1	IN THE UNITED STATES DISTRICT COURT
2	FOR THE DISTRICT OF OREGON
3	
4	TERI SEE and DARREL SEE,)
5	husband and wife,)
6	<pre>Plaintiffs,))</pre>
7	vs.) Case No. 81-886)
8	REMINGTON ARMS COMPANY, INC.,)
9	Defendant.)
10	Before: Honorable Edward Leavy, Magistrate
11	United States District Court
12	TESTIMONY OF ROBERT LEE HILLBERG
13	March 4, 1983
14	For the Plaintiffs: BODYFELT, MOUNT & STROUP
15	By: Peter R. Chamberlain Kathryn R. Janssen
16	Attorneys at Law 222 SW Morrison, Rm. 229 Portland, OR 97204
17	502/243-1022
18	For the Defendant: SCHWABE, WILLIAMSON, WYATT, MOORE & ROBERTS
19	By James Huegli, Local Counsel Robert Spurling, Corporate Counsel
20	1200 Standard Plaza Portland, OR 97204
21	503/222-9981
22	VIOLA JOYNER, RPR Court Reporter
23	225 U.S. Courthouse Portland, OR 97205
24	Portland, OR 97205 503/221-3113
25	

Q. And when you graduated from high school, would you please tell the jury what you then did; when did you graduate would be the first question.

A. A long time ago.

Q. Okay.

A. I went to the University of Minnesota; I spent two years there. During that time, I had designed a submachine gun. My father was an ardent hunter, and sportsman, and I accompanied my dad on many hunting trips in Minnesota and throughout South Dakota and the Midwest.

And I was fascinated with firearms. It became a hobby. I was motivated by things mechanical, and I felt that I would like to follow it up as a career, as a gun designer, or work in the gun industry.

And my first attempt was to design a submachine gun.

I took this gun, in 1938, to the Colt Patent Firearms Manufacturing Company, in Hartford, Connecticut.

Colt had no interest in the gun, because at that time they were in full production with the Thompson submachine gun of their own, and the Thompson was not selling. We were not at war at that point, and there was no requirements for submachine guns. It was actually a very poor weapon for police use, and the military wasn't interested. So I struck out as far as selling my gun to the Colt Company.

Incidentally, I built the model of it at the Wilt

Chamberlain Air Force Base, where I was a Member of the Navy Scouting Squad on the reserve, while I was going to school.

However, the Colt Company did have an interest in hiring me, and since this was my ultimate desire, to get into the gun industry, I accepted the job. It was sort of an indoctrination to the gun industry, because they moved me from department to department as a sort of form of education.

I worked for the assembly departments, for quality control, and inspection. I worked in the manufacturing division to learn how the firearms were made. I worked in the engineering department predominantly.

And while at Colt, I designed a miniaturized single action pistol, the old John Wayne-type of cowboy pistol. It was merely a copy of the old Colt, but it was a reduced seven-eighths scale. This gun was ultimately produced by Colt many years later.

I also designed a so-called short action rifle while at Colt, which meant that the hammer didn't have to go back through the large arc but had a very short throw.

The advantage of this was to make it a faster firing weapon. For-- it was valuable in terms of a combat weapon, because you could fire it faster.

I left Colt in 1940 and went to Pratt & Whitney Aircraft.

0. In 1940, you said?

A. Yes.

2

Q. Okay. And what did you do at Pratt Whitney?

Well, I worked in the Engineering Department of Pratt

3

4 Whitney, and I was working on experimental engines and

5

6 the results of our new machines in the various aircraft and

7

8 strictly promotion on the part of Pratt Whitney to determine

9

whether our engines could equal or outperform the competitive.

compared them to other aircraft with other engines. This was

experimental installations on fighter aircraft. And we tested

10 While I was at Pratt Whitney Aircraft, however, I

11

when I had-- the opportunity arose to work on a 20 millimeter

The United States Army was soliciting certain

spent a tremendous amount of time on my own, evenings, and

13

12

3 cannon, and I also started working on a carbine.

I was at Pratt Whitney.

14 15

at that time to design a U.S. carbine rifle. And I spent a

16

17 considerable amount of time on that particular development.

18

That pretty much covers my ordnance activity while

inventors, and certain gun companies throughout the country

19

20

Q. Where did you then go from Pratt Whitney, Mr.

21

Hillberg?

A. Well, in 1942 I went with the Ordinance Division of

22

Bell Aircraft.

23

24

At the start of the war Bell Aircraft had an ordnance division in Burlington, Vermont that was created

25

5

specifically to design and build ordnance for the Air Force.

I was a Project Engineer at Bell, and I designed a great number of ordnance oriented equipment. Just to name a few of them, I designed the-- or shall I say I was a designer working on various-- I don't want to infer that all of the projects that I'm going to mention were mine exclusively. Many times a project is not a one-man development.

What I'm saying is that I worked on these various things in charge of the operation, but I had other engineers working for me on them. One of them would be a tail and waste turret for the famous B17 bomber. I worked on Graumann turrets and many others.

We developed continuous belt feed mechanisms for various aircraft. We developed radar gun sight installations, many, many things that were ordnance oriented, as I said before.

The carbine that I started at Pratt Whitney Aircraft on my own, Bell took an interest in, and they decided to build a prototype of it and submit it into the competition. This was kind of late in the schedule, but we built the gun, and the tests at Aberdeen were already under way. And, unfortunately, my gun never did enter the trials.

However, Canada was looking for a similar weapon, and we submitted the gun to Canada, and later on during the war, we were-- Bell was doing a lot of business with Russia;

5

they were very friendly, and the P63 Fighter, we were in full production on that, that particular aircraft was sent in quantity to Russia and sold. So was the P39 Bell Single Engine Fighter; so we had Russian contacts, and I must say that they received all of the drawings for the guns, and photographs, and data, but we never heard anything further from the project.

Without going into a lot of boring detail and the length and number of projects that I worked on, that pretty much covers the type of things that I was doing at Bell.

- Q. And after you left Bell Aviation, did you then go to Republic Aviation?
 - A. Yes, sir, I did.
 - Q. What did you do at Republic, Mr. Hillberg?
- A. Well, at Republic Aviation, I was in the armament section, and I designed the gun mounts, the ammunition selection system, and discharge system for the F84 Fighter, which was a jet fighter. I designed the bomb rack, which retracted on bomb release.

And then later on in the F91 Fighter, which was an experimental interceptor fighter, which was rocket powered and jet powered, I designed the very complex throttle system for the rocket engines on that particular aircraft.

