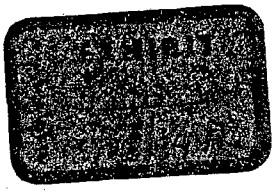

State of Illinois

In The Circuit Court For The First Judicial District

Jackson County

* *

LARRY LANGE,

Plaintiff,

Versus No. 80-L-11

KIM SMITH and REMINGTON ARMS CORPORATION, A Delaware Corporation,

Defendants.

* *

A Discovery Deposition Held on the 18th Day of December 1981 at the Offices of Remington Arms Corp., Ilion, New York, at 8:30 A. M.

Appearances:

HUNTER & SCHWARTZ, 90b West Cherry Street, Carbondale, Illinois, 62901, By WILLIAM G. SCHWARTZ, ESQ., of Counsel, Attorneys for the Plaintiff.

MITCHELL & ARMSTRONG, LTD., 404 North Monroe, Marion, Illinois, 62959, by BRIAN McGARY, ESQ., of Counsel, Attorneys for Defendant Remington Arms Corp.

Hearing Reporter:

SHIRLEY HEATH
R D 1 Box 300
Newport, New York 13416

SEE 0781

I N D E X

The following stipulation was entered into:

"It is hereby stipulated and agreed by and between the parties to the above-entitled action by their respective attorneys of record that the pretrial discovery deposition of John Linde and Robert Lee Hillberg may be taken upon oral interrogatories before Shirley Heath, a Notary Public, on December 13, 1981, at Ilion, New York.

"It is further stipulated and agreed by and between the parties hereto that any and all notice of the taking of said deposition and any and all other formalities required by law are hereby waived, that the aforesaid Notary Public shall, with respect to the taking of said deposition, have the same powers with reference to the examination of the witnesses that a Notary would have under a deposition taken pursuant to the Statutes and Rules of the Illinois Supreme Court, and that the deposition so taken may be used for any purpose that a discovery deposition taken in accordance with the Illinois Civil Practice Act and Illinois Supreme Court Rules may lawfully be used, and that the signature of the said witnesses to said depositions are hereby expressly waived.

"It is further stipulated that a copy of said deposition certified by said Notary Public, or any part of such certified copy, may be used upon the trial of this cause and shall be competent for any purposes that the testimony

of said Notary from her original notes might be used and that it shall be unnecessary to produce said Notary at the trial of this cause for the purpose of identifying such copy or testifying from her original notes."

[Plaintiff's Exhibit No. 1, Model 700, CF-17, Leaflet, was marked for identification.]

[Plaintiff's Exhibit No. 2, Design Request 3/15/73, was marked for identification.]

[Plaintiff's Exhibit No. 3, Design Request 3/16/76, was marked for identification.]

[Plaintiff's Exhibit No. 4, Design Request 1/11/77, was marked for identification.]

[Plaintiff's Exhibit No. 5, Design Request 2/1/77, was marked for identification.]

[Plaintiff's Exhibit No. 6, Design Request 11/18/77, Trigger, Was marked for identification.]

[Plaintiff's Exhibit No. 7, Design Request 11/18/77, Sear Safety Cam, was marked for identification.]

J O H N L I N D E , called as a witness, being duly sworn, was examined and testified as follows:

EXAMINATION BY MR. SCHWARTZ:

Q State your name, please.

A John Linde.

Q Your address?

A 54 Lake Street, Richfield Springs.

Q And your employment?

A Remington Arms Company.

Q And what type of work do you do for Remington Arms?

A I am the Superintendent of Product Engineering and Control.

Q How long have you been so employed?

A Seventeen years approximately.

Q Prior to working for Remington, did you work for another company?

A No, I never.

Q What is your educational background?

A I have a Bachelor of Science in Engineering from the University of Wyoming.

Q Did you do any graduate school?

A Yes, I have.

Q And where did you do your graduate school?

A I did it at Utica College which is a division of Syracuse.

Q Did you receive a degree?

A No, I never.

Q What type of courses did you take?

A I have taken business courses and some that relate to my job which would be engineering and engineering management.

Q Were you in the military?

A No, I was not.

Q Have you written any publications?

A No, I haven't.

Q You examined a rifle which we are here talking about today, did you not?

A Yes, I have.

Q Did you rely on any texts, management, science, or authorities in -- as a result of your examination of that rifle?

A No.

Q Have you ever been recognized as an expert in court?

A What do you mean?

Q Have you ever testified in court?

A No, I haven't.

Q Have you ever had your deposition taken before?

A Yes, I have.

Q And with regard to what type of case?

A What do you mean what type of case? Product liability cases?

Q Product liability cases, automobile accidents, design.

A Sure.

Q How many times have you had your deposition taken?

A I don't know. Must be three or four times.

Q Could you tell me the nature of each of those cases?

A Well, there was a case with a shotgun.

Q Let me follow that up for a moment, if I could. When you say a case with a shotgun, what was the problem?

A They alleged that the gun was defective.

Q What type of defect was that?

A They said that the barrel steel, steel we used in the barrel, was defective.

Q Okay. What was the next deposition?

A Well, I don't know if they are in order in time.

Q I understand that. Another one.

A Okay. Then there has been -- let's see. There has been a deposition on a model 700.

Q And what was the problem with that 700?

A Let's see. The problem on that is they alleged that --well, there really was no problem with the gun, but they alleged that it -- that when you were -- when you are opening it, it should be changed so that you can open it and unload it easier and not have to move the safety lever.

Q Okay. That leaves one or two more.

A Yes. I am having a little trouble there. I can't remember the depositions or not, you know, where I have helped on cases.

Q Okay. Is the 700 case you just told me about the only one of the depositions you gave testimony regarding?

A No.

Q Let me restate that. It was the only case that you

gave depositions regarding the 700, the case you just told me about?

A I believe so, but I am not sure.

Q Are you familiar with the fact situation involved in this case?

A Yes, I am.

Q Did you ever consult with anybody regarding a similar fact situation?

A What do you mean?

Q On any of the cases you just told me about, your depositions.

A What do you mean consult with somebody?

Q With anybody from Remington, with any outside individual.

A This case last night we talked over.

Q But any other case of a similar nature, have you ever been involved in a case that has similar factual setting to this one?

MR. MC GARY: What do you mean? The guy got shot in the foot?

