

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF MISSOURI  
SOUTHERN DIVISION

\* \* \* \* \*

EVELYN LEWY and JACK LEWY,

Plaintiffs,

-vs-

REMINGTON ARMS COMPANY, INC., and  
K MART CORPORATION,

Defendants.

Civil Action No. 83-3172-CV-S-2

\* \* \* \* \*

Held at Remington Arms Company  
14 Hoeffler Avenue  
Illion, New York  
March 28, 1984

DEPOSITION UPON ORAL EXAMINATION of  
JOHN P. LINDE, taken by the Plaintiffs, held  
pursuant to Notice.

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ALSO PRESENT:

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Reporter







S T I P U L A T I O N S

IT IS STIPULATED by and between the attorneys for the respective parties that the testimony contained herein may be used upon the trial of this action; that all objections, except objections as to form, are reserved until the time of trial, and that objections as to form shall be noted on the record; and that the testimony be taken before Ann Short, a Shorthand Reporter and Notary Public in the State of New York, whose oath is waived.

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MARTIN MURPHY, CSR, P.C.

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J O H N   L I N D E   ,   having been previously duly sworn, testified further under his oath as follows:

EXAMINATION BY MR. McDONALD:

Q     Mr. Linde, we will continue from yesterday. You are, of course, reminded that you are still under oath.

I will show you what has been marked as F38 and ask what that document is.

A     It is a spring.

Q     Where is it used, sir?

A     Used on the fire control.

Q     Where on the fire control?

A     It is the safety detent spring.

Q     And what is its purpose?

A     It is the detent spring for the safety lever.

Q     What does it hold?

A     It applies tension to the detent ball.

Q     What is the relationship of drawing F38 -- I'm sorry. That was A15368, F38, is that correct?

A     Yes, it is.

MR. HEADLEY: Off the record.

(Discussion off the record.)

BY MR. McDONALD:

Q F36 and F37, sir, what is the relationship between those two drawings? F36 is A17043, and 37 is B17043, is that correct?

A Yes.

Q All right.

A They are safety pivot pins.

Q When was 36, F36 first drawn?

A In 1944.

Q Is 37 the current design drawing for that pin?

A Just a minute. There was one more of these pins.

Q I think you are right. F33, which is B91918, correct?

A Yes, it is.

Q Those three need to be read together, is that correct?

A That's right.

Q Which one is the current design drawing?

A Okay. The drawing A17043 was the original

drawing.

Q That's F36, correct?

A On your nomenclature, yes. It was redrawn -- It says, "see B17043," and this is B17043, which is your F37. "For the blank drawing, see B91918," and the blank drawing for the part is your F33.

Q All right. Now, F33, of course, as you described it, is a blank. What further manufacturing processes have to be applied to a blank such as depicted on F33?

A It is depicted on F37.

Q What further processes are applied?

A It is a heat treat.

Q Anything else?

A I can't tell you.

Q Current design drawing is which one, sir?

A It is a combination -- the current design drawing is the F37 in final form, and the blank is F33.

Q Which firearms are the pins which are depicted by F33, F36 and F37 used in?

A F33 is used on the Mohawk 600, 700 Varmint, 40XB, 600, XT100, 700 BDL, 700 ADL, 40XCF, 721, 722,

40X, 725, 40XCF, XC13, and on F37, I believe the only one I haven't included was the 700 Varmint.

Q All right. So have there been any modifications to the part as is shown in F37 as that part was used in the 700 fire control system?

A There is no modification shown on F37.

Q Therefore, it has not been modified since first applied or used in the 700 fire control system?

A No, there is no modifications on F37.

Q Well, has it or hasn't it been modified as used in the 700 fire control system?

A From F37 I can't tell.

Q All right. What would you have to look at?

A I'd have to look at the previous one, F36. Yes, there has been modifications to the pin.

Q As used in the 700 fire control system?

A No. There were no modifications as used in the 700.

Q Thank you. Now, to F38 and F39, I think your prior testimony is -- By the way, F38 is A15368, and F39 is B15368, correct?

A Yes.

Q These two drawings relate to each other, is that correct?

A Yes.

Q And they depict a spring which, when assembled, fits over the part that we just discussed previously, correct?

A No, it doesn't.

Q Well, it fits -- I'm sorry. What relation is there between the part depicted in F38 and 39 and the part depicted in the last three drawings we just discussed?

A They are part of the same assembly.

Q Does the pin shown in F37 serve to hold in place the part depicted in F38?

A Does the pin -- What pin?

Q The pin shown in F37.

A This pin would do what?

Q Serve to hold in place, in any fashion, the part depicted in F38 and 39.

A Yes, it would apply a load on the pin.

Q In what fashion?

A It would apply an axial load.

Q Meaning that the pin passes through the hole depicted on the drawing on F37 or F38 and 39?

A No.

Q What kind of axial load does F37 apply to F38 and 39?

A It applies an axial load up against the head of the pin.

Q In what way?

A An axial would be along the axis.

Q Does part F38 and 39 fit over any protrusion formed by F37 as assembled in the 700?

A Okay. Would you repeat the question, please?

(The last question was read by the reporter.)

A (Continuing.) Yes.

BY MR. McDONALD:

Q Can you tell me the diameter of the hole depicted in F38 and 39?

A Okay. On F38, the diameter of the hole is .126-.128.

Q That sets the parameter of the outer limits of acceptability of the outer hole, is that correct?



A What do you mean by "outer limits"?

Q I mean assembly, that these figures from a design standpoint tell whether the hole is too big or too small, if either of those are exceeded.

A No. The figures tell what the tolerance of the hole is.

Q What is the tolerance? What does that mean?

A It means that the dimension of that hole is .126 to .128.

Q And if it is beyond that, it is beyond tolerance?

A It is not within -- it is beyond the dimensions.

Q Is that beyond tolerance?

A No. It is beyond the dimension of the hole.

Q What does the word "tolerance" mean to you?

A It means the difference -- It would be the range from .126 to .128.

Q And if the hole were larger than or smaller than those two figures that you just mentioned, would that be beyond tolerance?

A No.

Q Okay. What is the diameter of the hole shown at F39?

A It is .126-.128.

Q Same tolerance as shown in F38?

A Yes -- No. It is the same dimension.

Q When was F38 first drawn?

A 1961.

Q Is there a predecessor drawing to F38?

A It says, "superseded." I would imagine there was.

Q Can you tell by looking at F38?

A It says it was superseded.

Q I know it says that, but was there a predecessor drawing, one that went before F38 in point of time?

A Yes, you can tell.

Q Sir?

A Yes, there was.

Q What was that drawing?

A I don't know.

Q Where do you find that information?

A Well, it starts with alteration six, and it

has a reference to some other drawing.

Q And the reference is what?

A A17042.

Q Okay. Do you find that drawing anywhere in the stack of drawings that have been supplied by Remington's lawyers?

MR. McDONALD: We can save some time, Mr. Headley. It is not there.

MR. HEADLEY: What's the number of it?

MR. McDONALD: The number he just recited was A17042.

MR. HEADLEY: You say it is not there?

MR. McDONALD: It is not there.

MR. HEADLEY: Off the record.

(Discussion off the record.)

MR. HEADLEY: Mr. Linde, is this drawing that we were talking about, F38, which is drawing number A15368, does that show the original drawing for that particular part for the Model 700?

THE WITNESS: Yes.

MR. HEADLEY: All right. And you were

talking that it succeeded some drawing that you read a number on?

THE WITNESS: That reference is another drawing.

MR. McDONALD: A17042.

MR. HEADLEY: Why do you say that's the original drawing?

THE WITNESS: Because the 700 was introduced in 1962, and this was a 1961 drawing, and there was no reason to have it. It didn't exist in 1961.

BY MR. McDONALD:

Q Mr. Linde, the Model 700 was introduced, marketed in what year?

A '62.

Q When was it designed?

A It would have been before '62, from '58 to '62.

Q All right. Sir, during the design stage, did you use drawings?

A Yes, we did.

Q Did you, in fact, use drawing A17042 or other predecessors of F38 in the design stage of the

Model 700?

A They could have been used.

Q Now, with regard to F38 and F39, what weapons or firearms has that part been used in?

A It's been used in the 700 ADL, 700 BDL, 600, 700 Varmint, 40XB, IFR, 40XCF, 40XB, and that's all.

Q Has this part ever been used in the 721 and 722?

A Not on these drawings, it hasn't.

Q Would you be able to tell if it had, if you had the predecessor drawing?

A Yes, I could.

Q How about the 600 or the 600 Mohawk or the 660?

A What about them?

Q Has this part, as depicted in F38 and 39, been used in those firearms?

A I read them all off.

Q Well, my question is, has this part --

A They have been used in the 700 ADL, 700 BDL, Model 600, 700 Varmint, 40XB, IFR, 40XCF, 40XB.

Q Do you know whether it has been used in the

721 or the 722?

A Not from those drawings, I don't.

Q Do you know, though?

A That part?

Q Yes.

A No, I don't.

Q Okay. F40, F41, F42, F43 are all drawings which relate to each other, is that correct? I will give the actual numbers after you have answered that question.

A Yes, they are.

Q Okay. Generally, they depict a ball bearing, would that be a correct statement?

A Yes.

Q All right. Let's get the numbers going here. F40 is A23220, is that correct?

A Yes.

Q F41 is B23220, is that correct?

A Yes.

Q F42 is B23220, is that correct?

A Yes.

Q And F43 is B23220, is that correct?

A Yes.

Q Now, in chronological order, timewise, are they correctly marked F40 through F43?

A Yes.

Q When was F40 first drawn?

A 1955.

Q Is there a predecessor drawing to F40?

A Yes, there appears to be.

Q What number is that?

A I don't know.

Q How can you tell that by looking at F40?

A On the bottom in the alterations, alteration number one says "added," and it gives a DCR number.

Q Okay. So you would have to refer to that particular DCR to get the prior history?

A If there was one, yes.

Q All right. Is F43 the current design drawing for the detent ball in the 700?

A Yes, it appears to be.

Q Now, ball bearings, by their very nature -- well, Strike that.

Can you tell by looking at these documents,

F40 through F43, whether or not this particular ball bearing was used in the 721, 722?

A Yes.

Q Was it?

A Yes.

Q Was it used in the 600?

A When?

Q At any time?

A Yes.

Q Was it used in the 600 Mohawk?

A Yes.

Q Was it used in the 660?