I was Project Engineer on the armament, which consisted of 20 millimeter cannons, and I worked on other details of the airplane, such as the impenaj, some work on the

D

1 | landing gear.

But my main work at Republic as armament expert, I was assigned to the Ready Room, the Secret Room, as Republic Aviation was working on advanced fighter aircraft which would appear six, seven years from the date that we would start the design. The Air Force generally laid down advance future plans, and all of the aircraft companies had a Secret Room, which we would develop the aircraft.

And the reason for this is that up to that point in time, all military aircraft were generally built, and then as an afterthought, you would hang a machine gun on it, or some other type of ordnance, and the speeds were becoming so exotic that you just don't do that anymore, because of the structure and strength, you have to make them within the envelope of the air frame. So that the armament became, all of a sudden, a very integral and important phase of aircraft design, and we were working in the Secret Room with exotic armament. In most cases, guns and rocket missiles that hadn't even been produced yet, because we were working with ordnance that was in the future with an aircraft that was in the future.

- Q. Okay. After you left Republic, did you then go to work for the High Standard Firearm Company?
 - A. Yes, sir, I did.
- Q. What did you do at High Standard; was your function once again that of a designer of firearms?

5

A. Initially when I went there, yes. I was in the Engineering Department. I was a designer there. And I designed several guns as a designer, and after I was there for one year in that capacity, I became Chief Engineer and Head of Research and Development for the High Standard Company.

Q. Can you tell the jury any of the firearms that you did design there at High Standard.

A. Well, at High Standard we were really very versatile, inasmuch as that during the war, we produced machine guns, commercial rifles, commercial shotguns and pistols. In other words, we covered the whole spectrum of firearms design.

My endeavors were in practically all of these areas.

At High Standard I developed and designed and built the World's first production gas operated shotgun.

By gas operated, I mean shotguns up to that point had, by and large, been recoil operated automatically.

Q. Let me interrupt you again for a moment.

Does Remington produce a prototype or what I will call an offspring of a gas operated shotgun?

A. Yes. Remington followed suit a few years later with their own gas operated shotgun, and they were very similar in many ways.

They both had sleeve pistons which were unique to the industry, and my patents on the sleeve piston preceded any of their work.

1 D.

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

Okay.

A. And, incidentally, the Remington 1100 gas operated shotgun is the high production shotgun in the World.

- Q. Do you hold patents on the guns that you designed?
- A. Yes, sir. I have about, well, -- well, over thirty patents, United States and foreign patents on firearms.

I have three or four more that I have been notified by the Patent Office that they are about to release. I also have five or six more pending.

- Q. Okay. After you left High Standard, did you then go to work for someone else at a company called Whitney?
- A. Well, sir, Whitney Firearms, actually I went to Bellmore Johnson Tool (phonetic) after I left High Standard.
 - Q. Tell us how Whitney Firearms came into existence?
- A. I designed an automatic pistol, a ten-shot automatic pistol.

Since we were within a shadow of Eli Whitney's original plant, we chose the name Whitney for the pistol, and the Whitney Company was formulated to manufacture this pistol.

And I hired a lot of employees that I worked with from High Standard, some from Winchester, and we set up a manufacturing plant in East-- excuse me. East Haven, Connecticut, although, the address was New Haven.

And the Whitney Firearms Company was formulated specifically with Bellmore Johnson tool management, of which I

25

3 4

5

6

7

8

9

10 11

12

13

14

15

16

17

18 19

20

21

22

23

24

25

was a member. I was Chief Engineer of Bellmore Johnson, and we manufactured 10,000 pistols before we sold it. We did that in a period of about one year.

- After you sold Whitney, and what year was that in? 0. About '56?
- A. Yes, it was somewhere in '56. I can't remember the exact month.
- From 1956 up until the present time, Mr. Hillberg, Q. what has been your occupation?
- A. From 1956 to the present time, I have been a professional gun designer and consultant, doing work for various gun companies.

At one time or another, I worked for a large number of the gun manufacturers in this country.

Okay. Now, I'm talking now about working for gun manufacturing versus testifying for them in court and being an expert witness for a lawyer.

What gun manufacturers have come to you and asked for your professional quidance and expertise in the design and production of firearms unrelated to lawsuits or court cases?

Well, there have been many. I have tabulated them here. I have worked in one way or capacity or another, mostly, however, in the capacity of designing firearms to their specifications for these various companies: Colt Patent Firearms, in Hartford; the High Standard Manufacturing Company

in Hamlin, Connecticut; Winchester, in New Haven; Marlin Firearms; Mosburg & Sons, Remington; Savage Arms; Ithica Brown Arms, in Morgan Utah; Springfield Armory; and several Pentagon agencies in Washington on a confidential basis.

- Okay.
- A. CIA.
- Q. To move forward, then, we will come back here. There has been such testimony that Mr. Boudreau took into his house a Marlin Lever Action Firearm. I can't remember what the number of it was. You were here in the courtroom and heard it, I think; who designed that firearm?
 - A. I designed that firearm.
- O. Okay. Now, have you been consulted by any Government agencies besides the CIA to do testing, or has most of your testing been civilian?
 - A. Did you say testing?
 - Q. Testing or designing.
- A. Or designing. Yes. I have been involved very heavily in military projects through the years. One of them was the design and development of attack machine gun.

Our contract came through the Springfield Armory, and there was later another contract with the Detroit Tanker Sentinel (phonetic), and I developed an automatic pistol, the T3, for the ordnance department.

We had other contracts, such as machine gun charging

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

Okay. Mr. Hillberg, as a firearms expert, your area of expertise, then, versus Mr. Davis' expertise, his was testing; yours is design, as I understand?

A. I would say primarily, our expertise is at opposite ends of the spectrum, although we have certain commonalities where our expertise meets.

O. Okay. Have you--

You have testified in other court cases for plaintiffs and defendants; is that correct?

- A. That is correct.
- Q. Do you mostly testify for defendants versus the plaintiff;
 - A. Yes, most of my testimony has been for defendant.
 - Q. Why is that?

A. Well, there is a very good reason for it. I'm not very well known to the general public. I am quite well known to the arms industry because of the various design guns that I have made, and, also, because of the number of patents that I hold, etcetera.

So it's only natural that the gun industry is familiar with me; and by the same token, it's only natural that the general public isn't.