BY MR. SCHWARTZ [Continuing]:

Q Model 700, got shot in the foot.

A Like this one here? No.

Q Now you personally examined theRemington 700 BDL custom rifle No. 6623513 that is involved in this case, did you not?

A Yes, I did, if that's the rifle that your Mr. Olson brought up here. That is correct.

Q When did you examine that rifle?

A About a month ago or month and a half ago now.

Q Where was that rifle examined?

A In this room.

Q Who was present?

A There was Bob Hillberg, Ole Olson from Minnesota, and Bob Hillberg, myself, Jim Hennings, Don Urtz. He was nothing more than took some photographs. John Brooks and Jim Steckle.

Q How long--

A And, of course, your Ole Olson was here.

Q How long did that examination take place?

A I guess we went along three or four hours.

Q What was your involvement in the examination?

A I looked at the rifle, looked at the parts.

Q Did you do any kind of analysis of any of the parts?

A No, not what you call engineering analysis.

Q Do you know why you were chosen as being one of the people to examine the rifle?

A They value my judgment, I guess.

Q Did you take any written notes?

A No, I never. I didn't have to.

Q Do you rely upon anybody else's notes or reports when you examined that rifle?

A When I examined it?

Q Yes.

A No.

Q What specific facts were you provided prior to examination of that rifle?

A Very little. Just that there was an alleged incident with this rifle, and I should take a look at it.

Q What specific facts were you given with regard to that incident?

A Honestly, nothing.

Q Okay. Did you prepare a written report after your examination?

A No, I never.

Q What was your initial impression of this rifle?

A What do you mean initial impression?

Q Upon looking at it, viewing it, watching it operated, did you have an initial impression with regard to that rifle?

A Yes.

Q Okay, what was that?

A The stock was in good shape, the gun had been handled a lot, had been dry cycled a tremendous number of times.

Q When you speak of dry cycled,--

A Somebody had run the bolt, trying it.

Q Did that have an affect upon the rifle any different than if one was using it out in the field, firing rounds in it?

MR. MC GARY: I don't understand. Did what have any affect?

MR. SCHWARTZ: The dry cycling.

MR. MC GARY: Do you understand the question?

THE WITNESS: No, I really don't.

MR. MC GARY: Rephrase it, please.

BY MR. SCHWARTZ [COntinuing]:

Q Is dry cycling any different than using the rifle in a field situation?

A Yes, it is.

Q And what is the difference?

A One place you are shooting a cartridge, and the other place you are not.

Q And does this have an effect upon the rifle?

A In one case you are loading all the members of the rifle and in the other case you are not.

Q Is the effect any different between loading the rifle with a live cartridge and dry cycling it?

MR. MC GARY: I am still having a little trouble. The effect of what?

BY MR. SCHWARTZ [Continuing]:

Q I am trying to determine if there is any difference between dry cycling and live, if there is any wear and tear.

A Yes, there is a difference.

Q What's the difference?

A The difference is that depending on the rifle, if you fire it, you get one sort of forces on the parts. If you dry cycle it, you get another set of forces.

Q Does that wear the rifle differently?

A Yes, it would.

Q What type of safety is used in this rifle that you examined?

A Two-position safety.

Q Do you know when this particular rifle was manufactured?

A Not exactly, no.

Q Is this rifle still being manufactured?

A Yes, it is.

Q And the shape that you found it when you examined it about a month ago?

A No.

Q Has there been changes in the rifle?

A Just a minute. You said the shape that I found that rifle. We don't manufacture anything like that.

Q Okay, you are talking about the fact that it was used?

A Yes.

Q The components which make up that rifle, are they the same components -- are the same components being used now as when that rifle was manufactured?

A Basically.

Q Is the two-position safety which you found on that rifle still the same safety as being used on 700 BDLs now?

A Basically.

Q When you say basically, has there been changes made?

A If you are manufacturing, you make minor changes.

Q Can you tell me what minor changes were made in that safety?

A Since when from when to when?

Q The safety which was on the rifle you examined.

A Yes.

Q As compared to the 700 BDLs being manufactured today, what changes?

A The changes that I know have taken place in that safety is we have increased the length of the arm, safety arm, a few thousandths; we have put a hole in the safety lever. I can't think of any other changes that we have actually made to the safety.

Q With regard to the length of the arm change you just mentioned,--

A Yes.

Q --what effect did that have upon the safety?

A No effect.

Q Why was that change made?

A We just made it to allow a little more margin between

the top of the stock and the bottom of the safety.

Q Would it be correct in stating that was for ease in movement of the safety?

A No, not at all.

Q You mentioned a hole in one of the parts of the safety. What was that change made for?

A We put a hole in it. We have a complicated gage when we bring the safety in to check the cam height, and by adding that hole, when we bring the parts in from the vendors when we check them, we can put it up on an optical comparator and check the surface sights much easier.

Q How is this particular two-position safety work?

A The -- when the gun is in the fire position, it has no effect on anything. When you put the gun on safe condition, there is a cam that lifts up the sear and disengages the sear from the trigger mechanism.

Q Does that prevent the trigger from operating?

A No.

Q Does it block the firing pin?

A It takes and lifts the sear up away from the trigger gear, and in so doing, there is an angle between the firing pin and the sear, and it blocks the firing pin through the sear.

Q Is there such a thing as a three-position safety?

A Yes, there is.

Q How does a three-position safety differ from this two-

position safety?

A Three-position safety has two positions, three, two positions safe.

Q What does the extra position do?

A They have -- we have a safety it is eiyher on fire or it is on safe. Three position, they have fire position, intermediate -- I don't know what you would call it -- half safe or what, and then they got a full safe position on it.

Q And what does the intermediate position on the three-position safety accomplish?

A Okay. They have -- they have a fire where you fire the gun, a half safe where it does not engage the bolt lock, and a full safe which engages the bolt lock.

Q What does the bolt lock do?

A The bolt lock locks the bolt in the fire position.

Q Does that mean that the bolt cannot be operated while the safety is in that position, in the full safe position?

A That's right.

Q And in the three-position safety, the intermediate step, would allow that bolt to operate but not allow the firing pin to work? Would that be a correct statement?

A It would allow the bolt to operate. That's right.

Q What about the firing pin?

A I can't say because under the -- what design are you talking about?

Q Okay. What is the reason for having a three-positon safety?

