IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA

FIFTH APPELLATE DISTRICT

SHERIFF CLAY PARKER, TEHAMA COUNTY SHERIFF; HERB BAUER SPORTING GOODS; CALIFORNIA RIFLE AND PISTOL ASSOCIATION; ABLE'S SPORTING, INC.; RTG SPORTING COLLECTIBLES, LLC; AND STEVEN STONECIPHER,

Case No. F062490

v.

THE STATE OF CALIFORNIA; KAMALA D. HARRIS, in her official capacity as Attorney General for the State of California; AND THE CALIFORNIA DEPARTMENT OF JUSTICE,

Defendants and Appellants.

Plaintiffs and Respondents,

Fresno County Superior Court, Case No. 10CECG02116 The Honorable Jeff Hamilton, Judge

JOINT APPENDIX VOLUME IV Pages JA000898-JA001192

KAMALA D. HARRIS Attorney General of California DOUGLAS J. WOODS Senior Assistant Attorney General PETER A. KRAUSE Supervising Deputy Attorney General Ross C. Moody Deputy Attorney General State Bar No. 142541 455 Golden Gate Avenue, Suite 11000 San Francisco, CA 94102-7004 Telephone: (415) 703-1376 Fax: (415) 703-1234 E-mail: Ross.Moody@doj.ca.gov Attorneys for Appellants State of California, Kamala Harris, and the California Departmen Justice

CHRONOLOGICAL

TAB	DATE	DOCUMENT	PAGE
		VOLUME I	
1	06/17/10	Summons and Complaint for Declaratory and Injunctive Relief; Petition for Writ of Mandate (To Determine Validity of Statutes)	JA000001
2	08/03/10	Answer to Complaint for Declaratory and Injunctive Relief and Petition for Writ of Mandate	JA000052
3	09/07/10	Notice of Motion and Motion for Preliminary Injunction;	JA000076
		Declaration of Barry Bauer in Support of Motion for Preliminary Injunction;	JA000079
		Declaration of Clinton B. Monfort in Support of Motion for Preliminary Injunction;	JA000083
		Declaration of Ray T. Giles in Support of Motion for Preliminary Injunction;	JA000089
		Declaration of Mike Haas in Support of Motion for Preliminary Injunction;	JA000093
		Declaration of Stephen Helsely in Support of Motion for Preliminary Injunction;	JA000099
		Declaration of Clay Parker, Tehama County Sheriff, in Support of Motion for Preliminary Injunction;	JA000114
		Declaration of Steven Stonecipher in Support of Motion for Preliminary Injunction;	JA000117
		Declaration of Randy Wright in Support of Motion for Preliminary Injunction;	JA000121
		Exhibits 1-34 in Support of Motion for Preliminary Injunction.	JA000126

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TAB	DATE	DOCUMENT	PAGE
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4	09/07/10	Exhibits 35-47 in Support of Motion for Preliminary Injunction;	JA000300
		Plaintiffs' Memorandum of Points and Authorities in Support of Motion for Preliminary Injunction;	JA000339
		Notice of Other Authorities in Support of Motion for Preliminary Injunction;	JA000358
		[Proposed] Order Granting Preliminary Injunction	JA000523
5	09/30/10	Defendants' Memorandum of Points and Authorities in Opposition to Motion for Preliminary Injunction.	JA000526
6	10/06/10	Plaintiffs' Request for Judicial Notice in Support of Motion for Preliminary Injunction-Exh. 48-49.	JA000548
		VOLUME III	
7	10/06/10	Plaintiffs' Request for Judicial Notice in Support of Motion for Preliminary Injunction-Exh. 50-53.	JA000592
8	10/07/10	Reply to Opposition to Plaintiffs' Motion for Preliminary Injunction; Supplemental Declaration of Clinton B. Monfort in Support of Motion for Preliminary Injunction.	JA000693
9	10/08/10	Plaintiffs' Request for Judicial Notice in Support of Motion for Preliminary Injunction- Exh. 54-55	JA000707
10	10/22/10	Defendants' Case Management Conference Statement	JA000797
11	10/29/10	Plaintiffs' Case Management Conference Statement	JA000802
12	11/17/10	Minute Order re: Status Conference, CMC, Motion for Preliminary Injunction	JA000808

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13	11/30/10	Stipulation and Order to Modify Briefing Schedule for Motion for Summary Judgment	JA000810
14	12/06/10	Notice of Motion for Summary Judgment and/or Summary Adjudication of Issues:	JA000815
		Memorandum of Points and Authorities in Support of Motion;	JA000819
		Separate Statement of Undisputed Facts in Support of Motion;	JA000851

VOLUME IV

15	12/06/10	Plaintiffs' Evidence in Support of Motion for	JA000898
		Summary Judgment or in the Alternative for Summary	
		Adjudication/Trial Brief-Exh. 1-54.	

VOLUME V

1612/06/10Plaintiffs' Evidence in Support of Motion for
Summary Judgment or in the Alternative for Summary
Adjudication/Trial Brief-Exh. 54-58.JA001193

Notice of Lodging Federal Authorities in Support of JA001424 Motion for Summary Judgment-Exh. 1-4;

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17	12/06/10	Plaintiffs' Notice of Lodging Federal Authorities in	JA001478
		Support of Motion for Summary Judgment-Exh. 4-15.	

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18	12/06/10	Plaintiffs' Notice of Lodging Federal Authorities in	JA001697
		Support of Motion for Summary Judgment-Exh. 15- 18; Request for Judicial Notice-Exh. A-H.	JA001815
		VOLUME VIII	
19	12/06/10	Plaintiffs' Request for Judicial Notice-Exh. I;	JA001967
		Declaration of Sean A. Brady in Support of Motion for Summary Judgment;	JA002004
		Declaration of Clinton B. Monfort in Support of Motion for Summary Judgment;	JA002007
		Declaration of Stephen Helsey in Support of Motion for Summary Judgment;	JA002017
		Declaration of Brian Hall in Support of Motion for Summary Judgment;	JA002039
		Declaration of Michael Tenny in Support of Motion for Summary Judgment;	JA002043
		Declaration of Larry W. Potterfield, CEO Midway Arms Inc, dba Midway USA, in Support of Motion for Summary Judgment;	JA002047
		Declaration of Tom Allman, Mendocino County Sheriff-Coroner, in support of Motion for Summary Judgment;	JA002051
		Declaration of Steven Stonecipher in Support of Motion for Summary Judgment;	JA002054
		Declaration of Ray T. Giles in Support of Motion for Summary Judgment;	JA002057

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TAB	DATE	DOCUMENT	PAGE
		Declaration of Randy Wright in Support of Motion for Summary Judgment;	JA002062
		Declaration of Barry Bauer in Support of Motion for Summary Judgment;	JA002066
		Declaration of Clay Parker, Tehama County Sheriff, in Support of Motion for Summary Judgment.	JA002070
20	12/23/10	Notice of Errata re: Plaintiffs' Separate Statement of Undisputed Facts	JA002073
21	01/03/11	Defendants' Memorandum of Opposition to Motion for Summary Judgment;	JA002144
		Defendants' Response to Separate Statement of Undisputed Material Facts and Supplemental Statement of Undisputed Material Facts;	JA002173
		Declaration of Kimberly Granger in Support of Opposition to Motion for Summary Judgment;	JA002242
		Declaration of Peter Krause in Support of Opposition to Motion for Summary Judgment;	JA002245
		Declaration of Blake Graham in Support of Opposition to Motion for Summary Judgment.	JA002249
		VOLUME IX	
22	01/03/11	Defendants' Request for Judicial Notice in Support of Opposition to Motion for Summary Judgment;	JA002263
		Objection to Evidence and Declarations Submitted in Support of Plaintiffs' Motion for Summary Judgment;	JA002378
		Defendants' Evidence in Support of Opposition to	14002410

Defendants' Evidence in Support of Opposition to JA002410 Motion for Summary Judgment-Exh. A-E.

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		VOLUME X	
23	01/03/11	Defendants' Evidence in Support of Opposition to	JA002558
24	01/04/11	Motion for Summary Judgment-Exh. F-I. Defendants' Notice of Lodging Federal Authorities Cited in Defendants' Opposition to Motion for Summary Judgment-Exh. A-G.	JA002616
		VOLUME XI	
25	01/04/11	Defendants' Notice of Lodging Federal Authorities Cited in Defendants' Opposition to Motion for Summary Judgment-Exh. H-J.	JA002817
26	01/07/11	Reply Memorandum of Points and Authorities in Support of Motion for Summary Judgment;	JA002879
		Stipulated Supplemental Separate Statement of Undisputed Facts in Support of Plaintiffs' Motion for Summary Judgment;	JA002913
		Supplemental Declaration of Clinton B. Monfort.	JA003055
		VOLUME XII	
27	01/07/11	Objection to Defendants' Evidence Offered in Opposition to Motion for Summary Judgment.	JA003424
28	01/07/11	Plaintiffs' Evidentiary Objections to Defendants' Request for Judicial Notice.	JA003452
29	01/07/11	Notice of Lodging Federal Authorities in Support of Plaintiffs' Reply to Opposition to Motion for Summary Judgment-Exh. 1-11.	JA003461

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TAB	DATE	DOCUMENT	PAGE
30	01/11/11	Defendants' Objections to Exhibits Attached to Supplemental Declaration of Clinton B. Monfort and Cited as Evidence in Plaintiffs' "Stipulated" Supplemental Separate Statement of Undisputed Facts; [Proposed] Order Thereon.	JA003704
31	01/12/11	Notice of Lodgment of Blake Graham's Original Deposition Transcript Volume One in Support of Plaintiffs' Motion for Summary Judgment or in the Alternative Summary Adjudication/Trial	JA003710
32	01/12/11	Notice of Lodgment of Blake Graham's Original Deposition Transcript Volume Two in Support of Plaintiffs' Motion for Summary Judgment or in the Alternative Summary Adjudication/Trial.	JA003713
33	01/12/11	Notice of Erratum re: Plaintiffs' Evidence in Support of Reply to Opposition to Motion for Summary Judgment or in the Alternative Summary Adjudication and Trial.	JA003716
		VOLUME XIII	
34	01/12/11	Notice of Lodging of Current Updated Version of Previously Filed Evidence in Support of Motion for Summary Judgment or in the Alternative for Summary Adjudication/Trial.	JA003724

01/13/11 Plaintiffs' Notice of Motion and Motion to Challenge JA003803
 Qualifications and Foundation of Defendants' Expert
 Witness Blake Graham to Offer Testimony at Hearing
 and Trial; Memorandum of Points and Authorities
 Demonstrating Preliminary Facts in Dispute;
 Declaration of Clinton B. Monfort in Support.

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TAB DATE DOCUMENT PAGE 36 01/18/11 Defendants' Memorandum of Points and Authorities JA003913 in Opposition to Plaintiffs' Motion for an Evidentiary Hearing re: Qualification of Expert Witness Blake Graham; Declaration of Peter A. Krause in Support of Opposition-Exh. A-D. **VOLUME XIV** 01/18/11 Defendants' Memorandum of Points and Authorities 37 JA004005 in Opposition to Plaintiffs' Motion for an Evidentiary Hearing re: Qualification of Expert Witness Blake Graham; Declaration of Peter A. Krause in Support of Opposition-Exh. E. 38 01/20/11 01/18/11 Amended Minute Order JA004030 39 02/01/11 01/31/11 Minute Order and Copy of Order Denying JA004031 Plaintiffs' Motion for Summary Judgment and Granting in Part and Denying in Part Plaintiffs' Motion for Summary Adjudication. 40 02/28/11 Notice of Entry of Judgment. JA004055 03/10/11 Memorandum of Costs (Summary) 41 JA004122 04/01/11 The State's Notice of Motion and Motion to Tax 42 JA004129 Costs; Appendix of Non-California Authorities in Support of JA004132 the State's Motion to Tax Costs; Memorandum of Points and Authorities in Support of JA004151 the State's Motion to Tax Costs; Declaration of Peter

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A. Krause in Support Thereof.

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TAB	DATE	DOCUMENT	PAGE
43	04/20/11	Memorandum of Points and Authorities in Opposition to Tax Costs;	JA004176
		Declaration of Clinton B. Monfort in Support of Opposition;	JA004190
		Declaration of C.D. Michel in Support of Opposition.	JA004195
		VOLUME XV	
44	4/20/11	Plaintiffs' Notice of Lodging of Exhibits E-F in Support of C.D. Michel's Declaration in Opposition to Motion to Tax Costs.	JA004201
45	04/26/11	Reply Memorandum of Points and Authorities in Support of the State's Motion to Tax Costs; Supplemental Declaration of Peter Krause in Support Thereof.	JA004253
46	04/28/11	Notice of Appeal	JA004271
47	05/13/11	Notification of Filing Notice of Appeal.	JA004273
48	05/17/11	Amended Notification of Filing Notice of Appeal.	JA004275
49	05/17/11	Ruling – Defendants' Motion to Tax Costs.	JA004277
50	06/09/11	Notice of Appeal; Appellant's Notice of Designating Record on Appeal.	JA004281
51	06/14/11	Notification of Filing Notice of Appeal – Civil; Clerk's Certification of Mailing.	JA004304
52		Stipulation for Joint Appendix.	JA004306

TAB 38	DATE 01/20/11	DOCUMENT 01/18/11 Amended Minute Order	PAGE JA004030
39	02/01/11	01/31/11 Minute Order and Copy of Order Denying Plaintiffs' Motion for Summary Judgment and Granting in Part and Denying in Part Plaintiffs' Motion for Summary Judgment.	JA004031
48	05/17/11	Amended Notification of Filing Notice of Appeal.	JA004275
2	08/03/10	Answer to Complaint for Declaratory and Injunctive Relief and Petition for Writ of Mandate.	JA000052
4	09/07/10	Exhibits 35-17 in Support of Motion for Preliminary Injunction;	JA000300
		Plaintiffs' Memorandum of Points and Authorities in Support of Motion for Preliminary Injunction;	JA000339
		Notice of Other Authorities in Support of Motion for Preliminary Injunction;	JA000358
		[Proposed] Order Granting Preliminary Injunction.	JA000523
10	10/22/10	Defendants' Case Management Conference Statement.	JA000797
23	01/03/11	Defendants' Evidence in Support of Opposition to Motion for Summary Judgment-Exh. F-I.	JA002558
36	01/18/11	Defendants' Memorandum of Points and Authorities in Opposition to Plaintiffs' Motion for an Evidentiary Hearing re: Qualification of Expert Witness Blake Graham; Declaration of Peter A. Krause in Support of Opposition-Exh. A-D.	JA003913
37	01/18/11	Defendants' Memorandum of Points and Authorities in Opposition to Plaintiffs' Motion for an Evidentiary Hearing re: Qualification of Expert Witness Blake Graham; Declaration of Peter A. Krause in Support of Opposition-Exh. E.	JA004005

TAB	DATE	DOCUMENT	PAGE
5	09/30/10	Defendants' Memorandum of Points and Authorities in Opposition to Motion for Preliminary Injunction.	JA000526
21	01/03/11	Defendants' Memorandum of Opposition to Motion for Summary Judgment;	JA002144
		Defendants' Response to Separate Statement of Undisputed Facts and Supplemental Statement of Undisputed Material Facts;	JA002173
		Declaration of Kimberly Granter in Support of Opposition to Motion for Summary Judgment;	JA002242
		Declaration of Peter Krause in Support of Opposition to Motion for Summary Judgment.	JA002245
		Declaration of Blake Graham in Support of Opposition to Motion for Summary Judgment.	JA002249
24	01/04/11	Defendants' Notice of Lodging Federal Authorities Cited in Defendants' Opposition to Motion for Summary Judgment-Exh. A-G.	JA002616
25	01/04/11	Defendants' Notice of Lodging Federal Authorities Cited in Defendants' Opposition to Motion for Summary Judgment-Exh. H-J.	JA002817
30	01/11/11	Defendants' Objections to Exhibits Attached to Supplemental Declaration of Clinton B. Monfort and Cited as Evidence in Plaintiffs' "Stipulated" Supplemental Separate Statement of Undisputed Facts; [Proposed] Order Thereon.	JA003704
22	01/03/11	Defendants' Request for Judicial Notice in Support of Opposition to Motion for Summary Judgment;	JA002263
		Objection to Evidence and Declarations Submitted in Support of Plaintiffs' Motion for Summary Judgment;	JA002378
		Defendants' Evidence in Support of Opposition to Motion for Summary Judgment-Exh. A-E.	JA002410

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TAB	DATE	DOCUMENT	PAGE
41	03/10/11	Memorandum of Costs (Summary)	JA004122
43	04/20/11	Memorandum of Points and Authorities in Opposition to Tax Costs;	JA004176
		Declaration of Clinton B. Monfort in Support of Opposition;	JA004190
		Declaration of C.D. Michel in Support of Opposition.	JA004195
12	11/17/10	Minute Order re: Status Conference, CMC, Motion for Preliminary Injunction.	JA000808
46	04/28/11	Notice of Appeal.	JA004271
50	06/06/11	Notice of Appeal; Appellants' Notice of Designating Record on Appeal.	JA004281
40	02/28/11	Notice of Entry of Judgment.	JA004055
20	12/23/10	Notice of Errata re: Plaintiffs' Separate Statement of Undisputed Facts.	JA002073
33	01/12/11	Notice of Erratum re: Plaintiffs' Evidence in Support of Reply to Opposition to Motion for Summary Judgment or in the Alternative Summary Adjudication and Trial.	JA003716
34	01/12/11	Notice of Lodging Current Updated Version of Previously Filed Evidence in Support of Motion for Summary Judgment or in the Alternative for Summary Adjudication/Trial.	JA003724
29	01/07/11	Notice of Lodging Federal Authorities in Support of Plaintiffs' Reply to Opposition to Motion for Summary Judgment.	JA003461

TAB 31	DATE 01/12/11	DOCUMENT Notice of Lodgment of Blake Graham's Original Deposition Transcript Volume One in Support of Plaintiffs' Motion for Summary Judgment or in the Alternative Summary Adjudication/Trial.	PAGE JA003710
32	01/12/11	Notice of Lodgment of Blake Graham's Original Deposition Transcript Volume Two in Support of Plaintiffs' Motion for Summary Judgment or in the Alternative Summary Adjudication/Trial.	JA003713
3	09/07/10	Notice of Motion and Motion for Preliminary Injunction;	JA000076
		Declaration of Barry Bauer in Support of Motion for Preliminary Injunction;	JA000079
•		Declaration of Clinton B. Monfort in Support of Motion for Preliminary Injunction;	JA000083
		Declaration of Ray T. Giles in Support of Motion for Preliminary Injunction;	JA000089
		Declaration of Mike Haas in Support of Motion for Preliminary Injunction;	JA000093
		Declaration of Stephen Helsely in Support of Motion for Preliminary Injunction;	JA000099
		Declaration of Clay Parker, Tehama County Sheriff, in Support of Motion for Preliminary Injunction;	JA000114
		Declaration of Steven Stonecipher in Support of Motion for Preliminary Injunction;	JA000117
		Declaration of Randy Wright in Support of Motion for Preliminary Injunction;	JA000121
		Exhibits 1-34 in Support of Motion for Preliminary Injunction.	JA000126

TAB 14	DATE 12/06/10	DOCUMENT Notice of Motion for Summary Judgment and/or Summary Adjudication of Issues;	PAGE JA000815
		Memorandum of Points and Authorities in Support of Motion;	JA000819
		Separate Statement of Undisputed Facts in Support of Motion.	JA000851
47	05/13/11	Notification of Filing Notice of Appeal.	JA004273
51	06/14/11	Notification of Filing Notice of Appeal – Civil; Clerk's Certification of Mailing.	JA004304
27	01/07/11	Objection to Defendants' Evidence Offered in Opposition to Motion for Summary Judgment.	JA003424
11	10/29/10	Plaintiffs' Case Management Conference Statement.	JA000802
15	12/06/10	Plaintiffs' Evidence in Support of Motion for Summary Judgment or in the Alternative for Summary Adjudication/Trial Brief-Exh. 1-53.	JA000898
16	12/06/10	Plaintiffs' Evidence in Support of Motion for Summary Judgment or in the Alternative for Summary Adjudication/Trial Brief-Exh. 24-58;	JA001193
		Notice of Lodging Federal Authorities in Support of Motion for Summary Judgment-Exh. 1-4.	JA001424
28	01/07/11	Plaintiffs' Evidentiary Objections to Defendants' Request for Judicial Notice.	JA003452
44	04/20/11	Plaintiffs' Notice of Lodging of Exhibits E-F in Support of C.D. Michel's Declaration in Opposition to Motion to Tax Costs.	JA004201
17	12/06/10	Plaintiffs' Notice of Lodging Federal Authorities in Support of Motion for Summary Judgment-Exh. 4-15.	JA001478

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TAB 18	DATE 12/06/10	DOCUMENT Plaintiffs' Notice of Lodging Federal Authorities in Support of Motion for Summary Judgment-Exh. 15- 18;	PAGE JA001697
		Request for Judicial Notice- Exh. A-H.	JA001815
35	01/13/11	Plaintiffs' Notice of Motion and Motion to Challenge Qualifications and Foundation of Defendants' Expert Witness Blake Graham to Offer Testimony at Hearing and Trial; Memorandum of Points and Authorities Demonstrating Preliminary Facts in Dispute; Declaration of Clinton B. Monfort in Support.	JA003803
6	10/06/10	Plaintiffs' Request for Judicial Notice in Support of Motion for Preliminary Injunction-Exh. 48-49.	JA000548
7	10/06/10	Plaintiffs' Request for Judicial Notice in Support of Motion for Preliminary Injunction-Exh. 50-53.	JA000592
9	10/8/10	Plaintiffs' Request for Judicial Notice in Support of Motion for Preliminary Injunction-Exh. 54-55.	JA000707
8	10/07/10	Plaintiffs' Request for Judicial Notice-Exh. I;	JA001967
		Declaration of Sean A. Brady in Support of Motion for Summary Judgment;	JA002004
		Declaration of Clinton B. Monfort in Support of Motion for Summary Judgment;	JA002007
		Declaration of Stephen Helsey in Support of Motion for Summary Judgment;	JA002017
		Declaration of Brian Hall in Support of Motion for Summary Judgment;	JA002039
	•	Declaration of Michael Tenny in Support of Motion for Summary Judgment;	JA002043

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TAB	DATE	DOCUMENT Declaration of Larry W. Potterfield, CEO Midway Arms Inc, dba Midway USA, in Support of Motion for Summary Judgment;	PAGE JA002047
		Declaration of Tom Allman, Mendocino County Sheriff-Coroner, in support of Motion for Summary Judgment;	JA002051
		Declaration of Steven Stonecipher in Support of Motion for Summary Judgment;	JA002054
		Declaration of Ray T. Giles in Support of Motion for Summary Judgment;	JA002057
		Declaration of Randy Wright in Support of Motion for Summary Judgment;	JA005062
	•	Declaration of Barry Bauer in Support of Motion for Summary Judgment;	JA002066
		Declaration of Clay Parker, Tehama County Sheriff, in Support of Motion for Summary Judgment.	JA002070
26	01/07/11	Reply Memorandum of Points and Authorities in Support of Motion for Summary Judgment;	JA002879
		Stipulated Supplemental Separate Statement of Undisputed Facts in Support of Plaintiffs' Motion for Summary Judgment;	JA002913
		Supplemental Declaration of Clinton B. Monfort.	JA003055
45	04/26/11	Reply Memorandum of Points and Authorities in Support of the State's Motion to Tax Costs; Supplemental Declaration of Peter Krause in Support Thereof.	JA004253

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TAB 8	DATE 10/07/10	DOCUMENT Reply to Opposition to Plaintiffs' Motion for Preliminary Injunction; Supplemental Declaration of Clinton B. Monfort in Support of Motion for Preliminary Injunction.	PAGE JA000693
49	05/17/11	Ruling – Defendants' Motion to Tax Costs.	JA004277
52		Stipulation for Joint Appendix	JA004306
13	11/30/10	Stipulation and Order to Modify Briefing Schedule for Motion for Summary Judgment.	JA000810
1	06/17/10	Summons and Complaint for Declaratory and Injunctive Relief; Petition for Writ of Mandate (To Determine Validity of Statutes).	JA000001
42	04/01/11	The State's Notice of Motion and Motion to Tax Costs;	JA004129
		Appendix of non-California Authorities in Support of the State's Motion to tax Costs;	JA004132
		Memorandum of Points and Authorities in Support of the State's Motion to Tax Costs; Declaration of Peter A. Krause in Support Thereof.	JA004151

There are no even-numbered page between JA002879 and JA003423 in the Joint Appendix. This gap was created by a production error at the numbering stage. Rather than print blank pages with these numbers, they have been omitted.

1 2 3 4 5 6 7	C. D. Michel - SBN 144258 Clinton B. Monfort - SBN 255609 Sean A. Brady - SBN 262007 MICHEL & ASSOCIATES, P.C. 180 East Ocean Blvd., Suite 200 Long Beach, CA 90802 Telephone: (562) 216-4444 Fax: (562) 216-4445 cmichel@michellawyers.com Attorneys for Plaintiffs/Petitioners	FRE: By -	DEC 0 7 2010 SNO COUNTY SUPERIOR COURT
8	IN THE SUPERIOR COURT		CALIFORNIA
9 10	FOR THE CC	UNTY OF FRESNO	
11 12	SHERIFF CLAY PARKER, TEHAMA COUNTY SHERIFF; HERB BAUER SPORTING GOODS; CALIFORNIA RIFLE AND PISTOL ASSOCIATION FOUNDATION; ABLE'S SPORTING, INC.; RTG SPORTING COLLECTIBLES, LLC; AND STEVEN STONECIPHER, Plaintiffs and Petitioners, vs. THE STATE OF CALIFORNIA; JERRY BROWN, IN HIS OFFICIAL CAPACITY AS ATTORNEY GENERAL FOR THE STATE OF CALIFORNIA; THE CALIFORNIA DEPARTMENT OF JUSTICE; and DOES 1-25,) MOTION FOR SU	IDENCE IN SUPPORT OF MMARY JUDGMENT OR ATIVE FOR SUMMARY / TRIAL BRIEF January 18, 2011 8:30 a.m. Dept. 402 Hon. Jeff Hamilton
21	Defendants and Respondents.))	
22 23)	
23 24			
25			
26			
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28			
	PLAINTIFFS' EVIDENCE IN SUPPOI	1 RT OF MOTION FOR SU	MMARY JUDGMENT

JA000898

1	PLEASE TAKE NOTICE THAT PLAINTIFFS hereby file with the Court the		
2	following exhibits in support of Plaintiffs' Motion for Summary Judgment or in the Alternative		
3	for Summary	Adjudication / Trial Brief:	
4		TABLE OF EXHIBITS	
5			
6	1.	Assembly Bill No. 962 and Complete Bill History Exhibit 1	
7	2.	Assembly Bill 2358 (2010) as Amended by Senate August 19, 2010 Exhibit 2	
8	3.	Assembly Bill 2358 (2010) as Amended by Senate August 30, 2010 Exhibit 3	
9	4.	Complete Bill History, A.B. 2358 (2010) Exhibit 4	
0	5.	Legislative History Report and Analysis Re: Senate Bill 1276	
1		(Hart – 1994) Exhibit 5	
2	6.	Public Records Act Request Sent to California Department of Justice Re: Assembly Bill 962, dated December 16, 2009 Exhibit 6	
3	7.	Defendant Department of Justice Response to Public Records Act Request and Relevant Email Enclosures, dated January 25, 2010 Exhibit 7	
เ4 เ5	8.	Information Bulletin from California Department of Justice Re: New and Amended Firearm Laws, dated December 30, 2009 Exhibit 8	
16	9.	Public Records Act Request Sent to California Department of Justice Re: Assembly Bill 962, dated July 16, 2010 Exhibit 9	
17 18	10.	California Department of Justice's Response to Public Records Act Request, dated August 9, 2010 Exhibit 10	
19 20	11.	Principles of Firearms - Definitions - Ammunition Components, http://rkba.org/guns/principles/definitions/ammunition.html (last visited December 5, 2010) Exhibit 11	
21	12.	Norm Flayderman, Flayderman's Guide to Antique American Firearms 265-66 (1998 7th ed.).	
22 23	13.	Firearms History, Technology & Development: Cartridges: Pinfire Cartridge, http://firearmshistory.blogspot.com/2010/05/cartridges-pinfire-cartridge.html (May 4, 2010) Exhibit 13	
24 25	14.	Gun & Game Forums - Some of my Antiques, http://www.gunandgame.com/forums/antique-firearms/103761-some-my-antiques. html Exhibit 14	
26	15.	Image of a Lefaucheaux Model 1854 Exhibit 15	
27 28	16.	Image & Description of Volcanic Lever Action Pistols and Carbines Exhibit 16	
		2	

17.	Chuck Hawks, A Brief History of .22 Rimfire Ammunition, 2005,
	http://www.chuckhawks.com/history_rimfire_ammo.htm Exhibit 17
18.	Arms Collectors' Association of the Northern Territory, Inc., <i>Tiger Tamer: A 12-Bore Howdah Double</i> , http://www.acant.org.au/Articles/HowdahRifle.html Exhibit 18
19.	Norm Flayderman, Flayderman's Guide to Antique American Firearms 85 (1998 7th ed.)
20.	What is SASS?, http://www.sassnet.com/About-What-is-SASS-001A.php (last visited December 5, 2010) Exhibit 20
21.	Uberti 1873 Rifle & Carbine, http://www.uberti.com/firearms/1873_rifle_and_carbine.php (last visited December 5, 2010) Exhibit 21
22.	Gallery of Guns - Item Detail - Magnum Research BFR 45-70, https://galleryofguns.com/genie/Default.aspx?item=BFR45%2f707 (last visited December 5, 2010) Exhibit 22
23.	Ruger 10/22 Rifles, http://www.ruger.com/products/1022/index.html (last visited December 5, 2010) Exhibit 23
24.	Ruger Charger, http://www.survival-gear-guide.com/Ruger-Charger.html (last visited December 5, 2010) Exhibit 24
25.	9mm Carbines & Grease Guns, http://www.best9mm.com/carbines/index.html (last visited December 5, 2010) Exhibit 25
26.	Marlin Model 9 Camp Carbine Owner's Manual Exhibit 26
27.	Image & Description of a Luger Carbine Exhibit 27
28.	9mm Largo Firearms, http://www.9mmlargo.com (last visited December 5, 2010) Exhibit 28
29.	Neal Pritchett, <i>Firearms Reviews and Commentary -Marlin Camp Gun .45</i> , http://www.notpurfect.com/main/campgun.htm (last visited December 5, 2010) Exhibit 29
30.	Robert Gibson, <i>A Pocket History of the M1 Carbine</i> , http://www.fulton-armory.com/M1Carbine.htm
31.	The Ruger New Model Blackhawk Single-Action Revolver, http://www.ruger.com/products/newModelBlackhawkBlued/models.html (last visited December 5, 2010) Exhibit 3

	TABLE OF EXHIBITS (CONT.)
32.	Jim Hammond, Shooting with Jim: Ruger 44 Magnum Carbine Product Review, http://www.shootingwithjim.com/ruger-44-carbine.htm (last visited December 5, 2010) Exhibit 32
33.	Chuck Hawks, <i>The .256 Winchester, 2004</i> , http://www.chuckhawks.com/256Win.htm Exhibit 33
34.	Glenn Custom - PRICING - Remington XP-100, http://glenncustom.com/pricing_remxp100.html (last visited December 5, 2010) Exhibit 34
35.	Bud's Gun Shop - Catalog - Rifles - Remington 700 LV Light Varmint .221 Fireball, http://www.budsgunshop.com/catalog/product_info.php/products_id/96185 (last visited December 5, 2010) Exhibit 35
36.	Impact Guns - Marlin 41 Magnum Model 1894FG 20" Walnut, http://www.impactguns.com/store/1894FG.html (last visited December 5, 2010) Exhibit 36
37.	.40 S&W Carbines: We Shoot Hi-Point, Beretta, Olympic Arms, GUN TESTS, May 2006, http://www.gun-tests.com/issues/18_5/features/5332-1.html Exhibit 33
38.	Colt Pattern .40 S&W Caliber Carbines, FEDERAL BUSINESS OPPORTUNITIES, Aug. 7, 2009, https://www.fbo.gov/index?tab=core&s=opportunity&mode=form&id=6ac219a2e 12e8aedc2755b3053e32af1&tabmode=list Exhibit 38
39.	FNH 5.7x28 Bulk Ammo Advertisement Exhibit 39
40.	Chuck Hawks, <i>The .17 Hornady Magnum Rimfire</i> , 2007, http://www.chuckhawks.com/17HMR.htm Exhibit 40
41.	Excel Arms - New Products - New Models X-22P and X-22R, http://www.excelarms.com/newproducts.html (last visited September 6, 2010)
42.	About Thompson Center Arms, http://www.tcarms.com/about (last visited December 5, 2010) Exhibit 42
43.	Thompson Center Arms - Caliber Selection - Encore Pistols, http://www.tcarms.com/customShop/chart_encore_pistol.php (last visisted December 5, 2010) Exhibit 42
44.	Match Grade Machine - Chamberings Available, http://www.matchgrademachine.com/chamberings_public.php (last visited December 5, 2010) Exhibit 44
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2 3	45.	John Taffin, <i>The Custom Pistols of Gary Reeder</i> , Guns Magazine, March 2001, <i>available at</i> http://findarticles.com/p/articles/mi_m0BQY/is_3_47/ai_70650330/ Exhibit 45
4	46.	http://ammoguide.com - About AmmoGuide.com Exhibit 46
5	47.	Bussard, Ammo Encyclopedia (2008) at p. 8 Exhibit 47
6 7	48.	Photograph Showing Size Disparity Between Cartridges of the Same Caliber Exhibit 48
8	49.	Midway U.S.A 2011 Catalog Page with Disclaimer Re: Sale of Ammo in California Exhibit 49
9 10	50.	Cheaper Than Dirt 2011 Catalog Page with Disclaimer Re: Sale of Ammo in California Exhibit 50
11 12	51.	Barnes, Cartridges of the World: A Complete and Illustrated Reference for Over 1500 Cartridges (11 th ed. 2006) "Cover, Table of Contents, and Introduction" Exhibit 51
13 14	52.	Barnes, Cartridges of the World: A Complete and Illustrated Reference for Over 1500 Cartridges (11th ed. 2006) "Selected Pages from Chapter 2: Current American Rifle Cartridges and Chapter 3: Obsolete Rifle Cartridges" Exhibit 52
15 16	53.	Barnes, Cartridges of the World: A Complete and Illustrated Reference for Over 1500 Cartridges (11th ed. 2006) "Selected Pages from Chapter 6: Handgun Cartridges of the World " Exhibit 53
17 18	54.	[Defendants'] Responses to Specially Prepared Interrogatories, Set One Exhibit 54
19 10	55.	[Defendants'] Amended Response to Specially Prepared Interrogatory No. 5 Exhibit 55
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21 22	57.	Deposition Transcript of Blake Graham Wednesday, December 1, 2010 Volume 1 Exhibit 57
23	58.	Deposition Transcript of Blake Graham Thursday, December 2, 2010 Volume 2 Exhibit 58
24 25	Dated: Decen	nber 6, 2010 Respectfully Submitted, MICHEL & ASSOCIATES, P.C.
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28		Clinton Monford Attorney for Plaintiffs
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ſ	PI	AINTIFFS' EVIDENCE IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

EXHIBIT "1"

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COMPLETE BILL HISTORY
BILL NUMBER : A.B. No. 962
AUTHOR : De Leon
TOPIC
        : Ammunition.
TYPE OF BILL :
                Inactive
                Non-Urgency
                Non-Appropriations
                Majority Vote Required
                State-Mandated Local Program
                Fiscal
                Non-Tax Levy
BILL HISTORY
2009
Oct. 11 Chaptered by Secretary of State - Chapter 628, Statutes of 2009.
Oct. 11 Approved by the Governor.
Sept. 29 Enrolled and to the Governor at 3:30 p.m.
Sept. 11 In Assembly. Concurrence in Senate amendments pending. Senate
        amendments concurred in. To enrollment. (Ayes 43. Noes 33. Page
        3371.)
Sept. 10
         Read third time, passed, and to Assembly. (Ayes 21. Noes 18. Page
        2395.)
Sept. 8 Read second time. To third reading.
Sept. 4 Read third time, amended. To second reading.
Sept. 1 Read second time. To third reading.
Aug. 31 From committee: Do pass. (Ayes 7. Noes 5.) (August 27).
        (received by desk August 28, 2009 pursuant to JR61(a)(11))
July 23 Joint Rule 62(a) suspended. In committee: Placed on Appropriations
        suspense file. (Page 1804.)
July 8 From committee: Do pass, and re-refer to Com. on APPR.
        Re-referred. (Ayes 4. Noes 3.) (July 7).
July 1 In committee: Hearing postponed by committee.
June 29 In committee: Hearing postponed by committee.
June 22 From committee chair, with author's amendments: Amend, and re-refer
        to committee. Read second time, amended, and re-referred to Com. on
        PUB. S.
June 18 Referred to Com. on PUB. S.
June 4 In Senate. Read first time. To Com. on RLS. for assignment.
June 3 Read third time, passed, and to Senate. (Ayes 42. Noes 31. Page
        2069.)
June 2 Read second time. To third reading.
June 1 Read second time and amended. Ordered returned to second reading.
May 29 From committee: Amend, and do pass as amended. (Ayes 12. Noes 5.)
        (May 28).
       In committee: Set, first hearing. Referred to APPR. suspense
May 6
       file.
nr. 22 From committee. Do need and to refer to Cam on And
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Re-referred. (Ayes 5. Noes 2.) (April 21). Apr. 14 In committee: Set, first hearing. Hearing canceled at the request

Assembly Bill No. 962

CHAPTER 628

An act to amend Section 12316 of, to add Sections 12317 and 12318 to, to add Article 3.5 (commencing with Section 12060) to Chapter 1 of, to add a heading for Chapter 2.6 (commencing with Section 12316) to, and to repeal the heading of Chapter 2.6 (commencing with Section 12320) of, Title 2 of Part 4 of, the Penal Code, relating to ammunition.

[Approved by Governor October 11, 2009. Filed with Secretary of State October 11, 2009.]

LEGISLATIVE COUNSEL'S DIGEST

AB 962, De Leon. Ammunition.

Existing law generally regulates the sale of ammunition.

The bill would provide that no handgun ammunition vendor, as defined, shall sell, offer for sale, or display for sale, any handgun ammunition in a manner that allows that ammunition to be accessible to a purchaser without the assistance of the vendor or employee thereof.

Existing law generally regulates what information is required to be obtained in connection with the transfer of ammunition.

This bill would, subject to exceptions, commencing February 1, 2011, require handgun ammunition vendors to obtain a thumbprint and other information from ammunition purchasers, as specified. A violation of these provisions would be a misdemeanor.

This bill would provide that a person enjoined from engaging in activity associated with a criminal street gang, as specified, would be prohibited from having under his or her possession, custody, or control, any ammunition. Violation of these provisions would be a misdemeanor.

The bill would prohibit supplying or delivering, as specified, handgun ammunition to prohibited persons, as described, by persons or others who know, or by using reasonable care should know, that the recipient is a person prohibited from possessing ammunition or a minor prohibited from possessing ammunition, as specified. Violation of these provisions is a misdemeanor with specified penalties.

The bill would provide, subject to exceptions, that commencing February 1, 2011, the delivery or transfer of ownership of handgun ammunition may only occur in a face-to-face transaction, with the deliverer or transferor being provided bona fide evidence of identity of the purchaser or other transferee. A violation of these provisions would be a misdemeanor.

By creating new crimes, this bill would impose a state-mandated local program.

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The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

The people of the State of California do enact as follows:

SECTION 1. This act shall be known, and may be cited, as the Anti-Gang Neighborhood Protection Act of 2009.

SEC. 2. Article 3.5 (commencing with Section 12060) is added to Chapter 1 of Title 2 of Part 4 of the Penal Code, to read:

Article 3.5. Handgun Ammunition Vendors

12060. As used in this article, the following terms apply:

(a) "Department" means the Department of Justice.

(b) "Handgun ammunition" means handgun ammunition as defined in subdivision (a) of Section 12323, but excluding ammunition designed and intended to be used in an "antique firearm" as defined in Section 921(a)(16) of Title 18 of the United States Code. Handgun ammunition does not include blanks.

(c) "Handgun ammunition vendor" or "vendor" means any person, firm, corporation, dealer, or any other business enterprise that is engaged in the retail sale of any handgun ammunition, or that holds itself out as engaged in the business of selling any handgun ammunition.

12061. (a) A vendor shall comply with all of the following conditions, requirements and prohibitions:

(1) A vendor shall not permit any employee who the vendor knows or reasonably should know is a person described in Section 12021 or 12021.1 of this code or Section 8100 or 8103 of the Welfare and Institutions Code to handle, sell, or deliver handgun ammunition in the course and scope of his or her employment.

(2) A vendor shall not sell or otherwise transfer ownership of, offer for sale or otherwise offer to transfer ownership of, or display for sale or display for transfer of ownership of any handgun ammunition in a manner that allows that ammunition to be accessible to a purchaser or transferee without the assistance of the vendor or employee thereof.

(3) Commencing February 1, 2011, a vendor shall not sell or otherwise transfer ownership of any handgun ammunition without, at the time of delivery, legibly recording the following information:

(A) The date of the sale or other transaction.

(B) The purchaser's or transferee's driver's license or other identification number and the state in which it was issued.

(C) The brand, type, and amount of ammunition sold or otherwise transferred.

(D) The purchaser's or transferee's signature.

(E) The name of the salesperson who processed the sale or other transaction.

(F) The right thumbprint of the purchaser or transferee on the above form.

(G) The purchaser's or transferee's full residential address and telephone number.

(H) The purchaser's or transferee's date of birth.

(4) Commencing February 1, 2011, the records required by this section shall be maintained on the premises of the vendor for a period of not less than five years from the date of the recorded transfer.

(5) Commencing February 1, 2011, the records referred to in paragraph (3) shall be subject to inspection at any time during normal business hours by any peace officer employed by a sheriff, city police department, or district attorney as provided in subdivision (a) of Section 830.1, or employed by the department as provided in subdivision (b) of Section 830.1, provided the officer is conducting an investigation where access to those records is or may be relevant to that investigation, is seeking information about persons prohibited from owning a firearm or ammunition, or is engaged in ensuring compliance with the Dangerous Weapons Control Law (Chapter 1 (commencing with Section 12000) of Title 2 of Part 4), or any other laws pertaining to firearms or ammunition. The records shall also be subject to inspection at any time during normal business hours by any other employee of the department, provided that employee is conducting an investigation where access to those records is or may be relevant to that investigation, is seeking information about persons prohibited from owning a firearm or ammunition, or is engaged in ensuring compliance with the Dangerous Weapons Control Law (Chapter 1 (commencing with Section 12000) of Title 2 of Part 4), or any other laws pertaining to firearms or ammunition.

(6) Commencing February 1, 2011, the vendor shall not knowingly make a false entry in, fail to make a required entry in, fail to obtain the required thumbprint, or otherwise fail to maintain in the required manner records prepared in accordance with paragraph (2). If the right thumbprint is not available, then the vendor shall have the purchaser or transferee use his or her left thumb, or any available finger, and shall so indicate on the form. If the purchaser or transferee is physically unable to provide a thumbprint or fingerprint, the vendor shall so indicate on the form.

(7) Commencing February 1, 2011, no vendor shall refuse to permit a person authorized under paragraph (5) to examine any record prepared in accordance with this section during any inspection conducted pursuant to this section, or refuse to permit the use of any record or information by those persons.

(b) Paragraph (3) of subdivision (a) shall not apply to or affect sales or other transfers of ownership of handgun ammunition by handgun ammunition vendors to any of the following, if properly identified:

(1) A person licensed pursuant to Section 12071.

(2) A handgun ammunition vendor.

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(3) A person who is on the centralized list maintained by the department pursuant to Section 12083.

(4) A target facility which holds a business or regulatory license.

(5) Gunsmiths.

(6) Wholesalers.

(7) Manufacturers or importers of firearms licensed pursuant to Chapter 44 (commencing with Section 921) of Title 18 of the United States Code, and the regulations issued pursuant thereto.

(8) Sales or other transfers of ownership made to authorized law enforcement representatives of cities, counties, cities and counties, or state or federal governments for exclusive use by those government agencies if, prior to the delivery, transfer, or sale of handgun ammunition, written authorization from the head of the agency authorizing the transaction is presented to the person from whom the purchase, delivery, or transfer is being made. Proper written authorization is defined as verifiable written certification from the head of the agency by which the purchaser, transferee, or person otherwise acquiring ownership is employed, identifying the employee as an individual authorized to conduct the transaction, and authorizing the transaction for the exclusive use of the agency by which he or she is employed.

(c) (1) A violation of paragraph (3), (4), (6), or (7) of subdivision (a) is a misdemeanor.

(2) The provisions of this subdivision are cumulative, and shall not be construed as restricting the application of any other law. However, an act or omission punishable in different ways by different provisions of law shall not be punished under more than one provision.

SEC. 3. A heading for Chapter 2.6 of Title 2 of Part 4 is added to the Penal Code, immediately preceding Section 12316, to read:

CHAPTER 2.6. AMMUNITION

SEC. 5. Section 12316 of the Penal Code is amended to read:

12316. (a) (1) Any person, corporation, or dealer who does any of the following shall be punished by imprisonment in a county jail for a term not to exceed six months, or by a fine not to exceed one thousand dollars (\$1,000), or by both the imprisonment and fine:

(A) Sells any ammunition or reloaded ammunition to a person under 18 years of age.

(B) Sells any ammunition or reloaded ammunition designed and intended for use in a handgun to a person under 21 years of age. As used in this subparagraph, "ammunition" means handgun ammunition as defined in subdivision (a) of Section 12323. Where ammunition or reloaded ammunition may be used in both a rifle and a handgun, it may be sold to a person who is at least 18 years of age, but less than 21 years of age, if the vendor reasonably believes that the ammunition is being acquired for use in a rifle and not a handgun.

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(C) Supplies, delivers, or gives possession of any ammunition to any minor who he or she knows, or using reasonable care should know, is prohibited from possessing that ammunition at that time pursuant to Section 12101.

(2) Proof that a person, corporation, or dealer, or his or her agent or employee, demanded, was shown, and acted in reasonable reliance upon, bona fide evidence of majority and identity shall be a defense to any criminal prosecution under this subdivision. As used in this subdivision, "bona fide evidence of majority and identity" means a document issued by a federal, state, county, or municipal government, or subdivision or agency thereof, including, but not limited to, a motor vehicle operator's license, California state identification card, identification card issued to a member of the Armed Forces, or other form of identification that bears the name, date of birth, description, and picture of the person.

(b) (1) No person prohibited from owning or possessing a firearm under Section 12021 or 12021.1 of this code or Section 8100 or 8103 of the Welfare and Institutions Code shall own, possess, or have under his or her custody or control, any ammunition or reloaded ammunition.

(2) For purposes of this subdivision, "ammunition" shall include, but not be limited to, any bullet, cartridge, magazine, clip, speed loader, autoloader, or projectile capable of being fired from a firearm with a deadly consequence. "Ammunition" does not include blanks.

(3) A violation of paragraph (1) of this subdivision is punishable by imprisonment in a county jail not to exceed one year or in the state prison, by a fine not to exceed one thousand dollars (1,000), or by both the fine and imprisonment.

(4) A person who is not prohibited by paragraph (1) from owning, possessing, or having under his or her custody or control, any ammunition or reloaded ammunition, but who is enjoined from engaging in activity pursuant to an injunction issued pursuant to Section 3479 of the Civil Code against that person as a member of a criminal street gang, as defined in Section 186.22, may not own, possess, or have under his or her custody or control, any ammunition or reloaded ammunition.

(5) A violation of paragraph (4) of this subdivision is a misdemeanor.

(c) Unless it is with the written permission of the school district superintendent, his or her designee, or equivalent school authority, no person shall carry ammunition or reloaded ammunition onto school grounds, except sworn law enforcement officers acting within the scope of their duties or persons exempted under subparagraph (A) of paragraph (1) of subdivision (a) of Section 12027. This subdivision shall not apply to a duly appointed peace officer as defined in Chapter 4.5 (commencing with Section 830) of Title 3 of Part 2, a full-time paid peace officer of another state or the federal government who is carrying out official duties while in California, any person summoned by any of these officers to assist in making an arrest or preserving the peace while he or she is actually engaged in assisting the officer, a member of the military forces of this state or of the United States who is engaged in the performance of his or her duties, a person holding a

valid license to carry the firearm pursuant to Article 3 (commencing with Section 12050) of Chapter 1 of Title 2 of Part 4, or an armored vehicle guard, who is engaged in the performance of his or her duties, as defined in subdivision (e) of Section 7521 of the Business and Professions Code. A violation of this subdivision is punishable by imprisonment in a county jail for a term not to exceed six months, a fine not to exceed one thousand dollars (\$1,000), or both the imprisonment and fine.

(d) (1) A violation of paragraph (1) or (4) of subdivision (b) is justifiable where all of the following conditions are met:

(A) The person found the ammunition or reloaded ammunition or took the ammunition or reloaded ammunition from a person who was committing a crime against him or her.

(B) The person possessed the ammunition or reloaded ammunition no longer than was necessary to deliver or transport the ammunition or reloaded ammunition to a law enforcement agency for that agency's disposition according to law.

(C) The person is prohibited from possessing any ammunition or reloaded ammunition solely because that person is prohibited from owning or possessing a firearm only by virtue of Section 12021 or ammunition or reloaded ammunition because of paragraph (4) of subdivision (b).

(2) Upon the trial for violating paragraph (1) or (4) of subdivision (b), the trier of fact shall determine whether the defendant is subject to the exemption created by this subdivision.

(3) The defendant has the burden of proving by a preponderance of the evidence that he or she is subject to the exemption provided by this subdivision.

SEC. 6. Section 12317 is added to the Penal Code, to read:

12317. (a) Any person, corporation, or firm who supplies, delivers, sells, or gives possession or control of, any ammunition to any person who he or she knows or using reasonable care should know is prohibited from owning, possessing, or having under his or her custody or control, any ammunition or reloaded ammunition pursuant to paragraph (1) or (4) of subdivision (b) of Section 12316, is guilty of a misdemeanor, punishable by imprisonment in a county jail not exceeding one year, or a fine not exceeding one thousand dollars (\$1,000), or by both that fine and imprisonment.

(b) The provisions of this section are cumulative and shall not be construed as restricting the application of any other law. However, an act or omission punishable in different ways by this section and another provision of law shall not be punished under more than one provision.

(c) For purposes of this section, "ammunition" shall include, but not be limited to, any bullet, cartridge, magazine, clip, speed loader, autoloader, or projectile capable of being fired from a firearm with deadly consequence. "Ammunition" does not include blanks.

SEC. 7. Section 12318 is added to the Penal Code, to read:

12318. (a) Commencing February 1, 2011, the delivery or transfer of ownership of handgun ammunition may only occur in a face-to-face

transaction with the deliverer or transferor being provided bona fide evidence of identity from the purchaser or other transferee. A violation of this section is a misdemeanor.

(b) For purposes of this section:

(1) "Bona fide evidence of identity" means a document issued by a federal, state, county, or municipal government, or subdivision or agency thereof, including, but not limited to, a motor vehicle operator's license, state identification card, identification card issued to a member of the Armed Forces, or other form of identification that bears the name, date of birth, description, and picture of the person.

(2) "Handgun ammunition" means handgun ammunition as defined in subdivision (a) of Section 12323, but excluding ammunition designed and intended to be used in an "antique firearm" as defined in Section 921(a)(16) of Title 18 of the United States Code. Handgun ammunition does not include blanks.

(3) "Handgun ammunition vendor" has the same meaning as set forth in Section 12060.

(c) Subdivision (a) shall not apply to or affect the deliveries, transfers, or sales of, handgun ammunition to any of the following:

(1) Authorized law enforcement representatives of cities, counties, cities and counties, or state and federal governments for exclusive use by those government agencies if, prior to the delivery, transfer, or sale of the handgun ammunition, written authorization from the head of the agency employing the purchaser or transferee, is obtained identifying the employee as an individual authorized to conduct the transaction, and authorizing the transaction for the exclusive use of the agency employing the individual.

(2) Sworn peace officers, as defined in Chapter 4.5 (commencing with Section 830) of Title 3 of Part 2 who are authorized to carry a firearm in the course and scope of their duties.

(3) Importers and manufacturers of handgun ammunition or firearms licensed to engage in business pursuant to Chapter 44 (commencing with Section 921) of Title 18 of the United States Code and the regulations issued pursuant thereto.

(4) Persons who are on the centralized list maintained by the Department of Justice pursuant to Section 12083.

(5) Persons whose licensed premises are outside this state who are licensed as dealers or collectors of firearms pursuant to Chapter 44 (commencing with Section 921) of Title 18 of the United States Code and the regulations issued pursuant thereto.

(6) Persons licensed as collectors of firearms pursuant to Chapter 44 (commencing with Section 921) of Title 18 of the United States Code and the regulations issued pursuant thereto whose licensed premises are within this state who has a current certificate of eligibility issued to him or her by the Department of Justice pursuant to Section 12071.

(7) A handgun ammunition vendor.

(8) A consultant-evaluator, as defined in subdivision (s) of Section 12001.

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SEC. 8. The heading of Chapter 2.6 (commencing with Section 12320) of Title 2 of Part 4 of the Penal Code is repealed.

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SEC. 9. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.

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EXHIBIT "2"

BILL NUMBER: AB 2358 AMENDED BILL TEXT

> AMENDED IN SENATE AUGUST 19, 2010 AMENDED IN SENATE JUNE 22, 2010 AMENDED IN SENATE JUNE 3, 2010

INTRODUCED BY Assembly Member De Leon

FEBRUARY 19, 2010

An act to amend Sections 12061 -and 12318- , 12318, and 12323 of the Penal Code, relating to ammunition.

LEGISLATIVE COUNSEL'S DIGEST

AB 2358, as amended, De Leon. Ammunition.

Existing law provides that commencing February 1, 2011, a vendor shall not sell or otherwise transfer ownership of any handgun ammunition without, at the time of delivery, legibly recording specified information regarding the purchaser or transferee, and maintaining the record for a period of not less than 5 years, as specified. Existing law provides that violation of these provisions is a misdemeanor. Existing law also provides that the records shall be subject to inspection by any peace officer and certain others, as specified, for purposes of an investigation where access to those records is or may be relevant to that investigation, when seeking information about persons prohibited from owning a firearm or ammunition, or when engaged in ensuring compliance with laws pertaining to firearms or ammunition, as specified.

This bill would require the information described above in connection with the transfer of handgun ammunition be legibly or electronically recorded. The bill would provide that commencing February 1, 2011, except for investigatory and enforcement purposes described above, no ammunition vendor shall provide the required information to any 3rd party without the written consent of the purchaser or transferee. The bill would also provide that records may be copied for investigatory or enforcement purposes by any person authorized to inspect those records, as specified, and that copies shall be transmitted to local law enforcement if required by local law. The bill would also provide that any required ammunition records that are no longer required to be maintained shall be destroyed in a manner that protects the privacy of the purchaser or transferee who is the subject of the record. The bill would provide that violation of these provisions is a misdemeanor.

By expanding the scope of an existing crime, this bill would impose a state-mandated local program.

The bill would require ammunition vendors, commencing February 1, 2011, to provide written notice to the local police chief, or if the vendor is in an unincorporated area, to the county sheriff, of the vendor's intent to conduct business in the jurisdiction, and to

This bill would also provide that handgun ammunition may be purchased over the Internet or through other means of remote ordering if a handgun ammunition vendor in California initially receives the ammunition and processes the transfer, as specified.

Existing law defines "handgun ammunition" for most purposes as ammunition principally for use in handguns, notwithstanding that the ammunition may also be used in some rifles.

This bill would instead define "handgun ammunition" for those purposes as any variety of ammunition of a caliber specified in a list added by this bill, notwithstanding that the ammunition may also be used in some rifles, and would provide that "handgun ammunition" does not include blanks or ammunition designed and intended to be used in an "antique firearm," as defined.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Section 12061 of the Penal Code is amended to read: 12061. (a) A vendor shall comply with all of the following conditions, requirements and prohibitions:

(1) A vendor shall not permit any employee who the vendor knows or reasonably should know is a person described in Section 12021 or 12021.1 of this code or Section 8100 or 8103 of the Welfare and Institutions Code to handle, sell, or deliver handgun ammunition in the course and scope of his or her employment.

(2) A vendor shall not sell or otherwise transfer ownership of, offer for sale or otherwise offer to transfer ownership of, or display for sale or display for transfer of ownership of any handgun ammunition in a manner that allows that ammunition to be accessible to a purchaser or transferee without the assistance of the vendor or employee thereof.

(3) Commencing February 1, 2011, a vendor shall not sell or otherwise transfer ownership of any handgun ammunition without, at the time of delivery, legibly or electronically recording the following information:

(A) The date of the sale or other transaction.

(B) The purchaser's or transferee's driver's license or other identification number and the state in which it was issued.

(C) The brand, type, and amount of ammunition sold or otherwise transferred.

(D) The purchaser's or transferee's signature.

(E) The name of the salesperson who processed the sale or other transaction.

(F) The right thumbprint of the purchaser or transferee on the above form.

(G) The purchaser's or transferee's full residential address and telephone number.

(H) The purchaser's or transferee's date of birth.

(4) Commencing February 1, 2011, the records required by this section shall be maintained on the premises of the vendor for a period of not less than five years from the date of the recorded transfer. Commencing February 1, 2011, except for the purposes set

http://www.leginfo.ca.gov/pub/09-10/bill/asm/ab_2351-2400/ab_2358_bill_20100819_ame... 9/6/2010

forth in paragraph (5), no vendor shall provide the information specified in paragraph (3) to any third party without the written consent of the purchaser or transferee. Any records required by this section that are no longer required to be maintained shall be destroyed in a manner that protects the privacy of the purchaser or transferee who is the subject of the record.

(5) Commencing February 1, 2011, the records referred to in paragraph (3) shall be subject to inspection at any time during normal business hours by any peace officer employed by a sheriff, city police department, or district attorney as provided in subdivision (a) of Section 830.1, or employed by the department as provided in subdivision (b) of Section 830.1, provided the officer is conducting an investigation where access to those records is or may be relevant to that investigation, is seeking information about persons prohibited from owning a firearm or ammunition, or is engaged in ensuring compliance with the Dangerous Weapons Control Law (Chapter 1 (commencing with Section 12000) of Title 2 of Part 4), or any other laws pertaining to firearms or ammunition. The records shall also be subject to inspection at any time during normal business hours by any other employee of the department, provided that employee is conducting an investigation where access to those records is or may be relevant to that investigation, is seeking information about persons prohibited from owning a firearm or ammunition, or is engaged in ensuring compliance with the Dangerous Weapons Control Law (Chapter 1 (commencing with Section 12000) of Title 2 of Part 4), or any other laws pertaining to firearms or ammunition. Records may be copied for investigatory or enforcement purposes by any person authorized to inspect those records pursuant to this subdivision.

(6) Commencing February 1, 2011, the vendor shall not knowingly make a false entry in, fail to make a required entry in, fail to obtain the required thumbprint, or otherwise fail to maintain in the required manner records prepared in accordance with paragraph (2). If the right thumbprint is not available, then the vendor shall have the purchaser or transferee use his or her left thumb, or any available finger, and shall so indicate on the form. If the purchaser or transferee is physically unable to provide a thumbprint or fingerprint, the vendor shall so indicate on the form.

(7) Commencing February 1, 2011, no vendor shall refuse to permit a person authorized under paragraph (5) to examine any record prepared in accordance with this section during any inspection conducted pursuant to this section, or refuse to permit the use of any record or information by those persons.

(8) Commencing February 1, 2011, a vendor shall provide written notice to the local police chief, or if the vendor is in an unincorporated area, to the county sheriff, of the vendor's intent to conduct business in the jurisdiction, and shall obtain any regulatory or business license required by the jurisdiction for ammunition sellers. Copies of the ammunition sales records required by this section shall be transmitted to the county sheriff or chief of police if required by local law.

(b) Paragraph (3) of subdivision (a) shall not apply to or affect sales or other transfers of ownership of handgun ammunition by handgun ammunition vendors to any of the following, if properly identified:

(1) A person licensed pursuant to Section 12071.

(2) A handgun ammunition vendor.

(3) A person who is on the centralized list maintained by the department pursuant to Section 12083.

(4) A target facility which holds a business or regulatory

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license.

(5) Gunsmiths.

(6) Wholesalers.

(7) Manufacturers or importers of firearms licensed pursuant to Chapter 44 (commencing with Section 921) of Title 18 of the United States Code, and the regulations issued pursuant thereto.

(8) Sales or other transfers of ownership made to authorized law enforcement representatives of cities, counties, cities and counties, or state or federal governments for exclusive use by those government agencies if, prior to the delivery, transfer, or sale of handgun ammunition, written authorization from the head of the agency authorizing the transaction is presented to the person from whom the purchase, delivery, or transfer is being made. Proper written authorization is defined as verifiable written certification from the head of the agency by which the purchaser, transferee, or person otherwise acquiring ownership is employed, identifying the employee as an individual authorized to conduct the transaction, and authorizing the transaction for the exclusive use of the agency by which he or she is employed.

(c) (1) A violation of paragraph (3), (4), (6), or (7) of subdivision (a) is a misdemeanor.

(2) The provisions of this subdivision are cumulative, and shall not be construed as restricting the application of any other law. However, an act or omission punishable in different ways by different provisions of law shall not be punished under more than one provision.

SEC. 2. Section 12318 of the Penal Code is amended to read: 12318. (a) Commencing February 1, 2011, the delivery or transfer of ownership of handgun ammunition in this state may only occur in a face-to-face transaction with the deliverer or transferor being provided bona fide evidence of identity from the purchaser or other transferee, provided, however, that handgun ammunition may be purchased over the Internet or through other means of remote ordering if a handgun ammunition vendor in California initially receives the ammunition and processes the transfer in compliance with this section and Section 12061. A violation of this section is a misdemeanor.

(b) For purposes of this section:

(1) "Bona fide evidence of identity" means a document issued by a federal, state, county, or municipal government, or subdivision or agency thereof, including, but not limited to, a motor vehicle operator's license, state identification card, identification card issued to a member of the Armed Forces, or other form of identification that bears the name, date of birth, description, and picture of the person.

(2) "Handgun ammunition" means handgun ammunition as defined in subdivision (a) of Section -12323, but excluding ammunition designed and intended to be used in an "antique firearm" as defined in Section 921(a) (16) of Title 18 of the United States Code. Handgun ammunition does not include blanks. 12323.

(3) "Handgun ammunition vendor" has the same meaning as set forth in Section 12060.

(c) Subdivision (a) shall not apply to or affect the deliveries, transfers, or sales of, handgun ammunition to any of the following:

(1) Authorized law enforcement representatives of cities, counties, cities and counties, or state and federal governments for exclusive use by those government agencies if, prior to the delivery, transfer, or sale of the handgun ammunition, written authorization from the head of the agency employing the purchaser or transferee, is obtained identifying the employee as an individual authorized to conduct the transaction, and authorizing the transaction for the

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exclusive use of the agency employing the individual. (2) Sworn peace officers, as defined in Chapter 4.5 (commencing with Section $\overline{830}$) of Title 3 of Part 2 who are authorized to carry a firearm in the course and scope of their duties. (3) Importers and manufacturers of handgun ammunition or firearms licensed to engage in business pursuant to Chapter 44 (commencing with Section 921) of Title 18 of the United States Code and the regulations issued pursuant thereto. (4) Persons who are on the centralized list maintained by the Department of Justice pursuant to Section 12083. (5) Persons whose licensed premises are outside this state who are licensed as dealers or collectors of firearms pursuant to Chapter 44 (commencing with Section 921) of Title 18 of the United States Code and the regulations issued pursuant thereto. -----(5) Persons licensed as dealers or collectors of firearms pursuant to Chapter 44 (commencing with Section 921) of Title 18 of the United States Code and the regulations issued pursuant thereto -whose licensed premises are within this state who has a who have current -certificate certificates of eligibility issued to him or her them by the Department of Justice pursuant to Section 12071. ---(7) (6) A handgun ammunition vendor. (8) (7) A consultant-evaluator, as defined in subdivision (s) of Section 12001. SEC. 3. Section 12323 of the Penal Code is amended to read: 12323. As used in this chapter, the following definitions shall apply: (a) "Handgun -ammunition" a mmunition, " which does not include blanks and ammunition designed and intended to be used in an "antique firearm" as defined in Section 921(a)(16) of Title 18 of the United States Code, means ammunition principally for use in pistols, revolvers, and other firearms capable of being concealed upon the person, as defined in subdivision (a) of Section 12001, notwithstanding that the ammunition may also be used in some rifles. any variety of ammunition in the following calibers, notwithstanding that the ammunition may also be used in some rifles: (1) .22. (2) .25. (3) .32. (4) .38. (5) .9mm. (6) .10mm. (7) .40. (8) .41. (9) .44. (10) .45. (11) 5.7x28mm. (12) . 223. (13) .357. (14) .454. (15) 5.56x45mm. (16) 7.62x39. (17) 7.63mm.

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(18) 7.65mm.

(19) .50.

(b) "Handgun ammunition designed primarily to penetrate metal or armor" means any ammunition, except a shotgun shell or ammunition primarily designed for use in rifles, that is designed primarily to penetrate a body vest or body shield, and has either of the following characteristics:

(1) Has projectile or projectile core constructed entirely, excluding the presence of traces of other substances, from one or a combination of tungsten alloys, steel, iron, brass, beryllium copper, or depleted uranium, or any equivalent material of similar density or hardness.

(2) Is primarily manufactured or designed, by virtue of its shape, cross-sectional density, or any coating applied thereto, including, but not limited to, ammunition commonly known as "KTW ammunition," to breach or penetrate a body vest or body shield when fired from a pistol, revolver, or other firearm capable of being concealed upon the person.

