

CONTENTS

Preface IX

Part One: Rocky Gibbs -- The Man and His Cartridges

1	Rocky Gibbs -- The Man and His Cartridges	3
2	.25 Gibbs	7
3	.30 Gibbs	11
4	.270 Gibbs -- Rocky's Favorite	15
5	.240 Gibbs	19
6	.338 Gibbs	23
7	Gibbs Hydraulic Case Former	27
8	Cartridge Information: Gibbs Metrics (6.5mm, 7mm, 8mm)	31

Part Two: Front Ignition Loading Technique

	A Message from the Author	37
1	Practical Approach to Front Ignition	39
2	Internal Ballistics	41
3	Seeking Accuracy	43
4	Chronographs Applied	47
5	Drop Figures	49
6	Case Preparation	53
7	Front Ignition Loading Technique	55
8	Sizing Dies	57

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PREFACE

The Gibbs line of wildcat cartridges aroused my curiosity in the mid 1960s. After listening to handloaders in the area expound and argue the velocity claims and cartridge designs of Rocky Gibbs, I decided to find some of my own answers.

While researching the Gibbs cartridges, I came across an article in an old *American Rifleman* magazine published in January of 1955. The article was written by Rocky E. Gibbs and titled "Making a Wildcat." Other than this article, only tidbits of information were available. To further enhance my knowledge, I contacted P.O. Ackley since some Gibbs cartridge information was located in his *Handbook for Shooters and Reloaders*. Ackley told me that the last he had heard Rocky Gibbs had died. His wife had burned all of his records. Ackley had no knowledge of any surviving family members.

Two years later, after countless phone calls and letters, I located Dorothy Gibbs, widow of Manollis Aamoen Gibbs (Rocky). None of the information published within this book would have been available without the complete cooperation of Dorothy Gibbs. She opened up her heart to some painful memories. Ray Tarbox, Rocky Gibbs' friend and hunting partner, also played an important role in locating and providing information.

Rocky Gibbs had developed his interest in handloading while a member of the Richmond, California, Rod and Gun Club. His competitive nature led to an intense desire to produce a cartridge that was bigger, better, faster and more complete than any other.

Gibbs was severely criticized for his cartridge case design. Nearly everyone complained about the minimum length of the case necks. The neck of the .300 Winchester Magnum case was also short, but the Winchester case never received the amount of criticism awarded the Gibbs case.

Rocky Gibbs was also accused of inflating the Gibbs cartridge velocities. It didn't seem to matter to the accusers that most of the firearms manufacturers were doing the same.

Rocky Gibbs never gave in or broke down in the face of these ongoing controversies. Obviously the man had genuine tenacity. Rocky Gibbs was willing to risk his reputation to prove he had *maximized* the available space in a .30-06 case.

Whether he accomplished his goal of producing the finest cartridge available is up to each handloader to decide. Rocky Gibbs would have liked us to remember two things. First, he set a range record with his .270 Gibbs cartridge against some top-notch competition. Secondly, when it comes to velocity, "a Gibbs chambered rifle with a standard barrel makes a magnum with a short barrel just another rifle."

Roger Stowers

Chapter One

ROCKY GIBBS

The Man and His Cartridges

MANNOLIS "Rocky" Aamoen Gibbs was born November 12, 1915. He contracted typhoid fever as a youngster, which resulted in the loss of sight in his right eye. Consequently when Gibbs later took up shooting, he had to learn to shoot as a southpaw.

Shortly after his graduation from Gainesville, Texas, high school, Gibbs boarded a train from the dust bowl town of St. Jo, Texas. He was bound for Richmond, California.

Rocky wanted to become famous, and he knew his chances were slim with the name he had been given, so he decided to change it. On the train ride West, he asked a conductor what the mountain range in the distance was called. The conductor replied, "Those are the Rockies." From that moment on, Mannolis Aamoen Gibbs became Rocky E. Gibbs.

Upon Rocky's arrival in California, he went deer hunting with some friends. He was not much of a shooter at that point, but after bagging his first deer he was hooked on the sport. He joined the Richmond Rod and Gun Club to hone his skills. As a new recruit, he was immediately assigned the task of building a 400-yard range that was to be used for practice and competitive shooting. The competition at the club was broken up into two parts: First, smallest group at 100, 200, 300 and 400 yards; second, the rifle zeroed for 100 yards that produced the least drop at 400 yards and shot the tightest groups at 100 and 400 yards was declared the overall winner.

Rocky bought a Remington Model 721 in .270 Winchester and soon became a contender to reckon with at the range. To improve his performance, his favorite gunsmith suggested that Rocky try a .270 Ackley Improved for

more velocity and a flatter trajectory at 400 yards. Rocky remained competitive with the Ackley modification but he experienced persistent pressure problems. When the cases stuck in the chamber because of the pressures, he suffered extractor problems with the Remington. Rocky sold the Model 721 and purchased a Winchester Model 70, again in .270 Winchester. With that rifle he proceeded to win both categories at the Rod and Gun Club.

To better his own record, he needed more velocity. Many wildcats were tried by other shooters. As a rule, if the calibers were very flat-shooting, they failed to win the small-group portion of the competition. Conversely, if the wildcats punched out tight groups, the trajectories usually left something to be desired.

Rocky realized there was a lot of potential in the .270 Winchester case. He wanted to blow the case out to hold the maximum amount of powder, then increase the shoulder angle to what he believed was the ideal. Rocky figured a 35-degree angle should be steep enough to prevent any excessive throat erosion in his rifle.

With Rocky's mind made up, a reamer was made. The case featured a minimum body taper and a 35-degree shoulder. From case head to shoulder, the case measured just over 54mm. Rocky later submitted the case to RCBS and they standardized the measurements. Clymer still produces reamers which follow those original dimensions.