A I don't know.

Q Do you know of any advantage of a two-position safety over a three-position safety?

A Yes.

Q And what advantages are those?

A Two-position safety is easier to understand.

Q And what would be a disadvantage of a two-position safety over a three-position?

A Why I don't know of any disadvantage.

Q Is there any advantage of a three-position safety over a two-position?

A Advantage of a three-position safety over two-position? In this line of reasoning, this line of questions, if I could clarify it, when guns were developed, okay, when like the three-position was originally developed, they had reasons for doing that at that time. Two position had reasons.

What you are asking me now is you are asking me right now today how I see it. That's the way I am interpreting.

Q That's correct.

A When the designer designed it, when he designed that three-position safety, he had a reason to do that when he did it.

Q Do you know what those reasons were?

A Not all of them, no.

Q But isn't the basic difference between a two-position safety and a three-position safety the fact that the bolt is actually locked in the two position and cannot be operated except by taking the safety completely off?

A No.

Q How would you take the safety off? Excuse me. How would you open the bolt up, by leaving the safety on in the two-position safety mechanism?

A Well, there are two-position safeties that don't have bolt locks.

Q Okay. On the 700 BDL do you have a two-position safety that does not have a bolt lock?

A No, we do not.

Q The 700 BDL that you examined did it have a bolt lock on it?

A Yes, it did.

Q Now with a bolt lock in a two-position safety, would it be a correct statement in saying that you could not open or work the bolt until the safety was taken off?

A That's right.

Q Now a three-position safety, as I understand it, would allow you to open the bolt, keeping the safety in a safe position by using the intermediate step in a three-position safety mechanism? Would that be a correct statement?

A Under what condition?

Q Under any condition.

A No.

Q What condition would that be an incorrect statement?

A If the gun was fired.

Q It would be in a full -- the safety would be in a fully off status at that time?

A That's right.

Q It would then be incumbent upon the operator of the rifle to move it to the intermediate step in order to retain the safety features of that step. Would that be correct?

A No.

Q Why is that? Why is that incorrect?

A You can't put, if the gun is fired, you can't put the gun in a three-position safety. Maybe you ought to tell me which rifle you are talking about with the three-position safety.

That might not be true in all cases.

Q The -- any time a rifle is fired, whether it be a two-position safety or a three-position safety, cannot put the rifle back in a totally safe position. Is that correct?

A On which rifles?

Q On 700 BDL.

A On a 700 BDL if you fired the rifle, the bolt is closed, you cannot put the safe on.

Q Now with a live round in the chamber, the only way with a two-position safety to get that live round out is to take

the safety off. Is that correct?

A The live round in the chamber?

Q That's correct.

A Two-position safety and what two-position safety?

Q Two-position safety on a 700 BDL.

A Okay.

Q You would need to take the safety and place it in an off position in order to remove that live round. Is that correct?

A That's right.

Q Now there is a three-position safety where you can move it to the intermediate step with a live round in the chamber and remove that round while still having the firing pin in a safe position?

A What rifle would that be?

Q I am saying is there such a mechanism?

A Yes.

Q Does Remington use a three-position safety in some of its rifles?

A No.

Q What about a 725?

A We did. We don't now.

Q And what type of safety do you use in a 725?

A We have a three-position safety.

Q You have a three-position safety?

A We have a three-position safety.

Q Is it -- you said you used the three-position safety before. Do you use it now in a 725?

A We don't make the 725.

Q I understand. A 788, do you currently make that?

A Yes, we do.

Q Is that a three-position safety?

A No, it is not.

Q Has it ever been a three-position safety?

A Never had been.

Q Does any other rifle manufacturer currently use a two-position safety for the same type of rifle as the 700 BDL?

A Yes.

Q And who is that?

A The biggest one would be Ruger. And there are others.

Q Do you know of any others?

A Sure.

Q Who?

A Smith and Wesson, Browning.

Q Do they have two-position?

A Two-position safeties.

Q Do any of the people who you have just mentioned who manufacture rifles of a similar type as the 700 BD: have a two-position safety which locks the bolt while there is a live round in the chamber?

A Yes, they do.

Q Do any of the other rifle manufacturers you just mentioned manufacture a two-position safety which does not lock the bolt while there is a live round in the chamber?

A Well, are you saying do they ha-e more than one model?

Q I am saying, is there a safety in existence that would allow one to do that which would allow the bolt to be operated while the mechanism is in an on position?

A Yes.

Q Are you aware of any complaints or problems regarding the two-position safety?

A What do you mean?

Q Have you been informed by anyone with regard to problems Remington has received from people having problems with this two-position safety on the 700 BDL or any other similar model?

A Yes.

Q And who were those people?

A I don't know.

Q And how many problems are you aware of?

A Well, I am aware of a number of problems.

Q And what was the nature of those problems?

A Well, we have had everything from people calling us up and saying I dropped my rifle, what can I do, it is setting down in the lake, I fished it out this spring, what can I do to get it in operative condition.

Q I am talking about problems specifically with the two-position.

A That is how can I make this trigger mechanism work.

Q That is more of a general sort of problem with the rifle, however, than if you dropped it in the lake?

A No. You are talking about problems. That's the kind of problems I get. There is all sorts of problems.

Q Have you received any complaints about a two-position safety having to be taken an off position or to remove a live round from the chamber?

A Yes.

Q How many of those type of problems?

A I don't know. You know, I wouldn't be in a position to say how many we have.

Q Who would be?

A I think Mr. Spurling would be in more of a position to answer that.

Q Have you been involved in any litigation involving tis particular safety?

A Yes.

Q And that was the 700 BDL case you referred to earlier in your questioning this morning?

A Yes.

Q Are you familiar with the trigger adjustment screws on the 700 BDL?

A Yes, I am.

Q Where are they located?

A There is two on the front of the housing and one on the rear.

Q What are their purpose?

A Starting with the one on the rear, the screw adjusts the amount of engagement between the sear safety cam and the trigger connector.

The one on the bottom front adjusts the amount of tension on the trigger.

The one on the top front adjusts the amount of trigger overtravel.

Q Have there always been three adjustment screws on the 700 BDL?

A Yes.

Q Are these adjustment screws secured in any fashion?

A Yes.

Q How are they secured?.

