

## H. XI—SECTION 7.

CH. XI SECTION 7—MARKINGS ON PROJECTILES. *Plates 13 and 14.*

310. Projectiles are Marked, *i.e.*, Stamped, Coloured and Stencilled, as a means of identification. Projectiles 2-pdr. and above are at present marked in the following manner :—

- (i) The Manufacturer of the empty shell places on it certain STAMPINGS, and in some cases paints the shell the appropriate body colour.
- (ii) The filling contractor is usually responsible for :—
  - (a) Painting the shell with the appropriate colour, except where this has already been done.
  - (b) Painting the coloured bands, and
  - (c) The stencilling.

The colouring and stencilling are kept up to date by the Armament Depots as the projectiles pass through their hands from time to time.

311. Markings may be divided into :—

- (1) Stampings.
- (2) Colouring and Stencilling.

## STAMPINGS

312. These refer to the empty shell. The type of shell or filling is sometimes shown by stamping so that in the event of the painting becoming obliterated the shell can be identified.

The positions of the stampings are :—

- (i) Projectiles used for Fixed Ammunition on the body above the driving band.
- (ii) Other projectiles, on the base.

The following stampings will be found :—

- (i) Calibre and mark numeral of shell. (How, if applicable.)
- (ii) Manufacturer's initials and lot number.
- (iii) Date of completion of manufacture.
- (iv) H. or L. denotes heavy or light shell, where applicable.
- (v) C.S., B.S., or F.S. denotes cast steel, bar steel or forged steel (for shell).
- (vi) C.I. denotes cast iron (for Practice projectiles).
- (vii) P denotes Practice.
  - A.P.C.—Armour-Piercing capped.
  - S.A.P.C.—Semi-armour-Piercing capped.
  - C.P.B.C.—Common pointed ballistic capped.
  - C.P.C.—Common pointed capped.
  - S.A.P.—Semi-armour-piercing.
  - S.M.K.—Target smoke shell.
  - S.M.K. B.E.—Smoke shell with base ejection.
  - CHEM.—Chemical shell.
  - CHEM. B.E.—Chemical shell with base ejection.

(viii) After mark of shell :—

A denotes over 2 c.r.h. and up to 4 (inch)	}	<i>See also para. 257.</i>
B " " 4 c.r.h. " " " 6 " "		
C " " 6 c.r.h. " " " 8 " "		
D " " 8 c.r.h. " " " 10 " "		

(ix) Q after the mark of shell denotes shell specially made to stand the pressure of the 6-inch, Mark XII gun. Shell for later high pressure guns, 6-inch, Marks XXII and XXIII do not have this letter.

(x) N.T. or T. denotes shell is fitted for tracer.

## COLOURING AND STENCILLING.

313. Projectiles in supply are painted and stencilled as applicable to either of the methods illustrated in *Plate 14* where, for convenience, they are referred to as the "Old" method and the "Present" method.

Future policy is for a universal system of Markings for the Services. This standardised method is being determined by the Inter-Service Ammunition and Ammunition Package Marking Committee, and will be published in due course in a special pamphlet, *B.R. 1202*.

**COLOURING.****The Bodies.**

314. The Bodies of projectiles are painted before they are filled, as follows :—

<i>Dull or H.E. Yellow</i>	... ..	Shell filled or suitable for filling with high explosive (which does not include gunpowder).
<i>Green</i>	... ..	Smoke Shell B.E.
<i>Grey</i>	... ..	Chemical Shell.
<i>Dull Yellow, top half ;</i>	} ... ..	Smoke Shell.
<i>Black, bottom half.</i>		
<i>Black</i>	... ..	All other projectiles, including those filled or suitable for filling with gunpowder.

*Note.*—Two shades of yellow are employed in shell painting :—

<i>Dull Yellow</i>	... ..	Denotes shell filled H.E.
<i>Bright or " Practice " Yellow</i>	... ..	Denotes that the shell is for practice purposes.

**Points and Caps.**

315. These are painted the same colour as the body except :—

Shrapnel shell	... ..	<i>Red.</i>
Shell filled Shellite	... ..	<i>Green.</i>
Shoulders of target Smoke Shell	... ..	<i>Dull (H.E.) Yellow.</i>

**Bands round the Body of the Projectile.**

316. *Note.*—Lyddite filled shell have only the red filling band.