Years later, that case design received some harsh criticism. Most of those responsible were unaware of the correct dimensions. Quite often, a gunsmith would select an Ackley reamer instead of one designed for the Gibbs chamber. The gunsmith would just run the

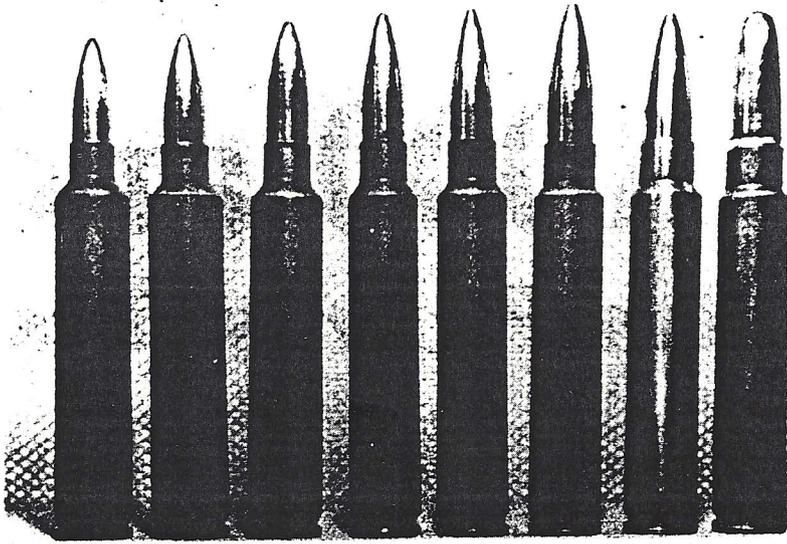
Ackley reamer in a little further. Such a chamber would accommodate a minimum tapered case with a 40-degree shoulder and a long neck. Because of that problem, Rocky never released any loading information to anyone unless he had personally cut their chamber. Gibbs was afraid of the liability and the bad publicity.

Many of the wildcats which appeared on the Richmond range had quite a bit of freebore. None of them were competitive in the group size category. Because of the accuracy needed to win at the range, Rocky decided his chamber should not be freebored or long-throated. The first Gibbs chamber was cut in his Winchester Model 70 barrel. Rocky proceeded to win the next match hands down. His record stood until the range was closed in 1954.

Gibbs bought a 10-inch Sheldon lathe in 1952 as equipment for his air conditioning and refrigeration business. He taught himself to operate the lathe quite proficiently. Meanwhile, his shooting buddies at the range had decided that the Gibbs design was for them. Rocky had a reamer made for himself and began modifying his friends' rifles. Naturally, he felt obligated to supply them with brass for reloading.

Case forming became quite a problem and was very time consuming. Fireforming all the rounds for his friends' rifles took away time from his air conditioning business. Almost in self-defense, Rocky created his own wildcat case-forming tool. That tool, which he later patented, became Rocky's first product, and the first product of Gibbs Rifle Products in 1953.

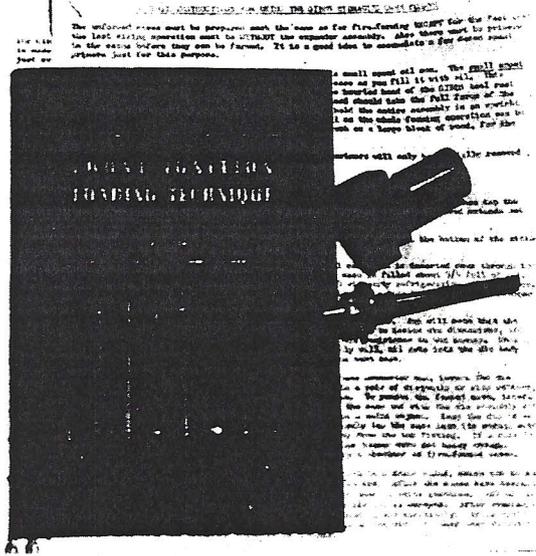
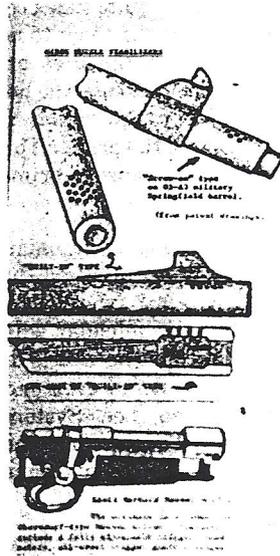
The case former operated hydraulically. A case with standard head size was placed in the forming



The eight Gibbs cartridges were based on the .30-06 case, and were identical except for neck diameter. (1) .240 Gibbs, (2) .25 Gibbs, (3) 6.5mm Gibbs, (4) .270 Gibbs, (5) 7mm Gibbs, (6) .30 Gibbs, (7) 8mm Gibbs (8) .338 Gibbs.

1 2 3 4 5 6 7 8

From 1953 to 1973, the Gibbs Rifle Products Company produced the *Front Ignition Loading Technique* manual, the Gibbs-designed cartridges, a wildcat case-forming tool and the Gibbs muzzle stabilizers. A fire in 1958 destroyed the existing stock of the manual, and it was not reprinted.



Rocky Gibbs' gun shop was the building in the center background. More than 12,000 chambers of the Gibbs design were reamed in this shed.

tool and the tool was affixed to any sizing die. After the decapping stem was removed from the die, the case was filled with oil. A rod was then inserted through the stem hole of the die until the rod rested on the oil in the neck of the case. The rod was then struck a sharp blow with a hammer and the case was hydraulically formed.

O'Neil, Keith and Hopkins' experiments with duplex loads interested Rocky immensely. He conducted numerous tests with duplex loads and set some range records at Richmond for both group size and trajectory. In 1954, Rocky produced a booklet about duplex loading entitled "Front Ignition Loading Technique." That became the second product of the Gibbs firm.

In the summer of that year, Rocky started marketing the Gibbs line of cartridges. With all the surplus .30-06 brass available, the design was developed around that hull instead of the .270 Winchester. Eventually, all eight calibers were based on the .30-06 case. The only difference in case dimensions, regardless of caliber, were the neck diameters. Shoulder angles and body taper of each case were identical.

Gibbs sold his air conditioning business and laid off his five employees in order to relocate to Viola, Idaho. Viola was a spot he had selected because of the proximity to Speer and their chronograph, the beauty of the countryside and the excellent elk hunting.

