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ADMIRALTY FLEET ORDER

BALLISTICS—LIST OF CURRENT RANGE TABLES, FUZE SCALES AND TRAJECTORY CHARTS, AND TABLES FOR SPECIAL SERVICES

ADMIRALTY, S.W.1,

20th January, 1944.

The following Order having been approved by My Lords Commissioners of the Admiralty is hereby promulgated for information and guidance and necessary action.

By Command of Their Lordships,

J. V. Markham

To all Commanders-in-Chief, Flag Officers, Senior Naval Officers, Captains and Commanding Officers of H.M. Ships and Vessels, Superintendents or Officers in Charge of H.M. Naval Establishments, and Admiralty Overseers concerned.

NOTE:—The scale of distribution is shown in the Admiralty Fleet Order Volume, 1941, Instructions, paragraph 10.

Head of "P" Branch

252.—Ballistics—List of Current Range Tables, Fuze Scales and Trajectory Charts, and Tables for Special Services

(G.6646/43.—20 Jan. 1944.)

The following list shows all current range tables, fuze scales and trajectory charts issued to date, and supersedes the lists given in A.F.O. 230/43. No range tables bearing C.B. numbers are at present in existence.

2. A certain number of the tables in the list have been superseded, but are retained on account of the gunsights graduated to them.

3. For information and record only a supplementary list is given of additional range tables and fuze scales required for guns held in reserve for special services. This list includes some tables which appear also in the main list, but no general issue of special services tables as such will be made. A list of range tables applicable to American guns used in the British Service is shown on pages 40—41. No general issue of these tables is being made.

4. Column 10 gives references to all amending A.F.Os. issued which, together with the additional and revised pages mentioned in Appendix B will bring up to date the original issue of the tables. From time to time tables are reprinted to replenish stocks, and have embodied in them all amendments to date. In such reprints, therefore, some or all of the amendments referred to in col. 10 may already be incorporated.

5. Seven appendices are added, viz. :—

Appendix A.—List of Tables whose serial numbers have been altered.

Appendix B.—List of additional and revised pages printed after the original issue of tables.

Appendix C.—List of Tables removed from last Current List.

Appendix D.—B.R. numbers and letters allotted for the subguards and tables.

Appendix E.—List, in numerical order, of serial numbers of current range tables fuze scales, trajectory charts, and tables for special services.

Appendix F.—Establishments authorised for all tables.

Appendix G.—List of Tables applicable to gun mountings held in reserve abroad.

All copies of tables for American B.L. 5-in., 51 calibre, Mark VIII guns should be returned to the Superintending Naval Store Officer, R.N. Store Depot, Edgware Road, Cricklewood, N.W.2, for retention pending further instructions. All copies of other tables listed in Appendix C should be destroyed in accordance with instructions in Form B.R.1—Books of Reference and I.D. Catalogue.

6. The particulars in Appendix B are not always applicable to reprints of tables issued subsequent to the printing of the new pages. Such reprints, being corrected to date, may have different pagination from the original issue. The cancellation of pages or sections referred to in col. 5 of Appendix B implies the cancellation of all amendments thereto.

7. Range tables, fuze scales and trajectory charts are supplied on a basis of one copy per mounting for the gun mountings maintained at stations abroad as reserves. Each set of tables is to consist of the following :—

- (a) The range table appropriate to gun sight graduations.
- (b) The range and elevation scale to which the gun sight is graduated.
- (c) Fuze scale, only if time fuzed ammunition is available.
- (d) Star Shell Range Table, only if star shell is available.
- (e) Trajectory Chart, for high angle mountings only.

A list is given in Appendix G of the tables, etc., applicable to each calibre and mark of mounting concerned. These tables are to be held at the Dockyards and kept with the relevant mounting ready for issue when required.

8. Demands for copies of tables, if allowed by establishment and not on board ships, should be forwarded to the Superintendent, R.N. Store Depot, Elveden Road, N.W.10.

9. Attention is drawn to the established allowances shown in Appendix F. Tables held surplus to these establishments should be returned to the Superintendent, R.N. Store Depot, Elveden Road, N.W.10.

PUBLICATIONS

concerning compilation of Range Tables, and on Ballistics included in the B.R. 980 Series.

No. and Title.	Amending A.F.Os.
† B.R. 980(A)/1935, Range Tables, Introduction ...	P.436/39, P.39/40, P.80/42, P.176/42, P.500/42.
† B.R. 980 (A) (1)/1935, Notes on Ballistics, with Addendum No. 1.	P.62/37, P.40/40, P.81/42, P.177/42, P.549/42, P.66/43.

† See Appendix F, para. 3 (Special Establishments).

Gun.	Serial No. of Table.	Nature of Table.	Projectile.		Charge.	M.V.	Agrees with Table No.	No. of Super-seding Table, if any.	Amending A.F.Os.	Remarks.	
			Weight.	C.r.h.							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
B.L. 16-in. Mark I. B.R.980 (U).	* 193	R.T.	lb. oz. 2,048 0	6	Full	f.s. 2525	—	—	P.660/43		
	194	R. & E.	" "	"	"	2650/2350	193	—	—		
	195	R. & T.	" "	"	"	2650/2350	193	—	—		
	224	H.T.C.T.	" "	"	"	2525	193	—	—		
	* 199	R.T.	" "	"	Reduced	1950	—	—	P.602/42		
	200	R. & E.	" "	"	"	2000/1700	199	—	—		
	201	R. & T.	" "	"	"	2000/1700	199	—	—		
	225	H.T.C.T.	" "	"	"	1950	199	—	—		
	B.L. 16-in. Marks II and III. B.R. 980 (U).	451	R.T.			Full		—	—	—	} Not yet issued.
		452	R. & E.			"		451	—	—	
453		R. & T.			"		451	—	—		
491		R.T.			Full		—	—	—		
492		R. & E.			"		491	—	—		
493		R. & T.			"		491	—	—		
454		R.T.			Reduced		—	—	—		
455		R. & E.			"		454	—	—		
453		R. & T.			"		454	—	—		

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(65745) B.L. 15-in. Mark I. B.R. 980 (D).	*505	R.T.	1,938 0	6	Super	2575	—	—	P.421/43	
	506	R. & E.	" "	"	"	2700/2400	505	—	—	
	507	R. & T.	" "	"	"	2700/2400	505	—	—	
	*508	R.T.	" "	"	Three-quarter Super	2150	—	—	P.422/43	
	509	R. & E.	" "	"	"	2250/2000	508	—	—	
	510	R. & T.	" "	"	"	2250/2000	508	—	—	
	*381	R.T.	" "	"	Full	2400	—	—	P.298/37, P.434/37, P.287/43, P.420/43	
	382	R. & E.	" "	"	"	2500/2300	381	—	—	
	383	R. & T.	" "	"	"	2500/2300	381	—	—	
	384	R.T.	" "	"	Three-quarter Super	2000	—	—	P.194/37, P.14/41	
	385	R. & E.	" "	"	"	2100/1900	384	—	—	
	386	R. & T.	" "	"	"	2100/1900	384	—	—	
	512	R.T.	1,920 0	4	Super	2575	—	—	P.385/42	
	513	R. & E.	" "	"	"	2700/2400	512	—	—	
	514	R. & T.	" "	"	"	2700/2400	512	—	—	
	516	R.T.	" "	"	Three-quarter Super	2150	—	—	P.223/42, P.386/42	
	517	R. & E.	" "	"	"	2250/2000	516	—	—	
	518	R. & T.	" "	"	"	2250/2000	516	—	—	
	* 226	R.T.	" "	"	Full	2400	—	—	P.419/38, P.11/41, P.858/41	
	227	R. & E.	" "	"	"	2450/2300	226	—	—	
	228	R. & T.	" "	"	"	2450/2300	226	—	—	
	229	H.T.C.T.	" "	"	"	2400	226	—	—	
	2c	F.S.	" "	"	"	2450	4	—	—	P.65/37

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* See Appendix B (new pages).

Shrapnel, Fuze No 93.

CURRENT RANGE TABLES, FUZE SCALES AND TRAJECTORY CHARTS

Gun.	Serial No. of Table	Nature of Table.	Projectile.		Charge.	M.V.	Agrees with Table No.	No. of Super-seding Table, if any.	Amending A.F.Os.	Remarks.
			Weight.	C.r.h.						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
B.L. 15-in. Mark I. B.R. 980 (D). —contd.	4	R.T.	lb. oz.			f.s.				
	38	R. & E.	1,920 0	4	Full	2450	—	226	P.419/38	
	* 261	R.T.	" "	"	"	2500/2300	4	—	P.194/37, P.419/38	
	262	R. & E.	" "	"	Three-quarter	2025	—	—	P.419/38, P.526/38	
	263	R. & T.	" "	"	"	2100/1900	261	—	P.12/41	
	298	H.T.C.T.	" "	"	"	2100/1900	261	—	P.419/38	
	5	R.T.	" "	"	"	2000	—	—	—	
	39	R. & E.	" "	"	"	2025	—	261	P.419/38	
						2100/1900	5	262	—	
	37	R.T.	" "	"	Half	1850	—	—	P.419/38, P.10/41	

(65745) B.L. 14-in. Mark VII. B.R. 980 (Y).	*415	R.T.	1,590 0	6	Full	2400	—	—	P.561/42, P.291/43		
	416	R. & E.	" "	"	"	2500/2300	415	—	—		
	417	R. & T.	" "	"	"	2500/2300	415	—	—		
	*419	R.T.	" "	"	Reduced	2000	—	—	P.35/41, P.269/42		
	420	R. & E.	" "	"	"	2100/1900	419	—	—		
	421	R. & T.	" "	"	"	2100/1900	419	—	—		

* See Appendix B (new pages).

CURRENT RANGE TABLES, FUZE SCALES AND TRAJECTORY CHARTS

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Gun. (1)	Serial No. of Table. (2)	Nature of Table. (3)	Projectile.		Charge. (6)	M.V. (7)	Agrees with Table No. (8)	No. of Super- seding Table, if any. (9)	Amending A.F.Os. (10)	Remarks. (11)	
			Weight. (4)	C.r.h. (5)							
B.L. 8-in. Mark VIII. B.R. 980 (W).	* 206	R.T.	lb. oz. 256 0	6	Full	f.s. 2725	—	—	P.661/43		
	207	R. & E.	" "	"	"	2850/2500	206	—	P.137/43		
	208	R. & T.	" "	"	"	2850/2500	206	—	—		
	222	H.T.C.T.	" "	"	"	2725	206	—	—		
	* 322A	E.F.C., Wear and M.V.	" "	"	Full and Three- quarter	—	—	—	—		
	* 209	R.T.	" "	"	Three- quarter	2200	—	—	P.188/43		
	210	R. & E.	" "	"	"	2350/2000	209	—	P.138/43		
	211	R. & T.	" "	"	"	2350/2000	209	—	P.139/43		
	223	H.T.C.T.	" "	"	"	2200	209	—	—		
	446B O.B. 88 O.B. 88A	H.A.R.T. T.C. T.C. }	" "	"	Full	2725	—	—	{ P.57/43 — — }		Fuze Nos. 206, 207, 211 and 401, Mk. II.
	374 O.C. 62	H.A.F.S. G.F.S. }	" "	"	"	2725	—	—	P.328/39		Fuze No. 400, Mk. I.

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B.L. 7-5-in. Mark VI. B.R. 980 (H).	*264	R.T.	200 0	4	Full	2700	—	—	P.329/38, P.422/38
	265	R. & E.	" "	"	"	2800/2550	264	—	
	266	R. & T.	" "	"	"	2800/2550	264	—	
	112	R.T.	" "	"	"	2700	—	264	P.422/38
	118	R. & E.	" "	"	Full and Reduced	2950/2150	116	265 and 291	—
	*290	R.T.	" "	"	Reduced	2200	—	—	P.422/38
	291	R. & E.	" "	"	"	2350/2050	290	—	P.422/38
	292	R. & T.	" "	"	"	2350/2050	290	—	—
	116	R.T.	" "	"	"	2200	—	290	P.422/38

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* See Appendix B (new pages).

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CURRENT RANGE TABLES, FUZE SCALES AND TRAJECTORY CHARTS

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Gun.	Serial No. of Table.	Nature of Table.	Projectile.		Charge.	M.V.	Agrees with Table No.	No. of Super-seding Table, if any.	Amending A.F.Os.	Remarks.	
			Weight.	C.r.h.							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
B.L. 6-in. Mark VII. B.R. 980 (J).	528	R.T.	lb. oz.	6	Full	f.s. 2700	—	—	P.240/42		
	530	R. & E.	100 0	"	"	2850/2550	528	—	—		
	531	R. & T.	" "	"	"	2850/2550	528	—	—		
	191	R. & E.	" "	"	"	3000/2700	—	530	—		
	558	R.T.	" "	"	Reduced	2000	—	—	—		
	204	R. & E.	" "	"	"	2250/1900	—	—	—		
	* 271	R.T.	" "	4	Full	2725	—	—	P.423/38, P.12/42, P.599/42		
	239	R. & E.	101 14	"	"	2850/2500	—	—	P.296/39		
	240	R. & T.	" "	"	"	2850/2500	—	—	—		
	* 333	F.S.	100 0	"	"	2725	270	—	P.423/38		Shrapnel, Fuze No. 93.
	* 334	F.S.	" "	"	"	2725	26D	—	P.423/38		Shrapnel, Fuze No. 93.
	26D	R. & E.	" "	"	"	2800/2450	—	239	P.423/38, P.297/39		
	270	R. & E.	" "	"	Full and Reduced	3000/1800	—	26D and 28	—		
	* 272	R.T.	" "	"	Two-thirds.	1950	—	—	P.196/37		
	242	R. & E.	" "	"	"	2150/1900	—	—	—		
	243	R. & T.	" "	"	"	2150/1900	—	—	—		
	237	R. & E.	" "	"	"	2125/2000	—	28	—		See footnote, Appendix A, p. 49.
28	R. & E.	" "	"	"	2125/1700	—	242	P.423/38, P.294/39			

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B.L. 6-in. Mark VII. B.R. 980 (J). ... Field Gun ...	*† 302 With Wind Correction Graph.	R.T.	100 0	4	Full	2725	239	—	—	
B.L. 6-in. Mark XII. B.R. 980 (J).	* 520	R.T.	100 0	6	Super	3000	—	—	P.245/43	
	521	R. & E.	" "	"	"	3100/2800	520	—	—	
	522	R. & T.	" "	"	"	3100/2800	520	—	—	
	* 537	R.T.	" "	"	Two-thirds super	2275	—	—	P.247/43	
	538	R. & E.	" "	"	"	2400/2050	537	—	—	
	539	R. & T.	" "	"	"	2400/2050	537	—	—	
	* 529	R.T.	" "	"	Full	2750	—	—	—	
	530	R. & E.	" "	"	"	2850/2550	529	—	—	
	531	R. & T.	" "	"	"	2850/2550	529	—	—	
	559	R.T.	" "	"	Reduced	2100	—	—	—	
	204	R. & E.	" "	"	"	2250/1900	—	—	—	
	* 534	R.T.	" "	4	Super	3000	—	—	P.521/42, P.246/43	
	535	R. & E.	" "	"	"	3100/2800	534	—	—	
	536	R. & T.	" "	"	"	3100/2800	534	—	—	
	* 238	R.T.	101 14	"	Full	2750	—	—	P.423/38, P.501/42, P.426/43.	
	239	R. & E.	" "	"	"	2850/2500	238	—	P.296/39.	
	240	R. & T.	" "	"	"	2850/2500	238	—	—	
	304	H.T.C.T.	" "	"	"	2750	238	—	—	

* See Appendix B (new pages).