Q. Okay. Have you been involved with any law enforcement agencies over the years?

23

24

25

- A. Yes, sir, I have.
- 0. Which ones?
- A. Well, I'm a member of the New England Chiefs of
 Police; I'm also a member of the International Association of
 Chiefs of Police; I'm a New Haven County Deputy Sheriff; I'm
 a member of the Connecticut Police Chiefs Association; and now
 Confederation of Police, just to name a few. I believe that
 covers them.
- O. Have you published any articles about firearms, or have any articles been written about you?
- A. Yes, sir. I'm not a writer, although I did write several things for the NRA many years ago. I don't even know if they were published.

However, there have been numerous articles published about me, in several books, several articles in them about my work.

Just to name a few-- or do you want to know?

Q. That's all right. I think your qualifications speak for themselves up to this point in time.

I'd like now to ask you some questions about your design expertise. Have you actually designed safety for firearms?

A. Virtually every time I design a firearm, I have to design a safety system for it. Yes, it's one of the prime considerations.

7

O. I'd like to call your attention specifically now to the history of the art of the bolt action rifle, because we are not concerned in this lawsuit with pistols or machine guns or short guns, or anything else. We are concerned with bolt action rifle.

I'd like you to tell this jury when the bolt action rifle was first developed and give us a very brief history of the production of the bolt action rifle from that point forward.

A. The heritage of the bolt action rifle goes back to about 1838. Up to that point in time, all rifles were single shot.

And through the years, there was a great demand for a rifle that you could fire rapidly, and the prime objective was to get more shots on target. The quicker the better.

And in 1838, a German by the name of Nicholas

Dreyse developed a bolt action rifle. And the Prussian

Government immediately recognized its advantages and adopted it as an official weapon.

And this started a tremendous chain of development and research throughout the entire World.

And all of the major Army and, in fact, all Armies rapidly became equipped with many versions of bolt action rifles.

The Dreyse gun was greatly improved upon throughout the years, and the bolt action gun became a standard for every Nation in the World.

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

1

And the same attempt to get more shots on targets rapidly spurred the development of many other types of firearms.

In our country, you are all familiar with the John Wayne lever action and the advantage of this speed of firing was that you didn't have to lift a bolt up, pull it back, push it forward, and close it, and then fire. You merely went like that (demonstrating). It had a lever that swung. You saw one here today. It was much faster.

And then the pump action or trombone action was developed, and this had a decided advantage over both the bolt and the lever.

And it was merely a rifle that you held in firing position, and to repeat, you merely moved the pump up front, or the trombone. But your hand remained on the grip and on the trigger. You didn't have to take your hand off to move anything. And in so doing, you could fire extremely fast. You merely pumped your hand, every time you did, you pulled the trigger.

So, then, last and finally, the ultimate development, as far as rifles was concerned, was the automatic rifle. automatic rifle was the development where you cocked it for the first shot, and when you were ready to shoot, you merely pulled the trigger, and it would shoot as fast as you could move your finger.

21 22 23

25

24

5

So the transition and development from 1838, from the single shot rifle to the bolt, on up to the automatic rifle, the emphasis was on speed.

And I must say that with all the development, an improved automatic rifle doesn't do anything particularly that the bolt action can't do either as well or better. Outside of that one factor-- speed.

The bolt is inherently more accurate, and it's inherently more reliable, because it has less parts, and it doesn't depend upon the kinematics of many pieces in motion.

I think it's also interesting to note that-Well, I guess that's another subject. I was going to

talk about the common revolver today without a safety.

Q. We are interested here in bolt action rifles. There has been a lot of discussion about Ml4's and 16's. I'm concerned about telling the jury about bolt action rifles, and I would like to move on to that now.

Are you familiar with the Model 700 Remington?

- A. Yes, sir.
- Q. How long have you been familiar with that rifle?
- A. Quite a few years. Probably goes back to very shortly after it was brought out. I tried to make myself familiar with new products.
- Q. Can you tell the jury what predecessors to the Model 700 were in relationship to the bolt lock, the safety,

- A. Well, are you talking about commercial firearms? Or military, or both?
- 0. I'm talking about commercial firearms that Remington produced.
- A. Well, prior to that, generally the type of firearm that is the 700, just prior to that, Remington made a Model 30, which was a development of the 1971 United States rifle, which was the United States Enfield, which was produced in fantastic quantities in World War I. It was a sporterized (phonetic) version. It had a much more streamlined stock, better sights, and it was a commercial version.
- Q. Does Remington's, if you will, the history of Remington's 700, then go back to early 1900's with the old Enfield two-position bolt lock firearm?
- A. Well, the United States Model 1971 Enfield, which Remington produced, was really the grandaddy-- actually, if you want to look at all or most all commercial bolt action rifles, they all have their inheritance back from the military bolt action rifle in one way or the other.

The famous Mauser, and etcetera, were all released and improved upon and put into commercial form.

Okay. You are a gun designer as the qualifications that you have laid out to us. I'd like you to tell us, and I assume you have seen Mr. Martin's automatic safety here that

he's designed, have you not?

A. Yes, sir.

Q. And you have heard him testify as to how he set about and where he was when he thought about designing it and what he did.

I'd like you to tell the jury in your expert opinion how do you set about to design a new firearm; is it something that takes a great deal of time?

A. It certainly does, and to design a new firearm, first of all, you have to look at the requirements. I call it project objectives.

We try, first of all, we try to see whether there is a void in the line. If it won't sell, there is no particular point in building it. We look for voids.

And if we can see a particular type of development that would fill a need, that would have salability, we set up project objectives to fill that void.

We then make a market survey, and we find out what does the customer want, and we also set up a price area where that firearm has to fit. If it's the World's greatest firearm but if the price is out of sight, it still won't sell, so we are restricted as far as development goes by many, many factors.

And we set about to study the competition, and we look for pluses and minuses, and we try to put all of the

S 1413

5

_

 pluses together and come up with an overall design.

After it's on paper, we are then in a position to run a cost survey and determine whether we can meet the market, the projected market, for that particular firearm that the sales department has set up as a requirement.

And if that meets our specifications, we then build prototypes, and we test the gun. And if we're good designers, it works somewhat like we had hoped it would, but it very seldom does.

Subsequently, when you are speaking of time, that's why I mention it, we usually find things that we can improve upon, and we go through a development program.

In other words, we don't design it, build it, and then-- boom, sell it.

And then when everything gets worked out and we feel it's ready for production, it has to be tooled. Generally this takes a minimum of a year.

And finally, I would say, after about a minimum of three to possibly five years, this development is ready for the market.