(c) "Body vest or shield" means any bullet-resistant material intended to provide ballistic and trauma protection for the wearer or holder.

(d) "Rifle" shall have the same meaning as defined in paragraph (20) of subdivision (c) of Section 12020.

-SEC. J. SEC. 4. No reimbursement is

required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.

EXHIBIT "3"

BILL NUMBER: AB 2358 AMENDED BILL TEXT

AMENDED IN SENATEAUGUST 30, 2010AMENDED IN SENATEAUGUST 19, 2010AMENDED IN SENATEJUNE 22, 2010AMENDED IN SENATEJUNE 3, 2010

INTRODUCED BY Assembly Member De Leon

FEBRUARY 19, 2010

An act to amend Sections 12061 $\ , \ 12077$, 12318, and 12323 of the Penal Code, relating to ammunition.

LEGISLATIVE COUNSEL'S DIGEST

AB 2358, as amended, De Leon. Ammunition.

Existing law provides that commencing February 1, 2011, a vendor shall not sell or otherwise transfer ownership of any handgun ammunition without, at the time of delivery, legibly recording specified information regarding the purchaser or transferee, and maintaining the record for a period of not less than 5 years, as specified. Existing law provides that violation of these provisions is a misdemeanor. Existing law also provides that the records shall be subject to inspection by any peace officer and certain others, as specified, for purposes of an investigation where access to those records is or may be relevant to that investigation, when seeking information about persons prohibited from owning a firearm or ammunition, or when engaged in ensuring compliance with laws pertaining to firearms or ammunition, as specified.

This bill would require the information described above in connection with the transfer of handgun ammunition be legibly or electronically recorded. The bill would provide that commencing February 1, 2011, except for investigatory and enforcement purposes described above, no ammunition vendor shall provide the required information to any 3rd party without the written consent of the purchaser or transferee. The bill would also provide that records may be copied for investigatory or enforcement purposes by any person authorized to inspect those records, as specified, and that copies shall be transmitted to local law enforcement if required by local law. The bill would also provide that any required ammunition records that are no longer required to be maintained shall be destroyed in a manner that protects the privacy of the purchaser or transferee who is the subject of the record. The bill would provide that violation of these provisions is a misdemeanor. This bill would provide that commencing February 1, 2011, except for investigatory and enforcement purposes described above, no ammunition vendor shall provide the required information to any 3rd party, or use the information for any purpose other than as is required or authorized by statute or regulation, without the written consent of the purchaser or transferee. The bill would also provide that any required ammunition records that are no longer required to be maintained shall be destroyed in a specified manner. The bill would provide that violation of these provisions is a misdemeanor.

By expanding the scope of an existing crime, this bill would impose a state-mandated local program.

The bill would require ammunition vendors, commencing February 1,

2011, to provide written notice to the local police chief, or if the vendor is in an unincorporated area, to the county sheriff, of the vendor's intent to conduct business in the jurisdiction, and to obtain any regulatory or business license required by the jurisdiction for ammunition sellers. A violation of this provision would be a misdemeanor. The bill would also provide that no public agency may make public the information obtained from the record of the ammunition transaction.

Existing law requires certain information to be collected by firearms dealers in connection with the transfer of firearms and submitted to the Department of Justice, as specified.

This bill would provide that no firearms dealer shall provide the information required by those provisions to any 3rd party, or use the information for any purpose other than as is required or authorized by statute or regulation, without the written consent of the purchaser or transferee, except for purposes of 3rd-party electronic submission to the department. The bill would also provide that any of these records that are no longer required to be maintained, if destroyed, shall be destroyed in a specified manner.

Existing law provides that commencing February 1, 2011, the delivery or transfer of ownership of handgun ammunition may only occur in a face-to-face transaction with the deliverer or transferor being provided bona fide evidence of identity from the purchaser or other transferee.

This bill would also provide that handgun ammunition may be purchased over the Internet or through other means of remote ordering if a handgun ammunition vendor in California initially receives the ammunition and processes the transfer, as specified.

Existing law defines "handgun ammunition" for most purposes as ammunition principally for use in handguns, notwithstanding that the ammunition may also be used in some rifles.

This bill would instead define "handgun ammunition" for those purposes as any variety of ammunition of a caliber specified in a list added by this bill, notwithstanding that the ammunition may also be used in some rifles, and would provide that "handgun ammunition" does not include blanks or ammunition designed and intended to be used in an "antique firearm," as defined.

This bill would incorporate additional amendments to Section 12077 of the Penal Code proposed by AB 1810, contingent on the prior enactment of that bill.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Section 12061 of the Penal Code is amended to read: 12061. (a) A vendor shall comply with all of the following conditions, requirements , and prohibitions:

(1) A vendor shall not permit any employee who the vendor knows or reasonably should know is a person described in Section 12021 or 12021.1 of this code or Section 8100 or 8103 of the Welfare and Institutions Code to handle, sell, or deliver handgun ammunition in the course and scope of his or her employment.

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(2) A vendor shall not sell or otherwise transfer ownership of, offer for sale or otherwise offer to transfer ownership of, or display for sale or display for transfer of ownership of any handgun ammunition in a manner that allows that ammunition to be accessible to a purchaser or transferee without the assistance of the vendor or employee thereof.

(3) Commencing February 1, 2011, a vendor shall not sell or otherwise transfer ownership of any handgun ammunition without, at the time of delivery, legibly or electronically recording the following information:

(A) The date of the sale or other transaction.

(B) The purchaser's or transferee's driver's license or other identification number and the state in which it was issued.

(C) The brand, type, and amount of ammunition sold or otherwise transferred.

(D) The purchaser's or transferee's signature.

(E) The name of the salesperson who processed the sale or other transaction.

(F) The right thumbprint of the purchaser or transferee on the above form.

(G) The purchaser's or transferee's full residential address and telephone number.

(H) The purchaser's or transferee's date of birth.

(4) (A) Commencing February 1, 2011, the

records required by this section shall be maintained on the premises of the vendor for a period of not less than five years from the date of the recorded transfer. Commencing February 1, 2011, except for the purposes set forth in paragraph (5), no vendor shall provide the information <u>specified in paragraph (3) to any third party</u> without the written consent of the purchaser or transferee. Any records required by this section that are no longer required to be maintained shall be destroyed in a manner that protects the privacy of the purchaser or transferee who is the subject of the record.

specified in paragraph (3) to any third party, or use the information for any purpose other than as is required or authorized by statute or regulation, without the written consent of the purchaser or transferee of the handgun ammunition who is the subject of the record.

(B) Any records generated pursuant to this section that are no longer required to be maintained shall be destroyed pursuant to Section 1798.81 of the Civil Code.

(5) Commencing February 1, 2011, the records referred to in paragraph (3) shall be subject to inspection at any time during normal business hours by any peace officer employed by a sheriff, city police department, or district attorney as provided in subdivision (a) of Section 830.1, or employed by the department as provided in subdivision (b) of Section 830.1, provided the officer is conducting an investigation where access to those records is or may be relevant to that investigation, is seeking information about persons prohibited from owning a firearm or ammunition, or is engaged in ensuring compliance with the Dangerous Weapons Control Law (Chapter 1 (commencing with Section 12000) of Title 2 of Part 4), or any other laws pertaining to firearms or ammunition. The records shall also be subject to inspection at any time during normal business hours by any other employee of the department, provided that employee is conducting an investigation where access to those records is or may be relevant to that investigation, is seeking information about persons prohibited from owning a firearm or ammunition, or is engaged in ensuring compliance with the Dangerous Weapons Control Law (Chapter 1 (commencing with Section 12000) of

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Title 2 of Part 4), or any other laws pertaining to firearms or ammunition. Records may be copied for investigatory or enforcement purposes by any person authorized to inspect those records pursuant to this subdivision.

(6) Commencing February 1, 2011, the vendor shall not knowingly make a false entry in, fail to make a required entry in, fail to obtain the required thumbprint, or otherwise fail to maintain in the required manner records prepared in accordance with paragraph (2). If the right thumbprint is not available, then the vendor shall have the purchaser or transferee use his or her left thumb, or any available finger, and shall so indicate on the form. If the purchaser or transferee is physically unable to provide a thumbprint or fingerprint, the vendor shall so indicate on the form.

(7) Commencing February 1, 2011, no vendor shall refuse to permit a person authorized under paragraph (5) to examine any record prepared in accordance with this section during any inspection conducted pursuant to this section, or refuse to permit the use of any record or information by those persons.

(8) Commencing February 1, 2011, a vendor shall provide written notice to the local police chief, or if the vendor is in an unincorporated area, to the county sheriff, of the vendor's intent to conduct business in the jurisdiction, and shall obtain any regulatory or business license required by the jurisdiction for ammunition sellers. Copies of the ammunition sales records required by this section shall be transmitted to the county sheriff or chief of police if required by local law.

(b) Paragraph (3) of subdivision (a) shall not apply to or affect sales or other transfers of ownership of handgun ammunition by handgun ammunition vendors to any of the following, if properly identified:

(1) A person licensed pursuant to Section 12071.

(2) A handgun ammunition vendor.

(3) A person who is on the centralized list maintained by the department pursuant to Section 12083.

(4) A target facility which holds a business or regulatory license.

(5) Gunsmiths.

(6) Wholesalers.

(7) Manufacturers or importers of firearms licensed pursuant to Chapter 44 (commencing with Section 921) of Title 18 of the United States Code, and the regulations issued pursuant thereto.

(8) Sales or other transfers of ownership made to authorized law enforcement representatives of cities, counties, cities and counties, or state or federal governments for exclusive use by those government agencies if, prior to the delivery, transfer, or sale of handgun ammunition, written authorization from the head of the agency authorizing the transaction is presented to the person from whom the purchase, delivery, or transfer is being made. Proper written authorization is defined as verifiable written certification from the head of the agency by which the purchaser, transferee, or person otherwise acquiring ownership is employed, identifying the employee as an individual authorized to conduct the transaction, and authorizing the transaction for the exclusive use of the agency by which he or she is employed.

(c) No public agency may make public the information obtained from the record made pursuant to paragraph (3) of subdivision (a).

(c) (d) (1) A violation of paragraph (3), (4), (6), -or (7) (7), or (8) of subdivision (a)

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is a misdemeanor.

(2) The provisions of this subdivision are cumulative, and shall not be construed as restricting the application of any other law. However, an act or omission punishable in different ways by different provisions of law shall not be punished under more than one provision.

SEC. 2. Section 12077 of the Penal Code is amended to read:

12077. (a) The Department of Justice shall prescribe the form of the register and the record of electronic transfer pursuant to Section 12074.

(b) (1) For handguns, information contained in the register or record of electronic transfer shall be the date and time of sale, make of firearm, peace officer exemption status pursuant to subdivision (a) of Section 12078 and the agency name, dealer waiting period exemption pursuant to subdivision (n) of Section 12078, dangerous weapons permitholder waiting period exemption pursuant to subdivision (r) of Section 12078, curio and relic waiting period exemption pursuant to subdivision (t) of Section 12078, California Firearms Dealer number issued pursuant to Section 12071, for transactions occurring prior to January 1, 2003, the purchaser's basic firearms safety certificate number issued pursuant to Sections 12805 and 12809, for transactions occurring on or after January 1, 2003, the purchaser's handgun safety certificate number issued pursuant to Article 8 (commencing with Section 12800), manufacturer's name if stamped on the firearm, model name or number, if stamped on the firearm, if applicable, serial number, other number (if more than one serial number is stamped on the firearm), any identification number or mark assigned to the firearm pursuant to Section 12092, caliber, type of firearm, if the firearm is new or used, barrel length, color of the firearm, full name of purchaser, purchaser's complete date of birth, purchaser's local address, if current address is temporary, complete permanent address of purchaser, identification of purchaser, purchaser's place of birth (state or country), purchaser's complete telephone number, purchaser's occupation, purchaser's sex, purchaser's physical description, all legal names and aliases ever used by the purchaser, yes or no answer to questions that prohibit purchase including, but not limited to, conviction of a felony as described in Section 12021 or an offense described in Section 12021.1, the purchaser's status as a person described in Section 8100 of the Welfare and Institutions Code, whether the purchaser is a person who has been adjudicated by a court to be a danger to others or found not guilty by reason of insanity, whether the purchaser is a person who has been found incompetent to stand trial or placed under conservatorship by a court pursuant to Section 8103 of the Welfare and Institutions Code, signature of purchaser, signature of salesperson (as a witness to the purchaser's signature), salesperson's certificate of eligibility number if he or she has obtained a certificate of eligibility, name and complete address of the dealer or firm selling the firearm as shown on the dealer's license, the establishment number, if assigned, the dealer's complete business telephone number, any information required by Section 12082, any information required to determine whether or not paragraph (6) of subdivision (c) of Section 12072 applies, and a statement of the penalties for any person signing a fictitious name or address or for knowingly furnishing any incorrect information or for knowingly omitting any information required to be provided for the register.

(2) Effective January 1, 2003, the purchaser shall provide his or her right thumbprint on the register in a manner prescribed by the

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department. No exception to this requirement shall be permitted except by regulations adopted by the department.

(3) The firearms dealer shall record on the register or record of electronic transfer the date that the handgun is delivered.

(c) (1) For firearms other than handguns, information contained in the register or record of electronic transfer shall be the date and time of sale, peace officer exemption status pursuant to subdivision (a) of Section 12078 and the agency name, auction or event waiting period exemption pursuant to subdivision (g) of Section 12078, California Firearms Dealer number issued pursuant to Section 12071, dangerous weapons permitholder waiting period exemption pursuant to subdivision (r) of Section 12078, curio and relic waiting period exemption pursuant to paragraph (1) of subdivision (t) of Section 12078, full name of purchaser, purchaser's complete date of birth, purchaser's local address, if current address is temporary, complete permanent address of purchaser, identification of purchaser, purchaser's place of birth (state or country), purchaser's complete telephone number, purchaser's occupation, purchaser's sex, purchaser' s physical description, all legal names and aliases ever used by the purchaser, yes or no answer to questions that prohibit purchase, including, but not limited to, conviction of a felony as described in Section 12021 or an offense described in Section 12021.1, the purchaser's status as a person described in Section 8100 of the Welfare and Institutions Code, whether the purchaser is a person who has been adjudicated by a court to be a danger to others or found not guilty by reason of insanity, whether the purchaser is a person who has been found incompetent to stand trial or placed under conservatorship by a court pursuant to Section 8103 of the Welfare and Institutions Code, signature of purchaser, signature of salesperson (as a witness to the purchaser's signature), salesperson' s certificate of eligibility number if he or she has obtained a certificate of eligibility, name and complete address of the dealer or firm selling the firearm as shown on the dealer's license, the establishment number, if assigned, the dealer's complete business telephone number, any information required by Section 12082, and a statement of the penalties for any person signing a fictitious name or address or for knowingly furnishing any incorrect information or for knowingly omitting any information required to be provided for the register.

(2) Effective January 1, 2003, the purchaser shall provide his or her right thumbprint on the register in a manner prescribed by the department. No exception to this requirement shall be permitted except by regulations adopted by the department.

(3) The firearms dealer shall record on the register or record of electronic transfer the date that the firearm is delivered.

(d) Where the register is used, the following shall apply:

(1) Dealers shall use ink to complete each document.

(2) The dealer or salesperson making a sale shall ensure that all information is provided legibly. The dealer and salespersons shall be informed that incomplete or illegible information will delay sales.

(3) Each dealer shall be provided instructions regarding the procedure for completion of the form and routing of the form. Dealers shall comply with these instructions which shall include the information set forth in this subdivision.

(4) One firearm transaction shall be reported on each record of sale document. For purposes of this subdivision, a "transaction" means a single sale, loan, or transfer of any number of firearms that are not handguns.

(e) The dealer or salesperson making a sale shall ensure that all required information has been obtained from the purchaser. The dealer

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and all salespersons shall be informed that incomplete information will delay sales.

(f) Effective January 1, 2003, the purchaser's name, date of birth, and driver's license or identification number shall be obtained electronically from the magnetic strip on the purchaser's driver's license or identification and shall not be supplied by any other means except as authorized by the department. This requirement shall not apply in either of the following cases:

(1) The purchaser's identification consists of a military identification card.

(2) Due to technical limitations, the magnetic <u>stripe</u> strip reader is unable to obtain the required information from the purchaser's identification. In those circumstances, the firearms dealer shall obtain a photocopy of the identification as proof of compliance.

(3) In the event that the dealer has reported to the department that the dealer's equipment has failed, information pursuant to this subdivision shall be obtained by an alternative method to be determined by the department.

(g) No dealer shall provide the information required by this section to any third party, or use the information for any purpose other than as is required or authorized by statute or regulation, without the written consent of the purchaser or transferee. This subdivision shall not apply to the electronic submission to the department, through a third party authorized by the department, of information required by this section and Section 12076.

(h) Any records generated pursuant to this section by a person licensed pursuant to Section 12071 that are no longer required to be maintained by that licensee, if destroyed, shall be destroyed pursuant to Section 1798.81 of the Civil Code.

- (g)

(*i*) As used in this section, the following definitions shall control:

(1) "Purchaser" means the purchaser or transferee of a firearm or the person being loaned a firearm.

(2) "Purchase" means the purchase, loan, or transfer of a firearm.

 (3) "Sale" means the sale, loan, or transfer of a firearm. SEC. 2.5. Section 12077 of the Penal
 Code is amended to read:

12077. (a) The Department of Justice shall prescribe the form of the register and the record of electronic transfer pursuant to Section 12074.

(b) (1) - For handguns, - Until July 1, 2012,

for handguns, and thereafter for all firearms, information contained in the register or record of electronic transfer shall be the date and time of sale, make of firearm, peace officer exemption status pursuant to subdivision (a) of Section 12078 and the agency name, auction or event waiting period exemption pursuant to subdivision (g) of Section 12078, dealer waiting period exemption pursuant to subdivision (n) of Section 12078, dangerous weapons permitholder waiting period exemption pursuant to subdivision (r) of Section 12078, curio and relic waiting period exemption pursuant to subdivision (t) of Section 12078, California Firearms Dealer number issued pursuant to Section 12071, for transactions occurring prior to January 1, 2003, the purchaser's basic firearms safety certificate number issued pursuant to Sections 12805 and 12809, for transactions occurring on or after January 1, 2003, the purchaser's handgun safety certificate number issued pursuant to Article 8 (commencing with Section 12800), manufacturer's name if

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stamped on the firearm, model name or number, if stamped on the firearm, if applicable, serial number, other number (if more than one serial number is stamped on the firearm), any identification number or mark assigned to the firearm pursuant to Section 12092, provided, however, that if the firearm is not a handgun and does not have a serial number, identification number, or mark assigned to it, a notation as to that fact, the caliber, type of firearm, if the firearm is new or used, barrel length, color of the firearm, full name of purchaser, purchaser's complete date of birth, purchaser's local address, if current address is temporary, complete permanent address of purchaser, identification of purchaser, purchaser's place of birth (state or country), purchaser's complete telephone number, purchaser's occupation, purchaser's sex, purchaser's physical description, all legal names and aliases ever used by the purchaser, yes or no answer to questions that prohibit purchase including, but not limited to, conviction of a felony as described in Section 12021 or an offense described in Section 12021.1, the purchaser's status as a person described in Section 8100 of the Welfare and Institutions Code, whether the purchaser is a person who has been adjudicated by a court to be a danger to others or found not guilty by reason of insanity, whether the purchaser is a person who has been found incompetent to stand trial or placed under conservatorship by a court pursuant to Section 8103 of the Welfare and Institutions Code, signature of purchaser, signature of salesperson (as a witness to the purchaser's signature), salesperson's certificate of eligibility number if he or she has obtained a certificate of eligibility, name and complete address of the dealer or firm selling the firearm as shown on the dealer's license, the establishment number, if assigned, the dealer's complete business telephone number, any information required by Section 12082, any information required to determine whether or not paragraph (6) of subdivision (c) of Section 12072 applies, and a statement of the penalties for any person signing a fictitious name or address or for knowingly furnishing any incorrect information or for knowingly omitting any information required to be provided for the register.

(2) Bffective January 1, 2003, the The

purchaser shall provide his or her right thumbprint on the register in a manner prescribed by the department. No exception to this requirement shall be permitted except by regulations adopted by the department.

(3) The firearms dealer shall record on the register or record of electronic transfer the date that the <u>handgun</u> firearm is delivered.

(c) (1) For firearms other than handguns, information contained in the register or record of electronic transfer shall be the date and time of sale, peace officer exemption status pursuant to subdivision (a) of Section 12078 and the agency name, auction or event waiting period exemption pursuant to subdivision (g) of Section 12078, California Firearms Dealer number issued pursuant to Section 12071, dangerous weapons permitholder waiting period exemption pursuant to subdivision (r) of Section 12078, curio and relic waiting period exemption pursuant to paragraph (1) of subdivision (t) of Section 12078, full name of purchaser, purchaser's complete date of birth, purchaser's local address, if current address is temporary, complete permanent address of purchaser, identification of purchaser, purchaser's place of birth (state or country), purchaser's complete telephone number, purchaser's occupation, purchaser's sex, purchaser' s physical description, all legal names and aliases ever used by the purchaser, yes or no answer to questions that prohibit purchase, including, but not limited to, conviction of a felony as described in

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Section 12021 or an offense described in Section 12021.1, the purchaser's status as a person described in Section 8100 of the Welfare and Institutions Code, whether the purchaser is a person who has been adjudicated by a court to be a danger to others or found not guilty by reason of insanity, whether the purchaser is a person who has been found incompetent to stand trial or placed under conservatorship by a court pursuant to Section 8103 of the Welfare and Institutions Code, signature of purchaser, signature of salesperson (as a witness to the purchaser's signature), salesperson' s certificate of eligibility number if he or she has obtained a certificate of eligibility, name and complete address of the dealer or firm selling the firearm as shown on the dealer's license, the establishment number, if assigned, the dealer's complete business telephone number, any information required by Section 12082, and a statement of the penalties for any person signing a fictitious name or address or for knowingly furnishing any incorrect information or for knowingly omitting any information required to be provided for the register.

(2) Effective January 1, 2003, the The

purchaser shall provide his or her right thumbprint on the register in a manner prescribed by the department. No exception to this requirement shall be permitted except by regulations adopted by the department.

(3) The firearms dealer shall record on the register or record of electronic transfer the date that the firearm is delivered.

(4) This subdivision shall become inoperative on July 1, 2012.

(d) Where the register is used, the following shall apply:

(1) Dealers shall use ink to complete each document.

(2) The dealer or salesperson making a sale shall ensure that all information is provided legibly. The dealer and salespersons shall be informed that incomplete or illegible information will delay sales.

(3) Each dealer shall be provided instructions regarding the procedure for completion of the form and routing of the form. Dealers shall comply with these instructions which shall include the information set forth in this subdivision.

(4) One firearm transaction shall be reported on each record of sale document. For purposes of this subdivision, a "transaction" means a single sale, loan, or transfer of any number of firearms that are not handguns.

(e) The dealer or salesperson making a sale shall ensure that all required information has been obtained from the purchaser. The dealer and all salespersons shall be informed that incomplete information will delay sales.

(f) - Effective January 1, 2003, the The

purchaser's name, date of birth, and driver's license or identification number shall be obtained electronically from the magnetic strip on the purchaser's driver's license or identification and shall not be supplied by any other means except as authorized by the department. This requirement shall not apply in either of the following cases:

(1) The purchaser's identification consists of a military identification card.

(2) Due to technical limitations, the magnetic stripe strip reader is unable to obtain the required information from the purchaser's identification. In those circumstances, the firearms dealer shall obtain a photocopy of the identification as proof of compliance.

(3) In the event that the dealer has reported to the department that the dealer's equipment has failed, information pursuant to this

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subdivision shall be obtained by an alternative method to be determined by the department.

(g) No dealer shall provide the information required by this section to any third party, or use the information for any purpose other than as is required or authorized by statute or regulation, without the written consent of the purchaser or transferee. This subdivision shall not apply to the electronic submission to the department, through a third party authorized by the department, of information required by this section and Section 12076.

(h) Any records generated pursuant to this section by a person licensed pursuant to Section 12071 that are no longer required to be maintained by that licensee, if destroyed, shall be destroyed pursuant to Section 1798.81 of the Civil Code.

----(g)

(i) As used in this section, the following definitions shall control:

(1) "Purchaser" means the purchaser or transferee of a firearm or the person being loaned a firearm.

(2) "Purchase" means the purchase, loan, or transfer of a firearm.

12318. (a) Commencing February 1, 2011, the delivery or transfer of ownership of handgun ammunition in this state may only occur in a face-to-face transaction with the deliverer or transferor being provided bona fide evidence of identity from the purchaser or other transferee, provided, however, that handgun ammunition may be purchased over the Internet or through other means of remote ordering if a handgun ammunition vendor in California initially receives the ammunition and processes the transfer in compliance with this section and Section 12061. A violation of this section is a misdemeanor.

(b) For purposes of this section:

(1) "Bona fide evidence of identity" means a document issued by a federal, state, county, or municipal government, or subdivision or agency thereof, including, but not limited to, a motor vehicle operator's license, state identification card, identification card issued to a member of the Armed Forces, or other form of identification that bears the name, date of birth, description, and picture of the person.

(2) "Handgun ammunition" means handgun ammunition as defined in subdivision (a) of Section 12323.

(3) "Handgun ammunition vendor" has the same meaning as set forth in Section 12060.

(c) Subdivision (a) shall not apply to or affect the deliveries, transfers, or sales of, handgun ammunition to any of the following:

(1) Authorized law enforcement representatives of cities, counties, cities and counties, or state and federal governments for exclusive use by those government agencies if, prior to the delivery, transfer, or sale of the handgun ammunition, written authorization from the head of the agency employing the purchaser or transferee, is obtained identifying the employee as an individual authorized to conduct the transaction, and authorizing the transaction for the exclusive use of the agency employing the individual.

(2) Sworn peace officers, as defined in Chapter 4.5 (commencing with Section 830) of Title 3 of Part 2 who are authorized to carry a firearm in the course and scope of their duties.

(3) Importers and manufacturers of handgun ammunition or firearms licensed to engage in business pursuant to Chapter 44 (commencing with Section 921) of Title 18 of the United States Code and the

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regulations issued pursuant thereto. (4) Persons who are on the centralized list maintained by the Department of Justice pursuant to Section 12083. (5) Persons licensed as dealers or collectors of firearms pursuant to Chapter 44 (commencing with Section 921) of Title 18 of the United States Code and the regulations issued pursuant thereto who have current certificates of eligibility issued to them by the Department of Justice pursuant to Section 12071. (6) A handgun ammunition vendor. (7) A consultant-evaluator, as defined in subdivision (s) of Section 12001. - SEC. 4. Section 12323 of the Penal Code is amended to read: 12323. As used in this chapter, the following definitions shall apply: (a) "Handgun ammunition," which does not include blanks and ammunition designed and intended to be used in an "antique firearm" as defined in Section 921(a)(16) of Title 18 of the United States Code, meansany variety of ammunition in the following calibers, notwithstanding that the ammunition may also be used in some rifles: (1) .22 rimfire (2) .25. (3) .32. (4) .38. (5) .9mm. (6) .10mm. (7) .40. (8) .41. (9).44. (10) .45. (11) 5.7x28mm. (12) .223. (13)(12) .357. (14)(13) .454. (15)(14) 5.56x45mm. (16) -7.62x39. (17)(15) 7.63mm. (10)(16) 7.65mm. (19) .50. (b) "Handgun ammunition designed primarily to penetrate metal or armor" means any ammunition, except a shotgun shell or ammunition

armor" means any ammunition except a shotgun shell or ammunition primarily designed for use in rifles, that is designed primarily to penetrate a body vest or body shield, and has either of the following characteristics:

(1) Has projectile or projectile core constructed entirely, excluding the presence of traces of other substances, from one or a combination of tungsten alloys, steel, iron, brass, beryllium copper, or depleted uranium, or any equivalent material of similar density or hardness.

(2) Is primarily manufactured or designed, by virtue of its shape, cross-sectional density, or any coating applied thereto, including, but not limited to, ammunition commonly known as "KTW ammunition," to breach or penetrate a body vest or body shield when fired from a pistol, revolver, or other firearm capable of being concealed upon the person.

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(c) "Body vest or shield" means any bullet-resistant material intended to provide ballistic and trauma protection for the wearer or holder.

(d) "Rifle" shall have the same meaning as defined in paragraph (20) of subdivision (c) of Section 12020.

SEC. 5. Section 2.5 of this bill incorporates amendments to Section 12077 of the Penal Code proposed by both this bill and AB 1810. It shall only become operative if (1) both bills are enacted and become effective on or before January 1, 2011, (2) each bill amends Section 12077 of the Penal Code, and (3) this bill is enacted after AB 1810, in which ca se Section 2 of this bill shall not become operative.

BEC. 4. SEC. 6. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.

EXHIBIT "4"

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COMPLETE BILL HISTORY
 BILL NUMBER : A.B. No. 2358
 AUTHOR : De Leon
 TOPIC : Ammunition.
 TYPE OF BILL :
                 Active
                 Non-Urgency
                 Non-Appropriations
                 Majority Vote Required
                 State-Mandated Local Program
                 Fiscal
                 Non-Tax Levy
BILL HISTORY
2010
Aug. 31 Withdrawn from committee. Ordered to third reading. Read third
         time, passage refused. (Ayes 20. Noes 17.)
Aug. 30 Senate Rule 29.3(b) suspended. (Ayes 21. Noes 13.) From committee
         chair, with author's amendments: Amend, and re-refer to committee.
         Read second time, amended, and re-referred to Com. on RLS.
Aug. 27 Re-referred to Com. on RLS.
Aug. 23 From committee: Return to Senate floor for consideration. (Ayes 4.
        Noes 2.) Ordered to third reading.
Aug. 20 Read second time. To third reading. Re-referred to Com. on RLS.
        pursuant to Senate Rule 29.10. From committee: Be re-referred to
        Com. on PUB. S. pursuant to Senate Rule 29.10. (Ayes 3. Noes 0.)
        Re-referred to Com. on PUB. S.
Aug. 19 Read third time, amended. To second reading.
Aug. 3 Read second time. To third reading.
Aug. 2 From committee: Be placed on second reading file pursuant to Senate
        Rule 28.8.
June 22 Read second time and amended. Re-referred to Com. on APPR.
June 21 From committee: Amend, do pass as amended, and re-refer to Com. on
        APPR. (Ayes 5. Noes 2.) (June 15).
June 3 From committee chair, with author's amendments: Amend, and re-refer
        to committee. Read second time, amended, and re-referred to Com. on
        PUB. S.
May 20 Referred to Com. on PUB. S.
May 6
        In Senate. Read first time. To Com. on RLS. for assignment.
        Read third time, passed, and to Senate. (Ayes 43. Noes 30. Page
May 6
        5049.)
Mav 3
      Read second time. To third reading.
Apr. 29 From committee: Do pass. (Ayes 10. Noes 5.) (April 28).
Apr. 14 From committee: Do pass, and re-refer to Com. on APPR.
Re-referred. (Ayes 5. Noes 2.) (April 13).
Mar. 11 Referred to Com. on PUB. S.
Feb. 22 Read first time.
Feb. 21 From printer. May be heard in committee March 23.
Feb. 19 Introduced. To print.
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EXHIBIT "5"



LEGISLATIVE INTENT SERVICE, INC.

712 Main Street, Suite 200, Woodland, CA 95695 (800) 666-1917 • Fax (530) 668-5866 • www.legintent.com

LEGISLATIVE HISTORY REPORT AND ANALYSIS

Re: Senate Bill 1276 (Hart – 1994) Unsuccessful Legislation

Our File No.: 1028905

The legislative history of the above-referenced bill is documented by materials[•] itemized in one declaration.

<u>SENATE BILL 1276 (HART – 1994)</u>

Senate Bill 1276 of 1994 was a failed measure that proposed to amend and add sections of the Penal Code relating to ammunition as last amended on May 26, 1994. (See Exhibit #1d) Senator Gary Hart introduced this measure on January 4, 1994 of his own volition. (See Exhibits #1a and #3)

Senate Bill 1276 was assigned to the Senate Committee on Judiciary where policy issues raised by the bill were considered. (See Exhibit #3) The fiscal ramifications of the bill were considered by the Senate Committee on Appropriations. (See Exhibit #5) Three amendments were made to Senate Bill 1276. (See Exhibits #1b through #1d and #2) Senate Bill 1276 was never approved by the Senate and subsequently died. (See Exhibit #2)

As last amended, the Senate Appropriations Committee Fiscal Summary described this bill as making "various changes to laws regarding firearms, ammunition, possession of a firearms and the sale of firearms and ammunition" (See Exhibit #5, page 1)

The Senate Committee on Judiciary analysis set forth the purpose of this legislation as follows:

The purpose of this bill is to place restrictions on the sale of firearms ammunition which are somewhat similar to the existing restrictions on the sale of firearms in California; to ban handgun bullets which can pierce body armor; to ban the sale of specific

[•] For information on document numbers, research policies, request for judicial notice and more, please visit <u>www.legintent.com</u> and click on the links "**How to Use Our Materials**" on the Home page and "**Points and Authorities**" on the State or Federal Research menu.

incendiary ammunition and ammunition which is designed to expel metal balls connected by metal wire; and to require a specified license of persons who possess more than 1,000 rounds of firearm ammunition. (See Exhibit #3, page 4)

This same analysis noted a long list of supporters, including the Los Angeles County District Attorney's Office, the Santa Cruz County Board of Supervisors, and the legal Community Against Violence, just to name a few. (See Exhibit #3, page 1) Those opposing Senate Bill 1276 were the National Rifle Association of America, the Attorney general, and the California Rifle and Pistol Association, Inc. (Id.)

Eventually, this bill was held in committee without further action. (See Exhibit #2)

Your careful review of the documents enclosed may reveal helpful discussion on the issue before you. You should also be able to draw some conclusions based upon the assumption that the language was intended to be consistent with the overall goal of the legislation. Thus, if you are unable to find specific discussion regarding your research question, the analyses contained in the legislative bill files enclosed herewith may provide you with an arguable assessment of the goals and purpose that could be applicable to your particular situation.

The language you are investigating may be affected by bills, pending or enacted, in the current legislative session. We do not ordinarily review for current session bills, but will do so upon request.

Any analysis provided in this report is based upon the nature and extent of your request to us, as well as a brief review of the enclosed documents. As such, it must be considered tentative in nature. A more conclusive statement of the impact of the legislative history in your case would be dependent upon a complete understanding of all of the factual issues involved and the applicable legal principles.

We appreciate the opportunity to provide this assistance and hope that these efforts will be of value to you.

Prepared by: MARIA A. SANDERS, Attorney at Law/jb/eg; File no.: 1028905 W:\Worldox\WDOCS\WORKPROD\00171\09235\00116354.DOC

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DECLARATION OF MARIA A. SANDERS

I, Maria A. Sanders, declare:

I am an attorney licensed to practice in California, State Bar No. 092900, and am employed by Legislative Intent Service, Inc., a company specializing in researching the history and intent of legislation.

Under my direction and the direction of other attorneys on staff, the research staff of Legislative Intent Service, Inc. undertook to locate and obtain all documents relevant to the Legislature's consideration of Senate Bill 1276 of 1994. Senate Bill 1276 failed to pass the Senate.

The following list identifies all documents obtained by the staff of Legislative Intent Service, Inc. on Senate Bill 1276 of 1994. All listed documents have been forwarded with this Declaration except as otherwise noted in this Declaration. All documents gathered by Legislative Intent Service, Inc. and all copies forwarded with this Declaration are true and correct copies of the originals located by Legislative Intent Service, Inc. In compiling this collection, the staff of Legislative Intent Service, Inc. operated under directions to locate and obtain all available material on the bill.

SENATE BILL 1276 OF 1994:

- 1. All versions of Senate Bill 1276 (Hart-1994);
- 2. Procedural history of Senate Bill 1276 from the 1993-94 Senate Final History;
- 3. Analysis of Senate Bill 1276 prepared for the Senate Committee on Judiciary;
- 4. Material from the legislative bill file of the Senate Committee on Judiciary on Senate Bill 1276;
- 5. Fiscal summary of Senate Bill 1276 prepared by the Senate Committee on Appropriations;
- 6. Material from the legislative bill file of the Senate Committee on Appropriations on Senate Bill 1276;
- 7. Material from the legislative bill file of the Office of the Senate Floor Analyses on Senate Bill 1276.

Page 1 of 2

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct. Executed this 18th day of February, 2010 at Woodland, California.

Maria a. landa

MARIA A. SANDERS

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SB 1276 (Hart) As amended March 24, 1994 Hearing date: April 4, 1994 Penal Code SAH:rs

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FIREARMS AMMUNITION - RESTRICTIONS ON POSSESSION AND SALE

HISTORY

Source: Author

Prior Legislation: None

- Support: Los Angeles County District Attorney's Office; California District, American Academy of Pediatrics; Chinese for Affirmative Action; Santa Cruz County Board of Supervisors; Criminal Justice Council of Santa Cruz County; Children Now; Lutheran Office of Public Policy -California; California School Employees Association; California Academy of Family Physicians; Handgun Control, Inc.; Legal Community Against Violence
- Opposition: National Rifle Association of America; Attorney General; California Rifle and Pistol Association, Inc.

KEY ISSUES

SHOULD FIREARM AMMUNITION CONTAINING EXOTHERMIC PYROPHORIC MISCH METAL AS THE PROJECTILE WHICH IS DESIGNED TO SIMULATE A FLAMETHROWER AND AMMUNITION CAPABLE OF EXPELLING METAL BALLS CONNECTED BY A WIRE BOTH BE ADDED TO THE LIST OF PROHIBITED AMMUNITION IN CALIFORNIA?

SHOULD PERSONS CURRENTLY PROHIBITED FROM OWNING OR POSSESSING FIREARMS ALSO BE PROHIBITED FROM OWNING OR POSSESSING FIREARM AMMUNITION?

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SHOULD EXISTING SENTENCE ENHANCEMENTS FOR A PERSON WHO FURNISHES FIREARMS TO ANOTHER DURING THE COMMISSION OF A FELONY BE EXTENDED TO ALSO INCLUDE FURNISHING FIREARMS AMMUNITION IN THE SAME SITUATIONS?

SHOULD THE SALE OF FIREARMS AMMUNITION IN CALIFORNIA BE INCLUDED IN VARIOUS EXISTING LICENSING REQUIREMENTS FOR THE SALE OF FIREARMS SO THAT THE SALE OF BOTH FIREARMS AND AMMUNITION ARE TREATED IN A MORE SIMILAR MANNER. SO THAT ONLY LICENSED FIREARMS DEALERS COULD SELL AMMUNITION?

SHOULD ANY PERSON SEEKING TO PURCHASE HANDGUN AMMUNITION - EXCEPT FOR SPECIFIED PEACE OFFICERS - COMMENCING JULY 1, 1996, BE REQUIRED TO PRESENT A VALID CALIFORNIA HANDGUN LICENSE?

SHOULD IT BE A MISDEMEANOR TO KNOWINGLY RECEIVE HANDGUN AMMUNITION THROUGH THE MAIL, EFFECTIVE JULY 1, 1996? SHOULD PERSONS SEEKING TO PURCHASE HANDGUN AMMUNITION THROUGH THE MAIL BE REQUIRED TO GO TO A DEALER TO COMPLETE SUCH A PURCHASE?

SHOULD FIREARMS DEALERS BE PROHIBITED FROM EMPLOYING ANY SALES PERSONS UNDER THE AGE OF 21 IF THE DEALER SELLS HANDGUNS AND UNDER THE AGE OF 18 IF THEY DO NOT SELL HANDGUNS? SHOULD FIREARMS DEALERS BE PROHIBITED FROM EMPLOYING ANY PERSON WHO WOULD GENERALLY BE PROHIBITED FROM PURCHASING OR POSSESSING FIREARMS? SHOULD FIREARMS DEALERS BE REQUIRED TO SUBMIT THE NAMES OF PROPOSED EMPLOYEES TO THE DEPARTMENT OF JUSTICE FOR A BACKGROUND CHECK AND WAIT 15 DAYS BEFORE HIRING NEW EMPLOYEES?

PURPOSE

(1) Under existing law, any firearms ammunition that contains or consists of any flechette dart is generally prohibited in California with violations punishable by imprisonment in a county jail not exceeding one year, or in the state prison.

This bill would also prohibit any firearm ammunition that contains exothermic pyrophoric misch metal as the projectile and that is designed for the sole purpose of throwing or spewing a flame or fireball to simulate a flamethrower, or any firearm ammunition that can be fired in a firearm capable of expelling as projectiles 2 or more metal balls connected by metal wire.

(2) Existing law prohibits specified persons from owning or having possession or control, as specified, of any firearm.

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This bill would extend this prohibition to apply to firearm ammunition and to include persons who purchase or receive or attempt to purchase or receive any firearm or firearm ammunition.

(3) Existing law provides for an additional term of imprisonment in the state prison of 1, 2, or 3 years for a person convicted of the commission or attempted commission of a felony during which the person furnished or offered to furnish a firearm to another for the purpose of aiding, abetting, or enabling that person or any other person to commit a felony.

This bill would extend this enhancement to apply to furnishing or offering to furnish firearm ammunition under these circumstances.

(4) Existing law requires that a person be licensed to sell, lease, or transfer firearms.

This bill would extend the licensing provisions to apply to firearm ammunition, as specified, and would generally place similar restrictions on the sale of firearms ammunition as currently exist for the sale of firearms effective July 1, 1995. An exception is made for infrequent sales or transfers of 24 or fewer bullets or shells.

(5) Existing law sets no limits on the mail order purchase of ammunition.

This bill would make it a misdemeanor, effective July 1, 1996, for a person to knowingly sell - or receive - handgun ammunition by mail except for a licensed firearms dealer, punishable as specified. The bill would also authorize a person to order handgun ammunition through a local firearms dealer and to take possession of the handgun ammunition only after furnishing the dealer with clear evidence of his or her identity and a California Handgun License - and California Arsenal License if necessary (both the firearms and arsenal license would be created by SB 1275 [Hart].

(6) Existing law specifies prohibitions with regard to selling, delivering, or transferring any pistol, revolver, or firearm capable of being concealed upon the person to any person under the age of 21 years or any other firearm to a person under the age of 18 years, punishable as a misdemeanor.

This bill would extend these prohibitions to apply to firearm ammunition so that a person under age 21 may not purchase handgun ammunition and a person under 18 may not purchase any ammunition. The bill would also prohibit any person or dealer licensed to sell firearms from employing any person under the age of 18 years unless the licensee does not sell pistols, revolvers, or other firearms capable of being concealed upon the person. If the licensee sells

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pistols, revolvers, or other firearms capable of being concealed upon the person, this bill would prohibit him or her from employing any person under the age of 21 years.

(7) Existing law places specified restrictions on the proof of identity a purchaser of a firearm must present.

This bill would require any person seeking to purchase handgun ammunition commencing July 1, 1996, to present clear evidence of identity and a valid California Handgun License (SB 1275 [Hart) would create the California Handgun License).

(8) Existing law prohibits, except as specified, the possession, manufacture, importation, sale, offer of sale, or knowing transportation of handgun ammunition designed primarily to penetrate metal or armor, punishable as a felony.

This bill would authorize the Attorney General to ban the sale and manufacture of any type of handgun bullet that tests show is capable of piercing a body vest (defined in Section 12022.2[c]). The bill also would require the Attorney General to annually compile a list of these bullets.

(9) Existing law provides a definition of handgun ammunition (Penal Code Section 12323) and imposes some restrictions on the sale, purchase, possession, or use of ammunition.

This bill would provide that every person who possesses or purchases in excess of 1,000 rounds of firearm ammunition without a valid California Arsenal License is guilty of a misdemeanor. (SB 1275 [Hart] would create the California Arsenal License.)

The purpose of this bill is to place restrictions on the sale of firearms ammunition which are somewhat similar to the existing restrictions on the sale of firearms in California; to ban handgun bullets which can pierce body armor; to ban the sale of specific incendiary ammunition and ammunition which is designed to expel metal balls connected by metal wire; and to require a specified license for persons who possess more than 1,000 rounds of firearm

COMMENT

1. Existing Law.

At the present time, there are few restrictions placed on the sale of ammunition at either the federal or the state level. The federal laws were changed in 1986 to allow almost anyone to sell most ammunition in the United States. Ammunition may be sold in California by almost anyone subject to normal local

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business licensing requirements. Federal laws do place some restriction on federal firearms dealers regarding the sale of ammunition to minors. Federal law does prohibit the sale of armor piercing ammunition and ammunition which contains an explosive projectile. Federal law does prohibit dealer sales to known persons in certain prohibited classes and the knowing sale of stolen ammunition is prohibited by anyone. However, there are few other limitations on the sale of ammunition.

California does place some restrictions and conditions on the possession of ammunition by minors (Penal Code Section 12101). California does impose a sentence enhancement on persons convicted of a felony who possess ammunition designed to penetrate metal or armor (Penal Code Section 12022.2) and bullets containing an explosive charge (Penal Code Section 12020). Possession of handgun ammunition primarily designed to penetrate metal or armor is prohibited (Penal Code Section 12320). However, there are few other restrictions on the sale of firearm ammunition in California.

2. Effect of this bill.

This bill contains three significant changes to existing law regarding the sale of ammunition in California. First, it proposes that all firearm ammunition to be sold by California retailers be sold only by licensed firearm dealers effective July 1, 1995 (added to Penal Code Section 12070). Second, it proposes that any person seeking to purchase handgun ammunition must present proof of identity and a valid California Handgun License commencing July 1, 1996 (added to Penal Code Section 12076).

In addition, the bill would make it a misdemeanor for any person to purchase or possess in excess of 1,000 rounds of handgun ammunition without a valid California Arsenal License, effective July 1, 1996 (added in a new Penal Code Section 12327).

(As noted, both the California Handgun License and the California Handgun License would be created by SB 1275 [Hart].)

3. Prohibition on sale of handgun ammunition by mail.

This bill would add a new Penal Code Section 12070.5 which would prohibit the sale of handgun ammunition by mail. That prohibition would apply penalties to both those who sell by mail - to anyone other than a licensed dealer - and to those who knowingly receive handgun ammunition by mail. Whether or not that statute could be enforced against out of state shippers is unclear. In addition, that prohibition would not

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SB 1276 (Hart) Page 6



apply to private delivery businesses, such as UPS. The author may wish to consider a clarification of that issue at some point.

4. Definition of indgun ammunition.

Existing Pen: Code Section 12323 was added in 1982 and defines handgun ammunition as "ammunition principally for use in pistols and revolvers...notwithstanding that the ammunition may also be used in some rifles."

That definition was added when the prohibition on handgun ammunition designed to penetrate metal or armor was added. However, that definition may not be suitable for defining handgun ammunition in general. It may be assumed that many ammunition calibers are suitable for both rifles and handguns. Without additional statutory guidance, it may be very difficult for dealers to determine which ammunition is "handgun ammunition" for purposes of the requirements added to Penal Code Section 12076.

5. <u>Opposition arguments</u>.

Opposition to SB 1276 is generally based on the assertion that criminals would still have access to ammunition and that only "law-abiding" gun owners would face undue burdens under this bill. (There is no apparent opposition to adding a prohibition on "bolo" or flame-thrower ammunition in California.)

The Attorney General notes opposition to the use of the California Handgun License in this bill since it is premature to assume that any "insta-check" system will soon be implemented in California (whether in SB 1275 [Hart] or in any other manner).

6. Conflict with other legislation.

AB 482 (Peace) was recently signed by the Governor. Some of the same provisions in AB 482 are contained in SB 1276 and at some point double-joining or conforming language should be added to SB 1276.

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EXHIBIT "6"

C. D. MICHEL

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December 16, 2009

Ms. Alison Merrilees Deputy Attorney General DEPARTMENT OF JUSTICE 4949 Broadway, Rm. G321 Sacramento, CA 95820 VIA FAX (916) 263-0676 & U. S. MAIL

Attorney General's Office Public Records Ombudsman 1300 "I" Street, Room 1710-6 Sacramento, CA 95820 VIA FAX (916) 322-4532 & U. S. MAIL

Re: <u>Public Records Act Request</u> PRAR # 12.16.09 - "DOJ Bureau of Firearms - AB 962"

Dear Ms. Merrilees:

This letter constitutes a request under the California Public Records Act (CPRA), California Government Code Section 6250, *et seq.* (the "Act").¹ When responding, please include the above reference number for internal tracking purposes.

This request is directed to the Public Records Act Clerk or custodian of records for each entity identified in the addressee section above. If the items listed below are under the control of another department or agency, please forward this letter accordingly and so advise us.

This request seeks the information listed below, whether in the form of a writing,² email (including attachments), computer file, photograph, audio or video tape, or however kept.

"Writing" means handwriting, typewriting, printing, photostating, photographing, photocopying, transmitting by electronic mail or facsimile, and every other means of recording upon any tangible thing, any form of communication or representation, including letters, words, pictures, sounds, or symbols, or combinations thereof, and any record thereby created, regardless of the manner in which the record has been stored.

¹ All references to standards for compliance are pursuant to the Act, as amended by California Assembly Bill 2799, effective January 1, 2001, and further informed by the heightened right to information as provided by the California Constitution, art. 1, section 3, amended by Proposition 59.

² WRITING, whether singular or plural, includes those items listed in the paragraph above, as well as those items described in the definition provided by Evidence Code section 250, which provides as follows:

Ms. Alison Merrilees December 16, 2009 Page 2

INFORMATION REQUESTED

The following public records and all "writings" related thereto are requested:

1. Any and all writings and communications, including, but not limited to, policies, bulletins, correspondence, notices, or internal memoranda, constituting, referring, or relating to the enforcement of Assembly Bill 962.

TIME TO RESPOND & COST REIMBURSEMENT

As the CPRA requires, we expect to receive notification of your compliance with this request within ten (10) days of your receipt of this letter. If you need additional time, please simply notify us in writing as the code requires. If practical circumstances further prohibit a timely response, please contact us so we may attempt to agree on a reasonable deadline for production.

Pursuant to section 6253(b) of the CPRA, we are willing to pay reasonable costs to reimburse you for direct costs of duplication, or to pay statutory fees. If you estimate that the direct copying costs will exceed one hundred dollars (\$100.00), notify us of the cost estimate so that we may determine how to proceed.

Thank you for your anticipated cooperation. Please contact me if you have questions or concerns.

Sincerely, MICHEL & ASSOCIATES, P.C.

Eric Flagel

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	*** TX REPORT ***

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P.<u>C.</u> arneys Ατι 8 2

Writer's Direct Contact: (562) 216-4444 vpometla@michelandassociates.com

FAX TRANSMITTAL SHEET

TO: Ms. Alison Merrilees, Deputy Attorney General

FIRM:

FAX NO.: (916) 263-0676

TEL. NO.

FROM: Eric Flagel

DATE: December 16, 2009

RE: PRAR#12.16.09 - "DOJ Bureau of Firearms - AB 962"

THIS FAX CONTAINS COVER PAGE PLUS <u>2</u> PAGE(S). IF YOU DO NOT RECEIVE ALL PAGES PLEASE CONTACT <u>Valerie Pomella</u> AT (562) 216-4444.

SPECIAL INSTRUCTIONS

Will follow via U.S. Mail. Thank you.

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Writer's Direct Contact: (562) 216-4444 vpomella@michelandassociates.com

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TO: Ms. Alison Merrilees, Deputy Attorney General

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FAX NO.: (916) 263-0676

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180 E. Ocean Boulevard, Suite 200 • Long Beach, CA 90802 • Tel: (562) 216-4444 • Fax: (562) 216-4445 www.michelandassociates.com

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Writer's Direct Contact: (562) 216-4444 vpomella@michelandassociates.com

FAX TRANSMITTAL SHEET

TO: Attorney General's Office, Public Records Ombudsman

FIRM:

FAX NO.: (916) 322-4532

TEL. NO.

FROM: Eric Flagel

DATE: December 16, 2009

RE: PRAR#12.16.09 - "DOJ Bureau of Firearms - AB 962"

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MICHEL & ASSOCIATES, P.C.

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EXHIBIT "7"

State of California DEPARTMENT OF JUSTICE



P.O. Box 160487 Sacramento, CA 95816-0487 Telephone: (916) 263-0699 Fax: (916) 263-0676 E-Mail Address: alison.merrilecs(@doj.ca.gov

January 25, 2010

Eric Flagel Attorney at Law Trutanich-Michel LLP 180 E. Ocean Boulevard, Suite 200 Long Beach, CA 90802

COPY

Re: Public Records Act Request 121609 - AB 962

Dear Mr. Flagel:

We received your check (#4631) in the amount of \$24.80. Enclosed are 199 pages in response to the above request, as well as a CD copy.

I hope you find this information helpful.

Sincerely,

4. mily ALISON MERRILEES

Deputy Attorney General Bureau of Firearms

For EDMUND G. BROWN JR. Attorney General

Enclosures

From:Alison Merrilees [mailto:Alison.Merrilees@dot.ca.gov] Sent: Tuesday, December 15, 2009 2:43 PM To: Clint B. Monfort Subject: Re: AB 962

Clint,

We expect our annual Information Bulletin about new laws - which will include information about AB 962 - to be sent to dealers and law enforcement, and posted on our website next week. I will be out of the office next week, but will ask for a copy of the IB to be sent to you. If you don't get the IB by December 28th, please let me know and I will forward you a copy when I return to the office.

I do not know how our field representatives will determine whether the type of ammunition sold by a vendor is principally for use in handguns, and therefore needs to be recorded in the ammunition log book. It would be impossible for our field representatives to determine the type of ammunition that is sold and <u>not recorded</u> in the log book, however, unless they personally observe a transfer, because there are no records of past ammunition transfers (other than those recorded in the log book). For the most part, I believe our field representatives will just be checking to make sure a log book is kept, and that it includes all the information required by law to be retained by the ammunition vendor. I do not believe it is accurate to describe this system as "registration," because there is no central record of the purchase to be retained by DOJ, or anyone else.

We cannot adopt a rule about .22 rimfire (or any other specific type of ammunition) without adopting a regulation pursuant to the APA. Otherwise, our rule would be an underground regulation.

My initial thought is that dealers make a similar determination now when deciding whether to sell ammunition to 18 - 20 year olds. A person under 21 cannot lawfully purchase "ammunition designed and intended for use in a handgun" if that ammunition cannot be used in a rifle. (PC 12316, subd. (a)(1)(B).) The definition applicable to record-keeping is slightly more broad, because it applies to ammunition "designed primarily" for use in handguns, "notwithstanding that the ammunition may also be used in some rifles." I suppose if dealers wanted to act in an abundance of caution, they could record the transfer of all ammunition that can be used in a handgun <u>or</u> a rifle.

>>> "Clint B. Monfort" <<u>CMonfort@michelandassociates.com</u>> 12/15/2009 2:03 PM >>>

Alison,

Would you mind to forward me a copy of the materials the Department is sending to California Dealers on this bill? Also, is the Department going to consider .22 rimfire ammunition as ammo principally for use in handguns, thereby requiring registration under section 12061?

Clint B. Monfort

Attorney (http://www.michelandassociates.com/) Direct: (562) 216-4456 Main: (562) 216-4444 Fax: (562) 216-4445 Email: CMonfort@michelandassociates.com Web: www.michelandassociates.com 180 E. Ocean Blvd. Suite 200 Long Beach, CA 90802

4

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AM0003

JA000956

 From:
 "Clint B. Monfort" <CMonfort@michelandassociates.com>

 To:
 Alison Merrilees <Alison.Merrilees@doj.ca.gov>

 Date:
 12/15/2009 5:53 PM

 Subject:
 RE: AB 962

I understand. If you can please let me know after you check with your field representatives or Dept, head that would be great. Thanks Alison,

Clint B. Monfort Attorney

Direct: (562) 216-4456 Main: (562) 216-4444 Fax: (562) 216-4445 Email: CMonfort@michelandassociates.com Web: http://www.michelandassociates.com

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-----Original Message-----From: Alison Merrilees [mailto:Alison.Merrilees@doj.ca.gov] Sent: Tuesday, December 15, 2009 5:43 PM To: Clint B. Monfort Subject: Re: AB 962

Still don't know and still can"t say.

This e-mail was sent from a California Department of Justice BlackBerry Device. ----Original Message-----From: "Clint B. Monfort" <CMonfort@michelandassociates.com> To: Merrilees, Alison <Alison.Merrilees@doj.ca.gov>

Sent: 12/15/2009 5:32:19 PM Subject: RE: AB 962

No problem. So now that we're on the same page, and circumstances surrounding the sale are irrelevant, will your field reps record this as a violation and seek prosecution by the local DA?

I understand that this is not a DOJ policy interpreting the law. I'm just curious whether your field reps will seek prosecutions for the described action.

Thanks, Clint B. Monfort Attorney [cid:image001.gif@01CA7DAC.8DAD9250]<http://www.michelandassociates.com/>

Direct: (562) 216-4456

AM0004

JA000957

Main: (562) 216-4444 Fax: (562) 216-4445 Email: CMonfort@michelandassociates.com<mailto:CMonfort@michelandassociates.com> Web: www.michelandassociates.com<http://www.michelandassociates.com> 180 E. Ocean Blvd, Suite 200 Long Beach, CA 90802

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From: Alison Merrilees [mailto:Alison.Merrilees@doj.ca.gov] Sent: Tuesday, December 15, 2009 5:27 PM To: Clint B. Monfort Subject: RE: AB 962

You're right. It probably wouldn't be relevant, nor would the fact in your hypo that a handgun was being transferred at the same time.

So without those additional facts, it just comes down to the type of ammunition, right? And I have already explained that we can't and won't adopt a general policy about that. If it seems to be a problem, we could consider adopting a regulation. Or, as you suggested, clean-up legislation could address the issue.

>>> "Clint B. Monfort" <CMonfort@michelandassociates.com> 12/15/2009 5:19 PM >>> I'm sorry, I'm confused. I thought that the definition was "principally for use in handguns." Why would the subjective intent of the purchaser (and his statements about what it was being used for in that one specific instance) matter at all? Thanks,

Clint B. Monfort Attorney [cid:image001.gif@01CA7DAC.8DAD9250]<http://www.michelandassociates.com/>

Direct: (562) 216-4456 Main: (562) 216-4444 Fax: (562) 216-4445 Email: CMonfort@michelandassociates.com<mailto:CMonfort@michelandassociates.com> Web: www.michelandassociates.com<http://www.michelandassociates.com> 180 E. Ocean Blvd. Suite 200 Long Beach, CA 90802

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From: Alison Merrilees [mailto:Alison.Merrilees@doj.ca.gov] Sent: Tuesday, December 15, 2009 5:13 PM To: Clint B. Monfort Subject: RE: AB 962

I'm sorry, Clint, but we can't answer this hypothetical question in the way you clearly want us to. I think I have been pretty patient and tried to answer all of your questions to the best of my ability. But I have also explained that we cannot adopt a policy about how we would handle this type of situation.

The facts you have described would seem to indicate that handgun ammunition is being transferred (assuming that the handgun can fire the .22 rimfire ammunition. But that determination would have to be made on a case-by-case basis and there could be other factors that would influence the decision, such as statements by the parties. ("I'd like some ammunition for my .22 rifle," or conversely, "I'd like the

I'm sorry, but that's as much info as I can give you.

>>> "Clint B. Monfort" <CMonfort@michelandassociates.com> 12/15/2009 4:56 PM >>> Can you ask your field representatives for me please when you get a chance so that I can properly advise my client and request that he seek the same clarification from the local D.A.? Thank you.

Thanks, Clint B. Monfort Attorney [cid:image001.gif@01CA7DAC.8DAD9250]<http://www.michelandassociates.com/>

Direct: (562) 216-4456 Main: (562) 216-4444 Fax: (562) 216-4445 Email: CMonfort@michelandassociates.com<mailto:CMonfort@michelandassociates.com> Web: www.michelandassociates.com<http://www.michelandassociates.com> 180 E. Ocean Blvd. Suite 200 Long Beach, CA 90802

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From: Alison Merrilees [mailto:Alison.Merrilees@doj.ca.gov] Sent: Tuesday, December 15, 2009 4:51 PM To: Clint B. Monfort Subject: Re: AB 962

I don't know.

>>> "Clint B. Monfort" <CMonfort@michelandassociates.com> 12/15/2009 4:48 PM >>> Sorry, one more thing.

If a field rep sees someone buying.22 rimfire ammunition along with a handgun that they are picking up that day and the vendor does not register the sale of the ammo, will the field rep record this as a violation and submit it to the local D.A. for prosecution?

Thanks, Clint B. Monfort Attomey [cid:image001.gif@01CA7DAC.8DAD9250]<http://www.michelandassociates.com/>

AM0006

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Direct: (562) 216-4456 Main: (562) 216-4444 Fax: (562) 216-4445 Email: CMonfort@michelandassociates.com<mailto:CMonfort@michelandassociates.com> Web: www.michelandassociates.com<http://www.michelandassociates.com> 180 E. Ocean Blvd. Suite 200 Long Beach, CA 90802

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From:	Alison Merrilees	
To:	Clint B. Monfort	
Date:	12/15/2009 4:48 PM	
Subject:	RE: AB 962	

In your hypothetical, the vendor has kept the records and presumably made them available for inspection by law enforcement, upon request in compliance with paragraphs 4 and 5 of Penal Code section 12061, subdivision (a).

>>> "Clint B. Monfort" < CMonfort@michelandassociates.com > 12/15/2009 4:26 PM >>>

I know, I know. Well then let me pose it to you or your field representatives this way:

If one of our clients keeps all of their records on microfilm only, will the Dept. record this as a violation and seek prosecution by the D.A.?

I understand that you cannot issue an opinion as to whether this will be a violation generally, and that local law enforcement may enforce the same law differently.

Clint B. Monfort Attorney

(<u>http://www.michelandassociates.com/</u>) Direct: (562) 216-4456 Main: (562) 216-4444 Fax: (562) 216-4445 Email: <u>CMonfort@michelandassociates.com</u> Web: <u>www.michelandassociates.com</u> 180 E. Ocean Blvd. Suite 200 Long Beach, CA 90802

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From:Alison Merrilees [mailto:Alison.Merrilees@doj.ca.gov] Sent: Tuesday, December 15, 2009 4:02 PM To: Clint B. Monfort Subject: RE: AB 962

We can't take a position about how records can and can't be kept without adopting a regulation to that effect. If we did so, our position or policy would be an underground regulation.

The vendor has to keep records. That is all the bill says, and all it requires.

>>> "Clint B. Monfort" <<u>CMonfort@michelandassoclates.com</u>> 12/15/2009 3:57 PM >>>

Thanks. Does the Dept. have a position one way or the other whether microfilm or other electronic storage of records will be acceptable? You must agree that the 5 year storage requirement on the premises is a bit much!

Thanks,

Clint B. Monfort Attorney (http://www.michelandassociates.com/) Direct: (562) 216-4456 Main: (562) 216-4444 Fax: (562) 216-4445 Email: <u>CMonfort@michelandassociates.com</u> Web: <u>www.michelandassociates.com</u> 180 E. Ocean Blvd. Suite 200 Long Beach, CA 90802

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From:Alison Merrilees [mailto:Alison.Merrilees@dot.ca.gov] Sent: Tuesday, December 15, 2009 3:45 PM To: Clint B. Monfort Subject: RE: AB 962

I don't believe it will be a huge priority for us, especially since we didn't get any funding or additional spending authority for enforcement. The locals (i.e. LAPD and Sacramento PD) seem to have more interest in doing it.

>>> "Clint B. Monfort" <<u>CMonfort@michelandassociates.com</u>> 12/15/2009 3:40 PM >>> Is this going to be done in practice? Are field reps going to relay info to the agents to run checks?

Thanks,

Clint B. Monfort

Attorney (<u>http://www.michelandassociates.com/</u>) Direct: (562) 216-4456 Main: (562) 216-4444 Fax: (562) 216-4445

AM0009

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Email: <u>CMonfort@michelandassociates.com</u> Web: <u>www.michelandassociates.com</u> 180 E. Ocean Blvd. Suite 200 Long Beach, CA 90802

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From:Alison Merrilees [mailto:Alison,Merrilees@doj.ca.gov] Sent: Tuesday, December 15, 2009 3:38 PM To: Clint B. Monfort Subject: RE: AB 962

You asked about the field reps. Our field reps (like me) **don't** have access to DOJ's criminal history databases. Our agents, like all peace officers, **do** have access to the information. (PC 11105, subd. (b)(2).) Therefore, our agents could check whether persons who entered in the ammunition log book are prohibited from possessing firearms and ammunition.

>>> "Clint B. Monfort" <<u>CMonfort@michelandassociates.com</u>> 12/15/2009 3:31 PM >>>

Who the field reps? What about local law enforcement who want to check for prohibited persons?

Thanks,

Clint B. Monfort

Attorney (<u>http://www.michelandassociates.com/</u>) Direct: (562) 216-4456 Main: (562) 216-4444 Fax: (562) 216-4445 Email: <u>CMonfort@michelandassociates.com</u> Web: <u>www.michelandassociates.com</u> 180 E. Ocean Blvd. Suite 200 Long Beach, CA 90802

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AM00010

JA000963

From:Allson Merrilees [mailto:Alison.Merrilees@doj.ca.gov] Sent: Tuesday, December 15, 2009 3:30 PM To: Clint B. Monfort Subject: RE: AB 962

No. They don't have access to those databases.

>>> "Clint B. Monfort" <<u>CMonfort@michelandassociates.com</u>> 12/15/2009 3:29 PM >>> Yep. Oh another thought - so are the Field Reps not going to be running background checks on purchasers?

Thanks,

Clint B. Monfort Attorney (<u>http://www.michelandassociates.com/</u>) Direct: (562) 216-4456 Main: (562) 216-4444 Fax: (562) 216-4445 Email: <u>CMonfort@michelandassociates.com</u> Web: <u>www.michelandassociates.com</u> 180 E. Ocean Blvd. Suite 200 Long Beach, CA 90802

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From:Alison Merrilees [mailto:Alison.Merrilees@doj.ca.gov] Sent: Tuesday, December 15, 2009 3:26 PM To: Clint B. Monfort Subject: RE: AB 962

There's always something (more and more, it seems) to clean up.