<i>Red round head or shoulder</i>	... ..	Shell filled with explosive.
<i>Red above the Driving Band</i>	... ..	Shell fitted with live tracer.
<i>White above Red filling band</i>	... ..	S.A.P. or S.A.P.C. shell. <i>Note.</i> —Early S.A.P. shell have no White band.
<i>White ¼-inch wide on the body</i>	... ..	Centre of gravity for 15-inch shell.
<i>White 1-inch wide</i>	... ..	Position for grab on 16-inch shell.
<i>Green or Green and Black on the body or shoulder</i>	... ..	Shell filled T.N.T. or Head filled T.N.T. If a fraction such as 93/7 is shown above the green band, it denotes T.N.T./Beeswax; some shell may also have BWX stencilled in line with the fraction.
<i>Two Green with Practice Yellow between.</i>	... ..	H.E. special bombardment Practice. T.N.T. filling.
<i>Practice Yellow</i>	... ..	Practice Projectiles and Target Smoke Shell.
<i>Two practice Yellow</i>	... ..	Target ship practice.
<i>Blue</i>	... ..	Shell filled R.D.X./B.W.X.
<i>Blue with T.N.T. stencilled below band</i>	... ..	Shell filled R.D.X./T.N.T.
<i>Black zig-zag</i>	... ..	Radar.
<i>Black</i>	... ..	H.E. Drill shell.
<i>White zig-zag broken in three places with AR stencilled in the gaps. " ROPE " below the AR denotes the type of filling</i>	... ..	A.R. shell.

**Shell Bases.**

317. These are painted the same colour as the body. Fixed ammunition shell, filled lyddite, have the portion of the shell below the driving band and the base specially cleansed and finally painted green.

The colour of the *Gascheck Cover Plate* or *Disc Tracer* of base fuze shell and the *Screwed Ring*, which surrounds the cover plate, denote the fuze fitted :—

SCREWED RING	GASCHECK COVER PLATE OR DISC TRACER	DENOTES
Red ... ..	Red ... ..	Fuzes without delay action
White ... ..	Red ... ..	Fuze Nos. 158A, 159
White ... ..	Red with green bar ... ..	" " 158
Yellow ... ..	Red ... ..	" " 345A, 346
Yellow ... ..	Red with green bar ... ..	" " 345
Blue ... ..	Red ... ..	" " 479, 480
Blue ... ..	Red with green bar ... ..	" " 479
Red ... ..	Red with green bar ... ..	" " 500, 501
Red ... ..	Red with Yellow bar ... ..	" " 502
Red ... ..	Red with White bar ... ..	" " 551






## CH. XI—SECTION 7.

STENCILLING. *Plate 14.*



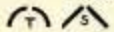
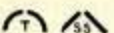

318. The following general stencilling will be found where applicable on the cap, shoulder, body or base (during hostilities certain relaxations are allowed) :—

- (i) Calibre, with How, if applicable (not on 6-pdr. and below).
- (ii) K or AK and colour of dye.
- (iii) H or L or Weight, *e.g.*, 35 lb. (not on 6-pdr. and below).
- (iv) The mark of the shell, *i.e.*, type of shell, mark numeral, *c.r.h.* (*para.* 257), and T or N.T. if tracer is fitted. With Fixed Ammunition this is prefixed by the letters F.A. (not on 6-pdr. and below).
- (v) F Z D on shell (except Q.F. 2-pdr. and below) which are fuze, serial number of fuze, Mark, date of filling, filled lot number and maker's initials. Projectiles 8-inch and above have these markings stencilled on the base as well as on the body.
- (vi) G on shell fitted with a gaine with the Number and Mark of gaine, date of filling, filling lot number, and manufacturer's initials.
- (vii) Monogram of filling station.
- (viii) Date of filling, month and year.
- (ix) L.G. or symbol as applicable on powder filled shell indicating nature of powder.
- (x) EXPL. BAG (or PEL.) on shell fitted with exploders with nature and size. Lot number of exploder if of P.P. or P.A. (picric powder or picric acid).
- (xi) On plugged shell for practice, the filling is indicated :—
  - SALT ... .. Salt.
  - P.S. ... .. Powder substitute.
  - (H.E.S.) ... .. H.E. substitute.
- (xii) N for Naval Service.
- (xiii) 70/30 or other fraction on Shell filled Shellite, T.N.T./Beeswax denotes the composition of the filling.
- (xiv) SMK BOX or " S " on GREEN DISC on H.E. Shell 6-inch and below denotes shell fitted with smoke composition in box.
- (xv) U on opposite sides of the head denotes fitted with Universal Cavity.
- (xvi) R denotes Radar.
- (xvii) L or S in the breaks of the zig-zag band denotes the use of Long or Short band Radar.