† See Appendix F, para. 3 (Special Establishments).

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CURRENT RANGE TABLES, FUZE SCALES AND TRAJECTORY CHARTS

Gun.	Serial No. of Table.	Nature of Table.	Projectile.		Charge.	M.V.	Agrees with Table No.	No. of Super- seding Table, if any.	Amending A.F.Os.	Remarks.
			Weight.	C.r.h.						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
			lb. oz.			f.s.				
B.L. 6-in. Mark XII. B.R. 980 (J.) —contd.	* 24A	R.T.	100 0	4	Full	2750	—	238	P.423/38	
	273	R. & E.	" "	"	"	2900/2500	24A up to 15°	26D	—	
	26D	R. & E.	" "	"	"	2800/2450	24A	239	P.423/38, P.297/39	
	* 241	R.T.	" "	"	Two- thirds.	2075	—	—	P.423/38, P.174/43 P.427/43	
	242	R. & E.	" "	"	"	2150/1900	241	—	—	
	243	R. & T.	" "	"	"	2150/1900	241	—	—	
	305	H.T.C.T.	" "	"	"	2075	241	—	—	
	* 25A	R.T.	" "	"	"	2075	—	241	P.423/38, P.409/39	
	237	R. & E.	" "	"	"	2125/2000	25A up to 15°	28	—	See footnote, Appen- dix A, p. 49.
	28	R. & E.	" "	"	"	2125/1700	25A	242	P.423/38, P.294/39	
377 O.C. 65	H.A.F.S. } G.F.S. }	" "	" "	" "	Full	2750	—	—	P.68/37, P.221/39	Fuze No. 400, Mk. I.

* 473	Equivalent Ranges.	—	—	—	—	—	—	—	P.177/43, P.318/43	For use in conjunc- tion with Tables 241, 397 and 398.
* 397	R.T.	100 0	4	Bom- bard- ment, No. 2	1230	—	—	—	P.336/43	For H.E. shell, fuzed No. 45, Smoke shell and Chemical Bursting, fuzed No. 117 or 118.
* 398	R.T.	" "	"	Bom- bard- ment, No. 1	910	—	—	—	—	

* See Appendix B (new pages).

CURRENT RANGE TABLES, FUZE SCALES AND TRAJECTORY CHARTS

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Gun.	Serial No. of Table.	Nature of Table.	Projectile.		Charge.	M.V.	Agrees with Table No.	No. of Super-seeding Table, if any.	Amending A.F.Os.	Remarks.	
			Weight.	C.r.b.							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
B.L. 6-in. Mark XIII. B.R. 980 (J).	* 238	R.T.	lb. oz.			f.s.					
	239	R. & E.	101 14	4	Full	2750	—	—	P.423/38, P.501/42		
	240	R. & T.	" "	"	"	2850/2500	238	—	P.296/39		
	304	H.T.C.T.	" "	"	"	2850/2500	238	—	—		
				" "	"	2750	238	—	—		
	* 334	F.S.	100 0	"	"	2725	26D	—	P.423/38	Shrapnel, fuze No. 93.	
	248	R. & E.	" "	"	"	2750/2625	—	239	—		
	* 241	R.T.	" "	"	Two-thirds.	2075	—	—	P.423/38, P.174/43, P.427/43		
	242	R. & E.	" "	"	"	2150/1900	241	—	—		
	243	R. & T.	" "	"	"	2150/1900	241	—	—		
	28	R. & E.	" "	"	"	2125/1700	—	242	P.423/38, P.294/39		

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B.L. 6-in. Marks XXII and XXIII. B.R. 980 (J).	*342	R.T.	112 0	6	Full	2700	—	—	P.1006/41, P.13/42, P.41/43, P.105/43, P.290/43, P.1007/41, P.1008/41	
	343	R. & E.	" "	"	"	2800/2500	342	—	P.1007/41	
	344	R. & T.	" "	"	"	2800/2500	342	—	P.1008/41	
	* 348	R.T.	" "	"	Two-thirds.	2000	—	—	P.390/41, P.529/41, P.1009/41, P.31/42, P.465/42, P.106/43	
	349	R. & E.	" "	"	"	2200/1750	348	—	P.1010/41	
	350	R. & T.	" "	"	"	2200/1750	348	—	P.1011/41	
	546	Equivalent Ranges	" "	"	—	—	—	—	P.468/42, P.136/43	For use with Tables 348, 448 and 449.
	* 448	R.T.	" "	"	Bombardment No. 1	800	—	—	P.1014/41, P.592/43	For H.E. shell and Chemical Bursting, both fuzed No. 230, and Smoke shell, fuzed No. 117.
	* 449	R.T.	" "	"	Bombardment No. 2	1100	—	—	P.1015/41, P.337/43	
	376 O.C. 63	H.A.F.S. G.F.S. }	" "	"	Full	2700	—	—	P.1012/41, P.32/42, P.42/43	Fuze No. 400, Mk. I.
	*408A O.C. 71 O.C. 71A	H.A.R.T. T.C. }	111 0	"	"	2700	—	—	P.44/43, P.108/43	Fuze Nos. 206, 207, 211 and 401 Mk. II.

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* See Appendix B (new pages).

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CURRENT RANGE TABLES, FUZE SCALES AND TRAJECTORY CHARTS

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Gun.	Serial No. of Table.	Nature of Table.	Projectile.		Charge.	M.V.	Agrees with Table No.	No. of Super-seding Table, if any.	Amending A.F.Os.	Remarks.
			Weight.	C.r.h.						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Q.F. 5·25-in. Mark I. B.R. 980 (G.)	* 409	R.T.	lb. oz. 80 0	6	Full	f.s. 2600	—	—	P.102/40, P.1081/41, P.324/42, P.462/42	
	410	R. & E.	" "	"	"	2700/2450	409	—	—	
	411	R. & T.	" "	"	"	2700/2450	409	—	—	
	* 426	R.T.	" "	"	Reduced	1900	—	—	P.158/43, P.591/43	
	427	R. & E.	" "	"	"	2050/1600	426	—	—	
	428	R & T.	" "	"	"	2050/1600	426	—	—	
	*555	Equivalent Ranges	80 9	"	—	—	—	—	—	For use with Tables 556 and 557.
	556	R.T.	" "	"	Bom- bard- ment No. 2	1125	—	—	P.288/43, P.335/43, P.614/43	For H.E. shell and Chemical Bursting fuzed No.230, and Smoke Shell B.E. fuzed No. 198.
	557	R.T.	" "	"	Bom- bard- ment No. 1	800	—	—	P.289/43, P.425/43, P.615/43	

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* 418	H.A.R.T. }	80 0	"	Full	2600	—	418A	P.783/41, P.1082/41, P.262/42, P.325/42 P.133/43, P.508/43, P.655/43	Fuze Nos.206,207, 211 and 401, Mk. II.
* 418A	" }								
O.B.97 O.B.73A	T.C. " }	"	"	4	—	—	—	—	For use with Table 566.
565	Equivalent Ranges								
566	R.T.	71 10	4·35 /5	Star	2300	—	—	P.379/40	Fuze No.198, Mk.II.
435	Star R.T.								

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* See Appendix B (new pages.)

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CURRENT RANGE TABLES, FUZE SCALES AND TRAJECTORY CHARTS

Gun. (1)	Serial No. of Table. (2)	Nature of Table. (3)	Projectile.		Charge. (6)	M.V. (7)	Agrees with Table No. (8)	No. of Super- seding Table, if any. (9)	Amending A.F.Os. (10)	Remarks. (11)		
			Weight. (4)	C.r.h. (5)								
B.L. 4-7-in. Marks I and II B.R. 980 (B).	* 313	R.T.	lb. 50	oz. 0	4	Full	f.s. 2600	—	—	P.505/40, P.809/41		
	314	R. & E.	"	"	"	"	2700/2400	313	—	P.907/41		
	315	R. & T.	"	"	"	"	2700/2400	313	—	P.417/38 P.417/38		
	143	R.T.	"	"	"	"	2550	—	313	P.417/38		
	142	R. & E.	"	"	"	"	2650/2400	143	314	P.417/38 P.417/38		
	* 161A	R.T.	"	"	"	Reduced	1500	—	—	P.417/38		
	162	R. & E.	"	"	"	"	1550/1400	161A	—	P.417/38		
	163	R. & T.	"	"	"	"	1550/1400	161A	—	P.417/38		
	567	R.T.	49	13½	"	Bom- bard- ment No. 2	1020	—	—			
	568	R.T.	"	"	"	Bom- bard- ment No. 1	825	—	—	For H.E. shell, fuzed No. 44.		
	* 379	H.A.F.S.	} 50	0	"	Full	2600	—	—	} P.285/41, P.856/41 P.414/43		} Fuze No. 400 Mk. I.
	O.C.67	G.F.S.										
	215A	Star R.T.	43	8	2	Star	1900	—	—	P.192/37, P.349/39 P.509/41		Fuze No. 198.

Q.F. 4-7-in. Mark VIII. B.R. 980 (B.)	* 232	R.T.	50	0	4	Full	2400	—	—	P.436/43		
	233	R. & E.	"	"	"	"	2500/2300	232	—	P.417/38		
	234	R. & T.	"	"	"	"	2500/2300	232	—	P.417/38		
	235	H.T.C.T.	"	"	"	"	2400	232	—	—		
	* 351A	H.A.R.T.	} 50	8	"	"	2400	—	} 351B	} P.319/42, P.501/43 P.320/42, P.317/43, P.502/43		} Fuze Nos. 206,207, 211 and 401, Mk. II.
	* 351B	H.A.R.T.										
	O.C. 55	T.C.	}							} P.525/38		
	O.C. 55A	T.C.										
	215A	Star R.T.	43	8	2	Star	1900	—	—	P.192/37, P.349/39 P.509/41		Fuze No. 198.

* See Appendix B (new pages).

CURRENT RANGE TABLES, FUZE SCALES AND TRAJECTORY CHARTS

Gun.	Serial No. of Table.	Nature of Table.	Projectile.		Charge.	M.V.	Agrees with Table No.	No. of Super-seding Table, if any.	Amending A.F.Os.	Remarks.
			Weight.	C.r.h.						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Q.F. 4-7-in. Marks IX, IX*, IX** and XII. B.R. 980 (B.)	* 254	R.T.	lb. oz. 50 0	4	Full	f.s. 2600	—	—	P.417/38, P.457/42, P.413/43	For H.E. Shell, Target Smoke, Chemical Bursting, all fuzed No. 230.
	* 255	R. & E.	" "	"	"	2700/2350	254	—	P.184/38, P.248/38 P.417/38	
	* 256	R. & T.	" "	"	"	2700/2350	254	—	P.417/38	
	* 257	H.T.C.T.	" "	"	"	2600	254	—	P.417/38	
	* 457	R.T.	" "	"	Reduced	1950	—	—	P.461/42, P.419/43	
	458	R. & E.	" "	"	"	2000/1850	457	—	—	
	459	R. & T.	" "	"	"	2000/1850	457	—	—	
	* 393	R.T.	" "	"	Bom- bard- ment No. 3	1415	—	—	P.248/38, P.811/41, P.998/41, P.458/42, P.416/43	
	* 394	R.T.	" "	"	Bom- bard- ment No. 2	960	—	—	P.82/42, P.417/43	
	* 395	R.T.	" "	"	Bom- bard- ment No. 1	800	—	—	P.418/43	

501	Equivalent Ranges	49 10	4	—	—	—	—	—	P.1002/41	For use in con- junction with Tables 502, 503, 504.
502	R.T.	" "	"	Bom- bard- ment No. 3	1419	—	—	—	P.1003/41	For Smoke Shell, B.E., fuzed No. 198, Mark II.
503	"	" "	"	Bom- bard- ment No. 2	963	—	—	—	P.1004/41, P.329/43	
504	"	" "	"	Bom- bard- ment No. 1	803	—	—	—	P.1005/41, P.330/43	
*392 O.C. 60	H.A.R.T. T.C.	50 0	"	Full	2600	—	—	—	P.415/43	Fuze No. 198, Mk. II.
*547 O.B. 104 O.B. 104A	H.A.R.T. T.C. T.C.	49 2½	"	"	2600	—	—	—	P.507/43	Fuze Nos. 211, 207, 206 and 401, Mk. II.
* 405 *405A	H.A.R.T. "	49 0	"	"	2600	—	—	405A	P.781/41, P.24/42, P.258/42, P.321/42, P.503/43	Fuze Nos. 206, 207, 211 and 401, Mk. II.
O.C. 70 O.B. 70A * 379	T.C. " H.A.F.S.	50 0	"	Full	2600	—	—	—	P.285/41, P.856/41 P.414/43	Fuze No. 400, Mk. I.
O.C. 67 215A	G.F.S. Star R.T.	43 8	2	Star	1900	—	—	—	P.192/37, P.349/39, P.509/41	Fuze No. 198.

* See Appendix B (new pages).

