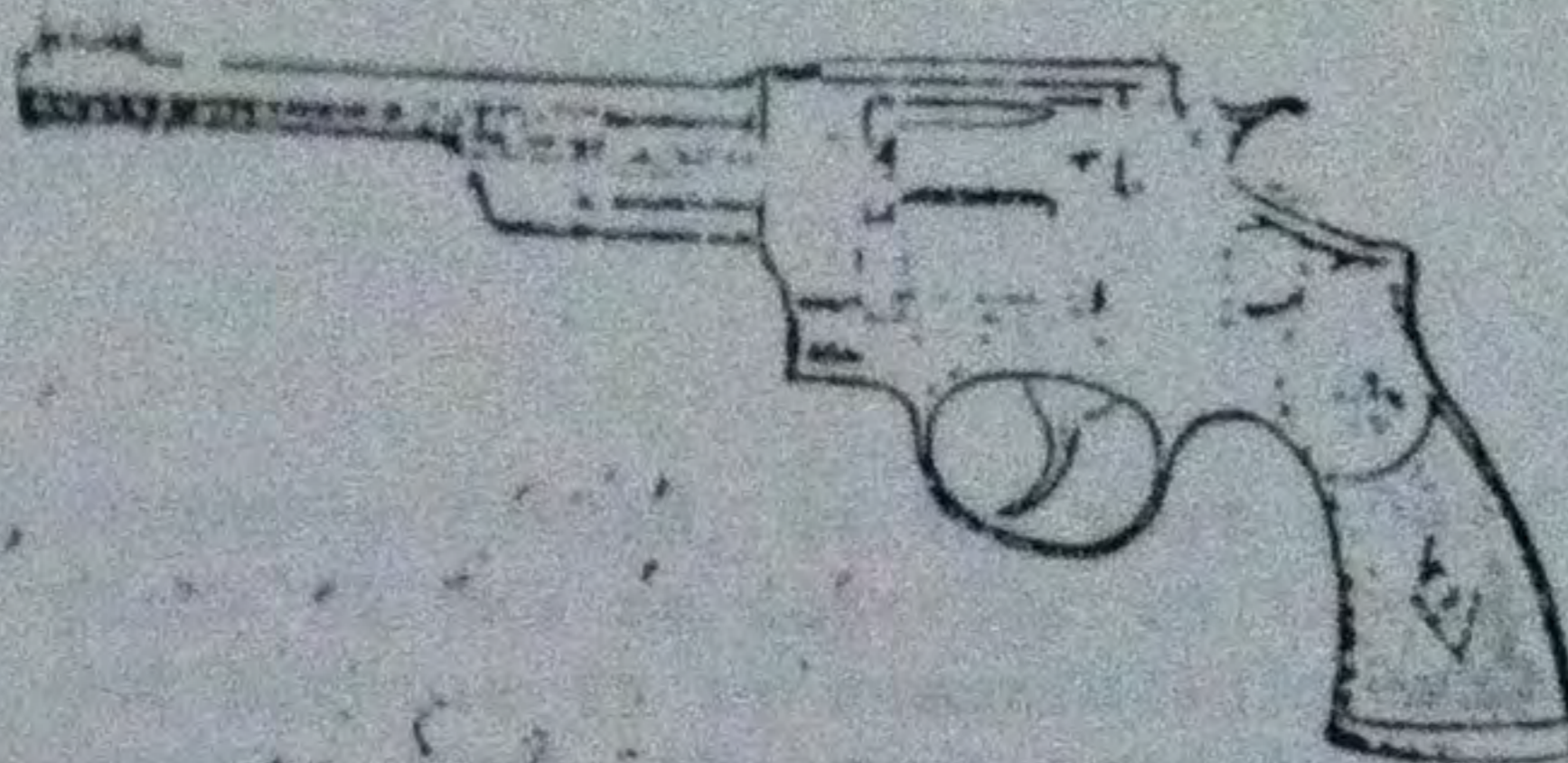


44 ASSOCIATES
AUBURN, MASSACHUSETTS



SPECIAL LOADS

edited by

Lawrence I. Newton

A compilation of tested handloads

for "Radian Cartridge #1"

from various experienced sources

Copy No. 160 of Two Hundred

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Introduction

Because the .44 S. & W. Special cartridge, properly loaded, is the most powerful that can be fired in our present handguns, since it has no superior in inherent accuracy among the center-fire cartridges, and because it is commercially under-nourished for want of attention since its birth in 1907, it has become in the course of the last dozen years "Handgun Cartridge #1" for those who like to load their own and want the utmost in a handgun.