319. The following special stencillings may be found :—

- (i) 16 L.B. on 3-inch 16 lb. projectiles.
  - (ii)  in three places, on all 14-inch projectiles and above, indicates position of centre of gravity; 15-inch projectiles have the horizontal lines extended round the body to assist in placing the grab; 16-inch projectiles have a grab mark indicated in addition to the centre of gravity marking; the grab marking consists of a 1-inch white band broken in three places equally spaced with the word GRAB stencilled in white in these spaces.
  - (iii) A on 3-pdr. and 6-pdr. indicates annealed shell.
  - (iv)  projectile prepared for tracer.
  - (v)  projectile fitted with night tracer.
  - (vi)  projectile fitted with Mark V or later tracer.
- The symbols in (iv), (v) and (vi) are applicable to shell fitted for or with Nos. 1 and 2 tracers.
- (vii)  projectile fitted with tracer.
  - number of tracer.
  - + mark of tracer.

320. The following markings are applicable to shell Q.F. 2-pdr. fitted with Igniter or Tracer and Igniter :—

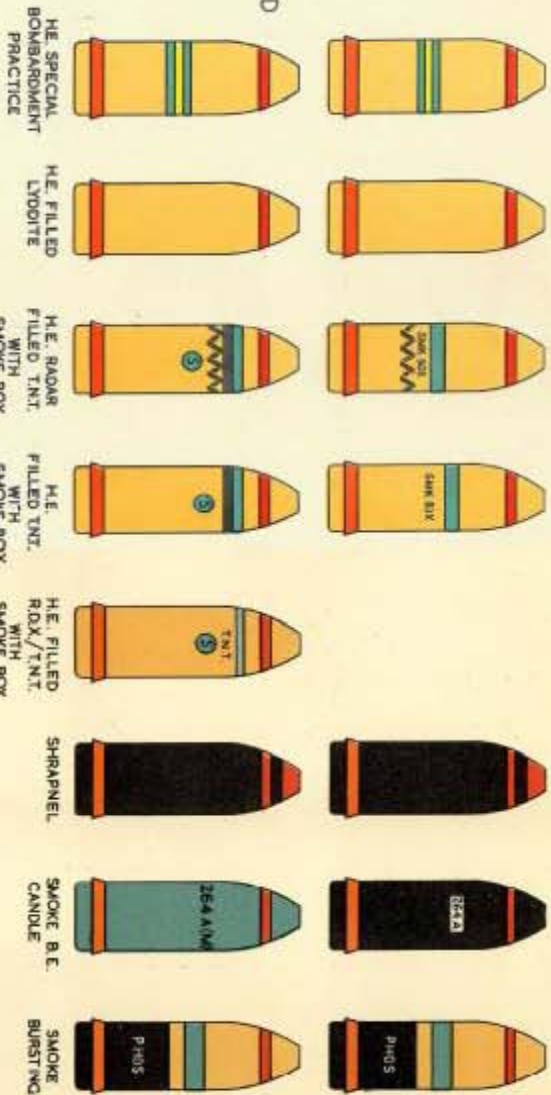
- (i)  shell fitted with Igniter No. 1 Mk. I (long time to self-destruction).
- (ii)  shell fitted with Igniter No. 1 Mk. II (short time to self-destruction).
- (iii)  shell fitted with Tracer and Igniter No. 7 Mk. IV (with long time to self-destruction).
- (iv)  shell fitted with Tracer and Igniter No. 7 Mk. III (with short time to self-destruction).
- (v)  Projectiles Q.F. 2-pdr. filled for dark ignition tracer.

321. On *Star Shell* :—

- (i) A red star on a white disc.
- (ii) A green star on a white disc denotes a 27-inch Mark III parachute fitted.
- (iii) A letter and number or number below the disc denotes the star composition used.