A No, it was not used on the 660.

Q Was it used on the 725, the 788 and the XP100?

A Yes, it was used on the 725.

MR. HEADLEY: What was used?

THE WITNESS: The steel ball was used on the 725. It was used on the XP100.

BY MR. McDONALD:

Q All right. 788?

A No.

Q Has the dimension of the ball ever changed?



A No, it hasn't.

Q What is that dimension?

A It is 53 seconds with a max variation of 2 ten-thousandths of an inch.

Q What is the purpose of the detent ball as used in the Model 700 fire control system?

A The detent ball is just as the name applies. It is the ball that gives you the detent action when applied with the spring force.

Q The spring that's shown in F38 and 39?

A Yes.

Q In the on safe position, where is the detent ball located in the 700 fire control system?

A It is in the safety lever.

Q Is it in relation to the trigger plate housing? Where is it located?

A It is on the rear detent.

Q Okay. In the off safe position, where is the detent ball shown by F40 through F43 located?

A It is in the forward detent position.

Q And on the trigger housing, where is that located?

A The detents are located adjacent to the detent pivot -- I mean on the pivot hole where the pin goes through.

Q Is there a difference in size of those two holes?

A Yes, there is.

Q Is that depicted by any particular drawing before you?

A We have already went through the drawings.

Q Is that depicted by drawings F16, 17 and 18?

A It is depicted by drawing 16.

Q In fact, there was a change with regard to the detent hole, which is depicted in F16 on the off safe position, isn't that correct?

A No.

Q Has the hole in the off safe position ever been changed, the detent hole?

A I don't know. I can't tell from this drawing.

Q Well, can you look at all three of those drawings and tell?

A No. I need a different drawing.

Q Which drawing do you need?

A Well, I can go through the pile and find it.

Q All right. Are you looking at F5 and 6 now?

A I see no changes to the off safe detent hole.

Q Was there ever a point in time when Remington changed the off safe detent hole or the on safe detent hole by flanging either of those holes?

A What does "flanging" mean?

Q Putting a larger circumference on the outer surface and decreasing that or sloping it in as you drill into the plate.

A Okay. I find no changes actually in the countersink. There is a change in the hole diameter.

Q Okay. When was that made?

A The hole diameter change?

Q Yes.

A Well, your question was on the countersink.

Q Yes, but when was the hole diameter changed?

Is that shown on F16?

A Is what shown?

Q The hole diameter change.

A No. F16 calls out a hole diameter.

Q Where is the hole diameter change shown, on which exhibit?

A It doesn't show on either exhibit.

Q How do you know it was done, then?

A Well, this drawing has a certain hole diameter, and this drawing has a certain hole diameter.

Q Which drawings are you referring to?

A F16 and F7.

Q What is the area between the off safe and on safe detent holes known as?

A I don't know what an official name would be.

Q Would the apex, a-p-e-x, would that be a correct terminology?

A That would be a satisfactory terminology.

Q Would that be one you have used in trials before and testimony?

A I could have.

Q All right. We understand what that means, don't we?

A Maybe you ought to just draw a little picture of what you mean, just to be sure.

Q The high area between the on safe and off safe detent holes over which the detent ball passes when operating the safety lever, and that's what I'm

referring to as the apex.

A Okay.

Q Is that terminology that we can agree to?

A Yes.

Q All right. Now, was there ever a change in either the diameter of the off safe or on safe detent holes, the distance between those two holes or the area of the apex in the 700 fire control system?

A Okay. Let's take it one step at a time. The first thing is a hole diameter, and I said that this one drawing had a different hole diameter on the off safe detent position.

Q All right. That's F7.

A Okay. The detent or the counter bore is the same.

Q All right.

A Now, I'll have to check the other hole position, the hole diameter. There is no change in the on safe hole diameter.

Q Okay.

A Okay. There was no change in the position of the on safe detent hole position. There was no change

in the off safe hole position.

Q How about the area which we had defined as the apex between those two holes?

A The area as defined by the apex between the two holes should be determined by the hole diameter of the on safe detent hole, the counter bore diameter of the off safe detent hole and the position of the on safe detent hole and position of the off safe detent hole, and I looked up those characteristics and told you what I found.

Q Therefore, there should be no change in the area, because there was no change in the position of the diameter, is that correct?

A That's the way it appears, yes.

Q All right. Now, can you tell us what the area -- well, Strike that.

Are you familiar with the terminology "trick test"?

A You'd have to define what you mean.

Q It is used throughout Remington documents right and left. I'm asking you if you know what it means.

A I know what it means to Remington, yes.

Q What does it mean to Remington?

A The trick test is where you take a bolt action rifle, and you cock the rifle. You put the rifle in the on safe position. Of course, without saying, you make sure it is pointed in a safe direction, and you make sure it is empty. You point it in a safe direction. You put the gun in the on safe position. You then take and move the safety lever to a position where the ball, as we were talking about in this case, comes to the apex, as used by the plaintiffs' attorney, in that position, so it is -- it will come to that position, and then you will pull the trigger, and then you release the trigger, and then you push the safety lever from on to the fire position.

Q And then what occurs, at that point?

A What do you mean, "what occurs?"

Q I mean, what occurs, at that point?

A If the trick test is failed, the firing pin will drop. If it passes the trick test, nothing will happen.

Q Now, is the trick test applied to all Model

700's before they leave Remington for resale?

A Yes, it is.

Q When was it first instituted as a test, a production test?

A It would have been in the time span of 1975, like, April, May or June, in that time span.

Q Did you have anything to do, personally, with instituting the trick test?

A I was working in research at the time, and I was aware of the trick test and the conditions of why it was being instituted.

Q Did you participate in recommending that the trick test be used prior to any 700's being sent from Remington's plants for resale?

A Did I recommend?

Q Yes.

MR. HEADLEY: Prior to any 700 being sent from the plant?

MR. McDONALD: Yes.

MR. HEADLEY: Which started in 1962. I don't understand the question.

THE WITNESS: The problem is trying to



answer the question. I can't answer that.

BY MR. McDONALD:

Q Well, let me rephrase, and maybe we can get one that you can answer. All right. From what point in time -- Did you say that Remington applied the trick test to all 700's before they left the plant?

A It would be in April, May, June time frame of 1975.

Q Before April, May and June of 1975, did Remington apply the trick test to all 700's that left its plant?

A No, they never.

Q Did they apply it to any prior models before they left Remington's plant?

A No.

Q When did Remington -- well, Strike that. After April, May or June of 1975, does Remington apply the trick test to all models that leave its plant?

A No.

Q Only the 700?

A No.

Q What other models do they apply it to?

A They apply it to all bolt action rifles.

Q All right. After April, May or June of 1975, then Remington applies the trick test to all bolt action rifles that leave its plant, is that correct?

A All but the rim fire.

Q All bolt action center fire rifles?

A True.

Q Now, after April, May or June of 1975, was there any change in the countersink whatsoever in the 700's?

A I went through the countersink diameter on what the previous drawings had and what they have now, and I can go through and check it again for you, if you'd like.

Q No, that's fine. Now, diameter is measured on a countersink from where to where?

A The diameter would be the extreme edge.

Q If we are looking at an assembled housing, it would be the outermost plane, is that correct?

A It would be where the cut intersects the outermost plane.

Q All right. Has there ever been any change

in the angle of the countersink?

A I thought I checked that too.

Q If you did, you didn't so testify. Now, if you have checked it, that's fine. By the way, before you continue looking, is the angle of the countersink reflected on F16 as 120°?

A Yes, it is. On the F16, which is dated '61, which would precede the Model 700, the angle shows 120°. On the 1976 and 1980, it calls for 120°. Yes, I can't see any difference.

Q All right. So as far as you know, there has been no change in the diameter or the angle of the slope of the countersink as shown by any of the drawings you have examined, is that correct?

A That's what the drawings show.

Q All right. Now, at the bottom of the countersink there is a hole. What do you call that particular area?

A What do I call it?

Q Yes.

A I would call it the bottom of the countersink.

Q All right. Has that hole size been enlarged

at any time?

A I went through that drawing before, and there has been a change to that hole.

Q When was that hole changed?

A I can't find it.

Q Okay.

MR. HEADLEY: What do you mean by, "you can't find it"? You can't find what?

THE WITNESS: I can't find why the dimension is different.

BY MR. McDONALD:

Q Can you find where it is different?

A I already told you that.

Q Tell me again where it is.

A Right here. This is the drawing used, and it is a 1980 drawing, and it shows the diameter of the hole -- Let me make sure I get the right hole here. .101-.103.

Q So it was increased from what to what?

A Well, I don't know if it was increased.

Q Well, was it decreased?

A This is dated '66.

Q That's F6?

A That's F6. I got the wrong hole. Let me go through it again.

Q All right.

A I found it here. I had the wrong hole. I got the wrong hole. I thought it was a B, and it was a G. I can find it now, I think.

Okay. On the old drawing, F16, which shows a '61 date, the hole calls for a .106-.110 diameter hole.

Q That's .106-.110?

A Yes, and then on all the drawings from then on, on F7 it shows when it was redrawn and revised in alteration ten. It shows a .101-.103 diameter hole, and this was in 1976.

Q Now, what was the alteration number?

A It is alteration number ten.

Q All right. Is there a DCR that corresponds?

A Yes. 10195.

Q Now, by decreasing that hole, what would be -- well, Strike that.

It is my understanding from your prior

testimony that the detent ball diameter has never decreased.

A That is right.

Q All right. By decreasing the diameter of the hole at the bottom of the countersink, what effect would that have on the detent ball in the operation of the safety?

A On the operation of the safety?

Q Yes.

A It would have little or no effect.

Q That's your testimony?

A Yes.

Q All right. If you viewed the side plate -- By the way, the detent holes on a right-hand gun are on the right trigger housing plate?

A Yes.

Q And if you laid that trigger housing plate on a flat surface, so that the detent holes were up, and assuming that the detent ball remained the same, as you testified prior to alteration ten, isn't it true that the detent ball would seat deeper in the off safe hole than it would after alteration ten?

A Yes.

A Yes.

Q Now, do you know why there was a change in the off safe detent hole diameter to decrease it as is shown by alteration ten?

A I don't remember why the change was made.

Q Didn't you participate in that decision?

A Yes, I did.

Q What was your position at the time?

A I was the manager of manual firearms design.