In the spring of 1955, Gibbs Rifle Products was reborn. Rocky had a 500-yard range right out the window of his shop. Articles in leading magazines by Jack O'Connor and Bob Hutton helped business prosper. Rocky enlisted the help of his two sons. The boys eventually learned to do much of the work, and it was always done to the exacting specifications set out by Rocky. Rocky's two girls helped with the housework. Dorothy, Rocky's wife, took a job as a secretary at Washington State University. At night she returned home to be the secretary and bookkeeper for Gibbs Rifle Products.

A fire destroyed the Gibbs home on St. Patrick's Day, 1958. Luckily, the gun shop was unharmed. Unfortunately, many records and all the remaining "Front Ignition Loading Technique" booklets were lost. The latter were never reprinted.

Gibbs was now selling only a few case formers and no booklets. Most of his time was spent chambering barrels for his cartridges. He also installed a



With this Winchester Model 70 chambered in .270 Gibbs, Rocky Gibbs held the range record at the Richmond, California, Rod and Gun Club for many years. A childhood case of typhoid fever cost Rocky Gibbs the sight in his right eye, so he shot left-handed. This photo was taken in 1968.

muzzle brake system he designed; a series of holes drilled at the top of the muzzle to reduce jump. After thinking things over, he shortened the firm's name to Gibbs Rifles, feeling it was more representative of what they did.

By 1968, Rocky figured he and his sons had chambered more than 12,000 rifles. He sold various actions, all with Douglas barrels. The vast majority of his work involved rechambering customers' barreled actions.

In 1955, Gibbs wrote an article for the *American Rifleman* about fire-forming a wildcat case. The *Rifleman* staff wanted to do a piece on a Gibbs cartridge if Rocky would send them a test rifle. Gibbs refused to send a rifle unless he could conduct the test. As a result, no Gibbs cartridge was ever evaluated in the *Rifleman*. Gibbs said he was afraid the *Rifleman* test shooters might use the wrong components and create excessive pressures that would be detrimental to his reputation.

Gibbs developed and built his own test gauges. He used a pressure gun and a strain gauge he built himself to measure pressures. He used pressure barrels to develop his loads and test more than 40 lots of military and commercial .30-06 brass. He discovered that Den 43 brass was by far the strongest, easily withstanding

pressures over 50,000 pounds. He also found that if pressures of 53,000 pounds were consistently maintained, the primer pockets in even the strongest brass would start to expand. He considered that to be the maximum pressure level for all his loads.

Rocky used carefully selected lots of primers, powder, brass and bullets for his ammunition. He tried every combination possible to obtain the most velocity with acceptable pressures. He believed that handloaders should always try to attain the maximum performance with their rifles.

To measure velocity for his cartridges, Gibbs would load up to 53,500 CUP on his own equipment, then go to Speer and use their Potter chronograph. His advertised velocities are questioned to this day. Many believe the velocities Gibbs advertised were unattainable. Many of his velocities were corrected from instrumental to true muzzle velocity. This added a few fps. He considered barrel length as the distance the bullet traveled down the bore, not the distance from the bolt face to the muzzle. That, in effect, added two more inches of barrel length and another 100 fps or so. Instead of taking the average velocity of 10 shots, Gibbs recorded the highest speed achieved.

The .30 Gibbs rifle was his favorite for elk. Of the thousands of rifles chambered for his cartridges, the .30 Gibbs was by far the most popular.

Gibbs was disappointed that neither

of his sons took over the business. Before he died of leukemia in 1973, he instructed his wife to burn all the records. He did not believe anyone outside his family could produce his products with the quality he demanded. He

was 58 when he died.

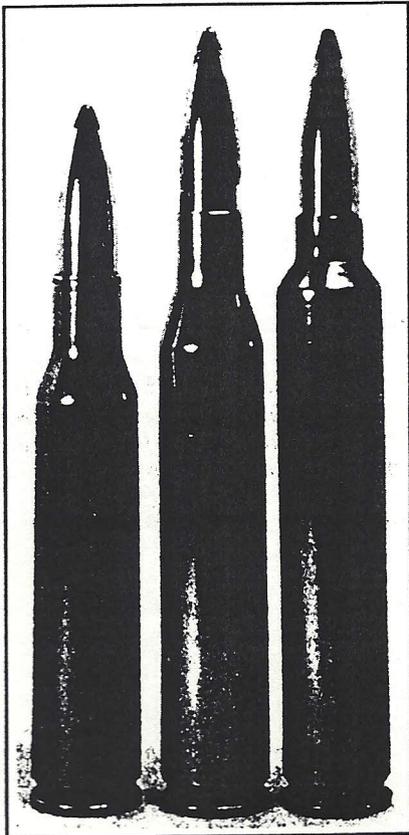
The McGowen Rifle Barrel Company chambers many of the Gibbs cartridges; Clymer makes reamers and RCBS still produces the dies. ●

Chapter Two

.25 GIBBS

AS RECENTLY AS 1980 the .25 Gibbs was listed as one of the top 37 wildcat cartridges in Frank Barnes' *Cartridges of the World*. Barnes' choices were based on the rounds' popularity as determined by the number of reloading dies in each caliber sold by RCBS.

The .25 Gibbs was introduced in 1954 along with the .240, 6.5, 7mm, .30 and 8mm Gibbs. Rocky Gibbs developed his



Powder capacity of the .25 Gibbs (right) is much greater than the .257 Roberts (left) or the .25-06 (center).

first cartridge, the .270 Gibbs, in 1953. By the fall of 1954, seven different Gibbs cartridges were available. Rocky believed the .25 Gibbs cartridge was one of the best of the line. It was described as an outstanding round for antelope and deer and he claimed the only non-commercial cartridge that shot flatter was the .240 Gibbs, the fastest 6mm in the world.