## COLOURING OF PROJECTILES

### OLD METHOD



### FUZE MARKINGS ON BASE PLATE (3)

SCREWED RING AND GASCHECK COVER PLATE FOR FUZE N°158A OR N° 159



SCREWED RING AND GASCHECK COVER PLATE FOR FUZE N°502 GREEN BAR ALSO APPLIES WHEN FUZES N°345 OR N°479 ARE FITTED



SCREWED RING AND TRACER SHELL N° 8 FOR FUZE N°346 OR N° 345A



SCREWED RING AND GASCHECK COVER PLATE FOR FUZE N°159 OR 158 A



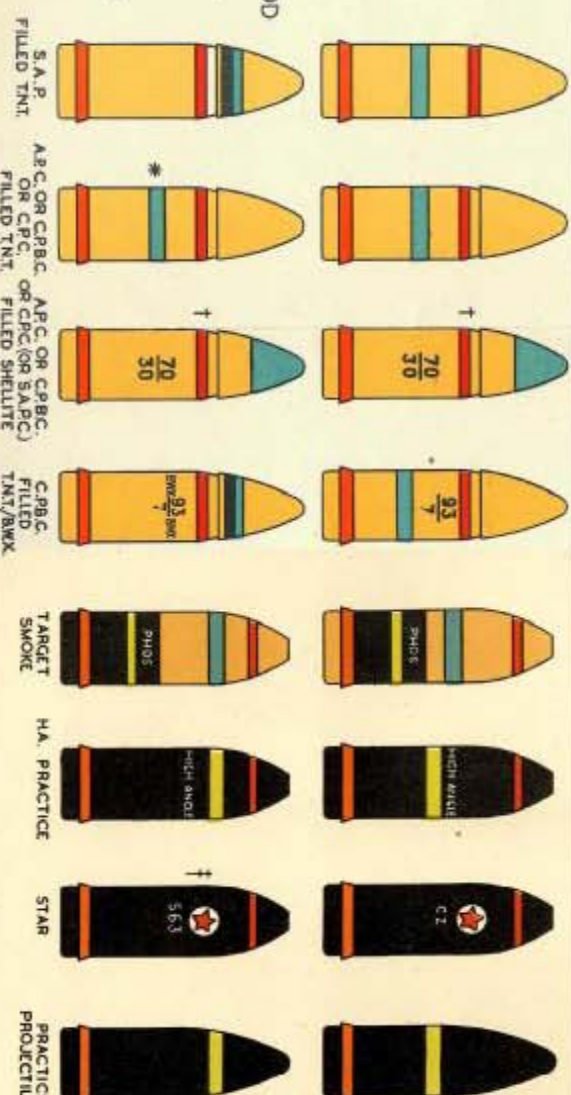
COLOUR OF SCREWED RING	N° OF FUZE FITTED
WHITE	158 158A OR 159
YELLOW	345 345A OR 346
BLUE	479 479A OR 480