CURRENT RANGE TABLES, FUZE SCALES AND TRAJECTORY CHARTS

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Gun.	Serial No. of Table.	Nature of Table.	Projectile.		Charge.	M.V.	Agrees with Table No.	No. of Super- seding Table, if any.	Amending A.F.Os.	Remarks.	
			Weight.	C.r.h.							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
Q.F. 4.7-in. Mark XI. B.R. 980 (B).	*412	R.T.	lb. oz.			f.s.					
	413	R. & E.	62 0	6	Full	2500	—	—	P.100/40, P.517/42		
	414	R. & T.	" "	"	"	2600/2250	412	—	P.288/39		
				" "	"	"	2600/2250	412	—	P.289/39, P.101/40	
	*441	R.T.	" "	"	Reduced	1875	—	—	P.153/43, P.244/43		
	442	R. & E.	" "	"	"	1950/1800	441	—	—		
	443	R. & T.	" "	"	"	1950/1800	441	—	P.84/40		
	*523	R.T.	62 14	"	Bom- bard- ment No. 2	1250	—	—	P.331/43	For H.E. shell and Chemical Bursting, both fuzed No. 230.	
	*524	R.T.	" "	"	Bom- bard- ment No. 1	825	—	—	P.332/43		
	*424	H.A.R.T.	} 62 0	}	}	Full	2500	}	} 424A	P.506/40, P.782/41, P.260/42, P.505/43 P.261/42, P.506/43	Fuze Nos. 206, 207, 211 and 401 Mk. II.
	* 424A	H.A.R.T.									
	O.C.74	T.C.									
O.B.74A	T.C.										

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525	Equivalent Ranges	49 10	4	—	—	—	—	—	—	For use in con- junction with Tables 526 and 527.
526	R.T.	" "	"	Bom- bard- ment No. 2	1419	—	—	P.145/42, P.333/43	For Smoke Shell, B.E., fuzed No. 198, Mk. II.	
527	R.T.	" "	"	Bom- bard- ment No. 1	940	—	—	P.146/42, P.334/43		
460	Star R.T.	55 0	4.22/ 5	Star	2200	—	—	—	Fuze No. 198, Mk. II.	

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* See Appendix B (new pages).

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CURRENT RANGE TABLES, FUZE SCALES AND TRAJECTORY CHARTS

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Gun. (1)	Serial No. of Table. (2)	Nature of Table. (3)	Projectile.		Charge. (6)	M.V. (7)	Agrees with Table No. (8)	No. of Super- seding Table, if any. (9)	Amending A.F.Os. (10)	Remarks (11)	
			Weight. (4)	C.r.h. (5)							
Q.F. 4-5-in. Marks I, III and IV B.R. 980 (X)	*399	R.T.	lb. oz. 55 0	6	Full	f.s. 2350	—	—	P.280/43	Fuze Nos. 206, 207, 211 and 401, Mk. II.	
	400	R. & E.	" "	"	"	2500/2200	399	—	P.52/41		
	401	R. & T.	" "	"	"	2500/2200	399	—	P.53/41		
	*423	R.T.	" "	"	Reduced	1775	—	—	P.276/43, P.431/43		
	464	R. & E.	" "	"	"	1850/1700	423	—	—		
	465	R. & T.	" "	"	"	1850/1700	423	—	—		
	*402B	H.A.R.T. } H.A.R.T. } T.C. } T.C. }	" "	" "	" "	Full	2350	—	402C		P.281/43, P.510/43
	*402C										P.282/43, P.511/43
	O.C. 69										—
	O.B. 69B										—
	432	Star R.T.	41 11 1/2	4-7/6	Star	2150	—	—	P.474/39, P.283/43		Fuze No. 198, Mk. II.

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B.L. 4-in. Mark VII. B.R. 980 (K). Field Gun	* † 246 With Wind Correction Graph.	R.T.	31 0 3	Full	2800	275	—	—	P.424/38	
	29E	F.S.	" "	"	2800	275	—	—	—	Shrapnel, Fuze No. 92.
	543	F.S.	" "	"	2800	275	—	—	—	Shrapnel, Fuze No 80.
B.L. 4-in. Mark IX. B.R. 980 (K).	* 230	R.T.	31 0 3	Full	2600	—	—	—	P.331/38, P.424/38, P.911/41, P.226/42, P.600/42, P.476/43, P.593/43	
	178	R. & E.	" "	"	2650/2400	230	—	—	—	
	179	R. & T.	" "	"	2650/2400	230	—	—	—	
	231	H.T.C.T.	" "	"	2600	230	—	—	—	
	90A	R.T.	" "	"	2600	—	—	230	P.424/38	
	180	R. & E.	" "	"	2700/2300	90A	178	—	P.424/38	
	380 O.C. 68	H.A.F.S. } G.F.S. }	" "	" "	" "	2600	—	—	—	P.299/37, P.88/89
* 216	Star R.T.									28 12

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* See Appendix B (new pages).

† See Appendix F, para. 3 (Special Establishments).

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CURRENT RANGE TABLES, FUZE SCALES AND TRAJECTORY CHARTS

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Gun.	Serial No. of Table.	Nature of Table.	Projectile.		Charge.	M.V.	Agrees with Table No.	No. of Super-seding Table, if any.	Amending A.F.Os.	Remarks.
			Weight.	C.r.h.						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Q.F. 4-in. Mark IV. B.R. 980 (K).	*469	R.T.	lb. oz. 31 8	6	Full	f.s. 2100	—	—	P.1090/41, P.391/42,	
	470	H.A.F.S.	31 0	"	"	2100	—	—	P.1091/41, P.480/43	Fuze No. 400, Mk. I.
	*328	R.T.	" "	3	"	2100	—	—	P.1085/41, P.388/42, P.478/43	
	171	R. & E.	" "	"	"	2250/2000	328	—	P.424/38	
	173	R. & T.	" "	"	"	2250/2000	328	—	P.424/38	
	279	R.T.	" "	"	"	2200	—	328	P.424/38	
	280	R. & E.	" "	"	"	2300/2000	279	171	—	
	482	H.A.F.S.	" "	"	"	2100	—	—	P.122/42	Fuze Nos. 198, Mk. II, 400, Mk. I and 401, Mk. II.
	*236	Star R.T.	28 12	"	Star	1570	—	—	P.424/38, P.245/40, P.449/40, P.307/41	Fuze No. 198.

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Q.F. 4-in. Mark V. B.R. 980 (K).	*230	R.T.	31 0	3	Full	2600	—	—	P.331/38, P.424/38 P.911/41, P.226/42, P.600/42, P.476/43, P.593/43	
	178	R. & E.	" "	"	"	2650/2400	230	—	—	
	179	R. & T.	" "	"	"	2650/2400	230	—	—	
	231	H.T.C.T.	" "	"	"	2600	230	—	—	
	90A	R.T.	" "	"	"	2600	—	230	P.424/38	
	180	R. & E.	" "	"	"	2700/2300	90A	178	P.424/38	
	380 O.C.68	H.A.F.S. G.F.S. }	" "	"	"	2600	—	—	P.299/37, P.88/39	Fuze No. 400, Mk. I.
	*361	R.T.	31 7½	6	H.A.	2350	—	—	P.479/43	
	362	R. & E.	" "	"	"	2400/2200	361	—	P.424/38	
	363	R. & T.	" "	"	"	2400/2200	361	—	P.424/38	
	*429	{ Special H.A.R.T. }	31 0	"	"	2350	—	—	P.185/43	Fuze No. 198, Mk. II.
	*127A G.R.T. XXXI	H.A.R.T. T.C. }	" "	"	"	2350	—	—	P.424/38, P.910/41, P.224/42, P.10/43	Target smoke shell with Fuze No. 192.
	*245 O.C. 42	H.A.R.T. T.C. }	" "	"	"	2350	—	—	P.69/37, P.424/38, P.350/39, P.814/41, P.1084/41	Fuze No. 198, Mk. I.

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* See Appendix B (new pages).

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CURRENT RANGE TABLES, FUZE SCALES AND TRAJECTORY CHARTS

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Gun. (1)	Serial No. of Table. (2)	Nature of Table. (3)	Projectile.		Charge. (6)	M.V. (7)	Agrees with Table No. (8)	No. of Super- seding Table, if any. (9)	Amending A.F.Os. (10)	Remarks. (11)
			Weight. (4)	C.r.h. (5)						
Q.F. 4-in. Mark V. B.R. 980 (K)— <i>contd.</i>	*358A	H.A.R.T. }	lb. oz.			f.s.				
	*358B	H.A.R.T. }	30 10	6	H.A.	2350	—	358B	P.1086/41, P.227/42 P.179/43. P.815/41, P.389/42, P.180/43.	Fuze Nos. 206, 207, 211 and 401, Mk. II.
	O.C. 56 O.C. 56A	T.C. T.C. }					—			
	* 216	Star R.T.	28 12	3	Star	1710	—	—	P.528/38 P.11/43	Fuze No. 198.

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Q.F. 4-in. Mark XII. B.R. 980 (K).	*469	R.T.	31 8	6	Full	2100	—	—	P.1090/41, P.391/42	
	470	H.A.F.S.	31 0	"	"	2100	—	—	P.1091/41, P.480/43	Fuze No. 400, Mk. I.
	*328	R.T.	" "	3	"	2100	—	—	P.1085/41, P.388/42, P.478/43	
	171	R. & E.	" "	"	"	2250/2000	328	—	P.424/38	
	173	R. & T.	" "	"	"	2250/2000	328	—	P.424/38	
	279	R.T.	" "	"	"	2200	—	328	P.424/38	
	280	R. & E.	" "	"	"	2300/2000	—	171	—	
	482	H.A.F.S.	" "	"	"	2100	—	—	P.122/42	Fuze Nos. 198, Mk. II, 400, Mk. I and 401, Mk. II.
	*236	Star R.T.	28 12	"	Star	1570	—	—	P.424/38, P.245/40, P.449/40 P.307/41	Fuze No. 198.

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* See Appendix B (new pages).

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CURRENT RANGE TABLES, FUZE SCALES AND TRAJECTORY CHARTS

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Gun. (1)	Serial No. of Table. (2)	Nature of Table. (3)	Projectile.		Charge. (6)	M.V. (7)	Agrees with Table No. (8)	No. of Super- seding Table, if any. (9)	Amending A.F.Os. (10)	Remarks. (11)		
			Weight. (4)	C.r.h. (5)								
Q.F. 4-in. Mark XVI. B.R. 980 (K)	*369	R.T.	lb. oz. 35 14	6	Full	f.s. 2600	—	—	P.182/43, P.657/43	Fuze No. 206, Mk. I.		
	370	R. & E.	" "	"	"	2700/2450	369	—	—			
	371	R. & T.	" "	"	"	2700/2450	369	—	—			
	498	F.S.	" "	"	"	2600	—	—	P.785/41, P.1016/41, P.124/42			
	*438	R.T.	" "	"	Reduced	1950	—	—	P.330/42, P.186/43			
	439	R. & E.	" "	"	"	2000/1850	438	—	—			
	440	R. & T.	" "	"	"	2000/1850	438	—	—			
	553	R.T.	" "	"	Bom- bard- ment	1275	—	—	P.658/43		For H.E. shell, fuzed, No. 230.	
	*373A	H.A.R.T.	}	35 0	"	Full	2600	—	373B		P.519/40, P.399/41, P.817/41 P.1089/41, P.228/42, P.265/42, P.183/43, P.818/41, P.35/42, P.229/42, P.266/42 P.184/43.	Fuze Nos. 206, 207, 211 and 401, Mk. II.
	*373B	"										
O.C. 58	T.C.											
O.C. 58A	"											
*245	H.A.R.T.	}	31 0	"	H.A.	2350	—	—	P.528/38	For Target Smoke Shell only.		
O.C. 42	T.C.											

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544	Equivalent Ranges	30 2½	4/5	—	—	—	—	—	P.559/42	For use with Table 545.
545	R.T.	" "	"	Reduced	2075	—	—	—	P.560/42, P.595/43	
561	Equivalent Ranges	32 12	3.8/10	—	—	—	—	—	—	For use with Table 562.
562	R.T.	" "	"	Reduced	1975	—	—	—	—	
*216	Star R.T.	28 12	3	Star	1710	—	—	—	P.11/43	Fuze No. 198.
422	" "	29 10	4/5	"	2100	—	—	—	—	Fuze No. 198, Mk. II.
Q.F. 4-in. Mark XIX. B.R. 980 (K).	*496	R.T.	35 14	6	Full	1275	—	—	P.575/41, P.481/43	Fuze No. 400, Mk. I Fuze No. 198, Mk. II.
	497	H.A.F.S.	}	35 7	"	"	1275	—	—	
	O.B.115	T.C.								
540	Star R.T.	29 10	4/5	Star	1475	—	—	—		
B.L. 4-in. mortar B.R. 980 (K)	554A	R.T.	10 8	—	{	1st	317	—	}	P.688/43
						2nd	415	—		

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* See Appendix B (new pages)

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CURRENT RANGE TABLES, FUZE SCALES AND TRAJECTORY CHARTS

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Gun.	Serial No. of Table.	Nature of Table.	Projectile.		Charge.	M.V.	Agrees with Table No.	No. of Super-seding Table, if any.	Amending A.F.Os.	Remarks.
			Weight.	C.r.h.						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
M.L. 3.5-in. bomb thrower. B.R. 980 ().	† 341	R.T.	lb. oz. 213 0	—	Full	f.s. 350	—	—	—	
3-in. rocket ... B.R. 980 (Z).	519	R.T.	53 12	—	—	—	—	—	—	

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(05745) Q.F. 3-in. 20 cwt. B.R. 980 (L).	129A	R.T.	16 0	6	Full	2000	—	—	P.425/38, P.236/41, P.916/41, P.37/42, P.237/41, P.868/41, P.917/41, P.38/42, P.523/42, P.483/43, P.425/38	Fuzes Nos. 80/44, 44 and 45P. Fuze No. 230.
	352	R.T.	17 8	"	"	2000	—	—		
	79	F.S.	16 0	"	"	2000	129A	—		Fuze No. 80/44,
	128A G.L.XXII	H.A.R.T. } T.C. }	" "	"	"	2000	—	—	P.425/38, P.915/41, P.36/42	Fuze No. 80/44.
	396 O.C. 61	H.A.R.T. } T.C. }	" "	"	"	2000	—	—	P.351/39, P.869/41, P.918/41, P.39/42	Fuze No. 198, Mk. II.
	471	H.A.F.S.	16 15	"	"	2000	—	—	P.919/41, P.659/43	Fuze No. 400, Mk. I.
	485	H.A.F.S.	16 8	"	"	2000	—	—	P.920/41	Fuze No. 401, Mk. II.
	337 O.C. 53	H.A.R.T. } T.C. }	12 8	2	Full	2500	—	—	P.425/38	Target smoke shell with Fuze No. 198, Mk. I.
	† 175 G.L.XVIII	H.A.R.T. } T.C. }	" "	"	"	2575	—	—	P.425/38	Target smoke shell with Fuze No. 185.
	† 40/WO/4065	H.A.R.T.	" "	"	"	2500	—	—	—	Fuze No. 185.
	217	Star R.T.	" "	"	Star	1610	—	—	P.425/38, P.144/41, P.546/41	Fuze No. 198.