Good luck!

>>> "Clint B. Monfort" <<u>CMonfort@michelandassociates.com</u>> 12/15/2009 3:18 PM >>>

Thanks I appreciate it.

I share your same thoughts about the .22 rimfire issue as this definition is technically broader. I think we

are going to advise our clients to register these sales out of an abundance of caution. I realize that the enforcement issue makes this somewhat of a moot point with the Department's Field Reps, but we don't want to advise technical violations of the law nonetheless, especially with regard to other law enforcement agencies (even though we don't consider .22 rimfire to be ammunition principally for use in handguns). Maybe this is something that could be addressed in cleanup legislation. I know we have a few more issues that are worthy of some cleanup/clarification.

Thanks,

Clint B. Monfort Attorney (<u>http://www.michelandassociates.com/</u>) Direct: (562) 216-4456 Main: (562) 216-4444 Fax: (562) 216-4445 Email: <u>CMonfort@michelandassociates.com</u> Web: <u>www.michelandassociates.com</u> 180 E. Ocean Blvd. Suite 200 Long Beach, CA 90802

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From:Alison Merrilees [mailto:Alison.Merrilees@doj.ca.gov] Sent: Tuesday, December 15, 2009 2:43 PM To: Clint B. Monfort Subject: Re: AB 962

Clint,

We expect our annual Information Bulletin about new laws - which will include information about AB 962 - to be sent to dealers and law enforcement, and posted on our website next week. I will be out of the office next week, but will ask for a copy of the IB to be sent to you. If you don't get the IB by December 28th, please let me know and I will forward you a copy when I return to the office.

I do not know how our field representatives will determine whether the type of ammunition sold by a vendor is principally for use in handguns, and therefore needs to be recorded in the ammunition log book. It would be impossible for our field representatives to determine the type of ammunition that is sold and <u>not recorded</u> in the log book, however, unless they personally observe a transfer, because there are no records of past ammunition transfers (other than those recorded in the log book). For the most

part, I believe our field representatives will just be checking to make sure a log book is kept, and that it includes all the information required by law to be retained by the ammunition vendor. I do not believe it is accurate to describe this system as "registration," because there is no central record of the purchase to be retained by DOJ, or anyone else.

We cannot adopt a rule about .22 rimfire (or any other specific type of ammunition) without adopting a regulation pursuant to the APA. Otherwise, our rule would be an underground regulation.

My initial thought is that dealers make a similar determination now when deciding whether to sell ammunition to 18 - 20 year olds. A person under 21 cannot lawfully purchase "ammunition designed and intended for use in a handgun" if that ammunition cannot be used in a rifle. (PC 12316, subd. (a)(1)(8).) The definition applicable to record-keeping is slightly more broad, because it applies to ammunition "designed primarily" for use in handguns, "notwithstanding that the ammunition may also be used in some rifles." I suppose if dealers wanted to act in an abundance of caution, they could record the transfer of all ammunition that can be used in a handgun <u>Qr</u> a rifle.

>>> "Clint B. Monfort" <<u>CMonfort@michelandassociates.com</u>> 12/15/2009 2:03 PM >>>

Alison,

Would you mind to forward me a copy of the materials the Department is sending to California Dealers on this bill? Also, is the Department going to consider .22 rimfire ammunition as ammo principally for use in handguns, thereby requiring registration under section 12061?

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From:Alison MerrileesTo:Clint B. MonfortDate:12/10/2009 9:43 AMSubject:Re: AB 962

Hi Clint,

We don't plan to hold any regulatory meetings. We will send out a "new laws" bulletin to dealers this month, explaining all of the new laws taking effect next year, including this one. Of course, ammunition is sold by many vendors who are not licensed firearms dealers, but those other vendors are not subject to DOJ oversight. Although the bill gives DOJ the ability to inspect ammunition transfer logs kept by ammunition vendors, DOJ has no way to know who the ammunition vendors are (unless they are licensed firearms dealers). Otherwise, as long as the vendor keeps the records that are required, the vendor has complied with the law.

Let me know if you have any other questions, or concerns.

Alison

>>> "Clint B. Monfort" <<u>CMonfort@michelandassociates.com</u>> 12/9/2009 5:23 PM >>>

Hi Allison,

When is the Department planning to hold any regulatory meetings regarding the implementation of this bill? Though I realize regulations were not authorized by 962 it seems like it will be a nightmare to implement, enforce, and comply with without further clarification and guidance. Is the BOF planning to thanks.

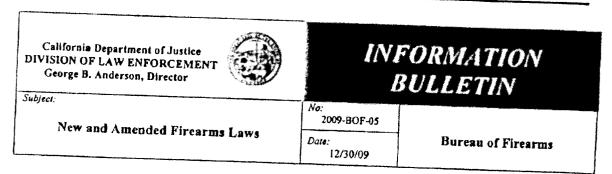
Clint B. Monfort

Attorney (<u>http://www.michelandassociates.com/</u>) Direct: (562) 216-4456 Main: (562) 216-4444 Fax: (562) 216-4445 Email: <u>CMonfort@michelandassociates.com</u> Web: <u>www.michelandassociates.com</u> 180 E. Ocean Blvd. Suite 200 Long Beach, CA 90802

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EXHIBIT "8"

Edmund G. Brown Jr., Attorney General



TO: All California Centralized List of Firearms Dealers, Manufacturers, and Exempted Federal Firearms Licensees

This bulletin provides a brief summary of new and amended California firearms laws that take effect on January 1, 2010, unless otherwise noted. You may contact the California State Capitol Legislative Bill Room at (916) 445-2323 to obtain copies of the bills (order by statute year and chapter number), or access the full text of the bills via the Internet at <u>http://www.leginfo.ca.gov/</u>.

AB 962 (Stats, 2009, ch. 628)

- Handgun ammunition must be displayed in a manner that makes the ammunition inaccessible to a purchaser or transferee, and requires the assistance of the vendor or an employee of the vendor. (§ 12061.)⁴
- An employee of a handgun ammunition vendor, who is prohibited from possessing firearms, cannot handle, sell, or deliver handgun ammunition in the course and scope of his or her employment. (§ 12061.)
- No one shall supply, deliver, or give ammunition to a minor who is prohibited from possessing ammunition pursuant to section 12101. (§ 12316.)
- Any person who is enjoined from engaging in activity associated with a criminal street gang is prohibited from possessing ammunition. A violation is a misdemeanor. (§ 12316.)
- Beginning February 1, 2011, the delivery or transfer of handgun ammunition must occur in a face-to-face transaction, with the recipient providing bona fide evidence of his or her identity and age, subject to specified exceptions. Non-face-to-face transfers, such as internet transactions and mail order deliveries are prohibited. A violation is a misdemeanor. (§ 12318.)
- Beginning February 1, 2011, handgun ammunition vendors must obtain a thumbprint and other information related to handgun ammunition transactions subject to specified exceptions (including transfers to peace officers who are authorized to carry a firearm in the course and scope their duties). The information must be retained by the vendor for five years from the date of the transaction. A violation is a misdemeanor. (§ 12061.)

¹ All further statutory references are to the California Penal Code, unless otherwise specified.

Information Bulletin 2009-BOF-05 New and Amended Firearms Laws Page 2

AB 1286 (Stats. 2009, ch. 144)

• An exemption to the limit of one handgun per 30 days has been added, allowing the transfer of multiple handguns within 30 days to community colleges certified by the Commission on Peace Officer Standards and Training for commission-certified law enforcement training. (§ 12072.)

SB 175 (Stats. 2009, ch. 334)

- The firearms dealer licensing requirement provides an exception for the exchange of a firearm to or from a gunsmith for purpose of service or repair. (§ 12072.)
- A California Firearms License Check (CFLC) verification number exemption for dangerous weapons has been removed. (§ 12072.)
- Pawnbrokers are precluded from placement on the Centralized List of Exempted Federal Firearms Licensees (CLEFFL). (§ 12083.)
- Persons who possess a current dangerous weapons permit, are exempt from the fees associated with CLEFFL. (§ 12083.)

SB 449 (Stats. 2009, ch. 335)

• Beginning July 1, 2010, secondhand dealers will report daily to DOJ (rather than the local law enforcement agency) via electronic submission, any firearms purchased, taken in trade, or taken in pawn. Within one working day of receipt of a secondhand dealer report, the DOJ will electronically provide information in the report to a secure mailbox of the local law enforcement agency. (§ 12083; Bus. and Prof. Code §§ 21628 and 21628.2.)

If you have any questions regarding this Information Bulletin, please contact the DOJ Bureau of Firearms at (916) 263-4887.

Sincerely, WILFREDO CID, Chief Byreau of Firearms

For EDMUND G. BROWN JR. Attomey General

EXHIBIT "9"

SENIOR COUNSEL: C. D. MICTHEL

SPECIAL COUNSEL: Victor J. Otten W. Lee Skitte

ASSOCIA TE COUNSEL: SEAN A. BRADY SCOTT M. FRANKLIN HILLARY J. GREEN THOMAS J. MACLEJEWSKI CLINT B. MONFORT JOSEPH A. SLLVOSO, III TAMARA M. RIDER LOS ANGELES, CA

Wnter's Direct Contact: (562) 216-4492 abarvir@michellawyers.com



July 16, 2010

OF COUNSEL: Don B. Kates San Francisco, CA

RUTH P. HARING LOS ANGELES, CA

GLENN S. MCROBERTS SAN DIEGO, CA

AFFILIATE COUNSEL John F. Machtinger Jeffrey M. Cohon Los Angeles, CA

> DAVID T. HARDY TUCSON, AZ

Ms. Kimberly Graham Deputy Attorney General DEPARTMENT OF JUSTICE 4949 Broadway, Rm. G321 Sacramento, CA 95820 VIA FAX (916) 263-0676 & U. S. MAIL

Public Records Ombudsman ATTORNEY GENERAL'S OFFICE P.O. Box 944355 Sacramento, CA 94244 VIA U. S. MAIL

Re: <u>Public Records Act Request</u> PRAR # 7.16.10 – "DOJ Bureau of Firearms"

Dear Ms. Graham:

This letter constitutes a request under the California Public Records Act (CPRA), California Government Code Section 6250, *et seq.* (the "Act").¹ When responding, please include the above reference number for internal tracking purposes.

This request is directed to the Public Records Act Clerk or custodian of records for each entity identified in the addressee section above. If the items listed below are under the control of another department or agency, please forward this letter accordingly and so advise us.

This request seeks the information listed below, whether in the form of a writing,² email (including attachments), computer file, photograph, audio or video tape, or however kept.

"Writing" means handwriting, typewriting, printing, photostating, photographing, photocopying, transmitting by electronic mail or facsimile, and every other means of recording upon any tangible thing, any form of communication or representation, including letters, words, pictures, sounds, or symbols, or combinations thereof, and any record thereby created, regardless of the manner in which the record has been stored.

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¹ All references to standards for compliance are pursuant to the Act, as amended by California Assembly Bill 2799, effective January 1, 2001, and further informed by the heightened right to information as provided by the California Constitution, art. 1, section 3, amended by Proposition 59.

² WRITING, whether singular or plural, includes those items listed in the paragraph above, as well as those items described in the definition provided by Evidence Code section 250, which provides as follows:

Ms. Kimberly Graham July 16, 2010 Page 2

INFORMATION REQUESTED

The following public records and all "writings" related thereto are requested:

- 1. All writings and communications referring or relating to Assembly Bill 962 (2009), including, but not limited to, bulletins, correspondence, memoranda, notices, and policy statements acquired or created between March 1, 2010 and the present.
- 2. All writings and communications constituting, referring, or relating to Assembly Bill 2358 (2010), including, but not limited to, bulletins, correspondence, memoranda, notices, and policy statements.
- 3. All writings and communications between the Department of Justice and the Legal Community Against Violence (LCAV) acquired or created between January 1, 2010 and the present. These documents may include, but are not limited to, studies and research by and correspondence (including e-mails) to or from LCAV.
- 4. All writings and communications between the Department of Justice and the Brady Campaign acquired or created between January 1, 2010 and the present. These documents may include, but are not limited to, studies and research by and correspondence (including e-mails) to or from the Brady Campaign.

TIME TO RESPOND & COST REIMBURSEMENT

As the CPRA requires, we expect to receive notification of your compliance with this request within ten (10) days of your receipt of this letter. If you need additional time, please simply notify us in writing as the code requires. If practical circumstances further prohibit a timely response, please contact us so we may attempt to agree on a reasonable deadline for production.

Pursuant to section 6253(b) of the CPRA, we are willing to pay reasonable costs to reimburse you for direct costs of duplication, or to pay statutory fees. If you estimate that the direct copying costs will exceed one hundred dollars (\$100.00), notify us of the cost estimate so that we may determine how to proceed.

Thank you for your anticipated cooperation. Please contact me if you have questions or concerns.

Sincerely, MICHEL & ASSOCIATES, P.C.

amam Ban

Anna M. Barvir

180 E. Ocean Boulevard, Suite 200 · Long Beach, CA 90802 · Tel: (562) 216-4444 · Fax: (562) 216-4445 · Web: www.michellawyers.com

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Writer's Direct Contact: (562) 216-4458 vpomella@michellawyers.com

FAX TRANSMITTAL SHEET

TO: Ms. Kimberly Graham

FIRM:

FAX NO.: 916-263-0676

TEL. NO.:

- FROM: Anna Barvir
- **DATE:** July 16, 2010
- **RE:** PRAR #7.16.10 "DOJ Bureau of Firearms"

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THIS FAX CONTAINS COVER PAGE PLUS <u>2</u> PAGE(S). IF YOU DO NOT RECEIVE ALL PAGES PLEASE CONTACT <u>Valerie Pomella</u> AT (562) 216-4444.

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SPECIAL INSTRUCTIONS

Original to follow via U.S. Mail. Thank you.

EXHIBIT "10"

State of California DEPARTMENT OF JUSTICE



1300 I STREET, SUITE 125 P.O. BOX 944255 SACRAMENTO, CA 94244-2550

Public: (916) 445-9555 Telephone: (916) 322-6114 Facsimile: (916) 324-8835 E-Mail: Kimberly.Graham@doj.ca.gov

August 9, 2010

Anna M. Barvir Michel & Associates 180 E. Ocean Blvd., Suite 200 Long Beach, CA 90802

SENT VIA EMAIL TO abarvir@michellawyers.com

RE: Public Records Act Request (PRAR # 7.16.10)

Dear Ms. Barvir:

I am writing in response to the above request made pursuant to the California Public Records Act set forth in California Government Code §6250 et seq. received by the Bureau of Firearms of the California Department of Justice (DOJ) via facsimile on July 16, 2010. In the PRA request, you seek four categories of documents regarding Assembly Bill 962 (2009) and Assembly Bill 2358 (2010).

Under the PRA, government records are open and subject to inspection by and disclosure to the public, unless they are "exempt from disclosure by express provisions of law." (Gov. Code, § 6253, subd. (b).) The PRA specifically exempts certain types of documents from public disclosure, including those described in Government Code sections 6254 and 6255. In addition, Government Code section 6254, subdivision (k) incorporates confidentiality privileges set forth elsewhere in law, and makes those privileged documents exempt from the disclosure requirements of the PRA.

I will respond to the four categories of documents you seek in your request separately, as indicated below.

Categories 1 and 2: All writings and communications referring or relating to Assembly Bill 962 (2009) and Assembly Bill 2358 (2010).

In categories 1 and 2, you seek "[a]ll writing and communications referring or relating to" Assembly Bill 962 (2009) and Assembly Bill 2358 (2010) "including, but not limited to,

Ms. Anna Barvir August 9, 2010 Page 2

bulletins, correspondence, memoranda, notices, and policy statements acquired or created between March 1, 2010 and the present." For the reasons set forth below, DOJ objects to the request and therefore is unable to produce certain documents responsive to the request.

<u>Deliberative Process Privilege (§ 6255)</u>: The deliberative process privilege is applied to the PRA through section 6255. It exempts from disclosure materials that would expose an agency's decision making process in such a way as to discourage candid discussion within the agency and thereby undermine the agency's ability to perform its functions. Even if the content of a document is purely factual, it is nonetheless exempt from public scrutiny if it is actually related to the process by which policies are formulated or, if it is inextricably intertwined with policymaking processes. (*Times Mirror Co. v. Superior Court, supra*, 53 Cal.3d at p. 1342.)

The documents responsive to this request reveal the decision-making process of the Attorney General and his staff, including but not limited to internal memoranda and emails about the development of policy; specifically, it seeks documents reflecting the analysis by DOJ employees regarding pending legislation. Disclosure of the materials would expose the decision-making process of the Attorney General and DOJ "in such a way as to discourage candid discussion within the agency and thereby undermine the agency's ability to perform its functions. [Citation.]" (*Times Mirror Company v. Superior Court, supra*, 53 Cal.3d at p. 1342.) Therefore, we deny your request for any documents that are responsive to this request which are exempt from disclosure pursuant to the deliberative process privilege.

<u>Attorney-Client Privilege (§ 6254, subd. (k)/Evid. Code</u> 952: Section 6254, subdivision (k), incorporates confidentiality privileges set forth elsewhere in law. The attorneyclient privilege is contained in Evidence Code section 952 and protects confidential communications between an attorney and his or her client. Section 6254, sub-division (k), expressly exempts from disclosure matters privileged under the Evidence Code, which includes the attorney-client privilege. (*Roberts v. City of Palmdale* (1993) 5 Cal.4th 363, 370.) Public entities may assert the attorney-client privilege. (*Ibid.*) The privilege "applies to communications in the course of professional employment that are intended to be confidential." (*Id.*, at p. 371.)

In the present case, deputy attorney generals provide legal advice to the Attorney General, his designees, and to the bureaus and divisions within DOJ. The documents that are responsive to your request include legal advice to the Attorney General, his designees, and to the bureaus and divisions within DOJ regarding pending legislation. Any documents that constitute legal advice from deputy attorneys general to the Attorney General, his designees, or the bureaus/divisions within DOJ are exempt from disclosure pursuant to the attorney-client privilege. Because attorney-client communications are exempt from disclosure in response to a PRA request, we deny your request for any documents that constitute attorney-client communication. Ms. Anna Barvir August 9, 2010 Page 3

Attorney Work Product Privilege (§ 6254, subd. (k); see also Code Civ. Pro., § 2018.030): Code of Civil Procedure section 2018.030 exempts from disclosure the work product of an attorney. The attorney work product privilege applies to any writing that reflects an attorney's impressions, conclusions, opinions, legal research or legal theories that are maintained as confidential. It is incorporated into the PRA by section 6254, subdivision (k). (County of Los Angeles v. Superior Court (2000) 82 Cal.App.4th 819, 833.) Under the attorney work-product exception, records such as confidential analyses, draft language and memoranda prepared by the attorneys employed in the Attorney General's Office constitute attorney work product that is exempt from public disclosure under the PRA.

In the present case, the attorneys in our department provide legal advice to the Attorney General and his designees. To the extent that records were prepared by deputies attorney general to offer their impressions, conclusions, opinions, legal research or legal theories to the Attorney General, his designees, or the bureaus/divisions within DOJ about pending legislation, those records are attorney work product that is exempt from disclosure in response to your request. Because attorney work product is exempt from disclosure in response to a PRA request, we deny your request for any documents that constitute attorney work product.

Subject to and without waiving these exemptions, BOF will produce any non-exempt, non-privileged documents that are responsive to your request.

<u>Categories 3 and 4:</u> Writing and communications between DOJ and LCAV/Brady <u>Campaign</u>

In categories 3 and 4, you seek "[a]ll writings and communications between the Department of Justice" and the Legal Community Against Violence (LCAV) and the Brady Campaign "acquired or created between January 1, 2010 and the present. These documents may include, but are not limited to, studies and research by and correspondence (including emails) to or from" LCAV/Brady Campaign. During our telephone conversation on July 23, 2010, you agreed to modify your request to those communications regarding Assembly Bill 962 (2009) and Assembly Bill 2358 (2010).

BOF has determined that there may be documents responsive to your request, and is in the process of collecting such documents. However, with respect to emails, please be advised that the DOJ computer system only retains emails for a three-month period; therefore, unless the email was personally archived or printed by the recipient, there will be no record of emails sent or received by a DOJ employee beyond the last three months.

* * * * *

Ms. Anna Barvir August 9, 2010 Page 4

Should have any questions regarding our response to your request, please do not hesitate to contact me. And, in closing, thank you again for your cooperation with regard to this request.

Sincerely,

KIMBERLY J. GRAHAM

Deputy Attorney General

For

EDMUND G. BROWN JR. Attorney General

KJG:

SA2010101369 10600713.doc

EXHIBIT "11"

Page 1 of 3

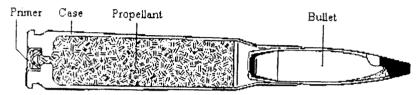
Definitions

Previous Section: Gun Types

Ammunition Components

Cartridge

Cartridge firearms have been in service since the mid-1800s. In earlier designs such as flint-lock or percussion cap arms, the propellant (powder) and the ignition mechanism were individual components which had to be separately loaded or were part of the arm itself.



Modern cartridges have a case which holds bullet, propellant and primer in a single self-contained system. This complete unit and the bullet fired from it are also referred to as a *round* or *shell*.

The cartridge is perhaps the single most important factor making modern firearms practical. The cartridge is a stand-alone module of mechanical integrity sealing sensitive chemical compounds from the external environment, and keeping together all the consumable components needed for firing one round. This key development enabled the significant advance of arms technology starting in the latter half of the 19th century.

Bullet

The bullet is the projectile driven down the barrel by the pressure of hot, burning propellant gases. Bullet design is a fairly specialized sub-field involving a much design and experimentation. Bullets must be aerodynamically stable and have low drag at their design velocities. They must be soft enough to allow some deformation in the rifling of the barrel. Bullets must have sufficient strength to withstand high acceleration during firing.

One of the topics not covered in this document is ballistics. Internal ballistics is the study of bullet and

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entirely of plastic. As described above the case is the carrier which holds the propellant, primer and bullet securely. This makes it practical to transport and deploy the components as a single module, greatly simplifying logistics and use. To re-iterate, the important principle was to group the relevant components as a self-contained functional unit.

The most important role of the case after feeding is the sealing of the breech. During firing the case expands outward against the barrel chamber providing a gas-tight seal and preventing the high pressure gases from entering the rest of the arm. Such a release could case a failure hazardous to the user, since usually only the combined case/chamber/breech system has sufficient strength to withstand the high pressures generated. Since the case expands under great pressure against the chamber, considerable force is required to overcome friction in extracting the fired case from the chamber.

Primer

The modern cartridge's percussion primer was a major improvement in starting the ignition chain. Previously a spark from a flint, heat from a smoldering match (a cotton cord), or an externally placed percussion cap provided the source of ignition. The modern primer is cup-shaped and contains percussion (impact or pressure) sensitive explosive compounds. When struck, the primer expels hot burning particles onto the propellant (powder) contained in the cartridge.

In modern rifle and pistol rounds the primer is press fit and sometimes crimped into the back of the cartridge, where the striker can reach it. Cannon rounds are usually electrically fired. That is, the primer is an electrical device with two insulated, usually concentric terminals which is ignited through electrical current. In rimfire rounds, the primer compound is in the fold at the back of case which also forms the extraction rim. The striker impacts the rim, detonating the primer material.

Propellant (Powder)

The first part of the ignition chain is the primer. When struck, the primer detonates (it is a primary explosive rather than a propellant) and begins to ignite the propellant (powder). The powder then burns at a controlled rate appropriate to the particular bore diameter, projectile mass, barrel length, etc. Note that powder is not a primary explosive, so in normal operation it burns relatively gradually rather than detonating. The burning propellant generates high pressure gases which accelerate the projectile down the barrel. Smokeless powder is usually composed of double base (twice nitrated) compounds and binders (glues) to hold grain shape.

Modern powders are extruded in the shape of rods or discs and come in a variety of sizes which together with chemical composition affect the burning rate. Smaller-grained, fast-burning propellants are generally used in higher velocity applications and larger-grained, slower-burning used in lower velocity rounds. Matching of burning rates to bore diameters and projectile masses requires careful calculation and measurement of pressure versus time. This is important to keep within the safe pressure limits of the barrel and rest of the system. Such development can be aided by using piezoelectric cells or strain gauges feeding computerized data acquisition systems. Once calibration procedures are established, these measurement systems are more efficient and simpler to use than old-style mechanical copper crushers

Next Section: Gun Components



9/6/2010





Back to Definitions Index

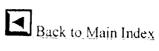


EXHIBIT "12"

Rifles: Standard with 24" barrel, octagonal through about the serial range 100000, at which time round barrels became common. Brass frame, buttplate, and forend cap (steel cap became -undard after serial range 135000). The buttplate of the crescent n pe.

Carbines: Standard with 20" round barrel and two barrel rands. Brass frame and buttplate, the latter of the distinctive curved profile. Saddle ring mounted on the left side of the frame.

Muskets: Standard with 27" round barrel, 24" magazine, and * forend. Three barrel bands present, and the buttplate of carnine style.

Major variations are:

First Model 1866, tang serial number concealed by the buttstock, Henry drop" in profile of frame at the hammer area, frame does

not flare out to meet forend, upper tang has two screws, flat hading gate cover, Henry and King's patent barrel marking, serial range 12476 to about 15500 (with some overlap with Henry Ritle).

Rifle version of the First Model (not fitted with forend cap): 5K-026 Values-Good \$10,000 Fine \$32,500 Carbine version of the First Model: 5K-027 Values-Good \$6,000 Fine \$15,000

Musket version of the First Model: (None produced)

Second Model 1866, concealed "inside" serial marking on the tang (early production through about 19000 serial range), flared trame to meet the forend, the "Henry drop" frame profile has rurned to a graceful curved shape in the hammer area, Henry and King's patent barrel marking for most of production, serial range about 15500 to 23000+.

Rifle: 5K-028 Values-Good \$3,500 Fine \$10,000 Carbine: 5K-029

Values-Good \$3,000 Fine \$8,000

Musket: None known to be produced.

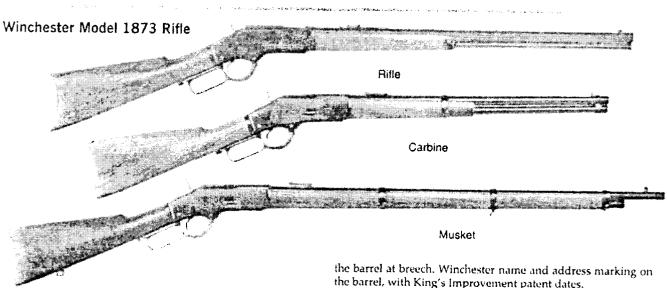
Third Model 1866, serial marked in block numerals behind the trigger (and thus visible without removing stock), flared frame to meet forend, and the curved frame profile in hammer area not as pronounced as the First and Second Models; Winchester, New Haven and King's Patent barrel marking, serial range about 23169 (lowest recorded number to date) to 149000.

Rifle: 5K-0 30	ValuesGood \$3,000	Fine \$7,500
Carbine: 5K-031	ValuesGood \$2,500	Fine \$6,500
Musket: 5K-032	ValuesGood \$2,250	Fine \$5,500

Fourth Model 1866, the serial number marked in script on the lower tang near lever latch, flared frame to meet forend, the curved frame profile in hammer area even less pronounced than the Third Model, barrel marking same as the Third Model, serial range about 149000 to 170101. Late production iron mountings.

Rifle: 5K-033	ValuesGood \$2,500	Fine \$6 ,750
Carbine: 5K-034	ValuesGood \$2,250	Fine \$6,000
Musket: 5K-035	Values-Good \$2,250	Fine \$5,500

(Note: A premium placed on round barrels on rifles, as these are less frequently encountered than octagon.)



Model 1873 Rifle. Made c. 1873-1919; total produced approximately 720,610 (figure includes 19,552 made in 22 rimfire).

32-20, 38-40, and 44-40 calibers. Tubular magazine located bemeath barrel. The frames of iron with sideplates, and noticeably auterent from the Model 1866 predecessor.

Oil stained or (less common) varnished walnut stocks. Blued coush, with hammers, levers and buttplates casehardened; trames also not uncommon casehardened.

Serial numbering in individual series from 1 on up; located in the lower tang. MODEL 1873 and Winchester markings apyear on the upper tang; caliber markings usually are present on bottom of the brass elevator block (see bottom of frame) and on the barrel, with King's Improvement patent dates.

To the good fortune of collectors, Winchester Museum factory records are virtually complete for the Model 1873 production. This is a model in which the collector can specialize exclusively, and perhaps never run out of variations to acquire. Considerable variety is apparent in the Model 1873, in sights, magazines, finishes, markings, barrel lengths and weights, stocks, and even in screws, varying contours of wood and metal, knurlings, and ad infinitum. Export sales were considerable, and many of these arms experienced rough handling and those that survived are often in poor condition. Domestic sales have survived in a generally better state of condition, but the majority do show use, and often to a great degree. Perhaps the most famous of all Winchesters, the '73 was featured in the James Stewart film "Winchester

SEVENTH EDITION 265



'73." The Model boasts a production record covering more years (about 50) and more guns (over 720,000) than most of the company's other lever action models. Those under No. 525900 (approx.) made prior to December 31, 1898.

Rifles: Standard with 24" barrel, round or octagon. Buttplate of the crescent type. Cap on front of forend; the magazine tube attached to barrel with small band. Adjustable, open style sporting rear sight.

Carbines: Standard with 20" round barrel, and two barrel bands. Buttplate of distinctive curved profile. Saddle ring mounted on the left side of the frame. The rear sights of adjustable carbine type (compare with Rifle).

Muskets: Standard with 30" round barrel, 27" magazine. Three barrel bands usually present, the buttplate of carbine style, and the sights of adjustable musket type.

Major variations are:

Early First Model 1873, the dust cover with guide grooves is mortised in forward section of the frame; checkered oval thumbrest is separately affixed (very earliest is round thumbrest and worth premium). Note two screws on frame above trigger, lever latch fits into lower tang with threads, upper lever profile curves away from trigger; serial range from 1 to about 1600 (serials under 100 worth 30% to 50% premium).

5K-036	Values-Good \$1,500	Fine \$5,500
Carbine: 5K-037	Values-Good \$2,250	Fine \$7,500

Musket: None known to be produced.

(Note: On serial numbers 1 through approximately 600 Model 1873 markings are hand engraved and found on the lower tang with the serial number. This feature worth a premium in value.)

Late First Model 1873, the dust cover mortised as above (oval thumbrest is checkered on the cover itself and variations of that oval panel occur and (etch premiums), trigger pin appears below the two frame screws above trigger, improved type lever latch (the threads not visible) became standard as did the trigger block safety and the added profile to the lever behind trigger (to engage newly added safety pin); serial range about 1600 to 31000 (serials under 100 worth 30% to 50% premium).

Rifle:			rarities, rang	ing from:	
5K-038	Values—Good \$1,100	Fine \$4,500	1 of 100;		
Carbine: 5K-039	Values-Good \$1,600	Fine \$6,000	5K-048	ValuesGood \$32,500 Exc. \$125,000	Fine \$70,000
Musket 5K-040	ValuesGood \$1,750	Fine \$6,500	1 of 1000: 5K-049	ValuesGood \$32,500 Exc. \$125,000	Fine \$7 0,000

Second Model 1873, same as above but dust cover slides on center rail on rear section of top of the trame, the rail secured by screws; serial range about 31000 to 90000. On later Second Models, serrations on rear edges (for finger hold) replaced the checkered oval panel on the dust cover.

Rifle: 5K-041	ValuesGood \$650	Fine \$2,250
Carbine: 5K-042	ValuesGood \$1,000	Fine \$3,750
Musket: 5K-043	ValuesGood \$1,000	Fine \$3,250

Third Model 1873, same as above but the dust cover rail is a machined integral part of the frame, no longer present are the two frame screws and pin formerly located above the trigger, and screws on lower tang are located much more rearward than previously; serial range about 90000 to end of production. Serrated rear edges on dust cover.

Rifles: 5K-044	ValuesGood \$600	Fine \$1,800
Carbine: 5K-045	ValuesGood \$850	Fine \$3,500
Musket: 5K-046	Values-Good \$900	Fine \$2,000

Model 1873 22 Rimfire Rifle, easily identified by the 22 caliber markings and the lack of a loading gate in the right sideplate. Chambered for 22 short and long rimfire cartridges, and loaded through the front end of the magazine tube. 24" or 26" barrels standard. Made c. 1884-1904 in a total quantity of 19,552, this was the first repeating rifle manufactured in America chambered for the 22 rimfire ammunition. Made only in rifle form: 5K-047 Values--Good \$775 Fine \$2,250

1 of 1000 and 1 of 100 rifles, are among the ultimate rarities in Winchester collecting. In the Model 1873 only 136 "1 of 1000" rifles were made, and 8 "1 of 100". These are distinguished by the special marking found on the top of the breech. Confirmation of the series can be made through Winchester Museum records, in which the original arms are documented. The desirability of 1 of 100/1000 rifles has made them attractive for faking; and caution is suggested in making a purchase. Although the "1 of 100" is the scarcer rifle it seems that the "1 of 1000" is more eagerly sought after, hence values are apparently the same for these two great rarities, ranging from:

EXHIBIT "13"

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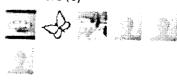
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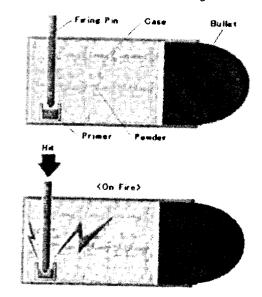
Tuesday, May 4, 2010

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Cartridges: Pinfire Cartridge

In our last post, we studied the cartridges of the needle gun. We've also studied how shock-sensitive materials such as fulminates make percussion locks work. We've also studied how the breech-loader loading mechanisms work. In our studies of the needle gun's cartridges, it was noted that one of the defects of this weapon was that the needle tended to break off often. The next type of cartridge we will study is the Pinfire cartridge.

The pinfire cartridge was originally developed around the same time as the needle gun's cartridge. However, unlike the needle gun, where the long needle is part of the gun's firing mechanism, a pinfire cartridge has a firing pin as part of the cartridge.



Public domain image courtesy of wikipedia.com

It consists of a cartridge with a metallic case. On one side of the cartridge is a protruding firing pin. The other end of the pin touches a small copper cap containing a pressure sensitive primer explosive such as mercury fulminate or potassium chlorate. The rest of the case is filled with gunpowder and there is a lead bullet at the end.

To ignite the gunpowder charge, one applies a sharp blow to the pin.

http://firearmshistory.blogspot.com/2010/05/cartridges-pinfire-cartridge.html

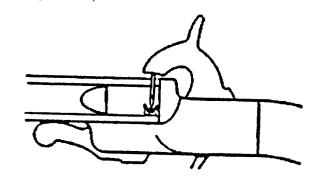
Rifling: Polygonal Bore and the Whitworth Rifle Rifling: Expanding Bullets and the Minie Rifle Rifling: Brunswick Rifle Rifling: History Rifling: Basics Exotic Firing Mechanisms: Electrical Cartridges: Caseless Cartridge Cartridges: Centerfue cartridge Cartridges: Rimfire Cartridge Cartridges: Pinfire Cartridge Cartridges: Needle Gun Cartridge Cartridges: The Paper Cartridge

► April (16)

About Me

The Editor View my complete profile The other end of the pin then strikes the primer which then ignites and then burns the main gunpowder charge.

To load the weapon, the user opens the breech of the gun and drops in a cartridge. There is a slot at the top of the barrel so that the pin can protrude out of the slot. The user then cocks the hammer against spring pressure. When the user pulls the trigger, the hammer is released and the spring force drives the hammer onto the pin, thereby firing the weapon.



Pinfire revolvers also work on similar principles. There is a slot cut into compartment of the revolver's cylinder, so that the pin can protrude out of it. The hammer of the revolver strikes the top of the pin and thereby fires the weapon.

A little history on the pinfire gun: The original mechanism was developed in 1828 by a Frenchman named Casimir Lefaucheaux. By the mid 1840s, guns using this mechanism grew very popular in France, but had limited success in England, chiefly because they were suspicious of breech-loaders in England and also because they didn't trust a French inventor. It was only past the 1850s that the English began to look at breech-loaders and they didn't use the pin-fire cartridge with their weapons. Hence, the pin-fire cartridges were never really popular in English speaking countries. On the other hand, they were very popular in France and French neighbouring countries (Spain, Italy Switzerland etc.)

The pinfire cartridge was one of the reasons for the decline of muzzleloading weapons. It was much quicker and easier to load a breechloading weapon using pinfire cartridges. The cartridge was also relatively gas-tight compared to the needle gun, which made the shooting a bit more efficient. It must be noted however that it wasn't as gas tight as some later cartridges working on other principles. The pinfire cartridges were the first metallic cartridges and also responsible for the decline of paper cartridges as well. All future cartridges with metal cases owe some history to the pinfire.

The problems with the pinfire were that, with the protruding pin, it took a little longer to load than the future centerfire and rimfire cartridges, since the pin needs to be aligned to the slot before the gun can be closed. Rough handling could sometimes accidentally trigger the pin and cause the cartridge to detonate. The pin-fire cartridge, while it was an improvement over the needle gun cartridge, was also not very gas-tight and often, a bit of the expanding hot gas would push the pin up and escape that way. These days, the only weapons that use pinfire cartridges are either antiques from the 1800s, or weapons with really small caliber bullets (e.g. 2 mm bullets), where a rimfire or centerfire cartridge would not work. Posted by The Editor at 12:26 AM Labels: cartridge, pinfire cartridge

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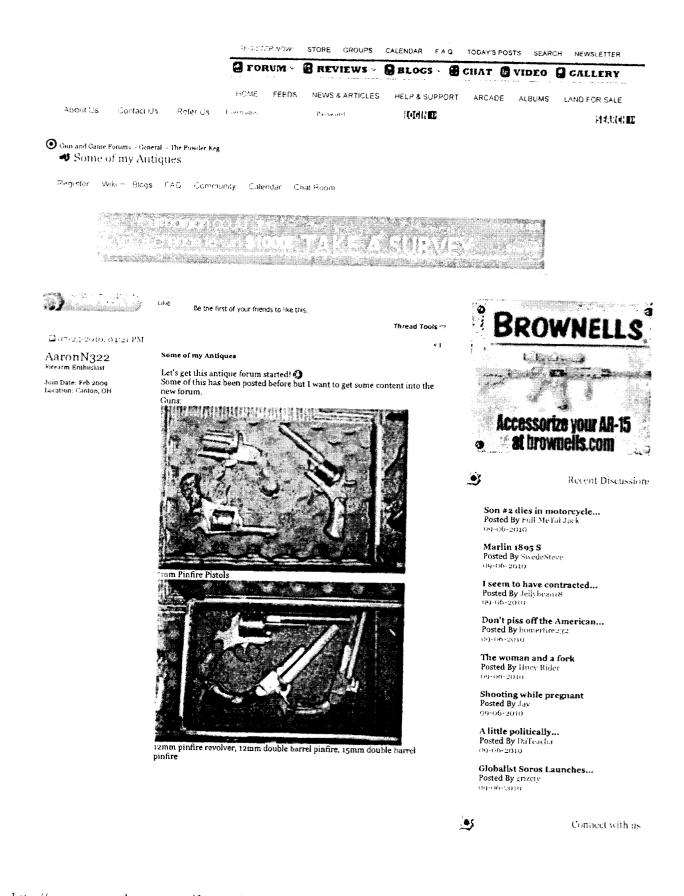
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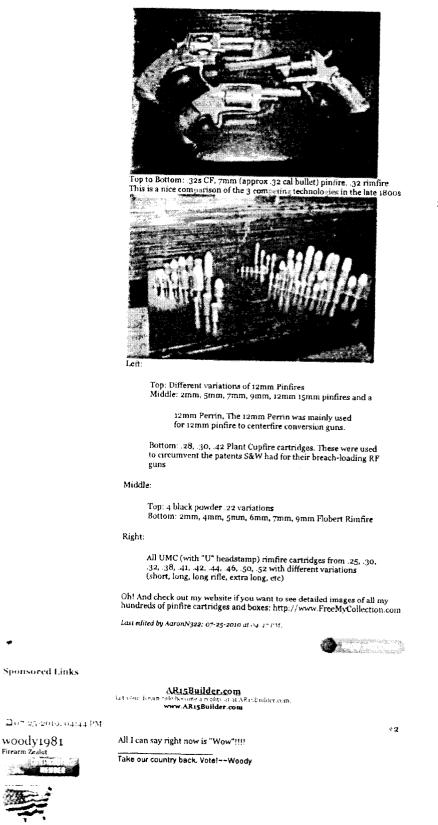
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EXHIBIT "14"



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Join Date: Jun 2009 Location: southwest PA

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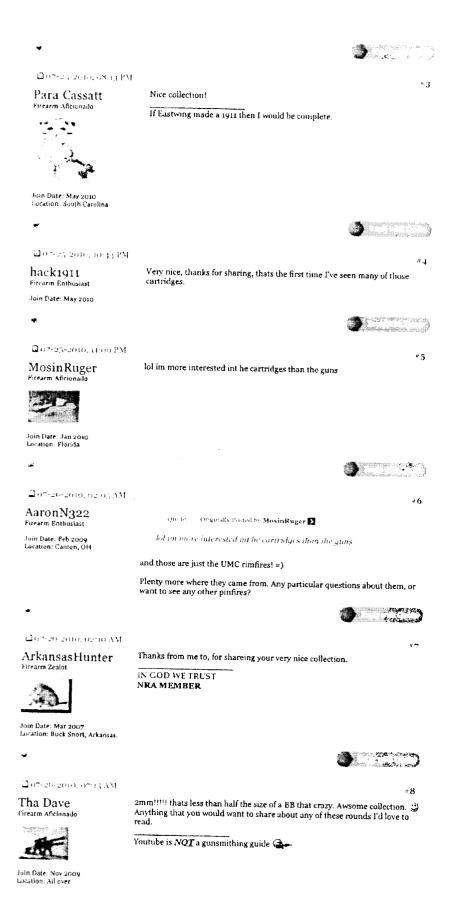
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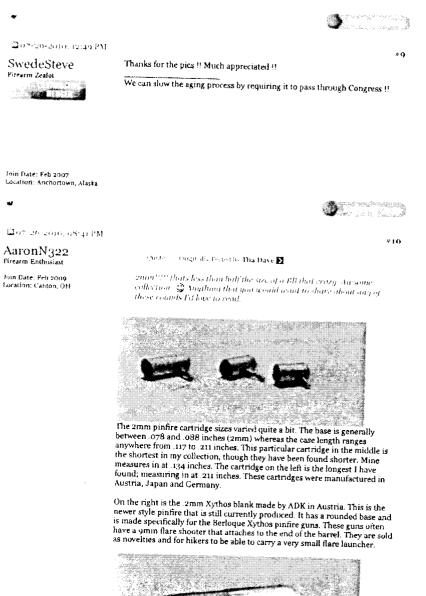
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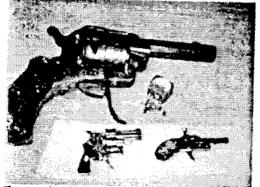
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Some of my Antiques - Gun and Game Forums

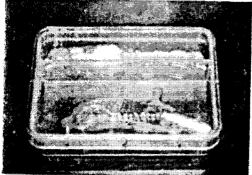
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The two on the left most often came in capsules like the one shown with between 6 and 21 cartridges.



The one on the right most often comes in the little red box as shown in the pictures with the guns.



The older style guns often came in boxes such as the German MAUS that is from early to mid 1900s

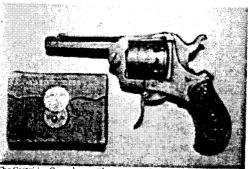
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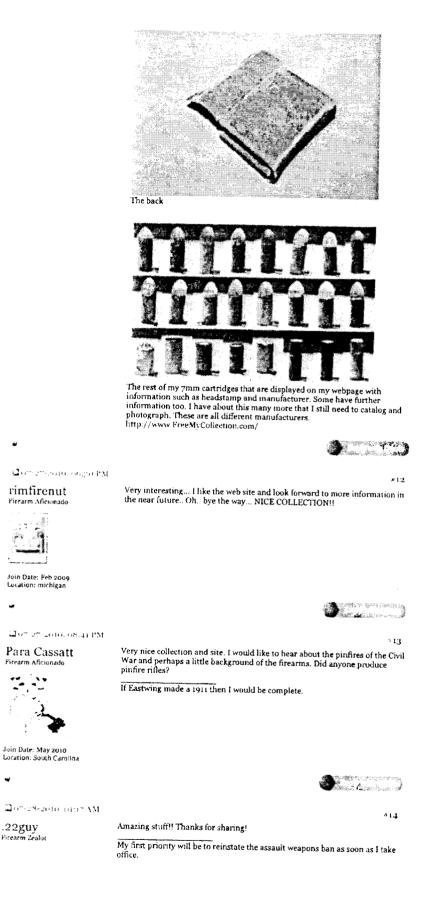
Aaron N322 Firearm Enthusiaat Join Date: Feb 2009 Location: Canton, OH Another one of my favorite pieces in my collection is this leather cartridge holder for 7mm pinfires. I believe this to be from the 1860-1880s. It was most likely used in Europe but who knows, maybe it was even used in our Civil Wat? Both Union and Confederate soldiers are known to have used pinfire (Lefaucheux) revolvers and carbines during the Civil War. If you all are interested I could type a little about their use in that war.



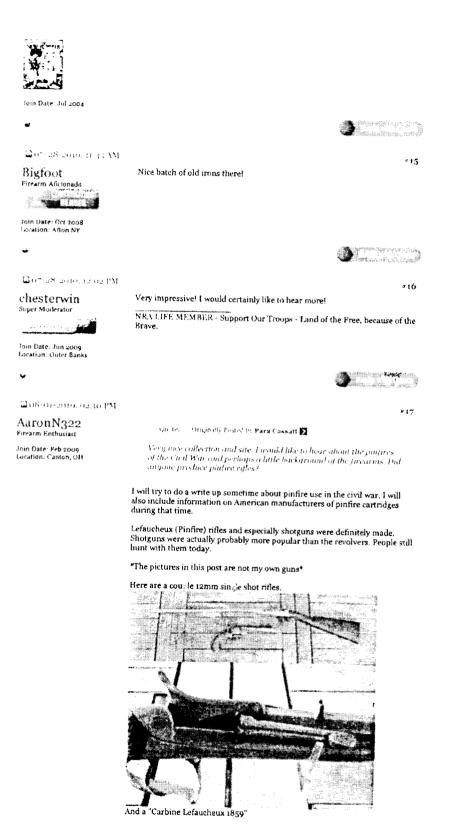
The Cartricige Case along with a 7mm pinfire revolver.

Page 6 of 11

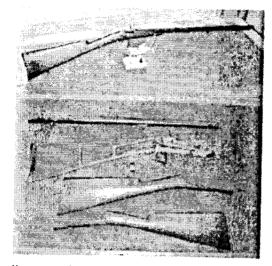
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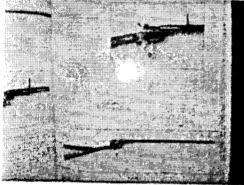
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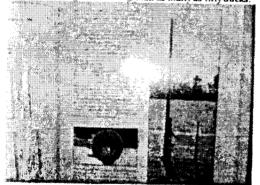
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Here are a couple revolving 12mm pinfire carbines. They also came in 15mm, as well as various gauges of revolving shot guns.

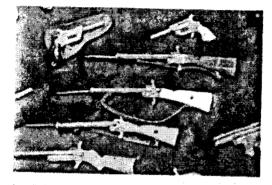


Here is an interesting pinfire punt gun. A single shot would shoot about a pound of BB shot. The gun weighs 130lbs. This one is 9'4" long. "A well placed shot fired at sitting waterfowl might **kill as many as fifty ducks**."



Also, here are some 2mm pinfire rifles:

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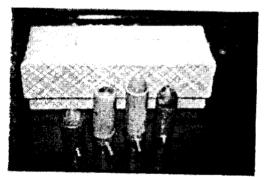
AAFONN322 Firearm Enthusiast Join Date: Feb 2009 Location: Canton, OH Also, Here is a picture of some 12mm carbine length pinfire cartridges. The cartridge on the left is a standard size, for size comparison.

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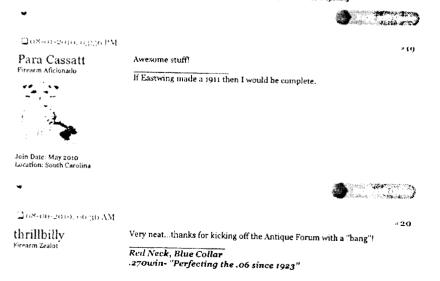
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The box in the back is a full, sealed box of the cartridge on the right. It was made by Houllier & Blanchard of Paris, France. These are documented to have been used in revolving carbines during our Civil War. They are also occasionally dug at civil war battlefields; but not near as often as the shorter, revolver-size pinfires. This cartridge (and box) was made between 1855 and 1872.

The two in the middle are a special cartridge made by Gevelot (Gevelot S. A., (Societe Francaise des Munitions), Paris, France) for a specific British rifle. It has a much longer case than most and it has hard cardboard(pasteboard? paper?) for the case attached to a brass base. I have included a sample of a conical bulleted version and a round ball version.



Last edited by AaronN322; 08-01-2010 at 02:39 PM. Reason: spelling



http://www.gunandgame.com/forums/powder-keg/103761-some-my-antiques.html 9/6/2010

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08:06/2010		^То Тор	Copyright © 2010 GunandGame. All rights reserved.
The woman and a fork Posted By Huey Ruler 00-06-2010			

"rout know why there's a Second Amendment? In case the government fails to follow the first one." -- Rosh Embaugh Advertise Here + Link to US + (annual Game Swag

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EXHIBIT "15"

Plate 2-11 (ubove). A Lefaucheux Model 1854 pinfire "pistol-carbine" revolver fitted with scarce 16-inch harrel and detachable skeleton shoulder stock, serial number "1700." Note rear leaf sight. Courtesy Museé d'Annes de Liége; Francis E. Niffle photograph

Plate 2-12 (below). A Lefaucheux Model 1854, singleaction pinfire revolving ritle in 12mm caliber. Courtesy James Lowther; John Calcany photograph

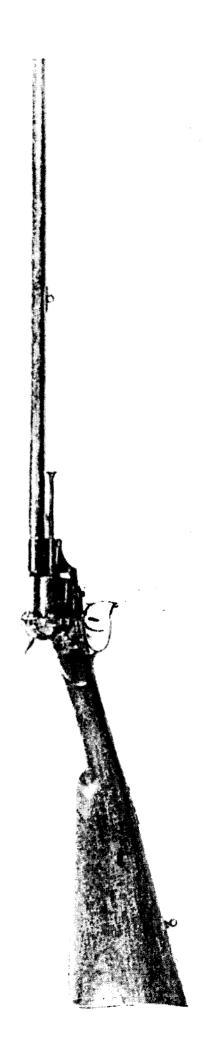


EXHIBIT "16"

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	SK-011	5K-007	SK-DOB	 'istol; same as above but with > hare, '500: 'Good \$3,500 Fine \$8,000 'e fitted with shoulder stocks derived. 'istol; as above but with 16" barrel with 	tock. Quantity estimated 300. Rare i-Good \$5,000 Fine \$16,000	-Good \$8,500 Fine \$22,560 \$41 caliber, barrel length of 16-1 2 rels from Navy Pistol. Long and +TEAPH itstocks, with crescent type brass cluster and as noted above:	-Good \$7,000 Fine \$17.50 ily by New Haven Arms Co. (a.: ily by New Haven Arms Co. (a.:
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EXHIBIT "17"



For good deals on cheap 22Ir ammo go to LuckyGunner.com - 100% IN STOCK AMMO!

A Brief History of .22 Rimfire Ammunition

By Chuck Hawks

The rimfire principle was used to create the first successful self-contained metallic ammunition. Rimfire cases are constructed with the priming compound spun inside the rim of the copper or brass case, which is crushed by the blow of the firing pin to ignite the main powder charge.

The first rimfire cartridges were .22s, but after the type became established many larger caliber rimfire cartridges were developed in the mid to late 19th Century. Some of these had a good run of popularity until they were superceded by the development of higher pressure centerfire ammunition.

Calibers ranged from the .25 Short to the .58 Miller. Probably the best known of the larger caliber rimfires are the .25 Stevens, .32 Long, and .44 Henry Flat. The latter was the cartridge for which the seminal Henry and Winchester 1866 "Yellow Boy" lever action rifles were chambered.

Guns and ammunition for the last of the larger caliber rimfires was discontinued in the U.S. in the late 1930's and early 1940's. According to *Cartridges of the World* by Frank C. Barnes/Edited by M.L. McPherson, for which I am indebted for much of the historical information in this article, Navy Arms commissioned a run of .32 Long ammunition from a Brazilian manufacturer in 1990.

In addition to the larger caliber rimfire cartridges of the past, in recent times subcaliber rimfire cartridges have been introduced. Among these are the 5mm Remington Magnum, .17 Mach 2, and the very successful .17 HMR. However, the focus of this article is .22 caliber rimfire cartridges.

All .22 rimfires (except the WRF and WMR) are ancient black powder designs, and use tapered heel bullets. If you examine a .22 S, L, or LR cartridge, you will see that the case and bullet are the same diameter. The part of the bullet inside of the case (the heel) is reduced in diameter to allow it to fit inside of the case. Such bullets are also called "outside lubricated," because they are ordinarily waxed or copper plated. In all other modern cartridges, the bullet shank is of constant diameter and the case is slightly larger than the bullet to allow the heel of the latter to fit inside. This old fashioned term for this design is "inside lubricated," as the lubrication grooves of lead bullets are inside of the case.

The BB Cap was the first type of rimfire ammunition. BB stands for "bullet breech." It was invented in France around 1845, designed for the Flobert indoor target rifle. BB Caps were designed for shooting gallery use and are seldom encountered these days, as shooting galleries are now considered politically

incorrect by socialists, tort lawyers, girly men, and liberal politicians.

The BB Cap fires a round lead projectile (ball) powered only by the priming compound in the rim of the case, which is very short as no powder is used. The case is just there to hold the priming compound and bullet together.

BB Caps were made in Europe and America until fairly recently. The last I saw were made in Germany by RWS who, I believe, still loads them today.

The successor to the BB Cap was the CB Cap. "CB" stands for "Conical Bullet." The CB cap uses a 29 grain round nose lead bullet and a tiny pinch of powder. This is also shooting gallery ammunition. CCI produces modern CB Cap loads in .22 Short and .22 Long cases (firearms chambered for the Long Rifle cartridge being far more common today) for gallery and indoor practice use. The MV of either is 710 fps.

The common .22 Short cartridge dates from 1857. It is the oldest cartridge still being loaded today. It was the first American metallic cartridge, introduced in for the first S&W revolver, a pocket pistol developed for personal protection. It was popular during the American Civil War, carried as personal weapons by soldiers on both sides.

The .22 Short is a development of the BB cap using a 29 grain round nose (RN) bullet in a lengthened case (compared to the BB Cap). It was originally powered by 4 grains of fine black powder (about FFFFg). After the advent of smokeless powder, the .22 short was adapted to the new, cleaner burning propellant. Although no longer extremely popular, it is still used all over the world and in the Olympic games for the rapid fire pistol event. Modern .22 Short High Velocity ammunition is loaded to a MV of approximately 1095 fps and ME of 77 ft. lbs. from a rifle barrel (Remington figures).

The .22 Short is a pretty anemic round, and in 1871 a longer case of the same diameter was developed for the 29 grain Short bullet. This became the .22 Long cartridge, still occasionally seen (but obsolescent) today. The .22 Long was once chambered in a large number of pistols and rifles. It was originally loaded with 5.0 grains of very fine black powder and offered about 100+ fps greater velocity than the .22 Short. The Long survived the change to smokeless powder and is still occasionally seen today. CCI loads their .22 Long High Velocity ammo to a MV of 1215 fps and ME of 95 ft. lbs.

Around 1880 the .22 Extra Long cartridge appeared, powered by 6.0 grains of black powder. It fired a 40 grain tapered heel bullet (the same as the later .22 Long Rifle) at a MV similar to the Long Rifle, but used a longer case than the .22 LR. This cartridge was available in a number of rifles in the late 19th Century. .22 Extra Long ammunition was finally discontinued around 1935.

In 1887 the Stevens Arms Co. developed the ultimate in .22 rimfire cartridges, the .22 Long Rifle. This used the .22 Long case with a 40 grain RN bullet loaded to higher velocity than the 29 grain Long bullet. It shot flatter and hit harder than any of the previous .22 rimfires except the .22 Extra Long, whose performance it essentially duplicated in a shorter case, and it was more accurate than that cartridge.

The .22 Long Rifle caught on, was adapted to both rifles and pistols, and became

the most popular sporting and target shooting cartridge in the world. After the advent of smokeless powder a High Velocity version of the .22 LR was introduced, which further extended the .22 LR's superiority as a small game hunting cartridge.

Modern .22 LR target ammunition is loaded to a MV of about 1085 fps with a 40 grain RN bullet. .22 Long Rifle High Velocity cartridges drive a 40 grain copperplated bullet at a MV of 1255 fps and ME of 140 ft. lbs. from a rifle barrel. For small game hunters, most manufacturers offer a 36-37 grain copper-plated lead hollow point bullet at about 1280 fps (Remington figures). This load expands nicely and makes for quick kills on small game, given proper bullet placement.

Because of its popularity there are many permutations of the .22 LR cartridge. One of the more useless is the .22 LR shot cartridge, which fires a pinch of very fine #12 shot. This load is used, among other things, to collect very small creatures, mice and the like, for museum displays. This is not a hunting load, as it is ineffective for use even on very small birds beyond about 10 feet.

Far more useful are the Hyper Velocity .22 LR loads pioneered by CCI in the form of the Stinger. These use lightweight hollow point bullets at increased velocity for flatter trajectory and dramatic expansion. Remington followed suit with their famous Yellow Jacket load, and the idea was subsequently picked-up by most other manufacturers. The CCI Stinger drives a 32 grain GLHP bullet at a MV of 1640 fps with 191 ft. lbs. of ME.

In 1890 the .22 Winchester Rim Fire (WRF) was introduced. This cartridge is loaded with a 45 grain, flat point, inside lubricated bullet with a full diameter heel, rather than the tapered heel bullet of the .22 LR. The .22 WRF fires a .224" diameter bullet, just like modern centerfire .22s and the later .22 Magnum (WMR). At one time a 40 grain HP bullet was also available, but it has since fallen by the wayside.

Remington called this cartridge the .22 Remington Special, and loaded it with a 45 grain RN bullet. The .22 Rem. Spec. and .22 WRF are the same cartridge and are interchangeable.

The .22 WRF is a good small game cartridge, superior to the .22 LR. CCI loads the ammunition, and Winchester does an occasional run of .22 WRF. Modern CCI ammo is loaded to a MV of 1300 fps and ME of 169 ft. lbs.

Today the .22 WRF is kept alive primarily as a less destructive small game load for rifles chambered for the .22 WMR cartridge. The .22 Magnum is a lengthened version of the .22 WRF and will chamber in firearms designed for the .22 WMR, much as .38 Special ammunition may be fired from .357 Magnum guns, although it will not function correctly in autoloaders.

In the early 20th Century a pair of cartridges about the same size and offering about the same ballistics as the .22 LR were introduced. These were designed for use in autoloading rifles, used smokeless powder and inside lubricated bullets, and in that respect are a more modern design than the .22 LR. However, as soon as the established .22 LR was universally converted to smokeless powder, the .22 Auto cartridges became superfluous.

The .22 Winchester Automatic cartridge was designed for their Model 1903

autoloading rifle (discontinued in 1932). Ammo was produced into the 1970's. Remington's .22 Automatic appeared in their Model 16 autoloader. That rifle was discontinued in 1928, and the ammunition was not loaded after the Second World War. Although similar, these two cartridges differ dimensionally and are *not* interchangeable.

Jump to 1959, the year Winchester introduced their very successful .22 Winchester Magnum Rimfire (WMR). This cartridge pushes the limits of pressure possible with a rimfire case given the limits of contemporary metallurgy. The .22 Magnum was initially offered with 40 grain FMJ and JHP bullets at an advertised MV of 2000 fps from a rifle barrel and 1550 fps from a pistol barrel. Due to its high velocity, .22 WMR cartridges are loaded with jacketed bullets.

The .22 WMR is based on a lengthened version of the .22 WRF case, like that cartridge uses standard diameter .224" inside lubricated bullets, and remains to this day the most powerful .22 rimfire cartridge ever. It has been adapted to many types and brands of firearms, and .22 WMR ammunition is loaded by all of the major rimfire ammunition manufacturers and is very widely distributed.

As good as the .22 WMR is as a rifle cartridge, I feel that it is even better as a revolver cartridge. It offers velocity and trajectory similar to the centerfire magnum pistol cartridges at a fraction of the recoil and cost. Convertible revolvers, supplied with both .22 LR and .22 WMR cylinders, are the ultimate in versatility for plinking, small game hunting, and varmint shooting.

Today the .22 WMR is available with bullet weights ranging from about 30 to 50 grains, and CCI loads a shot shell version. The standard Winchester 40 grain JHP bullet is now loaded to a rifle MV of 1910 fps with ME of 324 ft. lbs. The various 30-40 grain JHP bullets are best for varmint hunting, but are overly destructive on small game intended for the dinner table. A better choice in that case are the heavier 45-50 grain bullets intended for small game hunting, or the use of .22 WRF ammo when possible.

The .22 WMR is the newest, commercially successful, .22 rimfire cartridge (so far). With .22 rimfire cartridges now available from the BB Cap to the WMR, the field seems pretty well covered. Recent rimfire development has concentrated on lighter, smaller caliber bullets that can achieve higher velocity within the existing pressure limits. The .17 HMR, based on a necked-down .22 Magnum case, is the best example.

Rimfire cartridge design is limited by the fact that the brass case rim must be weak enough to be crushed by the blow of the firing pin. This severely limits the permissible maximum pressure and thus the performance of the cartridge. I suspect that the advent of more potent .22 rimfire cartridges will depend on the future development of more advanced case materials.



Back to the Rimfire Page

Back to the Collector's Corner

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EXHIBIT "18"

TIGER TAMER: A 12-BORE HOWDAH DOUBLE

from the collection of

Tony Orr

From very early historical times Indian royalty enjoyed the sport of hunting, or shikar as it was known, especially the pursuit of dangerous game such as tiger, bison and bear from a howdah on the back of specially trained elephants. Regal hunts were by all accounts gala affairs, with an extensive entourage of palace staff, high-ranking officials, tentage and furniture, opulent table fare, and of course shikaris, elephants and their mahouts. The practice appears to have reached almost fever pitch during the British Raj, with the influx of military and civil service personnel from England bringing with it the British *penchant* for field sports. The advantages of hunting tiger from an elephant were quickly realised by senior civil servants and high-ranking military officers alike, especially the added security of an elevated position in the event of a charge from wounded dangerous game.



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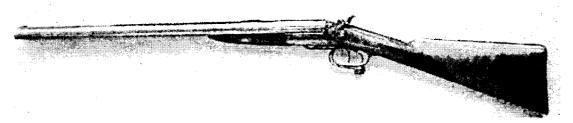
were usually sheathed on or

in the howdah within easy reach of the occupant, or holstered on the hunter's person for instant accessibility in the gravest extreme!



In those days, there were no illusions about the most effective projectiles for close-quarter conclusions with an angry tiger. The bigger the bullet, the better! At such short ranges trajectory was immaterial and penetration rarely limiting, hence the powder-charge was of secondary importance to bullet diameter. Common chamberings ranged from the various .450s, .455s and .476s through the .577 Revolver and .577 Snider, right up to the short 16-bore! In a hand-gun, the latter would have been a handful indeed!

Less common, but nonetheless effective as a close range tiger-stopper, was the light, handy, short-barrelled bore-rifle. These specialist double-guns were designed for spherical ball or a short conical bullet, and were chambered for either a brass or paper-case cartridge. The crucial quick-handling qualities and capacity for a fast follow-up shot were enhanced by the side-by-side coach-gun design and total weight rarely exceeding 8 lbs. Powder-charges were relatively light in order to minimise recoil, although admittedly "recoil is insignificant when there is a tiger on the head of your elephant", as the Maharajah of Cooch Behar was once heard to remark!

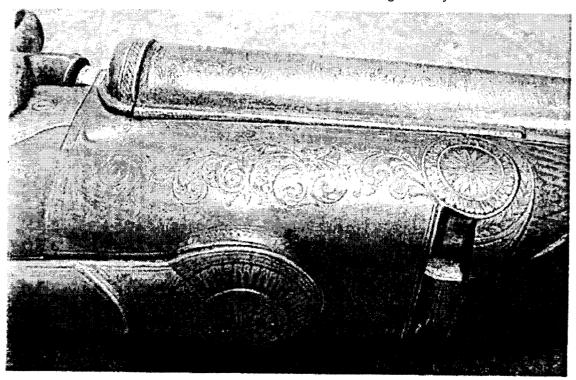


The howdah rifle presented here bears the inscription "W & J Kavanagh" on the lock-plates, having been built by the very talented Irish gun-making family by that name. The top rib carries the firm's address: "12 Dame Street, Dublin". We know that William Kavanagh originally set up shop at Lower Ormand Quay around 1817, and moved up to the Dame

http://www.acant.org.au/Articles/HowdahRifle.html

Street foundry in 1821 where the company continued to trade for over 100 years! Like the rib and locks of this gun, trade labels from the second half of the 19th Century read "W & J Kavanagh", however the Dublin City Directory of 1850 listed only William Kavanagh as a gun-maker and no-one by the name of J. Kavanagh was listed in the trade. We can surmise that he joined the firm some time after 1850, a younger brother perhaps? Later guns made around the turn of the century were marked "Wm Kavanagh & Son", implicating the next generation of this famous gun-making dynasty.