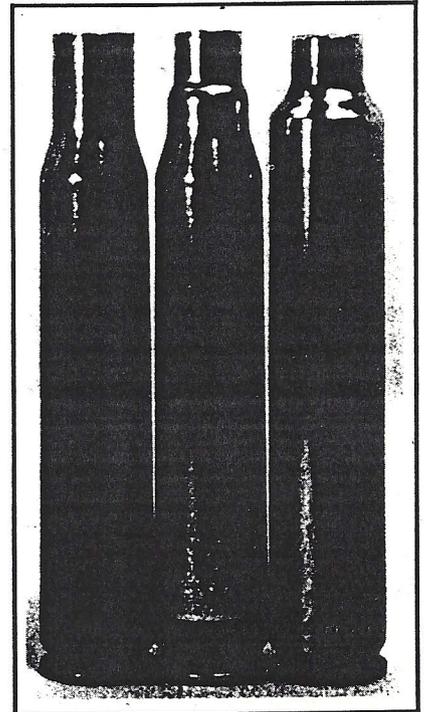
The .25-06, a very popular wildcat at that time, gave the .25 Gibbs a lot of competition. Rocky's advertising claimed better velocities for his .25 than the .25-06, with less bolt thrust than the .257 Weatherby Magnum.

Gibbs frequently stressed the advantages of a straight-walled case in his literature. It could grip the chamber walls better than any tapered case and produced less strain on the action and locking lugs. As a result, he claimed, sticky bolt lift was seldom a problem, even when working with maximum loads.

Whenever potential customers were undecided about which cartridge they wanted for a custom rifle, Rocky recommended a barreled action for the .25 Gibbs. Gibbs' advertising emphasized that he used Douglas barrels exclusively and his custom rifle business was quite successful. The .25 Gibbs ranked third in sales. Only the .270 and the .30 Gibbs were more popular.

Rocky recommended a 10-inch twist for the .25 caliber. He would sell a barreled action with a 12-inch twist only at the customer's request and he was quick to warn his client that it might not produce the desired accuracy with the heavier bullets.

Rocky believed in and liked the looks of the .25 Gibbs cartridge enough to



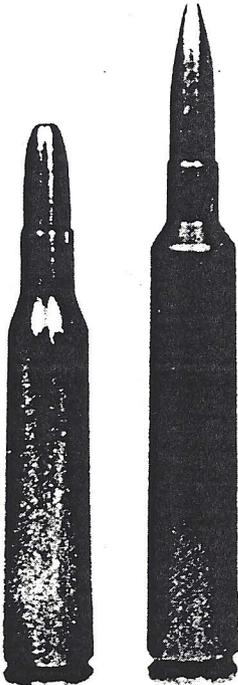
The .25 Gibbs is formed from the .30-06 (left) by sizing it in a .270 Winchester die first then forcing it into a .25 Gibbs die (center). That moves the shoulder back just far enough to allow the case to chamber so it can be fireformed.

feature it alongside a .257 Roberts cartridge on his company envelopes after 1958.

Before the .25-06 was standardized in 1969, .25 Gibbs cases had to be formed from either .30-06 or .270 Winchester brass. Surplus .30-06 brass was most plentiful at the time and Gibbs suggested sizing them down in a .270 Winchester die far enough to resize the neck of the case about .25 inch and finishing the job in the .25 Gibbs die. The sizing dies had to be adjusted so the resultant bulge on the case neck

GIBBS RIFLES

VIOLA, IDAHO 83872



The .25 Gibbs was pictured beside the .257 Roberts on Gibbs Rifles' mailing envelopes.

served as a temporary shoulder to establish proper headspace when chambered by holding the case firmly against the bolt face for fireforming.

Gibbs' cartridges are true wildcats in that they are formed in the shape of the chamber and have a headspace measurement that is unlike any factory standard. The .25 Gibbs can be fireformed or reshaped with the aid of a hydraulic case former. With either method, the neck should be prepared as described earlier.

Cases can be fireformed with a charge of 10 grains of Unique. Top the remainder of the case off with cornmeal or Cream of Wheat and plug the mouth with cotton, toilet tissue or wax. The case must form a snug fit in the chamber to fireform properly or it may stretch in the wrong places and encourage head separations. Then too, if the case fits the chamber loosely, the firing pin may only drive the case forward and fail to fire the primer.

The .25 Gibbs can also be fireformed with 50 grains of IMR-4895 pushing an

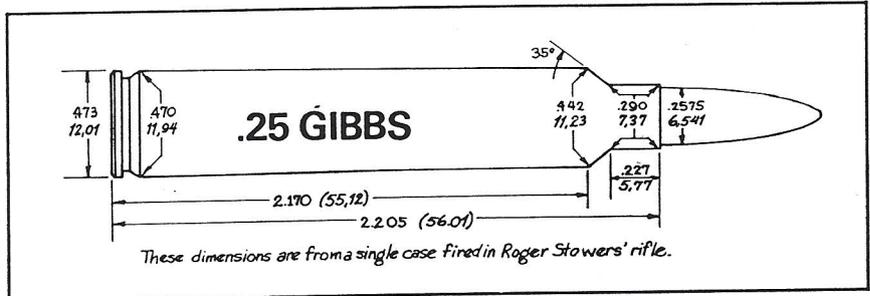
87-grain bullet. The bullet should be seated out to engage the rifling and hold the head of the case back against the bolt face.

Gibbs designed a hydraulic case forming tool to overcome some of the fireforming problems. With his tool, the case could be readied for initial Gibbs starting loads with a little oil and a lot of hammer. Needless to say, the mess created by hydraulically form-

ing 100 cases took a lot of the fun out of loading for a Gibbs round.

Another option is to start with commercial .25-06 ammunition. The bullets can be pulled and resealed so that they engage the rifling when the cartridges are chambered in the .25 Gibbs. That is the quickest way to get a supply of cases for the wildcat.

Gibbs recommended the use of magnum primers because of the long



.25 Gibbs

The following loads were all MAXIMUM in the author's rifle. Due to variations in other ".25 Gibbs" chambers, starting loads should be reduced by at least five grains.

bullet (grains)	powder	charge (grains)	velocity (fps)
117	H-4831	59.0	3,332
	IMR-4831	57.0	3,317
	H-450	63.0	3,295
	IMR-7828	59.0	3,285
	H-870	69.0	3,279
	H-4350	56.0	3,271
	IMR-4350	55.0	3,243
	IMR-7828	61.0	3,545
	H-4831	60.0	3,510
	IMR-4831	57.0	3,502
100	H-450	65.0	3,505
	IMR-4350	56.0	3,495
	H-4350	58.0	3,493
	IMR-7828	65.0	3,784
	H-4831	63.0	3,789
	IMR-4831	60.0	3,768
	H-450	70.0	3,762
	H-4350	60.0	3,716
	IMR-4350	58.0	3,704
	IMR-7828	67.0*	3,902
75	H-450	72.0*	3,897
	H-4350	63.0	3,897
	IMR-4350	61.0	3,861
	H-4831	66.0*	3,823
	IMR-4831	64.0	3,910
	IMR-4320	53.0	3,734

* Case full with these charges.