During that time the number and variety of loads for the caliber has multiplied amazingly. It has been adapted to every purpose, from indoor gallery shooting to subduing any game which can be stopped by a handgun, with bullets ranging in weight from 120 to 250 grains, and powder charges varying from 2.0 grains Bullseye to 24.5 grains #2400.

The maximum power of the .44 Special is possible because it has the thickest chamber walls of any large caliber, permitting correspondingly higher pressures. It has 45% greater sectional area than the .357 Magnum, allowing a bullet of equal weight to be driven to the same or higher velocities with considerably lower pressures. The evidence also indicates that pressures with heavy loads in the .44 Special are more uniform, with a lower peak in relation to their average value. Presumably this is because the larger case allows a more favorable density of loading, but in any event the result is further increased velocity for a comparable recorded pressure.

Its shock or killing power according to the Hatcher or Baden-Powell formulas, which have been thoroughly field tested, is 70% greater than that of the Magnum, at pressures of 20,000 as compared with 15,000 p.s.i. A 173-grain bullet in the .44 Special has been reliably chronographed at 1630 f.s., with pressures within the safety limits of modern guns. Even by the theoretical measure of muzzle energy this load shows 1020 foot-pounds against 800 for the Magnum, which is admittedly the most powerful handgun cartridge ever turned out by the factories.

While the primary development has been for power, careful experimenters working for accuracy have produced loads which compare favorably with the best center-fire handgun cartridges, and further work in progress along these lines is expected to show even more significant results.

This unusual combination of power, accuracy and flexibility is entitled to formal recognition, and it also seems that the individual experimenter would be aided by a knowledge of what others have done and are doing in the field. Beyond these factual considerations, the .44 Special is a man's cartridge, a distinction shared by all the big bores, and to the end that our affectionate regard for it may come to be more widely shared, this tabulation of loads is dedicated.

It is in more than the usual sense a cooperative effort, a pooling of information for the benefit of all, as may be noted from the Source column in the tables. It is sincerely hoped that every reader will consider this a standing invitation to add his own measure of cooperation, by reporting results or suggesting improvements in the tabulation.

Precautions

Flammable instructions in general are beyond the scope of this booklet; the field has been thoroughly and competently covered by these standard texts on the subject:

The ABC of Reloading, F. C. Ness (National Rifle Assn.)
Belding & Mull Handbook: Handloading Ammunition
Ideal Handbook: Reloading Ammunition (Luman Gun Sight Corp.)
Sixgun Cartridges and Loads, Elmer Keith
Handloader's Manual, Maj. Earl Karamore
Complete Guide to Handloading, Capt. Philip B. Sharpe

There are a few precautions, however, which cannot safely be overlooked, and they are included in the following check list:

- 1) Bullet temper should be between 1-10 and 1-20, to avoid possible upsettage between chamber and barrel and still leave the bullet soft enough to swage to bore diameter comfortably.
- 2) Bullets should be sized to not more than .002" over groove diameter of gun, and should push easily by hand but not drop through cylinder throats.
- 3) Cases should be carefully inspected inside and out for cracks or signs of weakness before resizing. The case is the weakest link in the reloading chain and must be treated accordingly.
- 4) Primer pockets should be cleaned and inspected for cracked webs or abnormal flash holes, and flash holes must not be reamed or otherwise enlarged.
- 5) Primers should be of same make as cases for any magnum or maximum load. Flash hole size and strength of priming mixture are carefully matched to each other by the manufacturer, and putting together a large flash hole and strong priming compound may be dangerous.
- 6) Use pistol primers only; rifle primers must never be substituted, as their hotter flash is likely to raise pressures several thousand pounds without a corresponding increase in velocity.
- 7) Mercuric primers should not be used, or if absolutely necessary, cases fired with them should afterward be used only for light loads.
- 8) When a primer seats very easily in the case it indicates an enlarged primer pocket, and the case should be either discarded or used only for light loads.
- 9) Primers must be seated flush with or slightly below head of case; a protruding primer may explode when the chamber is not in line with the barrel, or may prevent the cylinder from revolving at a critical moment.
- 10) Check weight of your bullet of the same no. against that in the tables, and if more than a few grains heavier reduce the powder charge to begin with by at least a grain.
- 11) Another bullet of the same weight may usually be substituted for one in the tables, since weight and air space are more important factors in determining pressure than is bearing surface. In substitutions, powder charges should begin at a grain less than those shown.
- 12) Seating depth as shown in the tables should be generally observed, and must be for maximum loads. If base wads are used to overcome leading, allowance must be made for their thickness, by decreasing either seating depth or powder charge.
- 13) Any charges showing pressures over 15,000 p.s.i. should be carefully weighed on scales sensitive to 1/10th grain or less, and charges for any load over 10,000 lbs. should be carefully measured and double-checked periodically by the same type of scale.
- 14) Set up adequate safeguards against the possibility of a double powder charge; even one of them, so either has carefully weighed or measured, is likely to make scrap metal out of a fine gun.
- 15) Establish strict, consistent specifications, standard methods of operation and standard results, based on all these points and on your own acquired knowledge, then **INSIST CAREFULLY FOR ANY AND EVERY VARIATION FROM STANDARDS AT EVERY STEP IN THE LOADING PROCESS.**