The Kavanagh firm hung its shingle alongside other well-known Dublin gun-makers, the most notable being William & John Rigby of Suffolk Street, and William Trulock of several addresses in the Dublin gun-making quarter including Dame Street. The well-respected London maker, Stephen Grant, apprenticed to William Kavanagh in his youth.

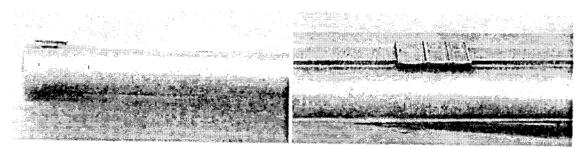


The rifle before us is an early side-by-side double-barrelled hammer gun built on the Jonespatent rotary under-lever action. While this might suggest a date of manufacture some time after 1859, a number of other features of this remarkable vintage firearm speak to us of a far more interesting origin! Neatly-executed and barely-visible metal patches dove-tailed into the tops of the chambers indicate that the gun was converted to central-fire from the earlier pin-fire ignition system. The relatively thin chamber walls and the shallow fences provide further evidence that the firearm is a

conversion. The pin-fire system lasted only 15 years or so from its appearance in 1847 till the widespread acceptance of Daw's central-fire patent by 1862. Conversion from pin-fire to centralfire was common as the benefits of

http://www.acant.org.au/Articles/HowdahRifle.html

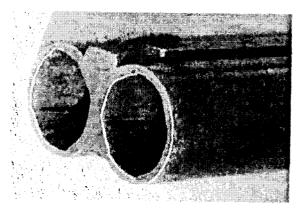
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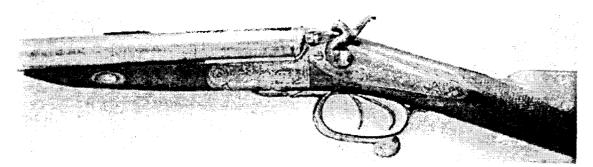
Information on the early 12-bore ball cartridge for which this double-gun was probably intended is rather sketchy in the historical literature. According to W.W. Greener's tome, the most likely

charge of the pin-fire cartridge used in these barrels prior to the conversion was 2 $\frac{3}{4}$ to 3 drams, so I think we can safely regard this double as a 3-dram gun.

Could this particular rifle have been intended for more general hunting than from a howdah? Most historical writings from Baker to Burrard would tend to indicate otherwise. Even at the beginning of the breech-loading era, the 3 dram charge and spherical ball was not considered particularly adequate for jungle



shikar, and was probably rather light even as the primary arm in a howdah. As well as tiger and bear, buffalo and gaur were common quarry, and a rhinoceros or wild bull elephant in 'must' could not be ruled out.



For such game, heavy bore-guns from the 5-dram No.12 up to the 10-dram No.8 were sine qua non during the mid to late 1800s. Double express rifles from .450 to .577 would soon become popular as bore-guns gradually faded from the scene, and although the 'Paradox' or 'Jungle Guns' were to enjoy brief popularity around the turn of the century, the various cordite express rifles would eclipse them all by the beginning of the Kaiser's War.

Like the better-known howdah pistols, however, this stumpy 12-bore 3-dram rifle would have possessed all the short-range power required to dislodge an angry tiger from the elephant's head, at distances measured in feet and sometimes barely inches! Sadly, the attempts of modern man to distance himself from the soil have relegated many marvellous

artefacts like this howdah rifle to insipid curiosity, and as a result the majority are now lost. For the avid hunter/collector, however, merely shouldering this surviving example conjures up the sights, smells, and excitement of shikar in that distant land so long ago!

Sources

"Wild Beasts and Their Ways" by Sir Samuel Baker. MacMillan & Co, 1890.

"Notes on Sporting Rifles" by Sir Gerald Burrard. 3rd Edition, 1932.

"The Gun and Its Development" by W.W.Greener 9th Edition, 1910.

"Gunmakers' Row, Dame Street and Environs, Dublin" by David Stroud pp 43 –45 in Classic Arms & Militaria Vol. XV Issue 2, 2008.

http://www.dublin1850.com/dublin1850/xdubbir44.html#Kavanagh

EXHIBIT "19"

MAR (661)

model and the 44/40 caliber with the etched barrel panel. Other fake single action rarities will undoubtedly show up, too. Close scrutiny is mandatory when acquiring these types; billsof-sale from the seller with guarantees of authenticity should be obtained.

Classification of these famous Colt single actions, and the identification of their myriad of variants is so extensive that there are currently 15 books specifically dealing with the subject. Quite a few of those works are of major significance to understanding them (see Biblingraphy this chapter).



BASIC VARIATIONS AND THEIR VALUES:

Early production revolvers, 45 caliber, 7-1/2" barrel, with socalled "pinched frame" (constriction in the topstrap to form the rear sight), and slanted barrel address (serial range about 1 to 100);

58-136 Values—Good \$20,000 Fine \$70,000

Early Martially Marked Model, 7-1/2" barrel with slanted address markings (most of the first 24,000 pistols produced), in 45 caliber, with U.S. markings and inspector stampings: 5B-137 Values-Good \$4,000 Fine \$25,000

Standard models above the serial range 24000 to end of production; common calibers, e.g., 45, 44-40, 38-40, 32-20, etc. Longer barrel lengths and largest calibers in greater demand and tend to bring higher values. Those made for smokeless powder (after c. 1898) to end of production tend to bring lesser values than indicated:

58-138 Values---Good \$1,200 Fine \$4,000 Exc. \$7,500

Rare calibers: This model was made in a great many calibers of which quite a few are considered either scarce or rare. These calibers, along with quantities manufactured of each, may be found listed in many of the major Colt reference works and should be consulted to determine relative rarity. Depending on the quantity produced of each specific caliber (and, of course, condition) prices of this model can increase from 50 percent to 500 percent.

Civilian arms with the early slanted barrel address, 45 caliber, 7-1/2° barrels (no U.S. government markings):

5B-139 Values—Good \$1,750 Fine \$6,500

U.S. martially marked revolvers with conventional barrel address, 7-1/2", 45 caliber, government inspector markings:5B-140Values--Good \$2,750Fine \$8,500

Springfield Armory and Colt factory refinished U.S. martially marked revolvers with 5-1/2" barrels; so called ARTILLERY MODEL. Three variations: TYPE 1 all mixed serial numbers;

Colt Flattop Target Model Single Action Army

Flattop Target Model Single Action Army. Made c. 1888 to about 1896; a few in later years; total quantity approximately 925. Values shown are for following calibers and quantities

known made of each: 22 RF (107); 38 Colt (122); 41 (91); 45 (100); 450 Boxer (89); 450 Eley (84).

Premiums usually added to rarer calibers: 32 Colt (24); 32 S&W (30); 32-44 (9); 32-20 (30); 38 S&W (39); 38 Colt Special (7); 38-44 (11); 380 Eley (3); 38-40 (19); 44 Russian (51); 44 S&W (51); 44 S&W Special (51); 44-40 (21); 455 Elev (37); 476 Eley (2). TYPE II barrel number mismatched, other numbers match, worth small premium; TYPE III all matching numbers, very scarce, worth premium:

58-141 Values-- Good \$1,200 Fine \$4,500

Made for British Market with Poll Moll London address markings:

5B-142 Values—Good \$1,200 Fine \$4,000

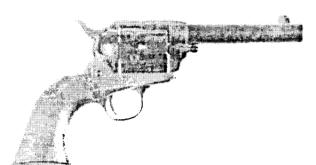
44 rimfire series, individual serial range of from 1 to about 1800,44 Henry caliber, made c. 1875-80, majority with 7-1/2" barrels:5B-143Values-Good \$3,750Fine \$20,000

22 rimfire series, 7-1/2" barrel. Total 107 made (flat-top model not included); 90 of these utilized frames and some parts of the 44 r.f. series (*q.v.*) with serial numbers in the 44 r.f. special range 1–1800; others fall mostly in serial range 135000. **22 CAL** marked on side of trigger guard:

5B-143.2 Values—Good \$4,000 Fine \$17,500

44-40 revolvers with etched COLT FRONTIER SIX SHOOTER barrel marking (left side); within serial range about 21000 to about 130000;

58-144 Values---Good \$1,400 Fine \$7,500



Sheriff's or Storekeeper's Model. Made without ejector rod or ejector housing. Right forward side of frame made without provision for the ejector housing. 4" barrel most commonly encountered with majority of other barrel lengths from 2-1/2" to 4-3/4" and a small group with 7-1/2". Various calibers:

5B-145 Values-Good \$4,500 Fine \$20,000

Wells Fargo & Company revolvers, bearing the W.F. & Co. markings on the butt, and documented by Colt factory ledgers, 45 caliber, usually 5-1/2" barrels:

5B-146 Values—Very Good \$4,000 Exc. \$8,500

Long fluted cylinder model, made in the serial range 330001 - 331480, to use up double action cylinders:

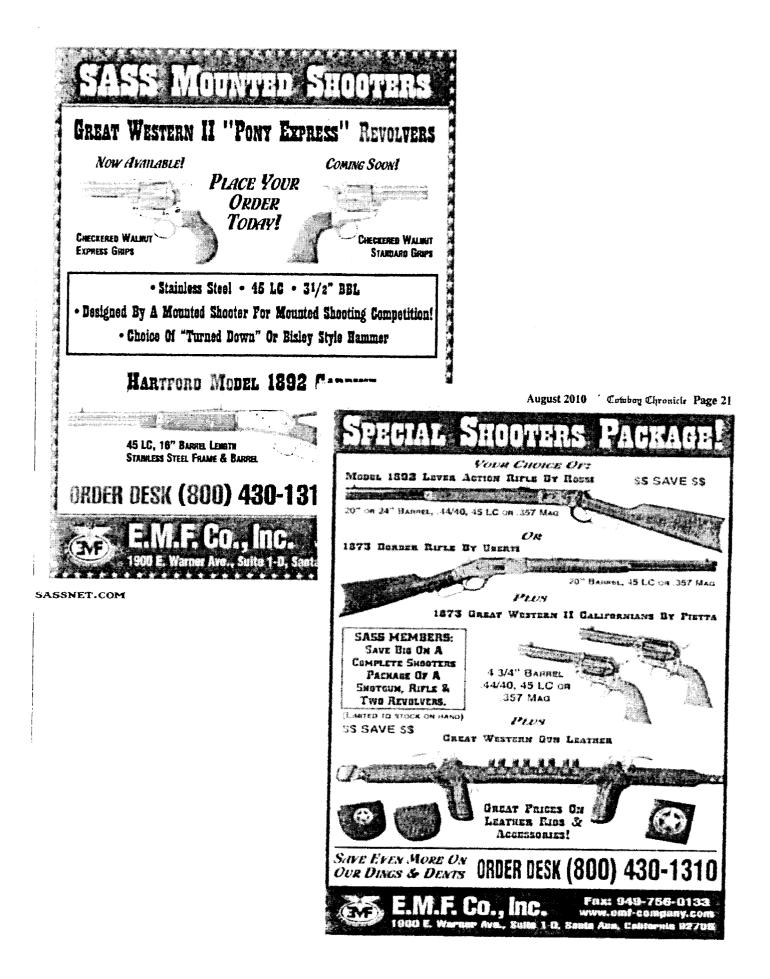
5B-147 Values---Very Good \$2,000 Exc. \$5,500

(Note: Among the important details affecting collector valuations are calibers, barrel lengths, special markings, variations in sights, frames, ejector rods, hammers, cylinder pin locking devices and grips. The number of variants catalogued by collectors is very extensive. Fortunately the Colt factory ledgers are nearly complete for this model. The collector should perform careful and thorough research on rare and/or high value pieces prior to acquisition.)

7-1/2" barrel standard. Variants known, most prominent being the mis-named "Buntline Specials."

Grips of checkered hard rubber; checkered walnut also available. Metal parts blued, with casehardened hammers.

Serial number markings within the range of about 127000 -162000, with a few in higher ranges; numbered in the sequence of the Single Action Army. Barrel marking: COLI'S PT. F.A.MFG.C^o HARTFORD, CT.U.S.A. Frame markings of 2-line 1871, 1872, and 1875 patent dates and the rampant colt were standard. Caliber markings on left side of the barrel for most of the production.



Colt Single Action Army Revolver

Single Action Army Revolver, A legendary American gun, Contracted and issued in large quantities by the U.S. Army during the Indian Wars; widely carried in the "golden days of the old west" by the most illustrious of lawmen and most notorious of outlaws. A.k.a. "Peacemaker", "Frontier Six-Shooter", "Equalizer", "Hog-leg", "Thumb-buster" and more recently "First Generation" for pre-World War II production 1872-1940 (included here); popularly known as merely the "Single Action" among collectors. "Second Generation" (1956-1978) and "Third Generation" (1978-present) types are easily recognized by large letters "SA" after serials or letter-number combinations on commemoratives and custom guns. (Post-WWII types not covered.) Total quantity, including Flattop Target model and Bisley Model (both numbered in same range) 357,859 of which 310,386 were this standard model. (Those under No. 182,000 (approx.) made prior to Dec. 31, 1898.)

Most popular calibers for collectors are 45 (150,683 made); 44-40 (64,489 made). Other popular calibers: 41 (16,402 made); 38-40 (38,240); 32-20 (29,812 made).

Other scarce and rare calibers with respective quantities follow. Values and premiums are usually in direct relation to quantity produced: (except where noted all are centerfire) 22 RF (107); 32 RF (1); 32 Colt (192); 32 S&W (32); 32-44 (2); 38 Colt (1,011); 38 Colt (up to 1914 1,011); 38 Colt (after 1922 1,365); 38 S&W (9); 38 Colt Special (820); 38 S&W Special (25); 38-44 (2); 357 Magnum (525); 380 Eley (1); 44 Smoothbore (15); 44 RF (1,863); 44 German (59); 44 Russian (154); 44 S&W (24); 44 S&W Special (506); 45 Smoothbore (4); 45 Auto (44); 450 Boxer (729); 450 Eley (2,697); 455 Eley (1,150); 476 Eley (161).

Barrel lengths were standard in 4-3/4", 5-1/2", and 7-1/2". Lengths listed in the Colt serial ledgers run from 2-1/2" on up to 16". Ejector rod standard, mounted on the right side of the barret.

Long barreled Colts with attachable, skeleton-type Colt made shoulder stocks are commonly called "Buntline Specials" after the legendary Dime Novel author Ned Buntline. He allegedly had five made for presentation to Dodge City lawmen, a story debunked by critical arms and Western students. Some special order Single Actions with varying long length barrels were made and attachable shoulder stocks could be separately purchased from Colt for them (or any Single Action). All are considered rare. Though these types have acquired the nickname of "Buntline Special," the so-called "true" Buntline is a special flat top single action in the serial range of 28800 through 28830, with folding leaf rear sight and barrel length varying from 10" to 16". Considered an extreme rarity. All of those long barreled models with stocks fetch values far in excess of those shown here but each must be valued on its own individual merit and unique features.

Grip types vary, beginning with walnut (either oil stained or varnished), and changing to eagle and shield pattern hard rubber at the serial range about 75000. At the range about 165000 these were succeeded by rampant colt hard rubber without the eagle and shield design. A variety of special grips were available, particularly in ivory and pearl, sometimes carved; quantities, however, were relatively limited.

Finish was standard blued, the frame and hammer casehardened. Nickel plating was fairly common. Silver, gold, and other finishes could be ordered, but are scarce.

Serial numbering began with 1 and continued through 357859. The only exception to the sequence was the special 44 Rimfire Model, which is considered individually below. Barrel address markings went through two standard types:

+COLT'S PT. F.A. MFG. Co. HARTFORD, CT. U.S.A.+ (serial range 1 to approximately 24000). Slanted, italic markings.

COLT'S PT. F.A. MFG. Co. HARTFORD, CT. U.S.A. (serial range 24000 to end of production; in single line on barrels of 5-1/2" and longer).

Patent date markings were on the left sides of the frames. The sequence was as follows: Two line marking of 1871 and 1872 dates (beginning of production through about 34000). Three line marking of 1871, 1872, and 1875 dates (34000—about 135000). Two line marking of 1871, 1872, and 1875 dates (135000 to end of production). A rampant colt trademark was stamped next to the patent dates, beginning at about the 130000 range, and continued in slightly varying formats through the end of manufacture.

The stamping of serial numbers on cylinders ceased about 120000; no serial appeared on that part thereafter. Around 144000 Colt introduced the transverse, spring-loaded catch for the cylinder pin (located on the front of the frame just below barrel) to replace the cylinder pin retaining screw. Generally believed to be the demarcation of the use of black powder loads for smokeless, high pressure loads, it should be specifically noted that such is not the case! By 180000 (October, 1898) Colt warned against the use of smokeless powder and continued to do so until early 1900 (approx. 192000) when they first stated their smokeless guarantee.

Most caliber markings appeared on the left side of the barrel; excepting the early production (up through about the 130000 serial range), where marks were usually on the trigger guard area.

The variety of other marks classified is extensive, and includes government inspector and proof stampings, Colt factory inspector stamps, serial numbering, various inscriptions (e.g., W.F. & Co.), etc., etc.

Caution: Since 1981 there have appeared on the market a number of extremely clever, well-made, completely spurious Colt single-action FAKES of the martially marked 45 caliber

EXHIBIT "20"



http://www.sassnet.com/About-What-is-SASS-001A.php

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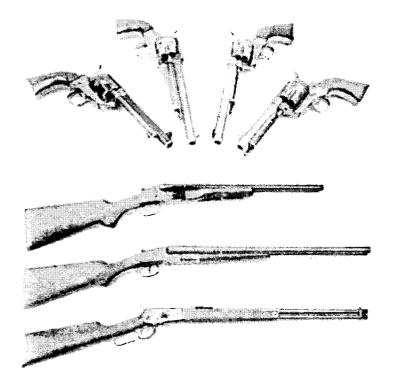


same. Adding "too," "II," etc., is not acceptable. "Ranger" could become "Texas Ranger" but not "The Ranger." "John Henry Chisum" could be modified to "Jack Chisum" but not "John H. Chisum" or "Jon Henry Chisum." Historical names may not be modified to make them different. "Wyatt Earp" and "Marshal Wyatt Earp" are considered the same.

The SASS Alias Registry changes daily. Feel free to <u>search the current</u> alias list then telephone or fax the SASS office to confirm the availability of your alias choice. Be creative and good luck!

OLD WEST FIREARMS

Cowboy Action Shooting is a multi-faceted shooting sport in which contestants compete with firearms typical of those used in the taming of the Old West: single action revolvers, pistol caliber lever action rifles, and old time shotguns. The shooting competition is staged in a unique, characterized, "Old West" style. It is a timed sport in which shooters compete for prestige on a course of different shooting stages.



Each scenario, as they are called, features an array of situations, many based on famous incidents or movies scenes, in which the shooters must test their mettle against steel targets.

SPIRIT OF THE GAME

As the game of Cowboy Action Shooting[™] has evolved, our members have developed and adopted an attitude towards their participation called "The Spirit of the Game." It is a code by which we live. Competing in "The Spirit of the Game" means you fully participate in what the competition asks. You try your best to dress the part, use the appropriate competition tools, and respect the traditions of the Old West. Some folks would call it nothing more than good sportsmanship. We call it "Spirit of the Game."

http://www.sassnet.com/About-What-is-SASS-001A.php

9/6/2010

Become a Member Now!

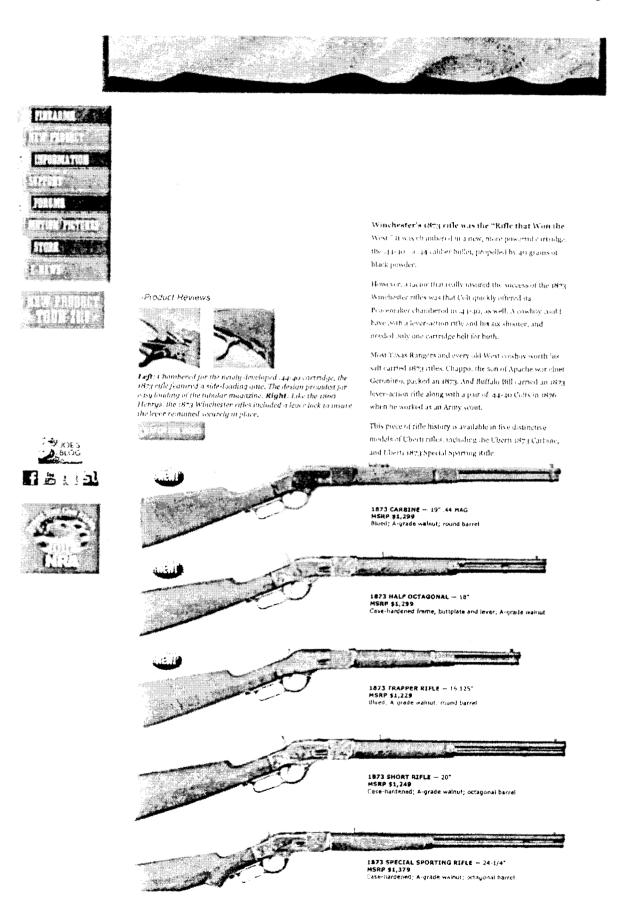
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http://www.sassnet.com/About-What-is-SASS-001A.php

9/6/2010

JA001028

EXHIBIT "21"



http://www.uberti.com/firearms/1873_rifle_and_carbine.php

9/6/2010

1



ITEM NOMBER	MODEL	CALIBER	BARREL	MATERIALS	MSRP
		1873	Rifle and	Carbine	
3424.30	Гнаррен	45 Colt	16 125"	Blue Steel Frame and Bultplate, Case-Hardened Lever	\$1229
<u>116</u> .		353 1110			

				Lever	
342440	Half Octagonal Rifle	45 Cott	15"	Case-Hardened Frame Buttplate and Lever	\$1099
342445	Haif Octagonal Rifle	357 MAG	18"	Case-Hardened Frame Bullplate and Lever	\$1299
341260	Carbine	44 MAG	14"	Blue Steel Frame, Rubbar Recoil Pad, Case- Hordened Lever	\$1299
342700	Carbine	357 Mag	19"	Blue Steel Frame and Buttplate, Case-Herdened Lever	51199
342400	Carbine	44/40	19"	Biue Steel Frame and Buttplate. Case-Hardened Lever	\$1199
342800	Carbine	45 Cort	19"	Blue Steel Frame and Butplate, Case-Hardened Laver	51199
342710	Short Rille	357 Mag	50	Case-Hardened Frame, Rutplate, and Lever	\$1249
342410	Short Rifle	44/40	20"	Case-Hardened Frame, Buttplate, and Lever	\$1249
342910	Short Ritle	45 Colt	50.	Case-Hardened Frame, Buttplate, and Lever	\$1249
342720	Sporting	357 Mag	24 25"	Case-Hardened Framo Buttplete, and Lever	\$1249
342420	Sporting	44/40	24 25"	Case-Haidened Frame, Buttplate, and Lever	\$1249
342820	Sporting	.45 Cott	24 25"	Case-Hardened Frame, Buttplate, and Lever	\$1249
342138*	Special Sporting Short	357 Mag	20"	Case-Hardened Frame, Bultplate, and Laver	\$1379
342058*	Special Sporting Short	44/40	20"	Case-Hardened Frame, Bullplate, and Lever	\$1379
340068*	Special Sporting Short	45 Colt	20"	Case-Hardened Frame, Buttplate, and Lever	\$1379
342760*	Special Sporting	357 Mag	24.25"	Case-Hardened Frame, Buttplate, and Lever	\$1379
142750*	Special Sporting	44/40	24.25"	Case-Hardened Frame, Bultplate, and Luver	\$1379
342770*	Special Sporting	45 Cont	24.25"	Case-Hardened Frame, Buttprate, and Lever	\$1379

SPECIFICATIONS: Capacity: 1,1-1124,05" barrel) or 10+1 (18", 10" and 20" barrel) or 0+1 (19 125" barrel) Number of Groover 6 Twist, Right Total Lengths: 34", 10", and 43-3" Weights: 7-4, 7-7, and 8.2 lbs. Barrel: Octagonal on rife; round on tachine Stock: A-grade walnut "Checkered pistol-grip stock and forcend

. ...

DEALER LOCATOR Zip: Distance: J

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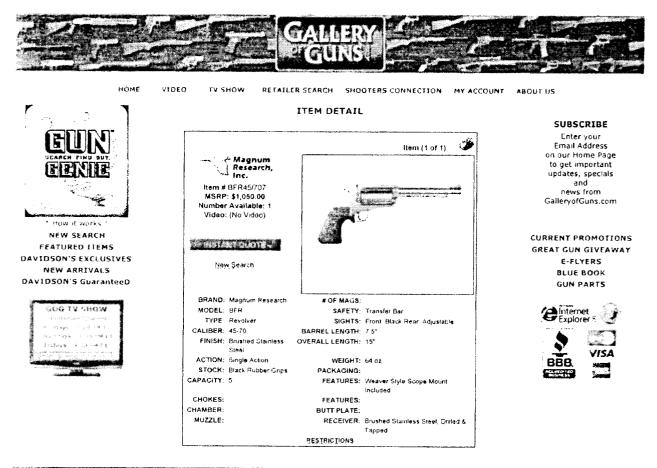
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Source	over (CAREFY-		KIC	<u>K'S</u>

or donor done Bit TRAL VB Reglass Recommed. Website Design for Gray Edon Markening Group

Page 2 of 2

www.GalleryOfGuns.com - Gun Genie - Davidson's most popular and powerful search en... Page 1 of 1



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http://www.galleryofguns.com/genie/default.aspx?item=BFR45%2F707

9/6/2010

Trapdoor Springfield Rifle - imfdb :. guns in movies :. movie guns :. the internet movie fi... Page 1 of 1

Trapdoor Springfield Rifle

From imfdb :, guns in movies :, movie guns :, the internet movie firearms database

(Redirected from Springfield 1873 "Trapdoor" Carbine)

ⁿ Handgun Parts	» AR-15 Stocks	» Shooting Accessories	» Rifle Parts	» Firearms Training Quiz
» AR-15 Perts	» Build Your Dream AR-15	» Firearms Training Reports	» STI International Parts	» Gun Training Reports
» AR15Builder.com	» AR-15 Accessories	» Suppressors	» Remington 700 Parts	>> Gun Cleaning Supplies Ads by TacticalRepublic.com

Next (Trapped)





4 Video Games

Original Springfield Model 1888 "Trapdoor Springfield" - .45-70

Specifications

Previous (Transporter 3)

Contents

Type: Rifle

Caliber: 45-70

Capacity: 1 round

Fire Modes: Single shot

The *Trapdoor Springfield* refers to a series of breech loading rifles developed by Springfield, beginning with the Springfield Model 1868 (chambered in .50-70) up to the Springfield Model 1870 (.45-70) and then the most famous Model 1873, which was adopted by the U.S. Army (chambered in .45-70), and the later Models 1877, 1884 and 1888.

The Model 1873 (full sized or cavalry carbine version) is the most likely variant of the Trapdoor Springfield rifle to appear in movies or television shows.

The Trapdoor Springfield (1873) has been seen in the following:

Film

- · Prison guards in For a Few Dollars More
- The 10th Cavalry Regiment (Buflalo Soldiers)as well as other infantry regiments in *Rough Rulers* (Cavalry Carbine)
- Velken's men in Van Helsing
- Sergeant York (1941) (Mocked up Kentucky Rifle)
- · Winchester 73 (1950) Cavalry soldiers...including Tony Curtis and James Best.
- Rio Conchos (1964) Tony Franciosa uses a Trapdoor Carbine. Vito Scotti... as the Bandit Chief...carries a Trapdoor Rifle across his saddle.

Television

Weaponology

Video Games

• Red Deud Redemption

Retrieved from "http://www.imfdb.org/index.php/Trapdoor_Springfield_Rifle" Categories: Gun | Rifle | Battle Rifle Hosted by Unixy.net

• This page was last modified on 20 April 2010, at 01:04.

9/6/2010



Replica Springfield Model 1873 "Trapdoor Springfield" built by Uber

Replica Springfield Model 1873 Cavalry Carbine "Trapdoor Spring Uberti Arms - .45-70



Springfield Trapdoor 1879 - .45-70.

JA001034

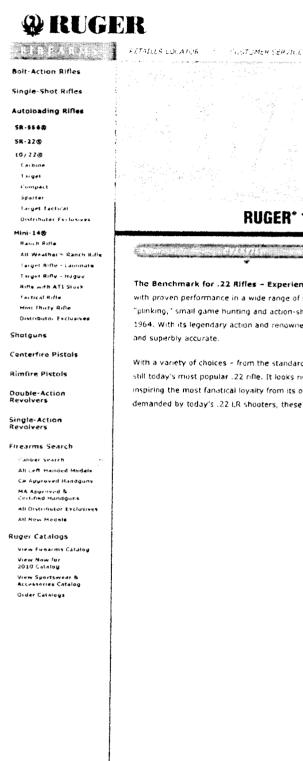
EXHIBIT "23"

SHOPRUGER.COM + CORPORATE + PINE TREE CASTINGS

SAFETY INFORMATION

UNKS OF INTEREST

RIFLE





NEWS & RESOURCES

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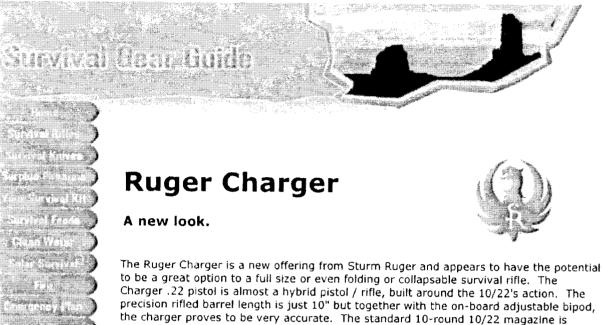
The Benchmark for .22 Rifles – Experience the Tradition. The Rugen® 10/22® rifle is America's favorite .22 LR rifle, with proven performance in a wide range of styles for every nimfire application. Ideally suited for informal target shooting, "plinking," small game hunting and action-shooting events, Ruger has sold millions of 10/22 rifles since their introduction in 1964. With its legendary action and renowned reliable rotary magazine, all 10/22 rifles are sleek, perfectly balanced, rugged and superbly accurate.

With a variety of choices - from the standard 10/22 Carbine, to the tack-driving accuracy of the Target model, the 10/22 is still today's most popular .22 rifle. It looks right, feels right, shoots right and continues to perform under heavy use inspiring the most fanatical logalty from its owners. With proven design, legendary reliability and the modern features demanded by today's .22 LR shooters, these firearms are priced right to make keeping tradition affordable.

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9/6/2010

EXHIBIT "24"



utilized, and removed easily with and extended release just in front of the trigger guard. At 3.5 lbs and 19 1/4 inches long, it wont require a lot of room in your gear bag. The charger is selling for around \$300, a good deal less than the MSRP. The lack of open sights would probably be the biggest drawback to substituting this weapon for a survival rifle, break your scope, and you may have a problem. Other than that, the charger stands out somewhat in a league of its own.

- ~ 10/22 action.
- ~ Ruger reliability.
- ~ Compact.
- ~ 10 round capacity
- ~ integrated bipod.
- ~ Good Accuracy.

Ruger Charger Video

Callber:	.22LR only
Operation:	Semi Auto
Stock:	Wood
Capacity:	10+1
Finish:	Blued
MSRP:	\$369

Ruger Charger



courtesy Sturm Ruger

EXHIBIT "25"

x

9mm Carbines and Grease Guns

Home	Gun Auction	Gun Store Lasers	Please tell othe Pistol Scopes	Holsters	<u>.9mm.com</u> Cleaning Kits	Gun Safes	Kniv
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and a state		By Adam	→ Treasure IF HE CA Horseta YOU CA	AN DO IT. (97) NITOO 📢		2-1H	
		h					
	iet up to						
	1000		9mm Carbi	nes and (Grease Gur	15	
1	ASH!						
- App - Ke A	ty in under 2 min. Optication ha	There is no real rea	son for us to do a "	best" list, be	cause each gun is	s so different.	What is
4	Apply	awesome is that a s carbine barrel. One	imm bullet has a m	iuzzle velociti	y of 1400 to 2000) FPS from a 1	6"
	Now	We didn't list those	over \$1000. If we	missed any, p	please let us know	N.	
	NOW	Hi-Point 995 C					
		Barrel: 16.5", Weight: "	lbs., 10 shot magazi	ne.			
Featured	d Links	Scope mounts, Sling a release, Quick on-off th	nd swivels, Grip mour	nted clip		- milden	
> Postor Sil	encers	Free trigger lock, Lifeti.	me warranty, 100% A	merican-made,	ц — — — — — — — — — — — — — — — — — — —		
han tiw	-	parts and assembly Hi-Point 995 Carbine p			L	1	×.,
(1911) Kar 		THE AUTAAN AGINING T	ARE ALL NG AMESOUS	ZALL SLUCK			
	neag Reports Training Reports	Kel-Tec SUB-20	00: Haddle Pric	e \$300-¢3	30		
Molitary H		Barrel: 16.1", Weight: 4			14		·····
AP 15 Pa	irts	S&W magazines.		-	2		
RH (892)	Tac Holster	The SUB-2000 has a g handgun. The superior	precision is also very	useful against	to an annual statistics	્ડાં	
	actical Level 2	 small or partially cover 	ed targets at shorter ra	ange, Rifle can] '≉	
ister AR-15 Ac	Tessiones	be reduced to a size of Kel-Tec SUB-2000 site	16" x /" to facilitate s	écuré storage.	J.	12	
Seencers					l		
Three Da	y Assault Pack	Ruger PC9 Cart	ine: Hanolo Pri	ca ¢190 ~-	dun		
Customz	e Your AR-15	Barrel: 16.25", Weight:			<u>u up</u>		
	ning Systems	Ruger has recently disc	ontinued production of	of PC9			4
Airsoft Ri	ne	Carbines, but you can s The PC9 was one of the	itill find them new at n e best and used by his	nany dealers. Indreds of	37.000	Y	
ΠΔT	ELONFIN	police departments. It ta Ruger PC9 page	akes the P series pisto	ol magazines.		•	
10.01	TTELLS AND	eondias e cha badiai					
	WIFE DATING SITE	Beretta CX4 Sto	rm: Haggle Prid	e \$690-\$7	20		
1.00		Barrel: 16.6", Weight: 5	75 lbs., 15 shot maga	izine.	<u></u>		
1		This is a popular carbin	e for police use. Form	follows	€	······	
22.2		function in a symphony possible by the use of n	odern high strength t	echno			<u> </u>
		polymers. Berettas use weight down, making th	of cutting edge materi	ials also keeps			1
		Beretta USA Rifles page	e oxy a pleasure (0 Ci	any	L		
		AD-15 Tune Piel	as 9. Coubins				
		AR-15 Type Rifl			ice \$750 and i	1 <u>D</u>	
		The M16, M4, A3, and A a dozen companies. No	mally the 9mm Luger	is priced the	•		
		same as the .223 (5.56r better choice to get the	nm) centerfire rifle. It i	may be a		-	
		 though 9mm ammo is cl 	eaper. These military	type guns are	K. K.	r i	
		very durable and fun to galore.	shoot. Aftermarket ac	cessories	4	l	
		Bushmaster Colt Websil	e Olympic Arms		L*	•	
p://ww	w.best9mm.co	m/carbines/index.h	tml			9	/6/201
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Stock Trading <u>Pro</u> System

Start Your Investing Education. Trade Stocks with Confidence.

Eguides on Elementary

School 4 eguides dealing with hot issues in elementary education by P Fioriello

Teachers' Interview Edge

101 Most Popular Teacher Interview Questions With Potential Answers

Child Development Stages

A complete preschool curriculum, head start and early childhood manual

Guides for Secondary School

3 Eguides for Secondary students, parents & educators about top issues

Stock Trading Course Get the best stock trading education with video training, Start Today!

Inspired Children Membership Weekly guide for parents to help their child develop key life skills

Your One Stop Shop From Martial Arts to Education Join Mailing List for Free Updates

What time is it? A rhythmic educational time telling game for ages 7 and up and educators

Daily Motivational

Calico M-900 Liberty I 50: Haggle Price \$690 and up

Barrel: 16 0", Weight: 3.7 lbs., 50 shot magazine. Retarted blowback action. Heat treated Chrome Moly barrel. A-356 aluminum reciever. Also check out the Liberty II with 100 round magazine, and the awesome M-950 Liberty III pistol. Can you believe a pistol with a 50 round mag! Calico Weapons

Vector Arms UZI Clones: Haggle Price \$650 and up

Vector Arms has a huge selection of knockoff UZI carbines and pistols with recievers made in the USA. What is cool is that the Vector product is very high quality at a lower price. There is too much to tell, so it is better to visit the Vector Arms website. Vector Arms



Masterpiece Arms MPA30: Haggle Price \$350 and up

These machine gun type pistols are available with 3", 6" or 10" barrels. You also have the option of top cocking or side cocker (MPA30ST). In the accessories section of the website it shows the 32 round Sten Magazine. These pistols can be a lot of fun and do get attention at the range! Masterpiece Arms Site

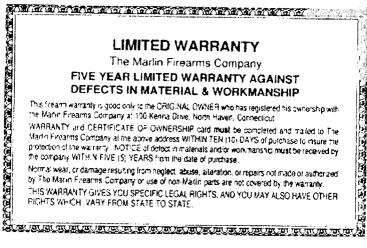


9/6/2010

EXHIBIT "26"

Owner's Manual Marin[®] Marin[®] MODEL Ø CAMP CAR BINE SELF-LOADER SELF-LOADER SELF-LOADER ALSO KNOWN AS 9MM PARABELLUM AND 9X19mm)

This manual contains operating, care and maintenance instructions. To assure safe operation, any user of this firearm must read this manual carefully. This manual should always accompany this firearm, and be transferred with it upon change of ownership. The warrarity card attached to the cover must be filled out and mailed within 10 days of purchase. WARNING: KEEP THIS FIREARM OUT OF THE REACH OF CHILDREN

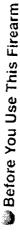


MARLIN'S PERFORMANCE UNDER THE ABOVE WARRANTY

- 1. After notice of defect in material and/or workmanship is received by the Martin Firearms Company, Martin shat send instructions for stripment of the linearm; and repairs will be made and the linearm returned within a reasonable time after the firearm is received. Cost of shipping, insurance charges, etc. its over an returning the linearm to the company shat be prepaid by the original owner.
- 2 Cost of parts and labor performed shall be provided without charge by the Martin Firearms Company.
- 3. If The Martin F rearms Company, after receipt of the trearm, determines that the detects in material and/or workmanship were the result of abuse and/or noglect, or otherwise not covered by the warranty set forth above Martin shall notify such owner to that effect and give an estimate for ropart. In such cases, repair, return shipping and insurance charges, etc. shall be paid by such owner.
- 4. In the event that The Martin Findamis Company is unable to make warranty repairs to the likearm, it shall, within a reasonable time after the receipt, notify the owner to that effect and give him the option either to receive a replacement of the same model if then available in its intrentory, or to receive a refund, either of which, if feasible, will be made through the store of purchase.

The Marlin Firearms Company

100 Kenna Drive, North Haven, CT 06473



It is very important that you read and understand this manual before using your frearm. Warnings are highlighted in red, and should be read and hecded carefully. Also follow "Manin's Guide to Gun Safety", in this manual

 WARNING: Your ritle is stripped completely assombly bod and should not be used or disassembled without fully reading and imdensionaling the instructorys in this Owners Manual. WARNING Do not use ammundion designated "9mm -P+" in this rife. The pressures generated by these carridges may cause damage to the gun, or personal frury.

 WARNING Sub-source ammunition will fire, in this rife, but may not cycle the acrison (This type of "special" ammunition should always be tested by lots in the fream in which it is to be used.)

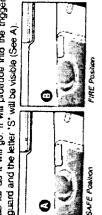
How to Operate the Safety

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 WARNING: Phot to fung, become lamitar with the operation of the safety by practicing with the rille unsaded.

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The safety mechanism is a Garand-type steel kever located in the forward section of the trogoer guard. To put the rifle on SAFE, pull the lever rearwards as far as it will go. It will protrude into the trigger guard and the letter 'S' will be visible (See A).

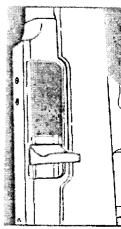


To move the safety to the FIRE position, push it forward as far as it will go. it will protrude in front of the trogger guard, and the letter 'F' will be visible (See B).

 WAFNING: Never disassemble the safety, it has been concouly designed, hitcd and losted. Any mechanical device can fail, however, so more reivien the safety to justify carefiess handling. Never use a gun with a safetation property. (See instructions for fuctory maintenneo in this manual).

Other Safety Features

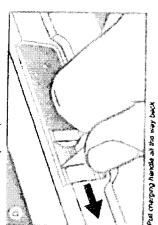
 Automatic "Last-Shot" Boit Hold-Open This feature is activated when the magazine is empty and the last shot has been fired, or when the charging handle is pulled back fully with an empty magazine in place (See C). The bolt will not slay open automatically unless an empty magazine is locked in place. To release bolt from automatic hold-open position, remove magazine, pull charging handle to the rear, and release.



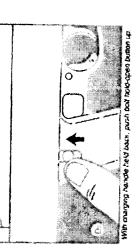
Automatic 'tast-attor' but hold open Feature 2. Manual Boit Hold-Open Feature in addition to the automatic 'tast-shof' boit holdopen. the manual boit hold-open device allows

you to lock the bolt in the open position at any time. (It can be used whether or not the magazine is locked in place.)

ļ



First, pull the charging handle all the way back (See D1). Then, while holding the handle back, push the bolt hold-open button (located on the left side of the magazine housing) up as lar as it will go (See D2). Bolt is now manually locked open. To close the bolt, push the bolt hold-open button all the way down, pull the charging handle back, and release it (See H&I).





put the safety on "SAFE", and lock through the bare. If the bore is obstructed, insert a proper size cleaning builtet out. If the builtot cannot be disjodged by tapping rod (without a tip) from the muzzle end, and push the the rod, it should be removed by Martin Gun Sorvico.

After removal of the obstruction with a cleaning rod. check the bore for damage.

If an empty magazine is in the gun, the bolt will hold-open feature (See C). If a loaded magazino is in the gun, a cartridge will be chambered not close because of the automatic "tast-shot" when you release the bolt.

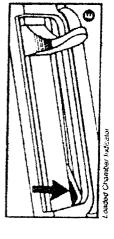
• WARNING: When not is use, the safest possible way to handle your rife is completely unloaded with the action open, the safety on SAFE, the magazine removed, and pointed in a safe direction,

3. Magazine Disconnect Feature

As an additional safety feature, your rifle will not lire when the magazine has been removed from the gun.

4. Loaded Chamber Indicator

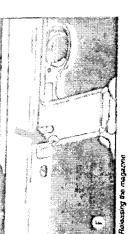
This is an instant visual warning that the cham-A red indicator protrudes from the rear right side of the bolt when a cartridge is in the chamber. ber is loaded (Sec E)



How to Load

• WARNING: Bofore loading your rifle, always check the bore to be sure it is free of grease, all or any other obstruction

Depress the magazine release on the loft side of the magazine housing (Sec F), and remove the magazine. Insert cartidges as shown in G.

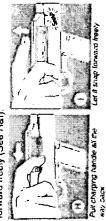




With the gun pointed in a safe direction, and the safety on SAFE, insert the loaded magazine fully into its housing, being sure it locks in place. coding the magazine

Cocked and Ready

tion, and pointed in a safe direction, pull the With the safety on SAFE and loaded magazine lockod in place, the rifle in normal shooting posicharging handle all the way back and let it snap lorward freely (See H&I)



How to Unload

 WARNING: Before you unload, be sure your after is co. SAFE and pointed in a safe direction

Remove the magazine as shown in F, and pulling the charging handle all the way back and releasing it. Then replace and lock the magazine check the chamber visually to be sure that no empty ail cartridges. Next, clear the action by back in position. Pull the charging handle all the matic "last-shot" hold-open position. Finally, way back, release it, and it will lock in the autocarindges remain.

Sighting

Your rifle has been sighted-in and lest-fired at the factory. Due to individual shooting characteristics, however, sighting should be range verified.

1. Vertical Correction (elevation): To raise the point of impact, raise the rear sight, by moving the sight elevator rearward. To lower the point of impact, lower the rear sight, by moving the sight elevator forward.

base to the left. To move the point of impact to 2. Horizontal Correction (windage): To move the point of impact to the left, tap the rear sight the right, tap the rear sight base to the right.

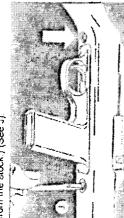
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How to Clean your Rifle

 WARNING: Nevor attempt to wipe down or clean a loaded gun Follow instructions undor "How to Unload" before cleaning. Wear safety glasses while cleaning Elle. To insure proper functioning of the rifle, you must keep the action and magazine clean.

Disassembly for Cleaning

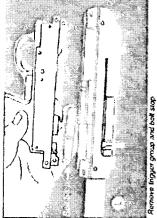
shown in H&L. Turn the gun upside down and remove the magazine. Next, close the action as toosen the front and rear take-down screws until the stock can be separated from the barreled action (These screws do not have to be removed With the gun empty and the safety on SAFE. from the stock.) (See J)



pins. Note: since the front pin has a head on one which has the serial number (See K). (Also be sure the headed and of this pin is on the senal Separale stock and barreled action. Next, with punch or nail, remove front and rear take-down end, it must came out on the side of the receiver

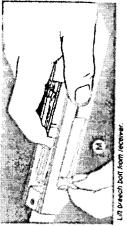


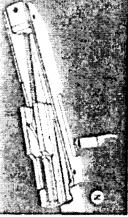
Remove trigger group and bolt stop (which will fall free) from receiver (See L).



(See M). The recoil spring and spring guide are and lift the muzzle end of the breech bott from the ing handle will become free and can be removed receiver. As you begin to lift the bolt out, the chargnow within easy reach for removal (See N). Further Than, with forefinger, pull bolt slightly to the rear disassembly of the gun is not recommended.

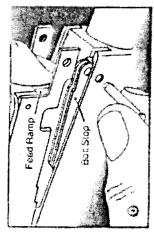
zine is inserted into housing, and the ingger is purled, the harmont spring and strut will the free, and could · WARNING: If, at this stage of disassembly, the magacause personal injury





er.(Be sure to follow manufacturer of gun deaner's age, wipe the bore with lightly oiled patch, and folly using a toothbrush and a commercial gun cleandirections as some chemicals may damage the the bore with powder solvent and brush. For storsynthetic trigger guard/magazine housing.) Clean Clean the bolt, receiver and Ingger group thorough ow storage instructions in this manual.

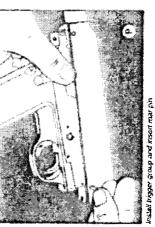
Reassembly



Searing trant of Ingger proup

Insert bolt, rocoll spring and rod into receiver, and roinstall charging handle through ejection port (See M). Position bolt stop in receiver as shown in O. Insert rear of trigger group into receiver, line up rear pin holes, and insert pin (See P).

Next, exert and maintain slight rearward prossure on feed ramp, as shown in O, while sealing ramp is not pressed rearward, and holes in bolt front end of trigger guard. (Important: if feed stop are not aligned, action wilt not reassemble.)



Exert slight rearward pressure on feed ramp

while aligning front pin hotes.

With a nail or punch, line up holes in bolt stop with holes in front of receiver, and insert front takedown pin, with the flat-headed end on the serial number side of the receiver. (Important: insertion of this pin should not require the use of a hammer.)

Replace stock and lighten take-down screws. This completes reassembly.

Storage

form soon after the gun is brought into a warm room, or it may become wet during inclement weather. In any case, all moisture should be storage, lightly oil the bore, barrel and action Use anly a very thin coat of light oil during below treezing conditions. Condensation droplets will Exterior metal finishes may be wiped down with a slightly oiled cloth. For long term unloaded and stored in a dry area with the action with gun ail. Your gun should be completely open. Never store your gun in a carrying case. removed

Repair Instructions

Your firearm has been designed, engineered should be addressed to our Gun Service and manufactured in accordance with Martin's rigid quality control standards. However, any mechanical device may occasionally require adjustment or repair. Questions regarding the performance and serviceability of your firearm Division. You should include the Serial Number. Model Number and a full description of the conditions and problems involved.

Warranty Repairs

Our Warranty policy covers all our firearms this manual for warranty details. Guns requiring against defects in workmanship or material for a period of two years from the date of purchase to the onginal owner. See the inside front cover of warranty repairs should be returned to the factory. Be sure to follow the "Shipping and Handling" instructions in this manual.

e able to repair your tion under any cirdifficulty occurs. ng the firearm. dling lumed. pairs 8

7. Ship your firearm via insured Parcel Post or U.P.S. Shipment must be prepaid and addressed to:

ctory, following the pairs will begin upon order. If repairs are we will send you an tions in this manual

Marlin Gun Service

NorthHaven,Conn. 06473 **100 Kenna Drive**

to the factory you

magazine of your ee "How to Unload" Itely certain that the

cial container which Use ample cushion-dy outer cardboard

365, Scope mounts, lype swivels, sling ppointments should

del number, serial amage or problem, sheet with the fol-

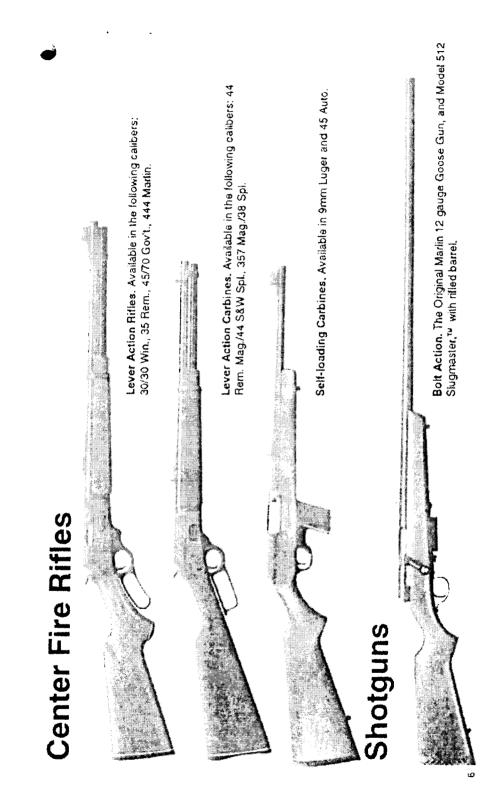
iddress on the outr instruction sheet.

Health Warning

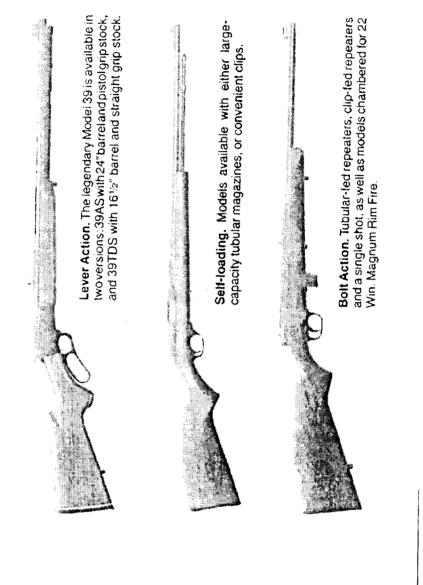
Discharging of firearms in poorly ventireproductive systems. Have adequate oughly after shooting, handling ammu-nition, or cleaning a firearm. Do not lated areas and handling ammunition cause birth defects or damage to the may cause exposure to lead and/or ventilation at all times, especially in eat or smoke during these activities. kidney, nervous, blood forming and confined areas. Wash hands thorlead compounds. Exposure may

Safety Warning

take a hunter safety course, taught by Dept. or a local gun shop can suggest Marlin strongly recommends that you this firearm. Your State Fish & Game a certified instructor, before you use courses in your area.



Marlin 22 Rimfire Rifles



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IMPORTANT

If you have any questions or problems relating to your new Martin, would like additional information on safe operation, or wish to order parts or accessories, just call our Customer Service Center. A Service Representative can be reached at the numbers listed below, between 8 A.M. and 4:30 P.M. (Eastern Time), Monday through Friday.

Nationwide **1-800-544-8892** (Toll Free) Conn. Residents 239-5621 (North Haven)

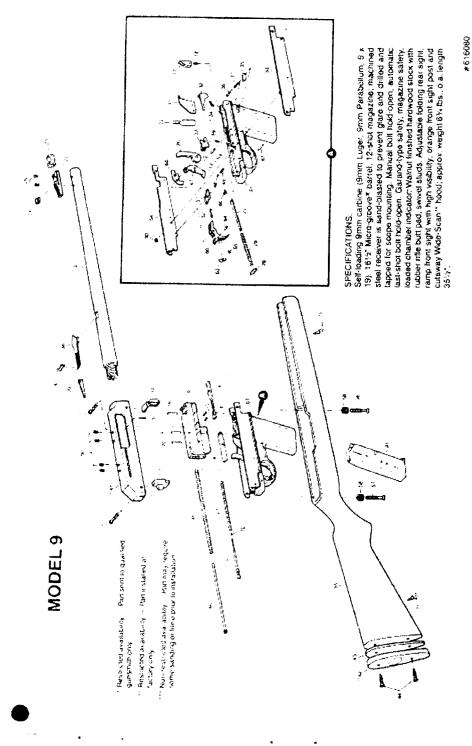
2 Keep the safety on SAFE until you are rearty to shoot. 3 Bo sure of your larget before you shout.

Marlin's Guide to Gun Safety

Handle every gun as you would a cocked and loaded gun

- 4. Bothore target shooting, be sure you have all advantate backstop. Rismember, as rife animumbion is durgerous at tanges up to, and in excess of a mail.
 - 5. Canful the muzzle. and never point a gun at anything you don't wara to shoot
 - 6. Wways wear protective glasses when shooting
 - 7. Wear hearing protectors when target shocking.
- 8. Do not use modified, damaged or dirty ammunition 9.11ss cash communities of a
- Uso only ammunition of the correct cabox, size and builts shape.
 Cartritoes that have been incorrect, however, in 2 and 10.
- Cartridges that have been improperly hundrated can damage the gun and cause personal injury.
 - 11. Avoid recordeds by news smooting at water, or any hand, liket surface
 - 12 Be sure no one is in path of cjeating shulls.
- 13. Never climb or jump over a lonou or other oustacle with a loaded gun 14. Never short are a construction of the second gun
 - 14. Never clinit) #140 or out of a tool, or tree stand with a loaded firearm.
 - 15. Never pull a gun toward you by the muzzle.
- 16. Avoid alcoholic beverages before and during shooting.
- Never use a gun that laits to function property. Do not try to force a jammod action or firm that any property.
 - 18. Er sure to keep the burnel and mechanism free of obstructions
- Before downry, be sue the chamber, action and magazine are completely unceded, on Proceedings
 - 20. Always uniced a gun before storing, transporting, or loawing unattended. 21. Never enter a motor vehicle with a loaded gun.
- 22. Sicre gurs and annunation separatory, locked and beyond the reach of chicken.
- 23. Always carry your ratio empty with the action open, except when you ratert to shoot
 - 24. Avoid burnying, dropping ar jaming any titearm. Burnying, dropping or jaming has resulted in contrain froarms discritarigming appoidentally under some cocumistances. 25. Contrait connects manual before using any freearm.

Failure to follow these rules, or other instructions in this manual, can result in personal injury.



MODEL 9 PARTS LIST

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For parts prices, call 1-800-544-8892 • Conn. residents call 239-5621 (8 A.M. to 4:30 P.M., Eastern Tune, Weekdays) Be sure to mention gun senal number when ordering parts

III. NO.	Lan Name	Part No.	III. NO.	Part Name	Part No
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•		168016	8	Magazina Latch Relaming Screw	116700
• ;	Accord Assembly For Hear	316997	37	Manazina I atch Reserved Second	
n			1	Date Sinth Bases	CRIOLE
4	Bott Stop		88		520251
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æ	Carthdor Indicator	316185			
0 %	Cartrolog Indicator Assembly Pin	-	7		401202
5	Charoing Nanda	í	7	Hecord Plad Spacer	416203
11		:	4	Heode Pad Screws (2)	420500
::		316164	ŝ	Recoil Softed	116104
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2		316297	3	Sideotate, Right Hand	
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		1	3	Slock Complete	
2	Front Hamp Sight Base		5	Takathan Sreau Error	212010
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2	Front Ramp Sight Red Insert		5 5		316190
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Specifications subject to change without robos.

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EXHIBIT "27"

THE LUGER CARBINE

Manufacturer: DWM--Deutsche Wallen und Munitionsfabriken, Berlin

Frame: Long style, with stock lug and frame extension Receiver: Long fork, 1900 & 1902, regular lork 1920 Grips: Checkered wainut

Proofs: Early "bug" proofs, nitro proofs on 1920 Model. Barrel: 11 3/4-Inch steel, rust blue

Callber: 7.65mm and 9mm

Serial No. Range: 1900 - 2 digit

1902 - 21000-24900

1920 --- 1 through 4 digits

Quantity Manufactured: 1900-only 1 known

1902—approximately 2500 1920—very few, less than 1902 Model

The carbine was Georg Luger's answer to a unique sporting rille or "bush" gun. The Luger pistol carbine appeared sometime around 1903. It was the first Luger to bear the clock lug. The wooden stock was of fine walnut with a small amount of checkering. The barrels on these pistols were all 11 3/4-inches long. The caliber was the bottle-neck 7.65mm, mainly for the penetrating power; very few were in 9mm. I have examined only one in 9mm, The barrells fitted with a wooden checkered forearm, very similar to all itles. The forearm is held on by a square cornered pin fitted through the forearm and through a slot in the metal extension secured to the front of the Euger. frame. In the forearm there is a spring to help return to battery the beavy barrel when fired. The front sight is also the same ramp type found on sporting rifles, graduated to 200. matare

are a few special order exceptions. Altiwere manufactures, before World War I, and were of the "old style" togges except the 1920 "parts" carbines. Strange as it may seen these 1920 "parts" carbines bring more money than the 1902 Model.

About 400 were shipped to the United States to commercial sales. Some have been observed that bear the Great Seal of the U.S. over the chamber. These are quite rare. The price then was about \$50, Fitted cases with stock, extra magazines and cleaning tools were available for \$10 extra.

Two most notable Lugar carbine owners of histon were Kaiser Wilhelm II and President Theodore Rocszelt.

Due to the greater cost factor and limited quants produced, the Luger carbine is very scarce and high valuable to the collector.

in 1972, the Treasury Department's Bureau of Aca hol, Tobacco and Firearms classified the Model "SQ Luger carbine with original commercial-type should stock and forearm piece, Model 1900 transitional ca bines, prototype and presentation variations of the M 1902 carbines and the Modal 1920 "parts" carbines a collectors' items exempt from the provisions of the Car Control Act of 1968. Military versions with flat based stocks and non-original altered Lugers are, however, the exempt.

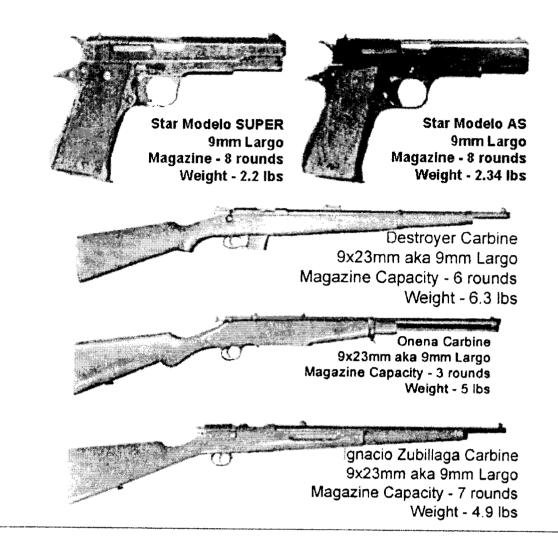
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EXHIBIT "28"



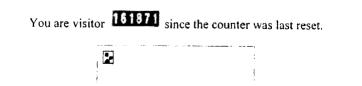
Book Reviews of 9mm Largo related references now available.

9mm Largo Firearms click on the image for information about that firearm Bergman-Bayard Model 1910 Star Modelo 1920 9mm Largo 9mm Largo Magazine - 6 or 10 rounds Magazine - 8 rounds Weight - 2.12 lbs Weight - 2.2 lbs the state of the second se Astra Modelo 1921 (400) Star Modelo 1921 9mm Largo 9mm Largo Magazine - 8 rounds Magazine - 8 rounds Weight - 2.34 lbs Weight - 2.21 lbs Star Modelo 1922 Star Modelo A 9mm Largo 9mm Largo Magazine - 8 rounds Magazine - 8 rounds Weight - 2.2 lbs Weight - 2.21 lbs 5 Jo-Lo-Ar Llama Extra 9mm Largo 9mm Largo Magazine - 9 rounds Magazine - 9 rounds Weight - 2.5 lbs Weight - 2.75 lbs



Uncategorized information.

- 9mm Largo cartridge and reloading data: 9mm Largo Ammunition
- General Data Tables:
 - Spanish proof marks
 - Year of Proof Codes
 - Star Pistol Model Numbers
- General Internet firearms information: Firearms Links
- Home brew bore cleaner: Ed's Red
- Lee Enfield FAQ: zipped text file or an Adobe Acrobat PDF.
- Old Spanish Steel parts: Parts Suppliers
- Spanish firearms terms translated: Spanish/English Firearms Dictionary



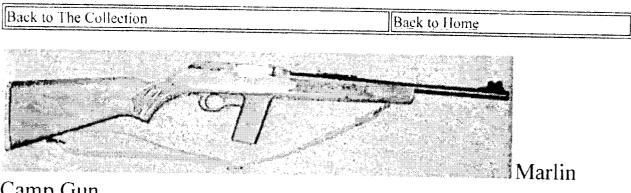
You are listening to the Spanish National Anthem.

http://9mmlargo.com/

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JA001060

EXHIBIT "29"



Camp Gun

Length Overall	Barrel Length	Weight	Caliber	Action Type	Magazine Capacity
35"	16"	6 Pounds 7oz.			

One of my favorite knock-about/ utility guns. It fires my favorite pistol cartridge (.45 A.C.P.) Out of a light handy carbine, and it even takes the same magazine as the classic Colt Government Auto. It is an exceptionally fun gun to shoot as are the equally handy lever action carbines, and the 10/22, the M-1 Carbine, and the almost identical 9mm Camp Gun. The gun is much easier to hit with and far easier to shoot than the .45 pistol, but, sadly, the designers decision to go with an unlocked blowback operation has nullified much of the longer barrels ballistic advantage. The stubby .45 auto cartridge is very efficient when loaded with fast burning powders. In the average 5" pistol barrel, the fast burning powder is almost completely burned when the bullet exits, meaning that in the longer barreled carbine, the bullet can actually be slowed down by barrel friction. The usual cure for this type of thing is to either increase the pressure or go with a slower burning powder, unfortunately an unlocked action does not lend itself to slow powders or higher pressures. This type of action is generally used for low powered pistol cartridges, and .22 rifles. It works in this particular rifle because Marlin has made the bolt rather heavy, depending on inertia rather than a locking action to retard the bolt's rearward motion. This is perfectly fine as long as standard loads are used. In the case of a higher pressure load, the bolt would be slammed back into the receiver very quickly, before the cartridge has left the barrel. In the case of a slower burning powder, the powder will still be burning as the bolt opens. In either case, the result is the same-a face full of hot propellant gasses and a possible burst case.

Deficiencies aside, this is a great all around gun, and the heavy .45 is no slouch out of a long or short barrel, at close range. If some one had possessed the wit to produce this gun in the forties, the M-1 Carbine, which was designed to replace the .45 auto in issue to non-combatants, would not have been necessary. The .45 carbine that did exist at the time was the famous Thompson. A comparison of the two guns is interesting. The Thompson also fired from an unlocked bolt. The earlier versions used a closed bolt, and firing pin, the later, M-1 versions fired from an open bolt with the firing pin milled right on to the bolt face. The Thompson weighed 11 1/2 pounds, and was 42" long. This makes it almost twice the weight, and 7" longer than the Camp Gun. As much as I am a fan of the .45, the Thompson is just too big and heavy for this round. At the same weight you can get a Garand, firing the capable 30-06, or one of the excellent .308 assault rifles. Even the .223 cartridge, which can be had in the six pound M-16, and is very light for a rifle round, greatly exceeds the power of the potent (for a pistol) .45 A.C.P. As with all carbines, the gun is very cheap for the hand loader to shoot. Group size at hand gun ranges is under two inches, at the 100 yard rifle range, a five or six inch group is about the best that this gun can do. In both cases this compares poorly to a regular rifle, but is as good or better than any thing the pistol can shoot. Overall, I like this gun a lot; within it's design range of 50 yards or so, you can comfortably hit anything you aim at. The gun is quick to fire and quick to reload, and there is little perceived recoil.

EXHIBIT "30"



Fulton Armory Service Grade M1 Carbine

A Pocket History of the M1 Carbine

by Robert Gibson

Someone wanted some info on M1 Carbine....maybe this will help. Much of it is copied from the NRA's booklet "U.S.Caliber .30 Carbine".

Over a span of just 38 months (the first carbines were delivered in June 1942, the last in August 1945) nine primary contractors established manufacturing facilities, tooled up and turned out some six million carbines of all types - M1, M1A1, M2 and T3/M3. The production program was such a success that, excepting Inland and Winchester, the remaining contracts were cancelled in mid-1944. Those two companies completed their carbine production runs in August, 1945.

M1 Carbine Production

	Inland Manufacturing Division, G.M.C	2,632,097	43.0%
	Winchester Repeating Arms Co	828,059	13.5%
	Underwood-Elliot-Fisher Co	545,616	8.9%
*	Saginaw Steering Gear Div., G.M.C	517,212	8.5%
**	National Postal Meter Co	413,017	6.8%
***	Quality Hardware & Machine Co	359,666	5.9%
	International Business Machines Corp (IBM)	346,500	5.7%
	Standard Products Co	247,160	4.0%
	Rock-Ola Co	228,500	3.7%
	Total:	6,221,220	

* Note that Saginaw had two plants in operation, one in Saginaw, MI and one in Grand Rapids, MI. The Grand Rapids facility assumed a contract that had been originally awarded to Irwin-Pedersen Arms Co....I-P had assembled only 3,542 guns at the time, none of which were accepted by the government.

http://www.fulton-armory.com/M1Carbine.htm

**Note that a few early NPM receivers are marked "Rochester", for the Rochester Defence Corp. A very few late receivers are marked "CCC", for Commecial Controls Corp.