Author's rifle had a 26-inch barrel with one-turn-in-10-inch twist. All loads in Remington cases with CCI 250 primers. Chronographed on an Oehler 33 at 15 feet, converted to muzzle velocity.

Be alert — Publisher cannot accept responsibility for errors in published load data.

powder column in his cartridges. Cases should be trimmed to 2.494 inches, the .30-06 standard length. Trimming is rarely required with any Gibbs case because the sharp shoulders appear to inhibit stretching.

Maximum loads for the .25 Gibbs were developed with IMR-4350, CCI 250 primers and 87-grain bullets. The powder charge was increased one grain at a time, until signs of excessive pressure were evident. The charge was then reduced one grain and five shots were fired. The expansion of the five pressure rings was measured and averaged. That measurement was considered a standard maximum. Whenever any load produced that measure-

ment, it was considered a maximum load. That system works fine as long as you always use the same lot of brass. If types or lots of brass are changed, then a new standard has to be established for each batch.

The loads listed in the accompanying table are a safe maximum in my rifle. *They are not recommended for any other rifle.* Reduce the top loads four grains and work up one grain at a time, being alert for any indications of pressure.

Incorrect die setting or oily cases and chambers may also let a case slam back against the bolt face, causing the case head and primer to register erroneous pressure signs.

Whenever an ejector mark is visible on the case head, reduce the powder charge at least one grain immediately. As Gibbs preached, "good case life and snug primer pockets are the secret to safe handloads." A slightly cratered primer will probably appear just before the ejector mark is evident.

Do not reduce the powder charge more than four grains below the loads shown. The sharp shoulder angle and small neck diameter may set the scene for a powder jam there. If such a phenomenon should occur, gas pressure might be re-directed toward the base. Blown primers, severe case head expansion or worse can be the result. ●

Chapter Three

.30 GIBBS

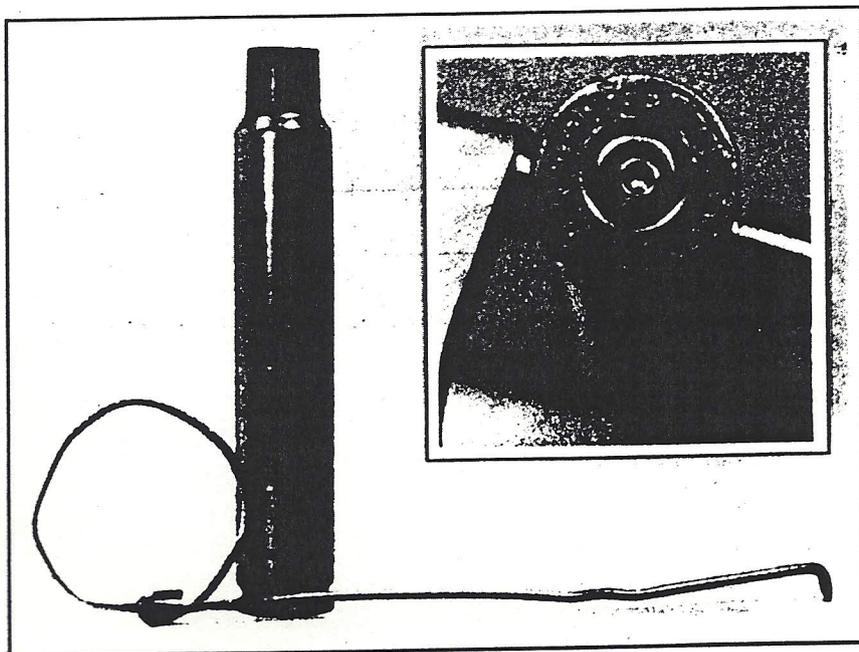
THE .30 GIBBS was the second cartridge developed by Rocky Gibbs of Gibbs Rifle Products. His first cartridge, the .270 Gibbs, was made up from a .270 Winchester case. The .30 Gibbs, based on the .30-06 case, was the most popular of all the Gibbs designs. After 1954, all eight Gibbs cartridges were based on the '06 case.

Gibbs stated in his *Front Ignition Loading Technique* manual, that he chose the .30-06 case first of all, "because of the ever plentiful supply of .30-06 brass. Secondly, a case with standard head size delivers 40 percent less thrust to the locking lugs than a case with a large head such as a Weatherby or a .300 H&H case."

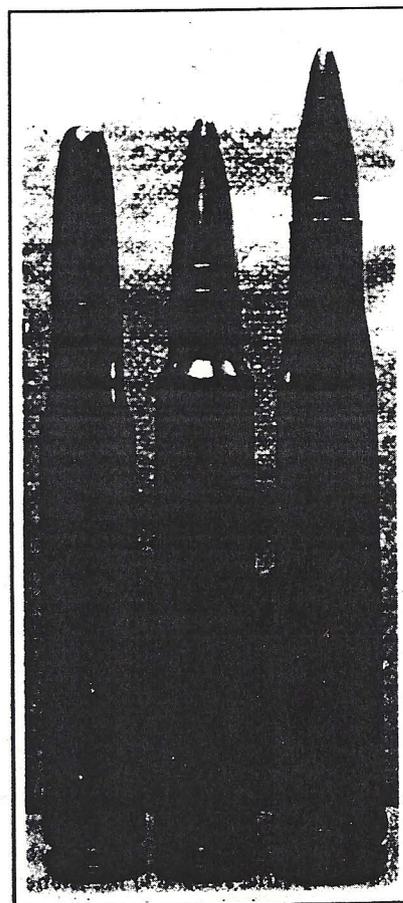
While marketing the .30 Gibbs, Rocky advertised his conversion as the "most economical .30-caliber rifle in the world, with recoil and barrel life comparable to the .30-06." The largest percentage of advertising was directed at the rifle enthusiasts who might be considering rechambering their 03-A3 Springfields.