Q All right. And weren't you the person who was responsible for making that recommendation? Well, we can mince words, but we can get into all the minutes, and that will take care of it. Weren't you the person responsible for making that recommendation?

A I was the person who signed the change, that is right.

Q Right. Why did you sign it?

A Obviously, at the time, I thought it was the thing to do.

Q For what purpose?

A I can't remember.

Q Which DCR do you need to refer to refresh

your memory?

A Whatever the DCR is that you read into the testimony.

Q Is that on alteration ten? Can you find that for me again, alteration ten?

A Okay. It is revised and redrawn DCR 10195.

MR. McDONALD: All right. That wasn't produced.

MR. HEADLEY: Wasn't it?

MR. McDONALD: No. Do you want to take a break and produce that for us?

MR. HEADLEY: Sure, if we have got it.

MR. McDONALD: In the interim, could I see the drawings on the two-part sear cam?

MR. HEADLEY: Yes.

(A short recess was taken.)

BY MR. McDONALD:

Q Sir, you have before you DCR 10195 consisting of four pages, is that correct?

A Yes.

Q And -does that correspond with alteration ten?

A Yes, it did.



Q All right. And alteration ten is on which drawing, F what?

A Alteration ten is on F7.

Q All right. Sir, did you participate in the drafting of DCR 10195?

A No, I approved it.

Q Where is your approval shown?

A On the bottom. It says "JPL," and there is a date.

Q I see. My copy is cut off. We are talking on page one, is that correct?

A Yes, we are.

Q Can you tell me if there is more than "JP 7/2/76"?

A Yes, there would be. It is JPL. I wouldn't just put JP.

Q The problem is, Mr. Linde, I can't really tell that from the copy that has been provided.

MR. HEADLEY: Let the record show it is down on the very bottom of the Xerox copy, but your testimony is that where the JP is shown, there would be an L too?

THE WITNESS: Yes.

MR. HEADLEY: And the date there would be July 2nd, 1976?

THE WITNESS: Yes. It would agree with the transmittal date.

MR. HEADLEY: All right. Are you going to put that in as an exhibit?

MR. McDONALD: I am, but I'm not going to mark it just yet, because it will fall out out of sequence.

MR. HEADLEY: Well, just put an L where it faded and the date.

BY MR. McDONALD:

Q All right. Sir, there is a second set of initials on the front page, which I can't read. It is slightly to the right. Do you know whose initials those are?

A No, I don't.

Q All right. Now, DCR's have a number of functions, am I correct?

A No.

Q They only have one function, is that it?

A It is a design change request.

Q All right. Did they transmit drawings, for instance?

A They are used with the transmittal.

Q All right. Do they have a position on them indicating what should be done with parts that are in inventory?

A Yes, there is.

Q All right. Now, the reason for this particular change, and I am going to quote, is "to provide the M 600 with a more positive fire control, a better safety and a common, more easily adjustable fire control housing," is that correct?

A Yes.

Q Did you agree with that?

A I signed it.

Q Did you agree with it?

A Not necessarily, no.

Q What did you disagree with?

A Well, a more positive fire control could be construed in a number of different ways.

Q How did you construe it when you signed?

A I construed it to be a more rigid housing.

Q All right. Is that something that was desirable or undesirable?

A The housing really didn't have much to do with the change at all.

Q All right. Any other part that you claim you disagreed with?

A Well, as far as a better safety, really it is a common safety, so it can't really be a better safety.

Q Common what?

A The safety components are the same. Basically, it is used in the 700, and we are -- excuse me, I'm wrong on that. The way the thing worked is basically the same. The components are basically different. The design of the components was different on the 600 and 700, but how the actual thing functioned, that is the design was the same.

Q All right. Now, can you tell me whether or not the parts that were affected were also used in the 700?

A It says right here, "Mohawk 600." Those are

the parts that were going to be drawing numbers, the safety, the safety assembly, the trigger assembly and the sear safety cam.

Q Were they also --

MR. HEADLEY: Now, at this point, I'm going to ask the witness to restrict his answers to our basic inquiry, and that is if there is anything on this DCR that we are looking at which would explain to him the reason for changing the diameter of the hole we were previously discussing on the Model 700 in the off safe position, and will you limit your answers to that, and I will ask you, Mr. Witness, not to go into any further commentary concerning the 600.

BY MR. McDONALD:

Q Were these parts used in the M 700?

A Which parts?

Q The parts that are indicated in the top.

A The parts used in the 700 are as it says on the DCR Model 700. See where it says "Model 700" in the lower part of that block?

Q Yes.

A It says, "trigger housing assembly complete and the plate."

Q All right. That's just below "Mohawk 600," correct?

A No. That says, "Model 700, Model 600." It says those two parts.

Q Just above that, that's in the column that says, "Mohawk 600" also?

A No. That Mohawk 600 is for those parts that go with the Mohawk 600. Where it says "700 and 600," those two items are the parts that are going to be common on those.

Q "Trigger housing assembly complete," is that what you are saying?

A Yes, "and the plate."

Q All right. Now, what is the indication as to what should be done with the parts that are in inventory?

A It says, "to use."

Q In other words, those parts are to be assembled in rifles, and those rifles are to be put in the stream of commerce and sold, is that correct?

A Yes.

Q Without any change being made to them, correct?

A That's not correct.

Q What change is to be made to them?

A There was some modification at the time where the parts on hand were modified.

MR. HEADLEY: We are still getting into the same thing, and I'm asking the witness to answer on the question which caused the reason for looking at this DCR, and that was if he knows of the change in the diameter of the hole in the Model 700 with respect to the on safe position, and that was the reason we got it, to aid the witness's recollection, and that's the question I want him to answer, but nothing more concerning this DCR with relation to any other models. Let the record also show that we have obviously provided a copy to plaintiffs' attorney.

BY MR. McDONALD:

Q What was the reason for the change of the

diameter of the hole?

A I don't know.

Q After you reviewed the DCR 10195, you don't know, is that right?

A That is correct.

Q All right. Did you participate in the decision to issue 10195?

A Yes, I did.

Q And you have no idea as to what the change in the diameter of the hole on the off safe position on the right-hand plate of the trigger assembly housing was for, is that correct?

A I don't know.

Q Who would know?

A I don't know as anybody would know.

Q That could be.

MR. HEADLEY: Well, I think you are limiting your answer to the fact that you don't know, and you don't know in a positive sense, is that correct?

THE WITNESS: That is right.

BY MR. McDONALD:



Q Do you know in any other sense, positive or otherwise?

A It would only be conjecture on my part.

Q What's your best judgment?

A I don't have a best judgment.

Q Do you have an engineering judgment?

A I don't know. I'm not going into conjecture.

Q You refuse to answer the question?

A I don't know. I don't know why the change was made.

Q Let me ask you this, sir. Taking your education into consideration and your professional degree into consideration, your years as a designer of weapons, your position, your knowledge that you have accumulated over the years of 700's and your years with Remington, taking all of that into consideration and bringing that to bear and focus on the question, are you able to formulate an opinion, a professional opinion, an expert opinion as to why that change was made?

A I could make some guesses.

Q Are you able to form a professional or expert

opinion?

A I can't form an expert opinion.

Q Okay. Now, what does the word "centrality" mean insofar as drilling or punching of holes?

A Centrality doesn't mean anything, as far as drilling or punching holes.

Q Okay. Have you ever used that word in any DCR's that pertain to the detent holes, you personally?

A I could have.

Q Well, what did it mean to you when you used it?

A Centrality means something that's centered with respect to something else.

Q Okay. Did you ever make a statement, at any time, in any memos or any meetings that when you started investigating these trigger housings, and particularly the detent holes in the fire control systems, that there was not centrality?

A Can you read that question back, please?

(The last question was read by the reporter.)

MR. HEADLEY: If you recall.

A (Continuing.) I can't recall discussing centrality of holes in any meetings or any memos.

MR. HEADLEY: I would ask Counsel for Plaintiff if you have some record or some memo reproduced -- it is apparent that plaintiffs' attorney has documents they have obtained, perhaps, from other cases. If you have something, I'd ask you to show it to the witness in attempt to refresh his memory.

MR. McDONALD: I'll get around to that. You can count on it.

MR. HEADLEY: Okay.

BY MR. McDONALD:

Q Now, centrality would deal with the theoretical midpoint of each detent hole, would that be a correct statement?

A I have trouble with that definition.

Q Well, let's just say between us guys, for purposes of this deposition, that centrality is the center of the hole, the theoretical center of the hole. Can we agree on that?

A Okay. Go ahead. That's your definition of centrality.

Q Would you agree with that?

A I have trouble with that definition.

Q What definition would you use for centrality?

A Well, when I think of centrality, I think how central is something with respect to, like, two surfaces.

Q All right. Fine. We'll use centrality as the relationship between two things and the things that --

A It would be like a hole, if you had two surfaces, and you had a hole in it, the centrality of a hole would be clearly defined. It would be how central it is to two surfaces. I don't know how a hole can be central to itself. I'm having trouble with that.

Q You can't. You're right. Now, the theoretical center of the two holes can have a relationship to each other? That's all I'm asking you, the theoretical center.

A It has a relationship.

Q And the theoretical relationship of one hole to another would fall within the definition of centrality, the relationship of those two theoretical points?

Let me rephrase. I'll even draw it for you, so we can help each other out some. My question is, does the relationship of those two theoretical centers deal with the concept of centrality, correct? In other words, the theoretical centers can have a relationship to each other?

A The theoretical centers do have a relationship to one another.

Q Exactly. Now, there is on drawing 5, is there not, a method of measuring the theoretical centers, the relationship of each to one another, is that correct?

A You can calculate the dimension from center to center.

Q Now, is there any measurement or any kind of legend that will tell us what the distance is between the theoretical center of each detent hole?

A The distance from center to center?

Q That's right.

A Yes.

Q Where is that?

A It is this dimension, an inch 015 and an inch 013, and this dimension, .423 and .425, and this dimension, .943 and .941, and this dimension, .588 and .586.

Q All right. Those dimensions which you have just recited off F5 are the dimensions, assuming that the holes, detent holes are drilled according to design, and that relationship of the two holes would determine the area of the apex, isn't that true?

A It would determine the apex. It would determine the intersection.

Q All right. In other words, if those holes aren't drilled -- let's just take this hypothetical situation. Let's assume that the two detent holes are not drilled in relation to each other according to specifications. Let's assume that they are drilled closer to each other than specifications are designed. What would occur to the apex in that situation?