Okay. Do you have an opinion design-wise as to the quality of design, overall design, as a general proposition, first, of the Remington Model 700 that is involved in this lawsuit today?

MR. CHAMBERLAIN: I'll object to the form of the question--

4

5 6

7

8 9

10 11

12

13 14

15

16

17

19

18

20 21

22

23

24 25 today; I think that we ought to stick with the particular defect, not the general overall quality of the rifle.

THE COURT: It's overruled.

- (By Mr. Huegli) Please answer the question.
- I will, if you repeat it, please.
- Q. Do you have an opinion, design-wise, as to the overall design, first, and then we will go down to the specific parts of the Remington Model 700 that is in this room today, one produced in 1976 and sold to Mr. Boudreau.
- It's an excellent design. I feel that it is very A. well executed.
- Would you agree with Mr. Martin's testimony from a prior case that design-wise the Remington Model 100 (sic) has been the state of the art for a long, long time?
 - A. It certainly has.
- How important is safety in relationship to the design of a firearm?
- Safety is the single most important design consideration when you design a new firearm, and I don't care whether it's a-- whether we are talking about an expensive, low cost, or whether we are talking about the Rolls Royce of the industry, safety is the most important consideration, and price has nothing to do with it.
- Okay. Are there some circumstances where price would Q. enter into the design and production, actually selling of a

He told this jury about some patents that I want you

to explain for us, if you would. The patents were in 1945, by

H & R; 1949 by Winchester; 1951 by Winchester; 1958 by a

fellow by the name of Joe Fisher (phonetic); 1976, one by

Marlin; 1964 by Savage; and 1968 by Olin (phonetic); and he

A.

20

21

22

23

24

25

Yes, sir.

20

21

22

23

24

25

told the jury that all of those patents were automatic safety bolt lock patents; did you hear that testimony?

- A. Yes, I did.
- Q. And I asked him whether he knew whether or not any of those firearms had been placed into production under those patents for the general public; did you hear that testimony?
 - A. I heard.
 - Q. And you heard him say that he didn't know?
 - A. Yes, sir.
 - 0. Do you know?
- A. I have never seen any used. I'm not familiar with any automatic safety on a magazine type high powered rifle. There isn't such a thing.
- Q. Have you ever seen a high powered bolt action rifle in the whole world, outside L.S. Martin's gun that he produced after the last trial;
 - A. No, sir.
- Q. Would you agree that manual safety should not be relied upon at any time?
 - A. I don't think a safety should ever be relied upon.
- Basically, a safety is an aid towards safe gun handling practice, but it is never, ever, a substitute. A safety should not be trusted.
- First of all, it may be off when you think it's on.

 Secondly, it may be on when you may put it on, but inadvertently

D

may not be off, and you do not know it.

2

1

Q. Mr. Hillberg, do--

3

In your experience, --

4 5

Your experience is that there are those rules that you have just laid down for us, common rules in the firearms industry?

6 7

A. Absolutely.

8

O. Now, we have talked about speed, firearm speed, and you have told us a little bit of the history about that.

10

9

Are there some circumstances, however, where a slight loss of speed would be acceptable in a firearm when we are

11

12 | talking about safety?

13

A. Very definitely. In a firearm where your life isn't at stake, or where it isn't a defensive weapon, so to speak,

15

14

speed of firing does not mean anything.

Like a double barreled shotgun?

16

17

A. Something like a double barrel or single barrel shotgun, or a single action pistol, for example.

18

Q. None of those are repeating rifles, are they?

19 20

A. No, they are not.

21

22

Q. Are there any circumstances where speed, where an automatic safety would completely defeat the purpose of the firearm, such as in a bolt action rifle?

23

A. Very definitely.

24

Q. Have you--

25

24

25

Yes, technically, I have never worked or done anything

that you also consult for who is Ruger's counsel, much as

Remington would have general counsel back East?

1

3

4

5

6

8

7

9

10 11

12

13

14

15

16 17

18

19

20

21

22

23 24

25

for Ruger directly. If they required my services, they would do it through a law firm in Bridgeport, Connecticut, by the name of Marsh, Day, and Calhoun, and they direct my activities.

Hillberg

And as an expert in the firearm areas over the years, is it a common practice for you, as a designer, and as an independent designer since 1956, to design something and then go try to sell it to Winchester, or Ruger, or Savage, or others?

A. That's one way of doing it.

There is two ways as a designer that I get involved. One, a gun company may come to me and give me their project objectives and ask that I submit proposals.

The other way is that I may see a void in their line and feel that it's a worthwhile gamble on my part to put my own money and time and develop something that I think, I hope, they need.

Good case in point is the Browning Company. they didn't have a pump gun in their line, and I designed the Browning BPS, Browning Pump Shotgun, which is now in full production. It was never requested by Browning; it was something that I developed and took to them, so you can go into either direction.

Q. Mr. Hillberg, so the jury will understand, there was a question of Mr. Davis--

I think that you have been sitting in the back of the

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

A.

Q.

Q.

A.

PORTLAND, OREGON, FRIDAY, MARCH 4, 1983, 1:32 P.M.

DIRECT EXAMINATION (continued)

BY MR. HUEGLI:

Q. Mr. Hillberg, at the break we were-- we had finished up with your qualifications and started in on some questions on design in relationship to safety mechanisms on firearms, and we were starting in on automatic safety mechanisms.

I would like to call your attention to some of the history that you gave us regarding rifles, firearms, guns that are repeaters, if you will, and that the progression would go from the Musket loaders, I suppose, up to repeaters, and ask you to tell the jury what safety mechanism, for example, exists on a-- well, let's say, a revolver, a .45 revolver, or some type of revolver gun with a hammer that you cock back and shoot it.

A. The double action revolver, which you see virtually every police department carrying, and the FBI, they have no safeties. They depend primarily upon safe gun handling practice, and there are no manual safeties. There is nothing you push or turn to the gun.

You can pick it up and fire it instantly. And the main reason for that is because the revolver is a protective weapon; when you need it, you need it instantly, because your

very life may be at stake.

2 3

So, in the military, you have plenty of time to anticipate you are going to need a handgun. You are ready to

4

use it, and you have time to put the safety off.

5 6

bad guys can fire first; so you need your weapon, and you need

A policeman doesn't always have that luxury.

7

it immediately; so you pull it out and pull the trigger, and it

8

goes bang; therefore, safety is very undesirable, and it all

relates to speed of fire. 9

10

There are some firearms where a safety is, Q. Okay.

