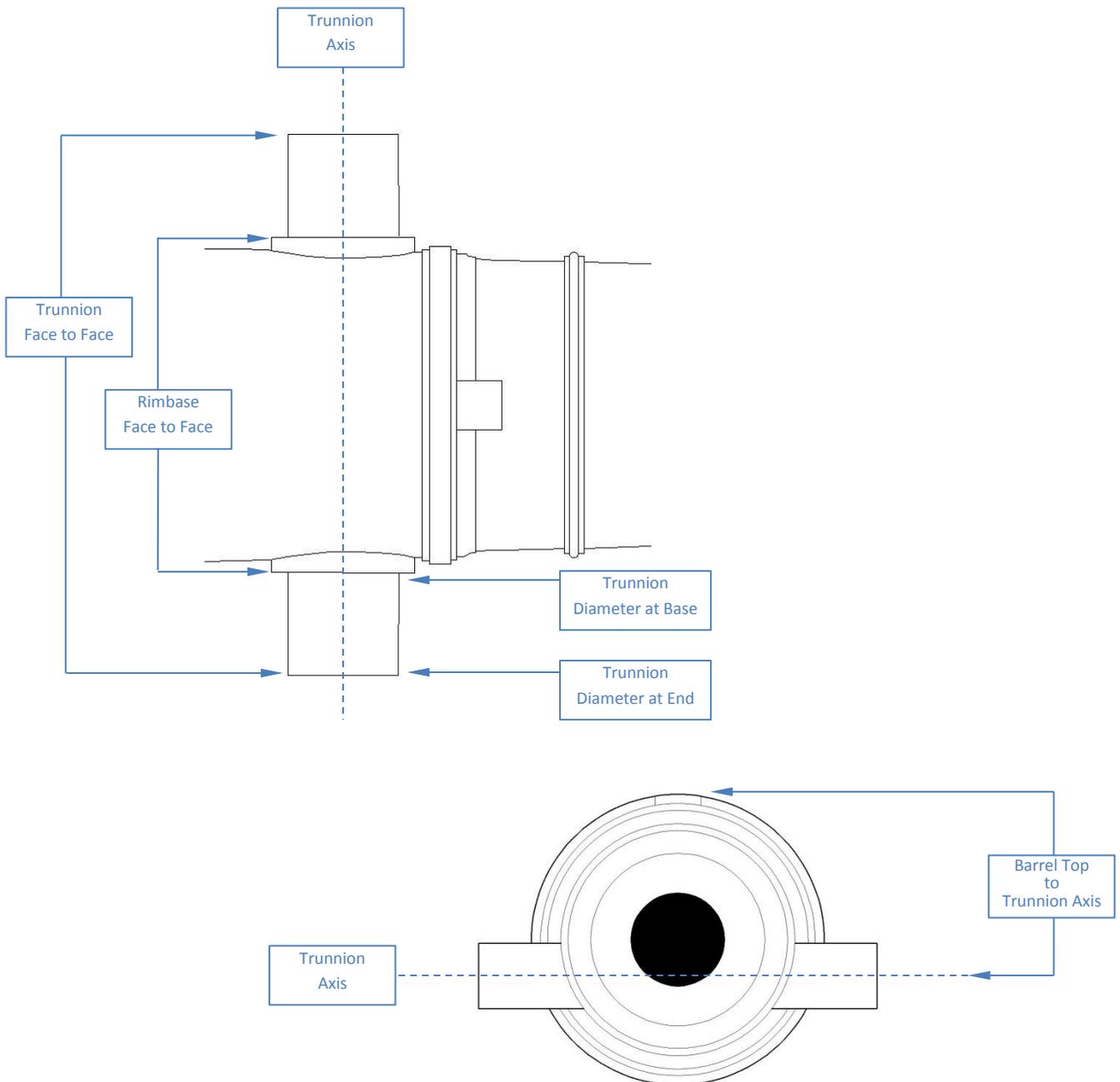
Carriage parts - For use where original carriage parts survive (usually underwater). Carriages on land are almost always reproductions. Write 'REPRO?' if unsure.