***Note that some Quality Hardware carbines were assembled using receivers made by Union Switch & Signal Co, hence the "UN-QUALITY" marked carbines. These are highly prized by some carbine afficionados.

The history of who made what during the brief 38 months of production is a story that can (and does) fill a book. Might I suggest you find a copy of "WAR BABY" or "M1 Carbine Design, Development and Production" by Larry Ruth. Another recommended book is "Guide to Collecting the M1 Carbine" by Robert Gibson (no relation, by the way!)...they're all good books with tons of info. Another excellent reference book is "U.S. M1 Carbines: Wartime Production" by Craig Riesch, a North Cape Publications "For Collectors Only" series.

Which are the most collectable? Depends on what your own personal criteria might be. Rock-Ola's are always desirable, not only because there were fewer made than any other make but because Rock-Ola was a famous juke box maker of the period who's product was quite familiar to the WWII GI's. Others look to the Winchester carbines because of the name on the receiver....I own one these myself. There are all kinds of reasons to own a particular "brand" of carbine...I've worked with IBM mainframe computers systems for some 20 years, I think it would be rather fitting to obtain an IBM carbine sooner or later. 20 carbine owners might give 20 different reasons for owning their particular carbine....you really need to read up on M1 history and decide what YOU want.

Mechanically they were each and every one built to the same design specs as specified in the contracts the maker signed with the U.S. Government. You could strip 25 M1 Carbines down to their component narts mixed em uning has and then reassemble them at random back into 25 or 14 _______

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Subcontractors involved in the carbine program number in the hundreds, and made everything from pins and springs to receivers and barrels.

The U.S. Cal. .30 Carbine was designed from day one as a true "mixed parts" military firearm....carrying the "any part from any source will fit" philosophy of the U.S. Rifle, Cal. .30, M1....the M1 Garand....one step further.

In my rather humble opinion the design and manufacture of the M1 Carbine by the American Military Industrial Complex of the WWII era would have to be considered a watershed event in the field of military firearms production.

It certainly goes without saying there are no "bad" USGI World War II era M1 Carbines seeing they were all built to the same milspecs and thoroughly inspected before acceptance by Uncle Sam. True, there are many out there now that are in need of large doses of TLC due to their hard travels around the world for the last 50 years. A good service rifle gunsmith can do wonders with one of these rather sad re-imports if someone were so inclined to rescue it, but....supplies of repatriates could be drying up. That WRA carbine I mentioned above was one of these neglected war dogs when I stumbled upon it.

It now rests in the gunsafe with my Garands, M1911 Govt pistols, M1903-A3 Remingtons 'n others from the World War II era...including a German KAR 98k. Quite a sight actually, old cronies...and mortal enemies...resting together with actions gleaming and stocks giving off the odor of fresh linseed oil.

There were also commercial M1 carbine models produced from 1960's to 1980's by Iver Johnson, Plainfield Machine Co., & Universal Sporting Goods. I don't much care for commercial M1 carbines so am not really up on their history, OTOH some do prefer them over GI carbines...different strokes for different folks. I did see a nickel-plated IJ once that was quite striking....well, to be perfectly honest I thought it was somewhat gaudy.

The commercial carbines simply *do not* compare well to a true-blue USGI M1 Carbine that's in good repair....my own biased opinion of course.

ADDENDUM: "Bavarian Carbines"....What Are They?

Following from the "For Collectors Only" edition of "U.S. M1 CARBINES" by Craig Riesch, published by North Cape Publications (revised, 2nd edition)

"After World War II, the United States, as one of the Occupying Powers in Germany, was responsible for providing community policing in the U.S. Zone. As the United States had no intention of either remaining as an Occupation force in Germany any longer than necessary, or in becoming involved in the day-to-day government of the community, local police forces were established to asume standard policing duties ranging from traffic control to criminal investigation to forestry protection. One of the most extensive of these police forces was the Bavarian Rural Police.

"Bavaria is one of the largest German states and included extensive forested and mountainous regions. The U.S. Army made M1 Carbines available to these local police units, many of which remained in service for more than ten years. "Many can be identified by the stampings, "BAVARIAN RURAL POLICE", "BAVARIAN FORESTRY SERVICE", "BAVARIAN BORDER POLICE" and "BAVARIAN STATE POLICE" on the receiver. Other carbines were furnished to the federal border guard service, the "BUNDESGRENZSHUTZ". A variety of city and state police marks will also be noted. Most also had their component parts stamped with the last three or four digits of the original receiver serial number, as was standard German practice. Many of the carbines were reblued or refinished in "black oxide" which sometimes appears almost "blue/black' in color, depending on the polish of the metal beneath. On others, the issue rear sight was removed and the dovetail filled with a block of steel which was machined with a series of grooves across the top to prevent glare.

"Occasionally, they were rebarreled with new barrels manufactured by the German firm of ERMA Werke. A non-adjustable rear sight with a "Vee" notch was brazed on the front of the receiver behind the handguard. It provided a sight picture very much like that of the Mauser bolt action rifle, fam- iliar to its new users, many of whom had seen previous police or military service during World War II."

Hope this information is of some help.

Robert Gibson

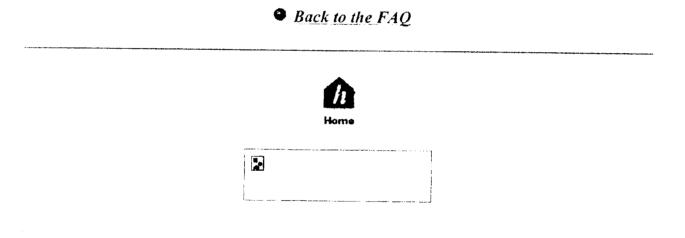


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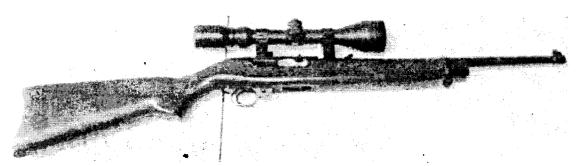
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Convertible	BN+34L	10306	357 Mag.	4.62"	10.50"	46.00 oz.	1.16° RH	8	\$557.00	<u> </u>	OKDER
Bixley Distillutor Exclusive	8N-36L	10316	.357 Mag.	6,50"	12.38"	48.00 oz.	1:16" RH	8	\$557.00	r ¥	ORBER
lew Model	8N-41L	10405	.41 Mag.	4.62*	10.50*	38.00 oz.	1:20" RH	6	\$557.00	e 🌒	ORDER
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Blued Stanlesa	BN-45L	10455	.45 Colt	7.50*	13.28*	40.00 oz.	1:16" RH	6	\$557.00	<u> </u>	DADER
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EXHIBIT "32"

Shooting With Jim Ruger 44 Magnum Carbine Product Review

Oldie but Goodie Ruger 44 Carbine Hand Loads, Reload Data, Ammo Reloading for Ruger 44 Mag Carbine. Reloading Data For The Ruger 44 Carbine. Hand load Data for the Ruger 44 Magnum Carbine. 44 Ruger Carbine Bullet Loading Data Information.

This one was made in 1963 and still works flawlessly. Shoots pretty good also.



(see targets and loads info below)

Sturm, Ruger & Co. has no equal when it comes to the variety of rifles and carbines it has introduced.

Ruger introduced an auto loading carbine as its first center fire long gun, and it was chambered for a handgun cartridge, the .44 Magnum. The Ruger Deerstalker, whose name was later changed to the .44 Carbine, was and is a very practical choice for hunting whitetail-size game in heavy cover. It is short, lightweight, and has moderate recoil with four magazine-housed rounds available for a few quick follow-up shots. After more than a quarter-million units being produced, the .44 Carbine is no longer made.

Authors Notes

To date, I have shot about 400 rounds through this Carbine both from a Lead Sled and from a standing position and can say this rifle shoots darn good. It is a great little close range medium game hunting rifle with plenty enough knock down power to pursue White Tail Deer, Wild Hogs, Black Bear and possibly some of the larger antlerd game of North America. It is not a long range rifle and shots over 100 yards should only be taken by a skilled shooter with great care in bullet

placement. The short barrel and short stock make this a great brush gun and the 44 Magnum cartridge shoots straight to the target even if it glances off of a few small twigs on its way. Loaded with the lighter bullets it also makes a great small game rifle for rabbit size game. Shooting with the use of a scope, red dot or just

http://www.shootingwithjim.com/ruger-44-carbine.htm

¹⁹⁶³ Ruger 44 magnum carbine, sporting a new BSA Deerhunter 3-9x50

EXHIBIT "33"



The .256 Winchester Magnum

By Chuck Hawks

The .256 Magnum is a varmint and predator cartridge introduced by Winchester in 1960. In 1961 Ruger brought out the Hawkeye single shot pistol for the .256 Magnum. The next year (1962) Marlin chambered their Model 62 Levermatic rifle for the new Winchester cartridge. These were the two principle firearms chambered for the .256 Win. Mag.

Winchester offered factory loaded .256 Magnum ammunition (and brass to reloaders) into the beginning of the 1990's. Winchester .256 factory loads used a 60 grain Open Point Expanding bullet at a MV of 2760 fps and ME of 1015 ft. lbs. from a 24 inch rifle barrel. That is about 500 fps faster than Winchester factory loads for the old .25-20 cartridge. At 200 yards the velocity was 1542 fps and the remaining energy was 317 ft. lbs.

From an 8.5 inch pistol barrel the 60 grain .256 Winchester factory load was advertised as having a MV of 2350 fps and ME of 735 fps. This was 250 fps faster and nearly twice as powerful as the .22 Jet, a varmint cartridge for revolvers that was also based on a necked-down .357 Magnum case.

According to data from the fifth edition of the Hornady Handbook of Cartridge Reloading handloaders with a .256 rifle can approximately duplicate the Winchester factory load using the Hornady 60 grain Flat Point bullet in front of 15.5 grains of H4227 powder for a MV of 2700 fps. The trajectory of that load looks like this: +2.3 inches at 50 yards, +4.4 inches at 100 yards, 0 at 200 yards, and -26.2 inches at 300 yards.

A better option for handloaders would be the 75 grain Hornady V-Max bullet in front of 14.2 grains of H4227 powder for a MV of 2400 fps and ME of 959 ft. lbs. The 200 yard figures are 1855 fps and 573 ft. lbs. The trajectory of that load looks like this: +1.7 inch at 50 yards, +3.2 inches at 100 yards, 0 at 200 yards, and -13.3 inches at 300 yards. This is a deadly 200 yard varmint load, but under no circumstances should it be used on deer or any other North American medium size big game animal.

Note: A full length article about the .256 Winchester Mag. can be found on the *Handgun Cartridge Page*.



Back to the Reloading Page

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EXHIBIT "34"



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1911 Style Gun

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Other Handguns, Revolvers, Rifles, Shotguns, Misc. PPC Revolver Package Revolver Services Sig-Sauer Browning Hi-Power Colt Python Rifles

Shotguns Ruger 10-22 Remington XP-100 Grip Reduction Miscellaneous



Remington XP-100

Masters Conversion Remington XP-100 Stock (front grip) \$307 Pillar bed \$185 Paint stock \$65 Trigger guard \$30 Stainless Steel Barrel \$475 Muzzle brake \$175 Recoil lug \$30 install new bolt handle \$65 Custom bolt stop \$35 Aluminum bolt plug, saves 1.5 oz. \$35 Scope base \$98 Install Base \$55 Scope rings \$35 Hard Chrome bolt & muzzle break \$85 Hard Chrome receiver \$125 Glass bead barrel \$50 Sako extractor installed \$95 AR-15 extractor installed \$100 Extended trigger mech. (14-18 .oz pull weight) \$250 True receiver & bolt (included in barrel job) \$70 Lighten receiver (removes 1.3 .oz) \$100 Blue receiver (included in lightening job) \$40 Flute bolt 8 flutes .070 deep (removes one .oz) \$85

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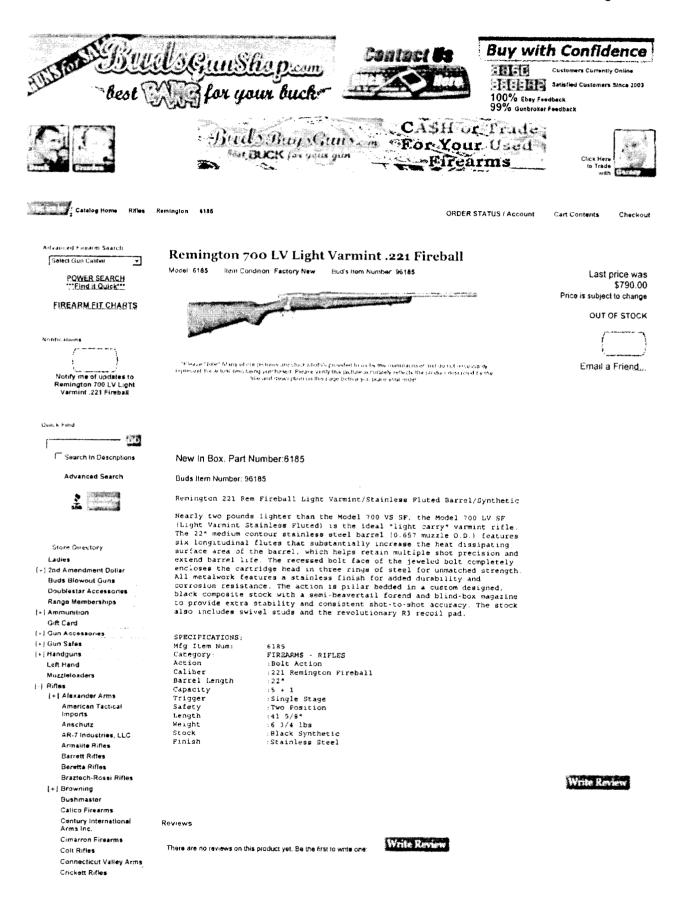
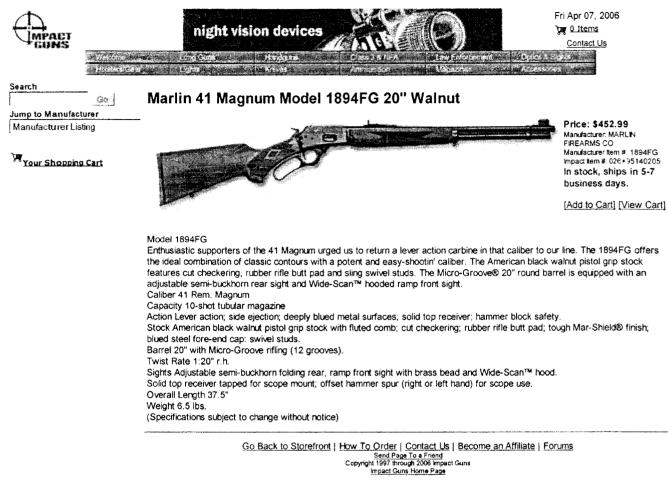


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.40 S&W Carbines: We Shoot Hi-Point, Beretta, Olympic Arms

And the results? Based on its function and low price, we think Hi-Point's 4095 is a winner. The Olympic Arms K40 was a crowd pleaser, but we'd pass on Beretta's pricey Cx4 Storm,

A handgun is many limes more difficult to learn to shoot well than a rifle, but there are times when a rifle cartridge is too powerful for the task at hand, whether it's punching holes in old tin cans or defending your home. The solution is one about as old as cartridge firearms, a short rifle that shoots handgun cartridges. A pistol-caliber carbine makes hits easier, and often gives away very little practical usefulness or stopping power to a hull-size rifle cartridge. There too is the advantage of multiple firearms taking the same cartridge, so ammunition supply is simplified.



Usemame Password:

if you're in the market for a .40 S&W carbine, one of if you're in the market for a .40 S&W carbine, one of these might please you. We really liked the odd-looking Hi-Point (bottom) with its low price and great performance, and we were right at home with the AR-15-looking Olympic Arms K40 (top), but the compact, modern-looking Beretta Cx4 Storm (center) didn't please our shooters, though it performed well enough and completely reliably.

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EXHIBIT "38"



COLT PATTERN .40 S&W CALIBER CARBINES Solicitation Number: RFQ0221719

Agency: Department of Justice Office, Federal Bureau of Investigation Location: Quantico Contracts Unit

Notice Type: Special Notice

Posted Date: August 7, 2009

Response Date: Aug 19, 2009 11:59 pm Eastern

Archiving Policy: Automatic, 15 days after response date

Archive Date: September 3, 2009

Original Set Aside: N/A

Set Aside: N/A

Classification Code: 13 -- Ammunition & explosives

NAICS Code:

332 -- Fabricated Metal Product Manufacturing/332992 -- Small Arms Ammunition Manufacturing

Synopsis:

Added: Aug 07 2009 7:29 am

THE FEDERAL BUREAU OF INVESTIGATION (FBI) INTENDS TO NEGOTIATE A SOLE-SOURCE, FIXED-PRICE PROCUREMENT WITH ROCK RIVER ARMS, 1042 CLEVELAND ROAD, COLONA, IL 61241, UNDER RFQ 0221719. THIS NOTICE WILL BE DISTRIBUTED SOLELY THROUGH THE GENERAL SERVICES ADMINSITRATION'S (GSA) FEDERAL BUSINESS OPPORTUNITIES (FBO) WEBSITE, WWW.FEDBIZOPPS.GOV. INTERESTED PARTIES ARE RESPONSIBLE FOR MONITORING THE FBO SITE TO ENSURE THEY HAVE THE MOST UP-TO-DATE INFORMATION CONCERNING THIS ACQUISITION. ROCK RIVER ARMS WILL PROVIDE LAR40, COLT PATTERN .40 S&W CALIBER CARBINES. BASED ON THE MARKET RESEARCH AND FBI REQUIRMENTS, . USE OF A COLT PATTERN .40 S&W CALIBER CARBINE, WILL RESOLVE THE MAINTENANCE ISSUE, ENSURING A RELIABLE SOURCE OF PISTOL CALIBER CARBINES. FURTHER, THE ROCK RIVER ARMS LAR40 PISTOL CALIBER CARBINE WILL ALLOW THE FBI TO MAXIMIZE TRAINING, SINCE THE OPERATIN SYSTEM AND CONTROLS ARE VIRTUALLY IDENTICAL TO THE COLT PATTERN 5.56 X 45 ADDITION, BY USE OF A COMMON WEAPON PLATFORM, THERE IS A REASONABLE AMOUNT OF PARTS INTERCHANGEABILITY BETWEEN EXISTIN FBI 5.56 X 45 MM LAR15 ROCK RIVER ARMS CARBINES AND THE LAR40, FURTHER ENHANCING THE COST

https://www.fbo.gov/index?s=opportunity&mode=form&id=6ac219a2e12e8aedc2755b3053... 9/6/2010

EFFECTIVENESS OF THIS ACQUISITION. THE FBI REQUIRES AN INTEGRAL MAGAZINE WELL (AS OPPOSED TO A PINNED MAGAZINE WELL ADAPTOR) AND A CALIBER DEDICATED MAGAZINE, DEVELOPED SPECIFICALLY FOR THIS WEAPON SYSTEM AND CALIBER, WHICH ENSURES THE LEVEL OF RELIABILITY REQUIRED BY FBI SPECIAL AGENTS DURING HIGH RISK SITUATIONS. THE FBI REQUIRES THIS CARBINE TO BE MANUFACTURED IN .40 S&W CALIBER, WHICH WILL PROVIDE GREATER OPERATIONAL EFFECIENTCY, SINCE BOTH THE ISSUED SERVICE PISTOL AND THE PISTOL CALIBERCOLT PATTERN CARBINE WILL BE CHAMBERED FOR THE SAME AMMUNITION (I.E., .40, S&W CALIBER). ROCK RIVER ARMS IS THE ONLY MANUFACTURER KNOWN TO MEET THESE CRITICAL REQUIREMENTS. THIS NOTICE OF INTENT IS NOT A REQUEST FOR COMPETITVE QUOTATIONS, HOWEVER, INTERESTED PARTIES MAY IDENTIFY THEIR INTERESTS AND CAPABILITIE TO RESPOND TO THIS REQUIREMENT OR SUBMIT QUOTES TO THIS OFFICE BY 10:00 A.M. EDT, AUGUST 19, 2009, VIA FACSIMILE TO THE ATTENTION OF LAURIE L. WILLIAMS, CONTRACT SPECIALIST, AT (703) 632-6103. INFORMATION RECEIVED WILL SOLELY FOR THE PURPOSE OF DETERMINING WHETHER TO CONDUCT A COMPETITIVE PROCUREMENT. THE AWARDEE SHALL BE REGISTERED IN THE CENTRAL CONTRACTOR'S REGISTRATION (CCR) DATABASE, AND ALSO THE ON-LINE REPRESENTATIONS AND CERTIFICATION (ORCA) AT HTTP://ORCA.BPN.GOV.

Contracting Office Address:

FBI Engineering Research Facility, FBI Academy Quantico, Virginia 22135

Place of Performance:

FBI ACADEMY - OPERATIONAL TECHNOLOGY DIVISION DEFENSE SYSTEMS UNIT (DSU)

QUANTICO, Virginia 22135 United States

Primary Point of Contact.:

Laurie L. Williams, CONTRACT SPECIALIST LAURIE.WILLIAMS@IC.FBI.GOV Phone: 7036326118 Fax: 7036326103

Opportunity History

Original Synopsis
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 7:29 am

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EXHIBIT "40"



The .17 Hornady Magnum Rimfire

By Chuck Hawks

Illustration courtesy of Hornady Mfg. Co.

Introduced in 2002, the .17 Hornady Magnum Rimfire (.17 HMR) is the first new rimfire cartridge since the ill-fated 5mm Remington of 1970. The last successful rimfire cartridge was the .22 Winchester Magnum Rimfire (.22 WMR) of 1959.

Hornady, like Remington with their short-lived 5mm, ventured into uncharted rimfire waters with a caliber other than .22. Although there have historically been a wide variety of moderately successful rimfire cartridges in calibers larger than .22, in modern times .22 has been *the* rimfire caliber, and there has never been a successful caliber smaller than .22. The overwhelming shooter acceptance of the .17 HMR has changed that.

The .17 HMR has more going for it in terms of name recognition than the 5mm Remington had, as many shooters have probably at least heard about some of the various .17 caliber centerfire cartridges. .17 is an unusual caliber, but not as weird as 5mm, for which there was almost no precedent. Those who are aware of the .17 caliber centerfire cartridges, such as the .17 Mach IV and .17 Remington, probably associate them with ultra-high velocity, which can only rebound to the .17 HMR's advantage, as it is the fastest rimfire in history.

In developing the .17 HMR, Hornady was aided by rifle makers Marlin and Ruger. Together they were seeking the highest velocity possible in a rimfire cartridge consistent with reliability, accuracy, and reasonable manufacturing economy. The .17 HMR was designed to outperform the .22 WMR in velocity and trajectory, and be less susceptible to wind drift. It was also to have a similar maximum range, no greater noise level, be less susceptible to ricochet, and operate at the same pressure. All this in a cartridge designed to meet an intrinsic accuracy standard of 1 minute of angle (MOA) or better.

The new cartridge also had to be adaptable to existing rimfire rifle designs. They settled on a .22 WMR case, the largest and strongest rimfire case available, necked down to accept a .172 inch diameter bullet. The maximum overall length of the cartridge is 1.35 inches, the same as that specified for the .22 WMR, insuring that it will fit in the magazines and work through the actions of rifles designed for the .22 WMR cartridge. The result is a bottleneck rimfire case about the length of the .22 WMR case with a small but definite 25-degree shoulder.

In order to achieve the highest possible velocity, a bullet weight of just 17 grains was chosen, and Hornady designed a new V-Max bullet specifically for the .17 HMR. Hodgdon Lil' Gun powder was selected for use in the cartridge.

In form the 17 grain bullet appears to be a boat-tail spire point. In order to raise the ballistic coefficient (BC) of this very stubby bullet a large polymer tip was incorporated into its design. Proportionally, the 17 grain V-Max bullet has the biggest polymer tip I have ever seen. It accounts for about 28.5% of the overall length of the bullet. I calculated the sectional density (SD) of this bullet at .084, the lowest of any bullet on the market. Over penetration is unlikely to be a problem with the .17 HMR!

The Hornady varmint load for the .17 HMR advertises the 17 grain V-Max bullet at a MV of 2550 fps and ME of 245 ft. lbs. The figures for 100 yards are 1901 fps and 136 ft. lbs. Hornady trajectory figures show that when zeroed at 100 yards, this bullet hits only 0.1" high at 50 yards, and 2.6" low at 150 yards.

A better way to zero a .17 HMR rifle is to put the 17 grain bullet 1.5" high at 100 yards, for a zero range of 145 yards. It would then hit about 0.9" high at 50 yards, 0.3" low at 150 yards, and 5.5" low at 200 yards. The maximum point blank range (+/- 1.5") of the cartridge would be about 165 yards, at which range the bullet retains about 90 ft. Ibs.of energy, enough to remain effective on the smaller varmints.

These figures are based on a bullet with a BC of .123, which I derived from the Hornady velocity and trajectory figures. Hornady and Speer have not released the BC's of their .17 HMR bullets, but I feel confident that my estimate is very close for the .17 grain V-Max bullet.

In 2004 Hornady expanded their line of .17 HMR cartridges by offering a second load using a 20 grain XTP bullet (SD .097) at a MV of 2375 fps and ME of 250 ft. lbs. Zeroed at 100 yards, this bullet will hit 3.2" low at 150 yards, according to Hornady figures. This bullet equals the SD of the 34 grain .22 WMR bullet. It is a controlled expansion bullet designed for small game hunting, rather than a frangible varmint bullet like the 17 grain V-Max bullet.

Sight that load to take advantage of its MPBR (+/- 1.5") of 154 yards and the point of zero would be 134 yards for a bullet with a BC of .123. (Which I believe, coincidentally, to also be the BC of the 20 grain Hornady XTP bullet, based on the Hornady velocity and trajectory tables.) The trajectory would then look like this: +1" at 50 yards, +1.3" at 100 yards, -1.2" at 150 yards, and -7.6" at 200 yards.

The .17 HMR is intended for hunting animals such as squirrels, rabbits, prairie dogs, gophers, marmots, and other small creatures. This is the same class of game appropriately hunted with a rifle chambered for the .22 Magnum cartridge. However, the superior velocity and flat trajectory of the .17 HMR extends the humane range. Early reports from the field suggest that consistent one shot kills on ground hogs are possible at 150 yards if the shooter has the skill to get the bullet into a vital spot.

With its intrinsic MOA accuracy, the .17 HMR cartridge is accurate enough to score clean kills on small game at 150 yards. The small game hunter with a .17 HMR rifle is pretty much out of excuses for his misses, at least on a calm day. But beware of the wind! A 10 MPH cross wind will blow the 17 grain V-Max bullet 8" laterally at 150 yards, or the 20 grain XTP bullet 8.8" off course at the same range.

Marlin and Ruger offered the initial rifles chambered for the .17 HMR. Both companies adapted existing bolt action repeaters to the new cartridge. In Marlin's case this is their medium-low priced Model 917V (blue) and medium priced 917VS (stainless steel) varmint rifles, and in Ruger's case their medium-high priced Model 77/17 (sporter) and 77/17VBZ (varmint) rifles.

Subsequently, CZ brought out .17 caliber versions of their bolt action rimfire rifle. Savage introduced their stainless steel/laminated stock Model 93R17-BVSS varmint rifle and three variations of their Model 93R17 small game hunting rifle. Anschutz is chambering their upscale Model 1717D and 1517 bolt action rifles for the .17 HMR.

New England Firearms (owned by Marlin) has an inexpensive, break-action, single shot rifle for the .17 Hornady. Savage/Stevens has their more expensive Model 30R17 falling block single, and Winchester offers their deluxe Model 1885 Low Wall in .17 HMR. In addition, Thompson/Center is offering the .17 HMR in their single shot rifle.

The .17 HMR is also available in lever action repeating rifles from Henry and Winchester, and Remington has adapted their Model 597 autoloader to the cartridge. Rossi has added it to their Youth Rifle, and Taurus offers the .17 HMR in their pump-action rifle. These, along with other newly annnounced rifles, completely cover the rimfire rifle price range from low to high. It is fair to say that practically everyone who *can* build a .17 HRM rifle is now doing so.

Handgun manufacturers quickly jumped on the .17 HMR bandwagon. Thompson/Center and Savage single shot pistols are easily adaptable to rifle cartridges and were the first to be announced. Ruger, Smith & Wesson, and Taurus adapted existing revolvers to the .17 HMR, much as they had the earlier .22 WMR.

Even more promising were the 2003-2004 announcements by CCI, Federal and Remington that they were commencing distribution of .17 HMR ammunition under their brand names. CCI will continue to manufacture the .17 HMR ammo for all four brands, but the load specifications vary. The 2003 Remington catalog shows that their initial .17 HMR offering is in their Premier line, uses the 17 grain V-Max boat tail bullet, and has identical ballistics to the Hornady load. The Federal and Speer loads use a 17 grain Speer TNT (hollow point) spitzer bullet, with the Federal load at 2550 fps and the CCI load at 2525 fps. Ammunition of all brands, initially in short supply, is now widely available and is selling for about \$8.95/50 round box at discount stores in my area.

This acceptance of the .17 HMR on the part of gun and ammunition manufacturers, as well as consumers, is both surprising and pleasing. It seems that the .17 HMR has become a huge commercial success, expanding the choice and capabilities of rimfire cartridges in the 21st Century.



Back to the Rimfire Page

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	X-22R	Both the Pistol and the Rifle are CNC machined from solid Aluminum. They both are chambered in .22LR and accept 10/22 magazines. They have an integral weaver base to mount a variety of scopes, sights and optics. The Rifle Model X-22R has AR styling, Collapsible stock, 18" barrel and tapped holes in the handguard for mounting accessory rails.
		The Pistol Model X-22P has adjustable sights, 4.5" barrel and a accessory rail will be available for mounting Lasers and Lights.
	X-22P	

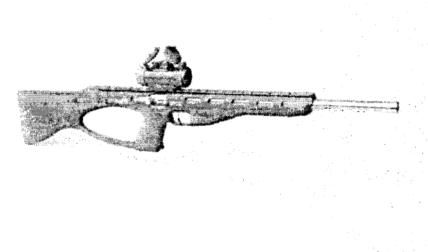
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From: "EXCEL ARMS"

EXCEL ARMS introduces the new Model SR-17 .17 MACH 2 And SR-22 .22 LR semi-automatic rifles. These unique Stainless Steel Rifles are extremely accurate and are ideal for target shooting and varmint hunting. The aluminum shroud features an integral full-length weaver rail to allow the mounting of scopes and sights as well as the standard Red Dot sight. The accelerator Rifles are American Made with a lifetime warranty and include a hard sided case.



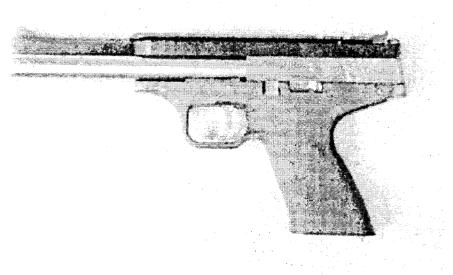
SR-17 / SR-22 Standard model shown with black shroud

Coming Soon

.17 MACH 2 / .22 LR ACCELERATOR PISTOL

From: "EXCEL ARMS"

EXCEL ARMS introduces the new model SP-17 .17 MACH 2 And SP-22 .22 LR semi-automatic pistol. They are constructed from Stainless Steel with a durable polymer grip and either a 6.5" or 8.5" Stainless Steel bull barrel. The pistol has fully adjustable target sights as well as an integral weaver base to mount scopes or optics. The SP-17 And SP-22 are American Made with a lifetime warranty.



SP-17 / SP-22 Shown with 6.5" Stainless Steel bull barrel

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EXHIBIT "42"

summing a series of the differences

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ABOUT THOMPSON CENTER ARMS

In 1965, K. W. Thompson Tool was looking for a product to build and a gun designer, Warren Center, was looking for sumeune to build his Contender B pistol. It was a perfect match. The facilities at K. W. Thompson Tool were expanded and Thompson/Center Arms was formed. Two years later, the first Contender Pistol was shipped, starting a trend in high performance hunting handguns, which cuntinues to grow every year. To date, over 400,000 Contender pistols have been shipped and the pistol's reputation for versatility, accuracy and dependability goes unchallenged among serious handgun shouters.

Since the production of the initial Contender Pistol, the company has expanded its facilities and product line numerous times. In 1970, Thompson/Center entered the Black Powder market with the introduction of their first muzzlelosiding rifle, the Hawken. Muzzleloading interest at the time was minimal and the market needed a quality rifle, which could not only be shot but could be pirchased at a reasonable price. Original or antique rifles were selling for high prices and most collectors opted not to fire these pieces. The T/C Hawken¹⁴ was the first of many muzzleloader types for Thompson/Center.

Currently, Thompson/Center produces an extensive line of single shot pistols and rifles, plus a full line of inizzleloading rifles and "black powder" accessories.

The old-style Contender Pittol has been redesigned. Now called the G2 Contender (2nd generation), it continues to be the most versatile hunting pittol on the market, with the capabilities of accepting both rimfire and centerfire barrels. In addition to the G2 Contender Pistol, 7/C also produces a G2 Contender Ritle, again t-assting readily hierechangeable barrels.



Sporting a 23° barrel and weighing only 5.4 pounds, there isn't a handler, more versatile rifle anywhere.

The overall success of the Contender Pistol, and the reputation it established, led the company to bring out a slightly larger version, with a longer and thicker frame. Called the Encore B, this pistol/rifle accepts the larger, high-powered cartridges popular with hunters who want more power at extended ranges.

Over the last 15 years, the sport of "black powder" hunting has increased drametically — as have hunters' demands. Conerally not interested in the nostalgla, which accompanies the guns of the 1800's, these hunters want modern designs, better accuracy at extended ranges, and easier cleaning. Although Thompson/Center continues to offer our first muzzleloader, the Hawken, most of the muzzleloaders T/C offers today are modern in-line styles. These modern muzzleloaders are capable of accepting magnum charges of 150 grains of FFG Black flowder, or Pyrodex@equivalent (i.e.: three each of 50 grain [50 caliber] Pyrodex pellets).

Thompson/Center now offers four different styles of mudern in line muzzleloaders. The Omega¹ what a scaled pivoting breech design. The Encore 209X50 Magnum Is the most versatile and popular muzzleloader available on the market today. The Encore Endeavor which cumes with T/C's Speed Breech XT and the Triumph. T/C's new magnum muzzleloader.

An extensive array of black powder accessories are available for purchase to compliment T/C's muzzleloading product line. Our entire product line is built with one thing in mind — quality. Thompson/Center guns are built by New Englanders, who take pride in building a sturdy product and selling it at a fair price. In addition, Thompson/Center stands behind each gun with their famous Lifetime Warranty.

Our precision investment castings come from our own casting facility here in Rochester, Thompson Investment Castings. T/C's dedication to giving shooters and hunters their best product value begins with the T/C employees. More often than not, T/C employees use T/C products when they head into the fields and woods... products they (and you) can rely on, year after year.

Thompson/Center is not old by historical standards however, in less than 40 years, we have contributed heavily to the growth of shooting and hunting sports in America. We've elevated handgun hunting and hunting with a muzzlebader to new heights. Thompson/Center continues to lead the industry through the development of innovative, quality products for sport shooters and hunters worldwide.

In 2007 Thompson/Center became part of Smith & Wesson Holdings, Co. and is recognized as Smith & Wesson Hunting.

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EXHIBIT "43"



830437

B30113

B30114

830115

830116

830117

B30118

B30119

B30494

B30121

B30120

B30122

B30123

B30447

225 WIN

22 PPC

6MM TOU

243 WIN

6MM РРС

6MM REM

6MM-06

25/20 WIN

25/35 WIN

250/3000

SAVAGE

256 WIN MAG

250/3000 ACK

6MM BENCHREST

220 SWIFT

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338 FEDERAL

38 SPECIAL

357 MAG

357 MAX

35 REM

358 WIN

375 WIN

38-55 WIN

41 REM MAG

375)03

357/44 B&D

357 HERRETT

35 WHELEN

38 SPECIAL MATCH

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CALTRED	CELECTION					
	SELECTION	l leng	th ai	nd finish.		
III ENCO	RE [®] PISTOLS					
Order Number	Caliber Description	ອເບ	SST	Order Number	Caliber Description	
B30100	**17 K HORNET	X	x	B30220	284 WIN	
B30101	**17 ACKLEY BEE	x	×	B30221	7MM BR	
B30102	**17 MACH IV	×	X	830130	30 M1 CARBINE	Ĩ
B30103	**17 REMINGTON	×	×	830131	30 HERRETT	
B30556	**17 HORNADY MAG	x	×	B30133	30/30 WIN	
830514	204 RUGER	x	×	B30564	30/30 ACK IMP	1
830562	22 SHORT MATCH	x	x	B30290	300 SAVAGE	
B30559	22 LONG RIFLE	X	x	B30440	30/40 KRAG	
B30560	22 LR W/MATCH	×	х	B30135	307 WIN	Ì
B30563	22 WIN MAG	X	x	830587	308 MARLIN	
B30561	22 REM JET	X	X	830134	308 WIN	
B30105	22 HORNET	x	x	830476	308 ACK IMP	
B30106	22 K-HORNET	_ <u>_</u>	x	B30595	30 TC	
B30107	218 BEE	x	. ×	830136	30-06 SPGFLD	J
830558	219 ZIPPER	x	x	830477	30-06 ACK IMP	
B30108	221 FIREBALL	x	x	B30137	32/20 WIN	1
830581	5.7X28 FN	×	x	830138	32 H&R	ĺ
B30289	22 BENCHREST	x	x	B30569	9MM LUGER]
B30109	222 REM	x	X	830139	7.62X39 RUSSIAN	J
830111	222 REM MAG	<u>x</u>	×	B30110	223 REM	Ī
B30445	223 ACK IMP	1 x i	x	B30112	22-250 REM	1
B30446	22-250 ACK IMP	x	x	B30496	338-06	

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	IMP	1		1			
B30124	257 ROBERTS	x	i x	B30443	414 SUPER MAG	X	
B30448	257 ROB ACK IMP	x	x	B30522	405 WIN W/MT	x	
830125	25/06 REM	x	X	B30150	45 ACP X		x
B30481	25/06 REM ACK IMP	×	x	830151	45 COLT		x
B30225	6.5 BENCHREST	×		830568	45 WIN MAG	x	x
830126	6.5X55 SWEDISH	x		830153	454 CASULL	X	X
B30438	6.5X54 MANN SCH	x	1	B30464 44-40 WIN		x	×
B30439	6.5×284	x		B30147	44 REM MAG	x	x
830127	6.5 TCU	x		B30148	445 SUPER MAG	x	×
830128	260 REM	x		B30149	444 MARLIN	×	x
830521	G.8MM REM	x	X	B30154	45/70 GOVT	×	×
B30129	270 WIN	x	x	B30152	**45/410 GA W/VENTRIB		
B30215	7MM TCU	x	X	B30593	460 S&W (Hvy Qnly)	X	X
B30216	7-30 WATERS	x	x	B30482	480 RUGER	X	
B30217	7MM-08 REM	x	x	B30590	500 S&W (Hvy Only)	×	x
330218	7X57 MAUSER	×	x		Special Pricing Applies. Le - \$297.957 A30253.55t e walnut forend #7712 -		7.9 <u>9</u>
330219	260 REM	×	x	A30238	209X50 15in ML PISTOL BBL	×	
330475	280 REM ACK Imp	x	x	A30253	209X50 15in ML PISTOL BBL		x
30132	300 WHISPER	x	X)		

**Additional fee of \$30 added to total price of barrel for these calibers. **45/410 bore barrel available in 15in taper barrel only. **45/410 barrels are not offered for sale in California. *FORENDS ARE SOLD SEPARATELY

Tapered Barrels - 9 to 15in

CODE	DESCRIPTION	PRICE
т	Std. Factory Blued Finish	\$280.95
1	Hi Luster Blued Finish	\$306.95
l	Matte Blued Finish	\$286.95
s	Brushed Satin Finish - SST	\$306.95

Heavy Barrels - 9 to 15in

CODE	DESCRIPTION	PRICE
VT	Std. Factory Blued Finish	\$290.95
VH	Hi Luster Blued Finish	\$315.95
VM	Matte Blued Finish	\$295.95
٧S	Brushed Satin Finish - SST	\$315.95

Bull Barro	els - 12 to 15in	
CCDE	DESCRIPTION	PRICE
ΥT	Std. Factory Blued Finish	\$300.95
YH	Hi Luster Blued Finish	\$325.95
YM	Matte Blued Finish	\$305.95
YS	Brushed Satin Finish - SST	\$325.95

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EXHIBIT "44"

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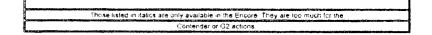
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14 Squirret (Homet)	14 LPB	14-221
17 Cal (172)		. <u> </u>
17 Mach II (22LR necked down)	17 Ackley Homet	17-222 Remington
17 HMR (22 Mag necked down)	17 Ackley Bee	17 Remington
17 Aguila (22 LR necked down)	17 Heebe	17 Classic
17 Squarel	17 Mach IV	17 Tactical
17 K Hornel	17 Fireball	17 x 50
19 Caliber		
19 Calhoon Hornet	19-223 Calhoon	
20 Cal. (.204)		
20 Squinel	20 Vartarg Turbo	20-221
20 Ackley Bee	20 Tactical	5mm Remington
20 Ackley Homet 20 x 5 7x28	204 Ruger 20 Classic	20 PPC 20 BR
20 X 3 7 X28 20 Vartarg	20 Classic	20 67
22 Cal. (.224)	20 ///	
22 LR Match (222 bore)	22 Vartarg Turbo	22-250 Remington
22 Short Match (.222" bore)	222 Remington	22-250 Ackley Improved
22 WRM (224 bore)	222 Remington Magnum	22-243 Middles(ead (243 Win)
22 CCM (224 bore)	218 Bee	220 Swift
22 K-Homet	218 Mashbum Bee	220 Swift Ackley Improved
22 Homet	223 Reinington	22-6 Remington Ackley Improved
57,28	219 Donaldson Wasp	224 Texas Troohy Hunter
22 Classic	223 Ackley Improved	22-454 Casul
221 Remington	22 Reministon Jet	22 BR
22 Squirrel	22 PPC	22-284 Lapua *BOLT ACTION ONLY*
22 Vartarg	225 Winchester	223 WSSM "BOLT ACTION ONLY"
6mm (.243)	الاستجراف والمستجر المستخدر المستخلصين المتأك الأوارك الترك	
6mm x 30-30	6mm PPC	6mm-284
5mm x 30-30 Ackley (improved	6mm BR	6mm-06
6mm Classic 6mm Varlarg	6mm-250 6mm-250 Ackiey Improved	6mm-06 Ackley Improved 6mm Gibbs
6mm Variarg Turbo	243 Winchester	240 Weatherby
Emm TCU	243 Ackley Improved	243 WSSM 'BOLT ACTION ONLY'
6mm x 45mm	6mm Remington	6 17 Spillire "BOLT ACTION ONLY"
6mm к 47mm	6mm Ackley Improved	6 17 Flash BOLT ACTION ONLY
26 Caliber (.267)		
25-23 Winchester	25 x 30-30	257 Weatherby
256 Winchester Mag	25-08 (308 Winchester)	250 Savage
256 Super Mag	25-08 Ackley Improved	250 Savage Improved
25 TOU (223 Remington)	257 Roberts	25-300 WSM "BOLT ACTION ONLY"
25 Classic (30-30 Winchester)	257 Roberts Ackley Improved	25 STW *BOLT ACTION ONLY*
25-35 Ackley Improved	25-284 (284 Winchester)	25 RSAUM BOLT ACTION ONLY
25-35 Winchester	25-06 (30-06 Springfield)	25 WSSM BOLT ACTION ONLY
25 x 30-30 Ackley improved	26-06 Improved	J
6.5mm (.264) 5.5mm TOU	6 5mm-284	264 Winchester Magnum
5 Smm Classic	6 5mm-06	6 5 Grendel
5.5mm × 30-30	6 5mm-06 Ackley Improved	5 5 Creedmoor
3 5mm x 30-30 Ackey Improved	260 Remington	6 71 Lazzeroni Phantom "BOLT ACTION ONLY"
6 5mm x 47 Lapua	260 Remington Improved	6.5 WSSM "BOLT ACTION ONLY"
6.5mm PPC	6.5mm Remington Magnum	6 5-300 WSM "BOLT ACTION ONLY"
6 5mm BR	6 5mm Gibb s	6 71 Blackbird *BOLT ACTION ONLY*
6 5mm-250	6.5mm x 55	
270 Caliber (.277)		
6.8 Remington SPC	270 Winchester	270 Weatherby
270-08	270-284	
7mm (.284)		
7mm TCU	7mm x 57	7mm STW

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7-08 Remington Timm Gibbs 7-08 Remington Ackley improved Timm Remington Magnum 30 Caliber (308) 30-40 Krag Ackley improved 30 Resca 308 Winchester 300-221 ("Whisper") 308 Winchester 300-221 ("Whisper") 308 Winchester Ackley improved 300-221 ("Whisper") 308 Winchester 30-06 Springfield 30-204 300-221 ("Whisper") 308 Winchester 30-204 Minchester 30-206 Springfield 30-30 Minchester 30-06 Improved 300 Savage 300 Winchester Magnum 300 Savage 300 Winchester Magnum 300 Savage 300 Weatherby 7.62 x 25 Tokarev (308 Bore) 32.7 Ederal (312 Bore) 312 & 321 Caliber 32.40 Winchester (321 Bore) 327 Eddraft 32.40 Winchester (321 Bore) 328 x 30-30 338-20 338 x 30-30 338-21 338 x 30-30 338-21 338 x 30-30 338-206 338 x 30-30 338-306 338 x 30-30 357 Bain & Davis 357 Magnum 358-338 Winchester Magnu	Jmm x 64 Imm Executor SOLT ACTION ONLY* a 7.21 Tomahawk 'BOLT ACTION ONLY* a 7.21 Tomahawk 'BOLT ACTION ONLY* 3 7.62 x 54R (308 Bore) 300 Norma Mag 30 ad 30 BR 100 H&H Magnum 300 Norma Mag 30 301 TS Weatherby Magnum 'BOLT ACTION ONLY* 300 RCM 'BOLT ACTION ONLY* 301 TACTION ONLY* 302 RCM 'BOLT ACTION ONLY* 303 RUM 'BOLT ACTION ONLY* 303 RUM 'BOLT ACTION ONLY* 303 RUM 'BOLT ACTION ONLY*
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45 Long Celt 460 Smith & Wesson	
468 Caliber	
45-70 US Govt 458 Winchester Magnum	450 Alaskan
45 Basic 450 Martin	
458 Lott 45-120 Sharps	
475 Caliber	
475 Linebaugh 470 Nitro Express	
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50-90 Winchester 500 Linebaugh	50-40 3 25"
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	50-140 3.5"
This list is a list of rounds available for the T/C E	50-140 3.5"

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The Custom Pistols Of GARY REEDER

Guns Magazine, March, 2001 by John Taffin

As strong as they are beautiful, these classic handguns are designed and crafted with serious field use in mind.

Custom gunsmith Gary Reeder specializes in single shots and sixguns designed for handgun hunting. Reeder uses five basic platforms to build his guns for handgun hunters, cowboy shooters and those seeking an easy-packin' big bore sixgun to handle any emergency that may arise in the wild. His guns are built on Thompson/Center single-shots, Ruger Redhawks and Super Redhawks, Ruger Blackhawks, Bisleys and Vaqueros, and the Model 83 from Freedom Arms.

The Single-Shots

Reeder originally built his reputation with his wildcat cartridges on custom T/C Contenders. The advent of the T/C Encore gave him an even stronger platform to add more powerful chamberings. Some of Reeder's wildcats include the .356GNR, a .357 on a necked-down .41 Mag. case, as well as the .338GNR, .350GNR and .378GNR, all on the necked-down .405 Win. Cases.

Reeder also offers two .41s, the .4lGNR on a neckeddown .44 Mag., and the .41GNR on .445 SuperMag. brass. For really big game, Reeder goes with the .4l6GNR and .450GNR, both on the .348 Win.; and the .450KNR on the .470 Nitro Express.

Reeder can chamber appropriate T/C barrels or supply completely custom barrels in any of the above chamberings; dies are also available from Reeder Custom Guns, plus several dozen more from the .22 Hornet through the .458 Winchester.

Reeder's Kodiak Hunter started in the '80s on the Contender and is now offered in both .454 Casull and .50 AE on the Encore. Particulars include a heavy 10" barrel with the gold-bead front sight on a barrel band mated up with a fully adjustable rear sight. The Kodiak Hunter has a black chromex finish, with a Dall sheep laser engraved on the left side of the frame and a Kodiak bear on the other side.

The Ultimate Encore comes with a 15" barrel and a choice of finishes: black chromex, high polish stainless, or soft satin vapor-honed stainless finish. This serious hunting handgun is chambered in some heavy-recoiling cartridges; however, it comes with a recoil-taming Reeder muzzle brake to handle the .338 Win., .350 Rem. Mag., 7MMSTW, .358 STA, .300 H&H, .375 H&H and .416 Remington.

The Ultimate Freedom Arms

Reeder offers several custom options on the already excellent Freedom Arms sixguns. The Ultimate Back-Up, mainly in the original .454 Casull chambering, consists of a fixed-sighted frame; a 3 1/2" barrel with ejector rod; Reeder's rendition of the bird's head grip, the gunfighter grip frame; vapor-hone finish; shooter's choice of animal engraved on the cylinder; and the Ultimate Back-Up logo on the barrel.

This little sixgun yields right at 1,700 fps with a 265 gr. bullet, and nearly 1,350 fps with a 300 gr. bullet. That is a lot of power in a very packable sixgun.

But that's not the only Freedom Arms revolver offered by Reeder. Start with an adjustablesighted Freedom Arms .50AE; round butt the grip frame; cut the barrel to 4 1/2"; recrown and solidly re-mount the front sight with an Allen screw; round off all sharp edges; engrave the frame, barrel and cylinder, and you'll get a devil of a sixgun known as Lucifer's Hammer.

Several Ultimate Models are offered, including the Ultimate .41 chambered in .41 GNR, the Ultimate 50 and the Ultimate Long Colt. The latter is chambered in .45 Colt, with a custom five-shot cylinder on the .50AE frame. Two models are available: the Hunter Model, with a soft satin finish and shooter's choice of barrel length; and the Professional Model, with a choice of finishes, Gunfighter grip frame, adjustable express sights and an extra cylinder in .454 Casull. Both models feature custom engraving on the frame, cylinder and barrel.

Reeder's Double Action Rugers

Ruger's Redhawk and Super Redhawk are the strongest double action sixguns ever offered. To make his Alaskan Survivalist, Reeder starts with a Redhawk. Offered in either .45 Colt or .44 Mag., the Survivalist has a round butt and is fitted with ebony grips; the barrel is cut to 3"; the action is smoothed; the hammer, trigger and pins are high polished; and the finish is soft satin black or vapor-hone. This is another easy-packin' powerhouse pistol.

Reeder's Long Colt Hunter on the Redhawk has a 5" barrel, with a soft satin finish, action job, gold dot front sight, V-express rear, jeweled hammer and trigger, and Gunfighter grip frame with ebony grips. Engraving is offered at no extra charge, including a most attractive version consisting of animal tracks.

Moving on to the Super Redhawk, Reeder comes up with the Master Hunter. Built on a 7 1/2" .44 Mag., the Master Hunter includes a Reeder muzzle brake, a smoothed action, a vaporhone finish, a jeweled hammer and trigger, Hogue soft rubber finger groove grips, and express sights, as well as the Ruger ring setup for scope mounting. Reeder says full-house .44 Magnums will feel like .38 Specials in this setup for the serious hunter.

Reeder's Ruger Bisleys And Blackhawks

The single-action version of the Redhawk Long Colt Hunter is built on a stainless Blackhawk .45 Colt with a 5 1/2" or 7 1/2" barrel, gold bead front sights, satin finish, rounded Bisley grip frame with ebony grips, polished pins, and jeweled hammer and trigger.

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EXHIBIT "46"

AmmoGuide



About AmmoGuide Interactive...



AmmoGuide Interactive was created by **Mike Haas**, a professional web developer who is also a lifelong reloader and NRA Benefactor member. The design emodies the concept that *"technology should work for you."* Mike is originally from Pittsburgh, PA and now lives in the San Francisco Bay Area.

Drawing on Mike's years of experience in financial industry web design, AmmoGuide Interactive is both *powerful and easy-to-use*. Advanced tools like the Visual Comparison Tool and the

AmmoGuide Cartridge Creator - exclusive features of AmmoGuide.com - provide an interactive experience no other website or paper manual can match, <u>bar none</u>. There's simply no other website like AmmoGuide.com.

At a low \$18.95-per-year, AmmoGuide Interactive represents an incredible value!

In our spare time...

AmmoGuide.com supports pro-gun organizations like the Fifty-Caliber Institute, the NRA and specifically donates web support to the California NRA Members' Councils. AmmoGuide is also a co-founder and sponsor of Project Bore Snake. [More]

About AmmoGuide.com...

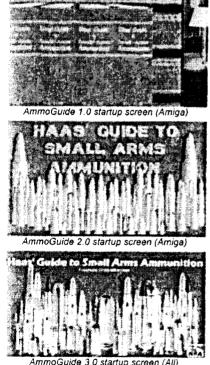
AmmoGuide 1.0 began life as an Amiga freeware program in 1995 with the full name of Haas' Guide to Small Arms Ammunition. While it didn't contain any reloading data, the program featured information on 90 cartridges, complete with case diagrams (always!) and a descriptive history (in most cases). In early 1997 the last Amiga-based version, AmmoGuide 2.0, was released with 132 rounds. (These early Amiga programs can still be located in many web archives.)

Before the demise of the Amiga platform, AmmoGuide had become an international hit! AmmoGuide had been featured in *both American and European computer magazines*, including screenshots of it's case diagrams and graphics.

The emergence of the web brought a wealth of associated technologies. A new "runtime" environment called Java (by <u>Sun Microsystems</u>) allowed websites to **run programs securely over the internet**. Java would come to be universally accepted and adopted by virtually all web browsers and servers. In 1997, rewritten in Java, **AmmoGuide 3.0** was released as a standalone, downloadable program configured for Windows and Macintosh platforms.

The first AmmoGuide website began life in late 1997 with those same 132 cartridges. In 1999, the domain was registered and **AmmoGuide.com was launched**. AmmoGuide's cartridge-drawing engine and information no longer required any special kind of computer and could be displayed <u>in any Java-enabled web browser</u>.

In 2000, the <u>AmmoGuide Cartridge Creator</u> was added, allowing visitors to submit their own favorite



http://ammoguide.com/myag/aboutag.html

cartridges to the AmmoGuide database from their Java-enabled web browser.

In January 2004, the website was completely redesigned to better serve it's visitors as a fullservice reloading center comprised of highlyintegrated, easy-to-use tools. **AmmoGuide Interactive** adds *thousands of loads* of reloading



data and a vast array of reloading/cartridge functionality unmatched on the web - all for an affordable annual fee. Sophisticated yet easy-to-use tools like the **Cartridge Identification and Search Tool** and the **Cartridge Master** List dramatically increase the usefulness of the website to shooters and hunters.

AmmoGuide.com is committed to providing the very best in online reloading services.

your AmmoGuide team

Close Window

EXHIBIT "47"

INTRODUCTION

Without ammunition, a firearm becomes an unwieldy club. Without a firearm, ammunition becomes dead weight. For these reasons, firearms and ammunition are inextricably interdependent and developed together, not in isolation. While scores of books have been written about firearms, few have been written on the general subject of ammunition. In writing this book, the author seeks to fill that void.

This book is intended as a broad, practical reference work on sporting and military small arms ammunition. Its informational core contains data on hundreds of current and obsolete centerfire cartridges, rimfire cartridges, and shotshells. Detailed information on the history, nomenclature, manufacture, application, and ballistics of small arms ammunition supports and guides the reader's understanding of the core material. To aid in placing the core material and technical data in a practical context, this book also contains chapters on markets, manufacturers, production volumes, and trademarks. Supporting material includes reference charts, formulas, source lists, and company histories, as well as a Glossary, Bibliography, Trademark Index, and Index. Where appropriate, chapters contain definitions, answers to frequently asked questions, ammunition factoids, informative quotes, and short biographies.

Every effort has been made to present the material within these pages in a clear, concise, user-friendly format. Accordingly, the 792 pages of text have been divided into 60 closely focused chapters.

This book is not a reloading manual and contains no reloading data. Readers seeking such information and data are referred to the many excellent books on this subject published by bullet and powder manufacturers. A listing of such manufacturers will be found in the frademark Index.

As military cartridges larger than 15mm are not considered small arms ammunition, such calibers are not included here.



Author (r.) with Dr. Mikhail Kalashnikov (l.) and Jim Sullivan (c.) in Russia.

For those electronically inclined individuals with a computer and Internet access, Blue Book Publications, Inc. will also offer this information online at www.bluebookinc.com.

The database of this book will continue to be updated as new cartridges are released, and these new additions will be available both online and in upcoming editions of this book. To aid in this effort, the author and co-editors welcome corrections, additional materials, and suggestions for improvements. These may be sent to the Blue Book Publications, Inc. address, to the author's attention.

In closing, I would like to thank all of you for your heip and support on this project. The history of ammunition is at least as exciting as the history of firearms, and deserves as much respect and credit as the "hardware" it is shot in.

Sincerely, Michael Sussard

Michael Bussard

ACKNOWLEDGEMENTS

The author would like to extend a special thank you to both John B. Allen and David Kosowski for taking this book to the next level in terms of being thorough and more complete. Also, Clint H. Schmidt deserves special recognition for spending a lot of time making sure all the images, graphics, and overall design turned out as well as they did. This was a long, hard, uphill climb, but at the end, all of us felt good once we reached the summit.

Dimensional drawings by QuickDESIGN^{*} program available from NECO (Nostalgia Enterprises Company) at www.neconos.com.

The following people and companies also deserve special mention.

S.P. Fjestad Tom Burczynski Ed Dillon Hartmut Broemel Frank Allan Jim Brown

Steve Johnson Bill Woodin R.T. Lunger, Jr. Evan Marshall Alton S. "Chuck" Drury The Swiss National Library

The Higley Museum The British Army Museum The British Museum Curtis Brown, Ltd. Mike Haas at ammoguide.com

EXHIBIT "48"

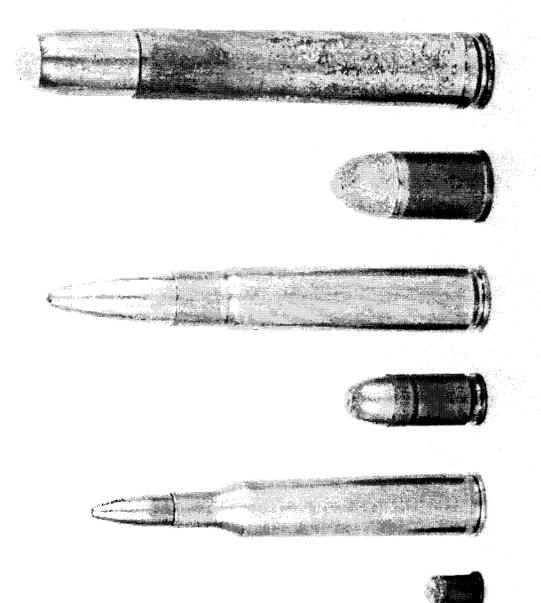


EXHIBIT "49"



Attention California Residents: As a result of California Assembly Bill 962, which criminalizes the delivery and transfer of handgun ammunition in all non-face-to-face transactions, and because the bill does not define handgun ammunition, MidwayUSA regrets we are unable to ship any ammunition to the state of California beginning February 1, 2011.