SCREWED RING AND GASCHECK COVER PLATE FOR FUZE N°502

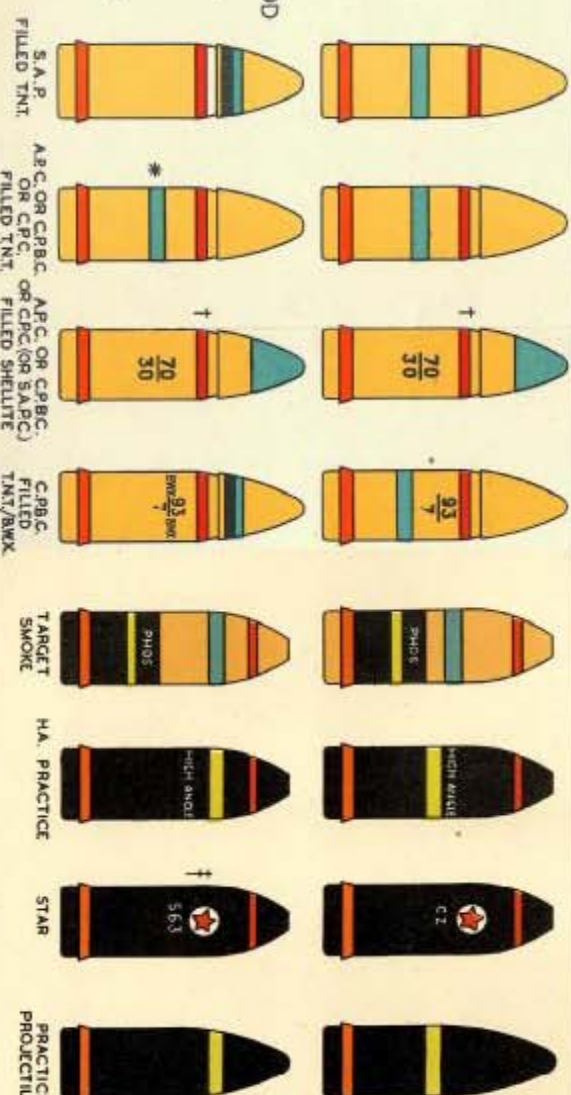


COLOUR OF BAR	N° OF FUZE FITTED
WHITE	501
GREEN	500 OR 501
YELLOW	502

### OLD METHOD



### PRESENT METHOD

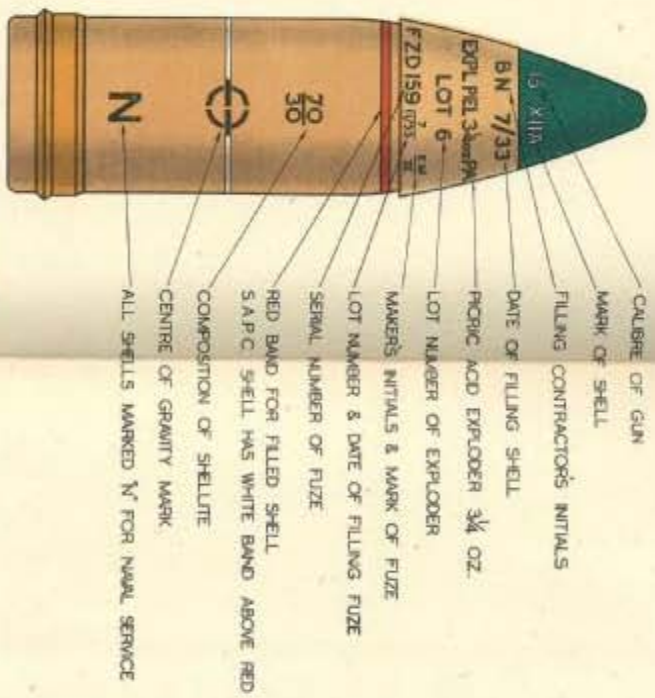


\* SOME CPBC OR C.P.C. SHELL HAVE A GREEN & BLACK BAND ON BODY OR CAP

+ S.A.P.C. SHELL HAVE A WHITE BAND ABOVE TAIL RED BAND

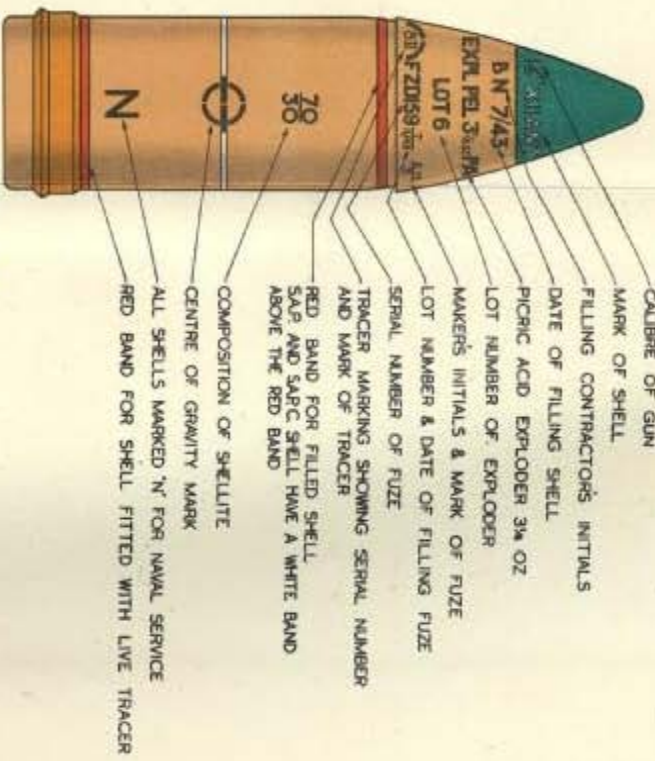
† GREEN STAR FOR SHELL WITH 27 INCH MAILED PARACHUTE

## STENCILLING ON SHELL OLD METHOD



TYPICAL BASE FUZED SHELL  
A.P.C. C.P.C. OR C.P.B.C. FILLED SHELLITE

## STENCILLING ON SHELL PRESENT METHOD



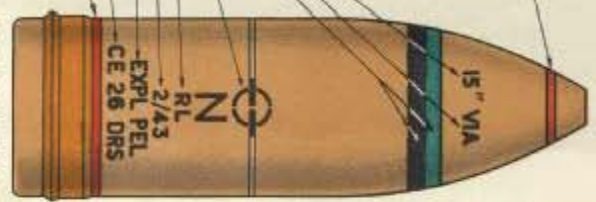
TYPICAL BASE FUZED SHELL  
A.P.C. C.P.C. OR C.P.B.C. FILLED SHELLITE

- RED BAND FOR FILLED SHELL
- PROJECTILES FITTED FOR TRACERS ARE STENCILED AS FOLLOWS:-
- ☾ WHEN PREPARED FOR TRACER
- ☾ WHEN FITTED WITH NIGHT TRACER
- ☾ WHEN FITTED WITH W.P.2 MAKE TRACER
- MARK OF SHELL
- CALIBRE OF GUN
- GREEN BAND FOR SHELL FILLED TNT
- CENTRE OF GRAVITY MARK
- FILLING CONTRACTOR'S INITIALS
- DATE OF FILLING SHELL
- PELLET EXPLODER
- COMPOSITION EXPLODING 26 DRS