High Pressure and Duplex Loads

Pressures have been indicated in the tables wherever known, and are either measured or based on reliable estimates. As an additional safeguard, if not definitely known but believed to be between 15,000 and 20,000 p.s.i. they have been designated as "High", and if believed to be above the 20,000 lb. absolute maximum which has been adopted for the .44 Special by a number of experienced handgun reloaders, they have been marked "Extreme".

As a matter of fact, there is little to gain and much to lose by shooting loads which go appreciably over the arbitrary 15,000 p.s.i. pressure limit set by the powder companies in days gone by. A hollow-point .44 slug will open reliably on beast or man at a velocity of 1000 feet per second, which speed can be attained at pressures well under 20,000 lbs., and only for hunting or defense purposes is it even necessary to approach the 15,000 mark.

The higher the pressure the greater the strain on the gun, and the only reason for exceeding necessary limits for each type of load is an insatiable curiosity as to what will happen. The least that can happen is a fine gun worn out sooner than it should be, the most is a blown-up weapon and possible serious injury to someone, in the case of handguns more often than not an innocent bystander.

The moral is, don't overload — but if you insist on it, take new unprimed cases, prime them with non-corrosive, non-mercuric, non-corrosive primers, proof fire them with full charge (15,000 p.s.i.) loads, inspect each case carefully for signs of weakness, including expansion of primer pockets, then use once only for overloads.

And always bear in mind that because of the inescapable variations possible even with the greatest care, any of these heavy loads should be worked up to gradually, beginning with a powder charge you know is light for the purpose. The minute you see any of the danger signs: swelled heads, evidenced by the slightest difficulty in extraction, gas leakage around primers, or pierced or blown primers, stop right there, tear down the rest of that lot of cartridges, and move backward again in one quick jump to the point where the signs disappear entirely.

As for duplex loads, their use is not recommended. By this means a powder difficult to burn in the length of a revolver barrel may be fully consumed, and in comparatively light loads the practice may be justified, but the reaction is variable and unpredictable, and the only ballistic tests on record show pressures with heavy duplex loads some 5,000 lbs. higher than those of straight charges giving the same velocities.

Strength of Guns

No load giving pressures over 10,000 lbs. should be fired in Colt Single Action cylinders numbered under 160,000, as these were built for black powder charges, and were simply not intended to withstand the pressures of modern smokeless powder loads.

Guns assembled from odd parts on which the serial nos. do not match should have chamber and bore dimensions carefully checked against each other and against standard dimensions before being considered safe to shoot.

Revolvers manufactured before 1920 could well be restricted to a diet of not over 15,000 lbs., on the grounds that technological advances in steel due to World War I give an additional margin of strength to guns made since that date. For

practical purposes serial no. 15,600 can be considered the dividing line for Smith and Wesson guns, and 340,000 for Colt Single Actions. All later guns of these two manufacturers should be safe with loads up to 20,000 lbs. pressure, including the S. & W. Military and 1926 models, and the Colt Single Action, New Service and Shooting Master. It cannot be repeated too often, however, that one small variation somewhere in the loading process can jump pressures faster than it is pleasant to think about.