Gibbs also sold barreled actions built on numerous actions, mostly Mauser 98 types, using Douglas barrels exclusively. Gibbs recommended a 12-inch twist for the .30 Gibbs but installed barrels with 10 or 14-inch twists at customers' requests.

Cases for the .30 Gibbs are easily formed by firing 50 grains of IMR-4895



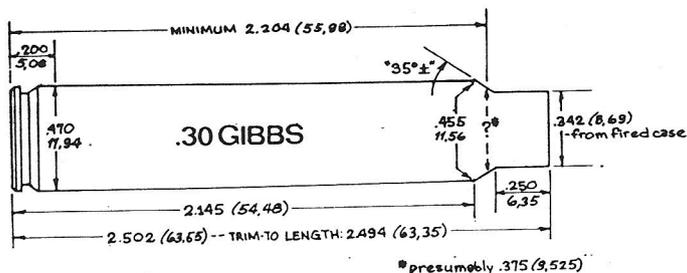
Case head separations can occur during fireforming or as the result of improper sizing. The wire tool (fashioned from a paper clip) will detect incipient separations as it slides down the inside of the case, near the head. Inset, expansion at the pressure ring determined maximum loads.



The .30 Gibbs (center) is formed from the .30-06 case (left) and is frequently compared to the .300 H&H Magnum (right).

behind 180-grain bullets. The bullets should be seated out far enough to engage the rifling so resistance is felt when closing the bolt. Factory loads can also be used. If .30-06 factory loads are used, the bullets should be pulled and seated out to engage the rifling.

When I was preparing to work up loads for the .30 Gibbs, the Gibbs Wildcat Case Forming Tool was used



to form about 100 cases hydraulically. When hydraulically forming cases, they should be about .010 inch too long. After forming, the 35-degree shoulders emerge slightly rounded but form a crush fit in the chamber when the bolt is closed. Upon firing, the shoulder fills out with sharp edges. (As long as the cartridge case was held snugly in the chamber, regular Gibbs starting loads were used for the initial firing.)

The loads listed as maximum in my rifle are not recommended for other rifles. Start at least four grains below the loads listed and work up very slowly. Other loads for the .30 Gibbs were developed by Bob Hagel and appear in *Handloader* No. 73.

Maximum loads were developed using Winchester-Western cases from the same lot. Hornady 150-grain bullets and IMR-4320 powder along with CCI 250 primers made up the starting loads. Powder charges were increased one grain at a time. When excessive pressures were indicated, the charge was dropped one grain and five shots were fired. The pressure ring on each one of the five cartridges was measured and the readings averaged. That reading was then considered the maximum reading for all rounds fired. The test rifle's 26-inch barrel has a 10-inch twist.

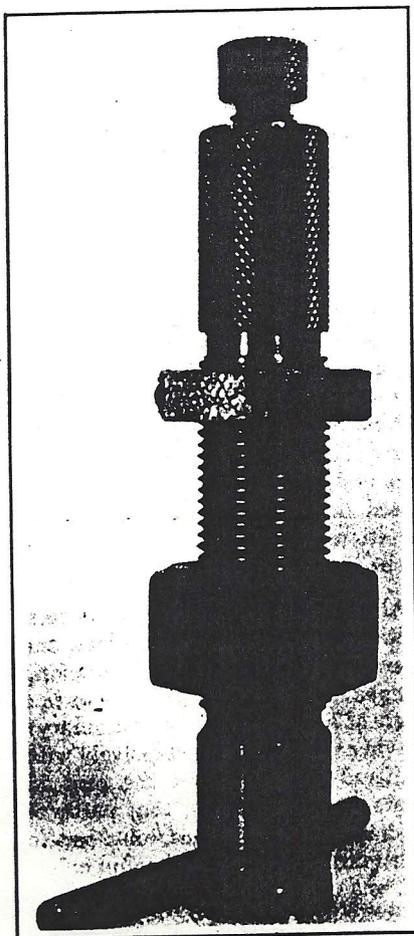
Excessive pressures usually show up as ejector marks on the case head, cratered and/or severely flattened primers. Sticky bolt lift is seldom a noticeable problem. The Gibbs case design has minimum body taper. The amount of bolt thrust any Gibbs cartridge might produce is much lower than any tapered case of similar size. In any excessive pressure situation, a tapered case frequently delivers enough bolt thrust to make the bolt lift sticky or stiff, not so with a Gibbs.

In May 1956, Jack O'Connor reported on the results of test firing three Gibbs rifles at the Speer laboratory in *Outdoor Life* magazine. O'Connor wrote, "the primers were cratered, but

there were no primer leaks and Gibbs claims case life is good. Astounding thing is that in no instance was it hard to extract a case. So help me, I could literally open the bolt with one finger."

In the literature that was sold with his chambering jobs Gibbs wrote that, "pressure indications may be as subtle as a cratered primer," and "the secret to safe handloads is good case life and snug primer pockets." That advice should be regarded as gospel and maximum handloads approached with caution.

When working with maximum handloads, the sizing die should be set so the case fits the rifle chamber with absolute minimum clearance. If the sizing die is set properly, the case head



.30 Gibbs			
bullet	powder	charge (grains)	velocity (fps)
150	IMR-4320	59	3,261
	W-760	65	3,247
	H-380	64	3,246
	IMR-4064	59	3,225
	H-414	65	3,219
	H-4895	57	3,219
	H-4350	66*	3,144
	IMR-3031	56	3,137
165	IMR-4350	65	3,096
	W-760	63	3,106
	H-4350	66*	3,096
	H-380	63	3,089
	IMR-4320	57	3,082
	IMR-7828	67*	2,979
	H-414	63	3,129
	IMR-4350	65	3,115
180	W-760	62	2,971
	H-4350	65	3,036
	H-414	62	2,958
	H-380	62	2,952
	IMR-4320	55	2,913
	H-4831	66*	2,896
	IMR-7828	66*	2,842
	H-4350	61	2,871
	W-760	60	2,855
	IMR-4831	60	2,852
200	IMR-4350	61	2,871
	W-760	60	2,855
	IMR-4831	62	2,852
	IMR-7828	64	2,840
	H-4350	61.5	2,831
	H-414	60	2,815
220	H-4831	63	2,688
	IMR-7828	64	2,670
	IMR-4831	60	2,667
	H-4350	60	2,628
	IMR-4350	59	2,618
	H-870	69*	2,489

All loads listed are maximum except where noted by an asterisk. * Denotes case full. Starting loads should be reduced at least 4 grains. Rifle had a 26-inch barrel with one-in-10-inch twist; all loads used CCI 250 primers, WW cases. Average weight 190.8 grains primed. Velocities measured on Oehler 33 chronograph at 15 feet, converted to muzzle velocity.