A Starting with the one on the back and the trigger engagement screw, it is locked-tighted, and it is always sealed with a sealer.

The ones on the front are adjusted and sealed.

Q Is this at the time of manufacture?

A Yes, it is.

Q What precise stage in the manufacture is it securer

sealed?

A When they assemble the component parts to the trigger housing assembly.

Q Is the trigger pull tested prior to trigger adjustment screws being sealed?

A Yes.

Q What are Remington standards for the trigger bolt?

A We have a number of them on the different guns, but as I recall, I think on the 700 three to five and a half or three to five. I am not sure.

It is either three to five, three to five a nd a half or three to six.

Q Has the method always been the same for the 700 BD: model?

A No.

Q What changes have been made securing those trigger adjustment screws?

A The ones I know of, we used to stake the rear engagement screws.

Q When you say stake,--

A Took a punch with the screw in there and would actually deform a little metal to secure the screw.

Q Would that be for all adjustment screws?

A I can't remember. The only one I can remember for sure is the engagement screw.

Q That would be one of the two on the front?

A No. It would be the one on the rear.

Q This is not being done. Is that correct?

A No. We are using lock tight instead of the stake.

Q When did that change take place?

A It has been years ago. I don't know.

Q As far as you are aware, would I be correct in stating the trigger tension adjustment screw?

A Fine.

Q Has that one ever been staked the way you just described?

A I don't know. I don't know if it had been or not. I can't remember it being staked, but it could have been.

Q As far as you are aware, it has always been secured in a different fashion by the use of sealant?

A Yes. The sealant is put on here at the factory.

Q Is that what secures the trigger tension adjustment screw?

A Not necessarily, no.

Q What secures that adjustment?

A Actually on the spring, the spring putting force on the screw secures the screw.

Q Did you test the trigger pull on the particular rifle we are talking about here?

A I never personally checked it. No.

Q Do you know what the trigger pull was at the time you examined the rifle?

A Yes.

Q How did you determine that?

A They were adjusting these or setting it -- not setting but checking it with a spring tension trigger pull gage, and I said, well, what is the trigger pull running, and they said, a little over two pounds.

Q Who did the testing of that?

A I think it was Bob Hillberg.

Q And you did not specifically yourself test the trigger pull on that particular rifle?

A No.

Q How does the trigger pull affect the operation of a rifle?

A What do you mean how does it affect it?

Q Would a light tri-ger pull have an effect upon the working mechanism of the rifle versus a more heavy pull?

A Yes.

Q And what would that effect be?

A Well, the -- just the tension of the trigger under the sear. So if you have a lighter tension, well, the amount of force that you have holding the trigger under the sear would be less.

If you have a greater amount of tension, then you have

more force holding the trigger under the sear.

Q And how does that transmit into the working of the rifle itself, the firing of the rifle?

A I don't understand how does it transmit.

Q Is it easier to fire with more tension or easier to fire with less tension or has no effect?

A I don't understand the question.

When you say easier to fire with the higher tension, it takes the shooter, he has to exert more pressure on the trigger to fire the rifle.

With the lesser tension, then he has to exert less tension to the trigger to fire the rifle.

Q And with tension adjusted in a downward or lighter pull, would it be more easy for the rifle to go off without the trigger having in fact even being pulled?

A Would it be easier to pull the trigger?

Q No. Would a shock to the rifle such as a drop set the firing pin off without the trigger being pulled when there is extremely light tension on the trigger?

A Could a shock?

Q Yes.

A To the rifle set the rifle off if you have extremely light pull? Yes.

Q Yes. Is there a term for that?

A Jar off.

Q How far down in terms of trigger pull would a rifle have to go before the jar -off effect would occur?

A Depends upon the rifle.

Q The wear to the internal mechanism of the rifle?

A No. No. Depends on who made the rifle, how they made it, the design of the trigger mechanism.

Q Say a Remington 700 BDL. Is there a specific lower or a minimum trigger pull before jar off would occur?

A Is there a minimum trigger pull before jar off would occur? Jar off is a relative thing.

Q Depending upon the rifle and the status of the components of the rifle?

A No. What you are saying is if -- if I hit that table with my hand, I apply a certain force. Is that correct?

Q That's correct.

A You are asking me regardless of how hard I hit it, what is a safe table top to prevent it from breaking.

Q Okay. Jar off should not occur with the Remington trigger pull that Remington placed on a 700 BDL, three and a half to five pounds. Is that correct?

A No. If you take a rifle and you drop it from, you know, twenty feet to a steel plate, that's one thing. Right?

And to say that you adjusted it or had it adjusted to four and a half pounds, would it jar off, I can't say. I would say it probably would.

Q Does jar off, a jar off would be more likely to occur if the trigger was adjusted to an extremely light tension versus an extremely heavy tension, would it not?

A With a given load.

Q With a given load. Are you familiar with the advertisements for the 700 BDL?

A Somewhat.

Q Was it at one time advertised as being fully adjustable?

A Yes, it was.

Q Has that subsequently been changed?

A Yes, it is.

Q And in what manner was the change?

A To say, do not adjust or actually just to leave it.

Q Do you know when this change occurred?

A No, but it has been in the last -- must be four or five years.

Q Is there an instruction sheet provided with new 700 BDLs?

A Yes, there are.

Q Did that instruction sheet tell how to adjust the trigger adjusting screws?

A What instruction sheet?

A The instruction sheet received with the 700 BDL?

A The one in question?

Q Yes.

A Yes.

Q Has that instruction sheet regarding the adjustment of the trigger screws subsequently been changed?

A Yes, it has.

Q And in the manner you have just mentioned?

A It has been deleted.

Q In the instruction sheet which would have been received with the 700 BDL in question, is there any mention of resealing the adjustment screws?

A No, I don't believe there is.

Q Is there any mention of problems such as a jar off from improper adjustment in the instruction sheet which would have been received with this 700 BDL?

A Yes, there is, in that it says do not adjust below three pounds.

Q And that would have been in the instruction sheet that would have been received with this 700 BDL?

A That's right.

Q I will show you what has been marked as Plaintiff's Exhibit No. 1. Is that the type of instruction sheet which would have been received with the model 700 BDL in question here?

A I can't tell you because I need the next page to see what the date was on it.

Q Do any of these pages assist you?

A I don't believe this would be the one. In fact, it wouldn't be. This would not be the instruction bulletin that came with that rifle.