Source Identification

Assoc. - Reliable data from 44 Associates files
Auth. - Competent ballistic authorities who prefer anonymity
B & M - B & M Handbook, Belding & Mull, Philipsburg, Pa.
Boser - Gordon C. Boser, Springville, N. Y.
Chapman - George V. Chapman, Harrington Park, N. J.
Farr - Eric M. Farr, Packenack Lake, N. J.
Ideal - Ideal Handbook, Lyman Gun Sight Corp., Middlefield, Conn.
Keith - Elmer Keith, North Fork, Idaho
Landon - J. W. Landon, Pittsburgh, Pa.
Mosgrove - R. G. Mosgrove, Carrollton, Ky.
Ness - F. C. Ness, National Rifle Association
Newton - Lawrence I. Newton, Auburn, Mass.
Sharpe - Capt. Philip B. Sharpe, Baltimore, Md.
Smith - J. A. Smith, Palos Verdes Estates, Calif.
Spence - George W. Spence, Steele, Mo.
Thompson - Ray C. Thompson, Grand Marais, Minn.
White - Norman P. White, Hornell, N. Y.
Yancey - O. L. Yancey, Monett, Mo.

Acknowledgment

This compilation could not have been made without the ready cooperation of the several score big bore shooters who call themselves informally "44 ASSOCIATES". To each of them personally the editor acknowledges his debt and tenders sincere thanks, and especially is he grateful to those whose major contributions are evidenced by individual listing in the Source Identification table above.

No record of the .44 Special would be complete without specific mention of Elmer Keith, who pioneered its recent development, and of Gordon C. Boser, J. W. Landon and Ray C. Thompson, who have done a tremendous amount of experimental work to carry the development forward. Special thanks are also due Belding & Mull, Funk & Wagnalls, Lyman Gun Sight Corp., F. C. Ness and Capt. Philip B. Sharpe for permission to include copyrighted material, and to Eric M. Farr for counsel and advice throughout the preparation of the manuscript.

Having no control over the actual loading process, neither the editor nor any contributor can of course assume any responsibility whatever for results obtained through the use of the tabulation, although no effort has been spared to make it as accurate and reliable a guide as possible.

There is no substitute for intelligent care in handloading.

Good shooting, friends!

Lawrence I. Newton
Auburn, Massachusetts
July, 1945

(250 gr. Ideal 429336 - Heath Flat Nose Sharp Shoulder)

.374	(Unique	2.0	(Duplex with		
"	2400	10.0	separator)		
"	"	4.0	"		Landon
"	"	8.0	"		"
.374	(Bullseye	2.0	(Triplex		
"	Unique	2.0	with		
"	2400	4.0	separators)		Landon
.374	(5	2.0	(Triplex		
"	(Unique	2.0	with		
"	(2400	4.0	separators)		Landon
.374	(6	2.0	(Triplex		
"	(Unique	2.0	with		
"	(2400	4.0	separators)		Landon

+ 250 gr. Ideal 429421 - Keith Flat Nose Sharp Shoulder

.335	Bullseye	2.0	480		Newton
"	"	3.0	590	6,300	Spence
"	"	3.5			Ness
"	"	4.0			Keith
"	"	4.5			Ness
"	"	4.9	805	15,000	Ideal
"	"	5.5		High	Keith
.335	5	6.0			Ness
"	"	6.5			Keith
"	"	7.0	805		Ideal
.335	6	4.5			Spence
"	"	5.0	720		Ness
"	"	5.5			Spence
"	"	5.6	785		Ness
"	"	6.2		High	Assoc.
.335	Unique	5.5	660		Farr
"	"	6.5	810	8,800	Auth.
"	"	7.0	865	11,000	Farr
"	"	7.5	915	13,200	Ness
"	"	7.9	960	15,000	Auth.
"	"	8.0			Farr
"	"	8.3		High	"
"	"	8.5	1000	17,500	Boser
"	"	9.0	1050	20,000	Newton
.335	SR 80	9.5	750		Ideal
"	"	12.0			Keith
"	"	12.5		High	"
"	"	13.0		High	"
.335	2400	16.0	800		Chapman
"	"	16.5	950		"
"	"	17.0	1020		"
"	"	17.5	1050	16,400	"
"	"	18.0	1085	18,200	Keith
"	"	18.5	1170	20,000	Chapman