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† See Appendix F, para. 3 (Special Establishments).

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CURRENT RANGE TABLES, FUZE SCALES AND TRAJECTORY CHARTS

Gun.	Serial No. of Table.	Nature of Table.	Projectile.		Charge.	M.V.	Agrees with Table No.	No. of Super-seding Table, if any.	Amending A.F.Os.	Remarks.
			Weight.	C.r.h.						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Q.F. 12-pdr. 12 cwt. B.R. 980 (M).	488	R.T.	lb. oz. 12 15	6	Full	f.s. 2175	—	—	P.875/41, P.43/42	
	489	R. & E.	" "	"	"	2300/2000	488	—	—	
	490	R. & T.	" "	"	"	2300/2000	488	—	—	
	281	R.T.	12 8	2	"	2197	—	—	P.198/37, P.871/41 P.41/42	
	282	R. & E.	" "	"	"	2300/1900	281	—	—	
	480 O.B.93	H.A.R.T. T.C. }	" "	"	"	2200	—	—	P.269/41, P.873/41 P.42/42	Fuze No. 198, Mk. II
	481	H.A.F.S.	" "	"	"	2200	—	—	P.874/41, P.45/43	Fuze Nos. 198, Mk.II, 400, Mk. I, and 401, Mk. II
	336	Star R.T.	" "	"	Star	1500	—	—	P.426/38, P.30/41, P.295/41	Fuze No. 198.
Q.F. 6-pdr. 7 cwt.	26 (Manuals) 3110	R.T.	6 5	2	Full	2675	—	—	—	A.P. Shot.

These range tables are supplied only to ships with H.A. mountings.

Q.F. 6-pdr. Hotchkiss.	548	R.T.	6 0	—	Full	1700	—	—	—	
B.R. 980 (N).	563	R.T.	6 4½	—	"	1700	—	—	—	H.E. shell, Fuze No. 241.
	* 177	R.T.	6 0	—	"	1700	—	—	P.427/38, P.921/41	A.P. Shot (Provisional table).
	284	R.T.	" "	—	"	1818	—	177	P.427/38	
	285	R. & E.	" "	—	"	1900/1600	284	—	—	
	486	H.A.R.T.	" "	—	"	1725	—	—	P.922/41	Fuze No. 65A.
Q.F. 6-pdr. Sub-calibre, Mark I.	*495	H.A.R.T. }	6 0	3	Full	1750	—	—	—	Fuze No. 125.
B.R. 980 (N).	O.B.96	T.C.								
2-in. Rocket	560	R.T.	11 7	—	—	—	—	—	—	
B.R. 980 (Z)	—	T.C.	" "	—	—	—	560	—	—	Fuze No. 720 or P.D. 329.
2-in. Rocket Flare	—	T.C.	—	—	—	—	—	—	—	Fuze No. 720.
B.R. 980 (Z)	—	—	—	—	—	—	—	—	—	
2-in. Rocket Tar- get.	D.N.O.3	T.C.	—	—	—	—	—	—	—	
B.R. 980 (Z)	—	—	—	—	—	—	—	—	—	
Q.F. 3-pdr. Hotchkiss.	176A	R.T.	3 5	2	Full	1875	—	—	P.1092/41, P.601/42, P.539/43	
B.R. 980 (O).	286	R.T.	" "	"	"	1873	—	176A	P.428/38	
	287	R. & E.	" "	"	"	2000/1600	286	—	—	
Q.F. 3-pdr. Sub-calibre, Mark I.	494	H.A.R.T. }	3 0	3	Full	1950	—	—	P.635/41	Fuze No. 125.
B.R. 980 (O).	O.B.95	T.C.								

* See Appendix B (new pages).

CURRENT RANGE TABLES, FUZE SCALES AND TRAJECTORY CHARTS

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Gun.	Serial No. of Table.	Nature of Table.	Projectile.		Charge.	M.V.	Agrees with Table No.	No. of Super- seding Table, if any.	Amending A.F.Os.	Remarks.
			Weight.	C.r.h.						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Q.F. 40 mm. Bofors, Mark I B.R. 980 (R)	532	H.A.R.T.	lb. oz. 2 0	—	Full	2800	—	—	—	H.E. shell, Fuze No. 251.
Q.F. 2-pdr. Mark II.* B.R. 980 (E).	169A	R.T.	2 0	2	Full	1900	—	—	—	C.P. shell
	316A	R.T.	" "	"	"	1900	—	—	P.15/41	H.E. shell, Fuze No. 131.
	355A	R.T.	" "	"	"	1900	—	—	—	C.N.F. shell, Fuze No. 124 or No. 125
	320A O.C.51	H.A.R.T. } T.C. }	" "	"	"	1900	—	—	—	{ C.N.F. shell, Fuze No. 124 or No. 125.
	319A O.C.50	H.A.R.T. } T.C. }	" "	—	"	1900	—	—	{ P.241/40,P16/41 P.435/37	H.E. shell, Fuze No. 131.
Q.F. 2-pdr. Mark II* C. B.R. 980 (E).	364A	R.T.	2 2½	—	Full	1900	—	—	P.154/43, P.370/43	H.E. shell, Fuze No. 240 or 241.
	365A O.C. 59	H.A.R.T. } T.C. }	" "	—	"	1900	—	—	P.155/43	{ H.E. shell, Fuze No. 240 or 241.

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Q.F. 2-pdr. Mark VIII. L.V. B.R.980 (E).	364A	R.T.	2 2½	—	Full	1900	—	—	P.154/43, P.370/43	H.E. shell, Fuze No. 240 or 241.
	365A O.C.59	H.A.R.T. } T.C. }	" "	—	"	1900	—	—	P.155/43	{ H.E. shell, Fuze No. 240 or 241.
Q.F. 2-pdr. Mark VIII. H.V. B.R. 980 (E).	* 430	R.T.	1 13½	—	Full	2300	—	—	P.653/43	Fuze No. 243 or 246.
	* 431 O.C. 76	H.A.R.T. } T.C. }	" "	—	"	2300	—	—	—	Fuze No. 243. or 246.
Q.F. 2-pdr. L.A. sub-calibre, Mark I. B.R. 908 (E).	169A	R.T.	2 0	2	Full	1900	—	—	—	C.P. shell weighted.
	355A	R.T.	" "	"	"	1900	—	—	—	C.N.F. shell, weighted and Shot Practice Mks. I* and II.
	316A	R.T.	" "	"	"	1900	—	—	P.15/41	Projectile Practice Mk. I.
	320A O.C. 51	H.A.R.T. } T.C. }	" "	"	"	1900	—	—	—	{ C.N.F. shell, Fuze No. 124 or No.125.
	364A	R.T.	2 2½	—	"	1900	—	—	P.154/43, P.370/43	Projectile Practice, Mk. II.

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* See Appendix B (new pages).

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CURRENT RANGE TABLES, FUZE SCALES AND TRAJECTORY CHARTS

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Gun.	Serial No. of Table.	Nature of Table.	Projectile.		Charge.	M.V.	Agrees with Table No.	No. of Super-seding Table, if any.	Amending A.F.Os.	Remarks.
			Weight.	C.r.h.						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Q.F. 2-pdr. H.A. sub-calibre, Mark II. B.R. 980 (E).	164 O.C.32	H.A.R.T. } T.C. }	lb. oz. 2 0	2	H.A.	f.s. 1000	—	—	P.420/38, P.290/39, P.534/40	C.N.F. shell, Fuze No. 125.
	165	R.T. & F.S.	" "	"	"	1000	—	—		
20 mm. Oerlikon Gun. B.R. 980 (T).	467	R.T.	- 4 $\frac{3}{8}$	—	—	2725	—	—	—	—
	468	H.A.R.T.	- 4 $\frac{3}{8}$	—	—	2725	—	—	—	—
1-in. Aiming Rifle. B.R. 980 (S).	288	R.T.	oz. grs. 9 408	—	A.R.	1100	—	—	—	—

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0.5-in. Browning Machine Gun. B.R. 980 (T).	541	R.T.	—	—	—	2400	—	—	—	} Agree with American F.T. 0.50— F—2.
	542	H.A.R.T.	—	—	—	2400	—	—	—	
	551	R.T.	—	—	—	2700	—	—	—	
0.5-in. Vickers Machine Gun. B.R. 980 (T).	552	H.A.R.T.	—	—	—	2700	—	—	—	} Agree with American F.T. 0.50— F—3.
	* 347	R.T.	grs. 580	—	Mk. II Z/A.	2540	—	—	—	
	356	H.A.R.T.	"	—	"	2540	—	—	—	
.303 in. Lee- Metford Rifles, and Aiming Rifles with long barrels. B.R. 980 (T).	289	R.T.	215	—	Mk. VI Ammu- nition.	2000	—	—	—	—
Short Lee- Enfield Rifles, Mark III, and Aiming Rifles with short barrels. B.R. 980 (T).	311	R.T.	215	—	Mk. VI Ammu- nition.	2000	—	—	—	—
All .303 in. Machine Guns and Rifles firing Mark VII Ammu- nition. B.R. 980 (T).	312	R.T.	174	—	Mk. VII Ammu- nition.	2440	—	—	—	—

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* See Appendix B (new pages).

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RANGE TABLES AND TRAJECTORY CHARTS FOR AMERICAN GUNS

Gun. (1)	Serial No. of Table. (2)	Nature of Table. (3)	Projectile.		Charge. (6)	M.V. (7)	Remarks. (8)
			Weight. (4)	C.r.h. (5)			
Q.F. 5-in., 38 cal., Mark XII ... B.R. 980 (Q) (1).	*O.P. 551	R.T.	lb. 54	5.25	Full	f.s. 2600	} 45-sec. fuze, Mark XVI and mods.
	Dr. 170024 (O.B. 98) }	T.C.	"	"	"	2600	
	533	Star R.T.	"	"	"	2600	
	Sk. 78815	Star G.R.T.	"	"	"	2600	
Q.F. 4-in., 50-cal., Mark IX ... B.R. 980 (Q) (3).	O.P. 171	R.T.	33	7	Full	2900	} Long-pointed projectile. Time fuze, Mark XI, Mod. 2 or 3.
	O.P. 173	R.T.	"	—	"	2900	
	O.P. 172	R.T.	"	7	Reduced	2500	
	564	Star R.T.	"	—	Full	2900	
	Sk. 73645	Star G.R.T.	—	—	Full	2760	

(5745) Q.F. 3-in., 50-cal., Marks III and X. B.R. 980 (Q) (4).	O.P. 861	R.T.	13	—	Full	2700	} 30-sec. mechanical time fuze, Mark 22. Shrapnel. Blunt-pointed projectile. } 30-sec. mechanical time fuze, Mark 22. } 21-sec. fuze, Mark XI, mod. 2-3. } 30-sec. mechanical time fuze, Mark 22.
	O.P. 144	R.T.	"	—	"	2700	
	O.P. 138	R.T.	"	—	"	2700	
	O.P. 824	H.A.R.T.	"	—	"	2615	
	Dr. 328809	T.C.	"	—	"	2735	
	Dr. 160990	T.C.	12.6	—	"	2735	
	O.P. 771	A.A. Barrage Tables	12.6	—	"	2735	
Sk. 87494	F.S. Chart	12.6	—	"	2735		
Sk. 99459	Star G.R.T.	13	—	"	2700		
Q.F. 3-in., 23-cal., Mark XIV B.R. 980 (Q) (5).	O.P. 133	R.T.	13	—	—	1650	} Shrapnel. 21-sec. fuze, Mark XI, mod. 2-3. } 30-sec. mechanical time fuze, Mark 22.
	O.P. 134	R.T.	"	—	—	1650	
	Dr. 55225	T.C.	"	—	—	1650	
	Dr. 33079	T.C.	"	—	—	1650	
Q.F. 3-in., 23-cal., Mark XI ... B.R. 980 (Q) (6).	Sk. 120106	Star G.R.T.	"	—	"	1600	
	O.P. 143	R.T.	13	—	—	1650	
40 mm. A.A. ... B.R. 980 (Q) (9).	O.P. 867	H.A.R.T.	1.97	—	Full	2800	} Detonating fuze, Mark 27. This range table is based on B.R. 980 (R), Table No. 532.
Q.F. 1-pdr. ... B.R. 980 (Q) (7).	O.P. 76	R.T.	1.057	—	—	2000	
General ... B.R. 980 (Q) (8).	O.P. 380	Description and R.Ts.	—	—	—	—	} F.N. projectiles. } Description, operation and R.Ts.
	O.P. 390	Star R.Ts.	—	—	—	—	

O.P. = Ordnance Pamphlet.

* See Appendix B (new pages).

RANGE TABLES AND FUZE SCALES HELD IN RESERVE FOR SPECIAL SERVICES

(No general issue of these Tables will be made.)

Gun.	Serial No. of Table.	Nature of Table.	Projectile.		Charge.	M.V.	Agrees with Table No.	No. of Super-seding Table, if any.	Amending A.F.Os.	Remarks.
			Weight.	C.r.h.						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
B.L. 14-in., Mark VII. B.R. 980 (Y).	472	R.T.	1,590 0	6	Super	f.s. 2750	—	—	—	H.E., fuzed 118.
	570	R. & T.	" "	"	"	2850/2400	—	472	—	
B.L. 7.5-in., Mark VI. B.R. 980 (H).	* 264	R.T.	200 0	4	Full	2700	—	—	P.329/38, P.422/38	
	265	R. & E.	" "	"	"	2800/2550	264	—	—	
	266	R. & T.	" "	"	"	2800/2550	264	—	—	
	112	R.T.	" "	"	"	2700	—	264	P.422/38	
	118	R. & E.	" "	"	Full and Reduced	2950/2150	—	265 & 291	—	
	* 290	R.T.	" "	"	Reduced	2200	—	—	P.422/38	
	291	R. & E.	" "	"	"	2350/2050	290	—	P.422/38	
	292	R. & T.	" "	"	"	2350/2050	290	—	—	
116	R.T.	" "	"	"	2200	—	290	P.422/38		

(65745)	B.L. 6-in., Mark VII.	528	R.T.	100 0	6	Full	2700	—	—		
	B.R. 980 (J).	530	R. & E.	" "	"	"	2850/2550	528	—		P.240/42
	531	R. & T.	" "	"	"	"	2850/2550	528	—		—
	191	R. & E.	" "	"	"	"	3000/2700	—	530		—
	558	R.T.	" "	"	Reduced	2000	—	—	—		—
	204	R. & E.	" "	"	"	2250/1900	—	—	—		—
	*271	R.T.	" "	4	Full	2725	—	—	—		P.423/38, P.12/42
	340	R.T.	101 14	"	"	2500	—	—	—		P.599/42
	239	R. & E.	" "	"	"	2850/2500	340	—	—		P.502/42
	240	R. & T.	" "	"	"	2850/2500	340	—	—		P.296/39
	* 333	F.S.	100 0	"	"	2725	270	—	—		P.423/38
	* 334	F.S.	" "	"	"	2725	26D	—	—		P.423/38
	26D	R. & E.	100 0	4	"	2800/2450	—	239	—		P.423/38, P.297/39
	270	R. & E.	" "	"	Full and Reduced	3000/1800	—	26D and 28	—		—
	* 272	R.T.	" "	"	Two-thirds.	1950	—	—	—		P.196/37
	* 450	R.T.	" "	"	"	1925	—	—	—		—
	242	R. & E.	" "	"	"	2150/1900	—	—	—		—
	243	R. & T.	" "	"	"	2150/1900	—	—	—		—
	237	R. & E.	" "	"	"	2125/2000	—	28	—		—
	28	R. & E.	" "	"	"	2125/1700	—	242	—		See footnote, Appendix A, p. 49.
213	Star R.T.	90 0	2	Star	1950	—	—	—	P.423/38, P.294/39		
									P.135/41, P.463/42	Fuze No. 198.	