A I can't say for sure.

Q You can't?

A No.

Q Why not?

A Because you are leaving out one of the other tolerances. Well, not tolerance, but cuts. That has to be considered.

Q What is that other cut?

A That's the counter bore.

Q Well, assume that the counter bore is also sunk according to design.

A Okay. Read back his question.

(The last question was read by the reporter.)

A (Continuing.) Okay. The apex of the cut would come in the same position.

BY MR. McDONALD:

Q Would come in the same position?

A Yes.

Q Meaning what?

A Meaning that where the cut comes is going to be where the hole breaks.

Q Now, would there be more or less area on the

apex in the hypothetical I have just given?

A Actually, there wouldn't be any area. It would be a break point.

Q In other words, the holes would run together?

A That is right.

Q So thus, destroying at least a portion of the apex, the height of the apex?

A What do you mean "destroying"?

Q Well, just what I mean. In other words, if the two holes run together, and if we are laying this plate flat on the table --

A Right.

Q And we consider its thickness to be up and down, or height, the apex would be lower in that hypothetical situation, correct?

A Yes.

Q All right. Now, what would be the effect of that on the operation of the safety?

A It would reduce the detent force slightly.

Q And what would that do?

A It would reduce the load when you apply it to the safety arm going from either on to safe or off safe.



Q Would that have an effect on the safety of the weapon?

A No, it should not.

Q All right. Now, let's take the other situation. Let's assume that the theoretical center of the hole -- each hole has more distance than called for by design. In that situation, the area of the apex would not only be higher, it would also be wider, wouldn't it?

A Yes.

Q What would occur with regard to the operation of the safety in that instance?

A The safety detent loads would be up to the maximum amount, because you would be going over the maximum height.

Q But you would also have further distance to travel over the apex, wouldn't you?

A Over the apex, yes.

Q Therefore, increasing the likelihood that the detent ball and the safety could come to rest on the apex?

A It would be easier to trick.

Q And trick, I think, we have previously covered, have we not?

A Yes, we have.

Q That's the same as our discussion with regard to the trick test, is it not?

A Yes.

Q Have you personally ever investigated the phenomenon of the apex by reason of manufacturing process not being -- well, Strike that.

Have you personally ever investigated the phenomenon of the relationship of the two detent holes not being as specified by Remington during the manufacturing process?

MR. HEADLEY: I don't know what you mean by "personally investigated." The witness told you what the effect would be.

BY MR. McDONALD:

Q I mean, have you gone out and made an investigation to determine whether or not these plates meet Remington's specifications? That's what I mean.

A No, I haven't.

Q Have you ever supervised such an investigation?

A I could have.

Q Well, if I told you that you have, would that refresh your memory?

A No.

Q Okay. Now, this plate, as is shown by F7 and is used in the 700 fire control system, has that plate always been manufactured by Remington, or has it ever been subcontracted out?

A This plate?

Q Yes.

A I believe this plate is made by a vendor.

Q Who is the vendor?

A I don't know.

Q Do you have records that would show who the vendor is?

A Yes.

Q From when to when was it subbed out to other vendors?

A I don't know.

Q Has there been more than one vendor of this particular plate?

A I don't know.

Q Where would you go to find out, if you wanted to know?

A I'd call up purchasing and give them the part number and ask them who was making it and get the history on it.

Q Now, have the dimensions, which you recited into the record dealing with the relationship of the theoretical center of the two holes, ever been changed?

A I went through those dimensions with you this morning.

Q No. You went through one set of dimensions, and my question is whether or not those dimensions have ever been changed. I'm not talking about the size of the hole. I'm talking about the relationship between the theoretical center of the two holes, and you just got through reciting to me those measurements. I want to know if they have ever been changed.

A If you would like to go back, I did go through each one of the holes. I went through those dimensions from the position of this hole, this dimension and the other dimension and the position of this hole and the other dimension. I went through all

those for you on the questions that you asked.

Q I want to know if they have ever been changed, the theoretical center.

A That's what I'm telling you I went through with you.

Q Has it ever been changed?

A It has never been changed.

MR. HEADLEY: My recollection is that we covered it.

BY MR. McDONALD:

Q Then I misunderstood, because I didn't pick that up that you had covered the theoretical center. Okay. No, I think you are right. I stand corrected. You did do that. I recall that now.

Sir, drawings F44 through 49 deal with what?

A F44 is an assembly drawing. It is called the safety assembly. F45, which is B15372, is titled "button," and that's the safety button. F46 is a button. That's the safety button. That's B15372. F47, which is C14578, is a button. It is the safety button. F48 is B15372. It is a button. It is also a safety button. You want 49?

Q Yes.

A F49 is C14578. It is a button. It is also a safety button.

Q All right.

MR. HEADLEY: Now, just a minute. Off the record.

(Discussion off the record.)

BY MR. McDONALD:

Q Sir, what is the relationship of F44 through 51 to each other?

MR. HEADLEY: You might first identify 50 and 51.

BY MR. McDONALD:

Q Okay.

A F50 is B26585. It is an assembly, safety assembly. F51 is B92297. It is an assembly, safety assembly.

Q Now, these drawings depict the safety button and the process of attaching it to the safety lever arm, is that correct?

A That drawing does, yes.

Q Well, in general, isn't that what all these

drawings depict?

A They are either drawings of the safety button or the assembling of the safety button to the arm.

Q Okay. This safety button that is depicted in drawings F44 through F51 is one which is peculiar to the 700, is that correct?

A Yes.

Q Has it ever been used on any other firearm?

A No, it has not.

Q All right.

A It cannot be used.

Q The button?

A The button or the arm is not used.

Q I'm not asking about the arm. I'm talking about the button.

A Well, let me check the button. I know the arm will not fit on anything but the 700.

Q I'm just interested in the button.

A Well, the button is insignificant, so we will look it over. This button was used on the 40X also, which makes sense.

MR. HEADLEY: Does each exhibit show it

on there?

THE WITNESS: Yes.

MR. HEADLEY: So it will show, and you are just attempting to read them.

A (Continuing.) F46 is the 700 and 40X only. F47 is 40X and 700 only. F48 is the 700 and 40X only, and F49 is the 40X and 700, so the button and the arm is only for the 700.

BY MR. McDONALD:

Q But the button is only for the 700?

A The button and the assembly can only be used on the 700.

Q Now, what is the relationship of F52 and F53 to each other? F52 is C15370, correct?

A Yes.

Q And F53 is C92212, correct?

A Yes.

Q Which is a current design drawing for the 700?

A It would be C92212, your F53.

Q All right. When was F52 first drawn?

A F52 was drawn in 1961.

Q Does it have a predecessor drawing?



A No, it does not.

Q Does it have a DCR predecessor?

A No, it does not.

Q Now, the part depicted in F52, is that a stamped metal part?

A No, it is not.

Q What kind of metal process?

A It is a formed steel part.

Q Tell me what that means.

A It means you take a piece of steel, and it is formed up into this part.

Q How do you go about that?

A It goes through a series of die operations.

Q All right. Now, how does that differ from stamped?

A The layman's term could be stamped, but it is actually formed.

Q All right.

A It is not a one dimensional part. It can't be stamped.

Q In other words, there is more than one process applied to the part?

A Yes.

Q How many different processes are applied to this particular part as it is shown in F52?

A I have no idea.

Q Is there more than one bend made?

A Yes, there is.

Q At least two?

A That's right.

Q More than two?

A I don't know.

Q The part as designed serves what function, F52?

A The part that is designed is the safety lever. It is what the operator uses to actuate the safety.

Q Does it have another function also?

A Yes, it does. The extension on the gun is used -- pardon me. The extension on the safety lever is used on a bolt lock.

Q In other words, as we face the drawing, that portion which is on the right-hand side of the part is the bolt lock, is that correct?

A Yes, it is.

Q Now, when the operator pushes the safety arm or pulls the safety, whatever terminology you wish to use, into the safe position, what is the effect on the operation of the 700?

A What? When the operator positions the safety lever from the off safe to the on safe position, the cam on the safety lever comes up and contacts the sear safety cam, lifting it clear of the trigger connector. The forward projection comes in and locks the bolt.

Q All right. Let's take this situation. Let's assume that on a 700 ADL with the part depicted by F52, that a round is chambered and that the bolt is forward in battery position. Do we understand each other?

A There is a round chambered, and the bolt is locked down.

Q Locked down, and it is in battery position.

A What do you mean by "battery position"?

Q That's the terminology you have used.

A What it means to me, it is a battery position, that the rifle can be fired, the round is chambered, and it can be locked. It is fully locked up.

Q We'll use that terminology, then. We will use

your definition of battery position. Now, if the operator places the safety on the on safe position -- well, Strike that.

Assume that in the hypothetical I have just given you that the weapon is in the off safe position. What is the relationship of the sear to the firing pin mechanism? What is the sear safety or the sear doing to the firing pin mechanism, at that point?

A Okay. Let's make sure we have your hypothetical right. You have got a round in the chamber?

Q Right.

A You have got the bolt fully locked and the gun is cocked?

Q Right.

A The question is, what is the sear doing?

Q Yes.

A The sear is holding the firing pin.

Q All right. So the receiver is in direct contact with firing pin, correct?

A The firing pin head.

Q All right. In layman's terms, it is holding the firing pin back prior to striking the primer,

if released, right?

A Yes.

Q All right. Now, assume that the operator moves the safety to the on safe position. The part which is depicted in F52 has the function of further lifting the sear, is that correct?

A Further lifting it from what?

Q From the position it was in before. Well, Strike "further lifting." What happens when the operator places the weapon in the on safe position?

A The cam and the safety lever actuate against the sear safety cam, lifting it up.

Q All right. The sear safety cam will still be in contact with the firing pin, is that correct?

A Yes.

Q Now, what allows the sear to move in that operation further? In other words, is there a tolerance or an ability for the sear to move where you have it in the hypothetical situation I have indicated, and then you move to the on safe position?

A The sear is allowed to move as a front pivot.

Q Is there a dimension for that particular movement?

A What do you mean, "a dimension"?

Q How much does the sear move?

A The sear moves the amount the cam lifts it up.

Q How much is that?

A It depends upon the tolerances of the parts.

Q What is the specification for that move?

A I don't know what the specification is.

Q How would you find it?

A I would go through all the drawings, and I would calculate all the dimensions and tolerances and see what it is.