ELEY

FEDERAL

guila. Ge Jacketed Solid Point, per 50			
guila. Ce jacketed Solid Point, per 50	Velocity 	Product #.	Price \$0.00
17 HM2	1.1.1	1. A.	
Cl 7 Gr Hornady V-Max, per 50	Velocity	Product #.	Price
Gr Hornady V-Max, per 500,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			\$0.00
Gr Homady V-Max, ner 50	2100 fps		\$0.00
Gr Homady V-Max, per 500 Gr Homady V-Max, per 2000 ornady		513-412 729-975	\$0.00 \$0.00
S Gr NTY per 50	2050 frsc	4/5.661	SUM
5 Gr NTX, per 500 Gr Varmint Express V-Max, per 50			
(for Varmint Express V-May per 500)	21(8) 105	6811-771	- 14113
17 HMD			
Cl	Velocity	Product #	Price
Cl			\$0.0 \$0.0
7 Gr Homady V-Max, per 500			\$0.0
7 Gr Homady V-Max, per 2000 7 Gr Speer TNT JHP, per 50 7 Gr Speer TNT JHP, per 500		276-039 254-639	\$0.0 \$0.0
Gr Speer TNT JHP, per 500			0.0\$
) Gr FMI, per 500			\$0.0
) Gr GamePoint JSPP, per 50		970-191 	\$0.0
ederal Gr V-Shok Hornady V-May, ner 50	Velocity 2550 fps	Product #. 368-601	Pric i \$0.0
Gr V-Shok Hornady V-Max, per 50 Gr V-Shok Speer TNT JHP, per 500			\$0.0
Gr V-Shok Speer TNT JHP, per 50		194-762	\$0.0
ornady	Velocity	Product #.	Price
5 Gr NTX per 500	2525 fos	692-482	\$0.04
7 Gr Varmint Express V-Max, per 50			
Gr Varmint Express V-Max, per 2000			\$ 0.0
) Gr Varmint Express XTP JHP, per 500			\$0.04
emington	Velocity	Product #.	
' Gr Varmint Express V-Max, per 500 ' Gr Varmint Express V-Max, per 2000 O Gr Varmint Express XTP JHP, per 50 O Gr Varmint Express XTP JHP, per 2000 O Gr Varmint Express XTP JHP, per 2000 ' Gr Premier Hornady V-Max, per 50		,993-894 ,189-374	\$0.04 \$0.04
22 CB Shor	t i		Q
CI	Velocity	Product #.	Price
9 Gr CB Lead RN, per 100 9 Gr CB Lead RN, per 500			
22 CB Long			
	Velocity	Product #.	Price
) Gr CB Lead RN, per 100			\$0.0
) Gr CB Lead RN, per 5000		649-846	\$0. 0
22 Short			
guila	Velocity	Product #.	Pric
Gr High Velocity Plated Lead RN, per 50 Gr High Velocity Plated Lead RN, per 500			\$0.0
CI	Velocity	Product #.	Price
Gr Plated Lead HP, per 100	1105 fps	134-092	\$0,00
I Gr Plated Lead RN, per 100		121-124	\$0.00
Gr Target Lead RN, per 100		346-111	\$0.00
9 Gr Target Lead RN, per 500 oise Blanks, per 100	N/Á	368-201	\$0.00
emington Gr Golden Bullet High Velocity RN, per 100	Velocity	Product #.	Price
Gr Golden Bullet High Velocity RN, per 500		712-222	\$0.00
9 Gr High Velocity Plated Lead RN, per 50			

17 Aguila			22 Long		<u> </u>
Aguita 20 Ge Jacketed Solid Point, per 50			29 Gr Lead RN, per 100	1215 fps	\$0.0
17 HM2			29 Gr Lead RN, per 500	.1215 fos 181-697	\$0.0
CCI	Velocity Product #.	Price	22 LR		<u>.</u>
7 Gr Homady V-Max, per 50 17 Gr Homady V-Max, per 500		0,00 \$	Armscor 36 Gr High Velocity Lead HP, per 50	Velocity Product # .1260 fps 338-248	 Pric \$0.0
Eley	Velocity Product #	Price	36 Gr High Velocity Lead HP, per 500 40 Gr Target Lead RN, per 50	260 fos75 -831	\$0.0
17 Gr Homady V-Max, per 50		\$0.00 \$0.00	40 Gr Target Lead RN, per 50 40 Gr Target Lead RN, per 500 Aguila	.1135 fps	
7 Gr Homady V-Max, per 2000 Hornady	2100 fps	\$0.00	Aguila	Velocity Product # 375 fos 946-854	Pric ۵۵۵
15.5 Gr NTX, per 50		\$0.00	20 Gr Colibri Lead Solid Point, per 500		\$0.0
15.5 Gr NTX, per 500		\$0.00 \$0.00	20 Gr Super Colibri Lead Solid Point, per 50	500 tps	\$0.0 \$0.0
17 Gr Varmint Express V-Max, per 500		\$0.00	30 Gr Super Max Plated Lead HP, per 50 30 Gr Super Max Plated Lead HP, per 500	.1750 fps	\$0.0
17 HMR			30 Gr Super Max Plated Lead RN, per 50	. 1750 fps	\$0,0
CCI	Velocity Product #.	Price	30 Gr Super Max Plated Lead RN, per 500	. 750 fps 233-104	\$0.0
16 Gr Speer TNT Green HP Lead-Free, per 50		\$0.00 \$0.00	38 Gr High Velocity Plated Lead HP, per 500	.1280 fps 193-119	\$0.0
16 Cr Sparr TNET Green HR Land-Free par 2000	7700 for 765-875	\$0.00	38 Gr Subsonic Lead HP, per 50	.1025 fps	\$0.0 \$0.0
17 Gr Homady V-Max, per 50		\$0.00 \$0.00	40 Gr High Velocity Plated Lead RN, per 50	.1250 fps 176-566	\$0.0
17 Gr Homady V-Max, per 2000 17 Gr Speer TNT JHP, per 50			40 Gr High Velocity Plated Lead RN, per 500 40 Gr Interceptor Plated Lead RN, per 50	.1470 fps	\$0.0
17 Gr Speer TNT HP, per 500.	512-994	\$0.00	40 Gr Interceptor Plated Lead RN, per 500	.1470 fps	\$0.0 \$0.0
20 Gr FMJ, per 50 20 Gr FMJ, per 500	2375 fps	\$0.00 \$0.00	40 Gr Lead RN, per 50. 40 Gr Lead RN, per 50. 40 Gr Lead RN, per 50.	.1135 fps	\$0.0
20 Gr GamePoint JSPP, per 50		\$0.00	40 Gr Match Pistol Lead KN, per 500	,1080 10s	
Federal	"Velocity Product #.	Price	40 Gr Match Pistol Lead RN, per 5000 40 Gr Match Rifle Lead RN, per 50	1080 fps	\$0.0
17 Gr V-Shok Hornady V-Max, per 50		\$0.00 0.03	40 Gr Match Rifle Lead RN, per 500	.1080 fps 592-172	
17 Gr V-Shok Speer TNT IHP, per 50		\$0.00	40 Gr Match Rifle Lead RN, per 5000 40 Gr Subsonic Lead RN, per 50	.1080 fps 116-263 1025 fps	\$0.0 \$0.0
7 Gr V-Shok Hornady V-Max, per 500	Velocity Product #	Price	40 Gr Subsonic Lead RN, ner 500	1025 fos 588-779	\$00
5.5 Gr NTX, per 50 5.5 Gr NTX, per 500		\$0.00	40 Gr Target Lead RN, per 50 40 Gr Target Lead RN, per 500	1100 fps. 157-234	S O C
7 Gr Varmint Express V-Max, per 50		\$0.00	60 Gr SSS Lead RN, per 50	950 fre 135-961	\$00
17 Gr Varmint Express V-Max, per 500 17 Gr Varmint Express V-Max, per 2000		\$0.00	CCI	Velocity Product #	Pric
20 Gr Varmint Express XTP IHP, per 50		\$0,00	21 Gr Short Range Green TC HP Lead-Free, per 5000 31 Gr Shotshell #12 Shot, per 20	,1260 fps 638-953	\$0.0
20 Gr Varmint Express XTP JHP, per 500		\$0.00 \$0.00	37 Cr. Ouik-Shok Plated Lead HP per 50	1640 fre 712-296	\$0.0
Remington	Velocity Product #.	Price	32 Gr Quik-Shok Plated Lead HP, per 500	.1640 fps	\$0.0 \$0.0
17 Gr Premier Hornady V-Max, per 50 17 Gr Premier Hornady V-Max, per 500		\$0.00 \$0.00	32 Gr Stinger Plated Lead HP, per 50	.1640 fps	\$0.0 \$0.0
22 CB Short			36 Gr Mini-Mag High Velocity Plated HP, per 100 36 Gr Mini-Mag High Velocity Plated HP, per 500 36 Gr Mini-Mag High Velocity Plated HP, per 5000	.1260 fps 130 954	\$0.0
CCI		Price	36 Gr Mini-Mag High Velocity Plated HP, per 5000 40 Gr Blazer Lead RN, per 50	.1260 fps 154-902 1070 fps 133-745	\$0.0 \$0.0
29 Gr CB Lead RN, per 100 29 Gr CB Lead RN, per 500		\$0.00	40 Gr Blazer Lead RN, per 500	1070 foc 193-791	\$0.0
29 Gr CB Lead RN, per 500		\$0.00	40 Gr Blazer Lead RN, per 5000	10/0 tos 1/4-461	- 500
22 CB Long			40 Gr Green Tag Competition Lead RN, per 500 40 Gr High Velocity Mini-Mag Plated Lead RN, per 100	.1070 fps 281-643	\$0.0
CCI	Velocity Product #.	Príce	40 Gr High Velocity Mini-Mag Plated Lead RN, per 500	1235 fps. 225-774	
29 Gr CB Lead BNL per 500	710 fos 367-227	\$0.00	40 Gr High Velocity Mini-Mag Plated Lead RN, per 5000. 40 Gr Pistol M Lead RN, per 50	.1235 lps751-640 .1070 lps	\$0.0 \$0.0
9 Gr CB Lead RN, per 5000		\$0.00 \$0.00	40 Gr Pistol M Lead RN, per 500	.1070 fps 812-397	\$0.0 \$0.0
22 Short	•	12-12-14	40 Gr Plated Lead HP Subsonic, per 500	.1050 fps 310-307	\$0.0
Aguila		Price	40 Gr Select Precision Lead RN, per 100	.1200 fps	\$0.0 \$0.0
29 Gr High Velocity Plated Lead RN, per 50		\$0.00	40 Gr SGB Lead TC, per 50	.1235 fps	\$0.0
29 Gr High Velocity Plated Lead RN, per 500	Velocity Product #	Price	40 Gr SGB Lead TC, per 500 40 Gr Standard Velocity Lead RN, per 100	.1070 fps 271-391	\$0.0
27 Gr Plated Lead HP, per 100	I 105 fps 356-778	\$0.00	40 Gr Standard Velocity Lead RN, per 500 40 Gr Subsonic Lead HP, per 100	.1070 fps 143-578	\$0.0
29 Gr Plated Lead RN, per 100.	1080 fps 121-124	\$0.00	40 Gr Subsonic Lead HP, per 500	.1050 fps	\$0.0
29 Gr Plated Lead RN, per 500		\$0.00 \$0.00	40 Gr Velocitor Plated Lead HP, per 50 40 Gr Velocitor Plated Lead HP, per 500	.1435 fps 182-050 .1435 fps	\$0.0
29 Gr Target Lead RN, per 500		\$0.00	Eley	Velocity Product #	Pric
Noise Blanks, per 100 Remington			40 Gr Club Lead RN, per 50		
29 Gr Golden Bullet High Velocity RN, per 100	1095 fps	\$0.00	40 Gr Match OSP Lead RN, per 50	.1030 fps 670-294	\$0.0
29 Gr Golden Bullet High Velocity RN, per 500 29 Gr High Velocity Plated Lead RN, per 50	1095 fps	\$0.00	40 Gr Match OSP Lead RN, per 500 40 Gr Match Pistol Lead RN, per 50	.1000 fps 152-349	\$0.0
29 Gr High Velocity Plated Lead RN, per 500	1095 fps	\$0.00	40 Gr Match Pistol Lead RN, per 500	,1000 fps	\$0.0
			40 Gr Match Lead RN, per 50 40 Gr Match Lead RN, per 500	.1085 fps	\$0.0
			40 C - C + L + DNL EO	1085 for 453 569	\$0.0
			40 Gr Sport Lead RN, per 50 40 Gr Sport Lead RN, per 500	1085 fps - 597-085	\$00

EXHIBIT "50"



WINCHESTER

Cheaper Than Dirt! — America's Ultimate Shooting Sports Discounter

Remington[#] Golden Saber

As of January, 2011 we will no longer sell or ship animunition to residents of Califa

WINCHES

in

	ster® Super-X	WINGHESTER			
Caliber	Description	Rounds	Price	Item Number	
.22LR	FMJ, High Velocity, 40 grain	500	\$39.97	AMM-070	
22LR	PRN High Velocity , 40 grain	100	5.69	AMM-088	
22LR	Power Point HP, 40 grain	100	8.08	AMM-090	
.223	PSP Remington, 55 grain	20	15.89	AMM-65142	
12 Ga.	2 %", #00 Buck, 9 pellets	5	4.59	AMM-826	
12 Ga.	3*, 1 Buck, 24 Unplated pellets	5	5.79	AMM-827	

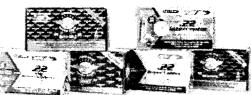
Winchester® Supreme

Caliber	Description	Rounds	Price	Item Number
.308	Elite XP3, 150 grain	20	\$38.59	AMM-7171
410 Ga.	2%", 000 Buck, 3 Pellets	5	5.69	AMM-861
12 Ga.	3*. 00 Buck, 12 Pellets	5	8.49	AMM-801
12 Ga.	2%", 00 Buck, 12 Pellets	5	7.49	AMM-802

Ranger ZQ4369 .40 S&W

JHP, 180 Grain, Loaded specifically for Law Enforcement use by one of the largest and oldest ammunition manufacturers, this round has devastating terminal ballistics, combined with outstanding penetration to meet the demand of Law Enforcement professionals. Nickel Cased, Bonded, RA408. 50 Round Box AMM-579 ... \$21.79

WINCHESTER ILYTER 40 S & W 0



Aguila® Match .22LR

Agulla

Standard velocity match ammo is Eley-primed and loaded for superior accuracy. This finely tuned ammunition is available in rifle and pistol varieties to meet your specific competitive shooting requirements. Match Pistol, .22LR, 40 Grain Lead Bullet, 925 fps, 500 round brick

AMM-058 ... \$27.69

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Match Rifle, 22LR, 40 Grain Lead Bullet, 1080 fps, 500 round brick AMM-059 ... \$27.69

Aguila® Match .22LR Aguila's most accurate target ammo is Eley-primed and loaded for superior accuracy and competition consistency. Target .22LR, 40 grain bullet, 1080 fps, 500 round brick. AMM-060 ... \$30.19

Aguila® Interceptor .22LR High Speed Aguila Interceptor .22 Long Rifle with full 40 grain lead bullet at a screaming 1470 feet per second! Sold in 500 round bricks. AMM-065 ... \$38.89

Aguila[®] .22LR Super Quiet Colibri Super quiet 500 fps ammo, does not contain gun powder. Fires from the force of the primer only, 20 gran lead, 500 round brick. AMM-066 ... \$20.89

Aguila® Sniper SubSonic .22LR

SubSonic .22LR ammo is Eley primed and has a heavy 60 grain lead bullet that travels at 950 fps. Very accurate and ideal for close range sniping and targeting, 500 round brick AMM-057 ... \$32.29

Caliber	Grains	Rounds Per Box	Boxes Per Case	Price	Item Number
9mm	124	26	20	\$21.79	AMM-416
9mm	147	50	10	34.19	AMM-452
9mm +P	124	25	20	25.49	AMM-414
38 Special +P	125	25	20	18.89	AMM-328
40 S&W	165	25	20	30.89	AMM-546
40 S&W	180	25	20	25.89	AMM-542
45 Auto	230	25	20	2279	AMM-509
45 Auto	185	25	20	21.79	AMM-522
45 Auto	185	60	10	35.39	AMM-528
.45 Auto +P	185	25	20	27.79	AMM-527

Extra deep cavity for extreme expansion means the ultimate in combat effectiveness. Features waterproof prime

Remington® Express

.45 Auto +P

Callber	Description	Rounds	Price	Item Number
.223	- HP Power-Lokt, 55 grain	20	\$24.79	AMM-6572
20 Ga.	2%7 #3 Buck, 20 Pellets	5	\$4.79	AMM-848

Remington[®] Buckshot

Caliber	Description	Rounds	Price	Item Number
12 Ga.	2%*. 00 Buck, 9 Pellets	5	\$4.09	AMM-817
12 Ga.	2%". 000 Buck, 8 Pellets	5	4.09	AMM-8172
12 Ga.	2%4*. #1 Buck, 16 Pallets	5	4.09	AMM-8174

Remington® UMC

Caliber	Description	Rounds	Price	item Number
.223	Metal Case, 55 grain	50	20.89	AMM-52783
.223	FMJ, 55 grain	20	9.97	AMM-206
.30-06	MC, 150 grain	20	19.79	AMM-676

Remington® Premier Match

Caliber	Description	Rounds	Price	Item Number
.223	Matchking 8THP, 69 grain	20	\$23.69	AMM-6573
.223	Match HP, 62 grain	20	23.69	AMM-6574
.223	Core-Lokt PSR 62 grein	20	23.69	AMM-6571

Piney Mountain® .22LR Tracer LRN, 40 grain, 50 rounds AMM-908 ... \$12.79



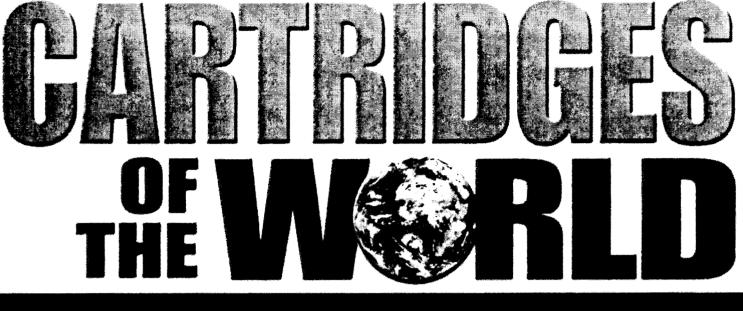
ition is non-returnable and may be restricted. We need an ammo affidavit from you to ship ammo, please see order form. Lead Warning: Discharging, cleaning, or handling ammunition or firearms may cause exposure to lead. Please see our website www.CheaperThanDirt.com for product availability.

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Ammunition

Remington^{*}

EXHIBIT "51"



A COMPLETE AND ILLUSTRATED REFERENCE FOR OVER 1500 CARTRIDGES

11th Edition

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 Ballistics and load data
 European and American
 Military and commercial
 Current and obsolete
 Blackpowder and smokeless
 Wildcats and proprietary rounds

By Frank C. Barnes / Edited by Stan Skinner

XLOP

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Fornady

LEVER

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THE ORIGINAL philosophy worked out by myself and the late John T. Amber (the original editor) was to assemble a practical and useful book that would appeal to as broad a spectrum of the shooting fraternity as possible. The sales record of the book over the years indicates that this was the proper approach. The 11th Edition carries on in the same tradition as the previous editions in offering both something new as well as retaining old data that is either useful or of general interest. There is really not much that can be done in the area of, say, obsolete cartridges because nothing changes except that occasionally one or two of the old-timers will be reintroduced. This requires moving such cartridges back into the chapter covering modern cartridges, or on the other hand, some commercially loaded number will be discontinued and relegated to the obsolete chapter. Such changes are updated in the next edition. We have retained the encyclopedic reference format and are continuing to present the information from a shooter's and hunter's point of view.

Included is information covering handgun, rifle, shotgun, obsolete blackpowder, European, British, military, wildcat and proprietary cartridges, along with data on the guns that shoot these cartridges. There is something for everybody.

The information contained in CARTRIDGES OF THE WORLD was obtained from many sources, including textbooks, new and old catalogs, periodicals and individuals. Amber supplied many out-ofprint and rare cartridge catalogs from his extensive library. Much information is from the author's and editor's files, as well as other original sources, and will not be found elsewhere. Practical experience also weighs heavily in the balance. Barnes had more than 50 years of hunting, shooting, reloading and collecting experience. Amber was a gun collector with extensive hunting experience in North America, Europe and Africa. Ken Warner, successor to Amber and former editor of GUN DIGEST, is also a collector, hunter and shooter with many years of experience. This collective experience is reflected in the pages of this book.

The book is divided into chapters based on each category of ammunition: Current American Rifle, Obsolete American Rifle, Handgun, Military, etc. Ballistics and basic loading data have been included with each cartridge listing if possible. Extensive dimensional charts and tables are found at the end of each chapter. Dimensional data is presented in this manner, rather than with the individual cartridges, in order to simplify the identification of unknown cartridges. Cartridges are listed in the order of increasing bullet diameter, or if caliber is the same, by length or power. One of the more difficult facts to establish with certainty is the date of origin for older obsolete cartridges. This is a matter of some importance to historians and occasionally archaeologists digging into our recent past when they happen to find spent cases or cartridges in graves or on old battlefields. It can be useful when attempting to determine the caliber of certain guns or the relationship between firearms, ammunition and historical events. Those who write western novels or make similar movies might be well served if they would peruse the pages of this book so that they would not constantly be placing the wrong guns in the wrong time period. It might surprise them to discover that the U.S. Cavalry in the 1870s did not carry either Model 1892 or 1894 Winchester lever-action carbines. These guns were unavailable then, and none of the cartridges those rifles chambered were ever adopted by the military. The date of origin, insofar as can be determined, has been included with the historical notes.

Many law-enforcement agencies, military organizations and defense ordnance groups have found CARTRIDGES OF THE WORLD to be a worthwhile reference source. It is also used as a basic text in colleges and universities for firearms identification courses. Firearms identification involves working with cartridges as much as working with firearms. CARTRIDGES OF THE WORLD even made it into television when it showed up in one episode of the once-popular cop show, "Miami Vice."

Under the heading "General Comments," an effort has been made to rate the various cartridges for hunting purposes. Admittedly any such ratings are highly subjective, since there is no quantitative formula for determining what cartridge is suitable for what game. Evidence (or lack thereof), observations in the hunting field and personal opinion inevitably enter this process. If the reader takes issue with the author or editor regarding the efficacy of a particular cartridge for some specific purpose, it doesn't necessarily follow that someone is wrong. Rather, the problem is evaluated from different points of view. I remember reading several years ago about a fellow in Africa who fired a 22 Long Rifle at an elephant in an effort to scare it away from his garden. Unfortunately, he hit the poor beast and dropped it in its tracks with a single, misplaced round, and then really had a hell of a time getting it out. I hardly think that this qualifies the 22 Long Rifle as an elephant round, although some might think so. Also, many years ago, I ran into an old-time trapper in the Yukon Territory of Canada who had a much-used Savage Model 99 lever-action rifle chambered for the 303 Savage. He handloaded all his ammunition with hand-cast 190-grain bullets at a muzzle velocity of about 1,950 feet per second. He insisted that this 30-30 class combination was more than adequate for moose, grizzly bear or anything else, and with his experience as a woodsman, trapper and hunter, it was. However, not many present-day gun writers would agree. So ideas about what's good for what in the world of hunting cartridges depends a good deal on personal experience, skill and opinion. In any event, the ratings of various cartridges for hunting purposes is, in all cases, based on the assumption that the hunter properly places the correct type of bullet into the intended target.

Finally we come to the subject of which cartridges should or should not be included within the pages of CARTRIDGES OF THE WORLD. Obviously this book does not include every known cartridge in the world. If it did, it would have to be divided into many volumes. From time to time, certain readers write rather irate letters wondering why such-and-such a cartridge has not been included, or on the other hand, why we bothered to include certain cartridges. Admittedly, there must be hundreds of cartridges and variations, including obsolete, military, European, etc., that have been excluded. There are several reasons for this. First, editorial constraints on the number of pages and contents don't leave sufficient room to include everything in one volume. The book has to be kept in balance to appeal to a general, rather than a specific, audience. Second, while most gun nuts are casual cartridge collectors, only a few shooters are avid cartridge collectors. In other words, not many people have even a remote interest in all the obsolete and littleknown cartridges that have been available at one time or another. There are already a large number of excellent books aimed specifically at the cartridge collector per se, such as those written by Charles Suydam, Herschel Logan, Fred Datig and others. The criteria used in this book to determine what cartridges to include are based largely on what the author and editor perceive as being of greatest general interest, what has historical significance or is of unusual interest. A survey has demonstrated, for example, that 98 percent of readers are interested in modern cartridges and many purchase the book for that information alone. Chapter 2 is based on commercially loaded ammunition readily available through most gun stores. Obsolete cartridges (Chapter 3) include all the betterknown smokeless and blackpowder cartridges no longer commercially loaded, but not every known obsolete cartridge. In other words, there has to be some sort of cutoff or the whole thing could get out of hand. A number of currently popular wildcat cartridges have always been included. In this edition, we have greatly expanded the chapter on wildcats because of new developments and renewed interest in this area. The reader will note a considerable reorganization in Chapter 11: Shotgun Shells, including a new dimensional table. As information, samples and illustrations become available, we intend to further expand this chapter. In this edition, we have expanded the proprietary cartridge chapter. This reflects the growing popularity of this class of custom chamberings. Also, we have included a master dimensional table, Chapter 20, organized by bullet diameter and case length to ease identification of unknown cartridges or spent cartridge cases by measuring them. Finally, we have reorganized the index at the back of the book to ease location of information on a cartridge, once its name is known. The author and the editor have tried to please as many potential readers as possible, but remember, as in the biblical parable of the man and his donkey, it is impossible to please everybody. -F.C.B.

EXHIBIT "52"

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25-20 Winchester (25-20 WCF)



Historical Notes The 25-20 Winchester Center Fire was developed for the short action of the Winchester Model 1892 lever-action rifle. The case is based on the 32-20 necked-down. There is a difference in opinion as to when it was actually introduced. Some authorities say 1893, others 1895. In any event, it was quickly adopted by a majority of the gun manufacturers and achieved considerable popularity. The Winchester lever-action 1892 and modernized Model 65, Remington pump-action Model 25, Marlin pump-action 27 and lever-action Model 94, and the Savage bolt-action repeater Model 23, were all available in 25-20 WCF. Marlin has reintroduced the 25-20 WCF in their Model 1894CL lever action. Winchester also loaded this same chambering with a slightly different bullet shape and headstamped it 25-20 Marlin.

General Comments Prior to the 22 Hornet and the 218 Bee, the 25-20 WCF was one of the most popular small game and varmint cartridges. It was also advertised as being suitable for deer and similar animals. No doubt it has killed plenty of deer, but it is not a satisfactory big game cartridge by any standard. Today, it is universally outlawed for big game hunting. On smaller animals, the 60-grain bullet is quite effective for 100- to 150-yard varmint shooting. The 86-grain softpoint or lead bullet does a fine job on rabit or turkey to 125 yards. A great many rifles were made in this valuer and are still in use by trappers, ranchers and farmers. Under certain conditions, the 25-20 repeater is still a useful small game

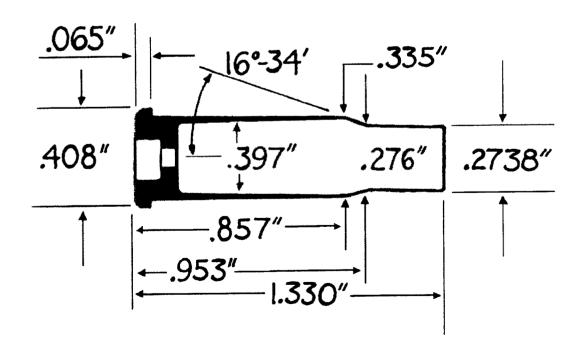
number. It will probably be around for a good many more years. With the growing popularity of Cowboy Action Shooting, the 25-20 is destined for renewed popularity.

The 25-20 is another old-timer the author has played around with at various times. Ownership of a Winchester Model 1892 lever action and later a Winchester Low Wall single shot in this caliber allowed ample opportunity to test its potential for small game and varmint hunting. It will do the job, but has serious range limitations due in part to bullet design. The 60-grain high-velocity load achieves its maximum expansion at a range of between 50 and 70 yards. Beyond that, good bullet placement is essential for quick kills. At ranges out to 50 yards, bullet expansion will ruin most of the cdible meat on small game. The 86-grain bullet is a better load for meat hunting, although the lower velocity requires good distance judgment at ranges much beyond 75 yards.

On the other hand, the 25-20 is one of those cartridges that can be improved to a satisfying degree by handloading. The 86-grain bullet can be loaded to deliver around 1,700 fps, but the 60-grain bullet can't be improved much over the factory load. The 25-20 is also capable of very good accuracy when fired in a single shot or bolt-action rifle. My Winchester single shot would do better than 2inch groups at 100 yards with handloads. Both Winchester and Remington continue to offer this caliber only with the 86-grain bullet.

25-20 Winchester (25 WCF) Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
60 Win OPE	680	13.0	2300	700	Hodgdon
60 SP	2400	9.6	2200	645	Hornady
60 SP	H-4227	11	2200	645	Hornady
60 SP	FI		2250	675	Factory load
86 SP	FL		1460	407	Factory load



11TH EDITION 29

Chapter 2

25-35 Winchester (25-35 WCF)



Historical Notes The 25-35 was developed by Winchester and introduced in 1895 for the Model 94 lever-action rifle. Along with the 30-30, it was one of the first small-bore, smokeless powder, sporting cartridges developed in the United States. Winchester, Marlin and Savage all chambered repeating lever-action rifles for this cartridge. Quite a few single-shot rifles also chambered the 25-35, and in Europe it was used in combination-type arms. No American rifles have been made for the 25-35 since the end of World War II.

General Comments The 25-35 is one of the most accurate cartridges available in the older lever-action rifles. In a good solid-frame single-shot, it will shoot about as accurately as any 25 ever developed. It does not have sufficient velocity for long-range

shooting. It has never been noted for great stopping power on deer or similar animals. In fact it is illegal for this purpose in many states. There are still a large number of 25-35 rifles in use, but it is more or less obsolete. It is not nearly as effective as the 250-3000 Savage, 257 Roberts or any of the more modern 6mm cartridges. However, it does have moderate recoil and will do a good job on small game and varmints at medium ranges. Modern powders would allow significant ballistic improvement if loads were at the same pressure as the current 30-30 factory ammunition. Loaded thus, this cartridge might not appear quite so anemic and would be better suited to deer hunting. Ackley's improved version provides impressive performance. Winchester is the only remaining manufacturer of this ammunition.

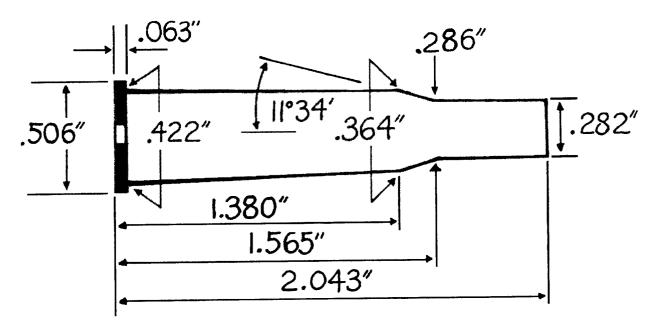
25-35 Winchester (25 WCF) Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
60 SP	IMR 4064	30.5	2800	1045	Hornady
60 SP	IMR 4320	32	2900	1120	Hornady
117 SP	IMR 3031	25.5	2300	1375	Hornady
117 SP	IMR 4320	27	2200	1258	Hornady
117 SP	FL		2230	1292	Winchester factory load

Winchester Repeating Rifle, Model 1894.

Made For .25-35 And .30 W. C. F., .32 W. S., .32-40 And .38-55 Curtridges.





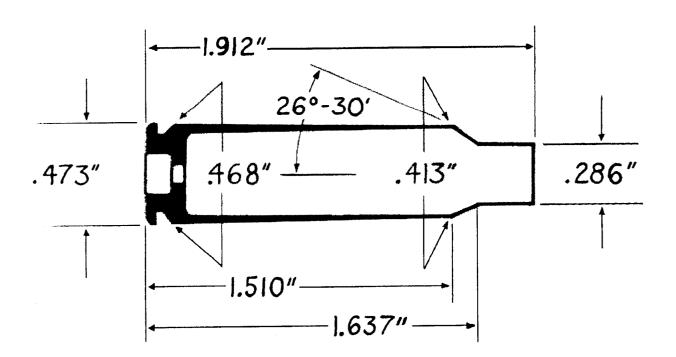
250 Savage (250-3000)

Historical Notes Designed by Charles Newton, the 250 Savage was introduced by the Savage Arms Co. as a high-velocity round for the Model 99 lever-action rifle. The original loading used an 87-grain bullet at 3,000 fps muzzle velocity, and Savage named it the 250-3000. One suspects the 87-grain bullet was chosen because it could be safely driven at 3,000 fps with the powders then available. This allowed Savage to introduce it with the ever-so-sexy name 250-3000. Remember in 1915, when this cartridge was introduced, riflemen were still marveling at cartridge achieving 2000 fps. About 1932, the 100-grain bullet load was marketed by Peters Cartridge Co. and later the velocity of the 87-grain bullet was slightly increased. Now it is simply called the 250 Savage. The Savage Model 20 and 40 bolt-action rifles also chambered the round, as did the Winchester Model 54 and 70 bolt actions. Late in 1971, Savage announced that the Model 99 would again be available in this caliber. Others, such as Ruger and Remington, have made rifles in this caliber also.

General Comments Flat trajectory, outstanding accuracy and good killing power on anything up to and including deer are established characteristics of the 250 Savage. It was, and is, excellent on varmints through deer. In the past few years, it has been edged out by the 257 Roberts and the new 6mm cartridges. It is far superior as a deer cartridge to the 30-30 or anything in that class, regardless of what some 30-30 addicts claim. Because of its light recoil, it is an excellent choice for youths and women. The 250-3000 is the basis of one of Ackley's best wildcats, the 250 Ackley Improved. Both Remington and Winchester continue to load this caliber. However, the 87-grain and 120-grain bullets are no longer factory loaded.

250 Savage (250-3000) Loading Data and Factory Ballistics

Builet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
60 Hdy SP	H4895	40.0	3667	1790	Hodgdon
60 SP	IMR 4064	39	3500	1632	Hornady
87 SP	IMR 4895	36.5	3200	1979	Sierra
87 SP	IMR 4064	35	3100	1857	Sierra
100 SP	IMR 4320	36	2800	1741	Nosler
117 SP	IMR 4064	32.5	2700	1894	Hornady
87 SP	FL	02.0	3030	1770	Factory load
100 SP	FI		2820	1765	Factory load
120 SP	FL		2645	1865	Factory load



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257 Roberts (257 Roberts +P)

Historical Notes The commercial version of the 257 Roberts was released by Remington in 1934 chambered in its Model 30 boltaction rifle. It was quickly picked up by Winchester for its Model 54 and the later Model 70. The Remington 722 bolt-action and the 760 pump-action models were also available in 257-caliber. In recent years, many American manufacturers have discontinued it, although Ruger continues to offer it in the Model 77 bolt action. The original cartridge was designed by N.H. Roberts (a well-known experimenter and gun writer during the 1920s and '30s) and is based on the 7x57mm Mauser necked-down. Remington changed the Roberts' shoulder angle from 15 to 20 degrees. The name of the cartridge was adopted to honor its original developer. Custom rifles in this caliber were made by the Niedner Rifle Co. as early as 1928.

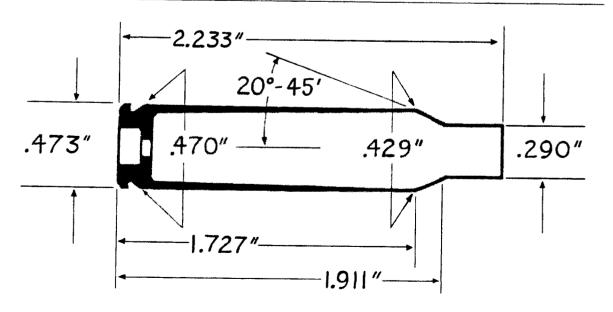
General Comments The 257 Roberts has often been referred to as the "most useful rifle cartridge ever developed." That is not very far wrong. It is suitable for a wide range of hunting under a variety of conditions. As a long-range varmint cartridge, it is as good as they come, being only slightly inferior to the newer 6mms. On deer, antelope, black bear, sheep or goat, it is as good as any other cartridge available. Naturally, it is not as powerful as the 270 Winchester or 30-06, but it has ample power for the game mentioned at all practical ranges.

The 257 was underloaded by ammunition companies. However, in the late 1980s, higher pressure +P loads were introduced, which enabled factory-loaded 257 Roberts ammunition to reach full potential. With modern powders, the handloader can improve performance safely in all bullet weights. With 117- or 120-grain boattail bullets at velocities of around 2,800 fps, the 257 can be used successfully on elk and caribou. It is at this end of the scale that it has an advantage over the 6mms. The author has used it for many years and it is one of his favorite calibers for western hunting.

Ackley's improved version of the 257 Roberts practically duplicates the ballistics of the longer 25-06. Winchester, Federal and Remington all offer this cartridge. The 87- and 100-grain bullets are no longer factory loaded.

257 Roberts (257 Roberts +P) Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
60 Hdy SP	H335	46.0	3885	2010	
60 SP	IMR 4064	44	3600	1727	Hodgdon
75 HP	IMR 4064	42	3300	1814	Hornady Sierra
75 Hdy HP	H4895	44.0	3561	2110	
87 SP	IMR 4320	37.5	3000	1739	Hodgdon
87 SP	H-380	46	3200	1979	Hornady Sierra, Hornady
100 SP*	IMR 4831	45.5	3100	2134	Nosler, Speer
100 SP	IMR 3031	34	2800	1741	
117 SP	IMR 4320	36	2600	1757	Hornady, Sierra Sierra
117 SP	IMR 4064	34.5	2600	1757	
120 SP*	IMR 4831	42.5	2800	2091	Hornady, Sierra Nosler
120 SP	IMR 4350	38.5	2600	1802	
87 SP	FL	00.0	3200	1980	Hornady
100 SP	FL		3000	1998	+P factory load
117 SP	FL.		2780	2009	+P factory load
120 SP	FL		2645	1865	+P factory load
* +P data			2040	1903	Factory load



32 CARTRIDGES OF THE WORLD

25 Winchester Super Short Magnum

Historical Notes Tailored for use in a shorter action rifles, the 25 WSSM uses a short and fat cartridge case to equal 25-06 ballistics with 14-percent less powder and less perceived recoil. Winchester® significantly re-directed the shape of magnum cartridges through the 2000 introduction of the Winchester short magnum and later, the Winchester super short magnum families. Introduced in 2005, the 25 WSSM is intended as a versatile, dual purpose (varmint and medium game) hunting cartridge.

General Comments The WSSM case is a half-inch shorter than the Winchester Short Magnum cases used for the 300, 7mm and 270 WSM cartridges. The "short and fat" design improves interior ballistics of the 25 WSSM cartridge. Exposing more propellant surface area to the primer results in more consistent ignition. The beltless cartridge case headspaces off the shoulder to provide better centering of the bullet in the chamber. Winchester and Browning super short rifle actions for this cartridge are stiffer, reducing accuracy inhibiting vibrations. Winchester offers 25 WSSM unprimed cartridge cases for reloaders.

25 Winchester Super Short Magnum Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
85 BST	FL		3470	2273	Winchester
120 AccuBond	FL		3100	2347	Winchester
115 BST	FL		3060	2392	Winchester
120 PEP	FL		2990	2383	Winchester
75 V-Max	BL-C(2)	49.3	3775		Hodgdon
85 Nos BT	BL-C(2)	47.5	3547		Hodgdon
100 Spr BT	H4350	48.5C	3233		Hodgdon
120 SP	H414	44.7	2985		Hodgdon

25-06 Remington



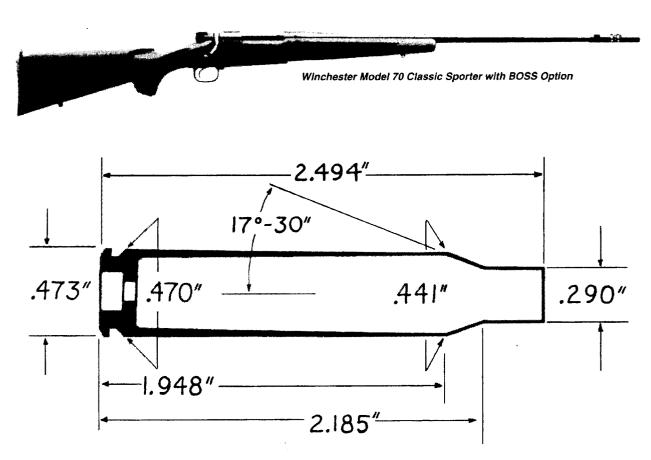
Historical Notes The 25-06, originally a wildcat cartridge, was picked up by Remington and added to its commercial line late in 1969. The wildcat version dates back to 1920, when it was introduced by A.O. Niedner. Remington has stuck to his original configuration of simply necking-down the 30-06 case. The Remington Model 700 series bolt-action rifles were the first to be offered in the newly-adopted caliber. At the present time, Remington, Interarms, Ruger, Savage, Winchester, Weatherby, Sako and almost every other manufacturer of bolt-action rifles offer at least one version in 25-06. In addition, the Ruger single shot is available in this caliber. This round became a very popular number, but that has waned recently.

General Comments The 25-06 is a fine 25-caliber wildcat. Its emergence as a standardized factory load was welcomed by many.

As a varmint cartridge with the 87-grain bullet, some have claimed it is unsurpassed. However, a comparison of factory ballistics and a little chronographing can be most informative. Comparing factory data, we see that as a varmint cartridge, both the 6mm Remington and 270 Winchester beat anything the 25-06 can offer in every category that matters. Amazingly, in spite of its much smaller case, the 6mm Remington, 100-grain load is only marginally behind the 25-06, 120-grain load in retained energy at long range. There really isn't any comparison between hunting loads in the 25-06 and the 270 Win. Chronograph results suggest that factory data is equally representative of what each can realistically do. So just exactly what does the 25-06 offer? Evidently something, because many laud the 25-06 as among the best. Federal, Winchester and Remington offer this cartridge in several bullet weights.

25-06 Remington Loading Data and Factory Ballistics

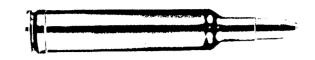
Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
75 Hdy V-Max	H4350	62.0	3700	2275	Hodgdon
75 HP	IMR 4350	55	3500	2041	Hornady, Sierra
87 SP	IMR 4831	57	3500	2367	Hornady
100 SP	IMR 4831	54.5	3300	2419	Sierra, Speer
120 SP	IMR 4064	44	3000	2399	Hornady
120 SP	IMR 4831	50	3000	2399	Nosler, Speer
87 SP	FL		3500	2370	Factory load
90 SP	FL		3440	2364	Factory load
100 SP	FL		3230	2316	Factory load
117 SP	FL		2990	2320	Factory load
120 SP	FL		2940	2382	Factory load



257 Weatherby Magnum

Historical Notes This cartridge was designed by Roy Weatherby in 1944, a year before he went into the commercial gun business. Like most other Weatherby cartridges, it is based on the necked-down and blown-out 300 H&H case. Commercial ammunition under the Weatherby name has been available since 1948. These have been based on Norma components since 1951. There are a number of wildcat versions of the 300 H&H Magnum necked-down to 25-caliber, but the Weatherby cartridge has largely displaced these.

General Comments The 257 WM was one of the first modern, ultra-velocity, small-bore rifle cartridges to be produced on a commercial basis that developed and retained a degree of popularity. It is accurate and well-suited for long-range varmint shooting, but also delivers sufficient velocity and energy to take on almost any North American big game. A superb deer, antelope,



sheep, goat or black bear cartridge, it has also been used successfully on elk, moose, brown bear, lion, buffalo and zebra. Many authorities insist that it is much too light for heavy game, but high-velocity advocates insist that with proper bullets, it is adequate for anything except the largest game in close cover. However, like most of its ilk, this number can be extremely hard on its barrel, especially if insufficient time is allowed between shots for the barrel to cool or if the barrel has not been cleaned adequately. And, like all high-intensity chamberings, it loses a great deal of velocity with barrels shorter than 26 inches. It is in its element for long-range plains or mountain hunting. The author used a custom Model 70 Winchester and later a Weatherby Mark V in this caliber, and it is dynamite on deer-size animals. For long-range varmint shooting, it can only be described as spectacular.

257 Weatherby Magnum Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
75 HP	IMR 4350	66.5	3800	2405	Hornady
87 SP	IMR 4831	71	3700	2645	Speer
100 SP	IMR 4831	66.5	3400	2568	Sierra, Speer, Nosler
117 SP	IMR 4831	61.5	3100	2497	Hornady, Sierra
120 SP	IMR 4350	59	3200	2729	Hornady
87 SP	FL		3825	2827	Weatherby factory load
100 SP	FL		3602	2882	Weatherby factory load
120 SP	FL		3305	2911	Weatherby factory load



Weatherby Mark V Sporter with Weatherby Supreme 3-9x44 Scope installed on Buehler Mounts

32-20 Winchester (32-20 WCF)

Historical Notes Introduced by Winchester in 1882 for the Model 73 lever-action rifle, the 32-20 quickly attained considerable popularity as a medium-power cartridge in both rifle and revolver. Practically all American makers have chambered rifles for the 32-20 in lever-, pump- or bolt-action, and most single-shot rifles have also chambered it. Colt, Smith & Wesson and Bayard made revolvers in this caliber. Marlin reintroduced it for their Model 94CL lever action in 1988. Winchester once offered a lighter 100-grain bullet blackpowder load for the 32 Colt Lightning magazine rifle, headstamped 32 C.L.M.R. A similar 100-grain loading specifically for Marlin rifles was headstamped 32-20. Both Remington and Winchester still offer factory-loaded ammunition.

General Comments Although recently semi-obsolete, the 32-20 still enjoys modest popularity with farmers, ranchers, trappers and pot hunters. It can be reloaded easily and at moderate cost. In addition, it delivers good killing power on small and medium game at ranges out to 100 yards without destroying all the edible meat.

Winchester once advertised it as a combination small game and deer cartridge. However, it is much too underpowered for deer-size animals. It is, nonetheless, a useful small game and varmint cartridge at short ranges, and it is quite accurate in a bolt-action or solid-frame single-shot. The author had considerable personal experience with the old 32-20, having owned and hunted with several rifles of this caliber. These included (in chronological order) a Winchester Model 1892 lever action, Savage Model 23C bolt action, Remington Model 25A slide action and a rechambered Greener single-shot Cadet rifle.

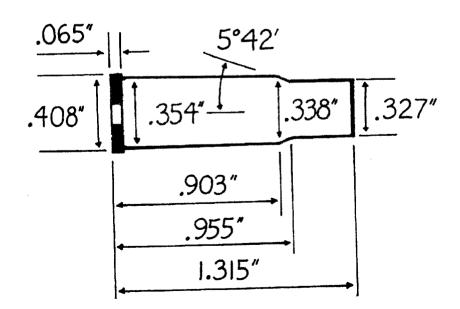
The Savage bolt action with a scope sight would shoot very consistently into 1 to 1-1/4 inches at 100 yards. This was a very nice little varmint and small game combination at ranges of 100 to 125 yards. I used this in the immediate post-World War II era when nothing else was available, and it worked out very well within its range limitations. I have also used the 25-20, but always considered the 32-20 a better all-around cartridge in this class. It's a better killer on just about anything at practical ranges.

In a strong single action revolver, the 32-20 can be loaded to 1,050 to 1,100 fps from a 6-inch barrel, which makes a very effective field gun. Trouble is, the cartridge is too long for most modern revolver cylinders. The 32 H&R Magnum is shorter and will serve to fill the requirement for a high-performance 32-caliber handgun round. The 357 Magnum revolver cartridge chambering in a rifle will out perform the 32-20 by a substantial margin. In any event, the author always liked the 32-20 for certain purposes. The advent of Cowboy Action Shooting has given this round a new lease on life. The 32-20 is the basis for the 25-20 and the 218 Bee.

32-20 Winchester Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
85 SP	2400	12.5	2100	833	Rifle only — Hornady
85 SP	IMR 4227	17	2300	999	Rifle only — Hornady
85 SP	H-110	14	2100	833	Rifle only — Hornady
110 SP	IMR 4227	15	2000	977	Rifle only — Hornady
110 SP	H-110	15.5	2100	1077	Rifle only — Hornady
110 SP	2400	10.5	1700	706	Rifle only - Hornady
80 SP	FL	10.0	2100	780	Factory load
100 SP	FL		1210	325	Factory load

WARNING: Do not use rifle loads in revolvers; pressures develop beyond what the average handgun is designed to withstand.



32 Winchester Special (32 WS)



Historical Notes Introduced in 1902 for the Winchester Model 1894 lever action, the 32 Special was an original smokeless powder design. Because it is a rimmed shell, it has never been used in anything but lever-action and single shot rifles. Remington brought out a rimless version to function in their bolt and semi-auto rifles. Winchester and Marlin were the principal American companies to chamber the 32 Special. Federal, Remington and Winchester continue to offer factory loaded ammunition until quite recently.

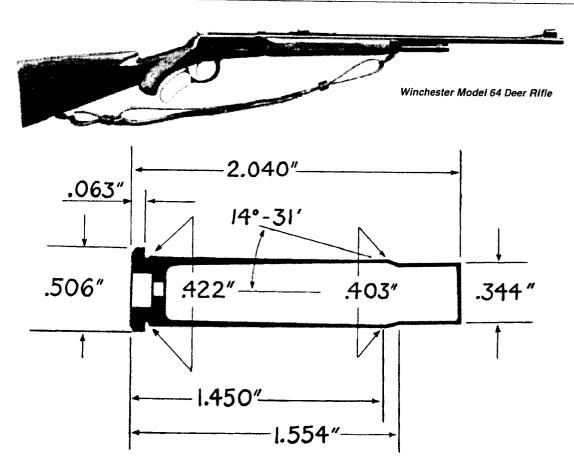
General Comments In the 1916 catalog, Winchester had this to say about the 32 Special: "The 32 Winchester Special, which we have perfected, is offered to meet the domand of many sportsmen for a smokeless powder cartridge of larger caliber than the .30 Winchester and yet not so powerful as the .30 Army." It goes on to explain that the 32 Special meets these requirements and the 1916 ballistics chart shows it generating 10.6 percent more energy than the 30-30 at the muzzle and retaining an edge to any reasonable hunting range.

Today, it is still loaded to higher velocity, and if loaded to equal pressure, it easily beats the 30-30 by over 100 fps. However, bullet selection is limited. Speer's 170-grain flat point, the most streamlined available, actually has a higher ballistic coefficient than most 170-grain 30-30 bullets. For those whose 32 Special rifle has a truly shot-out barrel, Hornady's 170-grain round-nose 0.323-inch bullet works wonderfully. There has been a mountain of bunk written about the 32 Special answering the demand of handloaders who wanted to use blackpowder. Since the same rifle was originally chambered for the 32-40 at about one-half the price of the nickel steel 32 Special version, this seems fantastic. Those writers would have us believe that the man wanting to save money on ammunition would for no reason spend the price of two rifles for the privilege. The fact that blackpowder can be used successfully in the 32 Special, and the fact that Winchester once provided a blackpowder-height rear sight for the rifle certainly do not prove that the cartridge was invented to allow folks to do what they could already do with the much cheaper 32-40 Model 94.

Much ink has also been spilled claiming the 32 Special just wouldn't shoot straight after the barrel got a bit of wear. I have experimented with two 32 Special carbines, a very early Winchester and a 1936 Marlin. With bullets that fit, both shoot inside 3 inches at 100 yards with open sights. The Winchester had been so abused that its rifling hardly showed until we thoroughly cleaned it. The bore is pitted but it shoots just fine.

32 Winchester Special Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
170 SP 170 SP	RL7	31.0	2283	1965	Lyman
170 SP	W748	36.2	2240	1890	Winchester
	FL		2250	1910	Factory load



72 CARTRIDGES OF THE WORLD

325 Winchester Short Magnum (325 WSM)



Historical Notes After introducing their short magnum family of cartridges in 2000, Winchester® recognized the need for another cartridge capable of launching 200-grain bullets (and heavier) with high inherent accuracy, energy capable of stopping the largest North American game, and lower perceived recoil. After considering different calibers, Winchester engineers determined the 325-caliber provided the best performance using the short magnum case. Released in 2005, the new 325 WSM cartridge delivers similar energies as the 338 Winchester Magnum while using a smaller case.

General Comments In addition to delivering excellent ballistics, the 325 WSM also exhibits exceptional accuracy. Initially, Winchester fielded three loads for the 325 WSM—a 200-grain Nosler Accubond® CT®, a Winchester 220-grain Power-Point® bullet, and a 180-gain Ballistic Silvertip®. Hunters can expect delayed, controlled expansion and deep penetration through thick, tough skin, heavy muscle tissue and bone, with ballistic coefficients ranging up to .477 for the 200-grain Nosler bullet. The 325 WSM is well suited for elk, bear, moose or other large and dangerous game where a lightweight short magnum rifle is desired.

325 Winchester Short Magnum Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
180 BST	FL		3060	3743	Winchester Winchester
200 Nos AccuBond	FL		2950	3866 3941	Winchester
220 Win PP	FL		2840		TT IN IGNOCION

338 Federal

Historical Notes In collaboration with Sako Rifles, Federal Cartridge's engineers and ballisticians have developed the 338 Federal, which necks up the proven 308 Winchester case to accept a .338 caliber bullet. This design, which is the first to bear the name "Federal" on the headstamp, is intended to provide big-bore wallop with moderate recoil for today's light weight, short bolt-action rifles. The 338 Federal should be available in 2006 in Federal's Premium line of ammunition.

General Comments The 338 Federal bears more than a passing resemblance to the 358 Winchester cartridge, which was introduced in 1955. Like the 358 Win, the 338 Federal offers excellent performance on big game without magnum recoil. Its muzzle



energy exceeds the 30-06 with a similar weight bullet, equaling the ME of the 7mm Remington Magnum. Its muzzle velocity ranges to approximately 200 fps greater than its parent 308 Winchester with similar weight bullets. Leaving nothing to chance, Federal offers three loads for the 338 Federal, each tipped with a premium-grade bullet that is proven to deliver devastating results on game ranging from deer to elk to bear.

The 358 Winchester, having been introduced in a time when ever-higher velocities were the craze, languishes in obscurity. Given the current interest in lightweight rifles and efficient cartridge designs, one hopes that the 338 Federal will fare better with the shooting public.

338 Federal Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
180 Nos AccuBond	FL FL		2830 2750		Federal Federal
185 Barnes TSX 210 Nos Part	FL		2630		Federal

38-55 Winchester (38-55 Ballard)

Historical Notes Like the smaller 32-40, the 38-55 was originally a Hallard-developed target cartridge. The present commercial version was introduced in 1884 as one of the cartridges for the Ballard Pretection No. 4, which was originally chambered for the 38-50 b verlasting. According to Satterlee in his *Catalog of Firearms*, 2nd Ld., Detroit, 1939, the Union Hill Nos. 8 and 9 were also chambered for the 38-55 Ballard in 1884. The external dimensions of the 38-55 Everlasting and the 38-55 Winchester & Ballard are nearly identical, but the heavier, thicker Everlasting version was a handloading proposition. The implication in Saterlee's book is that the original Everlasting case was introduced when Marlin Fire Arms Co. took over Ballard in 1881. The 38-55 Everlasting is nothing more than a 1/10-inch longer case than the 38-50 that Ballard introduced in 1876.

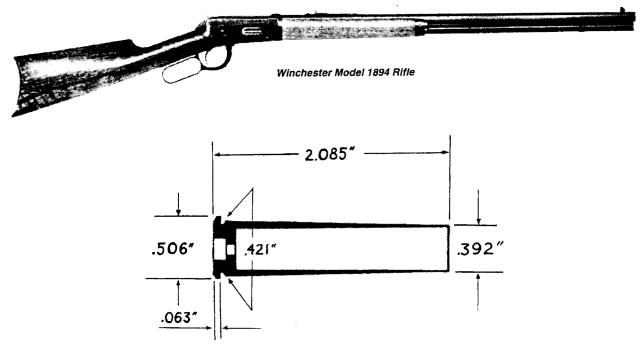
The Marlin Model 93 and Winchester 94 lever-action repeaters were available in 38-55, as was the Remington-Lee bolt-action, Colt's new Lightning pump-action, Stevens, Remington and Winchester single-shot rifles and also the Savage Model 99. No commercial rifles were available after Winchester dropped the 38-55 from the Model 94 list of calibers in 1940. However, Winchester has reintroduced the cartridge in several versions of the Model 94 in recent years, and it also has been offered in the H&R Handi-Rifle and others. The 225 Winchester, 22 Savage High Power, 25-35 Winchester, 32-40 Winchester, 30-30 Winchester, 32 Winchester Special, 375 Winchester and a host of wildcat cartridges are based on this case.

General Comments The 38-55 built up a reputation for fine accuracy at ranges out to 200 yards. It also developed a modest popularity with deer and black bear hunters. It gave good knockdown on deer-size animals with the 255-grain bullet at velocities of over 1,500 fps. At one time, factory-loaded cartridges were available with the 255-grain bullet at a muzzle velocity of 1,700 fps. At these higher velocities, it is a better deer cartridge than the 30-30. Present factory loading more or less duplicates blackpowder ballistics. In old Ballard and Stevens single-shot rifles, it is not safe to use loads developing velocities over 1,500 fps. Discontinued in 1970, the 38-55 is again listed in Winchester ammunition catalogs. Proper bullet diameter for cast bullets is 0.379-inch.

The growing popularity of Cowboy Action Shooting has breathed new life into this fine, old cartridge.

38-55 Winchester & Ballard Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
200 FN	XMP5744	25.5	1853	1525	Accurate Arms
220 SP	BL-7	31	1600	1257	Hornady
220 SP	IMR 3031	33	1600	1251	Hornady
220 SP	IMR 3031	34.5	1700	1412	Hornady
220 SP	IMR 4198	26	1600	1251	Hornady
220 SP	RL-7	29.5	1400	958	Hornady
240 Lead	XMP5744	22.0	1601	1365	Accurate
222 FN	XMP5744	23.5	1648	1325	Accurate
255 SP	H-4895	35	1700	1637	Barnes
255 SP	FL		1320	987	Winchester factory load



38-40 Winchester (38-40 WCF)



Historical Notes The 38-40 was developed by Winchester as a companion cartridge to its 44-40 and introduced in 1874. It is based on the 44-40 case necked-down to what is actually 40-caliber (0.401-inch). It was originally a blackpowder cartridge chambered in the Winchester Model 73 lever action. About 1878, Colt began chambering revolvers for it. It was later offered in the Remington Model 14 1/2 pump-action, Winchester 92 and Marlin 94 leveractions, plus a number of single-shot rifles. No rifles have been chambered for the 38-40 since 1937. Winchester loaded a slightly different version especially for the Colt Lightning magazine rifle, headstamped 38 C.L.M.R. Another version was loaded with the same 180-grain bullet as the 38 Winchester, but with 40-grains of blackpowder instead of Winchester's standard load of 38 grains and was headstamped 38-40 instead of 38 W.C.F. This raises the intriguing possibility that the name we now use, 38-40, came from 38 grains of blackpowder and a 40-caliber bore.

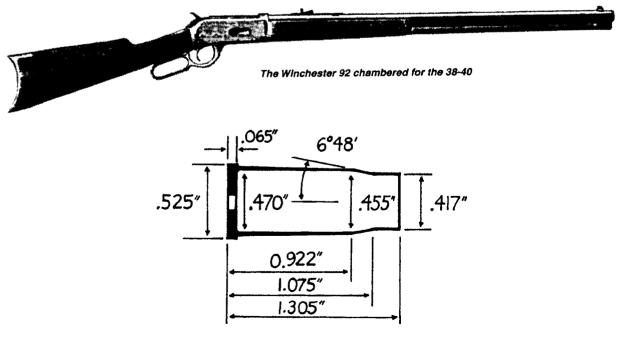
General Comments The 38-40 was at one time a popular mediumpower cartridge. Winchester used to load a high-velocity rifle version with a 180-grain bullet at 1775 fps. This was considered a pretty good short-range deer number, but was not intended for old blackpowder rifles or revolvers. It was discontinued because it caused a lot of trouble for people who never read labels. The present factory loading is strictly for revolvers, and it is necessary to handload in order to realize the full potential in a rifle. With proper load and bullets, the 38-40 can be used on small game, varmints, medium-size game or even deer at short range. Rifle loads should not be used in revolvers, as these loads develop pressures beyond safe limits.

The author's experience with the 38-40 is limited to one Remington Model 14 1/2R pump-action carbine that was used for several years before being traded off for something more useful. Although it was a nice, handy little rifle, I was not particularly impressed with the cartridge. The 38-40 is a bit much for most varmint and small game shooting and really not adequate for deersize animals. In any event, it is quite limited in its effective range on whatever you happen to be using it for. This lack of enthusiasm notwithstanding, the 38-40 enjoyed a certain popularity from its inception until about 1920, after which it declined in sales volume and was finally discontinued in 1937. Actually, there is no great difference in performance between the 38-40 and the 44-40, although some considered the 38-40 a better cartridge for a woman or young boy because it had less recoil. Honestly, neither one has any great recoil, and I could never tell much difference between the two in that regard.

The 38-40 made a better revolver cartridge than it did a rifle cartridge. The present factory load with the 180-grain bullet at 1160 fps (Winchester) cannot be considered adequate for deer, and only by handloading can one achieve acceptable performance for much of anything except self-defense, for which it is formidable.

38-40 Winchester Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
155 SP	2400	15	1200	496	Hornady
155 SP	IMR 4227	19.5	1200	496	Hornady
180 HP	2400	14.5	1100	484	Hornady
180 HP	Unique	9	1100	484	Hornady
180 HP	IMR 4227	18.5	1100	484	Hornady
200 HP	Unique	8.4	1000	444	Hornady
200 HP	2400	13.5	1050	490	Hornady
180 SP	FL		1160	53 8	Winchester factory load



444 Marlin



Historical Notes News and data on the 444 Marlin round was released to the public in June 1964. The cartridge was designed for the Marlin Model 336 lever-action rifle. Initially, the rifle was manufactured with a 24-inch Micro-Groove barrel, two-thirds length magazine and recoil pad. The straight-grip stock had a Monte Carlo cheekpiece. Original ammunition was made by Remington.

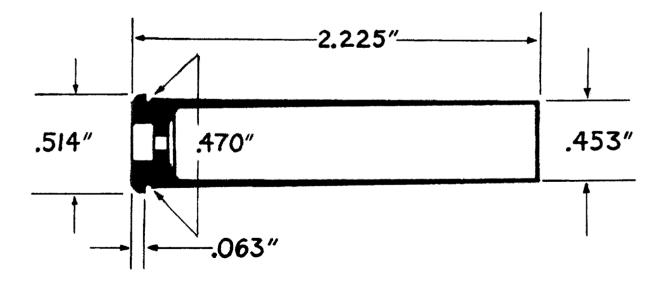
The 444 Marlin is somewhat similar to the 44 Van Houten Super. The 44 VH was developed by E.B. Van Houten and "Lucky" Wade of Phoenix, Ariz. It was made by necking-up 30-40 Krag brass, trimming it to 2 inches and turning down the rims slightly. It was designed for the 336 Marlin or 94 Winchester actions. It predates the Marlin round by at least three years. Ballistics of the two rounds are nearly identical.

General Comments The 44 Magnum revolver cartridge achieved popularity as a rifle round. However, anyone using it discovers quite quickly that it has a rainbow-like trajectory, and its killing power on heavier game such as elk and moose is adequate only at close range. Consequently, there was need for a somewhat more powerful

option. The 444 Marlin extends both the effective range and killing power inherent in the 44 Magnum. This round fires the same 240grain softpoint bullet, at 2330 fps as compared to 1850 for the average 44 Magnum rifle. The 444 Marlin is substantially more powerful than the old 30-30 or the 35 Remington at short ranges. It develops about the same energy as the 348 Winchester and slightly more than the later 358 Winchester. However, with its larger diameter bullet it should provide better knockdown power. It is a short- to medium-range cartridge and should be adequate for any North American big game. It would also be effective on most thinskinned African game, except dangerous varieties. Its advantage over the above-named cartridges is at ranges out to 150 yards. Beyond that, due to better bullet shape and sectional density, those all catch up to and finally surpass the 444 in retained velocity and energy. The 444 Marlin was formerly available as a superb allround hunting load with a 265-grain bullet. Remington and Buffalo Bore now offer ammunition, with the latter firm offering several superior-performance, heavy-bullet loads.

444 Marlin Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
180 HP	IMR 4198	51	2500	2499	Sierra
220 SP	IMR 4198	49	2350	2698	Sierra
240 HP	IMR 4198	46.5	2300	2820	Hornady, Sierra
240 HP	H-322	53	2300	2820	Hornady, Sierra
250 SP	IMR 4198	47	2250	2811	Sierra
265 Hornady JFP	H-4198	47.0	2273	3040	Hodgdon
275 SP	RL-7	47	2250	3092	Barnes
280 Swift HP	H322	49.5	2120	2790	Hodgdon
300 SP	BL-7	46	2150	3080	Barnes
300 Swift HP	H4198	42.5	2082	2885	Hodgdon
240 SP	FL		2330	2942	Remington factory load



44-40 Winchester (44 WCF, 44 Winchester)

Historical Notes This was the original cartridge for the famous Winchester Model 1873 lever-action repeating rifle. By 1878, Colt began offering revolvers in 44-40-caliber. At one time or another, just about every American arms manufacturer has offered some kind of gun chambered for this cartridge. The Colt-Burgess leveraction rifle of 1883 was made for the 44-40 and so was the 1885 Colt Lightning pump-action rifle. The Remington Model 14 1/2 pump-action used it, as did the Winchester 92 and Marlin 94, both lever-action repeaters. Most of the single-shot rifles made in the United States had a 44-40 model at one time or another. In Spain, there was a copy of the Winchester Model 92 in 44-40 caliber manufactured for police and civil guard use. No American-made rifles have chambered the round since 1937, but Colt revolvers retained it until 1942. Several foreign-made replicas of the Henry Carbine and the Winchester Model 66 and 73 are currently available in 44-40, as are new revolvers.

Winchester once loaded a 217-grain bullet in two separate headstamps: 44 C.L.M.R., for the Colt Lightning Magazine Rifle, and 44-40 for Marlin rifles. They also offered a 34-grain blackpowder load behind a 115-grain bullet for the Marble Game Getter rifle, which was headstamped 44 G.G.

General Comments The 44-40 is one of the all-time great American cartridges. It is said that it has killed more game, large



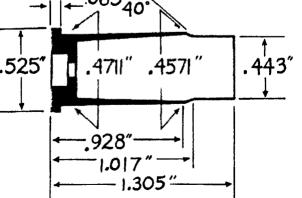
and small, and more people, good and bad, than any other commercial cartridge ever developed. In its original blackpowder loading, it was the first effective combination cartridge that could be used interchangeably in rifle or revolver, and was a great favorite in the early days of the American West.

With proper handloads used in strong rifles, the 44-40 can safely propel the 200-grain jacketed bullet at 1,800 fps. Compared to the standard 30-30 load with a 170-grain bullet at about 2,100 fps, this is a superior combination against deer at short range. It was once offered in a high-velocity loading specifically designed to take advantage of the Model 92 Winchester's strength. Like many other high-velocity loadings of yesteryear, it had to be discontinued because certain types just insisted on chambering anything that would fit in whatever gun was at hand. The 44-40 became obsolete in the revolver with the advent of the 357 and 44 Magnums, and in the rifle by the 30-30 and similar cartridges that have a flatter trajectory at ranges beyond 100 yards. Present factory loads by Remington and Winchester are intended for revolvers and it is necessary to handload in order to get top performance from the rifle. Many 44-40 rifles have been rebarreled for the 44 Magnum. The rise of Cowboy Action Shooting has rekindled the 44-40's popularity.

44-40 Winchester Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
180 SP	2400	18	1250	625	Hornady
180 SP	SR4756	11	1150	52 9	Hornady
180 SP	2400	16.5	1000	400	Hornady
180 SP	Unique	10.4	1150	529	Hornady
200 SP	IMR 4227	20	1100	537	Hornady
200 SP	2400	15.3	1000	444	Hornady
200 SP	Unique	9.5	1050	490	Hornady
200 SP	FĹ		1190	629	Factory load





Current American Rifle Cartridges

4<u>5-70.Government</u>

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450 Marlin



Historical Notes Hornady and Marlin announced the 450 Marlin at the 2000 SHOT Show. This is the first new chambering from Marlin since the introduction of the 444 Marlin in mid-1964. This editor was among those who long advocated that Marlin should introduce a "Magnum" chambering for the Model 1895. The motivation for this cartridge is simple; handloaders have been souping up 45-70 loads for use in Marlin's modern 1895 since the day that gun was introduced. My own efforts along that path culminated in a combination that safely generates more than 4,000 foot pounds of energy in a specially modified version of this rifle. More recently, several ammunition producers have offered Magnum-level loadings. Owing to the many weaker 45-70 rifles still in use, Marlin could not condone this practice, nor could they stop it. Something had to give. Some have asked why Marlin did not simply lengthen the 45-70 case, and standardize a new higher-pressure cartridge. That alternative was not tenable because such a cartridge would have chambered in older (potentially weaker) rifles designed for the 45-90, 45-110, etc.

General Comments In my humble opinion, when one considers a simple approach that could have been taken, this cartridge design is a poor second-best choice for chambering in the new M-1895 Marlin. The simple adoption of an "Ackley Improved" version of the 45-70, would have provided a superior case design with a cartridge that would function better through the Marlin rifle and would not chamber in any older factory rifle. In any case, the 450 Marlin offers lever-action fans a factory chambering with significant ballistic potential. Shooters in this country have a long history of fascination with large-bore, lever-action rifles. Except for caliber, Marlin's new number is quite reminiscent of Winchester's circa-1903, 50-110 Winchester High Velocity load, which originated for the same reason — muzzle energy is essentially identical. This cartridge and rifle make a fine and versatile combination for those who hunt dangerous game under the worst possible conditions. Given correct bullet choice and shot placement, this is a capable performer for any task.

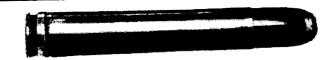
450 Marlin Factory Ballistics

Dullat (graina/huna)	Powder	Grains	Velocity	Energy	Source/Comments
Bullet (grains/type) 350 Hornady FP	Fl	arano	2100	3427	Hornady factory load
300 numauy ri					

458 Winchester Magnum

Historical Notes The 458 Winchester Magnum was introduced in 1956 for a dressed-up version of the Model 70 rifle called the "African." The Remington 700 Safari is available in 458 and so are many other American- and European-made rifles such as the A-Square, Dakota 76, BRNO and the Ruger 77. The 458 has become a world standard and many factories and individual makers provide hunting arms for it. Ruger also chambers the 458 in its No. 1 single-shot rifle.