Q Is this an instruction sheet which was later produced?

A No, this was produced before.

Q Before? Is there any method of resealing the adjustment screws once an adjustment had been made to those screws without having Remington's sealant?

A I don't understand. I don't understand.

Q The adjustment screws are secured by a sealant. Is that correct? The ones on the front of the trigger mechanism.

A What do you mean secured by a sealant?

Q Doesn't Remington put a sealant of some sort on those adjustment screws to keep them from moving in the manufacturing process?

A We put a sealant on them in the manufacturing process.

Q And does that keep the adjustment screw from moving combined with the spring tension you described earlier?

A Yes. Well, you could say that it is an extra -- you might say an extra precaution. That is not really the primary reason.

Q What is the primary reason?

A Primary reason is that we can put the sealant on there. We know we have got the fire control adjusted correctly. We have got everything right the way it should be. If the

sealant is broken, we know it has been tampered with, and we know through our process when we got the sealant on when the next guy in the process, he knows the trigger assembly is correct, and if the sealant is busted, he knows he has to take it back and he shouldn't pass it on.

Q That is the only method of securing the adjustment screws which appear on the front of that mechanism, is it not? The sealant which you place on there?

A The what?

Q The method of sealing those screws, there is no lock nut or lock washer on those?

A No, there is not.

Q But there is a lock nut or lock washer on the adjustment screw appearing on the rear of the mechanism?

A No.

Q What was the lock tight you just described?

A Yes.

Q That is a built -- a special sort of adjustment screw?

A No. It is a liquid that you put on the threads that when you put it in and you adjust it and this liquid hardens up.

Q Is that the sealant we have been talking about?

A No.

Q That is something different?

A Something different.

Q And that is only used on the rear?

A That's right.

Q Why isn't that used on the front adjustment screws?

A Because the rear adjustment screw is very, very critical as far as setting the engagement, and we wanted that to be such that it was factory set like all of our instructions call for, and we don't want people messing with it.

Q Aren't the adjustment screws on the front also extremely important?

A Yes, they are.

Q Why don't they use the same method of securing those screws?

A Because if you want to have -- if you have a 700 and you wanted a gunsmith to take it down to a three-pound trigger pull, you could take it to him and he would adjust it for you.

Q Would he have the same sealant or the same lock tight to put back on that screw?

A If you put lock tight on it, then there is a little tinny screw, as you are familiar with, and if you take your jeweler's screwdriver and you try to turn it, you would turn your head right off.

So if you insisted as a customer that he adjust that for you, you would end up in some cases to booger it all up or you could deform it by hitting it or applying heat or some other thing that could mess up the whole assembly.

Q So he would, in fact, have to replace the entire

adjustment screw if he messed it sufficiently?

A Yes.

Q So the reason for not placing lock tight on there is so that it is adjustable?

A That's right. For service.

Q Now you say the instruction sheet which was received with the 700 BDL in question here recommended that the trigger pull not be reduced to less than three pounds?

A That's right.

Q But it was later later recommended or just adjustment with regard to the trigger mechanism was totally deleted. Is that correct?

A That's correct.

Q And why was that deletion made?

A The industry in general, if you take your Winchester and your Ruger, they all had this trigger adjustment screw or something similar to adjust their triggers, and, of course, we were put in a competitive position, and we also had it.

As the industries and others pulled out, they started pulling out of their advertising and started saying that it is not adjustable.

Ruger even went so far as to putting an extra adjustment so people wouldn't get inside there and mess with their trigger assembly, and so we pulled ourself out too.

Q For safety factor?

A Not as a safety factor. No.

Q Wouldn't people want to change?

A If you are a customer now and you have a Remington, you can take it to a Remington authorized gunsmith, and he will adjust it down to three pounds for you if you want.

Q So you initially advertised that to be competitive, and you also removed that advertisement to be competitive as well?

A We didn't have to any more. We didn't need it.

Q The purpose for removing that advertisement had nothing to do with the safety of the gun, safety of the public as a whole?

A No. Not if they followed the instructions.

Q If the trigger adjustment screws had been readjusted subsequent to manufacture at the plant, would they be subject to movement by vibration?

A I don't understand.

Q Could the trigger adjustment screws on a 700 BDL, having been moved, changed subsequent to the manufacturing process?

A What do you mean subsequent to?

Q Okay. Your manufacturing process you placed a sealant?

A Right.

Q Over the top of that. After it leaves the factory, those adjustment screws are moved so that the trigger mechanism, the pull weight is reduced.

A Somebody on the outside.

Q Totally unrelated to Remington or it could have been a Remington gunsmith.

A But he adjusted that trigger assembly?

Q Right. Would a Remington gunsmith replace the sealant on those trigger adjustment screws?

A He probably would.

Q Would anybody else other than a Remington gunsmith?

A Probably not.

Q Without that sealant on those adjusting screws, could they vibrate in or out?

A I don't believe so.

Q Why is that?

A Because on the trigger adjusting screw you have a spring tension up against that spring and up against the screw, and it is essentially holding it there. It is not a free member to move.

Q As a rifle aged, works under normal wear of that spring, would that spring lose some of its tension?

A No.

Q It is not that type of spring?

A It is a coil spring. They don't take what they call a set. They don't get tired.

Q Wouldn't it be a simple matter to place a lock nut or counter nut of some sort on top of that adjustment screw to

make sure when it was reset, it stayed in that position?

A You said two things.

Q Okay. Wouldn't it be simple to place a lock nut or a counter nut -- I am not a mechanical engineer, so excuse my lack of using the correct terminology -- on that adjustment screw so that a later adjustment of it would remain without moving?

It would be reset, in other words.

A If you are saying could you put a lock nut or a jam nut on it?

Q Yes.

A Yes, you could.

Q And if there were any problems with regard to vibration, that would take care of that, would it not?

A Not necessarily.

Q Okay, and why is that?

A You have seen and I have seen places where you had lock nuts where if they are not applied right or not done right that they will vibrate loose.

Q Would it be if there were a vibration problem, would it be an assistance if it was done properly in removing that problem?

A If there was a problem.

Q Would a light trigger pull as a result of a light trigger pull, in fact, a very light trigger pull, would jar off be a more likely possibility in that situation?

A With a very light trigger pull?