Q That particular connection between the sear safety -- Strike that. That particular connection between the safety lever cam and the sear cam is a function of the tolerances of a number of parts, is that a correct statement?

A Yes.

Q All right. Which parts?

A It would be a function of the tolerances on the safety lever, which we have right here, the function on

the trigger housing.

Q Go ahead.

A The tolerances on the sear safety cam and the tolerances on the trigger and connector.

Q All right. Now, assume the same hypothetical situation, and assume that the safety is in the off position. Now, the connection or engagement -- I think engagement is probably a correct term. The engagement between the sear and the trigger connector is a function of the tolerances of what parts?

A That engagement is not a function of the tolerances of the parts.

Q Not at all?

A No.

Q Why not?

A That engagement is determined at the sub-assembly operation.

Q By the use of the adjustment screws?

A Yes.

Q Assume no adjustment screw application, does the manufacturing process achieve an engagement between the trigger connector and the sear based solely on the

tolerances of the parts?

A No.

Q Which of the three adjustment screws are critical to the engagement between the sear and the trigger connector?

A It is the engagement screw.

Q And that's located where on the trigger housing?

A Left rear.

Q So trigger travel or over travel would not be critical to the engagement between the sear and the trigger connector in the off safe position?

A The over travel screw does not determine engagement.

Q At all?

A At all.

Q Under any set of circumstances?

A No.

Q There are circumstances where it can determine the engagement?

A Yes.

Q Tell me about those.



A If you crank the screw all the way in, it won't let the gun fire.

Q Are there variations of that? In other words, if you crank the screw all the way back in, and brought it back an eighth of a turn, for instance, what would be the impact on the engagement?

A I don't know.

Q Well, using your education again and your knowledge that you gained through these many years with Remington, can you hazard a professional opinion?

A I know that the engagement -- I know what the engagement is. I don't know what the pitch on that screw thread is. I think I can go through it and calculate it out and calculate how much of an eighth of the turn may be, but you are asking me how much that is, and I have no idea.

Q Okay. It is a function of the threading, is that correct?

A Yes, it is.

Q All right. Now, does the trigger pull have any function or impact on the engagement between the trigger connector and the sear in the off safe position?

A Yes, it does.

A Yes, it does.

Q What?

A If there is no trigger spring force, then the trigger might not be up against the trigger engagement screw.

Q In which case, what would happen?

A You can have no engagement.

Q In which case, what would happen in the cocked position?

A You couldn't cock the rifle.

Q Let's assume it had been cocked.

A If the trigger is not underneath the connector, you can't cock it.

Q Assume it had been cocked.

A If the trigger is not under the connector, you can't cock it.

Q Isn't it the position, if the trigger connector isn't under the sear, it is in the fire mode, is that correct?

A That is correct.

Q So in other words, if the rifle had been cocked, and if the spring were not exerting force

on the trigger, and had not, for one reason or another, moved the trigger beneath the sear, then there would be no engagement, correct?

A That is right.

Q And if there was some force holding the firing pin in the cocked position, and the engagement was not effectuated, and once that force were released, then the weapon or the firearm would fire, is that correct?

A I can't follow your hypothetical.

Q Well, all right. Now, is engagement a correct term for the connection between the sear and the firing pin head when the weapon is in the cocked position?

A You could use the term.

Q What term is used within Remington?

A I don't know what the term would be used for that.

Q What term do you use when trying to express that concept?

A I don't know what I would use. You could use engagement, but it could be used in that, if it was described.

Q Is engagement a term of art used solely to speak about the relationship between the sear and the trigger connector in the cocked position in the 700?

A Not necessarily.

Q All right. Let's call it connection rather than engagement. The connection between the sear and the firing pin head, when the 700 fire control system is in the cocked position, is also a function of the dimension of the firing pin head and the upper plane or the upper measurements of the sear, is that correct?

A Yes.

Q Those two dimensions determine how well, if you will, the firing pin head is held in the fire mode, correct, the ready-to-fire mode?

A The relationship between the two parts would determine the amount of engagement or -- what did you call it?

Q Connection.

A Connection.

Q All right. Can you find within the drawings those drawings that express that connection, the

relationship between that connection, between those two parts that make up that connection?

A Yes, I could.

Q All right. Would you do so, please.

A I'd have to go through all the tolerances.

Q Well, can you find all the drawings first?

A They are all here.

Q Let's see if we can find the drawings that are applicable, and then we could go through the tolerances, if we decided to do so.

A Okay. You're serious about this?

MR. HEADLEY: Are you talking about all the drawings?

THE WITNESS: Yes, just about. You have to go through the whole stack of them.

BY MR. McDONALD:

Q Well, all I'm wanting to know right now is those drawings that express the connection, and are you saying that it would take a calculation of the tolerances of all the parts?

A It would take a calculation of a large number of parts, yes.

Q All right. Tell me, if you will, what parts you would have to calculate the tolerances in order to arrive at the calculation I have asked you about.

A The amount of overlap between the firing pin head and the sear.

Q Yes?

A You'd have to look at the tolerances on the sear, the trigger connector, the trigger housing, firing pin head, bolt plug, the bolt.

Q Excuse me. Two things, bolt head and bolt?

A I said, "bolt plug."

Q Yes?

A Bolt and receiver.

Q Okay. Is there, in one location, an expression of the design tolerance for the connection between the firing pin head and the sear?

A Not that I am aware of.

Q Has that calculation ever been made within Remington as it applies to the Model 700?

A I'm sure it has.

Q Are you aware of it?

A No.

Q Have you ever done it?

A I know I have done it on some models. I don't know if I have done it on the 700.

MR. HEADLEY: What's that dimension?

MR. McDONALD: The connection between the firing pin head and the sear.

MR. HEADLEY: Thanks.

BY MR. McDONALD:

Q Now, assuming that all parts are operable and within tolerance, would it be a fair statement to say that that connection, the connection between the firing pin head and the sear, the amount of overlap, I think you have said, would be a critical dimension to the safety of the weapon?

A It is an important dimension.

Q Would you use the word "critical"?

A Here again, I don't know what your definition of critical is.

Q Now, we can go through -- Have you ever used the word "critical" with regard to any particular relationship between parts in the firing control?

A I have used it with other respects.

Q Have you used it in writing to express a concept as to the importance of the relationship of two parts within the 700 fire control system?

A I don't know.

Q Are you familiar with the 1976 Remington Field Service Manual for the Model 700?

A Yes.

Q Are you familiar with pages eleven and twelve of that manual?

MR. HEADLEY: Let the record show that --

Strike that. I don't want to say anything.

BY MR. McDONALD:

Q Let the record show that the witness has just finished reading pages eleven and twelve of the 1976 Remington Field Service Manual, is that correct?

A Yes.

Q By the way, who authored those two pages?

A The information was supplied by myself.

Q Down in the lower right-hand corner of page twelve there appears the initials "JPL." Whose initials are those?

A Mine.



Q What does "RD" stand for?

A Research Department.

Q And "3/76"?

A Third month of '76.

Q Would the same designation apply to page eleven?

A Yes.

Q By the way, at the top, what does that say?

A "Model 725, 721, 722, 700 and 600."

Q Was it your intent that this information contained on page eleven and twelve apply equally to all five models?

A That the information could be applied to them, yes.

Q All right. Now, with regard to the relationship between the trigger connector and the sear, that relation being expressed by you as "engagement," could you use the word "critical"?

A I don't know.

Q Well, you did?

A No, not necessarily.

Q Well, did you use the word "critical" in here

at all?

A The word "critical" is used in that text.

Q All right. Will you use the same expression with regard to the connection between the firing pin head and the sear?

A I never used -- I don't know if I used it in that connection.

Q Would you use the same wording to express the necessity for the proper connection between the firing pin head and the sear as you have used to express with regard to the engagement between the trigger connector and the sear?

A I supplied the information for that. I did not write the text for that. The word "critical" is not necessarily the word that I used. That was what the guy used who put the thing together.

Q You reviewed it, did you?

A I read it, yes.

Q Did you review it before it was released?

A I read it.

Q Did you disapprove of the text?

A Not in its entirety, no.

Q Did you disapprove in writing of the text?

A Yes, I did.

Q By what means or method?

A The individual who does the final copy is not an engineer, and it is like when you have engineers and lawyers, they have a hard time coming up with common terminology, which is evident by the situation we are in now, and it was the same kind of thing that's going back between me and you in the use of terms. He has the final say on the use of the terms, because he understands the customer, and you understand the terms you're using, because you understand a jury.

Q Who was it that you had this discourse with about the pages eleven and twelve?

A The same person I have the discourse with any time I made any change in the Field Service Manual.

Q Who?

A Franky Hart.

Q What was his function?

A He took the information supplied and put it into the final form.

Q What was his position?

A I don't know what the name of his title is.

Q Was he in marketing?

A No.

Q What department was he in?

A He was in research.

Q Was it his job -- Well, what was his relationship to you, functionally, was he your supervisor?

A No.

Q What was his function in research?

A He worked on the Owner's Manual and the Field Service Manual.

Q But you did work with him in terms of providing information for eleven and twelve, is that correct?

A Yes.

Q And since your initials appear on pages eleven and twelve, what is the meaning of that?

A The meaning is that I supplied him the information.

Q And you approved, ultimately, the final text that went out, is that correct?

A In principle, I agreed with it, yes.

Q Well, if you had disagreed with the text, did you have the means available to you to change it?

A Do you and your wife agree on everything?

MR. HEADLEY: Just answer his question.

A (Continuing.) I mean, he's getting to the point where -- I agree, basically, with what the thing says, yes.

BY MR. McDONALD:

Q All right. Now, back to my question.

A Okay.

Q Wouldn't the relationship between the firing pin head and the sear be equally as important as the relationship between the trigger connector and the sear when the weapon is in the off safe position?

A I cannot say that it is as equally important. I can say it is an important measurement.

Q And it is an important measurement to the safe operation of the 700 fire control system, isn't it?

A Yes.

Q F52 depicts a part which has the function of also locking the bolt on the 700 fire control system,

correct?

A Yes.

Q And what terminology do you use to express the portion of this particular part which has the function of locking the bolt? In other words, is there an expression or word of art or term within Remington that deals with that portion which locks the bolt, bolt lock arm, bolt lock cam?

A I don't know it. I would imagine different people call it different things. There is no common terminology that I know of.

Q What do you use when talking about this particular segment of the part?

A I probably use a number of different things.

Q What do you want to call it?