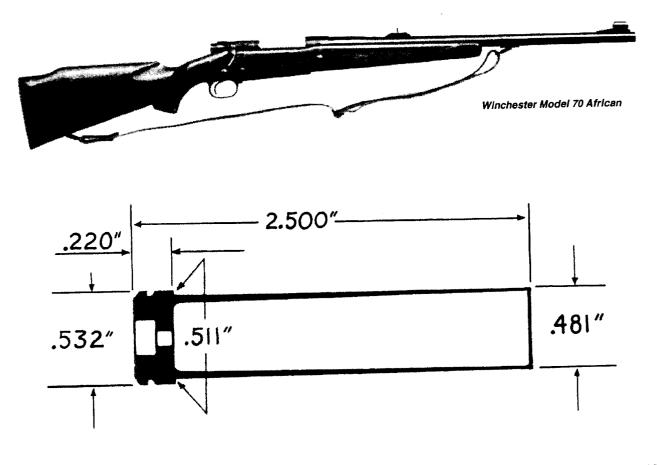
General Comments With an increasing number of American sportsmen making the trek to Africa, and with the Weatherby Magnum line of cartridges selling rather well, Winchester decided to get into the act. The result is the fine 458, a cartridge suitable for



any of the most dangerous game in the world. This cartridge has been tested thoroughly in Africa and has proven itself adequate for the toughest game found there. It is as powerful as most of the oversized English big-bore elephant cartridges. Although overpowered for North American big game, it has nonetheless found favor with many hunters as a woods and brush cartridge when reloaded with lighter than standard factory bullets. With the 300-, 350- or 405-grain bullets, it can be loaded to duplicate the 45-70 at any level, and to cover a wide range of game and hunting conditions. As a factory load, it is not good for anything but the biggest and toughest. But then that is what it was intended for. Federal, Winchester and Remington offer ammunition.

458 Winchester Loading Data and Factory Ballistics

Dullat (grains/huna)	Powder	Grains	Velocity	Energy	Source/Comments
Bullet (grains/type)		58	2100	2938	Hornady
300 SP	RL-7		2100	2938	Hornady, Sierra
300 SP	IMR 4198	49		4859	Hornady
350 SP	IMR 4198	70.5	2500		Speer
400 SP	IMR 4198	64	2250	4498	•
400 SP	IMR 4320	77	2200	4300	Speer
500 SP	IMR 3031	70	2100	4897	Hornady
• • • •	FL		2470	4740	Factory load
350 SP	• =		2380	5031	Factory load
400 SP	FL		2040	4620	Factory load
500 FMJ	FL			4712	Factory load
510 SP	FL		2040	4712	1 doitor y 1000



458 Lott

Historical Notes When a twice-shot African buffalo energetically squashed Jack Lott, dissatisfaction with his 458 Winchester's performance led to the creation, in 1971, of a more capable 458 cartridge, the 458 Lott. By using a case 2.8 inches long, the 458 Lott was able to achieve 2,150 fps with a 500-grain bullet. The genius of the late Mr. Lott's design is that 458 Lott rifles also chambered and fired 458 Winchester Magnum ammo. On the downside, the wildcat 458 Lott was strictly a handloading and custom rifle proposition. Then in 2002, Hornady decided to produce factory ammunition, and Ruger chambered their Model 77 MKII in 458 Lott.

General Comments The 458 Winchester is advertised as developing 2,040 fps with the 500-grain bullet when fired from a 24-inch barrel. In reality, poorly constructed factory loads often

produce little more than 1,900 fps in 22-inch barreled rifles. The 458 Lott will do an honest 2,300+ fps from a 22-inch barrel. It has been field-tested in Africa and has chalked up an impressive number of one-shot kills on elephants and buffalo. It is similar to the 450 Watts, which is also based on the full-length 375 H&H case expanded to 458-caliber, but is shorter. Rifles chambered for the 458 Lott will also safely shoot 458 Winchester ammo. Since Hornady has adopted this cartridge as a factory loading, availability of ammo and brass should improve markedly. Numerous bullet makers make bullets suitable for the 458 Lott, ranging from 350 grains to 600 grains. With factory anno and production rifles now readily available, the 458 Lott continues to be a superb choice for virtually any dangerous game worldwide.

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458 Lott Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
500 SP	IMR 4320	85.0	2330	6020	NA
500 SP	IMR 4064	79.0	2230	5520	NA
500 RN	FL		2300	5873	Factory load

460 Weatherby Magnum

Historical Notes This big, potent caliber was brought out in 1958 for the avowed purpose of providing the world's most powerful commercial rifle cartridge. It was developed by necking the 378 Weatherby case up to 45 caliber. Rifles and ammunition are available only through Weatherby on a commercial basis, but custom-made rifles based on Mauser-type bolt actions are occasionally chambered for this round.

General Comments Until the advent of the 700 Nitro Express, which is just barely in the ranks of commercial cartridges, the 460 Weatherby Magnum was among the most powerful available. Recent factory ballistics have been toned down a bit, but it still delivers better than 7,500 foot pounds of muzzle energy, which far exceeds most dangerous game loads. The big 460 is overly powerful for any North American big game, but it does provide that ultimate bit of insurance against the dangerous African or Asiatic varieties under adverse conditions. It would, of course, be preferable to be caught slightly overgunned than to be eaten by a lion or trampled by an elephant. Two wildcat cartridges, the 450 and 475 Ackley, are in the same class as the 460 WM insofar as energy is concerned. The 475 A&M Magnum reportedly develops a muzzle energy of some 10,000 foot-pounds. However, none of these are commercial cartridges. Recently, many new A-Square and proprietary numbers have exceeded the 460 Weatherby.

460 Weatherby Magnum Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
300 SP	IMR 4320	112	3000	5997	Barnes
350 SP	IMR 4064	111	2900	653 8	Hornady
500 SP	IMR 4350	123.5	2650	7799	Hornady
500 SP	IMR 4320	108	2550	7221	Hornady
500 SP	IMR 3031	99	2500	6941	Hornady
500 SP	H-4831	125	2650	779 9	Barnes
500 SP/FMJ	FL		2600	7507	Weatherby factory load

Obsolete American Rifle Cartridges

25-20 Single Shot

Historical Notes Designed by J. Francis Rabbeth — a gun writer at the turn of the century who used the pen name of J. Francis — the two 30 Single Shot first appeared about 1882, and was one of the first centerfire, 25-caliber wildcats. The first commercial cartridges are loaded by Remington (UMC), and shortly thereafter, Maximard, Remington, Stevens and Winchester chambered singlehot titles for the round. No commercial rifles have been available on this chambering since the late 1920s and the manufacturers topped loading this number in the mid '30s. Bell Basic Brass contact Buffalo Arms/208-263-6953/www.buffaloarms.com for builds. Successor to M.A.S.T. Technologies and Brass Extrusion



Laboratories, Ltd.) turned out at least one run of 25-20 Single Shot brass in 1987 and 1988.

General Comments The 25-20 Single Shot was too long to work through the action of the Winchester Model 1892, so Winchester designed the 25-20 WCF or Repeater version with a shorter, more bottlenecked case. The 25-20 SS is quite accurate and was used almost entirely in single-shot rifles. As a varmint or small game cartridge, it is in the same class as the 25-20 WCF. At one time there was a good deal of leftover ammunition on dealer shelves, but as this cartridge is the base for forming the once-popular 2R Lovell wildcat, most of this was bought up by 2R fans. Most rifles for this cartridge have been rechambered for the still-available 25-20 WCF.

25-20 Single Shot Loading Data and Factory Ballistics

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Dullat (graine(type)	Powder	Grains	Velocity	Energy	Source/Comments
Bullet (grains/type)		8.0	1535	310	Ackley
60 SP	2400		1620	380	Lyman No. 257420
65 Cast	2400	8.0		370	Ackley
86 SP	IMR 4227	8.5	1400	380	Factory load
86 SP	FL		1410	380	Tactory loud

25-20 Marlin



Historical Notes This cartridge was loaded for the Marlin repeating rifle Model 1894. Winchester loaded the 25-20 Marlin beginning at the turn of the century and until about World War I. It is nothing more than a special version of the 25-20 Winchester, except perhaps for the bullet nose shape, seating depth and the 25-20 Marlin headstamp. It is otherwise identical to the current 25-20 Winchester. In 1916, Winchester offered five versions of this cartridge: lead, blackpowder (86 grains, 17 grains); softpoint, smokeless powder; full-patch, smokeless powder; high-velocity softpoint; and high-velocity, full-patch.

General Comments Sales of Marlin's Model 1894 rifles evidently generated sufficient demand for special-cartridge versions of the

rifle's typical chamberings, or perhaps cartridges with slightly different bullet shapes or loading lengths were found to function better in it. There must have been some good reason, for Winchester's 1916 catalog shows separate cartridge loadings with the following names: 25-20 Marlin, 32-20 Marlin, 38-40 Marlin and 44-40 Marlin. It is possible the 25-20 Marlin was somehow unique from the 25-20 Winchester, because the catalog does not specify adaptation to Winchester rifles, as it does with the others. In addition, Winchester showed the same blackpowder load and bullet weight for both the 25-20 Winchester and the 25-20 Marlin. The 32-20, 38-40 and 44-40 were unique loadings.



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25-21 Stevens

Historical Notes The 25-21 Stevens was developed about 1897 as a shortened version of the slightly older 25-25. First introduced for the 44 Stevens rifles and later available in the 44-1/2 series, it was designed by Capt. W.L. Carpenter of the 9th U.S. Infantry, who also designed the 25-25 Stevens. The Remington-Hepburn was available in various models for the 25-21, and it was a popular target and small game number. Many shooters of the period disliked the bottlenecked case and the 25-21 was intended as a straight-case version of the 25-20 SS.

General Comments The 25-21 was noted as a very accurate cartridge, reportedly capable of 1/2-inch, 100-yard groups. It gave about the same performance as the 25-20 SS, but was much too long for the standard repeating actions. It is easy to reload and quite pleasant to shoot. Use Lyman No. 25720 flat-point or No. 25727 hollowpoint cast bullets. The former weighs 86 grains, the latter 75 grains. Twenty to 23 grains of FFFg blackpowder, or the light smokeless powder loads listed below can be used.

25-21 Stevens Loading Data

Bullet (arging /hung)					
Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
86 Lead	2400	9.0	1610	498	
86 Lead	Unique	5.0	1500	434	NA
88 Cast	Unique	5.5	1440		NA
		0.0	1440	406	Lyman No. 257231

25-25 Stevens

Historical Notes The 25-25 was the first straight shell manufactured for Stevens. Designed by Capt. Carpenter in 1895, Stevens introduced it for its Model 44 single-shot rifles and for the 44-1/2 series after this action was marketed in 1903. It was also a standard chambering for some of the Remington-Hepburn target rifles. It was somewhat popular, but the shorter 25-21 developed practically the same performance and was a little cleaner shooting. **General Comments** A very freakish-appearing cartridge with its excessive length-to-diameter ratio, it is the 25-21 with about 1/2-

inch added to its overall length. The late Phil Sharpe wrote (*The Rifle in America*, 1938) that the 25-25 caused much extraction trouble and that is why the shorter 25-21 was developed. However, modern users say this is not so, although the 25-25 fouls the bore a little more than the 25-21. It is highly probable the 25-21 was developed because it was found that 20 or 21 grains of powder gave practically the same ballistics as the extra 4 grains or so. You can use any cast 0.257-inch diameter bullet of 60 to 86 grains weight; the gascheck type is preferable with smokeless powder.

25-25 Stevens Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
86 Lead 86 Lead	Unique IMR 4198	5.5	1525	448	NA
86 Lead	FL	10.2	1520 1500	446 434	NA Factory load
				,0,1	

114 CARTRIDGES OF THE WORLD

25-36 Marlin

Historical Notes This cartridge, adopted by Marlin in 1895 for its by creaction Model 93 rifle, was designed by William V. Lowe a year or to prior and originally called the 25-37. It was probably inspired by the 25-35 Winchester. The two are very similar but not merchangeable although the 25-35 can be fired in the slightly broger 25-36 chamber. The 25-36 Marlin was loaded in a smokeless product version and survived until the early 1920s. **General Comments** The 25-36 and the 25-35 WCF are similar; however, many rifles for the Marlin cartridge were not strong enough to withstand maximum loads safely. In general, one should not exceed 2000 fps velocity with the 25-36. It is not an adequate deer cartridge, and its use should be confined to small or medium game. It did not acquire a reputation for outstanding accuracy.

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
87 SP	IMR 3031	20.0	2010	770	NA
117 SP	IMR 3031	20.0	1800	845	NA
117 SP	FL		1855	893	Factory load
and the second					
	- 57		del 1893 Special	Lightweight Rif	

256 Winchester Magnum

Historical Notes The 256 Winchester Magnum was announced in 1960 as a new handgun cartridge; however, the only handgun that chambered it was the single-shot, enclosed-breech Ruger "Hawkeye" introduced in late 1961. The 256 Winchester Magnum is listed as a rifle cartridge because Marlin produced its Model 62 lever-action rifle in this chambering and Universal Firearms made the semi-auto "Ferret" on the M-1 Carbine action. The Marlin rifle was available about a year after the Ruger "Hawkeye" and both were discontinued after a relatively short production life. The Thompson/Center Contender, a single-shot pistol, was also nvailable for this round. The cartridge is based on the necked-down 357 Magnum revolver case.

General Comments As a rifle cartridge, the 256 is considerably more potent than the 25-20 and several jumps ahead of the 22 Hornet or the 218 Bee. The factory-loaded, 60-grain bullet develops over 2760 fps muzzle velocity when fired from a 24-inch rifle barrel. This offers 1015 foot-pounds of muzzle energy, which is well above the Hornet or Bee. The 256 Magnum is an effective varmint cartridge out to ranges of 200 yards. It can be handloaded with heavier 75- or 87-grain bullets to velocities of 2500 and 2230 fps, respectively. Although a good varmint and small game chambering, it is not an adequate deer cartridge and most states will not allow its use for this purpose. Winchester was the only commercial manufacturer to offer the 256 Winchester Magnum. It was discontinued in the early 1990s.

256 Winchester Magnum Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
60 SP	H4227	14.0	2500	833	Hornady
••••	H4227	16.0	2800	1045	Hornady
60 SP	2400	14.0	2600	901	Hornady
60 SP	2400 H4227	14.0	2400	958	Hornady
75 HP	IMB 4227	14.0	2500	1041	Sierra
75 HP		14.0	2200	935	Sierra
87 SP	IMR 4227	14.0	2200	935	Hornady
87 SP	H4227	14.0	2760	1015	Winchester factory load
60 SP	FL		2/00	1010	

ullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
120 SP	IMR 4350	55.0	2980	2362	NA
130 SP	IMR 4895	46.0	2900	2425	NA
140 SP	IMR 4831	57.0	2890	2598	NA
129 SP	FL		2760	2180	Western factory load

Chapter 3

25 Remington

Historical Notes The 25 Remington is one of a series of rimless cartridges developed for the Model 8 Autoloading rifle and later used in other Remington rifles. It was introduced in 1906. The Remington Model 14 pump-action, Model 30 bolt-action and the Stevens Model 425 lever-action also used the 25 Remington. No rifles have chambered this cartridge since 1942, and the ammunition companies stopped loading it about 1950.

General Comments The 25 Remington is nothing more than a rimless version of the 25-35, but differs slightly in shape. The two are not interchangeable. Since the Remington line of rifles, particularly the Model 30 bolt-action, would stand higher pressures than the lever-action, it is possible to get slightly better performance out of the 25 Remington. However, the difference is not sufficient to make the rimless version anything but a barely adequate deer cartridge. It will do for varmints and small to medium game quite well and deer in a pinch, provided the hunter is a good shot. The 30-30 is a better cartridge for anything, and the 25 Remington is hardly

25 Remington Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
60 SP	H4895	31.0	2900	1121	Hornady
60 SP	IMR 4320	32.0	2900	1121	Hornady
117 SP	H4895	26.5	2200	1258	Hornady
117 SP	IMR 3031	25.5	2300	1375	Hornady
100 SP	FL		2330	1216	Factory load
117 SP	FL		2125	1175	Factory load

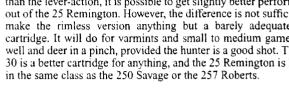


256 Newton

Historical Notes One of several high-velocity, rimless cartridges designed by Charles Newton for his bolt-action rifles, the 256 Newton was introduced in 1913 by the Western Cartridge Co. Until the 264 Winchester Magnum came along in 1958, this was the only American-designed 6.5mm to be offered on a commercial basis. The last of the Newton rifle companies failed in the early 1920s, and Western quit loading Newton cartridges in 1938. The 256 Newton is based on the 30-06 case necked-down.

256 Newton Loading Data and Factory Ballistics

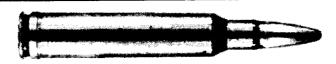
General Comments The 256 Newton has hung on as a wildcat cartridge and occasionally custom rifles are made for it. Cases can be made by necking-down, reforming and shortening 30-06 brass. This is a good cartridge and is adequate for practically all North American big game, but it is not as effective as the 270 Winchester. With modern, slow-burning powders, its performance can be improved over original factory ballistics.



308 Norma Magnum

Historical Notes The 308 Norma Magnum was introduced in 1960 by A.B. Norma Projektilfabrik of Åmotfors, Sweden. In its original form, this cartridge was something of a semi-wildcat, because only unprimed brass cases were available and no commercial rifles were chambered for it. However, about 18 months after it was introduced, Norma began producing factory ammunition. Several European manufacturers chamber the round as standard or on order.

General Comments The 308 Norma Magnum is practically identical to the wildcat 30-338, which is the 338 Winchester Magnum necked-down to 30-caliber. However, the two cases are not interchangeable because of a difference in body length. Almost any standard-length 30-06 rifle can be rechambered to take the 308



Norma cartridge. This cartridge is also similar to a number of 30caliber wildcat magnums based on the blown-out and shortened 300 H&H case, and known collectively as the 300 short magnum group. The 30 Luft, 300 Apex and Ackley Short 30 Magnum are representative of this class. The 308 Norma Magnum is adequate for any North American big game and should do well on African plains game. Powder capacity is only a hair greater than the 300 H&H, but the shape of the case is radically different. This is a proprietary cartridge of European origin designed specifically for the American market. It is placed with the American cartridges because most U.S. readers will look for it here. Technically, it belongs in the chapter covering European cartridges.

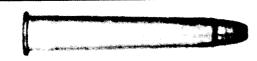
308 Norma Magnum Loading Data and Factory Ballistics

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Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
100 SP	H380	70.0	3500	2721	Speer
110 SP	IMR 4350	75.5	3400	2824	Sierra, Hornady
125 SP	IMR 4350	76.0	3400	3209	Sierra, Hornady
150 SP	IMB 4350	72.0	3200	3420	Hornady, Nosler, Sierra, Speer
150 SP	IMR 4831	73.0	3150	3306	Nosler, Speer
165 SP	IMR 4350	71.0	3100	3522	Sierra, Speer, Nosler
180 SP	IMR 4831	73.0	3000	3598	Sierra
220 SP	IMR 4350	68.0	2800	3831	Hornady
180 SP	FL	2010	3100	3842	Norma factory load



Reminaton M700AS Rifle

32-40 Remington



Historical Notes The 32-40-150 (2 1/8-inch) Remington was one of the cartridges for the single-shot, rolling block Sporting Rifle No. 1, introduced in 1870. This cartridge appears to have been introduced shortly after the rifle, about 1871-72. The 32-40 Remington was also one of the cartridges for the No. 3 Hepburn, and some of the Farrow single-shot rifles. Other than this, no one else seems to have adopted it. Remington quit loading it in 1910.

General Comments This is a very odd-looking cartridge, with a long tapered shoulder that merges imperceptibly with an elongated neck. It is usually listed as a straight case, but it is not straight and is not exactly necked. It might best be described as a "taper-necked"

case. On the dimensional chart, it is shown as type "A", or rimmed, bottleneck, but this is not totally correct either. The shoulder diameter is arbitrary, since it is difficult to decide just where the shoulder begins. Although called a 32-caliber, true bullet diameter is 0.308- or 0.309-inch; hence, it is really a 30-caliber. It was both a hunting and target round of limited popularity. It lost out to the 32-40 Ballard, which was available in both single-shot and repeating rifles. It was a small to medium game cartridge, but was probably also used to some extent for hunting deer-size animals. Usable cases might be formed from either 30-40 Krag or 303 British cases.

32-40 Remington Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
150 Lead	IMR 4198	14.5	1350	607	Lyman No. 308156
150 Lead	FL125		1350	607	Factory load

303 Savage

Historical Notes Originally developed as a potential military cartridge in 1895, the 303 Savage was later introduced commercially as one of several chamberings for the popular Savage Model 1899 lever action. Savage discontinued this chambering when rifle production was resumed after World War II. In England, it is known as the 301 Savage. No new rifles are chambered for this round at present.

General Comments Dogma holds that the 303 Savage is not a true 303 but instead uses standard 0.308-inch bullets. However, current SAAMI specifications call for a bullet of 0.311-inch. Measurements of bullets on three lots of each of two makes of World WarII-era factory loads yields mixed results. Some were 0.308-inch+, others 0.310-inch+. The 303 is similar to the 30-30 in size, shape and performance, but the two are not interchangeable. With its 190-grain bullet, many old woods hunters swore by it. With the relatively heavy bullet at moderate velocity, it gave good penetration on deer-size animals. However, it is ballistically no more powerful than the 30-30, so its use should be restricted to deer at short ranges. Unfortunately, Savage never took advantage of the fact that the 99 rifle is particularly suited to the use of spitzer bullets. Proper loadings of 150-grain spitzers in the 303 could have moved it completely out of the 30-30 class and might have come a long way toward increasing its popularity. As it has always been he case. Many handloaders still use the 303 Savage with 150-grain spitzer bullets loaded to about 2,500 fps. It is still no long-range wonder, but such a load gives it a decided edge over any other 30-30-class chambering.

303 Savage Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
150 SP	IMB 4064	36	2400	1919	Lyman
170 SP	IMR 3031	31	2170	1778	Lyman
180 SP	FL		2140	1830	Factory load
190 SP	FL		1890	1507	Winchester factory load

Savage Model 99A

32-20 Marlin

Historical Notes This cartridge was loaded for the Marlin 1894 repeating rifle. Winchester loaded this cartridge beginning around the turn of the century and until about World War I. It is nothing more than a special version of the 32 WCF (32-20 Winchester). Compared to the Winchester round, it was loaded with a lighter bullet, 100 grains versus 117 grains. With the exceptions of perhaps bullet nose shape, seating depth and headstamp, this loading appears to have been otherwise identical to the 32-20 Winchester. In 1916, Winchester offered three versions of this cartridge: lead and blackpowder (100 grains, 20 grains); softpoint (117 grains) and smokeless powder; and full-patch (117 grains) and smokeless powder. High-velocity loadings were not offered.

General Comments Evidently sales of Marlin's Model 1894 rifle generated sufficient demand for special versions of the cartridges for which that rifle was nominally chambered. Perhaps cartridges with slightly different bullet shapes or loading lengths were found to function better in it. Whatever the reason, the 1916 catalog shows separate cartridge loadings with these names: 25-20 Marlin, 32-30 Marlin, 38-40 Marlin and 44-40 Marlin. Winchester says this cartridge was adapted to both Winchester and Marlin rifles, as were the 38-40 and 44-40 Marlin cartridges.



32-30 Remington

Intorical Notes This bottleneck cartridge, similar to the 32-20 W(1, was one of the chamberings available for the Remington-Hepburn No. 3 series single-shot rifle introduced in 1880. The raundge was first made in November of 1884. Not a true 32, bullet dometer is 0.312-inch.

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not a popular cartridge, and died out in 1912. Like most other single-shot cartridges, this one was too long for the short repeating actions such as the Model 92 Winchester. These were, in addition,

too small for the larger actions. This in-between position eliminated these as the repeater gained popularity. Rifles for the 32-30 are comparatively rare today. Ammunition can be made by reforming 357 Magnum or 357 Maximum cases.

General Comments The	Remington-Hepburn was billed as a
hour-range hunting and ta	rget rifle," but the 32-30 is hardly a long-
more cartridge. It is only a	notch or so above the 32-20 WCF. It was

32-30 Remington Loading Data and Factory Ballistics								
Bullet (grains/type)	Powder	Grains	Velocity	Energy	Sou			
	INTE 4100	14.0	1650	676	Lvn			

Bullet (grains/type)	Powder	Grains	Velocity 1650	Energy 676	Source/Comments Lyman No. 311316
111 Lead 115 Lead	IMR 4198 blackpowder (FFg)	14.0 35.0	1430	528	NA Factory load
125 Lead	FL		1380	535	1 actory load

32-35 Stevens & Maynard

Historical Notes A match cartridge introduced by J. Stevens Arms # tool Co. in the mid-1880s, this was one of the chamberings mailuble for the New Model Range Rifle Nos. 9 and 10, which first suprared in 1886. These were on a tip-up, single-shot action and white of the earlier models of this type might have chambered the 13. Later rifles based on the 44 and 44-1/2 under-lever singlestan actions were available in 32-35.

General Comments This was one of the most accurate of the Stevens target cartridges, and many records were established with it. The 32-40 was responsible for the 32-35's gradual obsolescence. Best accuracy usually was obtained by seating the bullet in the chamber 1/16-inch or so ahead of the case; the case, full of powder with a wad to prevent powder spillage, was then inserted in the chamber behind the bullet. Lyman's No. 3117 bullet of 153 grains was popular with many riflemen. The correct charge of blackpowder was 35 grains of Fg or FFg.

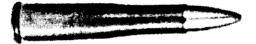
32-35 Stevens & Maynard Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
153 Lead	IMR 4198	14.0	1410	683	NA
165 Lead	IMR 4227	11.0	1380	696	NA
165 Lead	FL		1400	683	Factory load

32-40 Bullard

> flistorical Notes This is the smallest cartridge of a series designed he the Bullard single-shot and repeating rifles. Bullard patents were reanted in 1881, and manufacture of its rifles is believed to have started during 1882 or 1883. Exact date of introduction of the individual cartridges is difficult to establish, but all were available ► 1887

> General Comments The Bullard lever-action repeating rifle tracmbled the Winchester, but employed a different rack-andpenon mechanism. The loading port in the magazine was located



on the bottom, unlike the Winchester's side port. The single-shot was of the under-lever type and quite strong. Although Bullard rifles and cartridges were as good as any of contemporary manufacture, they did not endure beyond 1900. Some Bullard cartridges were made by Remington and Winchester. Performance of the 32-40 Bullard is the same as the 32-40 Winchester and Marlin. Both are scarce items. Usable cases can be easily formed from 357 Remington Maximum cases.

32-40 Bullard Loading Data and Factory Ballistics

Bullet (grains/type) 150 Lead 155 Lead	Powder IMR 4198 2400	Grains 15.0 13.0	Velocity 1470 1400	Energy 719 674 750	Source/Comments Lyman No. 311241 NA Factory load
150 Lead	FL		1492	750	Factory load

32 Long (CF)

Historical Notes This centerfire, reloadable version of the 32 Long rimfire with an outside-lubricated bullet was introduced in 1875 in a variety of light-frame single-shot rifles and the Marlin Models of 1891 and 1892. Some of these were constructed so that both rimfire and centerfire ammunition could be used by changing the firing pin or hammer.

Long," in order to increase range and killing power on small game. Eventually the 32 Long was replaced by such numbers as the 32-20 WCF, 32 Ideal and the 32-35 Stevens. It is very similar to the 32 Colt revolver cartridge. The standard load consisted of 13 grains of FFFg blackpowder and an 80- to 85-grain bullet. Muzzle velocity was only about 800 to 900 fps, depending on load and barrel length. The 32 S&W Long or 32 Long Colt will work in most old rifles in this chambering. These cartridges are now collector's items.

General Comments The 32 Long was not a satisfactory or effective cartridge. A longer case was soon used, called the "Extra

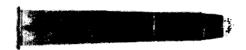
32 Long	(CF)	Loading	Data	and	Factory	Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments			
85 Lead	FL		850	136	Factory load			

32 Ballard Extra Long

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	Historical Notes The 32 Extra Long is an elongated version of the 32 Long centerfire, the latter being one of the chamberings	chambered for this cartridge will usually chamber and fire both the 32 S&W Long and 32 Long Colt.	
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32-40 (32-40 Ballard/ 32-40 Winchester)



Historical Notes Originally developed as a blackpowder match or target cartridge for the single-shot Ballard Union Hill Rifle, Nos. 8 and 9, the 32-40 was introduced in 1884 loaded with a 165-grain lead bullet in front of 40 grains of Fg blackpowder. It established a reputation for fine accuracy and Winchester and Marlin added it to their lines of lever-action repeating and single-shot rifles late in 1886 *et seq.* The late Harry Pope's favorite cartridge was the 32-40 and his variant, the 33-40. Ammunition has been discontinued by major companies. However, in the early 1980s, Winchester loaded this cartridge to boost sales of its John Wayne Commemorative rifle.

General Comments In a good solid-frame rifle, the 32-40 will shoot as well as any modern high-powered match cartridge out to 200 or 300 yards. It was a popular hunting cartridge for medium game and deer, and while it has certainly killed its share of deer, the factory loading barely qualifies in that class. However, in a strong action it can be handloaded to equal the 30-30. For small to medium game or varmints, it will do very well at moderate ranges. Do not use high-velocity loadings in the old Ballard or Stevens 44 rifles. A number of modern copies of old Sharps single-shot rifles and a special commemorative M1894 Winchester have been chambered for the 32-40 in recent years. Usable cases can easily be formed from 30-30, 32 Special or 38-55 cases.

32-40 Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
155 Lead	2400	13.0	1460	786	
165 Lead	H4895	16.0	1410	729	OK for old rifles – Hodgdon
	H4198	14.0	1340	658	OK for old rifles – Hodgdon
165 Lead	H4895	22.0	1865	1275	Not for old rifles – Hodgdon
165 Lead	H335	23.0	1890	1309	Not for old rifles - Hodgdon
165 Lead	AA 5744	20.0	1802	1226	Accurate Arms
170 Lead	FL	20.0	1440	760	Winchester factory load
165 SP 165 SP	FL		1752	1125	Winchester factory load high velocity

32 Remington



Historical Notes Another of the Remington rimless line of medium high-power rifle cartridges; this one is a rimless version of the 32 Winchester Special. Introduced in 1906, it was originally chambered in the Model 8 autoloader and later available in Remington pump-action and bolt-action rifles. The ammunition companies discontinued it many years ago.

General Comments Remington felt some need to counter the popular series of rimmed cartridges chambered in Winchester's Model 94 lever-action. The incentive was great enough to persuade Remington to invent substitutions for Winchester's rimmed 25-, 30and 32-caliber cartridges. It could be argued that the 35 Remington was an answer to Winchester's 38-55. A bit of reflection suggests that the folks at Remington were confused. It was not the cartridges that made Browning's invention successful – it was Browning's invention that made the cartridges successful. The 32 Remington is, nonetheless, perfectly adequate for any task to which the 30-30 or 32 Special are suited.

32 Remington Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
170 SP 170 SP 170 SP 170 SP 170 SP	IMR 4895 IMR 3031 IMR 4198 FL	33.0 30.0 26.0	2070 2020 1992 2220	1578 1546 1718 1860	Lyman NA NA Remington factory load

32 Ideal

Historical Notes One of the chamberings available for the singleshot Stevens 44 and 44-1/2 rifles, as well as for other single-shot rifles, this cartridge was introduced in 1903 and was quite popular for 20 years or so.

General Comments The 32 Ideal is an improvement over the older 32 Extra Long Ballard in having inside lubrication and better performance. It is cleaner to handle and easier to reload. It was also quite accurate and an adequate 150-yard small or medium game number. Use of bullets lighter than standard provides room for more powder and gives higher velocity. Sometimes called the 32 25-150, the 32 Ideal uses a bullet diameter of 0.323-inch and, as pointed out in early Ideal Hand Books, it offered new life, via reboring and rerifling, to "thousands of 32-caliber, Short, Long and Extra Long, Rim and Center Fire rifles that have been shot out or rusted..."

32 Ideal Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
115 Lead	blackpowder (FFg)	38.0	1425	524	Lyman No. 32359
150 Lead	blackpowder (Fg)	25.0	1250	526	
150 Lead	IMR 4198	12.0	1330		Lyman No. 32360
150 Lead	blackpowder (FFg)	25.0		596	NA
	Bidenperraer (i i g)	23.0	1250	526	Factory load

33 Winchester

Historical Notes Introduced in 1902 for the Winchester Model 86 lever-action rifle and discontinued along with the rifle in 1936, it was replaced by the 348 Winchester developed for an updated version of its '86, the Model 71 rifle. It was also chambered in Marlin's Model 95 lever-action and in the Winchester Model of 1885 single-shot. This round was dropped in 1940.

General Comments The 33 Winchester earned a good reputation as a deer, black bear and elk cartridge when used in the woods at moderate ranges. Its paper ballistics are no better than the 35

33 Winchester Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Enerav	Found/Commont-
200 SP 200 SP	H4895	45.0	2200	2150	Source/Comments Hornady
200 SP 200 SP	IMR 3031	40.0	2100	1959	Hornady
			2200	2150	Winchester factory load

70 cases.

35 Winchester Self-Loading (35 WSL)



Historical Notes The 35 SL was the original cartridge for the Winchester Model '05 semi-auto rifle introduced in 1905. The Model '05 was the only rifle that ever chambered it, and the cartridge was such a poor one that it was discontinued by 1920.

it was too expensive for such shooting. It is too underpowered for deer, and ranks right along with the 32 SL as a rather useless cartridge. It is semi-rimless, and can be fired in the 38 Special or _357_Magnum revolver if reloaded with 0.357 including the second



Remington rimless, but it uses a smaller diameter bullet with better

sectional density than the 200-grain 35-caliber. It gave good

penetration and satisfactory killing power when properly used. It is

still a good cartridge for anything up to and including elk, and it can

be improved safely with modern powders. In any case, it is not quite

as powerful as the 348 Winchester and early Model 86 actions are

not quite as strong as the Model 71. Cases can be formed from 45-

35-40 Maynard (1882)

long case is probably superior for hunting, but since both are strictly small- to medium-game numbers, any advantage would be a matter of opinion. Any cast 0.358-inch rifle or revolver bullet can be sized to work. The Lyman No. 358429 (165 grains) would be a good choice.

Historical Notes This an elongated version of the 35-30 and used in the Model 1882 Maynard rifles.

General Comments The 35-40 provides greater powder capacity than the shorter 35-30. The case dimensions are not identical, but cases can be made from 38-55 cases, just as with the 35-30. The

35-40 Maynard Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
165 Lead	IMR 4198	18.0	1400	725	Lyman No. 358429
250 Lead	FL		1355	1018	Factory load

38-45 Stevens

Historical Notes One of the special Stevens "Everlasting" cartridges, this one was introduced with the 1875 tip-up models. It was not very popular and was discontinued within a few years. Today it is one of the rarer Stevens cartridges.

General Comments Another of the 38-40 class cartridges, the 38-45 used a heavier bullet, but ballistics are similar. The 38-40 and 38-55 made most of these in-between cartridges obsolete. Original loading called for 45 to 50 grains of Fg blackpowder and a bullet of 210 to 255 grains. It should be possible to convert 303 British cases to work in these rifles.

38-45 Stevens Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments			
210 Lead	IMR 4198	16.0	1340	845	Lyman No. 36275			
210 Lead	FL		1420	947	Factory load			

35-30 Maynard (1865)

Historical Notes This unusual, externally ignited "cartridge" was chambered in the Model of 1865 Maynard rifle. This was a forerunner to all centerfire cartridges because it featured a central flash hole in the base of the case. This was also forerunner to the 35-30 Maynard cartridge used in Model 1873 and 1882 rifles. While Maynard rifles saw Civil War usage, this particular combination came along quite late in that conflict.

General Comments This rifle combines what appears to be a moreor-less conventional cartridge case with external priming. The base of the case has a centered, small-diameter flash hole. This hole carries the flash from a conventional cap into the charge.

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Conceptually, it is a very small step from this design to one combining the cap and the case into one unit.

One could argue that this "cartridge" falls outside the purview of this book because it does not incorporate a self-contained primer – it is not a complete cartridge in the modern sense. It is, however, much closer to the modern cartridge than its forerunners, the papercased "cartridge." Therefore, since this rifle and cartridge represent a significant step toward perfection of the self-contained cartridge, we feel that this number is worthy of mention here. Fully functional 35-30 Maynard pinfire cases are available from Ballard Rifle & Cartridge Co. (307-587-4914).







38-40 Remington-Hepburn

Historical Notes Although listed as the 38-40 Remington-Hepburn, this cartridge was available in the No. T Sporting Model rolling block rifle that preceded the Hepburn action by 10 years. The No. 1 rifle was also chambered for the 38-40 WCF shortly after Winchester introduced it during 1873-1874. It is likely that this cartridge was intended as a straight-case version of the bottlenecked Winchester round. The 38-40 Remington-Hepburn appeared about 1875.

General Comments Rifle and ammunition manufacturers went all out to please every segment of the trade during the 1800s. Some riflemen did not cotton to the bottlenecked cases, so all kinds of straight, tapered and bottleneck designs appeared in the same caliber and with the same powder charge. This may have provided a great lift to the men using these, but it is very confusing. The 38-40 Remington and 38-40 Winchester are a case in point. Neither could do anything the other would not, but the Winchester round won out in company with the repeating rifle. The Remington cartridge is a good target or small to medium game number. The original bullet is slightly heavier than the 38 WCF, but loading data for one will give similar results in the other. It is possible to convert 30-40 Krag cases to load this cartridge.

38-40 Remington-Hepburn Loading Data and Factory Ballistics

Builet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
190 Lead	IMR 4198	16.0	1427	835	Lyman No. 373164
250 Lead	2400	15.0	1300	937	NA
245 Lead			1200	790	Remington factory load

38-45 Bullard

Historical Notes This is another of the special cartridges for the Bullard lever-action, single-shot and repeating rifles. It was introduced approximately 1887, Remington once loaded this round, but it was never a very popular number. General Comments Very few rifles in this chambering still exist. Ballistically it is similar to the 38-40 WCF. It was an accurate cartridge, suitable primarily for small or medium game at close ranges. These cartridges are now collector's items. It should be possible to convert 44 Remington Magnum cases to work in these rifles.

38-45 Builard Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
175 Lead	2400	16.0	1480	883	Lyman No. 37582
250 Lead	Unique	10.0	1200	797	NA
190 Lead	FĹ		1388	822	Remington factory load

38 Long, Centerfire (38 Long, CF)

Historical Notes The 38 Long is another old-timer designed to replace a similar rimfire cartridge. It was introduced in 1875-76 and used in a number of single-shot rifles including the Ballard, Stevens, Remington and others. It was obsolete by 1900 and, oddly, the original rimfire version outlived the centerfire. General Comments The 38 Long, like the 32 and 44, was not very effective and had a short life. It was an alternative to the rimfire and many of the old rifles could, by a simple adjustment, fire either. The 38 Long Colt or 38 S&W Special can be used to make ammunition. Standard load was 20 to 25 grains of blackpowder and a 140- to 150-grain bullet.

38 Long, Centerfire Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
145 Lead	FL		950	291	Factory load

38 Ballard Extra Long

Historical Notes This centerfire version of the 38 Extra Long rimfire was introduced in 1885-86 as one of the chamberings for the Ballard No. 2 Sporting Model. It also was used by many other companies. It had the old No. 1 primer that has not been made for many years. Some of these rifles were furnished with a changeable firing pin or hammer arrangement so they could fire the rimfire or centerfire version with only a minor adjustment.

General Comments The 38 Extra Long was designed to furnish a reloadable case to those who favored the 38 Extra Long rimitire ballistics. It was a nice little plinking, small game or target cartridge for those who wanted economy. Any 0.358-inch bullet of suitable weight can be used. Using Lyman No. 358161 (145 grains) and 31 grains of FFg blackpowder will work fine. The 357 Remington Maximum case can be converted to work in the 38 Ballard Extra Long chamber.

38 Ballard Extra Long Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
150 Lead	Unique	6.0	1160	450	Lyman No. 358160
146 Lead	FĹ		1275	533	Factory load

38-35 Stevens

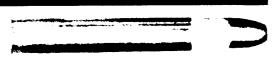
Historical Notes Introduced in 1875 for the Stevens tip-up singleshot rifles, this was one of the special Stevens "Everlasting" cartridges. It was not very popular, so it was dropped after a few years. In its original form, it is occasionally referred to as the 38-33.

General Comments Stevens "Everlasting" shells were sold as separate components and the older, less popular numbers are seldom encountered as loaded rounds. These cases, intended to give very long reloading life, were necessarily thick and heavy. About six of these special chamberings survived. Loadings were not standard, and they may be found with a variety of bullet weights in both grooved and paper-patched form. A load of 35 grains or so of Fg blackpowder and any bullet of 180 to 255 grains can be used in this cartridge. It should be possible to chamber and safely shoot either 41 Short Colt or the 41 Long Colt lead bullet loads in these rifles. The softer oversize bullet will safely swage down to bore diameter.

38-35 Stevens Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
180 Lead 215 Lead	blackpowder (Fg) blackpowder (Fg)	35.0 35.0	1350* 1255	729 75 8	NA Factory load
* Estimated					

38-50 Maynard (1882)



Historical Notes The 38-50 Maynard is practically identical to the 38-55 Ballard and Winchester, and uses a bullet of similar diameter. It was not popular because it was so similar to the Winchester number.

General Comments To reload the 38-50, one can make cases by resizing and trimming 38-55 cases and loading 38-caliber cast rifle

bullets sized to correct diameter. The 38-55 would only hold 48 to 50 grains of blackpowder after the ammunition companies began using heavier, solid-head cases. For all practical purposes, there is no performance difference between the 38-50 Maynard and the 38-55.

38-50 Maynard Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
149 Lead	IMR 4198	10.0	1100	420	Lyman No. 37583
250 Lead	IMR 4198	16.0	13 20	974	Lyman No. 375248
255 Lead	FL		1325	990	Factory load

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38-50 Ballard

Historical Notes This cartridge was the forerunner of the 38-55. It was introduced in 1876 for the Ballard Perfection No. 4 and Pacific No. 5 rifles, but was also available in other models. It is an "Everlasting" type case, heavier than the standard 38-55 and 3/16-inch shorter. It was replaced by the 38-55 when that cartridge was introduced in 1884.

General Comments Standard bullet diameter for most 38-caliber rifles was 0.375-inch, but many had a groove diameter of 0.379-inch, requiring a larger bullet. It is wise to measure the bore diameter before ordering a bullet mould for these old rifles. Lyman moulds are available in a variety of 38 rifle bullets, from 150 grains to more than 300 grains. Modern 38-55 cases can be used in 38-50 rifles by shortening the case to the proper length. Performance and usefulness are on a par with the 38-55 (see Chapter 2).

38-50 Ballard Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
145 Lead 250 Lead	IMR 4198 IMR 4198	14.0 17.0	1300 1350	550 1020	Lyman No. 37583 Lyman No. 375248
255 Lead	FL		1321	989	Factory load

38-50 Remington-Hepburn

Historical Notes Introduced in 1883 as one of the chamberings for the Remington-Hepburn match rifles, this was too similar to the popular 38-55 to gain much of a following and was discontinued after a few years. **General Comments** Loading data for the 38-55 Winchester and Marlin can be applied to this cartridge. There is no difference in usefulness or performance. It should be possible to convert 303 British or 30-40 Krag cases to work in these rifles.

38-50 Remington-Hepburn Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
255 Lead	IMR 4198	23.0	1580	1421	NA NA



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Chapter 3

38-90 Winchester Express (38 Express)



WINCHESTER LA FRESS

Historical Notes Introduced in 1886 as one of many chamberings for the successful Winchester Model 1885 single-shot, this was not a popular cartridge, and by 1904 it had been discontinued.

General Comments This is a long, bottlenecked case with a light bullet for cartridges of this class. Since it is designated an

"Express" cartridge, it was probably intended to develop superior velocity for a 38-caliber rifle. Old Ideal catalogs list bullet No. 375248 as standard with the No. 3 loading tool for this cartridge, but any of the lighter 38-55 bullets can be used. A charge of 90 grains of Fg blackpowder was the original factory loading.

38-90 Winchester Express Loading Data and Factory Ballistics

Bullet (grains/type) 218 Lead 218 Lead	Powder IMR 4198 IMR 4198 FL	Grains 21.0 23.0	Velocity 1350 1470 1595	Energy 886 1045 1227	Source/Comments Lyman No. 37584 Lyman No. 37584 Winchester factory load
217 Lead	1 6				

38-70 Winchester

Historical Notes Introduced in 1894 for the Model 1886 Winchester lever-action repeater, the 38-70 did not catch on and was discontinued within a few years.

General Comments This cartridge offers little if any improvement over the 38-55. It is of bottlenecked design but is not the same as



the 38-56 or the 38-72 Winchester. The older Lyman catalogs indicated it used the standard 38-55 bullet of 0.379-inch. Although the 38-70 case is longer than that of the 45-70, usable, short-necked cases could be made from the 45-70. However, the basic 45 cases now available will make perfect replacement cases.

38-70 Winchester Loading Data and Factory Ballistics

0070 11110100000					
Builet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
250 Lead	IMR 4198	26.0	1710	1625 169 8	NA NA
265 Lead	IMR 3031	41.0	1700 1490	1257	Factory load
255 Lead					

38-72 Winchester

Historical Notes This round was designed for, and introduced with, the Model 1895 Winchester lever-action, box magazine repeater. Both gun and cartridge were obsolete by 1936. The 38-72 was only moderately popular.

General Comments This is a nearly straight case with a very slight neck. Some cases have a pronounced groove around the neck to prevent the bullet from receding under recoil. This tends to obscure the slight neck. This is another 38-caliber cartridge touted as being very powerful when, in fact, it is nearly the same as the 38-55 (we Chapter 2). The 38-72 case has the same basic body as the 30 of Krag, but because headspacing is on the rim, it may not be possible to safely use that case to make the 38-72, except for very has pressure loads.

38-72 Winchester Loading Data and Factory Ballistics

Bullet (grains/type) 255 Lead 275 Lead	Powder IMR 3031 IMR 4198	Grains 33.0 27.0	Velocity 1735 1350	Energy 1715 1120	Source/Comments NA Lyman No. 375167 Lyman No. 357167
275 Cast 275 SP		72.0	1475	1330	Winchester factory load

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38 Colt Lightning and 38-40 Marlin See 38-40, Chapter 2

40-50 Sharps (Straight)



Historical Notes Introduced in 1879, this is the smallest of the

rounds. Standard diameter of most 40-caliber rifle bullets is 0.403inch and almost any bullet of that diameter can be used. These

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40-60 Marlin

Historical Notes The 40-60 is one of the chamberings for Marlin 1881 and 1895 lever-action repeaters. The 1895 uses the same basic system as the 1893 and 1894 models, but is larger and longer. This appears to be the same case as the 40-65 Winchester, but with a slightly different loading. The pump-action Colt New Lightning rifles also used the Marlin loading of this cartridge.

General Comments During the late 1800s, the same cartridge often went under various names, depending on who loaded it or whose rifle it was used in. It was also common practice to change the name if you furnished more than one load or bullet in the same case; that is what happened here. The 40-60 Marlin and the 40-65 Winchester are interchangeable and either can be used in the same gun. However, the old Ideal catalog states the 40-60 Marlin "must not be confused with the 40-60 Winchester as they are not the same." This, of course, is true. If the reader is not thoroughly confused by now, he should be. Go ahead. Read it through a few more times and it will clear up. Converting 45-70 cases into 40-60 Marlin cases is easily done. Marlin 40-caliber rifles often have significantly oversize bores. Groove diameters as large as 0.414-inch are noted.

40-60 Marlin Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
260 Lead 260 Lead 260 Lead	IMR 4198 IMR 3031	23.0 35.0	1500 1480	1308 1263	Lyman No. 403170 NA
200 2010			1385	1115	Factory load

40-60 Colt

Historical Notes At a casual glance, this cartridge appears to be identical to both the 40-60 Marlin and the 40-65 Winchester (except bullet diameter). However, this cartridge includes a definite shoulder, while the other two are true tapered designs. The value or need for a cartridge so similar to the 40-60 Marlin seems moot. Almost certainly, the Marlin round would chamber and fire normally in the Colt rifle.

General Comments It seems that this version must have been created in response to a request from Colt for a cartridge that was specifically intended for use in its rifle. Winchester displayed this number for at least one year on its product advertisement board but it was not found in any catalog listing between 1879 and 1910 or in the 1916 catalog. Therefore, it seems unlikely that it was ever actually offered for sale — at least not directly from Winchester. We present it here in an effort to try to demonstrate just how confusing such research can become. Unless this number was loaded with a different bullet weight, which seems unlikely, ballistics would have been identical to the 40-60 Marlin (see ballistics table).

40-63 and 40-70 Ballard

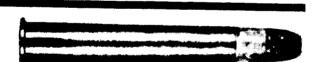
Historical Notes These two cartridges have identical length and outside dimensions, so are listed together. The 40-63 is actually just a heavier-case version of the 40-70 factory cartridge. Both are, in turn, an outgrowth of the original 40-65 Ballard Everlasting case, which had to be handloaded. The 40-63 and 40-70 were first listed for the Ballard Perfection No. 4 and Pacific No. 5 after the Marlin Fire Arms Co. took over manufacture of these rifles in 1881.

General Comments This was a popular cartridge among Ballard rifle fans and was as good as similar cartridges offered by Winchester and others. However, cartridges designed for repeating rifles tended to survive longer than those intended for single-shots. These were used more as match cartridges than anything else, but these also made good deer, black bear or elk numbers. Their performance is identical to the 40-70 Sharps Straight or the 40-72 Winchester. The 444 Marlin case should work in these rifles; however, the rim is generally too small to properly engage the extractor. These chambers were cut to use bore-diameter (0.403-inch), paper-patch bullets; groove diameter is typically 0.408-inch to 0.411-inch.

40-63/40-70 Ballard Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
330 Lead	IMR 4198	22.0	1310	1260	
330 Lead	FL		1335	1318	1/20 or 1/30 tin-lead Factory load

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40-65 Ballard Everlasting

Historical Notes The 40-65 Ballard Everlasting was introduced in 1876 as one of the original chamberings for the Perfection No. 4 and Pacific No. 5 rifles, and in 1879 it was added to the Hunter No. 1-1/2. These were all the same basic, under-lever, single-shot action. This cartridge was used in the J.M. Marlin Ballards, and after the Marlin Fire Arms Co. took over, it was altered to the 40-70 and 40-63.

General Comments The 40-70 or 40-63 Ballard can be chambered in the older 40-65 rifles, but the 40-65 case will not fit the other chamber. Note that firing the smaller diameter cases could result in a case wall rupture, so this is not a good idea. It is a much heavier case of slightly larger diameter, although all have the same length. Ballistics of all are the same for practical purposes, and the loading data shown for the 40-63 will give the same results in any of the cases. The 40-65 Everlasting is one of the rarer Ballard cartridges and is seldom encountered. It should be possible to convert 444 Marlin cases to work in these rifles.



Historical Notes This is the 40-2 1/2-inch straight case introduced in 1876. It is sometimes referred to as the 40-65, because with heavy, reloadable cases, that is all the powder it would hold unless a highter bullet was used. Remington and Winchester single-shots also chambered this round.

General Comments This is another cartridge with ballistics similar to a half-dozen others of different make or origin. There are actually more than a dozen 40-caliber cartridges with powder charges of around 40 to 70 grains and none offer any stupendous advantage



over the others. Like other 40 Sharps numbers, this one used a 0.403-inch bullet, weighing 330 or 370 grains. These chambers were cut to use bore-diameter bullets (often paper-patched). Groove diameter is typically 0.408-inch to 0.411-inch. A number of Lyman bullet moulds are available in this size. Although longer, this case headspacing is on the rim, it may not be possible to safely use that case to make the 40-70 except for very-low-pressure loads.

40-70 Sharps (Straight) Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
330 Lead	IMR 4198	23.0	1250	1150	Lyman No. 403149
330 Lead	FL		1258	1160	Factory load

40-70 Sharps (Necked)



Historical Notes This is the 40-2 1/4-inch bottlenecked Sharps that was brought out in 1871 for the Model 1871 Sporting rifle. It was used in other single-shot rifles also.

Ceneral Comments The 40-70 necked cartridge had a reputation for fine accuracy and was popular as a match cartridge as much as for hunting. While many people regard the Sharps rifles as strictly bullalo guns, Sharps also made match rifles that gained worldwide respect on the range — whence the name, Sharps-shooter. The best marksmen were given Sharps rifles in a special squad and its notoriety grew until the single word "sharpshooter" was synonymous with accurate rifle fire. It should be possible to convert the 45-70 case to work in these rifles but the neck would be very short. The 45 Basic will make perfect cases. These rifles have chambers that were cut to use a bore-diameter (0.403-inch), paperpatched bullet. Groove diameter is typically 0.408-inch to 0.411inch.

40-70 Sharps (Necked) Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
330 Lead	IMR 4759	26.0	1510	1671	NA
330 Lead	IMR 4198	27.0	1450	1542	Lyman No. 403139
330 Lead	FL	_	1420	1482	Factory load

Chapter 3

40-85 Ballard 40-90 Ballard

Historical Notes The 40-85 and the 40-90 Ballard are the same case with different loadings. L.D. Satterlee lists the 40-90 Everlasting with the J.M. Marlin Ballard Pacific No. 5 and Sporting No. 4-1/2 (introduced in 1878). He shows the 40-85 chambering for the Pacific No. 5 after the Marlin Fire Arms Co. took over manufacture in 1881.

General Comments The 40-90 Everlasting case is heavier and about 1/8-inch longer than the regular 40-90 or 40-85 case. Many of the 40-90 Everlasting cases were nickel plated. This is a bunting cartridge very similar to the 40-90 Sharps straight. The same loading data can be used for both, however these are not interchangeable. Although the case of the 40-85 Ballard is longer, it has the same basic body as the 444 Marlin case. It should be possible to make usable, albeit shorter, cases from those. These rifles had chambers designed to use a 0.403-inch (bore-diameter), paper-patched bullet. Groove diameter typically ran 0.408-inch to 0.411-inch.

40-85/40-90 Ballard Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
370 Lead	IMR 4198	28.0	1400	1615	Lyman No. 40395
370 Lead	FL		1427	1672	Factory load

40-90 Sharps (Straight)

Historical Notes Sharps catalogs do not fist this cartridge, although Sharps riftes (and others) chambered for it are known. It was introduced about 1885. The Remington-Hepburn No. 3 single-shot was advertised in this chambering and UMC and Winchester manufactured cases and ammunition.

General Comments The so-called "Everlasting," or reloadable case, was popular with hunters and target shooters during the 1880-90 period. These heavy cases could be reused repeatedly. In fact, they were made so heavy that powder capacity was often reduced by 5 or 10 grains. To get around this, the "Everlasting" case was often made longer than the standard. UMC cases of the 40/3-1/4inch are usually of very heavy, reloadable construction. The reason for mentioning this is that it might have a bearing on the origin of this cartridge. Physical measurements of the so-called 40-90 Sharps Straight are practically identical to the 40-90 Ballard, except for the length. It is possible that the design of the 40-90 Sharps straight is based on lengthening the Ballard cartridge to create an "Everlasting" version with the same capacity and ballistics. Anyway, the idea is worth mentioning and would probably occur to anyone who compared the two. Although longer, this case has the same basic body as the 444 Marlin. It should be possible to make usable, albeit much shorter, cases from those. These rifles had a chamber cut to use a bore-diameter (0.403-inch), paper-patched bullet; groove diameter was 0.408-inch to 0.411-inch.

40-90 Sharps (Straight) Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
370 Lead	IMR 4198	30.0	1400	1612	Lyman No. 403171
370 Lead	FL		1387	1582	Factory load

40-90 Sharps (Necked)

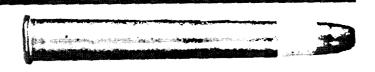
Historical Notes The 40-90 Sharps was introduced in 1873 for the Sharps side-hammer model rifles. There was also another loading, referred to as the 40-100 Sharps, which used a 190-grain hollowpoint bullet. However, it used the same 2 5/8-inch long case. General Comments This became one of the more popular Sharps cartridges. The hollowpoint Express bullets made by Sharps were

designed to accept a 22 rimfire blank, which was supposed to provide explosive expansion and better knockdown. The author has experimented with bullets of this type, and they do not work as they are intended to. An ordinary hollowpoint or a properly constructed softpoint will do as much damage. Perfect cases can be made from the 45 Basic case.

40-90 Sharps (Necked) Loading Data and Factory Ballistics

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Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
370 Lead	IMR 4198	28.0	1450	1735	Lyman No. 403171
370 Lead	FL		1475	1800	Factory load

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40-110 Winchester Express (40 Express)



Historical Notes Designed for the Winchester single-shot rifle and introduced in 1886, the 40-110 was intended to compete with the big Sharps cartridges.

General Comments In its original form, the 40-110 used a coppertubed bullet. The Ideal catalog lists bullet No. 403169 (260 grains) as proper for reloading. The 50 Basic will make perfect cases.

40-110 Winchester Express Loading Data and Factory Ballistics

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Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
260 Lead	FG	110.0	1617	1509	NA
260 Lead	IMR 4198	32.0	1650	1580	Lyman No. 403169
260 SP	FL		1617	1509	Winchester factory load

40-60 Winchester

Historical Notes The 40-60 Winchester is a sharply tapered, slightly necked cartridge for the Model 1876 Winchester rifle, which is a heavier version of the lever-action Model 1873 designed to handle more powerful cartridges. Rifle and cartridge were marketed from 1876 until 1897. This was a popular cartridge and Winchester continued to load it up to 1934.

General Comments The big powerful cartridges available for the Sharps and other single-shot rifles forced Winchester to bring out a more potent line for its repeaters. The cartridges for the Centennial Model marked the beginning of such a trend. This is not the same as the 40-00 Marbn. It is a better hunting choice than the old 44-40 WCF. The 45-70 case can be easily converted to make 40-60 Winchester cases.

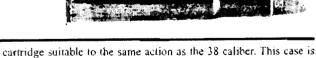
40-60 Winchester Loading Data and Factory Ballistics

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Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
210 Lead	IMR 4198	21.0	1520	1083	Lyman No. 403168
210 Lead	FL		1562	1138	Winchester factory load

40-70 Winchester

Historical Notes This cartridge was developed for the Model 1886 Witchester repeater and was used in the Winchester single-shot. It was introduced in 1894, but never became popular or widely used. the Marlin Model 1895 repeating rifle was also available in this bambering.

terneral Comments This is a bottlenecked case generally similar to the 18-70 Winchester. It provides a larger, heavier bullet in a



cartridge suitable to the same action as the 38 caliber. This case is not the same as that of the 40-72 Winchester. However, the ballistics are nearly identical. It should be possible to convert 45-70 cases to work in these rifles, but the neck would be short. The 45 Basic will make perfect cases. Although groove diameter was typically 0.408inch, original bullets were 0.406-inch diameter.

40-70 Winchester Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
330 Lead	IMR 4759	26 0	1540	1738	
330 Lead	IMR 4198	25.0	1380	1050	Lyman No. 406150
330 Lead	FL		1383	1333	Factory load

40-70 Remington

Historical Notes Although listed as the 40-70 Remington, this cartridge is really Remington's version of the 40-70 Sharps necked. The Remington rolling block No. 4 Sporting Model chambered it and so did the Hepburn No. 3. It was added to the Remington line in 1880.

General Comments Two versions of this cartridge were available: one with a regular brass case, the other with a special reloading case with a brass body and steel head. The steel head fastened to the brass body with an inside screw, which served as a primer anvil and had a flash hole drilled through it. Steel head cases in 1880! There really is nothing new under the sun. The 40-70 was used more for match shooting than for hunting. It should be possible to convert 45-70 cases to work in these rifles, but the neck would be very short. The 45 Basic will make perfect cases.

40-70 Remington Loading Data and Factory Ballistics

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Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
330 Lead	IMR 4198	27.0	1450	1542	Lyman No. 403139
330 Lead	FL		1420	1482	Remington factory load

40-65 Winchester

Historical Notes The 40-65 Winchester & Marlin was introduced in 1887 for the Model 1886 Winchester rifle. The Winchester single-shot also chambered it and so did the Marlin Model 1895. The 40-65 Winchester was loaded in both blackpowder and smokeless powder versions, and Winchester catalogs listed it to 1935. General Comments The 40-65 was a further effort to put more steam in the reneating rules' cartridges so they would be

General Comments the 40-65 was a turner enort to put note steam in the repeating rifles' cartridges so they would be competitive with similar single-shot cartridges. This one, reasonably popular, continued for almost 50 years. Rifles in this chambering are common and ammunition can be made by reforming 45-70 cases. Although groove diameter was typically 0.408-inch, original load bullets were 0.406-inch diameter.

40-65 Winchester Loading Data and Factory Ballistics

Builet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
260 Lead	IMR 4198	23.0	1500	1308	Lyman No. 403169
260 Lead	IMR 3031	44.0	1720	1708	NA
260 Lead	AA 5744	26.0	1651	1573	Accurate Arms
300 Lead	AA 5744	24.0	1515	1528	Accurate Arms
260 Lead	FL		1420	1165	Factory load

40-72 Winchester



Historical Notes Introduced for and with the Winchester Model (895 lever-action, box-magazine repeater, the 40-72 was not very popular, but was loaded until 1936.

General Comments This cartridge uses a smaller diameter, 30grain heavier bullet, compared to the much more powerful 405 Winchester. The latter was preferred by most purchasers of the Model 1895. Blackpowder cartridges of the 1890s suffered from competition with the newly introduced smokeless powder cartridges of that era. Most blackpowder cartridges introduced at that time had no chance to establish any degree of popularity Although longer, this case has the same basic body as the 30-40 Krag. Because headspacing is on the rim, it may not be possible to safely use that case to make the 40-72, except for very low-pressure loads.

40-72 Winchester Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
330 Lead	IMR 3031	40.0	1435	1510	Lyman No. 406150
300 Lead	FL		1425	1350	Winchester factory load
330 Lead	FL		1407	1451	Winchester factory load

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40-82 Winchester



Historical Notes Introduced in 1885 for the Winchester single-shot and also available for the Model 1886 lever-action repeater, this cartridge was popular enough to make the transition into the smokeless powder era. It was loaded up to 1935.

General Comments The 40-82 WCF gained a favorable reputation on elk and heavy game. It developed a higher muzzle velocity than many other blackpowder cartridges, which made it easier to hit with over unknown distances. Despite the relative popularity, rifles in this chambering are seldom encountered. Most of the original single-shots and Model 1886s have been rebarreled to some more modern chambering. It should be possible to convert the 45-70 case to work in these rifles, but the neck would be very short. The 45 Basic will make perfect cases. Although groove diameter was typically 0.408-inch, bullets used in original loads were only 0.406-inch diameter.

40-82 Winchester L	oading Data and	Factory B	Ballistics
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Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
260 Lead	IMR 4198	28.0	1425	1180	Lyman No. 403169
260 Lead	FL		1490	1285	Winchester factory load
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401 Winchester Self-Loading (401 WSL)

Historical Notes The 401 was introduced by Winchester in 1910 for its new Model 10 Autoloading rifle, which was a minor modification of the Model 1907. Both the eartridge and the rifle were discontinued in 1936, but the ammunition was loaded by most ammunition companies until after World War II. It is another obsolete "Self-Loading" cartridge.

General Comments The 401 is the most powerful of the Winchester Autoloading line, and the only one suitable for deer. The 401 found favor with many hunters as a quick, short-range number

for hunting deer and black bear. Velocity is too low and the trajectory too high for this to be a useful cartridge beyond about 150 yards. It can be reloaded, but like all cartridges used in semiauto guns, it is necessary to stick to the factory ballistics or the rifle action may not function properly. Proper bullet diameter is 0.406inch, but 0.410-inch revolver bullets can sometimes be used safely — verify chamber clearance. With a bit of lathe work, 35 Remington cases can be converted to work perfectly in 401 WSL chambered rifles.

401 Winchester Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
200 SP	2400	24.7	1915	1625	Lyman
212 Lead	IMR 4227	29.0	2074	2025	Lyman
240 Lead	IMR 4227	27.5	1968	2150	Lyman
200 SP	FL		2135	2020	Winchester factory loac
250 SP	FL		1870	1940	Winchester factory load

40-70 Peabody "What Cheer"



Historical Notes Made for the Peabody-Martini rifles (made by the Providence Tool Co.), this is one of a series of cartridges named for the "What Cheer" rifle range outside Providence, R.I., which opened in 1875. The first of the Peabody sporting and target rifles was said to have been exhibited at the opening celebration. The 40-70 cartridge netually was not introduced until 1877 or 1878. The Union Metallic Cartridge Co. loaded the round and so did Winchester.

General Comments This is an odd-shaped cartridge with a long, tapered shoulder and short body. Most samples have Berdan priming. Bullet diameter is 0.408-inch, but most nominal 0.406inch bullets will cast sufficiently oversize to meet this diameter. This is not a common cartridge in collections, and rifles in this chambering are rare. For these low-pressure loads, 348 Winchester cases could be converted to work in this chamber.

40-70 Peabody "What Cheer" Loading Data and Factory Ballistics

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Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
330 Lead	IMR 4198	22.0	1350	1340	Lyman No. 406150
380 Lead	FL		1420	1710	Factory load
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40-90 Peabody "What Cheer"

Historical Notes This unusually shaped cartridge was for the Peabody-Martini Rifle No. 3, introduced in 1877-78. This rifle was a fancy model similar to the No. 2 "Creedmoor," but was designated the "What Cheer". This was in line with the Peabody policy of naming its rifles after famous target ranges of the day.



General Comments The 40-90 Peabody is a bottlenccked case similar to the other "What Cheer" cartridges. This was a popular match cartridge until the early 1900s. Proper bullet diameter is 0.408-inch. Cast bullets intended for the 405 Winchester can be sized down and used in this round. No one lists a mould for a 500grain bullet for this cartridge. For these low-pressure loads, 348 Winchester cases could be converted to work in this chamber.

40-90 Peabody "What Cheer" Loading Data and Factory Ballistics

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Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
330 Lead	IMR 4198	27.0	1450	1550	Lyman No. 406150
500 Lead	FL		1250	1735	Factory load
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405 Winchester

Historical Notes The 405 is another of the rimmed cartridges developed for the Winchester Model 1895 lever-action rifle. Introduced in 1904, the rifle became obsolete in 1936 but has been reproduced recently in limited runs; most were chambered for cartridges that are somewhat more modern but one run was promised in 405. The Winchester single-shot also chambered the 405, and a number of double rifles were turned out in this chambering in England and Europe. The Remington-Lee boltaction rifle was available in 405 caliber between 1904 and 1906. The old Eley-Kynoch catalog lists the 405 Winchester with a 300-grain softpoint bullet at standard factory-load velocity.