11

and some where it isn't; it depends upon the design purpose of

12

the firearm; is that correct?

13

A. Absolutely.

14

All right now, I'd like to ask you some questions about Mr. Martin's testimony. He's talked about automatic

15

safeties on bolt action firearms.

16 17

First of all, there are certain guns that have auto-

18

what an automatic safety is?

matic safeties, are there not?

19

A. Yes, sir.

20

Okay. What is your understanding, Mr. Hillberg, of

21

22

23

24

25

Well, an automatic safety is a safety that goes into the safe mode without doing anything, and that is, it's automatic. You don't manually push it on safe, and the act of cocking the gun, or opening it and closing it, whatever, the

safety automatically goes on safe. You have no alternative.

And each shot that you take, in the case of Mr.

Martin's automatic safety, you have to push it off, then fire,
then cock it, then push it off, then fire. You have an extra
operation each time you shoot.

- Q. Well, that extra operation, Mr. Hillberg, may only take a second or a half second?
- A. That's very true, and when you demonstrate Mr.

 Martin's safety, you will find that operates reasonably fast.

The point being, it's an extra operation, and the more extra operations you have before you fire, the longer it's going to take, and it could be that half second, or whatever, that spells the difference between living or dying, or a hit on target or missed deer, or whatever.

- Okay. Now, we've got three types of firearms here.
 We have two-position safety, three-position safety, and automatic safety; is that correct?
 - A. Correct.
- Now, the only gun in the courtroom up until today that had a two-position bolt lock safety was our gun, was it not?
 - A. That's correct, up to now.
- Q. I'm going to hand you what has been marked Exhibit No. 228, and tell me, if you would identify this exhibit for me.

1	A. This is an Enter Arms High Powered Rifle, caliber
2	270, Mark X.
3	Q. Okay, would you tell the jury, stand down here, and
4	come down, and show them what kind of safety it has.
5	By the way, is that a brand new gun?
6	A. This is a brand new gun, and it's a modification of
7	the famous German Mauser design.
8	Q. Show the jury, number one, the type of safety, does
9	it or does it not have a bolt lock, and does it or does it not
10	have a trigger block?
11	A. This is the safety lock here. The trigger, obviously.
12	And with the bolt closed, with the safety to the rear, the
13	firearm is on safe. It does not have a trigger block. You can
14	see the trigger move.
15	Q. Does it have a sear block?
16	A. No, sir. It does not have a sear block.
17	Q. How is it blocked?
18	A. By
19	I beg your pardon. This does have a sear block, and
20	it's a two-position safety.
21	Q. Okay.
22	A. This is the safety. Forward it is on safe. To the
23	rear it is
24	To the rear, it's on safe; forward, it's on fire,
25	and you will notice that the rear position, the bolt is locked.

5 6

7

8

9

10 11

12

13

14

15

16

17

18

19 20

21

22

23 24

25

In other words, as far as the operation cycle is concerned, it's identical to the Remington Model 700.

All right. Now, on the Remington Model 700, to unload the gun, you move it to the safety position, open the bolt, pull the safety back to make sure the trigger is safe again, then you open the bullet?

On the Remington 700, you move the safety to the fire position.

Okay. Q.

Which you have to here, because you can't open the bolt, so you move it to the fire position. Now you can open the bolt, you merely lift it.

Q. Can you move the safety back?

A. Yes, you can.

Q. On this gun, you can as well?

Yes, up to now, the operation of rifles is identical to the Model 700.

Q. And to get the bullet out, you pull the bolt back?

(Witness pulls the bolt back, demonstrating.)

MR. HUEGLI: Very well. We would offer 228.

MR. CHAMBERLAIN: Could I see that, Counsel, I haven't seen it before.

Q. (By Mr. Huegli) I'll show you Exhibit 229 and ask if you would identify this firearm.

MR. CHAMBERLAIN: No objection.

1 THE COURT: That's 22--2 MR. HUEGLI: 228. 3 THE WITNESS: This is a Ruger Model 77, bolt action high 4 powered rifle. 5 THE COURT: 227 is offered and received. 6 MR. HUEGLI: 228. 7 THE COURT: 228 is received. 8 (By Mr. Huegli) Is that a brand new gun? Would you, once again, tell the jury how that firearm operates in 9 10 relationship to the safety. The safety on this firearm is located right in back 11 of the bolt and barrel on the near line of the gun. We call 12 it a tank safety. This being the tank of the gun. It is a 13 two-position safety. You push it to the rear, it's on safe; and you push 15 it forward, and it's on fire. 16 When it's to the rear, you cannot operate the bolt; 17 the bolt is locked. 18 Q. How can you--19 Can that gun or the prior exhibit be unloaded without 20 moving the safety to the fire position? 21 No, sir. In order to unload this firearm, you have 22 A. to push it in this position here. You can then open it up. 23 24 Q. Okay. 25 Like all two-position safety firearms, or any two-A.

or three-position firearm, which cocks on the opening motion of the bolt, the instant this bolt is moved the very slightest bit, the gun is safe. It cannot fire.

Also, if it did, for example, if it were in that condition there, and the 700 is exactly like it, if for some reason or other you should pull the trigger, that would appear as though it fires, but that is what we call a follow-down, also.

Q. The bullet won't go off?

A. The bullet won't fire or wouldn't go off.

MR. HUEGLI: Thank you. We would offer 229.

MR. CHAMBERLAIN: No objections.

does it not? Is that what we call a hang tag?

THE COURT: It's received.

0. (By Mr. Huegli) And lastly, I'd like to show you what has been marked as Exhibit 230. This gun has a hang tag,

A. Yes, sir.

MR. HUEGLI: Your Honor, I'm going to take the hang tag off, unless Mr. Chamberlain wants it in. I wanted the Court to know the tag was on this gun when we purchased it.

MR. CHAMBERLAIN: I have never seen it; I can't very well take a position.

Q. (By Mr. Huegli) Would you examine this rifle and tell us what it is.

A. This is a Weatherby Mark V. You might say that this

1

4

5

б

7

8

9

10 11

12

13 14

15

16

17

18

19

20

2122

23

24

25

is the Cadillac, or rather, the Rolls Royce of bolt action rifles. This gun costs over a thousand dollars. And no amount of money has been spared to make this the very best.

Q. Would you once again--Is that a brand new gun?

- A. This is a brand new gun.
- Q. Would you show the jury the type of safety that the top of the line, the Weatherby, has on it, and these are all high powered near fire rifles, are they not?
- A. Yes, sir, they are. It operates -- excuse me, substantially the same as all of the other rifles that you have seen.