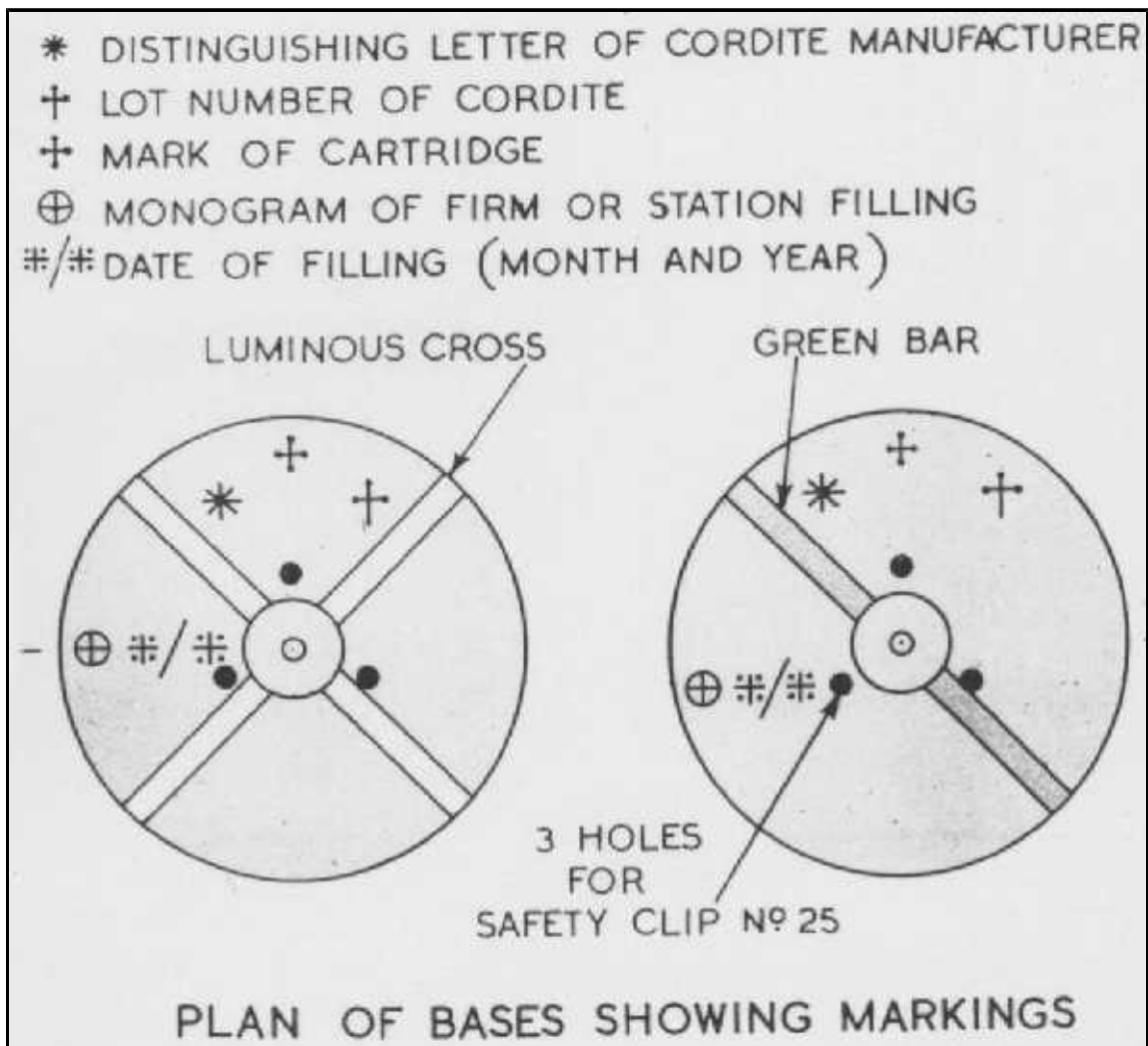
TYPICAL NOSE FUZED SHELL  
HE FILLED TNT

- RED BAND FOR FILLED SHELL
- PROJECTILES FITTED FOR TRACERS ARE STENCILED AS FOLLOWS:-
- ☾ WHEN PREPARED FOR TRACER
- ☾ WHEN FITTED WITH TRACER
- ☾ WHEN FITTED WITH DIM IGNITION TRACER
- MARK OF TRACER
- NUMBER OF TRACER
- CALIBRE OF GUN
- MARK OF SHELL
- GREEN & BLACK BANDS FOR SHELL FILLED TNT
- CENTRE OF GRAVITY MARK
- FILLING CONTRACTOR'S INITIALS
- DATE OF FILLING SHELL
- PELLET EXPLODER
- COMPOSITION EXPLODING 26 DRS
- RED BAND FOR SHELL FITTED WITH LIVE TRACER



TYPICAL NOSE FUZED SHELL  
HE FILLED TNT

# Royal Navy Cartridge Case Markings of the pre-World War II and World War II era

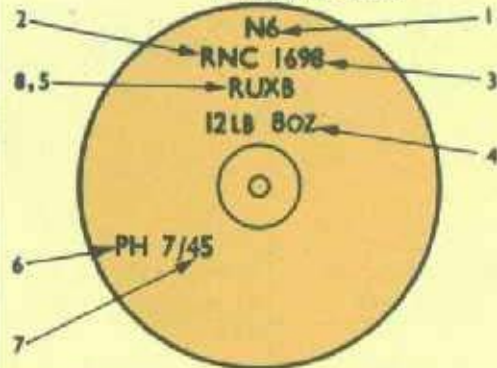


# Royal Navy Cartridge Case Markings of the post-World War II era

## Q.F. CARTRIDGES NAVAL SERVICE

### SEPARATE LOADING

FIG.1 STENCILLING AND IDENTIFICATION MARKINGS  
ON BASE OF CASE

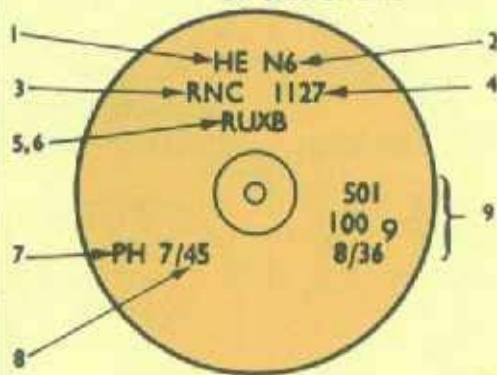


- 1.....MARK OF FILLED CARTRIDGE