Be alert — Publisher cannot accept responsibility for errors in published load data.

The Gibbs case forming tool forms the .30 Gibbs from .30-06 brass with hydraulic pressure.

will not slam against the bolt face and register erroneous pressure indications, nor will case head separations be a problem. In addition, be absolutely sure all sizing lubricant is removed from the cartridge cases. Any oil or residue on the case prevents the case from gripping the chamber wall. A slippery condition within the chamber will increase bolt thrust considerably. High bolt thrust can be very dangerous, particularly when working with high

pressure loads.

Best accuracy in my .30 Gibbs in all bullet weights is about two grains less than maximum. Groups of 1.25 inches at 100 yards are attainable without a lot of load adjustment.

When P.O. Ackley designed the .30 Ackley Improved he felt the .30 caliber would be at its maximum performance if the cartridge case was designed to

hold 65 grains of IMR-4350 to the base of the bullet. Gibbs advertised his case with a loading density of 67 grains of IMR-4350 to the base of the neck, slightly more than the Ackley Improved.

The .30 Gibbs was touted by Rocky as "the world's most powerful .30-06." This statement may invite some controversy but without a doubt the .30 Gibbs is a good "thumper." ●

Chapter Four

.270 GIBBS

Rocky's Favorite

THERE WERE TWO targets to master before the Richmond, California, Rod and Gun Club title could be claimed. Besides having the best group at 100 yards, the winner must have the group with the least drop at 400 yards. The rifle was to be sighted in "dead-on" at 100 yards.

Rocky Gibbs came very close to winning the title with a .270 Winchester. He had the best group at 100

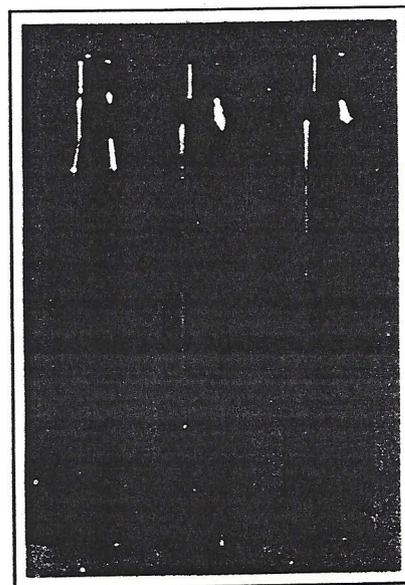
yards, but he needed more velocity to win the second half of the competition at 400 yards.

After the .270 Winchester, Rocky tried a .270 Ackley Improved in order to gain a little more velocity. This cartridge, however, gave Gibbs problems. Whenever maximum loads were tried, extractor problems popped up with the Remington Model 721 he was shooting.

Gibbs decided he should increase the



Rocky Gibbs used a Winchester Model 70 .270 Gibbs to win first place at the Richmond, California, Rod and Gun Club.



The .270 Gibbs is formed by partially sizing the .30-06 case (left) and fireforming to relocate the shoulder (center). Suggested starting loads generate sufficient pressure to produce sharp shoulder angles (right). Opposite page, the .270 Gibbs (left) surpassed the .270 Winchester (right) by 100 to 200 fps with 110, 130 and 150-grain bullets.

capacity of the .270 Ackley Improved case. He also believed the 40 degree Ackley shoulder was too steep. To reduce pressure he decided to modify its shoulder. The extractor problem was solved by switching to a Model 70 Winchester.

In 1953, Rocky had a reamer made for a cartridge which was based on a .270 Winchester case that was blown out with a 35 degree shoulder. The neck of the case came out about .250 inch long and through the years Gibbs was severely criticized for designing a case with such a short neck.

Regardless of the design's soundness, Rocky returned to the Richmond range with his .270 Gibbs. He and his Model 70 Winchester won the competition hands down. The record stood until the club was closed because of the area's urbanization.

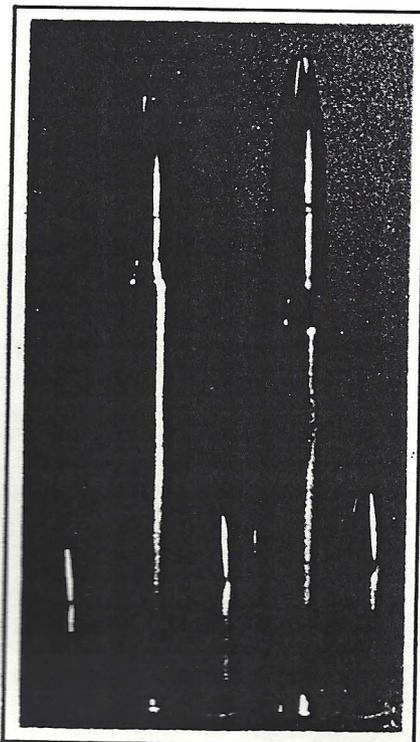
The .270 Gibbs was followed in 1954 with six other Gibbs cartridges. The .240, .25, 6.5, 7mm, .30 and 8mm were all cartridges based on the same case as the .270 Gibbs. Shortly after development, Rocky realized the case design allowed the use of surplus .30-06 cases which were less expensive and more plentiful than .270 Winchester brass.

From 1954 on, all Gibbs cartridges were based on the .30-06 case, including the .338 Gibbs, which appeared in 1968 and was the last of the Gibbs line.

Technically, improved cartridges have the same headspace measurement as the parent cartridge and the standard cartridge can be fired in an improved chamber to produce the new case.