The safety lock is here, and when this safety is in the back position, the firearm is safe.

- Q. Does that have a trigger block?
- A. It does not have a trigger block. You can see the trigger moving. It has a sear block, like the 700.
 - Okay.
- A. The two-position safety, when it's in the rear, in the safety position, you cannot open the bolt.

It has a bolt lock, and the only way that you can open the gun is to release the safety into the forward position. You may then lift up the bolt handle.

I might point out in this operation, as in the 700 and all of the other rifles that you have seen, when you lift

1 the bolt handle, your hand is going away from the trigger, not 2 into the trigger. 3 MR. HUEGLI: Okay. We would offer 230. 4 MR. CHAMBERLAIN: No objection. 5 THE COURT: 230 is received. 6 Q. (By Mr. Huegli) All right, now, Mr. Martin, you 7 heard Mr. -- excuse me, Mr. Hillberg, you heard Mr. Martin 8 testify here in court? 9 Yes, sir, I did. A. 10 And you had an opportunity, did you not, to examine his rifle in the office of Mr. Chamberlain, with me and Mr. 11 12 Linde, and you examined this for the first time, when? I guess 13 that is the best question. 14 A. The evidence rifle? 15 Yes, the L.S. Martin. A. The automatic safety. I viewed that firearm Tuesday 16 evening after court. 17 18 Q. All right. Now, this has an automatic safety that 19 Mr. Martin described, and in order to function it, to function 20 it, it's on safe; you have to push the safety off; pull the 21 trigger; cock the gun, and close it up; push the safety; and pull the trigger; is that correct? 22 A. That is correct. 23 24 Q. Okay. Do you have an opinion as to--25 And you heard Mr. Martin tell us that he was

7

9

8

10 11

12 13

14

15 16

17

18

19

20

21

22 23

24

25

satisfied with the design and execution of this gun as compared to the 700 itself, did you not?

- Yes, sir. A.
- Would you give us an opinion, or do you have an Q. opinion as to whether or not the design of the automatic safety as designed, implemented by Mr. Martin, is a satisfactory design?
 - A. Is what?
 - 0. Is satisfactory or a safe design.
- No, sir, it's anything but. It's unprofessional in A. many respects. I can find many things wrong with it.
 - What about the spring, for example?
- Well, it has a spring that is exposed. areas that are open on the side that are susceptible to twiqs, or just about anything, that could hold it out of operation.

It's, also, very obtrusive; it sticks out in the air; it's very easy to turn it off when you inadvertently-you think it's on, but it really isn't, because it can be backed up against things; it can be set down on things; and knocked off very easily.

- Is it subject to being damaged in the woods?
- A. Oh, yes.
- I would like to establish now--Q.

Stand in front of the jury. Wait. Stand behind me. I'm going to ask you to assume I'm a hunter in the woods, or--

I'm a shooter, and I pick this rifle up, by gosh, I do accidentally pull the trigger on Mr. Martin's gun, did I not?

Yes, sir. A.

22

23

24

- It appears to be in safety position, does it not? Q.
- A. Sure does.

 $\ensuremath{\mathtt{Q}}$. Please show the jury what happens when you are now ready to shoot that gun.

A. It's an accident waiting to happen, because all you have to do is to touch the automatic safety, and you will notice my finger is nowhere near the safety; it fired off safe; I didn't touch the trigger.

- Q. Is that something that just happens once in a while?
- A. No, sir. With this gun, it happens 100 percent of the time.
 - Q. Would you do that again for the jury.
- A. If you don't push it down all the way, if you push it like that--
 - Q. Then pull the trigger?
 - A. Pull the trigger, I pushed it--

MR. CHAMBERLAIN: Well, Your Honor, if this is going to be an experiment or demonstration, I'm going to object. I don't know what they are doing, and I can't see what Mr. Hillberg is doing with the gun. I'm not sure the jury can see either.

THE COURT: It's overruled.

- 0. (By Mr. Huegli) Pull the trigger, now what happens?

 Now what happens if you push the safety?
- A. When you push the safety, which is here, I go to push it off, I just touch it, and the gun fires. I'm nowheres near the trigger.
 - Q. I didn't pull the trigger. You have to pull the

1 trigger. In other words, now the sequence, you pull the 2 trigger, now what happens? 3 A. Bang. 4 Thank you. Q. 5 Would you take that gun hunting with you? 6 No, sir, I sure wouldn't. A. 7 MR. HUEGLI: Thank you. 8 THE COURT: Are you ready for cross? 9 MR. HUEGLI: I do have one more question. Excuse me, I 10 do have one more question. 11 (By Mr. Huegli) I asked Mr. Martin if he had ever 0. 12 seen this book called Bolt Action, by Stuart Otteson. 13 Yes, sir. A. And I can't remember what he said, but he didn't 14 recognize it as authoritative on bolt action rifles; do you? 15 It's very authoritative, known throughout the A. 16 industry. 17 Is that a book that you would rely upon? 18 19 A. Absolutely. In forming your opinions here today? 20 0, Mr. Otteson is an engineer who, I believe, works for 21 the Patent Office. 22 MR. HUEGLI: Your Honor, on the basis of his testimony, I 23 would like to read a page from Otteson, page 134, in relation-24 ship to the Model 700 firearm, an issue in this case today, 25

D-X

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

25

with the two-position safety on the bolt lock.

MR. CHAMBERLAIN: Is he trying to impeach his own witness, or trying to read out of a book?

THE COURT: Well, do you have any objection?

MR. CHAMBERLAIN: My objection is hearsay.

THE COURT: The objection is sustained.

MR. HUEGLI: Your Honor, I don't believe it's hearsay if this witness states that he relies upon it and it's authoritative. The testimony from this book could come in.

THE COURT: All right, on cross-examination, but not direct.

MR. HUEGLI: Thank you. That's all I have.

CROSS-EXAMINATION

BY MR. CHAMBERLAIN:

- Mr. Hillberg, you testified before the lunch break that you did work for a great number of different gun manufacturers, and you listed them all for us, and then you mentioned that you also do some work through a law firm that defends Ruger.
 - That's correct. March, Day and Calhoun.
- You do not work directly for Ruger, but through that law firm; you are on Ruger's side, so to speak, consulting for them?
 - That's correct. A.