Q That's correct.

A Yes, it would be.

Q Did you pull the trigger on this rifle during your examination of it?

A Yes, I did.

Q How many times?

A Oh, maybe ten, fifteen times.

Q Did anyone else pull the trigger during that examination?

A Yes. Hillberg did.

Q Did you watch him do it?

A I don't know as I actually seen himm pull it once or twice. I know that he did.

Q Did you ever have to manually return the trigger to the forward position?

A I did.

Q How many times?

A What do you mean did I have to manually? I manually returned the trigger back to its different position.

Q I speak of normal position. I am speaking of its normal position.

A Right.

Q Its rear position or reverse position would be after you have got done.

My question is did you ever manually have to return it to its forward position, its correct position?

A For why?

Q Because it didn't go there by itself.

MR. MC GARY: Are you saying that it was in the back position, that you take it and push it?

BY MR. SCHWARTZ [Continuing]:

A I--

Q That is right.

A I took and I moved it back. I played with it. I moved it forward, I moved it back.

Q Did you -- the correct operation of a trigger is for you to pull it and to automatically return. Is that correct?

A It sure is.

Q And during your course of pulling the trigger on this particular rifle, did you ever have to manually push it to forward position because it did not do so at the time itself?

A I would push the trigger to see what it would do to check the spring tension.

Q I think your answer is somewhat different than my question. Let me try to restate it.

A Could you state what you are trying to make the rifle do?

Q Okay. Did the trigger ever bind in a forward position?

MR. MC GARY: You mean you couldn't fire it because it was bound?

MR. SCHWARTZ: No. Let him answer the question if he can.

BY MR. SCHWARTZ [Continuing]:

A I don't know. It could have in that there is a number of times where the trigger did not return.

Q Okay.

A Now whether it was bound in that position or it did not return back and catch the sear,--

Q Is that unusual?

A Yes, it is.

Q Does that cause a problem?

A Yes, it does.

Q Was that an occurrence that happened to you when you used the trigger?

A Yes, it did.

Q Did it happen to anybody else when they were operating the trigger?

A I am sure it had.

Q How many times did this happen to you?

A Well, I did not just cycle the rifle like a normal person. I just cycled it two or three times to see how it was behaving, and I went through and tried little things myself to try and see what was happening.

Q Did you determine what caused the trigger to remain in a backward position? What would be a correct terminology?

A Not to return back to its normal position.

Q All right, did you determine what caused that?

A Yes.

Q What caused that?

A Insufficient spring tension.

Q Was that the only thing that was causing the problem in your estimation?

A There were other things in there, but the main thing was the insufficient spring tension.

Q What effect does the trigger remaining in the retractive position have upon the rifle?

A Depends on the condition.

Q Take the condition at the time you were examining the rifle.

A Well, if the trigger stays forward and does not engage the sear, that means it is not supporting the sear, and if you closed the bolt, the rifle would do what you call follow down.

Q And what is a follow down?

A The firing pin just goes right ahead. The cam that cams the firing pin into the cock position, there is nothing holding the firing pin when you go forward. So the firing pin just rides down that cam.

Q And if you were chambering a live round, would that live round go off?

A No, it wouldn't.

Q Why is that?

A Because there is nothing holding the firing pin back. There is no way the firing pin gets energy.

Q Okay. Let me run through this situation for you. You have -- you are hunting. You fire a round.

A Right.

Q The trigger does not return to its forward position; it remains in a rearward position.

A Does it catch the sear or not?

Q I don't know.

A If it is forward of the sear, that is one condition.

Q And rear of the sear is a second condition?

A That's right.

Q Okay. Let us take both of those conditions. Describe to me what happens to the internal mechanism of the rifle.

A You describe to me what you want.

Q I am trying to find out what goes on there.

A You tell me the condition you want because I can't answer it.

Q Follow me through on this if you would. I have fired at something.

A Okay.

Q The trigger has not returned to its forward position.

A Okay.

Q Now it can either be in front of the sear or behind the sear, is that correct, in that situation?

A No. When it is fired, it has to be forward of it.

Q Has to be forward of the sear. You--

A You just fired the gun.

Q That's correct.

A The trigger is forward of the sear.

Q I work the bolt.

A Right.

Q I empty -- I empty the spent cartridge.

A Right.

Q Automatically a new live round comes up.

A Right.

Q I chamber that. Now where is the firing pin before I crank that new round in? The bolt is to the rear.

Okay, where is the firing pin?

A Firing pin is in the bolt.

Q I understand that. It is in an in or out position?

A It is in an out position. It is being held by the little notch on the bolt body.

Q Okay, you say it is in an out position. Would that be a fired position?

A No. When you opened the bolt, you took it from the

firing pin from a fired position to a cock position.

Q Now it is in a cocked position that the--

A In the bolt.

Q In the bolt. My trigger is bound in the pulled position or in the -- it has not returned to its normal position. All right?

A Okay.

Q I slide my live round in. What happens at that point? What is the status of the mechanism of the rifle at that stage?

A If your trigger is forward, then the sear, as the striker that is t-e back of the firing pin comes up on the sear, the sear will drop out of the way and the firing pin will go right through and follow the bolt right down.

Q When you say follow the bolt right down, are you talking about into the chamber?

A Yes.

Q Will that -- will the firing pin following that bolt into the chamber strike the primer on that live round?

A It can touch it.

Q Are you saying there will not be enough force there to set that off?

A No, it won't.

Q Now if you were driving the bolt home with some force manually, would that be sufficient enough force for that firing pin?

A I don't believe it. No.

Q You don't believe that it could. Is there a possibility it could happen?

A I don't know. If Charles Atlas did it. Under normal conditions, no.

Q There just would not be enough force thrown forward by that to set that primer off and, in fact, a live round off?

A I don't believe there would be.

Q Would that -- would there be a difference in the scenario which we have just gone through based on the -- whether the -- we were in front of the sear or behind the sear?

A Yes.

Q And what would that difference be?

A If you were behind the sear, then what would happen is that the trigger would be supporting the sear, and the sear would support the firing pin.

Q And you would not have that follow through which we have just described?

A That's right.

Q Did you check the clearance of the trigger mechanism in the rifle you examined with regard to the trigger housing?

A No.

Q Is there a clearance which is set in by Remington in its manufacture of 700 BDLs?