This is not the situation with the Gibbs design. It is not an improved cartridge, but a true wildcat that requires fireforming or some other method to form cases.

Rocky Gibbs designed a hydraulic case forming tool that made it possible



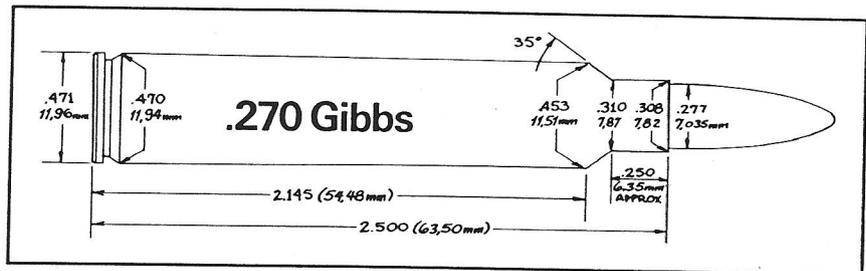
to form cases without leaving the house. Refrigeration oil was the recommended hydraulic liquid.

Fireforming is much easier and not nearly as messy. Using necked down .30-06 or .270 Winchester cases which have been trimmed to 2.494 inches, load with 46.0 grains of IMR-4895, seat a 130-grain bullet to engage the rifling (the case must be held snugly against the bolt face to prevent head separation) and fire the cartridge.

The cheapest and easiest way of fireforming cases is with 10 grains of Unique over a Magnum rifle primer. Fill the remainder of the case with Cream of Wheat and plug the case mouth with toilet tissue to hold the filler in place prior to firing.

Before loading for fireforming, the .30-06 case should be partially sized to create a slight bulge on the case neck. This will establish headspace in the chamber during fireforming and prevent stretching in the wrong places. If using .30-06 cases, one pass through a properly set .270 Gibbs die is all that is necessary. If using trimmed .270 Winchester cases, neck them up to .30 caliber then pass them through a .270 Gibbs sizer and you're set to load.

All Gibbs chambers are cut with the knowledge the cases will be made from .30-06 brass. Consequently, neck reaming or outside neck turning should not be necessary. It is a good idea to slip a bullet into the neck of a fired case. It should pass through the case neck with no resistance. Check this on cases



.270 Gibbs (26-inch barrel)

bullet	powder	charge (grains)	velocity (fps)	remarks
110-grain	H-4350	63.0	3,491	max
	IMR-4350	61.0	3,490	max
	IMR-7828	67.0	3,467	max
	IMR-4831	63.0	3,462	max
	H-4831	66.0	3,460	case full
	IMR-4320	54.0	3,391	max
130-grain	H-450	68.0	3,318	max case full
	H-4831	63.0	3,287	max
	H-4350	60.0	3,265	max
	IMR-4350	58.0	3,264	max
	H-450	66.0	3,152	max
	IMR-7828	64.0	3,231	max
150-grain	IMR-4831	60.0	3,228	max
	IMR-4320	53.0	3,178	max
	H-4831	60.0	3,054	max
	IMR-7828	61.0	3,030	max
	IMR-4350	55.0	3,020	max
	H-4350	57.0	3,015	max
-	IMR-4831	56.0	2,994	max
	H-870	68.0	2,968	max case full
	H-450	63.0	2,950	max

All loads listed should be considered as maximum. Starting loads should be reduced four grains.

Note: All loads used CCI 200 primers and Remington cases. Velocities converted to muzzle.

Be alert — Publisher cannot accept responsibility for errors in published load data.

that have been subjected to at least moderate pressures. Cases that have just been fireformed may not have been subjected to enough pressure to open the necks sufficiently.

All of my .270 Gibbs cases were made from Remington brass. Fireforming with Cream of Wheat for a filler worked fine and losses were minimal — about 3 percent.

After fireforming I started loading with IMR-4350 powder and 130-grain bullets. The powder charge was increased one grain at a time and five-shot strings were fired. When excess pressure surfaced in the form of cratered primers or ejector marks on the case head, the powder charge was reduced one grain.

With the one grain reduction five more shots were fired. Pressure rings were measured with a micrometer on each of the five cases and the readings were averaged. The average represented the standard maximum load. From that point, whenever any pressure ring measurements, regardless of bullet, powder or primer, equaled that standard, a maximum load was recorded.

Additional loads for the .270 Gibbs can be found in *Handloader* No. 90, page 38. The author, Don O'Connor, shows powder charges in excess of what I believe to be safe for my rifle. The difference may be that my barrel has a shorter throat. Gibbs states that his barrels are not freebored or long-throated. My barrel, however, was throated for the 130-grain bullet and not the 170-grain Speer RN.

Since most custom chambers vary, maximum loads can vary. The loads listed are maximum in my rifle. Reduce the maximum charges at least four grains to start and increase loads .5 to 1.0-grain at a time, always watching for signs of excessive pressure.

Gibbs recommended either a one-in-10 or one-in-12-inch twist in his .270 barrels. He used Douglas barrels exclusively for new rifles and did all the chambering and barrel fitting in his shop.

In the May 1956 issue of *Outdoor Life*, Jack O'Connor acknowledges that he tried the .270 Gibbs. He wrote, "as far as I can tell, Brother Gibbs doesn't do it with mirrors. I'm flabbergasted.

So are Ray and Vernon Speer and all right-thinking people who have seen what I've seen."

The .270 Gibbs proved to be his most popular cartridge. He called it "the best all around cartridge for a hand-loader." Rocky advertised the cartridge as producing less recoil than the .30-06, but delivering more energy than the .300 H&H Magnum.

Gibbs believed it was every hand-loader's responsibility to obtain the maximum from each handload. He repeatedly cautioned that long case life and snug primer pockets were the secret to safe handloads.

Sticky bolt lift and extraction should not be a problem until safe pressures have been left well behind. The minimum taper on the Gibbs cases allows it to grip the chamber walls and deliver less thrust to the bolt.

Whenever Rocky Gibbs talked about his .270 or .30 Gibbs cartridges, he couldn't resist saying, "My rifles make a magnum with a short barrel, just another rifle." ●