A You could call it the bolt locking arm on the safety lever.

Q Let's call it the bolt locking arm. Now, the bolt locking arm fits into a slot which is drilled into the bolt, is that correct?

A Yes.

Q I'll show you what is a portion of what has

previously been marked as Defendants' Exhibit 5, namely, the bolt. You recognize that as the bolt, right?

A Yes.

Q Can you show me where that slot is, which application is the locking of the bolt?

A It is right here.

Q All right. That bolt, by the way, is identified as 1337, is that correct?

A Yes.

Q All right. And by "right here," you have indicated a slot immediately beneath the bolt handle, is that correct?

A Yes.

Q Now, on the Model 700 ADL whenever the weapon or the firearm is in the firing mode or ready-to-fire mode, namely a cartridge chambered, the bolt down and in battery position and the safety in the on safe position with the part as depicted in F52, what effect on the operation of the bolt is there?

A The rifle can't be in an on safe and ready-to-fire position, both.

Q Those terms don't coincide, is that what you mean?

A Not to me.

Q All right. Take away the term "ready to fire." Let's just say cartridge chambered.

A Go through your scenario again.

Q Cartridge chambered, bolt down, battery position, locked position and the safety on the on safe mode, what effect does that have on the operation of the bolt?

A The arm locks the bolt in the battery position.

Q All right. Now, can the operator, in any fashion, empty or take cartridges out of that weapon while it is in that operating condition?

A The way you have it now or the way you described?

Q The way I described.

A No, you cannot.

Q What must the operator do in order to empty the firearm of cartridges?

A You would have to reposition the safety lever to the off safe position and open the bolt.



Q All right.

A Eject the fire round, and then he would just close the bolt a little bit, and it would kick out the second round, repeat it and kick out the rest of the rounds.

Q By the way, while we are on that subject, you are saying you don't have to go to battery on each cartridge, you can let the extractor pick up the cartridge rim and let it flip it out without it actually going to battery, is that correct?

A Just kick the case free of the arms in the magazine or the lips in the magazine.

Q Was that the way Defendants' Exhibit 5 was designed to operate?

A Yes.

Q That was intentionally designed that way by Remington, is that correct?

A That's the way it was designed.

Q Was it intentionally designed to operate by Remington the way you described?

MR. HEADLEY: That's the way it was intended.

BY MR. McDONALD:

Q So it was intentional that it be designed that way, correct?

A Well, the design is the design.

Q Well, did Remington intend to design Exhibit 5 so that it would have to be moved to the on safe -- or off safe position before it could be unloaded?

A Yes, that's the way it was designed.

MR. HEADLEY: Off the record.

(Discussion off the record.)

BY MR. McDONALD:

Q Now, with regard to Exhibit F52, there was a change in the design of the part, is that correct?

A Yes.

Q F53 you have already indicated is the current design of the 700 fire control system, is that right?

A Yes, I believe I did.

Q All right. When was F53 designed?

A F53 was drawn in September of 1981.

Q When was it actually put into production, can you tell from the drawing?

A No.

Q You'd have to go to the DCR to find that out?

A No.

Q What would you look to to find that out?

A Well, I know when it went into production.

Q When was it?

A February of '82.

Q All right. So that can you tell me what happened to the existing stock of parts depicted by F52?

A Yes.

Q They were destroyed, weren't they?

A No, I don't believe so.

Q What did happen to them, then?

A I believe some of them were used for arms service, and I believe some of them were taken and had the end lopped off of it and made into the new style.

Q They were modified?

A They were modified.

Q Is there a particular document that would reflect an order to modify F52 parts, so they would become F53 parts?

A No.

Q How was that order transmitted?

A Parts shipped back to the vendor.

Q Who was the vendor?

A I don't know who makes this part.

Q Where would you go to find that out?

A I would call purchasing.

Q Who in purchasing?

A I would call Lou Ferreira.

Q Would it be a correct statement to say, then, that F52 parts could be modified to 53 parts with a simple shearing operation, which would take off the bolt lock arm?

A No.

Q What else would you have to do?

A The parts basically differ. The full part -- there is an inspection part here, and it doesn't exist on this drawing.

Q All right. That inspection hole, by the way, on the F53 part, is -- Well, does it allow someone to inspect in one mode or the other, namely safe or off safe?

A No.

Q What is it designed to inspect?

A We had to measure this surface, those dial indicators, and in our purchased parts inspection, it was easier to put them on a comparator and check them on a comparator.

Q It had nothing to do with inspection after assembly?

A No.

(A gun was marked Plaintiffs' Exhibit G for identification.)

BY MR. McDONALD:

Q Sir, I'm going to hand you what has been marked Plaintiffs' Exhibit G and ask if you recognize it.

A It is a Model 700 ADL.

Q Manufactured by Remington?

A Yes, it is.

Q And you also have a bolt in your hand, which I was required to take out of that weapon prior to the deposition beginning, is that correct?

A I don't know. Were you?

MR. HEADLEY: Anyway, let's just --

he has the bolt separately in his hand, and we do not contend that that bolt did not come from this rifle. If you say it did, that's fine.

MR. McDONALD: I brought it in here assembled, and we were instructed to take it out for security reasons.

MR. HEADLEY: You have to take the bolt out of the rifle for a safe gun-handling process.

MR. McDONALD: In other words, that was your requirement, which I respect and did.

MR. HEADLEY: Yes, that is correct, but the way you said that earlier indicated that we directed you to do something that you didn't want to do, and it was for safety reasons, but we put it on the record.

BY MR. McDONALD:

Q Sir, I would like you to put the bolt in the battery position, please.

A Locked and down.

Q Put it in the safe position. Now, can you operate that weapon? Can you operate the bolt while the safety is on?

A Yes.

Q All right. Now, would that indicate to you, based on your experience, that that contains a part as depicted in F537

A It would appear to, yes.

Q All right. I hand you what has been marked as Defendants' Exhibit 5 along with the bolt, which was taken out at the same time as G, and ask you to place that bolt in that weapon, in that firearm. Now, put it in the battery position. Put the safety in the on position. Now, can you operate the bolt?

A No.

Q Would that indicate to you that that weapon, based on your experience, has the part depicted in F527

A Yes, it would.

Q Examining the bolt on Plaintiffs' Exhibit G, do you find the same milled out area or cut beneath the bolt handle as you did on your examination of the

bolt in Defendants' Exhibit 5?

A Yes.

Q And this bolt is the one that came from Plaintiffs' Exhibit G, would that also accommodate a part such as depicted in F52, if it were placed in that weapon, correct?

A It should.

Q It would serve the same function to lock the bolt on Plaintiffs' Exhibit G, correct?

A Yes, it is there for the same function.

Q All right. Can you tell me if, at any time, Remington has altered the design of its bolt to do away with the slot beneath the bolt handle, the bolt lock slot?

A No, I don't know.

MR. McDONALD: It is five till. Is this a convenient time to break? We can come back at five to one, if that's agreeable, and we can break right now.

MR. HEADLEY: That's agreeable. Is that agreeable to you, Mr. Linde?

THE WITNESS: Sure.



MR. HEADLEY: So be it.

(A recess was taken.)

BY MR. McDONALD:

Q Setting aside this area for just a moment, sir, would it be a fair statement to say that the design of the 700 was an evolutionary design rather than a new design?

A No, I don't think I could say that.

Q Would it be a fair statement to say that the design of the 700 evolved from the design of the 721, 722?

MR. HEADLEY: Go ahead and answer it, and we will stop him there.

A I think it is a fair statement to say that the 721, 722 was dropped, and the 700 became the bolt action line that we went with.

BY MR. McDONALD:

Q Well, you recall testifying on February 6th, 1984 in the Shutts versus Remington Arms case, do you not?

A Yes, I do.

Q You testified under oath, didn't you?

A Yes, I did.

Q Told the truth, didn't you?

A Yes, I did.

Q I refer you to page twenty-nine of the transcript from that trial.

A This is trial testimony?

Q That's right.

A You're fast.

Q Well, we try to be sometimes. The question is, "All right. And let's talk about the 700 gun itself. Do you know when that was originally designed?" The answer is, "Yes. It was designed in the early '60's. It was first marketed in 1962." The next question, "As a Model 700?" The answer, "As a Model 700." The question, "Was that Model 700 -- did that evolve from another gun?" The answer, "Yes, it did." The question, "Or did it come about as by itself?" The answer, "The 700 evolved from the Model 721 and 722." Were those questions asked of you, and did you give those answers?

A Yes, I did.

Q Were they the truth?

A Yes, they are.

Q You are welcome to look at it, but that's all.

Back to F52 and F53. In F53 you have indicated that there is a viewing hole, and that is depicted immediately above the pivot pin hole, is that correct?

A Yes.

Q Does that hole have any functional purpose once the part depicted in F53 is assembled and the 700 fire control system is in operation?

A No, it does not.

Q That is simply a manufacturing process hole, would that be a fair statement?

A Yes, it would.

Q Okay. On F53, can you point out the portion which actually comes in contact with the sear and actually performs the lifting work?

A Yes. It is right here.

Q All right. Is that portion depicted elsewhere on this drawing?

A Yes. It would be the inside portion right

here.

Q Okay. Now, you're indicating -- would that be a top section?

A That would be a bottom section.

Q A bottom section, which is at the bottom of F53, and you are indicating the shorter of the two prongs, is that correct?

A Yes.

Q Now, what portion actually comes in contact with the sear? Is it treated in any fashion?

A What do you mean by "treated"?

Q Heat treated, processed in anyway differently from the remainder of the part.

A No.

Q Is it reinforced with alloy added to it, or is it in anyway changed metallurgically from the remainder of the part?

A No.

Q Do you know the metallurgical characteristics of this part vis-a-vis those of the sear?

A Yes.

Q What are they?

A It is a 1020 steel.

Q And the sear is what, sir?

A The sear is powdered metal.

Q Which of the two, in layman's terms, which of the two metals is harder?

A In layman's terms, either one could be harder.

Q Well, if you had continuous contact or repeated contact between those two parts, which one would wear first?

A Neither of those two would wear.

Q Why?

A What?

Q Why?

A Because of the way they are hardened.

Q Well, assume sufficient contact between the two, so that a wearing process occurred, which one would wear first?

A Neither of those two parts would wear.

Q Ever, no matter under what circumstances you placed the two parts against each other?

A As they operate on the gun.