Recording the Barrel



Barrel – Starting at the back of the barrel (at the base ring) the diameter of the barrel and the distance from the base ring will be recorded for each set of ‘rings’ on the barrel. In each case the diameter of the barrel will be measured behind (aft of) the ring, on the widest part of the ring and in front (fore) of the ring. This is shown on the diagram above. The total width of the ring will be measured. Each element of the ring mouldings will be assigned a moulding code – the available moulding codes are shown in the table of moulding codes on the back of the gun recording form. An example of the moulding codes is shown in the drawing above; in this example ‘F B F O’. If a suitable code is not listed, sketch the moulding on the form and PLEASE send me a copy so that I can update the form. When measuring the distance from the base ring to each of the other rings the measurements should be taken from the rear of the base ring to the rearmost part of each ring (again see the drawing above for an illustration of this). Similarly, when measuring from the last ring to the muzzle swell and face, take the measurement from the rearmost part of the last ring.

Recording the Trunnions



Trunnions – If there is no rimbase please enter 'NO' for each measurement pertaining to the rimbase. The barrel top to trunnion axis distance can be tricky to measure – place a horizontal rule or spirit level over the barrel and measure from this to the trunnion axis.

Muzzle – Take diameters with callipers where possible. If you have to use the circumference instead, remember to precede the measurement with ‘C’. The length of bore is best made using an extending steel tape (the standard DIY tape). If the bore is blocked, enter ‘B’ for length of bore.

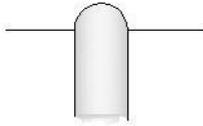
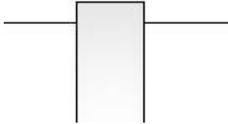
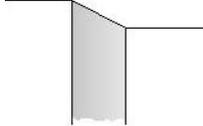
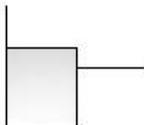
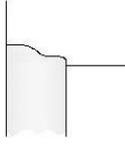
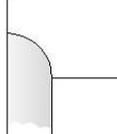
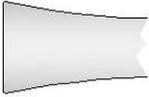
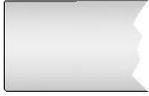
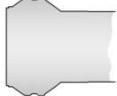
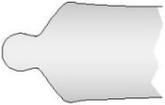
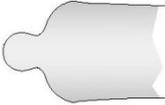
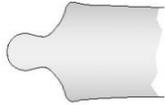
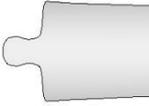
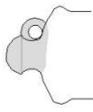
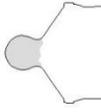
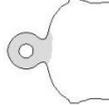
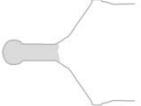
Cascable – Select a code for the cascable shape from those listed in the table on the back of the form. You are looking for the general shape of the cascable rather than an exact match. The same applies to the button shape codes. If you do find a cascable or button with a general shape not illustrated, PLEASE sketch and photograph it and send me a copy so that I can update the form.

Markings - Any visible markings should be noted. Always photograph any markings present – the photographs should show a close up and a distant shot so that the location of the marking can be determined. Also make a sketch of any markings in the notes section (or on a separate sheet if they are extensive).

Notes - Any other features of note should be recorded here. You should also make a sketch of the gun, either on the back of the form or on a separate piece of paper.