* See Appendix B (new pages).

RANGE TABLES AND FUZE SCALES HELD IN RESERVE FOR SPECIAL SERVICES

(No general issue of these Tables will be made.)

Gun.	Serial No. of Table.	Nature of Table.	Projectile.		Charge.	M.V.	Agrees with Table No.	No. of Super- seding Table, if any.	Amending A.F.Os.	Remarks.
			Weight.	C.r.h.						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
B.L. 6-in. Mark XI. B.R. 980 (J)	*268	R.T.	lb. oz. 100 0	4	Full	f.s. 2900	—	—	P.135/43	
	239	R. & E.	101 14	"	"	2850/2500	—	—	P.296/39	
	240	R. & T.	" "	"	"	2850/2500	—	—	—	
	270	R. & E.	100 0	"	Full and Reduced	3000/1800	268 & 269	239 & 242	—	
	023	R. & T.	" "	"	Full	2900/2700	268	240	—	
	269	R.T.	" "	"	Two- thirds	2200	—	—	P.196/37	
	242	R. & E.	" "	"	"	2150/1900	—	—	—	
	243	R. & T.	" "	"	"	2150/1900	—	—	—	
B.L. 6-in., Mark XVI. B.R. 980 (J).	*268	R.T.	100 0	4	Full	2900	—	—	P.135/43	
	239	R. & E.	101 14	"	"	2850/2500	—	—	P.296/39	
	240	R. & T.	" "	"	"	2850/2500	—	—	—	
	273	R. & E.	100 0	"	"	2900/2500	—	239	—	
	269	R.T.	" "	"	Reduced	2200	—	—	P.196/37	
	242	R. & E.	" "	"	"	2150/1900	—	—	—	
	243	R. & T.	" "	"	"	2150/1900	—	—	—	

(95745) B.L. 6-in. Mark XVII. B.R. 980 (J).	* 103A	R.T.	100 0	4	Full	2800	—	—	P.218/39, P.21/41, P.134/41, P.860/41	
	239	R. & E.	101 14	"	"	2850/2500	—	—	P.296/39	
	240	R. & T.	" "	"	"	2850/2500	—	—	—	
	304	H.T.C.T.	" "	"	"	2750	—	—	—	
	273	R. & E.	100 0	"	"	2900/2500	—	—	—	
	26D	R. & E.	" "	"	"	2800/2450	103A	26D 239	P.423/38, P.297/39	
	* 104A	R.T.	" "	"	Two- thirds.	2000	—	—	P.196/37	
	242	R. & E.	" "	"	"	2150/1900	—	—	—	
	243	R. & T.	" "	"	"	2150/1900	—	—	—	
	28	R. & E.	" "	"	"	2125/1700	104A	242	P.423/38, P.294/39	
	377 O.C. 65	H.A.F.S. G.F.S. }	" "	"	Full	2750	—	—	P.68/37, P.221/39	Fuze No. 400, Mk. I.

*See Appendix B (new pages).

RANGE TABLES AND FUZE SCALES HELD IN RESERVE FOR SPECIAL SERVICES
(No general issue of these Tables will be made.)

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Gun.	Serial No. of Table.	Nature of Table.	Projectile.		Charge.	M.V.	Agrees with Table No.	No. of Super- seding Table, if any.	Amending A.F.Os.	Remarks.
			Weight.	C.r.h.						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
B.L. 5.5-in. Mark I.	* 294	R.T.	lb. oz. 82 0	4	Full	f.s. 2725	—	—	P.64/37, P.193/37 P.249/38, P.328/38	
B.R. 980 (C).	295	R. & E.	" "	"	"	2800/2550	294	—	—	
	296	R. & T.	" "	"	"	2800/2550	294	—	—	
	153	R.T.	" "	"	"	2725	—	149	—	
	149	R.T.	" "	"	"	2725	—	294	P.418/38	
	13	R. & E.	" "	"	"	2800/2600	153 up to 10°	151	—	
	151	R. & E.	" "	"	"	2800/2600	—	295	—	
	*317	R.T.	" "	"	Two- thirds.	2050	—	—	P.418/38	
	152	R. & E.	" "	"	"	2100/1900	317	—	—	
	318	R. & T.	" "	"	"	2100/1900	317	—	—	
	154	R.T.	" "	"	"	2050	—	317	—	
	017	R. & E.	" "	"	"	2100/1900	154 up to 10°	152	—	
	378 O.C. 66	H.A.F.S. G.F.S. }	" "	"	Full	2725	—	—	P.64/37	Fuze No. 400, Mk. I.
Q.F. 4.7-in. Mark V*	20	R.T.	50 0	4	Full	2350	—	—	P.11/42	

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(05715)	B.L. 4-in. Mark VII.	* 275	R.T.	31 0	3	Full	2800	—	—	P.197/37, P.229/40 P.477/43	
	B.R. 980 (K).	276	R. & E.	" "	"	"	2900/2600	275	—	—	
		29E	F.S.	" "	"	"	2800	275	—	—	Shrapnel, Fuze No. 92.
		511	R.T.	" "	"	Reduced	1800	—	—	—	
	391	Star R.T.	28 12	"	Star	1870	—	—	—	Fuze T. No. 198.	
	B.L. 4-in. Mark VIII.	* 328	R.T.	31 0	3	Full	2100	—	—	P.1085/41, P.388/42, P.478/43	
	B.R. 980 (K).	171	R. & E.	" "	"	"	2250/2000	328	—	P.424/38	
		173	R. & T.	" "	"	"	2250/2000	328	—	P.424/38	
		277	R.T.	" "	"	"	2275	—	328	—	
		278	R. & E.	" "	"	"	2300/2100	—	171	—	
		499	R.T.	" "	"	Reduced	1500	—	—	—	
		* 236	Star R.T.	28 12	"	Star	1570	—	—	P.424/38, P.245/40, P.449/40	Fuze No. 198.
	B.L. 4-in., Mark IX.	466A	R.T.	31 0	3	Reduced	1650	—	—	P.307/41	
	B.R. 980 (K).										
	Q.F. 4-in., Mark V.	466A	R.T.	31 0	3	Reduced	1650	—	—	—	
	B.R. 980 (K).										
	Q.F. 3-in., 20 cwt.	483	R.T.	12 8	2	Practice	1600	—	—	—	
	B.R. 980 (L).										

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* See Appendix B (new pages).

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RANGE TABLES AND FUZE SCALES HELD IN RESERVE FOR SPECIAL SERVICES
(No general issue of these Tables will be made.)

Gun. (1)	Serial No. of Table. (2)	Nature of Table. (3)	Projectile.		Charge. (6)	M.V. (7)	Agrees with Table No. (8)	No. of Super- seding Table, if any. (9)	Amending A.F.Os. (10)	Remarks. (11)
			Weight. (4)	C.r.h. (5)						
Q.F. 12-pdr. 12 cwt. B.R. 980 (M).	488	R.T.	lb. oz. 12 15	6	Full	f.s. 2175	—	—	P. 875/41, P. 43/42	For ships with H.A. mountings only. Fuze No. 198, Mark II. Fuze Nos. 198, Mk. II, 400, Mk. I, and 401, Mk. II. Fuze No. 198, P. 42/42 P. 874/41 P. 45/43 P. 426/38, P. 30/41, P. 295/41
	489	R. & E.	" "	" "	" "	2300/2000	488	—	—	
	490	R. & T.	" "	" "	" "	2300/2000	488	—	—	
	281	R.T.	12 8	2	"	2197	—	—	P. 198/37, P. 871/41, P. 41/42	
	282	R. & E.	" "	" "	" "	2300/1900	281	—	—	
	480 O.B.93	H.A.R.T. T.C.	" "	" "	" "	2200	—	—	P. 269/41, P. 873/41, P. 42/42	
	481	H.A.F.S.	" "	" "	" "	2200	—	—	P. 874/41 P. 45/43	
336	Star R.T.	" "	" "	Star	1500	—	—	P. 426/38, P. 30/41, P. 295/41		

APPENDIX A

List of Tables whose serial numbers have been altered.

Calibre of Gun. (1)	Old Reference.			Nature of Table. (5)	New Reference.		
	Serial No. (2)	O.U. or C.B. No. (3)	Extensions. (4)		Serial No. (6)	B.R. No. (7)	
16-in. ...	193A	C.B. 1785	—	H.T.C.T.	224	980 (U)	
7-5-in. ...	G.24836/16 LXI LXII	—	—	R.T.	116	980 (H)	
		O.U. 5268	G.24836/16	R. & E.	118	"	
6-in. ...	LXIX LXX LXXXIX p. 88 p. 92 p. 100 p. 110 p. 106 G.20053/13 G.20053/13 24 25 G.38886/15	O.U. 5268	—	R.T.	268	980 (J)	
		"	—	R.T.	269	"	
		O.U. 5268A	27	R. & E.	270	"	
		"	—	R.T.	271	"	
		"	—	R.T.	272	"	
		"	G.35146/15	249	R. & E.	273	"
		"	250				
		"	—	—	R. & E.	28	"
		"	—				
		"	O.U. 6090 (J)	G.35146/15	R. & E.	237*	"
"	"	056A	R.T.	24A	"		
"	"	055A	R.T.	25A	"		
"	"	—	R. & E.	248	"		
5-5-in. ...	G.22345/15 G.22345/15 150	—	28384	R.T.	153	980 (C)	
		—	28384	R.T.	154	"	
		O.U. 6090 (C)	—	R.T.	317	"	
4-in. ...	LXXXIV LXXXV LXXXVI LXXXVII p. 114 p. 118 G.8021/15 90 127 172	O.U. 5268	054A	R.T.	275	980 (K)	
		"	028	R. & E.	276	"	
		"	—	R.T.	277	"	
		"	027	R. & E.	278	"	
		O.U. 5268A	030	R.T.	279	"	
		"	15	R. & E.	280	"	
		"	039	—	—	—	—
		"	258	—	—	—	—
		"	O.U. 6090 (K)	G.18668/15	R. & E.	180	"
		"	"	32E	R.T.	90A	"
"	"	172A	H.A.R.T.	127A	"		
"	"	—	R.T.	328	"		

* The latest reprints of Table No. 237 contain only the extension G.35146/15, Table G.20053/13 being embodied in Table No. 28.

APPENDIX A—contd.

Calibre of Gun. (1)	Old Reference.			Nature of Table. (5)	New Reference.	
	Serial No. (2)	O.U. or C.B. No. (3)	Extensions. (4)		Serial No. (6)	B.R. No. (7)
3-in. 20 cwt.	41H	O.U. 6090 (L)	—	H.A.R.T.	175	980 (L)
	128 } 78 }	"	—	H.A.R.T.	128A	"
12-pdr. 12 cwt.	XCIH	O.U. 5268	—	R.T.	281	980 (M)
	XCIV	"	8 }	R. & E.	282	"
	XCV	"	—			
6-pdr. ...	XCVII	O.U. 5268	—	R.T.	284	980 (N)
	XCVIII	"	7 } 21 }	R. & E.	285	"
3-pdr. ...	XCIX	O.U. 5268	XCIXA	R.T.	286	980 (O)
	C	"	91	R. & E.	287	"
2-pdr. ...	360	O.U. 6090 (E)	—	F.S.	355A	980 (E)
1-in. A.R.	p. 132	O.U. 5268A	—	R.T.	288	980 (S)
.303-in. ...	CVII	O.U. 5268	—	R.T.	289	980 (T)
	CVIII	"	—	R.T.	311	"

APPENDIX B

List of Additional and Revised Pages printed after the original issue of Tables.

Calibre. (1)	Serial No. of Table. (2)	No. of New Page. (3)	Date of New Page. (4)	Description. (5)		
16-in. ...	193	1	Nov., 1942	Revised page replacing page 1 (revised May, 1940).		
		14A	May, 1943	Revised page replacing page 14A (revised May, 1940).		
		14B	May, 1940	Additional page giving corrections to Drift Constants.		
		199	35	May, 1940	Revised page replacing page 35 (revised March, 1933).	
		43A	May, 1943	Revised page replacing page 43A (revised May, 1940).		
		43B	May, 1940	Additional page giving corrections to Drift Constants.		
		15-in. ...	226	1	Mar., 1935	Revised page replacing the original page 1.
				12	Feb., 1936	Revised page replacing page 12 (revised May, 1933).
				13	April, 1936	Additional page giving corrections to Drift Constants.
				261	1	Mar., 1937
10	Feb., 1936			Revised page replacing page 10 (December, 1931).		
11	April, 1936			Additional page giving corrections to Drift Constants.		
381	1			Nov., 1942	Revised page replacing the original page 1.	
505	1			July, 1943	Revised page replacing the original page 1.	
2A	July, 1943			Revised page replacing page 19 (revised April, 1943).		
508	1			July, 1943	Revised page replacing the original page 1.	
2A	July, 1943	Revised page replacing the original page 17.				
14-in. ...	415	1	June, 1940	Revised page replacing the original page 1.		
		17	May, 1942	Revised page replacing page 17 (June, 1940).		
		419	1	June, 1940	Revised page replacing the original page 1.	
		12	May, 1942	Revised page replacing page 12 (June, 1940).		