Q I'm not interested in that. I'm wanting to know, if you bring them in contact with each other --

A Like they work in the gun, neither part will wear.

Q I'm not worried about in the gun. I want to know which one of the two is harder.

A I can't answer that.

Q You don't know?

A No, I don't know.

Q All right. Have you, between the two tests -- Strike that.

Between the two grades of the metal, of the sear and the part depicted in F53, in your experience, which one is the harder of the two?

A They both can be hard. It depends on how you heat treat them.

Q I'm talking about as designed and as spec'ed.

A As used?

Q Not as used.

MR. HEADLEY: I think he added that.

BY MR. McDONALD:

Q I don't want it as used. I want to know the

the two parts independent outside the weapon, outside the firearm with the specs, the design specs. Which of the two metals is harder?

A I don't know.

MR. HEADLEY: But as used by Remington outside the weapon as they get it, can you answer that? That may be what you want.

THE WITNESS: You want me to look through the drawings to see if I can answer that question?

BY MR. McDONALD:

Q Sure. Take your time.

A They are both heat treated the same hardness.

Q Okay. Again, for those of us who are not too knowledgeable about this kind of thing, you can take two different kinds of metals, and you can bring them to the same hardness by heat treatment, is that correct?

A Yes.

Q And that's what has occurred in this particular situation?

A That is right.

Q All right. Have there been any tests done by Remington to ascertain whether or not there is any wear which occurs between the point of contact on your safety and the sear?

A Yes.

Q When were those conducted?

A They would have been conducted in, oh, '75, '76, '77 time frames.

Q Who did that?

A I don't know who did it.

Q Who was responsible for it?

A I was responsible for requesting it.

Q Why were you requesting it?

A I wanted to know how much wear I could expect out of those two parts.

Q Why did you want to know that?

A Because I felt that if they wore, that you would lose your amount of clearance between the sear and the trigger connector.

Q What could occur in that situation?

A You could actually work yourself into a condition where the safety would not work.



Q Could you work yourself into a condition where the safety would work, the trigger is pulled while on the on safe mode, that the trigger connector would then move forward of the sear, and the sear would drop, so that the trigger connector could not return to supporting position beneath the sear, and then when the firearm was moved from the on safe to off safe position, and of course, assuming that the weapon was cocked in the first instance, that the weapon would fire?

A Yes.

Q Then you were concerned during that period of time, based on that test -- Well, strike that.

It seems like '74, '75, '76 that you were conducting or at least responsible for a number of tests that dealt directly with the question of the clearance between the trigger connector and the sear, is that correct?

A No.

Q Only one?

A No. I was responsible for the design of bolt action rifles at that time, and I was working on bolt action fire controls.

Q All right. Did you conduct a number of tests to ascertain whether or not there was either wear or manufacturing tolerance differences or defects which would directly impact upon the clearance between the trigger connector and the sear? Do you want it read back?

A Yes.

(The last question was read by the reporter.)

A (Continuing.) Yes, I ran some tests on that.

BY MR. McDONALD:

Q Which ones?

A I ran the test on the dry cycling of the parts.

Q When was that done?

A As I told you, in '75, '76, '77 time frame.

Q What weapons did you test, what firearms did you actually test, models?

A I can tell you what I was working on. I was working on the 700, 600 and the 788, the 580's, the 540XR, the 40X's.

Q Is that inclusive?

A I don't know. There might have been one or two other models I worked on.

Q Did you head a team that was designated to make these kinds of tests?

A No.

Q Did you have people working for you?

A I ran a design team, yes.

Q Was there a designation for that design team?

A Manual operated firearms, manually operated firearms.

Q Who worked for you?

A At what year?

Q From beginning to end, '75 to '77.

A Ed Rankins, Ken Rowlands, Don Louis, Doug Bullis, Paul Nasypany, Bruce Bennett, Fred Martin, Ken Soucy.

Q How do you spell the last name, please?

A S-o-u-c-y. That's all I can think of.

Q All right. That was here at Ilion?

A Yes.

Q What was the purpose of this particular team?

A As the name applies, we did all the design

and development on all manually operated firearms.

Q Did that include looking at existing designs and recommending design changes?

A That could be part of it, yes.

Q Was it?

A It was part of the job, yes.

Q Did it include coming up with adaptations for new designs?

A Yes.

Q Is that how the Classic evolved, as a result of your team's work?

A Yes.

Q What other purposes did you have?

A Our purpose was also -- we did development, product development, which was our basic function.

Q Were you charged with examining all existing fire control systems for bolt action rifles, designs?

A No, nobody charged us with that.

Q Well, we all have people who tell us what to do, sir, and in one form or another, who did you answer to?

A I answered to Wayne Leek.

Q Well, did Mr. Leek, on occasion, drop by and give you some kind of guidance as to what you might be doing?

A Yes, he did.

Q How would he do that, orally or in writing?

A Normally, he would call me on the telephone.

Q Did you keep memos of his directions?

A No, I never.

Q Would he send you memos?

A No. That was not his style.

Q Did you, from time to time, write reports as to your findings?

A Not as to findings. I occasionally wrote reports on specific subjects.

Q Those specific subjects would usually result or be covered in your report as a result of testing that you had done, is that correct?

A Normally, what he was interested in was the product development and the findings, and what have you. He was concerned in actually getting the product developed, and most of that, most of the information is based on schedules, key points in the development

schedule that you need to meet, your introduction schedule, which you need to meet, your marketing. This would be most of the written information, because that's where you were coordinating the different divisions of the company to meet a specific time.

Q Are you familiar with the term "fire off safe"?

A Yes, I am.

Q What does that mean?

A That can have a number of different meanings. The chief meaning would be, if you put the gun on safe, on the on safe position, and you moved it to off safe position, the gun would fire.

Q Okay. While heading this team between 1975 and 1977, did you investigate the phenomena of fire off safe?

A Investigate the phenomena, per se?

Q Fire off safe.

A I know what a fire off safe is.

Q Did you investigate the causes for that phenomenon?

A Not as a specific instruction, no.

Q Was that part of the work that you did, nonetheless?

A Yes, it would be involved in the work that I did.

Q Tell me what steps or work that your particular task force did that dealt with the phenomena of fire on safe.

A I did not lead a task force.

Q Well, whatever your design group was.

A Normally, when you have a task force, it concentrates on an on-going problem. We were an on-going group.

Q I'm sorry. Your design group.

A Design team.

Q Tell me what your design team did that dealt with the phenomena of fire off safe.

MR. HEADLEY: Well, I guess he hasn't agreed with you yet on any phenomenon, and rather than spend fifteen minutes between the two of you, why don't you just say the definition of fire off safe that he used.

BY MR. McDONALD:

Q This definition of fire off safe that you used.

A Fine. The work that I did on the -- that was related to trigger assemblies, what you call fire controls. At the time, it would have been related to the Model 600, which we are not going to discuss here.

Q Anything else?

A No.

Q You didn't investigate the Model 700?

A No. The work on the fire off safe condition was the work I did with the 600.

Q Did you relate any of that into the design of the 700?

A Any changes in the 700 caused by the 600?

MR. HEADLEY: No. By the work you did.

THE WITNESS: By the work we did, yes.

BY MR. McDONALD:

Q All right. Tell me about those.

A When we got into the 600, we instituted the so-called trick test that we talked about, and so in that testing, we started testing all 700's also.

Q Why did you test the 700's?



A Because when we first got into the problem, we did not realize at that point that it was isolated only to the 600, and so rather than taking any chances, we started the trick test on the 700 also.

Q Do you continue the trick test on the 700 today?

A Yes, we do.

Q What is the purpose?

A What the problem with the trick test was, was this part right here. This is called your safety lever, your F52, and this is a cam on the safety lever. The 600 has a different cam than the 700, and on the 600, this cam did not come up as high as it does on the 700.

Q Why do you use the trick test on the 700 today?

A We use it now, because if you put it in the center position, this was where the cam was starting to let down. Getting towards the edge where it starts to let down, if you have anything that's marginal, it would show up on the trick condition, so this is another step you can go to assure that you have a good

product.

Q All right. The curve on the 600, was it the same as on this?

A No.

MR. HEADLEY: Don't do that.

MR. McDONALD: Don't do that?

MR. HEADLEY: No.

BY MR. McDONALD:

Q Okay. I won't. Now, when you talk of "let down," I assume that means just exactly what it sounds like. In other words, the sear cam would actually drop slightly by reason of the contact giving it room to move down?

A No.

Q Tell me what "let down" means?

A "Let down" means that when you come over this radius right here, the twenty-five thousandths, it would stop the safe.

Q Okay. What were the results or conclusions of the safety sear test?

A We cycled the sear safety cam 1,000 times, and there was no wear.

Q Was that reduced to writing or a report?

A I don't know.

Q Who, in your design team, had primary responsibility for conducting that test?

A It was done in the test lab.

Q Person's name?

A I don't know who did that test.

Q Did you look to one person within your design team to be responsible for supervising that testing?

A No, I never.

Q Did you look to more than one?

A I never looked.

Q Were you personally responsible for supervising that testing?

A No, I was not.

Q Who, within your design team, was responsible for supervising the testing?

A There was nobody within my design team responsible for supervising the testing.

Q How did you communicate to your laboratory your desire that the testing be done?

A I don't know. I could have called them up and

told them what I wanted, or I could have sent them a request.

Q Did you give them a test specification?

A What do you mean?

Q Did you tell them what you wanted to do in the test?

A Yes.

Q Did you do it in writing?

A That's what I told a minute ago.

MR. HEADLEY: Either way, he doesn't recall.

BY MR. McDONALD:

Q You don't recall?

A That's right, I don't.

Q Do you recall the results of the lab testing given to you in writing?

A No, I don't.

Q Is it standard practice and custom for your lab to conduct these tests, these types of tests you are talking about, and to reduce them to writing?

A They can be either way.

Q Is it generally true that they reduce them to

writing?

A You can't say that it is generally true, no.

Q If you were going to try to locate the results of that test today, where would you look?

A I would go back and go through some of the files that I had when I was in research, if they weren't thrown out.

Q Would the lab have a copy of any of the reports they did?

A They possibly could, yes.

Q Who is in charge of the lab?

A Jim Snedeker.

Q Who is in charge of the records in the lab?

A I don't know.

Q Where are the records kept?

A Kept in the lab.

Q Where is the lab?

A It is in Building 52.

Q Here at Ilion?

A Yes.