Ιt

Other than the Model 700, Remington Model 700, what

bolt action rifle does Remington presently manufacture which

23

24

25

0.

incorporate the bolt lock feature?

S 1439

A.

7

8

9 10

11

12

13 14

15

16

17

18

19

20

21 22

23

24

25

Well, I'm not all that conversant with the present Remington line, but the only bolt action rifle that I'm familiar with that Remington produces is -- well, I'll skip the .22's, because we are talking about peaches and bananas, as far as high powered is concerned, and the only one that I know of that is bolt action is the 788.

And the Model 700, you do keep up with current designs and current products, I thought you told us at the start of your testimony, that you keep up with all current products?

I used to keep very close track. For the past year or so, I've more or less drifted out of it.

I see. You told us the safety on any product, on any gun, should never be relied upon; those are your words?

A. I don't believe you should place all your trust in a No, sir. It's never a substantial substitute for safety. safe gun handling practice. At best, it's--

Calling it a safety is a bit of a misnomer then, isn't it?

A. I beg your pardon?

Q. Calling it a safety is a bit of a misnomer, if you can't trust it?

No, sir, because you add a little bit to safe gun handling by the use of a safety. It's an aid. It is never a substitute.

3

5

6 7

8

9

10

11

12 13

14

15

16

17

18

19 20

21

22

23 24

- A. That was at a later date, yes. Right.
- Q. And you get that \$15,000 before you do those 300 hours of work each year, don't you?
- A. I did on the first occasion. After that, I was paid in quarterly installments, and during the years that this contract has been in effect, I put in more than 300 hours per year.
- Okay. You told us earlier about different kinds of guns-- bolt actions, lever actions, pump actions, and automatics?
 - A. Yes, sir.
 - 0. And traced history for us a little bit.
- Let me see if I understand. If you want the most rapid fire of the four types I have just described, you use the automatic?
- A. The automatic would be the fastest firing of the group, right.
- Q. Next most fastest would be what-- that is a bad question. But what is the next fastest?
- A. I would think that the pump gun would be if you are very skilled at manipulating a pump gun, you can fire it virtually as fast as an automatic.
- One notch further down, next fastest would be the lever action?
 - A. I would think so. It's faster than a bolt.
 - O. So, of the four we described, the slowest is the

bolt?

- A. Of the magazine rifles, the repeating rifles, yes.
- Q. So, if a hunter is really afraid of being attacked by grizzly bears, he's going to have a better shot at that grizzly bear and more shots quicker with something other than a bolt action, at least as amongst the four we have just described?
 - A. That's true, as far as speed of fire is concerned.
- Q. Right. As far as the speed of the bolt action rifle, the speed with which you could shoot three or four rapid shots, or shots in rapid succession, that wouldn't be affected at all by whether or not that gun has a bolt lock on it, would it?
- A. No. As a matter of fact, one of the big advantages of the bolt action rifle is the fact that when you fire it rapidly, you know the bolt's locked down, you know it's going to fire every time. If it does not have a bolt lock, you don't really know.
- 9. You don't put the safety on between each of those rapid fire shots, do you?
 - A. No, sir.
- On the Model 700, the bolt lock is on the safety, right?
 - A. The bolt lock?
 - Q. Right.

A. That's correct. Once you throw the safety off, you disconnect the bolt lock, and you are able to fire the gun as rapidly as it's possible to fire. You have no other interruptions once you are into the firing process.

Now, let's see. You have already told us that most of your testifying is for gun manufacturers rather than against them, and you explained why, didn't you?

- A. Generally that is true.
- 0. It is true?
- A. Yes.
- Q. I don't need the explanation again. I'm making sure we have covered that.

Would you agree with me from a safety standpoint, the manufacturers in the gun industry have a high degree of responsibility with reference to the quality of the product they send out to the marketplace?

- A. Of course.
- Q. And part of the reason that they have that high degree of responsibility is because a firearm is an inherently dangerous object?
- A. All firearms are dangerous. They command the respect of safe gun handling practice, because of this potential danger. Yes, sir.
- Q. And the high degree or responsibility that the gun manufacturing industry has toward firearm safety is especially

A. About another product which was a handgun, had nothing to do with the 700.

0. I understand that.

Now, I want to talk about product warnings a little bit. You know something about that subject, don't you? Yes or no.

A. Very little. I'm not in that phase, really. My involvement in the firearms industry is more from the technical development of the product versus the advertising and the manual and the writing.

Q. All right. I'll just ask you a couple of questions about it, and we'll see if we can't stay within your area of expertise on that subject.

MR. HUEGLI: Your Honor, while Mr. Chamberlain is asking his question, may I take a look at the exhibit that was marked and identified and everybody has read it so far?

THE COURT: Yes.

Q. (By Mr. Chamberlain) Would you agree that with product warnings in the gun industry, that one of the biggest problems is to get the message of safety across?

A. It sounds fairly reasonable, yes.

Q. And you are familiar in that regard with the product packaging and the warnings provided by the Marlin Manufacturing Company?

A. I'm familiar with it, yes.

3

5 6

7

8 9

10

11

12 13

14

15

16 17

18

19

20

21 22

23

- 0. And, in fact, Marlin has a unique system of product warning that is, in your opinion, superior to any other company; isn't that true?
- Yes, at the time I believe I read the document or A. prepared the document that you are reading from, I felt that it was a very fine system.
- Okay. We are talking about a letter that was written in 1974, two years before Exhibit 2 was manufactured?
 - A. About 10 years ago, roughly.
- But two years before Exhibit 2 was manufactured, Q, right?
 - I beg your pardon? '
- It was two years before Exhibit 2, the accident rifle, was manufactured?
 - Yes. I didn't know what Exhibit 2 was.
- I'm sorry. Okay. Okay. And you would agree that Q. as far as spreading the word of product safety or product use to the owner that the instruction manual is the most important document?
 - It's a very important document, yes.
- And the biggest problem with the owner's manual is getting the reader -- excuse me, getting the purchaser to read it?
- That is true. A great many people never even look at A. it, open up the box, and throw it away.