- 2.....DISTINGUISHING LETTERS OF PROPELLANT MANUFACTURER
- 3.....PROPELLANT LOT NUMBER
- 4.....NOMINAL CHARGE WEIGHT
- 5.....XB, SUB LOT PARTICULARS OF PROPELLANT
- 6.....RECOGNIZED MONOGRAM OR INITIALS OF FILLER
- 7.....DATE OF FILLING (MONTH & YEAR)
- 8.....RU, INDICATING CARTRIDGES WHICH ARE, OR HAVE BEEN, STOWED IN READY USE LOCKERS

### FIXED

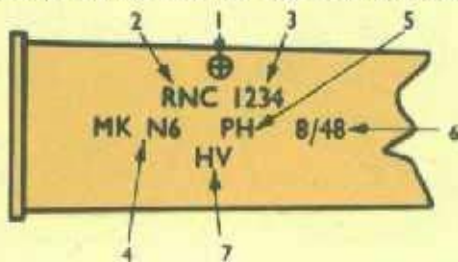
#### NOT MARKED UNDER THE BATCHING SYSTEM

FIG.2 STENCILLING AND IDENTIFICATION MARKINGS  
ON BASE OF CASE



- 1.....NATURE OF SHELL (AS APPLICABLE)
- 2.....MARK OF FILLED CARTRIDGE, i.e. COMPLETE ROUND
- 3.....DISTINGUISHING LETTERS OF PROPELLANT MANUFACTURER
- 4.....PROPELLANT LOT NUMBER
- 5.....RU, INDICATING CARTRIDGES WHICH ARE, OR HAVE BEEN, STOWED IN READY USE LOCKERS
- 6.....XB, SUB LOT PARTICULARS OF PROPELLANT
- 7.....RECOGNIZED MONOGRAM OR INITIALS OF FILLER
- 8.....DATE OF FILLING (MONTH & YEAR)
- 9.....PARTICULARS OF FUZE WHEN SHELL ARE FITTED WITH BASE FUZE