A What clearance from what?

Q For that trigger mechanism to the trigger housing.

A Trigger mechanism. What do you mean the trigger mechanism?

Q The thing that fits the gismo that has the adjusting screws to the front and back?

A That is the trigger housing. Clearance between what?

Q Clearance between the internal mechanism of that and the outside shell.

A What would be the internal mechanism clearance of what?

Q Is the sear located in there?

A Yes, it is.

Q The clearance of the sear and the various parts that work the sear.

A Is there a clearance between the sear and what?

Q The housing itself.

A Yes, there is.

Q Is there a standard set by Remington with regard to clearance in there?

A What do you mean a standard?

Q Do you check it when you manufacture a rifle and make sure there is sufficient clearance?

A Yes.

Q And is there a measurement that is required in your manufacturing process?

A What do you mean a measurement that is required?

Q You know, is it a half inch, five thousandths of an inch?

A No, we check for clearance.

Q And if there is any clearance whatsoever, it is sufficient?

A That's right.

Q But you did not check for any clearance in this particular rifle?

A Sure.

Q On the date you examined it?

A No.

Q You did not check the clearance on the date you examined it?

A No.

Q Are you aware of any changes made in the specification for parts of the trigger mechanism in the 700 BDL?

A Sure I am.

Q What changes have been made in the specifications for the trigger mechanism?

A On what parts?

Q Let me go about it slightly different. Had the 700 -- have there been problems with clearance of internal parts in the 700 BDL trigger mechanism?

A Not that I am aware of.

Q But there were changes made in clearance of the various trigger mechanism parts, some of them?

A There were changes made?

Q Yes.

A We make changes.

Q Let me show you what has been marked as manufacturer-s Exhibit No. 2. Are you familiar with that change?

A Bolt body assembly. Bolt body assembly left hand. This is the bolt body. This has nothing to do--

Q With the trigger mechanism?

A That's right. No, I am not as far as this. This is redesign and the bind cut. That is on the bolt body we have a cut on the bolt lug, the bolt head, and that -- so that when you are bringing the bolt back so it doesn't bind, pulls smooth, and the customer brings it back and forth, and there is some change made in that.

Q Okay. Let me show you what has been marked Plaintiff's Exhibit No. 3.

A Okay. Yes.

Q Okay, are those parts which are in the trigger mechanism?

A Yes, they are.

Q And what was that change? Is that a change to the parts which make up that trigger mechanism?

A They are the parts that make up the trigger housing,

not the trigger mechanism.

Q And what was the reason for the change in those parts that make up the housing?

A Okay. The -- this changes the blocks. There is a plate and then there is two blocks, and then there is another plate on the trigger housing. That is how it is made.

You take and you put the one plate down. You put your rivets in; you put the spares on it, put the other plate on it, you come down with the press and rivet it.

In so riveting this change here was made in the riveting operation. You are putting the pressure, and they found that they were in a worse tolerance condition.

The trigger was max and this went min, and in some cases we could have a slight bind in the trigger.

They checked this one hundred per cent, and they were generating scrap at this operation where they couldn't pass these trigger housings on to the next operation. So they made this change to allow more clearance.

So our inplant manufacture, we are reducing any scrap.

Q This was, if I understand what you just told me correctly, without -- prior to this change, you would on occasion have a mechanism come through with no clearance?

A No. No, because this is something we check.

Q What I am saying is on your check, you would find it, and you would scrap that particular part?

A That's right.

Q And you were generating so much scrap?

A No, there was a small amount.

Q You are generating some scrap, and this would eliminate the scrap problem?

A That's right.

Q I understand. Let me show you what has been marked Plaintiff's Exhibit No. 4.

A Yes.

Q Is that a part in the trigger mechanism?

A Yes, it is.

Q And what does that part do?

A It is a little part that fits along the side of the trigger mechanism that projects and comes out right in front of the trigger, and what you do if you want to take the bolt out of your gun, you press up on this part and that frees the bolt so you can take the bolt from the rifle.

There is a bolt stop, and it just disengages the bolt stop.

Q Does this -- does this involve in the trigger mechanism when the trigger is pulled?

A It has nothing to do with it.

Q Has nothing to do with it. Is it in the path of any of the moving parts when it is pulled?

A No.

Q Okay. I show you Plaintiff's Exhibit No. 5.

A Yes.

Q Is the sear safety cam part of the trigger mechanism?

A Yes, it is.

Q Is that what we were just talking about in our prior discussion when we were talking about the sear with regard to the firing pin itself?

A Yes.

Q Are you familiar with that change?

A Yes.

Q And what was the purpose of this, for that change?

A Just as it says here. Reason for change, one was to remove the 600 part usage from it. The other one, on the angles here, they -- they changed the angle from 15 degrees to 7 degrees.

That was to change the dimension to conform to production.

What that was was on the front sear surface there is like an angle that comes in. I don't know if you are familiar, but there is a hook in the part.

Q Okay.

A There the connector comes up underneath that part. If you looked on the side, you would see it looks like it is crushed in on each side.

Q Okay.

A We do that what we call densify that area, and the dyes that do that, when we set the part up, they initially started with 15 degrees, and they found that was too much. They backed it up to 7 degrees 30 minutes, and we made this part for a number of years, and that change had never been showing up on the model drawing.

So what this was to make a change on the model drawing to reflect actually what we were doing.

Q So you were really manufacturing it at 30 degrees, but your drawing--

A We were manufacturing it to 15 degrees to 7 degrees 30 minutes. We were manufacturing at--

Q And your drawing--

A So what we are trying to do is bring our drawing back to what we are actually doing.

Q Had it ever been manufactured at 15 degrees that you are aware of?

A Yes, it would have been. Not to the customer. It would have been manufactured in house and they would have had to have tooling problems or something busted, and so they changed it and went to the 7 degrees 30 minutes.

So from a production standpoint of guns to the customer, it would always have been the 7 degrees 30 minutes. I don't know that for a fact, but that is normally the way it works.

Q That is not the only change on there. There is a 600 change. Is that correct?

A Yes. They removed the 600 from the part.

Q I am not concerned about that. Is there any other corre-tion?

A It says add section CC and that was to eliminate burr buildup on the hole in the front.

Q Would you tell me what that means?