APPENDIX B—*contd.*

Calibre.	Serial No. of Table.	No. of New Page.	Date of New Page.	Description.
(1)	(2)	(3)	(4)	(5)
8-in. ...	206	1	Jan., 1943	Revised page replacing page 1 (revised May, 1932)
		12A	June, 1935	Additional page giving corrections to Drift Constants.
	209	32	Jan., 1943	Revised page replacing page 32 (revised Oct., 1932).
		40A	June, 1935	Additional page giving corrections to Drift Constants.
		322A	71	Dec., 1933
	72	Dec., 1933	Additional page, being a continuation of page 71 (December, 1933).	
7.5-in. ...	264	10	July, 1930	Additional page containing H.T.C. Table.
		11	Sept., 1931	Additional page containing Table of E.F.C., Wear and M.V., replacing the Table of E.F.C., Wear and M.V. given at foot of page 9.
	290	9	July, 1930	Additional page containing H.T.C. Table.
		10	Sept., 1931	Additional page containing Table of E.F.C., Wear and M.V., replacing the Table of E.F.C., Wear and M.V. given at foot of page 8.
6-in. ...	24A	7	May, 1928	Additional page giving table of corrections due to increase of $\kappa\sigma$ with elevation.
		25A	6	May, 1928
	103A	1	Mar., 1937	Revised page replacing page 1 (revised September, 1933).
		1A	Nov., 1930	Additional page, being a continuation of page 1 (revised March, 1937).
		5	Mar., 1940	Additional page giving table of E.F.C., Wear and M.V.
		6	Mar., 1940	Additional page, being a continuation of page 5 (March, 1940).
	104A	1	Sept., 1933	Revised page replacing page 1 (January, 1931).
		1A	Jan., 1931	Additional page, being a continuation of page 1 (revised September, 1933).
		4	Mar., 1940	Additional page giving table of E.F.C., Wear and M.V.
		5	Mar., 1940	Additional page, being a continuation of page 4 (March, 1940).
	238	1	Mar., 1937	Revised page replacing page 1 (revised October, 1931).
		1A	Mar., 1937	Additional page, being a continuation of page 1 (revised March, 1937).

APPENDIX B—*contd.*

Calibre.	Serial No. of Table.	No. of New Page.	Date of New Page.	Description.	
(1)	(2)	(3)	(4)	(5)	
6-in.— <i>contd.</i>		10	April, 1943	Revised page replacing page 10 (revised Mar., 1937) in issues other than the reprints dated May, 1939 and Mar., 1943.	
		12	April, 1943	Revised page replacing page 12 in reprints dated May, 1939 and Mar., 1943 only.	
		241	1	Oct., 1942	Revised page replacing the original page 1.
			9	April, 1943	Revised page replacing page 9 (revised Feb., 1936) in issues other than the reprint dated May, 1939.
			10	April, 1943	Revised page replacing page 10 in the reprint dated May, 1939 only.
		268	1	Nov., 1942	Revised page replacing the original page 1.
		271	1	Oct., 1942	Revised page replacing page 1 (revised September, 1933).
			6	Mar., 1940	Revised page replacing page 6 (revised August, 1930).
		272	1	Sept., 1933	Revised page replacing the original page 1.
			6	Mar., 1940	Revised page replacing page 6 (August, 1930).
		302	Complete Table on one page.	Oct., 1932	Revised, replacing the original Table No. 302.
		333	1	June, 1935	Revised page replacing the original page 1.
			3	June, 1935	Revised page replacing the original page 3.
			4	June, 1935	Additional page containing Tables C and D.
		334	1	June, 1935	Revised page replacing the original page 1.
			3	June, 1935	Revised page replacing the original page 3.
			4	June, 1935	Additional page containing Tables C and D.
		340	1	Mar., 1937	Revised page replacing the original page 1.
			1A	Mar., 1937	Additional page being a continuation of page 1 (revised March, 1937).
			8	June, 1939	Additional page giving table of E.F.C., Wear and M.V.
	342	1	Nov., 1942	Revised page replacing page 1 (revised July, 1939).	
		10	May, 1939	Revised page replacing page 10 (revised Nov., 1937).	
		11	June, 1935	Additional page giving corrections to Drift Constants.	
	348	1	July, 1939	Revised page replacing page 1 (revised Nov., 1937).	
		9	Nov., 1937	Revised page replacing page 9 (revised February, 1936).	

APPENDIX B—contd.

Calibre. (1)	Serial No. of Table. (2)	No. of New Page. (3)	Date of New Page. (4)	Description. (5)
6-in.— <i>contd.</i>		10	June, 1935	Additional page giving corrections to Drift Constants.
	397	1	May, 1943	Revised page replacing the original page 1.
	398	1	May, 1943	Revised page replacing the original page 1.
		5	May, 1943	Addition page for the original issue only, giving notes on the construction of the range table, etc.
		6	May, 1943	Additional page for the reprint dated December, 1938 only, giving notes on the construction of the range table, etc.
	408	1	July, 1941	Revised page replacing the original page 1.
		21	May, 1939	Revised page replacing the original page 21.
		22	June, 1942	Additional page giving corrections for M.V. differences.
	408A	23	June, 1942	Additional page giving corrections for M.V. differences.
	448	1	May, 1943	Revised page replacing the original page 1.
		5	May, 1943	Additional page giving notes on the construction of the range table, etc.
	449	1	May, 1943	Revised page replacing the original page 1.
	450	10	Dec., 1939	Additional page giving corrections to Drift Constants.
	473	1	Feb., 1943	Revised page replacing the original page 1.
		3	Feb., 1943	Revised page replacing the original page 3.
	520	2A	April, 1943	Additional page giving table of Wear, E.F.C. and M.V.
	529	13	April, 1943	Revised page replacing the original page 13.
	534	2A	April, 1943	Additional page giving Table of Wear, E.F.C. and M.V.
	537	2A	April, 1943	Additional page giving Table of Wear, E.F.C. and M.V.
5·5-in. ...	294	1	Jan., 1936	Revised page replacing the original page 1.
		9	Dec., 1930	Additional page containing H.T.C. Table.
		10 } 11 }	Aug., 1932	Additional pages containing Table of E.F.C., Wear and M.V., to cancel the Table of E.F.C., Wear and M.V., on page 8.
	317	8	July, 1936	Revised page replacing pages 8 and 9 (August, 1932).

APPENDIX B—contd.

Calibre. (1)	Serial No. of Table. (2)	No. of New Page. (3)	Date of New Page. (4)	Description. (5)
5·25-in. ...	409	1	Nov., 1939	Revised page replacing the original page 1.
		12	May, 1943	Revised page replacing page 12 (revised April, 1942).
	418	1	July, 1941	Revised page replacing the original page 1.
		22	May, 1943	Revised page replacing page 22 (revised April, 1942).
		23	June, 1942	Additional page giving corrections for M.V. differences.
	418A	22	May, 1943	Revised page replacing page 22 (revised April, 1942).
		23	June, 1942	Additional page giving corrections for M.V. differences.
	426	1	Feb., 1943	Revised page replacing the original page 1.
		11	May, 1943	Revised page replacing page 11 (revised Aug., 1940).
	555	1	Oct., 1943	Revised page replacing the original page 1.
		5 } 6 } 7 }	Oct., 1943	{ Additional pages giving tables of equivalent ranges, fuze settings and fuze corrections for Smoke Shell, B.E., fuzed No. 198.
4·7-in. ...	161A	4	Dec., 1942	Revised page replacing page 4 (revised April, 1942).
	232	1	July, 1942	Revised page replacing page 1 (revised September, 1936).
		8	April, 1942	Revised page replacing pages 8 and 9 (revised September, 1936).
	254	1	June, 1942	Revised page replacing page 1 (revised September, 1941).
		1A	Sept., 1941	Additional page, being a continuation of page 1 (revised June, 1942).
		9	July, 1943	Revised page replacing page 9 (revised April, 1942).
		10	May, 1933	Additional page containing note to Table of E.F.C., Wear and M.V.
		11	June, 1935	Additional page giving corrections to Drift Constants.
	255	10 } 11 } 12 } 13 }	Aug., 1933 } Aug., 1933 } Aug., 1933 } Aug., 1933 }	{ Additional pages for velocities 2425 to 2350 f.s.
	256	2	Aug., 1933	Revised page replacing the original page 2.
	313	1	Mar., 1940	Revised page replacing page 1 (revised July, 1933).
	1A	Mar., 1940	Additional page, being a continuation of page 1 (revised March, 1940).	
	8	July, 1943	Revised page replacing page 8 (revised April, 1942).	
351A	1	July, 1941	Revised page replacing the original page 1.	
	2	Aug., 1941	Revised page replacing the original page 2.	

APPENDIX B—*contd.*

Calibre. (1)	Serial No. of Table. (2)	No. of New Page. (3)	Date of New Page. (4)	Description. (5)
4.7-in.— <i>contd.</i>		20	April, 1942	Revised page replacing the original pages 20 and 21.
	351B	2	Mar., 1942	Revised page replacing the original page 2.
		21	April, 1942	Revised page replacing the original pages 21 and 22.
	379	1	Mar., 1941	Revised page replacing the original page 1.
	392	1	June, 1942	Revised page replacing page 1 (revised August, 1939).
		9	July, 1943	Revised page replacing page 9 (revised April, 1942).
	393	1	Nov., 1937	Revised page replacing the original page 1.
	394	1	May, 1943	Revised page replacing the original page 1.
		5	May, 1943	Additional page giving notes on the construction of the range table, etc.
	395	1	May, 1943	Revised page replacing the original page 1.
		4	May, 1943	Additional page giving notes on the construction of the range table, etc.
	405	1	July, 1941	Revised page replacing the original page 1.
		13	July, 1943	Revised page replacing page 13 (revised April, 1942).
		14	June, 1942	Additional page giving corrections for M.V. differences.
	405A	13	July, 1943	Revised page replacing page 13 (revised April, 1942).
		14	June, 1942	Additional page giving corrections for M.V. differences.
	412	1	Mar., 1942	Revised page replacing page 1 (revised August, 1940).
		11	Mar., 1942	Revised page replacing page 11 (August, 1940).
	424	1	Mar., 1942	Revised page replacing page 1 (revised July, 1941).
		13	Mar., 1942	Revised page replacing page 13 (August, 1940).
		14	June, 1942	Additional page giving corrections for M.V. differences.
	424A	1	Mar., 1942	Revised page replacing the original page 1.
		13	Mar., 1942	Revised page replacing the original page 13.
		14	June, 1942	Additional page giving corrections for M.V. differences.
	441	1	Feb., 1943	Revised page replacing page 1 (revised March, 1942).
		11	Mar., 1942	Additional page containing Table of E.F.C., Wear and M.V.
	457	1	June, 1942	Revised page replacing the original page 1.

APPENDIX B—*contd.*

Calibre. (1)	Serial No. of Table. (2)	No. of New Page. (3)	Date of New Page. (4)	Description. (5)
4.7 in.— <i>contd.</i>	523	1	May, 1943	Revised page replacing the original page 1.
	524	1	May, 1943	Revised page replacing the original page 1.
	547	17	July, 1943	Revised page replacing the original page 17.
4.5-in. ...	399	1	April, 1943	Revised page replacing page 1 (revised July, 1942).
		1A	Nov., 1943	Additional page replacing page 10 (revised April, 1943).
		11	Feb., 1938	Additional page giving corrections for effect of the earth's rotation.
	402B	1	April, 1943	Revised page replacing page 1 (revised July, 1942).
		2	April, 1943	Revised page replacing page 2 (revised Aug., 1941).
		3A	Nov., 1943	Additional page replacing page 19 (revised April, 1943).
		20	June, 1942	Additional page, giving corrections for M.V. differences.
		21	April, 1943	Additional page giving notes on the construction of the range table, etc.
	402c	1	April, 1943	Revised page replacing page 1 (revised July, 1942).
		2	April, 1943	Revised page replacing the original page 2.
		3A	Nov., 1943	Additional page replacing page 19 (revised April, 1943).
		20	June, 1942	Additional page giving corrections for M.V. differences.
		21	April, 1943	Additional page giving notes on the construction of the range table, etc.
	423	1	Feb., 1943	Revised page replacing the original page 1.
		1A	Nov., 1943	Additional page replacing page 10 (revised Feb., 1943).
4-in. ...	127A	Complete Table.	Jan., 1932	Revised, replacing the original Table No. 127A.
	216	1	Dec., 1942	Revised page replacing page 1 (revised October, 1936).
	230	1	Nov., 1930	Revised page replacing the original page 1.
		1A	July, 1942	Revised page { replacing page 1A (revised Nov-ember, 1939).
		1B	July, 1942	Additional page {
		6	April, 1942	Revised page replacing page 6 (revised August, 1932).
		7	April, 1942	Revised page replacing page 7 (August, 1932).

APPENDIX B—*contd.*

Calibre. (1)	Serial No. of Table. (2)	No. of New Page. (3)	Date of New Page. (4)	Description. (5)
4-in.— <i>contd.</i>		8	May, 1933	Additional page containing note to Table of E.F.C., Wear and M.V.
	236	1	Nov., 1935	Revised page replacing the original page 1.
	245	1	July, 1943	Revised page replacing page 1 (revised April, 1937).
		1A	Nov., 1937	Additional page being a continuation of page 1 (revised April, 1937).
		11	April, 1942	Revised page replacing page 11 (revised January, 1932), or page 13 of reprint dated May, 1939.
		12	May, 1933	Additional page containing note to Table of E.F.C., Wear and M.V.
		13	Nov., 1938	} Additional pages containing drift tables.
		14	Nov., 1938	
		15	Nov., 1938	
		15	Nov., 1938	
	246	Complete Table on one page.	May, 1934	Revised, replacing the original Table No. 246.
	275	1	July, 1935	Revised page replacing the original page 1.
	328	2	July, 1942	Revised page replacing page 2 (revised November, 1939).
		5	July, 1942	Revised page replacing page 5 (revised December, 1935).
	358A	1	Aug., 1941	Revised page replacing page 1 (revised March, 1941).
		1A	July, 1942	Revised page replacing page 1 (revised August, 1941).
		2	Aug., 1941	Revised page replacing the original page 2.
		15	April, 1942	Revised page replacing the original page 15.
	358B	1	Aug., 1941	Revised page replacing the original page 1.
		1A	July, 1942	Additional page, being an extension of page 1 (revised August, 1941.)
		16	April, 1942	Revised page replacing the original page 16.
	361	1	July, 1943	Revised page replacing the original page 1.
		9	April, 1942	Revised page replacing the original page 9.
	369	1	Aug., 1942	Revised page replacing page 1 (revised October, 1941).
		10	April, 1942	Revised page replacing page 10 (revised July, 1940).
	373A	1	Aug., 1941	Revised page replacing page 1 (revised December, 1940).
		24	April, 1942	Revised page replacing page 24 (revised July, 1940).
		25	June, 1942	Additional page giving corrections for M.V. differences.
	373B	1	Aug., 1941	Revised page replacing the original page 1.