FOR CALIBRES UP TO 6 PR. THE STENCILLED DETAILS WILL BE FOUND ON THE BODY OF THE CASE AS SHOWN BELOW



- 1.....CROSS IN CIRCLE FOR ROUNDS FILLED CORDITE HSCK/T ONLY
- 2.....DISTINGUISHING LETTERS OF PROPELLANT MANUFACTURER
- 3.....PROPELLANT LOT NUMBER
- 4.....MARK OF FILLED CARTRIDGE
- 5.....RECOGNIZED MONOGRAM OR INITIALS OF FILLER
- 6.....DATE OF FILLING (MONTH & YEAR)
- 7.....DENOTES HIGH VELOCITY AMMUNITION

Note: Special markings may also be applied at Naval Armament Depots to indicate work done on cartridge after original filling

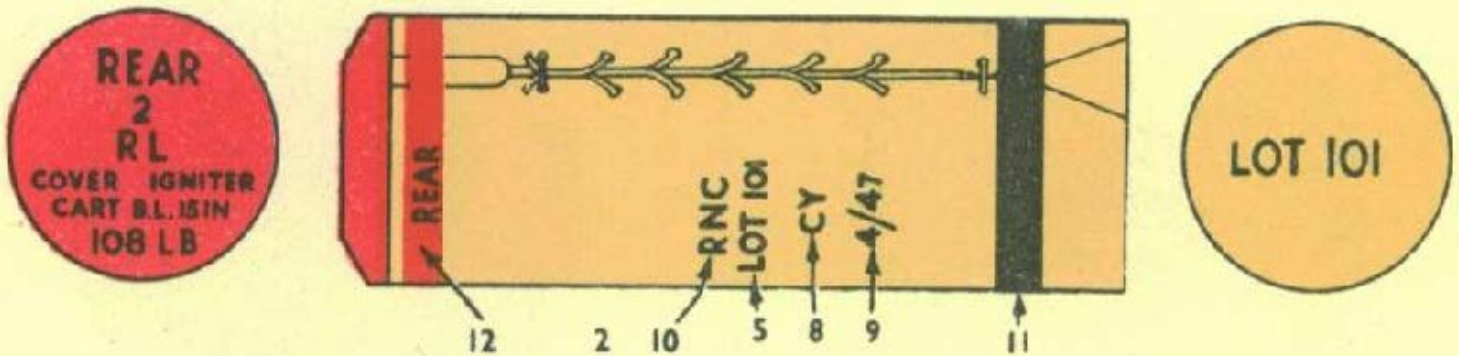
Examples: REMADE      CONVTD  
CRB              HK  
9/56              7/54

Full lists of such special markings and their specific meanings are found in appropriate Naval Service Books of Reference

# Royal Navy Bag Charge Markings of the post-World War II era

FIG.2

## NAVAL SERVICE



STENCILLED ON THE REVERSE  
SIDE OF BAG

N2  
16 NPI  
RL  
15 IN  
108 LB  
SC 280  
1/4  
CY

- |   |   |
|---|---|
| 1... CALIBRE (AND IF APPLICABLE) MARK OF GUN WITH WHICH CARTRIDGE IS TO BE USED | 8... RECOGNIZED MARK OR INITIALS OF FILLER              |
| 2... MARK OF FILLED CARTRIDGE AND DETAILS OF IGNITER WHERE APPLICABLE           | 9... DATE OF FILLING (MONTH & YEAR)                     |
| 3... PROPELLANT IDENTIFICATION CODE   | 10... DISTINGUISHING LETTERS OF PROPELLANT MANUFACTURER |
| 4... PROPELLANT SIZE  | 11... BLACK BAND INDICATING POSITION OF TIN FOIL        |
| 5... PROPELLANT LOT NUMBER  | 12... RED BAND INDICATING IGNITER END                   |
| 6... NOMINAL CHARGE WEIGHT  |   |
| 7... INDICATING FRACTION OF FULL CHARGE   |   |