A Yes. When they make this part, when they form it, they form out a burr. Just what happens, when you drill the hold. So you have to pay somebody to go in there and burr that. Get that burr off there.

So they changed that part. They put a countersink in the hole. Actually put a recess on each side. So if a burr is generated, it would break right off, and you don't have to pay somebody to deburr every part.

Q I understand. Thank you.

A You are welcome.

Q I show you Plaintiff's Exhibit No. 6. Is that a change generated by you? I notice your name is on the document.

A Requested by research, changed by Martin. Yes. Could be. They can come from a number of people as far as the request.

Q Okay.

A I would probably have been the one that was looking

on it.

Q Is that why your name appears on there, because you reviewed it?

A Yes.

Q Okay. Are you familiar with that change?

A Yes.

Q Would you tell me what the nature of that change is?

A Yes. That was the Model 700 trigger and its powder metal part we make in our powder metal division.

The block on it just said powdered metal, and I wanted the specific to what powdered metal. It is a new house, essentially an inhouse vendor. It is Remington powder metal division, but I thought it would actually be better if we did the specifics on the drawing, so some time in the future if we wanted to go on the outside or somebody new come in, so there was no mixup.

So we added what the actual mix we are using, you know, how to make the part. I will start right. Added Section BB. That was the same thing as we discussed on the sear safety cam.

When you press these powder metal parts, you press them and you can form a fine burr. Okay. On the sides of it. Now the fine burr, what it does is when you first put it into the housing, you can feel a little bind.

So what the guy has to do, he has to pull it out and remove that burr. So that is added cost. So what we did, we come up where we put chamfer right in the dyes. So that is why

you see the Section BB. That shows what chamfer, and so if there is a fine burr, then it is below the depth of the part.

So if there is a burr on it, it will never ever bind anything, and the guy doesn't have to pull it out and deburr it by hand.

I can explain the powdered metal. They added 90 degrees. That is the surface that the connector works on. The trigger setting here and the connector works on that, and they didn't have a dimension on it, and I thought we ought to put a dimension on the drawing.

It was obvious 90 degrees, but I thought we ought to put it on. So I added 90 degrees added note. I don't remember what the note would say.

Q Okay.

A But the note is on the drawings and you have the drawings.

Q I notice on that particular document which is Plaintiff's Exhibit No. 6, the reason for the change is listed to improve the function of the trigger safety but eliminating interference between the trigger and the housing.

The changes you just described to me do not seem to fit the reason for the change listed on that document.

A Very definitely they do. There is four changes. The 90 degrees has nothing to do with it. The note I don't know.

The change in the material has nothing to do with it.

The section BB really would tie into the reason because if you by adding that chamfers on the side of the part, you get rid of a burr when they put the trigger into the housing, it has a binding. They eliminate the binding or the interference.

Q So they added Section BB as referenced by the reason for the change?

A Yes.

Q The other three are just changes to the drawing to show what in fact was occurring during the manufacture?

A Or to update it. We wrote these for ourselves. We didn't write them for people on the outside.

Q I am just trying to understand what you are explaining to me.

A Okay.

Q I show you what has been marked Plaintiff's Exhibit No. 7.

A Okay. This is essentially the same thing as what we did. I bet the dates are the same. Essentially the same thing. The section is the same.

We put that form around it. We added notes, you know, so that it was clearly understood what we needed on certain areas of the part.

That added dimension to cornered note after grind, we were always grinding the part, and but the drawing clearly stated that you make the part bigger and you grind it smaller, and

I thought it should state that. So I put the dimension after grind so you would never be confused, you know, to tie it together to what we were doing and the material and densities back again. I wanted the material right on the drawing rather than say powdered metal.

Q Did any of these changes which we have just gone through in Plaintiff's Exhibit 2 through 7, were any of those as a result of complaints with regard to binding in the trigger mechanism?

A No.

Q They were all changes occasioned by manufacturing necessities?

A Pretty much. Yes.

Q Did you by any chance check the rifle which you examined in this case to see if perhaps one of the problems exhibited here had slipped through your inspection process and shown up in that particular rifle?

A Indirectly. We checked the function of the rifle.

Q And did you notice any specific problems with regard to the trigger mechanism and binding?

A Yes. I noticed some problems in that rifle. Yes, I did.

Q And what problems were those?

A Trigger adjustment screws had been backed off too far, and it looked like somebody had distorted that trigger.

Q When you say distorted the trigger assembly, what do you mean?

A When they either assembled or disassembled, they bent the plates.

Q What plates are you talking about?

A Side plates.

Q And those plates are different than the ones you referred to?

A Essentially the same.

Q And what effect did that have?

A There was a slight drag on the trigger.

Q Would you agree that the rifle with the trigger adjustment screw set as you found the day you examined it and the other problem you described with the plates, that rifle had become a dangerous entity because of those problems?

A No. Let me clarify that.

Q Please.

A You pick that rifle up and you function it, there is no question it should never be taken in the field. The rifle shouldn't have been show the way you delivered it to me.

Q And that's as a result of the trigger adjustment screws and the binding plates?

A As a result of whatever was done to it.

Q Okay, why is that?

A Why is what?

Q Why would you never take that rifle to the field?

A Because it would follow down. The safety -- not the safety but the trigger mechanism never worked right. You could never be sure of that rifle.

Q And those problems were occasioned by something other than the manufacturing process?

A They sure were.

Q Is the rifle repairable?

A Yes, it is.

Q How?

A A repairman could take it and the best way to repair that rifle probably would be to replace the trigger assembly.

Q When you examined the rifle, I owuld like to follow up on the plate part.

You said the side plates were bent.

A Distorted.

Q Distorted. Did you determine what caused that?

A I can't say. The only thing you do is speculate.

Q Would you speculate for me?

A I think that the way it looks to me, somebody was either taking that trigger assembly on or off, and they -- when they were driving the pins out, they struck it or something of that nature.

Q Side plates you are talking about?

A Yes.

Q And that bound--

A Didn't bind it but it--

Q Reduced the clearance?

A Offered some drag on it. Yes.

Q And with the trigger adjustment screws in the position that you found them combined with the possibility of the trigger mechanism itself not working properly, follow down was highly likely, probable?

A Well, you could assign the probabilities to what you think causes what, but, yes, that rifle would follow down.

Q Regularly?

A Yes.

MR. SCHWARTZ: I don't have any further questions.