APPENDIX B—*contd.*

Calibre (1)	Serial No. of Table. (2)	No. of New Page (3)	Date of New Page. (4)	Description (5)
4-in.— <i>contd.</i>		19	April, 1942	Revised page replacing the original page 19.
		20	June, 1942	Additional page giving corrections for M.V. differences.
	429	1	July, 1942	Revised page replacing the original page 1.
	438	1	July, 1942	Revised page replacing the original page 1.
	469	10	July, 1942	Revised page replacing the original page 10.
	496	1	June, 1942	Revised page replacing the original page 1.
6-pdr. ...	177	1	Nov., 1932	Revised page replacing the original page 1. <i>Note.</i> —Early issues have page 2 on the same sheet as page 1.
	495	9	July, 1941	Additional page giving Table of Drift.
2-pdr. ...	430	1	Nov., 1943	Revised page replacing pages 1 and 1A revised Feb., 1942.
	431	1	Nov., 1943	Revised page replacing pages 1 and 1A (revised February, 1942).
0.5-in. ...	347	3	Nov., 1932	Additional page containing Table of Remaining Velocities and Range Equivalents. (Incorporated in page 2 of reprint dated July, 1941.)
American 5-in., 38 cal.	O.P. 551	24 25	May, 1942	{ Additional pages giving table of E.F.C., Wear and Muzzle Velocity.

APPENDIX C

List of Tables removed from last Current List.

Calibre.	Serial No. of Table.	Nature of Table.	Remarks.
(1)	(2)	(3)	(4)
B.L. 13.5-in. V ...	50	R.T.	
	51	R.T.	
	52A	R.T.	
	53	R. & E.	
	54	R. & E.	
	136	R.T.	
	136A	H.T.C.T.	
	138	R. & E.	
	484	R.T.	
	500	R.T.	
	515	R.T.	
B.L. 8-in. VIII. ...	446	H.A.R.T.	Superseded by 446B.
B.L. 6-in. XXII and XXIII.	408	H.A.R.T.	Superseded by 408A.
B.L. 6-in. XII ...	474	R.T.	} { Information incorporated in 241, 397 and 398, used in conjunction with 473.
	475	R.T.	
	476	R.T.	
American ...	O.P.183	R.T.	
B.L. 5-in. 51 cal. ...	O.P.185	R.T.	
	O.P.186	R.T.	
	O.P.574	R.T.	
B.L. 4-in. IX ...	466	R.T.	Superseded by 466A.
Q.F. 4-in. V ...	139A	R.T.	Superseded by 361.
	466	R.T.	Superseded by 466A.
Q.F. 4-in. XVI ...	549	Equivalent Ranges	Superseded by 561.
	550	R.T.	Superseded by 562.

APPENDIX D

B.R. Numbers and Letters allotted for the sub-guards and tables

B.R. No.	
B.R.980	Guard Books for Range Tables (lace up type).
(1)	Sub-Guard Sheets for Range Tables.
(2)	Guard Books for Range Tables (lever arch type).
(3)	Guard Book for Range Tables (S.O. file, code 40-16).
(A)/1935	Range Tables, Introduction.
(A) (1)/1935	Notes on Ballistics, with Addendum No. 1.
(B)	4.7-in. guns.
(B) (1)	4.7-in. "
(C)	5.5-in. "
(D)	15-in. "
(E)	2 pdr. Q.F. and sub-calibre.
(F)	
(G)	5.25-in. guns.
(H)	7.5-in. "
(J)	3-in. "
(K)	4-in. "
(L)	3-in. "
(M)	12 pdr. "
(N)	6 pdr. "
(O)	3 pdr. "
(P)	
(Q)	American guns.
(R)	40 mm. Bofors guns.
(S)	1-in. aiming rifle.
(T)	Machine guns, .303 rifles and Oerlikon Guns.
(U)	16-in. guns.
(W)	8-in. "
(X)	4.5-in. "
(Y)	14-in. "
(Z)	Rockets.

APPENDIX E

List of Current Range Tables, Fuze Scales, Trajectory Charts, and Tables for Special Services in numerical order.

FUZE SCALES. OLD SERIES

Serial No.	Cal.	Mark of Gun.	Serial No.	Cal.	Mark of Gun.
2C 29E	15 in. 4 in.	B.L. I B.L. VII and Field Gun.	79	3-in.	Q.F. 20 cwt.

TRAJECTORY CHARTS

Serial No.	Cal.	Mark of Gun.	Serial No.	Cal.	Mark of Gun.
<i>G.L. Series.</i>			<i>Present O.B. and O.C. Series—contd.</i>		
G.L. XVIII	3 in.	Q.F. 20 cwt.	O.C. 56 ...	4 in.	Q.F. V
G.L. XXII	"	"	O.C. 56A	"	Q.F. XVI
<i>G.R.T. Series.</i>			O.C. 58 ...	"	Q.F. II* C and VIII, L.V.
G.R.T. XXXI	4 in.	Q.F. V	O.C. 58A	"	Q.F. IX and XII.
<i>D.N.O. Series.</i>			O.C. 59 ...	2 pdr.	Q.F. I and III
—	2 in.	Rocket Flare	O.C. 61 ...	3 in.	Q.F. 20 cwt.
—	2 in.	Rocket	O.C. 69 ...	4.5 in.	Q.F. I and III
3	2 in.	Rocket Target	O.B. 69B	"	Q.F. IX and XII
<i>Present O.B. and O.C. Series.</i>			O.C. 70 ...	4.7 in.	Q.F. IX and XII
O.C. 32 ...	2 pdr.	Q.F. H.A., sub-cal. II	O.B. 70A	"	B.L. XXII and XXIII.
O.C. 42 ...	4 in.	Q.F. V and XVI.	O.C. 71 ...	6 in.	Q.F. I
O.C. 50 ...	2 pdr.	Q.F. II*	O.B. 73A	5.25 in.	Q.F. XI
O.C. 51 ...	"	Q.F. II* and L.A. sub-cal.	O.C. 74 ...	4.7 in.	Q.F. XII
O.C. 53 ...	3 in.	Q.F. 20 cwt.	O.B. 74A	"	Q.F. VIII H.V.
O.C. 55 ...	4.7 in.	Q.F. VIII	O.C. 76 ...	2 pdr.	B.L. VIII.
O.C. 55A	"	"	O.B. 88 ...	8 in.	Q.F. 12 cwt.
O.C. 62 ...	8 in.	B.L. VIII	O.B. 88A	"	Q.F. Sub-cal. I.
O.C. 63 ...	6 in.	B.L. XXII and XXIII	O.B. 93 ...	12 pdr.	Q.F. Sub-cal. I
O.C. 65 ...	"	B.L. XII and XVII.	O.B. 95 ...	3 pdr.	Q.F. I
O.C. 66 ...	5.5 in.	B.L. I	O.B. 96 ...	6 pdr.	Q.F. 38 cal., XII (American).
O.C. 67 ...	4.7 in.	B.L. I and Q.F. IX	O.B. 97 ...	5.25 in.	Q.F. IX and XII.
O.C. 68 ...	4 in.	B.L. IX and Q.F. V.	O.B. 98	5 in.	Q.F. XIX.
O.C. 69 ...	4 in.	B.L. I	O.B. 104	4.7 in.	Q.F. XIX.
O.C. 70 ...	4 in.	B.L. I	O.B. 104A	"	Q.F. XIX.
O.C. 71 ...	4 in.	B.L. I	O.B. 115	4 in.	Q.F. XIX.

GRAPHIC FUZE SCALES

Serial No.	Cal.	Mark of Gun.	Serial No.	Cal.	Mark of Gun.
O.C. 62 ...	8 in.	B.L. VIII	O.C. 66 ...	5.5 in.	B.L. I
O.C. 63 ...	6 in.	B.L. XXII and XXIII	O.C. 67 ...	4.7 in.	B.L. I and Q.F. IX
O.C. 65 ...	"	B.L. XII and XVII.	O.C. 68 ...	4 in.	B.L. IX and Q.F. V.

APPENDIX E—contd.

RANGE TABLES AND FUZE SCALES

Serial No.	Cal.	Mark of Gun.	Serial No.	Cal.	Mark of Gun.
<i>O. Series.</i>			<i>W.O. Series.</i>		
O.17 O.23	5.5 in. 6 in.	B.L. I B.L. XI	40/W.O./4065	3 in.	Q.F. 20 cwt.

Serial No.	Cal.	Mark of Gun.	Serial No.	Cal.	Mark of Gun.
<i>Present Series.</i>			<i>Present Series.</i>		
4	15 in.	B.L. I	176A	3 pdr.	Q.F. Hotchkiss
5	"	"	177	6 pdr.	Q.F. Hotchkiss
13	5.5 in.	B.L. I	178	4 in.	B.L. IX, Q.F. V
20	4.7 in.	Q.F. V*	179	"	"
24A	6 in.	B.L. XII	180	"	"
25A	"	"	191	6 in.	"
26D	"	B.L. VII, XII and XVII.	193	16 in.	B.L. I
28	"	B.L. VII, XII, XIII and XVII.	194	"	"
37	15 in.	B.L. I	195	"	"
38	"	"	199	"	"
39	"	"	200	"	"
90A	4 in.	B.L. IX, Q.F. V	201	"	"
103A	6 in.	B.L. XVII	204	6 in.	"
104A	"	"	206	8 in.	B.L. VIII
112	7.5 in.	B.L. VI	207	"	"
116	"	"	208	"	"
118	"	"	209	"	"
127A	4 in.	Q.F. V	210	"	"
128A	3 in.	Q.F. 20 cwt.	211	"	"
129A	"	"	213	6 in.	B.L. VII special services only.
142	4.7 in.	B.L. I	215A	4.7 in.	B.L. I, Q.F. VIII, IX and XII.
143	"	"	216	4 in.	B.L. IX, Q.F. V and XVI
149	5.5 in.	B.L. I	217	3 in.	Q.F. 20 cwt.
151	"	"	222	8 in.	B.L. VIII
152	"	"	223	"	"
153	"	"	224	16 in.	B.L. I
154	"	"	225	"	"
161A	4.7 in.	B.L. I	226	15 in.	B.L. I
162	"	"	227	"	"
163	"	"	228	"	"
164	2 pdr.	Q.F. H.A., sub-cal. II.	230	4 in.	B.L. IX, Q.F. V
165	"	"	231	"	B.L. IX, Q.F. V
169A	"	Q.F. II* Q.F. L.A. sub-cal.	232	4.7 in.	Q.F. VIII
171	4 in.	B.L. VIII, Q.F. IV and XII.	233	"	"
173	"	"	234	"	"
175	3 in.	Q.F. 20 cwt.	235	"	"
			236	4 in.	Q.F. IV, XII and B.L. VIII
			237	6 in.	B.L. VII and XII
			238	"	B.L. XII and XIII

APPENDIX E—contd.

RANGE TABLES AND FUZE SCALES—contd.

Serial No.	Cal.	Mark of Gun.	Serial No.	Cal.	Mark of Gun.
<i>Present Series—contd.</i>			304	6 in.	B.L. XII, XIII and XVII
239	6 in.	B.L. VII, XI, XII, XIII, XVI and XVII.	305	"	"
240	"	"	311	·303 in.	Lee-Metford
241	"	B.L. XII and XIII	312	"	Machine Guns, etc.
242	"	B.L. VII, XI, XII, XIII, XVI and XVII.	313	4·7 in.	B.L. I
243	"	"	314	"	"
245	4 in.	Q.F. V and XVI	315	"	"
246	"	B.L. VII Field Gun	316A	2 pdr.	Q.F. II* and L.A. sub-cal.
248	6 in.	B.L. XIII	317	5·5 in.	B.L. I
254	4·7 in.	Q.F. IX and XII	318	"	"
255	"	"	319A	2 pdr.	Q.F. II*
256	"	"	320A	"	Q.F. II* and L.A. sub-cal.
257	"	"	322A	8 in.	B.L. VIII
261	15 in.	B.L. I	328	4 in.	B.L. VIII, Q.F. IV and XII.
262	"	"	333	6 in.	B.L. VII
263	"	"	334	"	B.L. VII and XIII
264	7·5 in.	B.L. VI	336	12 pdr.	Q.F. 12 cwt.
265	"	"	337	3 in.	Q.F. 20 cwt.
266	"	"	340	6 in.	B.L. VII, Special Services only.
268	6 in.	B.L. XI and XVI	341	3·5 in.	M.L. Bomb Thrower
269	"	"	342	6 in.	B.L. XXII and XXIII
270	"	B.L. VII and XI	343	"	"
271	"	B.L. VII	344	"	"
272	"	"	347	0·5 in.	Machine Gun
273	"	B.L. XII, XVI and XVII	348	6 in.	B.L. XXII and XXIII.
275	4 in.	B.L. VII	349	"	"
276	"	"	350	"	"
277	4 in.	B.L. VIII	351A	4·7 in.	Q.F. VIII
278	"	"	351B	"	"
279	"	Q.F. IV and XII	352	3 in.	Q.F. 20 cwt.
280	"	"	355A	2 pdr.	Q.F. II*, Q.F. L.A. sub-cal.
281	12 pdr.	Q.F. 12 cwt.	356	0·5 in.	Machine Gun
282	"	"	358A	4 in.	Q.F. V
284	6 pdr.	Q.F. Hotchkiss	358B	"	"
285	"	"	361	"	"
286	3 pdr.	Q.F. Hotchkiss	362	"	"
287	"	"	363	"	"
288	1 in.	Aiming Rifle	364A	2 pdr.	Q.F. II*C and VIII L.V. and L.A. sub-cal.
289	·303 in.	Lee-Metford	365A	"	Q.F. II*C and VIII L.V.
290	7·5 in.	B.L. VI	369	4 in.	Q.F. XVI
291	"	"	370	"	"
292	"	"	371	"	"
294	5·5 in.	B.L. I			
295	"	"			
296	"	"			
298	15 in.	B.L. I			
302	6 in.	B.L. VII Field Gun			

APPENDIX E—contd.

RANGE TABLES AND FUZE SCALES—contd.