General Comments The 405 Winchester is the most powerful rimmed cartridge ever developed for the lever-action rifle. It is adequate for any North American big game at short- to mediumrange and has been used successfully in Africa on all species. In the old Model 1895 Winchester, with its curved buttplate and poorlydesigned stock, it had a reputation for punishing recoil. Theodore



Roosevelt used the 405 in Africa and thought very highly of it as a lion cartridge. However, John Taylor in his excellent book. African Rifles and Cartridges, rates it as a poor choice compared to other available chamberings for African use. The short, fat. 300-grain round-nosed bullet loses velocity rapidly and lacks the sectional density necessary for deep penetration of heavy game. Nevertheless, it is quite adequate for any North American animals at ranges of 100 to 150 yards. Although longer, this case has the same basic body as the 30-40 Krag. However, because headspacing is on the rim, it is not possible to safely use that case to make 405s, except for very-low-pressure loads (which this editor has donc). With modern jacketed pistol bullets, one can thus make perfectly adequate short-range deer loads. A-Square has recently reintroduced 405 ammunition. Buffalo Arms (208-263-6953) offers modified 30-40 cases that are the correct length and have a modified rim to give the correct headspace.

405 Winchester Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
290 Cast	IMR 3031	40.0	1500	1449	Lyman No. 412263
300 SP	IMR 4895	56.0	2230	3321	NA
300 SP	IMR 3031	57.0	2 250	3380	NA
300 SP	FL		2200	3220	Winchester lactory load

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40-75 Bullard



Historical Notes Introduced in 1887 for the Bullard lever-action repeating rifle and available for the single-shot, the 40-75 was the same case with a different bullet weight and powder charge as the 40-60 Bullard.

General Comments This is a big game cartridge similar in performance to the 40-60 Marlin or the 40-65 Winchester. Winchester's cartridge achieved the greatest popularity of these three. Proper diameter for a cast bullet is 0.413-inch, which is significantly larger than many of the other 40-caliber cartridges, which used a bullet of 0.403-inch diameter. The old Bullard catalog states that the 40-60 Marlin can be fired in guns of the above chambering. If so, then the 40-65 WCF could also be used, as it is the same case as the Marlin round. It should be possible to convert 45-70 cases to work in these rifles.

40-75 Bullard Loading Data and Factory Ballistics

Builet (graina/type)	Powder	Grains	Velocity	Energy	Source/Comments
260 Lead	blackpowder (Fg)	75.0	1513	1315	Lyman No. 412174
260 Lead	IMR 4198	20.0	1500	1302	Lyman No. 412174
258 Lead	FL		1513	1315	Factory load

40-90 Bullard

Historical Notes This rather odd bottlenecked cartridge was developed for the Bullard single-shot and repeating rifles, introduced in 1886-87. Both Winchester and Remington manufactured this round for a number of years.

General Comments This is a rather large, fat cartridge with ballistics similar to other 40-caliber cartridges of the period such as the 40-82 Winchester. There was not a lot to choose from regarding performance between any of these. Cartridges designed by the big inanufacturers for its rifles were more widely advertised and distributed, and consequently won the popularity race. Cartridges like the Bullard line gradually faded into the background. The 40-90 Bullard was undoubtedly an effective big game cartridge, particularly if the now-rare 400-grain loading, was used. Considering the low-pressure loads used, it should be possible to convert 50-90 Sharps cases for safe use in rifles so chambered.

40-90 Bullard Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
300 Lead	blackpowder (Fg)	90.0	1569	1648	Lyman No. 415175
300 Lead	IMA 4198	29.0	1450	1405	Lyman No. 415175
300 Lead	FL		1569	1648	Factory load

40-40 Maynard (1882)

Historical Notes A cartridge for the Maynard 1882 rifle, Improved Hunting or Target No. 9 and the Mid Range Target or Hunting No. 10, it was advertised as a combination hunting and target cartridge.

General Comments in performance, the 40-40 is similar to the 44-40 WCF. Maynard made only two bullet weights in 40-caliber; the \$30-grain was intended for the longer 40-60, but was sometimes used in the 40-40. Bullet diameter of these cartridges is not the

used in the 40-40. Birlet bianeter of these cartridges is not the same as the 0.403-inch of most Sharps and Winchester cartridges. The Maynard Co. sold moulds or factory-made bullets for its rifles. The 40-caliber Maynard bore is usually 0.415- to 0.417-inch diameter. It should be possible to convert 303 British cases to work in these rifles.

40-40 Maynard 1882 Loading Data and Factory Ballistics

Builet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
260 Lead	IMA 4198	24.0	1400	1140	Lyman No. 413174
270 Lead	FL		1425	1222	Factory load
330 Lead	FL		1260	1168	Factory load

40-60 Maynard (1882)

Historical Notes This is an intermediate-range match cartridge for the 1882 Maynard Models 10, 12 and 13 Hunting and the Models 15-16 Target rifles. It does not use the same case as the longer 40-70 Maynaid.

General Comments The 40-60 Maynard is an elongated version of the 40-40 and differs mainly in the longer case length Unfortunately, it duplicated the performance of similar Marln. Sharps and Winchester cartridges, and for that reason, it did nobecome popular or widely used. It should be possible to convert 30. Brutish cases to work in these rifles.

40-60 Maynard 1882 Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
300 Lead	IMR 4198	26.0	1370	1248	Lyman No. 413175
330 Lead	<u> የኒ</u>		1370	1380	Factory load
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40-70 Maynard (1882)

Historical Notes This has the longest case of the three 40-caliber cartridges chambered in the 1882-type Maynard single-shot rifle. which was available in both target and hunting models.

General Comments Some publications show the 40-70 Maynard to be the same as the 40-60, but with a different load. Others indicate that it is identical except for length. Actually, it has a little longer case (0.21-inch) with a slightly larger rim and base diameter. The

40-60 can be fired in a 40-70 chamber, but the reverse is not true. In overall length, this is the shorter of the two cartridges because of the lighter bullet seated farther down in the case. This is more of a bunting cartridge, although it was also available in the target ritle models. It should be possible to convert 303 British cases to work in these rifles.

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40-70 Maynard (1882) Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
260 Lead	IMR 4199	27.0	1450	1211	Lyman No. 413174
270 Lead	FL		1645	1620	Factory load
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44 Evans Short



Historical Notes This is the cartridge for the various Old Model Evans rifles introduced in 1875. Winchester loaded the amnunition until the early 1920s.

General Comments The Evans rifle was designed for military use. but when it was turned down by the U.S. Ordnance Department, it was manufactured as a sporting number. The Evans had a magazine capacity of 34 cartridges held in the four-column tubular magazine located in the buft. This was an odd-looking lever-action rifle Evans rifles were once somewhat common items and box lots of

ammunition could be purchased until 1940-41. This is not a particularly strong action, so only use blackpowder loads. A load of 28 grains of Fg or FFg was used in the original round. Cases can be made by cutting off 303 Savage cases and perhaps thinning the rim. as required (As in similar run-thinning situations, pistol primers may have to be used, but those work well in most blackpowder or blackpowder pressure loads anyway) Also, either the case mouth must be thinned or an undersized bullet must be used to provide adequate case-neck to chamber-wall clearance.

44 Evans Short Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
215 Lend	F!		850	350	Winchester lactory load



44 Evans Long

Historical Notes The 44 Evans Long was developed for the 1877 New Model Evans sporting rifle. It is sometimes referred to as the 44-40 Straight or the 44-40-300 because of its different loadings.

General Comments The New Model Evans rifle was similar to the Old Model except for the change to a longer, more powerful cartridge. The magazine capacity was only (!) 26 rounds compared to 34 for the Old Model. Again, this is not a strong action, so it is advisable to use only blackpowder loads. The cartridge was loaded

44 Evans Long Factory Ballistics

Builet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
280 Lead	FL		200	903	Factory load

44 Henry Center Fire Flat

Illitorical Notes This is a centerfire version of the rimfire 44 Henry Flat. In 1891, 1020 M1866 Winchester rifles wee chambered for this cartridge and shipped to Brazil.

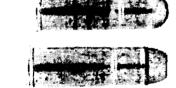
General Comments Rifles for this cartridge are extremely rare. The 1866 Henry rifle was not very strong. Those who want to shoot one of these should stick to blackpowder. The proper charge is 26 or

44 Henry Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments				
200 Lead	FL		1150	594	Factory load				
227 Lead	FL		1200	725	Factory load				
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load anyway.)

44 Game Getter 44-40 Marlin 44 Colt Lightning



Historical Notes in 1908, Marble Arms Corp. introduced its Game Ciciter, a double-barrel, over/under pistol with a removable skeleton butistock. The upper barrel was ritled and chambered for the 22 nullire cartridge; the lower barrel was smoothbore and chambered for the 44 Shot cartridge. The introduction of this pistol bolstered the popularity of the several varieties of 44 Shot cartridges.

the Stevens Model 101 "Featherweight" rifle (1914-16) was chambered for this cartridge as well as the 44 XL and 44 WCF shot cartridges. The 44 WCF Shot cartridge was a crimped case with authourd wadding; others were loaded with a wood or paper bullet" that enclosed the shot. The Marble catalog of 1914 stated, Shot cartridges with paper or wooden ends are especially adapted to infed barrels. However, they can be used in the Game Getter, but give uncertain results." UMC loaded a 44 Round Ball cartridge buttor the introduction of the Game Getter, using 34 grains of blackpowder and a 115-grain round lead ball. This combination of gun and cartridge became very popular and Winchester and U.S. Ammunition Co. began to offer it, calling it the 44 Game Getter.

General Comments The 44-40 is, of course, still loaded today, but during its life span as a blackpowder cartridge (and the early smokeless powder days) it was available in a variety of loads that are now obsolete.

The standard load of 40 grains of blackpowder and a 200-grain bullet of the 44 WCF was altered slightly (a 217-grain bullet was used) and the resulting cartridge was called the 44-40 Marlin or the 44 Colt Lightning Magazine Rifle. All are nothing more than load variations on the standard 44-40 Winchester – some rifles may require shorter overall cartridge lengths.

Also obsolete today are the high-velocity smokeless powder loads that were offered for rifles with stronger actions.

11TH EDITION 145



with 275- to 300-grain bullets and 40 to 43 grains of blackpowder. Although this case is somewhat larger in diameter, usable cases might be made by cutting off 303 Savage cases as with the Henry

Center Fire Flat. As with all similar numbers, it is best to load only

with blackpowder or Pyrodex. Also, either the case mouth must be

thinned or an undersized bullet must be used to provide adequate

used. Cases can be made by cutting off 303 Savage cases and, perhaps thinning the rim, as required. (As in similar rim thinning

situations, pistol primers may have to be used, but these are

preferable in almost every blackpowder or blackpowder pressure

case-neck to chamber-wall clearance.

44-40 Extra Long

General Comments The 44-40 Extra Long is listed in various publications and sample rounds are common. It has a longer body and neck than the standard 44-40 WCF. The author was unable to find any record indicating the gun for which this cartridge was designed. It is listed so the reader will not confuse it with the straight Ballard or Wesson Extra Long 44 cartridges. These are not

the same. Some believe this is the 44-40 shot case with a conical bullet. According to William R. Small of Ojo Caliente, N.M., the Stevens Model 101 "Featherweight" rifle (1914 to 1916) chambered this round as well as the 44 XL and 44 WCF shot cartridges. Cases can be made by shortening and necking 444 Marlin cases.

44 Long Center Fire (Ballard)

Historical Notes The 44 Long CF, was introduced in 1875-76 as one of the chamberings for the LM. Marlin Ballard Sporting Rifle No. 2. It was also used in a number of other single-shot rifles, including those of Frank Wesson. It was replaced by the 44 Extra Long CF, before both were phased out by the more popular 44-40 WCF. It is the centerfire equivalent of the 44 Long rimfire.

General Comments This is a more-or-less transitional cartridge from the rimfire to the better centerfires. Most early breech-loading rifles were developed for rimfire cartridges and it was a simple

matter to bring out a similar centerfire for the same basic rifle. This allowed the shooter to reload; however, most of these carifidges. were no more effective than the rimfire they replaced and so these did not last long. The original load used 35 grains of blackpowder and a 227-grain bullet. Muzzle velocity was low -- only about 1,100 to 1,200 fps. As with the 44 Evans Long, Short or Henry Flat Center Fire, cases can be made by cutting off 303 Savage cases, but stick to blackpowder and east bullets.

44 Extra Long Center Fire (Ballard)

Historical Notes This cartridge is sometimes listed simply as the 44 Extra Long. It is a straight case and is the centerfire version of the 44 Rimfire Extra Long. As near as can be determined, it was introduced in 1876 for the I.M. Marlin Balkard Sporting Rille No. 2. It was only available for a few years, before being replaced in the Ballard rifles by the 44-40 WCF. Rifles in this chambering are rare today.

General Comments The 44 Extra Long was not a popular Ballard number because there were too many better 44-caliber cartridges

44 Extra Long (Ballard) Factory Ballistics

available. The 44-40 WCF was already popular by the time the Ballard round hit the market and the 44 Extra Long was available only in the single-shot. It did, however, provide a reloadable case for those used to the 44 EL rimfire, and quite a few of the old rimfire rifles were probably converted to use the conterfire type. Remingtonloaded this with 50 grains of blackpowder and a 265-grain bullet. Cases can be made by cutting off 303 Savage cases as mentioned in the discussion about the 44 Henry Flat Center Fire.

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments			
265 Lead	FL		1320	1030	Remington factory load			

44 Wesson Extra Long

Historical Notes Made for the Frank Wesson up-up rifles, this cartridge appears to be identical to the 44 Extra Long Ballard except for the shape of the bullet. The Wesson bullet shows two grease grooves when loaded in the case, while the Ballard shows only one.

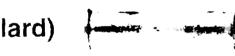
General Comments Many of the Wesson tip-up rifles were furnished with a patented adjustable hammer, permitting the use of

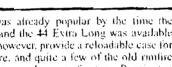
44 Wesson Extra Long Factory Ballistics

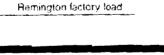
both rim- and centerfire cartridges. Lyman No. 419182 (240-grain) or 424100 (170-grain) bullets can be adapted to this cartridge. Original load used 48 to 50 grains of blackpowder. Wesson rifles in this chambering are very rare. As discussed with the 44 Henry Flat Center Fire, cases can be made by cutting off 303 Savage cases.

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Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
250-257 Lead	FL		1340	1010	Factory load

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44-90 Remington Special (Necked)

44 REM.

Historical Notes The 44-90 Remington Special looks like the 44-90 Sharps, but on closer inspection it has a shorter case with slightly larger body diameter so these are not interchangeable. The 40-90 was introduced as a match cartridge for the Remington rolling block Creedmoor series in 1873. Remington catalogs listed empty cases and bullets for this cartridge as late as 1910.

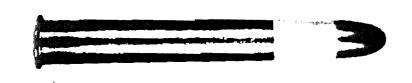
General Comments The 44-77 Sharps had a 2 1/4-inch case, the 44-90 Sharps a 2 5/8-inch case. The 44-90 Remington Special case was 2 7/16-inch or 2.44-inch long. The Remington carridge was regularly loaded with a 550-grain patched or lubricated lead bullet,

which is heavier than the normal bullet used in Sharps cartridges. Remington probably designed its 44-90 so a heavy bullet and 90 grains of powder could be used without increasing the overall length of the cartridge. The loaded length is actually less than the similar Sharps cartridges. This is primarily a match cartridge, but would also be effective on almost any big game. Lighter bullets and more powder could be used to mcrease blackpowder ballistics for hunting. The only safe source of cases (those that have been extensively modified from 348 Winchester size) is Buffato Arms (208-263-6953).

44-90 Remington Special Loading Data and Factory Ballistics

Builet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
470 Lead	IMR 4198	30.0	1270	1688	Lyman No. 446187
470 Lead PP	blackpowder (Fg)	90.0			Factory load, early paper patch
550 Lead	blackpowder (Fg)	90.0	1250	1812	Remington factory load

44-100 Remington "Creedmoor" /44-90 Remington Straight



Historical Notes The 44-100 cartridge was for the Remingtonlicphurn or No. 3 Long-Range Creedmoor rifle. It was introduced in 1880. This special 2 6/10-inch shell had various loadings and builtets plus the usual variety of designations for the same round. As it to add more confusion, a 2 4/10-inch version was also made. This may have been designed to furnish a straight case as an alternative to some of the necked Sharps 44 cartridges.

General Comments Also known as the 44-2 6/10-inch and 44-90 Hemington Straight, this was designed as a match cartridge for tong-range shooting out to 1,000 and even 1,400 yards. It was awalenately popular, but rifles in this chambering are scarce. The cartridge is a collector's item. Remington manufactured a number of match rifles designated "Creedmoor," and this is the correct spelling of the Creedmoor, Long Island rifle range. However, the company also made various cartridges under the "Creedmore" label (note the different spelling). Ammunition so designated had a target-type bullet and very often was intended for rifles that the manufacturer had never called "Creedmoor." This has caused much confusion, although Remington changed the spelling to try to prevent it. Both Remington and Winchester furnished empty cases and bullets for handloading. Cases can be converted from the 45 Basic.

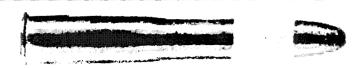
44-100 Remington "Creedmoor" Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
470 Lead	IMR 4198	27.0	1410	2080	Lyman No. 446187
520 Lead	FL		1435	2380	Remington factory load
550 Lead	FL		1380	2338	Remington factory load

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44-95 Peabody "What Cheer"

Historical Notes The 44-95 Peabody also had a 100-grain loading and was occasionally referred to as the 44-100 Peabody. It is the largest of the Peabody "What Cheer" cartridges. It was the original chambering for the Peabody-Martini Long-Range Creedmoor Rifle. The straight stock version was the No. 3 "What Cheer" and eventually the cartridge was given this name. Some authorities say it was introduced in 1877, but it may have made its debut as early as 1875. It was popular primarily as a target round.



General Comments Peabody and Peabody-Martini rifles were manufactured by the Providence Tool Co. of Providence, R.I. The action was patented by H.L. Peabody of Boston, Mass., in 1862. Peabody-Martini military rifles were manufactured for the Turkish government during 1873 and something like 600,000 were delivered. The original Peabody pivoting block action had a sidehanimer, but the Swiss Martini modification did away with this, employing an internal tock. The British Martini-Henry rifle is based on this modified American design. This is one of the strongest of the old single-shot actions.

44-95 Peabody "What Cheer" Loading Data and Factory Ballistics

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Bullet (grains/type)	Powder	Grains	Vetocity	Energy	Source/Comments
470 Lead	blackpowder (Fg)	100.0	1380	1990	Lyman No. 446187
470 Lead	IMR 4759	21.0	1380	1990	Lyman No. 446187
550 Lead	FL		1310	2100	Factory load
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44-70 Maynard (1882)

Historical Notes Introduced for the 1882-type Maynard single-shot rifle, the 44-70 was also available for the Hunters Model No. 11 and the Creedmoor No. 14 match rifle.

General Comments The 44-70 Maynard is a 44-caliber version of shoo the popular 45-70 Government military round. Many riflemen of short

the late 1880s preferred the 44-caliber over the larger 45 bore, although there is little difference in bore dimensions. The Maynard company furnished a 430-grain bullet for hunting and general shooting and a \$20-grain for target work. Although somewhat too short, 45-70 cases will work in these rifles.

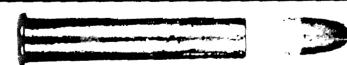
44-70 Maynard (1882) Loading Data and Factory Ballistics

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Bullet (grains/type)	Powder	Grains	Vetocity	Energy	Source/Comments
470 Lead	IMR 4198	26.0	1300	1768	Lyman No. 446187
430 Lead	FL		1310	1640	Factory foad
Arc	······				

44-75 Ballard Everlasting

Historical Notes The 44-75 is one of the rarer Ballard cases. Seldom found in collections and not mentioned in most cartridge books, L.D. Satterlee * lists it as available for the J.M. Marlin Ballard Perfection No. 4, Pacific No. 5 and Schuetzen No. 6, all introduced in 1876. He gives case length as 2 1/4-inch.⁺ This chambering is not listed in the Marlin Fire Arms Co. after Marlin began making Ballard rifles in 1881. James J. Grant ** says this was one of the special Marlin Evenlasting cases using the shallow Berdan-type No. 2 primer similar to the 40-65. He also has specimens using Large Rifle primers.

General Comments The 44-75-2 1/2-inch can be made by trimming and sizing Sharps 45-2 6/10-inch cases. This must have been intended as both a target and hunting cartridge since it was



available in rifles of both types. Marlin and Ballard catalogs listed a patched 405-grain, 44-ealiber bullet, which was probably one of the weights used in the 44-75. Bullets for 44-caliber Sharps cartridges of 0.446-inch diameter can be adapted to the 44-75 Ballard. No factory ballistics are available, so it is probable that only empty cases and bullets were furnished.

*op. cit.

**More Single Shot Rifles (New York, 1959).

#John T. Amber owned a fine No. 7 Ballard in 44-75 chambering, complete in case with hunting and target sights, etc., and including a score or more of cases. All were 2 1/2 inches long, not 2 1/4 inches, and were Berdan-primed Everlasting type.

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44-100 Ballard

Historical Notes The 44-100 Ballard Everlasting was one of the chamberings introduced with the various J.M. Marlin Ballard rifles. It is first listed for the 1876 Model Pacific No. 5 and Long Range No. 7A. It was discontinued about 1880 and does not appear as a standard chambering in later Marlin Fire Arms Co. catalogs. However, the 1888 Marlin & Ballard catalog again fists brass shells under obsolete sizes at 12 cents cach. The 45-100 Ballard, which came out later, is based on this same case with the neck rearned out to accept the larger-diameter bullet.

General Comments This is another rare Ballard cartridge. It was an accurate target number and had considerable knockdown power for big game. Ballard rifles were manufactured by several companies. The best known of these were made by the Marlin Fire Arms Co. after it was incorporated in 1881. Most of its models and cartridges are not particularly scarce. John M. Marlin organized the Marlin Fire Arms Co., but prior to that, he turned out Ballard rifles under the name of J.M. Marlin (1875 to 1881). The first Ballard arms were for rimfire cartridges, and these were introduced by Ball & Williams in 1861, and continued until 1866 under its brand. From 1866 to 1869, these were made by Merrimack Arms & Manufacturing Co., and from 1869 to 1873 by Brown Manufacturing Co. Some of these early models and cartridges are rare and valuable. Although the 44-100 Ballard is larger and somewhat longer in diameter, it might be possible to form 45-70 cases to work in these rifles. Basic 45s could be cut to the proper length. In either case, one might have to turn down the rim to fit the chamber.

44-100 Ballard Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
365 Lead	blackpowder (Fg)	110.0	1500	1830	Lyman No. 446109
365 Lead	IMR 4198	26.0	1350	1480	Lyman No. 446109
535 Lead	FL		1400	2328	Factory load

44-100 Wesson

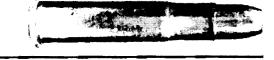


Illumiteal Notes As with the 44-85 Wesson, this one was found on U.S. Cartridge Co. advertising sheet printed in 1881-82. This is also a straight case with the length listed as 3-3/8 inches. The bullet is reated deeply so the total length of the loaded cartridge is 3-9/10 where. The load is given as 100 or 120 grains of blackpowder with \$10-grain, paper-patched bullet.

financel Comments What date and what rifle? There is no maximum given on this. As previously stated, all 44-caliber Marps cartridges are necked, and perhaps this is intended as the straight case counter to the necked 44-100 or 105 (2 5/8-inch) Sharps. This is speculation, but many shooters of this period did prefer the straight case. The 44-100 Wesson is not listed in any previous cartridge book, and now that its existence has been brought to the attention of collectors, additional information may be forthcoming. Muzzle velocity of this combination would be approximately 1350 to 1400 fps, depending on charge, barrel length, etc.

44-77 Sharps & Remington

Invioring Notes This is the 2-1/4-inch Sharps bottlenecked case method in 1869 for the Model 1869 Sharps breech-loading method rife. It was also one of the chamberings available for the



General Comments A variety of factory loadings were turned out for the 44-77, with bullet weights from 300 grains to 470 grains. It is sometimes listed as the 44-70 or 44-75, depending on the powder

Chapter 3

44-85 Wesson

Historical Notes The 44-85 Wesson is another of the mysterious and little-known Wesson cartridges. The little information available was gathered from a United States Cartridge Co. (U.S.C.C.) advertising sheet printed in 1881-82. The 44-85 is a straight case with a length of 2 7/8 inches. All 44-caliber Sharps cartridges were necked, so it is not similar to any of those. There is nothing to indicate which Wesson rifle it was for, but with that length, it was probably meant for the Creedmoor models.

General Comments It is well to point out that during the late 1800s, many riflemen did not like bottlenecked cases. It may be that Frank Wesson introduced this cartridge because all the Sharps 44 cases were necked and some individuals wanted the same performance in a straight case. The U.S.C.C. load had a 390-grain patched bullet backed by 85 grains of Fg blackpowder. This would have developed a muzzle velocity of approximately 1,450 fps in the average rifle.

44-85 Wesson Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments				
	blackpowder (Fg)	85.0	1450	1821	Factory load				

44-90 Sharps Necked (44-100 Sharps 2-5/8"/ 44-105 Sharp Necked)

Historical Notes This is the 44-90 Sharps 2 5/8-inch case of larger capacity than the 44-77 Sharps. It was the chambering for the Sharps 1873 Creedmoor rifle made by the old Sharps Rifle Manufacturing Co., before its reorganization in 1875-76, and was chambered in later side-hammer models. Advertisements list it as early as June of 1873. Sharps rifles of 44 caliber were discontinued during 1878 in favor of the more popular 45 caliber.

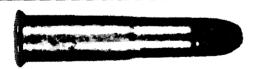


General Comments These are just different loadings and bullet weights. Ammunition was available with bullets weighing 277, 450, 470, 500 and 520 grains. It was not as popular for hunting as some of the other Sharps chamberings, but was used for 1,000-yard match shooting. A version with a 0,19-inch shorter case also existed. Both are listed in the 1910 Winchester catalog. The only safe source of cases is Buffalo Arms — They extensively modify 348 Winchester cases to properly fit these chambers (208-263-6953).

44-90 Sharps (Necked) Loading Data and Factory Ballistics

Powder	Grains	Velocity	Energy	Source/Comments
IMR 4198	28.0	1300	1630	Lyman No. 446187
FL		1270	1860	Factory load
	, = = .		IMR 4198 28.0 1300	IMA 4198 28.0 1300 1630

44-60 Sharps & Remington (Necked)



Historical Notes This 1 7/8-inch 44 case was loaded by Remington and Winchester. It was introduced in 1869 for the 1869 Sporting Rifle and used in Sharps, Winchester and Remington single-shot rifles.

General Comments This was a general purpose cartridge for hunting or target shooting. It was listed by Remington and labeled as one of its "Creedmore" types (note the difference in spelling), which has caused some confusion identifying the round. Sharps match rifles for long-range shooting were named after the famous range at Creedmoor, Long Island. Other rifle makers also used this name. Remington applied the name to cartridges not originally chambered in the Sharps Creedmoor line. It is interesting to compare this cartridge with the 42 Russian Berdan Carbine round. Except for bullet diameter, the two are practically identical. This suggests the possibility that the 44-60 was developed by expanding the neck of the Russian Carbine cartridge, much as some modern wildcats are made. The 44-60 necked Peabody, Winchester, Remington, etc. appear to be the same as the 44-60 (1 7/8-inch) Sharps cartridge.

44-60 Sharps (Necked) Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
315 Lead	IMR 4198	24.0	1300	1188	Lyman No. 446110
396 Lead	FL		1250	1375	Factory load
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45-50 Peabody (Sporting)

45 SPORTING

Humarical Notes A sporting cartridge for the Peabody-Martini **Humarical Notes** A sporting cartridge for the Peabody-Martini **Humarical Notes** A sporting after **Humarical Notes** A sporting cartridge for the Peabody after **Humarical Notes** A sporting cartridge for the Peabody after **Humarical Notes** A sporting cartridge for the Peabody after **Humarical Notes** A sporting cartridge for the Peabody after **Humarical Notes** A sporting cartridge for the Peabody-Martini **Humarical Notes** A sporting cartridge for the Peabody after **Humarical Notes** A sportes A sportes A sportes A sportes A sportes A sporte

(innertial Comments The 45-50 bears a close resemblance to the Praimity 45-55 Turkish carbine cartridge. It is probable that it is a multication of the Turkish military round, adapted to sporting use. Mustical measurements of the two are not identical, but very close, thus is a rare cartridge and rifles in this chambering are seldom emountered. Almost any 45-caliber rifle bullet can be sized down to 0.454-inch diameter and used; the Lyman No. 456191 (300-grain) will work fine. Powder charge can be varied from 50 to 55 grains of Fg blackpowder, depending on bullet weight and seating depth. For smokeless powder loads, use 22 to 23 grains of Du Pont (IMR) 4198. This will more-or-less duplicate original blackpowder ballistics. It could be possible to cut and form 45-70 cases to work in these rifles. This is one of the few Peabody designs that is close enough to common current chamberings to offer hope of conveniently shooting the rifle chambered for it.

45-50 Peabody (Sporting) Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
255 Lead	IMR 4198	25.0	1350	1080	Lyman No. 454190
300 Lead	blackpowder (Fg)	50.0	1285	1080	Lyman No. 456191
290 Lead	FL		1295	1085	Factory load

44-60 Winchester 44-60 Peabody "Creedmoor"

Historical Notes This cartridge is for the Peabedy-Martini "Creedmoor" rifle introduced in 1877-78. It is not a well-known entridge and apparently was of limited popularity. Winchester loaded this round under its own name, which it introduced in 1874-75. This is the same as the Sharps 44-60-1 7/8-inch necked cartridge. General Comments Examination of these cartridges in comparison with the 42 Russian Carbine indicates they are identical except for neck and bullet diameter. The 44-60 was likely developed by expanding the neck of the Russian cartridge, very much as some of our modern wildcats are made. The Russian Carbine cartridge is a shortened version of the 42 Berdan.

44-60 Peabody "Creedmoor" Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
365 Lead	blackpowder (Fg)	65.0	1280	1410	Lyman No. 446109
395 Lead	FL		1250	1375	Winchester factory load

45 Remington Thompson



Historical Notes This cartridge was developed for use in the Thompson M-1923 "Military Model" submachinegun. While this cartridge has been described as a stretched 45 Automatic, this is not precisely correct. Both case and bullet diameter are smaller than in the 45 Automatic (0.472- versus 0.476-inch and 0.447- versus 0.451-inch, respectively). The sample cartridge is headstamped "REM-UMC" over "45 ACP." Development was in 1923 as a joint venture of Remington Arms and Auto Ordnance Corp. Intended application was a long-barreled version of the Thompson that could

provide significantly improved ballistics over the standard 45 Automatic-chambered versions.

General Comments When one considers that this number generated ballistics exceeding any standard 44 Magnum factory toading fired from a pistol, this was, indeed, a significant ballistic improvement, compared to the 45 Automatic. However, it seems likely that the Thompson, despite its significant weight and good design, must have been something of a handful when firing such loads fully automatic.

45 Remington Thompson

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The stand (man for a line a)	Decodes	Carlan	Velocity	Eporaly	Source/Comments
Bullet (grains/type)	Powder	Grains	velocity	Energy	Sourcercomments
				•••	
050	m ;		4150	1165	Factory load
250	F1		1450	1100	raciory load
200					

45-60 Winchester

Historical Notes The 45-60 is one of several cartridges designed for the Winehester 1876 Centennial Model rifle The 45-60 cartridge was introduced in 1879. Winchester continued production of this cartridge until 1935, although the rifle was discontinued in 1897. The Kennedy lever-action repeating rifle used this cartridge, as did the Colt Lightning pump-action repeater.

production onlineed in is carriedge. Scarridge, would not be long carriedges used in the single-shots of the period. The 45-60 would be a better deer carriedge than the 44 WCE but would not be sintable for larger game. Rifles for this carriedge are not strong, so one should not attempt to exceed original ballistics. It should be easy to form 45-70 cases to work in these fiftis.

General Comments The 45-60 was brought out, with others of the Model 1876 cartridge fine, to provide greater power than the 44-10

45-60 Winchester Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Vefocity	Energy	Source/Comments
300 Lead	IMR 4198	25.0	1450	1410	Lyman No. 450191

45-75 Winchester (Centennial)

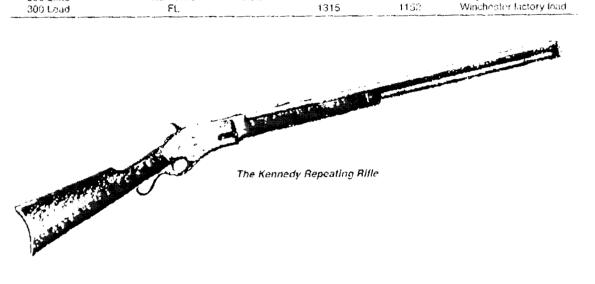
Historical Notes The 45-75 Winchester was the original chambering for the Model 1876 Centennial rifle. Other chamberings were added later. The Kennedy repeating rifle also used this round. Winchester continued to produce this cartridge until 1935. The Canadian Northwest Moninted Police adopted the '76 Winchester in 45-75 chambering and used it for 27 years.

General Comments To compete with the big Sharps and other single-shot cartridges, Winchester needed a longer repeating action. The Model To was designed to fill that need. However, as produced it was not long enough to handle cartridges with an overill length exceeding 2 1/4 inches. The 45-75 gives performance equal to, or slightly better than, the 45-70 Government by use of a shorter, fatter, bottlenecked case. The Model 76 action is not noted for great strength and heavy smokeless powder charges should be avoided. The 45-75 would be a good short-range deer or black bear cartridge by modern standards. It was favored by Theodore Roosevelt for grizzly bear. Usable cases can be made from 348 Winchester cases.

45-75 Winchester Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
350 Lead	IMR 4198	24.0	1380	1480	Lymun No. 456192
350 Lead	FL		1383	1485	Factory load
				a contraction of the state of the state	

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and other short cartudges used in the Model 1873 Winchester, The

45-60 design was probably influenced by the 45-70 Government

45-100 Ballard

Historical Notes Satterlee * indicates that this cartridge was introduced in 1878 with the Ballard Sporting No. 4-1/2 rifle. However, Grant first shows it with the 1882 (Marlin Fire Arms Co.) Pacifie No. 5. Manufacture of Ballard single-shot rifles was discontinued between 1888 and 1890. The 45-100 cartridge was still listed as a standard chambering in the 1888 Marlin & Ballard catalog. This was the last catalog that advertised the Ballard according to some authorities.

Comments The 45-100 is not a common cartridge, although it was available up to the time Ballard rifles were discontinued. It is the same case as the 44-100 Ballard, but the inside of the neck was reamed, to accommodate the larger 45enther bullet. Almost any 45-caliber lead rifle bullet can be sized to fit this case. The company offered 45-caliber bullets in 285, 405, 420, and 550 grains for loading this and other cartridges. Lighter bullets left room for up to 120 grains of blackpowder. This was used as both a target and hunting round and was equal in power to some of the big Sharps and Winchester cartridges of similar capacity. The old Ballard action is not particularly strong and caution is advised when using smokeless powder. Although the base is a bit smaller than the 45-70, one suspects usable cases could be made from 45-70 cases. If so, Basic 45 cases could be cut to the proper length to duplicate this cartridge, which is very similar to the 45-90 Winchester, only longer.

*op. cit.

45-100 Ballard Loading Data and Factory Ballistics

00 Lead			Velocity	Energy	Source/Comments
	blackpowder (Fg)	100.0	1400	2180	Lyman No. 457125
00 Lead	IMR 4198	22.0	1250	1740	Lyman No. 457125
50 Lead	FL		1370	2300	Factory load
50 Lead	FL	······	1370	2300	Factory loa

Ballard No. 5 Pacific Rifle

45-125 Winchester (45 Express)

Hinterical Notes Introduced in 1886 as a special-order chambering $k_{\rm H}$ the Winchester single-shot rifle, the 45-125 was not widely used and was discontinued after a few years. Winchester continued to the summunition until 1916.

Honeral Comments The 45-125 has a long bottlenecked case and non-themisthed with the 300-grain copper-tubed, "Express" bullet. Frimm No. 456191 is the proper bullet for reloading. In appearance, this cartridge resembles the British 500/465 Nitro, but they are not the same and can be distinguished by head markings, bullet diameter, etc. This is a powerful blackpowder number and would do for most big game in North America. One reason it became obsolete is that the 45-90 WCF will do the same thing with a smaller case and less powder.

45-125 Winchester Loading Data and Factory Ballistics

			·		
Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
300 Lead	IMR 4198	35.0	1475	1456	Lyman No. 456191
300 SP	FL		1690	1903	Winchester factory load

45-70 Van Choate

Historical Notes This cartridge was originally designed for the experimental Van Choate military bolt-action rifle made by the Brown Manufacturing Co. in 1872. It is similar to the 45-70 Government, but has a case length of 2-1/4 inches instead of 2-1/10 inches. It was used in other rifles as well because it was listed in Remington and Winchester catalogs as late as 1910-12. The paper patched bullet weighed 420 grains.

General Comments There are a number of variations of the basic 45-70 Government cartridge. Most of these vary by bullet weight, but a few use a different case length. One of these was the 45-78-475 Wolcott with a 2.31-inch case. There was also a 45-80 Sharpshooter cartridge that was used in special target rifles. This



had a 2 4/10-inch case that was very similar, if not identical, to th Sharps 2 4/10-inch case. Although these cartridges are identical i all dimensions except length, a rifle would have to be chambered to accept the extra-long case, so these would not be interchangeable Just what the originators hoped to gain from these variations is hard to imagine. It was probably done to allow a full or increased powder charge with a heavier or longer-than-standard bullet. Most of these variations have an odd-shaped bullet. For any of these, one can use the same bullets and loading data given with the 45-70. Standard 45-70 cases chamber in these rifles. To duplicate the original case, trim Basic 45s to the proper length.

45-75 Sharps (Straight) 45-70 Sharps 2 1/10"

Historical Notes This cartridge is identical to the 45-70 Government. It represents another instance of a manufacturer adding his name to a cartridge when chambered for his rifles. Also known as the 45-70 Sharps, it was added to the company product line early to mid-1875. It was one of the loadings of what was designated as the Sharps 45-2 1/10-inch case.



General Comments Use the same loading data as that given for the 45-70 Government. Most original Sharps rifles have blackpowder steel barrets so it is advisable to stick to lead bullets to reduce wear on the bore. Any load safe for the 1873 "Trapdoor" Springfield will be OK in Sharps rifles of any vintage.

45-75 Sharps (Straight) Factory Ballistics

Builet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments	
400 Lead	FL		1330	1580	Factory load	

45-100 Remington (Necked)

Historical Notes The 45-100 Remington necked cartridge is listed in the 1880-81 United States Cartridge Co. advertising sheet. It must have been a special-order chambering for Remington singleshot rifles because there are no references to it concerning a specific rifle. It was also available as a special order item for some of the late Sharps rifles, for it is listed in the 1875 Sharps catalog as the 45-2 1/4-inch case.

General Comments The 45-100 Remington uses a 2 5/8-inch necked case, which appears to be identical to the 44-90 Remington



except for the larger diameter and longer neck. As we have mentioned before, some shooters liked the straight case, while others preferred the necked case. All Sharps 45-caliber cases are straight. Perhaps Remington offered a choice to the man who wanted a necked 45-caliber cartridge. Since the U.S. Cartridge Co. shows this as loaded ammunition, at least a moderate demand must have existed. Although shorter, 348 Winchester cases can be modified for use in these rifles.



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45-82 Winchester 45-85 Winchester 45-90 Winchester 45-90 Winchester **High Velocity**

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distorical Notes These designations are often listed separately ing different case dimensions. However, these are nothing more المناه فاستعاد m.

fps and generating over 2,900 foot pounds of energy, it was no doubt a good killer. With a 200 lps advantage over the high-velocity -0 m 1 A 14 (M. 44)

4 loads were for the Winchester Model 1886 repeater or the 1885. de-shot. The 45-00 was miroduced in 1886. The other loads owed. The Marin Model 1895 was also chambered for the ip The smokeless powder 45-90 came out in 1895 and was continued about 1936

Goveral Comments For many decades after its introduction, the 40 was a popular sporting cartridge. Once offered in a highwity loading with its standard 300-grain bullet at nearly 2,000 vards more usable range.

The 45-90 case is practically identical to the 45-70, only longer. It is common practice to fire the 45-70 in these rifles when the proper ammunition is not available. The 45-90 is adequate for any North American big game at moderate ranges. Use standard 0.458inch diameter bullets for loading. For handloading, use only leadbullets to avoid excessive barrel wear.

45-82, 45-85, 45-90 Winchester Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
300 Lead	IMR 4198	38.0	1530	1565	NA
405 Lend	IMR 4108	32.0	1410	1790	 Lyman No. 457483
					gas checked
405 Cast	IMR 3031	40.0	1500	2023	Lyman No. 457124
300 Lond	FI		1554	1669	Factory load

45-90 Sharps (Straight) 45-100 Sharps (Straight) 45-110 Sharps (Straight) 45 Sharps Special



Historical Notes When the Sharps company adopted the 45caliber, it developed a variety of loads and case lengths. The first of these was introduced in mid-1876 (2-7/8 inches), and different case lengths were added late in 1876 (2-6/10 inches) and mid-1877 (2-4/10 inches). The principal difference in these cartridges was in bullet weight, powder charge and case length. Other dimensions are the same. Some are heavy reloadable cases that had to be lengthened slightly to hold the same charge as the originals.

General Comments The 45-100 (2-4/10 inches), 45-100 (2-6/10 inches), 45-90 (2-3/4 inches), 45-100 (2-7/8 inches) and the 45-110

(2-7/8 inches) all appear to be identical except for loading and/or case length. The 45-2 3/4-inch case, listed in the 1876 cotalog, is otherwise unknown. There is no point listing all of these separately because of slight differences. However, the reader should know thru each exists, as these are encountered in literature referring to Sharps rifles or loading data for those. The 45-90 Winchester cascan be fired in any of the above chambered rifles by seating the bullet well out of the case. With east bullets, 45-70 contridges can be fired in these rifles. These cases can be made from Basic 45 cases and many custom bullet moulds are currently available.

45-90 Sharps (Straight), 45-100 Sharps (Straight), 45-110 Sharps (Straight) Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
485 Lead	IMR 4198	24.0	1300	1822	Lyman No. 451112
550 Lead	FL		1360	2240	Factory load
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45-120 (3 1/4") Sharps (Straight) 45-125 (3 1/4") Sharps (Straight)



Illitorical Notes The 45-caliber 3 1/4-inch case is the largest Sharps cartridge of this caliber. Because of differences in case thickness, it usually came in two versions: the 45-120 and the 45-125. It was introduced in 1878-79 for the Sharps-Borehardt rifles, although there is no documentary evidence that the Sharps factory produced rifles in this chambering or any of the 3 1/4-inch cases, either 40, 45 or 50. Original rifles in this chambering and original ammunition are collector's items. The Sharps Rifle Co. failed in 1881, so the big 3 1/4-inch case did not have a particularly long life, although other single-shot rifles could be (and were) chambered for H, In 1991-92, Eldorado Cartridge made a run of cases and loaded this ammunition. General Comments The 45-120 Sharps is a very powerful blackpowder cartridge adequate for any North American big game. It is usually considered one of the big buffalo cartridges, but it could not have participated in the slaughter of these animals to any great extent because it arrived on the scene very late. Western buffalo hunting reached its peak in 1875-76 and by 1880 was on the wane. The last of the great herds was destroyed in 1884 and the need for the big, powerful buffalo rifles and cartridges passed with the last of these animals. The repeating rifle and the small-bore, bigh-velocity cartridge would, within a decade, give them the final shove into obsolescence. Most of the Sharps-Borchardt single-shot rifles in this and other chamberings have been rebarreled and made into modern small-bore variint rifles.

45-120 (3 1/4") Sharps (Straight), 45-125 (3 1/4") Sharps (Straight) Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
485 Lead	IMA 4198	26.0	1360	2000	Lyman No. 451112
500 Cast	Blackpowder (FFg)	85.0	1299	1973	Lyman No. 457125
500 Lead	FL		1520	2561	Factory load
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EXHIBIT "53"

22 Long Rifle rimfire is probably the most popular handgun wintge, followed by the 38 Special and 9mm Luger among the

Current Handgun Cartridges of the World

5.45x18mm Soviet

defense. Muzzle energy is about the same as the 22 Long Rifle. However, a key to its purpose may be bullet construction, which consists of a gilding metal jacket around a two-piece core consisting of steel front and lead rear halves. If penetration is the purpose, then this bullet should prove effective against body armor. Beyond this, it seems to have little value.

It is one of the few new cartridges to enter production in Russia for

whentry to have adopted this cartridge and the PSM pistol for it. General Comments The concept behind this cartridge is unknown. Hy Western standards, this cartridge is a very poor choice for selfmany years. Manufactured only in the Commonwealth of Independent States, cases are normally lacquered steel with a Berdan primer. Bullet diameter is about 0.210-inch.

5.45x18mm Soviet Factory Ballistics

ilistorical Notes This modern pistol cartridge was developed in the

service Union in the 1970s for the PSM compact semi-automatic service. Its design follows Soviet tradition in that the case is

attlenecked and bullet caliber is the same as the service rifle (the

#49mm AK-74). Case length and overall loaded length are similar

a the 9mm Makarov cartridge, although the base and rim diameter

of the 5.45x18mm Soviet is smaller. Thus far, Russia is the only

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments		
40 FMJ	FL		1034	95	Factory load		

25 (6.35mm) Automatic (25 ACP)

Historical Notes This cartridge was introduced in the United States in 1908 with the Browning-designed, Colt-manufactured 25 Vest Pocket Automatic pistol. It was introduced in Europe a few years endier in the E.N. Baby Browning, which is practically identical to the Colt. The design of these two pistols has been copied by manufacturers all over the world. Dozens of different pistols have used this cartridge. The original Browning is still made (for European consumption), but Colt did not resume manufacture of its Vest Pocket model after World War II. American Arms, Beretta, Iver Johnson, Jennings, Lorcin, Phoenix Arms, Sundance, Taurus, Origies, Astra, Star and Walther have all made pistols in this chambering.

General Comments The 25 Automatic offers surprising velocity for such a small cartridge. However, delivered energy is quite modest. This, combined with the full-metal jacketed bullet of the conventional load, adds up to very poor stopping or killing power on anything. Lighter, expanding bullets lack adequate penetration or delivered energy to suggest any significant improvement. The 25 Auto is not powerful enough for hunting anything but pests, nor is it adequate for serious self-defense. However, 25 Automatic pistols are popular because of their small size and low cost. Their principal usefulness might be as a threat, because no sane person wants to be shot if that can be avoided, not even with the little 25. Winchester and Hornady recently have offered hollowpoint loads in an effort to improve terminal ballistics.

Editor's Note: Three important facts are often overlooked when discussing the value of this cartridge. First, compared to any rinifire chambering, the 25 Automatic provides superior functioning in typical concealable pistols. Despite being very underpowered, well-placed shots from a 25 Auto do beat throwing rocks and will certainly disable or kill. Second, owing to a properly designed case and bullet, this cartridge is dramatically more dependable in a pocket pistol than any rimfire round. Finally, any functional gun that a person can and will carry and use correctly has significant defensive value.

25 (6.35mm) Automatic (25 Automatic) Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
50 FMJ	Bullseye	1.2	810	73	Hornady, Sierra
45 JHP	FL		815	66	Factory load,
S0 FMJ			760	64	Winchester new NA

Handgun Curtridges of the World

centerfires. The 22 rimfire is adequate for small game at close ranges and can serve as a house gun for home protection. The M Special has the advantage of reloadability, and by choosing loads at is possible to regulate the power to cover shooting situations from very light target loads to full-power self-defense or field loads. For serious self-defense, the 38 Special and the 380 Automatic are considered minimum. The 38 Special and the 357 Magnum are probably the most widely used revolver cartridges, while the 9mm, 40 S&W and 45 Automatic are the most popular pistol cartridges. For match competition, the 22 rimfire, 38 Special and 45 Automatic may still lead the pack, although other centerfire numbers have recently made gains. — E.C.B.

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25 North American Arms (NAA)

Historical Notes First developed in 1999 by Kentucky firearms writer J.B. Wood, the 25 NAA cartridge is a 32 ACP case necked to 25-caliber. Mr. Wood's goal was to increase reliable expansion of 25-caliber bullets when fired from a short-barreled handgun. The

General Comments Fired in a re-barreled Savage model 1908 self loading pistol with Hornady test ammo, bullet expansion ranged from .360- to .412-inch. With perceived recoil in the 22 Long Rite range, the improved feeding of a bottleneck cartridge and consistent ballow point. bullet expansion, the North American American

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30 (7.63x25mm) Mauser

Historical Notes The 30 Mauser cartridge was developed by American gun designer Hugo Borchardt for the first successful commercial, automatic pistol of the same name. The Borchardt pistol was made by Ludwig Loewe & Co. (later DWM) of Berlin, Germany. Both pistol and cartridge were introduced in 1893. The Horchardt automatic pistol was later redesigned and emerged as the well-known Luger pistol. This cartridge was adopted by Paul Mauser for his famous Model 1896 pistol with increased power for his more rugged design. It has been used mainly in the Mauser M1896 military automatic pistol and various imitations or copies manufactured in Spain and China. General Comments Until the 357 Magnum cartridge came along, the 30 Mauser was the high-velocity champion of the pistol world. It has a flat trajectory that makes long-range hits possible, but lacks stopping power because of the light, full-jacketed bullet. However, it has been used successfully for hunting small game and varmints at moderate ranges. Handloading with softpoint or hollowpoint hunting bullets improves performance considerably. At one time, both Remington and Winchester loaded this cartridge, but it has been dropped. Fresh supplies of this cartridge were recently imported from Portugal by Century International Arms.

30 (7.63x25mm) Mauser Loading Data and Factory Ballistics

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
86 FMJ	Bullseve	4.5	1160	257	Lyman
86 FMJ	Unique	6.0	1230	289	Lyman
86 FMJ	FL		1410	375	Factory load

32 (7.65mm) Automatic/32 ACP



Historical Notes Designed by John Browning for his first constitutation and introduced in 1899. It was marketed in the test States when Colt turned out a pocket automatic on another whing patent in 1903. The 32 Automatic is one of the more value pistol cartridges ever developed. In the United States, Colt, in highen, Harrington & Richardson, Smith & Wesson and Savage automatic pistols chambered the 32 ACP (Automatic Colt automatic pistols chambered the 32 ACP (Automatic Colt b) It was also used in the German Pickert revolver. In Europe, is known as the 7.65mm Browning, while in the United States it is material 32 Automatic or 32 ACP.

formeral Comments This cartridge uses a semi-rimmed cartridge and a 0.308-inch diameter bullet. The 32 Automatic is the assume cartridge that can be seriously considered for selfdefense. In the United States, it is used exclusively for small pocket-type guns and is not considered adequate for police or military use. However, in Europe it is often used in police pistols and as an alternative but unofficial chambering for military sidearms. As a hunting cartridge, it is not powerful enough for anything larger than small game.

Loading tables generally give bullet diameter of the 32 Automatic as 0.312-inch or 0.314-inch. It is actually closer to 0.308-inch, and this is important if you handload. Effective small game loads can be made by using 100-grain 30-caliber rifle bullets intended for light loads and plinking, such as the Speer 30-caliber Plinker. All major ammunition makers offer this cartridge. Winchester recently introduced a load with a jacketed hollowpoint bullet. Other makers have followed suit.

32 (7.65mm) Automatic/32 ACP Loading Data and Factory Ballistics

Builet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
71 FMJ	Bullseve	2.2	800	100	Sierra, Hornady
71 FMJ	700X	2.0	850	114	Sierra, Hornady
60 JHP	FL		970	125	Winchester factory load
71 FMJ	FL		905	129	Factory load
74 FMJ/JSP	FL				Factory load, early

32 H&R Magnum

Historical Notes The 32 H&R Magnum was the result of a joint project between Harrington & Richardson and Federal Cartridge Co. It was introduced in 1984 for the five-shot H&R Model 504, 532 and 586 revolvers. This was followed later in the same year by Charter Arms with its six-shot 32 H&R Magnum Police Undercover revolver and in 1985 by the Ruger New Model 32 Magnum Single-Six and SP101 revolvers. The 32 H&R Magnum is simply the older 32 Smith & Wesson Long case lengthened by 0.155 inch. Therefore, any 32 Magnum revolver with also accept and fire both the 32 S&W and the 32 S&W Long. This makes for a convenient situation because the shooter has a choice of three different cartridges that will work in one handgun. Two loadings of the cartridge were offered -- a lead semi-wadcutter bullet of 95 grains or an 85-grain jacketed hollowpoint.

General Comments According to factory ballistics, the 32 Magnum delivers double the energy of the 32 S&W Long and 13 $\,$

percent more energy than the standard 38 Special food it is chronograph tests demonstrated that actual velocity at the ranges 60 to 100 fps below factory-advertised figures. Never the cartridge performance level is well above that of any our caliber handgun cartridge currently available. The 32-20 to handloaded to equal the 32 Magnum in a revolver, but neve revolvers have not been available since before World War II

What kept H&R from chambering its revolvers for the **. To do so would have required extensive design changes in revolvers because the 32-20 is too long. In fact, 32-20 case terminearly the same as 32 Magnum overall cartridge length.

By the late 1980s, both H&R and Charter Arms had going on business (both are again producing firearms, although H&R and producing handguns as of 2000), leaving Ruger and Dan Weissen the sole suppliers of revolvers in this chambering. Federal was only ammunition maker to undertake production.

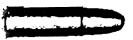
32 H&R Magnum Loading Data and Factory Ballistics

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Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
85 JHP	Unique	4.0	900	153	Hornady
90 Lead	Unique	3.4	815	145	Hornady
98 Lead	Unique	3.0	815	145	Speer
85 JHP	FĹ		1100	230	Factory load
95 SWC Lead	FĻ		1030	225	Factory load

32-20 (32 Winchester)

General Comments Although designed as a rifle cartridge, the 32-20 became very popular as a revolver cartridge. Historical notes and comments will be found in Chapter 2: Current American Rille Partridges.

7.5mm Swiss Army Revolver



JA001187

Historical Notes This cartridge was adopted by the Swiss Army in 1882 and officially used until 1903. The Swiss Army revolver is based on a modified Nagant system. In the early 1960s, quantities of these revolvers were sold in the American market by surplus deaters. These are quite well made and finished. Both blackpowder and smokeless powder ammunition is encountered.

General Comments The 7.5mm Swiss revolver cartridge is identical to and fully interchangeable with the 7.5mm Swedish and

Norwegian rounds. Modern smokeless powder ammunition was loaded by Norma for the Swedish Nagant, and this can be used in the Swiss revolver. The two cartridges differ only in bullet type. Most Swedish cartridges use an outside-lubricated bullet, whereas the Swiss also used an inside-lubricated type. Ballistics are about the same as the 32 S&W Long. For additional information, see the 7.5mm Swedish Nagant Revolver. Fiocchi now produces this ammunition.

7.5mm Swiss Army Factory Ballistics

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Bullet (greins/type)	Powder	Grains	Velocity	Energy	Source/Comments
102-110 Lead	ML		700	115	Military load

8mm Rast-Gasser

Historical Notes The 8mm Rast-Gasser military cartridge was introduced in 1898 for the solid-frame Rast-Gasser military rated are not solid in 1873 a number of different envolver

usually well made and rather sturdy. Quantities have been sold at various times in surplus stores.

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41 Remington Magnum

Historical Notes The 44 Remington Magnum revolver cartridge was introduced in June 1964 along with the S&W Model 57 revolver. This is a heavy-frame gun, essentially the same as the older 44 Magnum, but of smaller caliber. The 41 Magnum is very similar to an old, but little-known wildcat cartridge called the 400 Eimer. Bore diameter of the 41 Magnum is a true 0.410-inch rather than the 0.401-inch of the 41 Long Colt. Both a police load and a more powerful softpoint hunting round were originally introduced.

Like most new cartridges, a number of individuals claim to have originated or influenced the design of the 41 Magnum. It might be well in passing to mention that the 400 Eimer appeared around 1924. Possibly, a number of persons working over a span of time convinced Remington that it would be a good idea to bring out such a round. Probably Elmer Keith deserves the major credit.

General Comments There has been much argument as to the need for a police cartridge with greater stopping power than the 357 Magnum. Few understand why a blunt 200-grain bullet for the 357 would not have served this purpose. In addition, a lighter 210-grain police load could have been worked up for the 44 Magnum. However, someone wanted a new cartridge and the 41 Magnum was the result. Actually, the new round is a more practical all-round hunting cartridge for the average individual than the 44 Magnum. The 357 is not entirely adequate for big game, except in the hands of a good shot and experienced handgun hunter. The 44 Magnum is overpowered for anything but big game and most people do not shoot very well with it. The 41 Magnum covers the small, medium game and varmint-through-deer class quite adequately. Its effectiveness on anything heavier than deer would depend upon who was using it and under what conditions.

Recoit and muzzle blast of the 41 Magnum are slightly less than the 44 Magnum, but still heavy. For the average shooter, mastering either will require about the same amount of training and practice. The 210-grain lead police load with its 1,150 fps is relatively pleasant to shoot and quite adequate for small game or varmints at average handgun ranges. Factory-claimed velocities are for an 8 3/8-inch barrel. Velocity developed from the 6-inch barrel is about 1000 fps for the police load and 1360 to 1400 fps for the softpoint hunting load. In summing up, the 41 Magnum is not quite as powerful as the 44 Magnum, but it is all the gun the average handgun hunter needs. A number of police departments have adopted the 41 Magnum, but most have since dropped it in favor of 9mm Luger or 40 S&W semi-automatic pistols. All major domestic commercial ammunition-makers have offered this cartridge.

41 Remington Magnum Loading Data and Factory Ballistics

Builet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
170 JHP	2400	21.0	1400	740	Sierra
210 JHP	W296	20.0	1200	672	Speer, Nosler, Sierra, Hornad
210 JHP	H110	20.0	1200	672	Speer, Nosler, Sierra, Hornad
170 JHP	FL		1420	761	Factory load
175 JHP	FL		1250	607	Factory load
210 Lead	FL		965	434	Factory load
210 JHP	FL		1300	788	Factory load

10.4mm Italian Revolver

Historical Notes This cartridge was developed for the Italian Model 1874 service revolver, but also used in the Glisenti Model 1889 revolver. It is sometimes listed as the 10.35 Italian Revolver or 10.35 Glisenti. Blackpowder and smokeless powder ammunition is encountered. Both of the above revolvers have been sold from time to time in surplus stores. General Comments The 10.4 Italian cartridge is similar to the 44 S&W Russian. It would be an effective short-range self-defense or small game hunting number. This ammunition is still commercially available from Fiocchi.

10.4mm	Itallan	Revolver	Factory	Ballistics	

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
177 Lead	Blackpowder		735	212	Military load
177 Lead	Smokeless powder		800	240	Fectory load

44-40 (44 Winchester)

44-40 Revolver Loading Data



Historical Notes Designed as a rifle cartridge, the 44-40 became very popular as a handgun chambering, and many early shooters

carried both a rifle and revolver chambered for it. Historical notes and comments will be found in Chapter 2.

Builet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
200 SP	Unique	11.1	1125	560	Lyman
205 Lead	Unique	10.9	1095	545	Lyman No. 42798

304 CARTRIDGES OF THE WORLD



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455 Revolver Mkl 455 Colt/455 Enfield

Historical Notes The 455 Revolver MkI was adopted by the British Army in 1892 to replace the 476 MkIII and the 455 Enfield MkI ammunition. Despite the different designation, these two cartridges companies under this name, but was discontinued in the late 1950. This is not a Colt-designed cartridge, but it does have dute and ballistics than the British Mkl. Later, new cartridge dimensional and

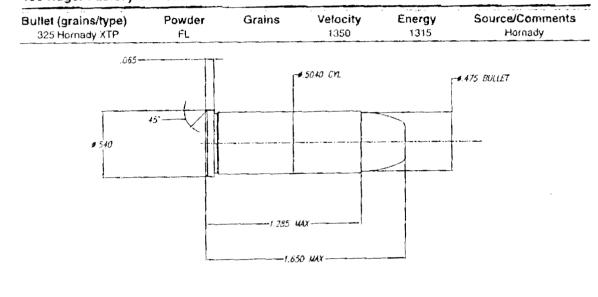
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Handgun Cartridges of the World

480 Ruger

Historical Notes After a half-century of production, millions of shooters use Bill Ruger's firearms---but only one very special pistol cartridge bears Bill Ruger's name. The 480 Ruger was never intended to be the biggest and heaviest-recoiling handgun cartridge on the block. It splits the difference between the 44 Remington Magnum and 454 Casult cartridges.

General Comments Using a Hornady 325-grain XTP Magnum bullet (diameter .475-inch) and Hornady brass, the 480 Ruger offers a significant velocity and energy increase over the 44 Remington Magnum cartridge, but without the recoil disadvantage of other super-powered handgun cartridges. The key to delivering the two-thirds of a ton of muzzle energy is a well-reasoned balance between bullet weight, velocity and operating pressure, in a cartridge derived from the venerable 45-70 case. The cartridge is chambered in Ruger's rugged double-action six-shooter, the Super Redhawk with an integral scope mounting system on the top strap. It should serve big-game handgun hunters and inetallic silhouette target shooters with distinction.



480 Ruger Factory Ballistics

50 Action Express

Historical Notes The 50 Action Express (50 AE) was developed in 1988 for the 1MI Desert Eagle semi-auto pistol, imported by Magnum Research Inc. It is another development by Evan Whildin, then of Action Arms. It was part of a program to upgrade performance of the semi-auto pistol through new cartridge design. The 50 AE has the same rim diameter, case length and overall hength as the 44 Magnum. However, base diameter is 0.547-inch, so, like the 41 AE, the 50 AE has a rebated rim. This allows simple adaptation to the Desert Eagle pistol, which was designed for use with the 44 Magnum. Since the rim is the same, it is possible to change chamberings by the simple process of installing a new burrel, a very practical approach. General Comments The 50 AE uses a 0.500-inch bullet * weighing 325 grains at a muzzle velocity of 1400 fps. This load develops 1414 Ipe, which makes the 50 AE one of the world's most powerful pistol cartridges. This is an excellent field cartridge for deer-size animals or as a backup when hunting dangerous game. Speer now offers factory ammunition.

* The original design featured a standard 50-caliber, 0.510-inch bullet but when a polygonally-rifled bore was adopted, the gauge plug defining the limit of "Sporting Devices" fell through the barret. This rendered the 50 AE a "Destructive Device," so bore size was reduced and the case was tapered to accommodate the smaller bullet.

50 Action Express Loading Data and Factory Ballistics

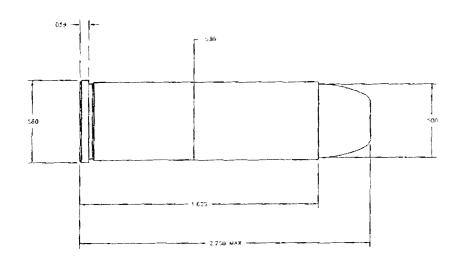
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Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
300 JHP	AA No. 7	27.5	1579	1568	Accurate Arms
325 Speer Uni-Core	AA 1680	37.8	1305	1227	Accurate
325 JHP	FL		1400	1414	Factory load
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500 Smith & Wesson

Historical Notes Introduced by Smith and Wesson in 2003 for big game hunting in the first commercial 50-caliber revolver, the 500 S&W became the most powerful factory production cartridge in history. The MS00 revolver and 500 S&W cartridge constitute an effective combination for big game hunting at reasonable ranges. General Comments The 500 S&W uses a rimmed case 1.625 inches long, with a rim diameter of .560-inch. To fit in the M500 revolver's cylinder, the overall length for a loaded cartridge cannot exceed 2.25 inches. The 500 S&W cartridge is best suited to heavyduty hunting revolvers or modern single-shot pistols and rifles. Factory ammunition is available from Hornady, Cor-Bon and Winchester, Hornady and Starline offer reloading components.

Bullet (grains/type)	Powder	Grains	Velocity	Energy	Source/Comments
350 Hornady XTP	FL		1900	2805	Hornady
500 Hornady SP	FL		1425	2254	Hornady
275 Barnes XPB	Li'lGun	44.0	2137		Hødgdon
350 Hdy XTP	H110	43.0	1877		Hodgdon
400 Sierra JSP	Lí'l Gun	37.0	1725		Hadgdon
500 Hdy SP	H110	32.2	1436		Hodgdon

500 Smith & Wesson Loading Data and Factory Ballistics



DECLARATION OF SERVICE BY OVERNIGHT COURIER

Sheriff Clay Parker, et al. v. State of California, et al. Case Name:

No.: F062490

I declare:

I am employed in the Office of the Attorney General, which is the office of a member of the California State Bar, at which member's direction this service is made. I am 18 years of age or older and not a party to this matter; my business address is: 455 Golden Gate Avenue, Suite 11000, San Francisco, CA 94102-7004.

On February 22, 2012, I served the attached JOINT APPENDIX, VOLUME IV, Pages JA000898-JA001192 by placing a true copy thereof enclosed in a sealed envelope with the Golden State Overnight, addressed as follows:

Carl Dawson Michel, Esq. Clinton Barnwell Monfort. Esq. Michel and Associates, PC 180 East Ocean Blvd., Ste. 200 Long Beach, CA 90802 (Attorneys for Respondents)

I declare under penalty of perjury under the laws of the State of California the foregoing is true and correct and that this declaration was executed on February 22, 2012, at San Francisco, California.

> J. Wong Declarant

V Worg Signature

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