5

6 7

8

9

10

11

12 13

14

15

16

17

18

19

2021

22

23

24

- O. And that's not only true of a great many people, but it's been true with you on many products that you have purchased; isn't that true?
 - A. I'm afraid that you are correct.
- Q. Probably not on rifles, because you are interested in that, but other products, right?
 - A. I have a tendency to do that.
- 0. Okay. And you have lots of company in that regard, don't you?
 - A. I'm afraid so.
- Q And then, something that I think was brought up yesterday, the idea of hang tags, you pointed out to some of your gun industry clients that is not necessarily an effective means of communicating, because the dealers that display the products tend to tear those tags off?
 - A. When a gun dealer--
 - Q. Much like this one was?
- A. When a gun dealer displays his products in the gun racks, very frequently he does not like a lot of tags and a lot of labels, and stuff, hanging all over them, and many times he will remove these and just throw them in the box; so in their display, they are not—they are not hanging on the product.
- However, if he gets a rifle out of stock, and it's wrapped up in its container, it would, of course, contain all

5

of the literature that goes along with it.

- Q. Now, another possibility that the gun manufacturer can consider is printing warnings right on the gun itself, and I understand that you feel that is not a very practical solution?
 - A. You mean embossed right in the metal?
- Q. Yeah, printing warnings on the gun itself, it's highly impractical and undesirable?
- A. I'm-- I don't quite understand you. Are you referring to the--
- Q. Well, we've talked about hang tags and the fact that that is not a very practical solution, because the fellers tear them off, and you have also observed, in advising your gun industry clients, that printing a warning, not a sticker, but printing a warning right on the gun itself is impractical, and in your opinion undesirable?
 - A. Right.

Not a sticker?

- Q. Right, not a sticker.
- A. Aesthetically, it's kind of nice, and people who have a special feeling about their firearm, particularly the collectors, they don't like to see it, but the Ruger Company has pioneered in this approach, and the reason they have done it, and I think it's a very, very good point, no matter what you print, or no matter how you try to warn somebody, when they

3

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. HUEGLI: Your Honor, may I interrupt the testimony for a minute, and maybe Mr. Chamberlain and I could approach the bench for a minute.

MR. CHAMBERLAIN: Well, there is no question pending.

MR. HUEGLI: Well, there is a question coming.

(Bench conference outside the hearing of the court reporter and the jury.)

(By Mr. Chamberlain) Now we have talked about hang tags and people tearing them off.

Marlin has attempted to improve that situation by using a special type of tough plastic that can't be broken, right?

- That is correct. Α.
- Just yes or no. Okay.
- They, however, still tie them on. It's just a A. stronger string, like fishing leader.
 - And in addition to that--O,

S 1450

Χ

2

3

4

5

6

7

8

9

10

11

12

13 14

15

16

17

18

19 20

21

22

23 24

- A. But still people cut them off.
- Q. In addition to that, back in 1974, you observed that Marlin, and you, I think, observed this and approved of it, that Marlin put a bright red sticker on each gun; isn't that true?
 - A. That's true.
- Q. And that sticker cautioned the purchaser to read the owner's manual before using the firearm, right?
 - A. Yes.
- Q. And that's done in an effort to get the owner to read the firearm?
 - A. That's correct.
- Q. And that's a gum label that is on there to warn the new owner, and then he can remove that label, and it does not impair the gun?
 - A. Yes, sir.
- Q And in your letter to your client Ruger, when you are describing this, you told them that that sticker is double insurance that the owner has been cautioned to read the instructions or the owner's manual, double insurance; right?
- A. Yes, that's, that he signs it to the effect that he has read it before the guarantee is in effect.
- Q. And it's hard to conceive that an owner would actually remove that label without at least reading the label; it's hard to conceive of that?

A. Well, I don't know about that. I can't speak for other people. I don't think I would have paid any attention to it.

- Q. When you wrote your client Ruger in 1974, you did tell them it would be hard to conceive that he would remove the cautionary label without reading it?
- A. I think it's a step in the right direction, yes.

 Again, it does nothing for the person that buys the gun or uses the gun after it's new.
 - Q Okay. We are talking the purchaser of a used rifle?
 - A. That's correct.
- Okay. And you, a minute ago, got ahead of me a little bit here and mentioned another gimmick that Marlin uses, where they require the owner to sign the warranty card and attest that they have read the manual when they send that card back in?
 - A. Yes, I thought we had covered that.
- MR. CHAMBERLAIN: May I have Exhibit 104, please (to the clerk, who complies).
- Q. (By Mr. Chamberlain) And in 1974, in describing all of the safety features, or, rather describing all of the warning features that we have just talked about that Marlin had in '74, when you wrote to your client, the Ruger Company, you, in a sense, recommended that they give serious consideration to similar warnings in their product?

A. I made it as a suggestion.

2 3

4

Incidentally, this was voluntary on my part. Neither

5

6 7

8

9

10

11

12

13

14 15

16

17

18

19

20

21

22

23 24

25

Ruger nor Marsh, Day and Calhoun requested me to do this. I was just doing it as I thought a favor to them in case they were interested.

O. In your experience in the gun industry, you have experienced a number of cases where the gun owner didn't read the manual, right, like you described earlier?

- Yes, sir, that's correct.
- Q. They throw it away?
- A. Some do; some don't.

0, There is no reason that in 1976, when Remington was marketing their Model 700 rifle, there is no reason that they couldn't have produced an owner's manual that had bold print and different color of ink for the most important of the instructions in that manual, is that--

MR. HUEGLI: Your Honor, we will stipulate when this qun was produced, we could have produced red ink, any number of different colors of inks, some signs in gold letters, yellow highlighting, any one of a number of things.

THE COURT: All right.

(By Mr. Chamberlain) But Remington did not do that, did they, 1976?

I don't believe so, but, as I told you before, I'm not really up on this end of the market.

X-ReD

3

4 5

6

7

8

9

10

11 12

13

15

14

16

17

18

19 20

21

22

23

24

25

Q. Okay. Would you agree that in providing warnings to gun owners that the most important thing is to properly word any warning that may be feasible and clearly spell out the procedure for safe handling in the owner's manual?

A. I would think so.

MR. CHAMBERLAIN: Thank you, Mr. Hillberg. No further questions.

REDIRECT EXAMINATION

BY MR. HUEGLI:

0. Mr. Hillberg, if the owner of a firearm does not sign a warranty card and throws it away with the rest of the material-- strike that.

In your experience, is there any way that the rifle manufacturer can guarantee in any way that they are going to force somebody to read a document that they don't want to read?

A. No, sir. The only--

After the rifle was purchased, and the material is either lost, thrown away, or whatever, from there on, anybody that fires the rifle, whether they borrow it or whether it's sold, the warnings are long lost.

MR. HUEGLI: Thank you, Mr. Hillberg. That's all we have.

MR. CHAMBERLAIN: No further questions.

THE COURT: All right, sir.

THE WITNESS: May I step down.