Serial No.	Cal.	Mark of Gun.	Serial No.	Cal.	Mark of Gun.
<i>Present Series—contd.</i>			423	4·5 in.	Q.F. I and III
373A	4 in.	Q.F. XVI	424	4·7 in.	Q.F. XI
373B	"	"	424A	"	"
374	8 in.	B.L. VIII	426	5·25 in.	Q.F. I
376	6 in.	B.L. XXII and XXIII	427	"	"
377	"	B.L. XII and XVII	428	"	"
378	5·5 in.	B.L. I	429	4 in.	Q.F. V
379	4·7 in.	B.L. I, Q.F. IX and XII.	430	2 pdr.	Q.F. VIII H.V.
380	4 in.	B.L. IX and Q.F.V.	431	"	"
381	15 in.	B.L. I	432	4·5 in.	Q.F. I and III
382	"	"	435	5·25 in.	Q.F. I
383	"	"	438	4 in.	Q.F. XVI
384	"	"	439	"	"
385	"	"	440	"	"
386	"	"	441	4·7 in.	Q.F. XI
391	4 in.	B.L. VII	442	"	"
392	4·7 in.	Q.F. IX and XII	443	"	"
393	"	"	446B	8 in.	B.L. VIII
394	"	"	448	6 in.	B.L. XXII and XXIII
395	"	"	449	"	"
396	3 in.	Q.F. 20 cwt.	450	"	B.L. VII, special services only.
397	6 in.	B.L. XII	451	16 in.	B.L. II and III
398	"	"	452	"	"
399	4·5 in.	Q.F. I and III.	453	"	"
400	"	"	454	"	"
401	"	"	455	"	"
402B	"	"	456	"	"
402C	"	"	457	4·7 in.	Q.F. IX and XII
405	4·7 in.	Q.F. IX and XII.	458	"	"
405A	"	"	459	"	"
408A	6 in.	B.L. XXII and XXIII	460	"	Q.F. XI
409	5·25 in.	Q.F. I	464	4·5 in.	Q.F. I and III
410	"	"	465	"	"
411	"	"	466A	4 in.	B.L. IX
412	4·7 in.	Q.F. XI	467	20 mm.	Oerlikon
413	"	"	468	"	"
414	"	"	469	4 in.	Q.F. IV and XII
415	14 in.	B.L. VII	470	"	"
416	"	"	471	3 in.	Q.F. 20 cwt.
417	"	"	472	14 in.	B.L. VII
418	5·25 in.	Q.F. I	473	6 in.	B.L. XII
418A	"	"	480	12 pdr.	Q.F. 12 cwt.
419	14 in.	B.L. VII	481	"	"
420	"	"	482	4 in.	Q.F. IV and XII
421	"	"	483	3 in.	Q.F. 20 cwt.
422	4 in.	Q.F. XVI	485	"	"
			486	6 pdr.	Q.F. Hotchkiss
			488	12 pdr.	Q.F. 12 cwt.

APPENDIX E—contd.

RANGE TABLES AND FUZE SCALES—contd.

Serial No.	Cal.	Mark of Gun.	Serial No.	Cal.	Mark of Gun.
<i>Present Series—contd.</i>			530	6 in.	B.L. VII, XII and XIIIB
489	12 pdr.	Q.F. 12 cwt.	531	"	"
490	"	"	532	40 mm.	Bofors, Q.F. I
491	16 in.	B.L. II and III	533	5 in.	Q.F., 38 cal., XII
492	"	"	534	6 in.	B.L. XII and XIIIB
493	"	"	535	"	"
494	3 pdr.	Q.F. Sub-cal. I	536	"	"
495	6 pdr.	Q.F. Sub-cal. I	537	"	"
496	4 in.	Q.F. XIX	538	"	"
497	"	"	539	"	"
498	"	Q.F. XVI	540	4 in.	Q.F. XIX
499	"	B.L. VIII	541	0.5 in.	Browning M.G.
501	4.7 in.	Q.F. IX and XII	542	"	"
502	"	"	543	4 in.	B.L. VII field gun.
503	"	"	544	"	Q.F. XVI
504	"	"	545	"	"
505	15 in.	B.L. I	546	6 in.	B.L. XXII and XXIII.
506	"	"	547	4.7 in.	Q.F. IX and XII
507	"	"	548	6 pdr.	Q.F. Hotchkiss
508	"	"	551	0.5 in.	Browning M.G.
509	"	"	552	"	"
510	"	"	553	4 in.	Q.F. XVI
511	4 in.	B.L. VII	554A	"	B.L. Mortar
512	15 in.	B.L. I	555	5.25 in.	Q.F. I
513	"	"	556	"	"
514	"	"	557	"	"
516	"	"	558	6 in.	B.L. VII
517	"	"	559	"	B.L. XII and XIIIB
518	"	"	560	2 in.	Rocket
519	3 in.	Rocket	561	4 in.	Q.F. XVI
520	6 in.	B.L. XII and XIIIB	562	"	"
521	"	"	563	6 pdr.	Q.F. Hotchkiss
522	"	"	564	4 in.	Q.F. 50 cal. IX
523	4.7 in.	Q.F. XI	565	5.25 in.	Q.F. I
524	"	"	566	"	"
525	"	"	567	4.7 in.	B.L. I
526	"	"	568	"	"
527	"	"	570	14 in.	B.L. VII
528	6 in.	B.L. VII			
529	"	B.L. XII and XIIIB			

APPENDIX F

Establishments authorised for Range Tables, Fuze Scales and Trajectory Charts.

Normal Establishment—

1. The normal establishment of Range Tables, etc., is as follows :—

Flag Officers One complete set for all guns.

Battleships, battle cruisers, cruisers, aircraft carriers, seaplane carriers. } One complete set for all guns carried.

A.A. ships, auxiliary A.A. ships, auxiliary aircraft carriers, flotilla leaders, repair ships, auxiliary fleet repair ships, netlayers, destroyers, anti-aircraft destroyers, sloops, corvettes, coastguard cutters, river gunboats, monitors, minelayers, auxiliary minelayers, submarines, ocean-boarded vessels and armed merchant cruisers. } One set of Range Tables, Fuze scales and Trajectory Charts for all guns carried. R. & E. and R. & T. scales will not be supplied to these ships.

Captains D., Depot Ships for Destroyers and S/MS. One complete set for all guns carried in the flotilla.

Dockyards One complete set for all guns.

H.M.S. "Excellent" Five complete sets for all guns (two only of B.L. 16-in. Mark I and B.L. 8-in. Mark VIII), and in addition one copy of all H.A. Tables, fuze scales and trajectory charts.

H.M. Gunnery Schools, Chatham and Devonport. Two complete sets for all guns.

Gun Mounting Overseers On demand from R.N. Store Depot Elveden Road, N.W.10, for preparation of sight-testing tables at designing and manufacturing works.

Table for Instructional Purposes—

2. The following tables should be held for instructional purposes in addition to the normal establishment :—

	H.M.S. "Excellent."	H.M. Gunnery Schools, Chatham and Devonport.
B.L. 15 in. I	200	15
B.L. 8 in. VIII	20	—
B.L. 6 in. XII	200	15
Q.F. 4.7 in. IX	*150	15
Q.F. 4 in. V H.A.	40	15
Q.F. 4 in. V, Trajectory Charts.	40	15

* Tables B.R. 980 (B), 254, 255 and 215A only.

APPENDIX F—contd.

Special Establishments—

3. The normal establishment does not apply to the following tables for which a special distribution is in force as shown:—

Guard Books for Range Tables B.R. 980 (2).	{	Submarine depôt ships, destroyer depôt ships, and above ...	1 copy.
		Establishments ...	As necessary.
B.R. 980 or 980 (3)	{	Flotilla leaders, destroyers and below ...	1 copy.
		Establishments ...	As necessary.
Sub-Guard Sheets for Range Tables B.R. 980 (1).	{	All ships ...	1 set.
		Establishments ...	As necessary.

	No. of Copies.	
	B.R. 980 (A)	B.R. 980 (A) (1)
Battleships, battle cruisers, cruisers, aircraft carriers, seaplane carriers, A.A. ships, auxiliary A.A. ships, auxiliary aircraft carriers, destroyer depôt ships, submarine depôt ships, flotilla leaders, repair ships, auxiliary fleet repair ships, net-layers, sloops, corvettes, coastguard cutters, river gunboats, monitors, mine-layers, auxiliary mine-layers, ocean-boarding vessels and armed merchant cruisers.	1	1
Introduction to Range Tables, B.R. 980 (A)/1935.	1	—*
Notes on Ballistics, B.R. 980 (A) (1)/1935.	1†	1†
Dockyards (home and abroad)	1	1
H.M.S. "Excellent" ...	230	230
H.M. Gunnery Schools—		
Devonport ...	51	51
Chatham ...	17	17
R.N.V.R. Divisions—		
London, Clyde, Ulster, Severn, Sussex, East Scottish, Mersey and Tyne.	5	5
R.M. Divisions—		
Chatham ...	2	2
Plymouth ...	8	8
Portsmouth ...	18	8
Loan Libraries ...	2	2
Naval Division, Meteorological Office.	—	3

* Flotilla leader's copy of B.R. 980 (A) (1) to be available for loan to destroyers of flotilla.

† If fitted with a gun.

B.L. 14 in. Mark VII Tables Nos. 472 and 570 · B.R. 980 (Y)	{	V.A., Dover ...	1 copy.
		A.S., Chatham ...	1 "
		H.M.S. "Excellent" ...	5 copies.
		Capt. (G.), Chatham ...	2 "
		Capt. (G.), Devonport ...	2 "

APPENDIX F—contd.

Special Establishments—contd.

B.L. 6 in. Mark VII. Field Gun, Table No. 302, with wind correction graph. B.R. 980 (J).	{	A.S., Portsmouth ...	4 copies.
		A.S., Chatham ...	3 "
		A.S., Malta ...	4 "
B.L. 4 in. Mark VII. Field Gun, Table No. 246, with wind correction graph. B.R. 980 (K).	{	A.S., Portsmouth ...	2 "
		A.S., Malta ...	4 "
3·5 in. bomb thrower. Table No. 341. B.R. 980 ().	{	C.-in-C., Portsmouth ...	1 copy.
		Captain A/S, Portland ...	1 "
		C.O., H.M.S. "Torrid" ...	1 "
3 in., 20 cwt. Tables Nos. 40/W.O./4065, 175 and T.C. No. G.L.XVIII. B.R. 980 (L).	{	H.M.S. "Excellent" ...	1 "
		Gunnery School tenders only	2 copies

Emergency Sets—

4. In accordance with paragraph 6 of Form U.2.B, two copies of all current Range Tables, Fuze Scales, etc., are required to be maintained by Distributing Authorities abroad as Emergency Sets. The list of current Range Tables issued herein gives the necessary information for keeping Emergency Sets up to date, but the following Range Tables will not be supplied for Emergency Sets:—

Gun.	Table No.
B.L. 16 in., Mark I ...	All.
B.L. 6 in., Mark VII, Field Gun ...	302 and wind correction graph.
B.L. 4 in., Mark VII, Field Gun ...	246 and wind correction graph.
M.L. 3·5 in. Bomb Throwers ...	All.
Q.F. 3 in. 20 cwt. ...	40/W.O./4065.

Any copies of the above tables now held for Emergency Sets should be returned in accordance with para. 9 on page 2 of this A.F.O.

APPENDIX G

Range Tables, etc. (B.R. 980 series), for Gun Mountings held in reserve abroad.

Gun.		Mounting.	Tables Applicable.				Trajectory Charts.
Cal.	Mark.	Mark.	R.T.	Sights Graduated to R. & E.	Fuze Scales.	Star R.T.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
6-in. ... B.R. 980 (J).	B.L. VII	P.III P.IV	271	26D 191			
			272				
			340				
			450				
	B.L. XI	P.V	271	26D			
			272				
			340				
			450				
	B.L. XII	P.IXA,B,C P.XIII*	24A	237 273	377		
			25A				
B.L. XIII	P.XI ...	238	248 28				
		241					
B.L. XII	P.XIII** C.P.XIV	24A	26D 28	377			
		25A					
4-7-in. ... B.R. 980 (B).	Q.F. V* ...	P.V P.X	20				
	B.L. I ...	C.P.VI*	143	142 162	379	215A	
			161A				
	Q.F. IX* IX*D	C.P.XIV C.P.XVII C.P.XVIII	254	255	379	215A	
Q.F. VIII	H.A.XII ...	232	233	—	215A	O.C.55 O.C.55A	
		351A					
		351B					
4-in. ... B.R. 980 (K).	B.L. IX IX*	C.P.I ...	90A	180	380	216	
	Q.F. V ...	C.P.II ...	90A	180		216	
	Q.F. IV ...	C.P.III P.IX	279	280	470 482	236	
			469				
	Q.F. V ...	H.A.III H.A.III* H.A.III** H.A.IV	90A	178 180 362		216	OC42 OC56 OC56A
			230				
			245				
			358A				
358B 361							
Q.F. XVI*	H.A.XIX ...	369	370 439	498	216 422	O.C.42 O.C.58 O.C.58A	
		438					
		373A					
		373B					

APPENDIX G—contd.

Range Tables, etc. (B.R. 980 series), for Gun Mountings held in reserve abroad.

Gun.		Mounting.	Tables Applicable.				Trajectory Charts.
Cal.	Mark.	Mark.	R.T.	Sights Graduated to R. & E.	Fuze Scales.	Star R.T.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
3-in. 20 cwt. B.R. 980 (L).	Q.F. I ... Q.F. II ... Q.F. III Q.F. IV ...	H.A.II H.A.III H.A.IV H.A.IVA	128A		471 485	217	GLXXII OC61
			352				
396							
	Q.F. I ...	H.A.IIA ...	128A		79 471 485	217	GLXXII OC61
			129A 352 396				
12-pdr. 12 cwt. B.R. 980 (M).	Q.F. I and II.	P.I P.I* S.II	281	282	481	336	
	Q.F. IA, IIA, V.	H.A./L.A. IX	281	282 489	481	336	O.B.93
			480 488				
		H.A.VIII ...	281	282	481	336	
6-pdr. ... B.R. 980 (N).		I** ...	284	285			
3-pdr. ... B.R. 980 (O).		I ... I* ...	286	287			
2-pdr. ... B.R. 980 (E).		H.A.II ...	169A		319A 320A 364A 365A		OC50 OC51
			319A				
			320A				
			364A				
			365A				
	Q.F. VIII H.V.	H.A.VIII*	430				O.C.76
			431				
Lewis and Maxim. B.R. 980 (T).			312				

(A.F.O. 230/43 is cancelled.)