Gun Recording - Photographs	
View Code	Description
G1	General view showing the gun and its surroundings
G2	Side view, taken from the same level as the barrel (left hand side)
G3	Side view, taken from the same level as the barrel (right hand side)
G4	Three-quarter view of the gun from the front (muzzle end)
G5	Three quarter view from the back (breech end)
M1	Muzzle face – looking straight down the bore
M2	Detail – muzzle mouldings
B1	Breech of the gun looking straight at the cascable (from the side)
B2	Breech of the gun looking straight at the cascable (from the top)
B3	Detail – side view of breech mouldings
B4	Detail – touch hole and vent field (looking straight down)
B5	Detail – Base ring
T1	Detail view left hand trunnion end
T2	Detail view right hand trunnion end
E1	Detail – each barrel moulding
E2	Detail – any markings or crests
O1	Any other photographs

Gun Recording Codes

M O U L D I N G C O D E S					
A Astragal		B Band		S Slope	
F Fillet		O Ogee		Q Quadrant	
C Concave		X Illegible	Illegible or missing		
M U Z Z L E C O D E S					
R Tulip		F Flared cone		T Tapered cone	
P Cylinder		E Coronice		X Illegible	Illegible or missing
C A S C A B L E C O D E S					
K Conical		O Spherical		U Concave	
D Flat		X Illegible	Illegible or missing		
B U T T O N C O D E S					
N Knob		L Knob with loop		G Spherical	
C Cylinder		H Horizontal ring		V Vertical ring	
E Extended knob		X Illegible	Illegible or missing		

Monograms of Master Generals of the Ordnance and the Secretary of State for War



59 Charles, 3rd Duke of Richmond, 1782.



63 Charles, 3rd Duke of Richmond, 1793.



66 Charles, 1st Marquess Cornwallis, 1797.



68 Charles, 1st Marquess Cornwallis, 1798.



77 John, 2nd Earl of Chatham, 1810.



78 Henry, 1st Earl of Mulgrave, 1813.



81 Henry, 1st Marquess of Anglesey, 1850.



83 Fitzroy, 1st Lord Raglan, 1853.



86 Major-General Jonathan Peel, 1858.

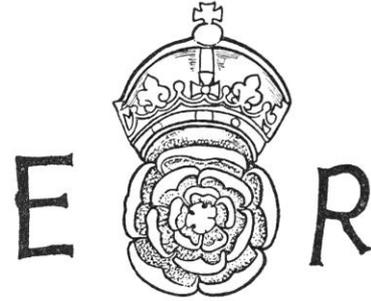
Monograms of British Monarchs



27 Henry VIII, 1529.



31 Henry VIII, 1546.



34 Elizabeth I, c. 1580.



39 Charles I, 1638.



42 Charles II, 1672.



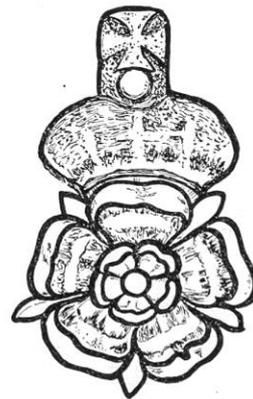
43 James II, 1685.



97 James II, 1687.



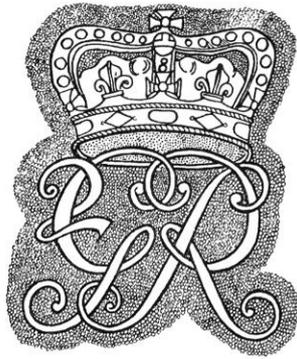
98 William and Mary, 1692.



48 Anne, c. 1710.



101 George I, c. 1720.



104 George II, c. 1740.



67 George III, 1798.



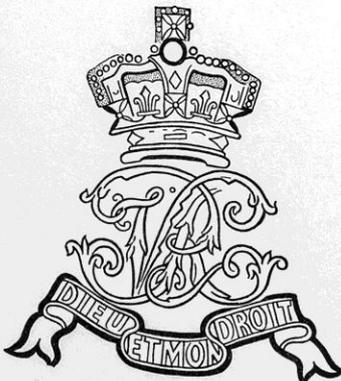
118 George IV, 1821.



*George IV, 1824.



†William IV, c. 1835.



86 Victoria, 1858.



89 Victoria, 1870.



92 Victoria, 1873.