Q In addition to the test you have just described, did your design team conduct other tests

dealing with the clearance between the trigger connector and the sear?

A Not that I can remember.

Q By the way, when you have either part F52 or F53 in a 700 fire control system, assuming the weapon is in battery, the firearm is in battered condition with the cartridge chambered, the bolt lever down, assume that the operator moves the safety lever from the off safe to the on safe position, at that point in time, there is, as you described, a cam reaction that lifts the sear, correct?

A You are going from off safe to on safe?

Q Yes.

A When you actuate the safety lever from off safe to on safe, yes, the cam lifts the sear.

Q All right. Now, in the situation I have just described, the firing pin head is retained by the sear when the weapon is cocked, correct?

A Yes, it is.

Q Now, when the safety is actuated and put on, you described that the sear is lifted. Now, does that also have the effect of further retracting the firing

pin head?

A Yes, it does.

Q Is there a measurement that has been made to ascertain the amount of retraction that occurs whenever the safety is actuated in the condition that I have described?

A You'll have to read that back.

Q Well, what I'm -- I'll just rephrase. What I'm wanting to know is whether or not Remington has ever measured the distance of travel of further retraction whenever the sear is raised by reason of the safety being placed on.

A I don't know.

Q Do you have a judgment as to the distance of the travel or movement of the firing pin?

A No, I don't.

Q Is that a result of the inclined surface of the sear, and whenever the sear is lifted, it causes the firing pin to move further down the incline?

A I don't think it would be that way.

Q Describe to me what occurs whenever the further retraction is caused as a result of the safety

being placed on.

A It would actually be the sear coming up, which would be the opposite of what you said.

Q Okay. What is the design purpose for the incline -- Strike that.

What is the terminology that you use to describe the inclined surface that actually holds the firing pin head back in the cocked position?

A I don't know that there is a term for that surface.

Q What is one that we can agree on, notch?

A You can call it the cocking pin stop surface, if you wanted to.

Q All right. The cocking pin stop surface, why is that inclined?

A It is part of the design to get the characteristics that are required.

Q What characteristic is desired?

A It splits the force, so that you can get a trigger pull that is reasonable.

Q Split what force?

A Split the firing pin force.



Q Is there any reason for the incline on the firing pin stop surface, insofar as the downward movement of the sear is concerned, when the firearm is discharged?

A It would be part of the system.

Q But is it desirable to propel the sear downward?

A I don't know.

Q Are you aware of any sear mechanisms in any other firearms that use a design different than an inclined cocking pin stopping surface?

A Yes.

Q Do some use perpendicular cocking pin stopping surfaces?

A Yes.

Q Which models?

A A lot of your military models.

Q Why is that?

A Because the way they were designed.

Q Why were they designed that way?

A I don't know why the designer chose that design.

Q Isn't it true that that gives a more positive

force relationship between the firing pin head and the sear cocking pin stopping surface, if the cocking pin stopping surface is more perpendicular to the firing pin head?

A No.

Q It is not true?

A No.

Q Why not?

A The force is going to be transmitted to the two surfaces whether it is cocked or not cocked, whether it is at an angle or whether it is perpendicular.

Q But the force would be applied at a different load factor, would it not?

A Not at a particular load factor. The force is the force.

Q Does an incline as opposed to a perpendicular cocking pin stopping surface, does that exert any downward force on the sear greater than -- and assume the same firing pin load -- greater than a perpendicular cocking pin stopping surface would?

A You can't say that, because it is a question of the pivots.

Q Are you talking about the incline also on the firing pin head?

A No. I'm talking about the loads are determined where you are pivoting from.

Q Okay. Assume the same pivot point in both cases.

A Then you would have to sketch what you want.

Q Let's assume the same length. This would be a rough sketch, quite obviously. All right. In the upper sketch I have attempted to demonstrate a cocking pin and surface that is perpendicular, and the lower sketch is one that is on the incline. Do you follow me so far?

A Yes.

Q Assume the same cocking pin load, same pivot point, same distances, same connection in every respect except the only difference in this case would be the surface of the cocking pin stopping surface. In the case of the perpendicular, isn't it true that by reason of the connection between the cocking pin head to the perpendicular surface, there is less of a downward load exerted in that instance than there is

in the case of the incline, which is the bottom figure?

A Yes.

Q So that the design of the incline cocking pin stopping surface and the Remington 700 firing control system has to take into consideration the downward load factor placed on the sear by reason of inclined stopping pin cocking surface, isn't that true?

A Yes, that's a part of the design.

Q Is that a part of the design considerations?

A Yes.

Q By the way, do you know what the 1903 Springfield had by way of a sear firing pin? What would you call it, cocking pin stopping surface?

A I would think it would be a square surface.

Q Perpendicular like the above, right?

A I would think so. It wouldn't be like that, though.

Q Similar, correct?

A It would be a perpendicular stop surface.

Q All right. And that 1903 Springfield was, in fact, manufactured -- a great number of them were manufactured by Remington, isn't that true?

A Yes.

Q So the design -- Well, strike that.

Now, did downward load factors on sears have an impact upon clearances between trigger connectors and sears?

A The term "impact" really doesn't apply in this case.

Q Have an effect upon?

A The clearance?

Q Yes.

A Very minute, yes.

Q But nonetheless, they can have an effect on it, is that correct?

A Yes, a minute effect.

Q Now, are there other pieces of work within the -- or other forces exerted within the 700 fire control system that impact or have effect upon -- we'll use that term "clearances," between trigger connectors and sear surfaces?

MR. HEADLEY: Read that back to me, please.

(The last question was read by the

reporter.)

BY MR. McDONALD:

Q Strike "pieces of work" from the question.

MR. HEADLEY: Read it again.

(The last question was read by the reporter.)

A This is with the gun ready to fire?

BY MR. McDONALD:

Q Yes.

A There is not a clearance, if the gun is ready to fire.

Q Now on safe.

A On safe, it would be the force that we talked about before. It would be the force from the firing pin.

Q Anything else?

A Not that I can think of.

Q Well, the force exerted from the safety lever cam against the sear, wouldn't that act upon the clearance?

A No. You want to know the forces on the gun, if the safety cam was up against the sear. The force

from the firing pin spring is coming down through the sear into this cam.

Q Okay. There would be no other forces other than the firing pin spring at work?

MR. HEADLEY: He said none that he could think of now.

A That's right. I can't think of anything else right now.

BY MR. McDONALD:

Q Okay. What about the force of the trigger spring return?

A On what?

Q On the trigger.

A What about it?

Q Would that have an effect on the clearance between the trigger connector and the sear when the fire control system, the 700 fire control system is in the safe position?

A It would not induce any change, no.

Q If it did not return the trigger to a position beneath the sear, in that situation, wouldn't it, in fact, have an effect upon the clearance?

A Yes.

Q That's a force at work within the weapon dealing with clearance between the trigger connector and the sear in the safe position, isn't it?

A Yes, but not as you described in your question.

Q All right. How would it, in fact, work?

A Well, you described in your question that the thing was in a static condition. The trigger is back in its --

Q Fire mode?

A Yes, intended position. It was not in the fire mode, but back in its intended position, back within the trigger engagement screw, and you had the gun on safe, and you wanted to know what the forces were on the system.

Q Assume that the trigger had not returned beneath the sear.

A Okay.

Q In that situation, would there be an impact or effect of the clearance between the trigger connector and the sear? Can you adjust the trigger sear spring



in a fashion to vary the pressure of the trigger?

A Yes.

Q How is that done?

A That's done by an adjusting screw on the trigger assembly.

Q Which one is that?

A That would be the bottom screw on the front surface, on the front face.

Q Is there a design specification for the length of material and strength of that spring?

A Yes.

Q We have covered that in these drawings, have we not?

A Yes, we have.

Q Have there been any tests conducted by Remington to ascertain the expected useful life of that particular spring in the 700 fire control system?

A Expected life of that spring?

Q The expected life of that spring.

A Any tests?

Q Yes.

A Not that I know of.

Q Has there been any investigation or any kind of determination made as to the useful life of that spring?

A Not that I am aware of.

Q Okay. Has the subject ever been brought up?

A Not that I am aware of.

Q Okay. Have you ever seen instances of damage to that spring based on repeated use?

A No, I haven't.

Q As a generality, does a spring have an unlimited life?

A Yes.

Q Why is that?

A Because you design it -- you normally design it such that it will last forever.

Q Repeated use will not affect the strength of that spring?

A On a coil spring, repeated use will not affect the life of it.

Q Would the load force applied to a coil spring, can that damage its ability to perform, work?

A In this case, no.

Q Well, I'm not worried about this case. As a generality.

A Generality, no.

Q You can't press a spring hard enough, with enough force to cause it not to be able to return to its intended position, is that what you are saying?

A You can take it -- no. I said intended use or intended use of a spring.

Q I'm not worried about this right now.

A If you want to take and demolish the spring, sure.

Q I'm not talking about that.

A If you deform a spring, you know it is not going to come back to where it was, right?

Q Right. Now, is there a way in which you can deform the trigger return spring within the 700 by normal use?

A Not that I am aware of.

Q Is there a way you can deform a trigger return spring in the 700 with some kind of abnormal use without invading the trigger housing mechanism?

A Not that I'm aware of.

Q Did you ever examine Defendants' Exhibit 5?

A No, I haven't.

Q Have you talked to anyone who participated in the examination?

A I've talked to two people, these two people right here. Now, I don't know if Jim had anything to do --

Q Jim Hutton?

A I don't know if Jim Hutton had anything to do with the examination or not.

MR. HEADLEY: And you've talked to me?

THE WITNESS: I said you too, and he was standing there too.

BY MR. McDONALD:

Q John?

A Yes.

Q Tell me about your conversation with Mr. Hutton. What did he say to you, and what did you say to him?

MR. HEADLEY: Was that with me present?

THE WITNESS: No. He asked me last week when I would be available for depositions.

I said, "Depositions for what?" He said,  
"We got a case from Missouri on a 700."

BY MR. McDONALD:

Q I'm talking about the examination of this  
firearm, the one involved in this case.

A He told me it was an alleged fire off safe  
condition on a Model 700.

Q Did he tell you of the examination of this  
particular firearm?

A Yes.

MR. HEADLEY: Was that with me present?

THE WITNESS: Yes.

MR. HEADLEY: I'm going to object to  
anything he said, because I was present  
talking about it as counsel.

THE WITNESS: Okay. That was with you  
present.

BY MR. McDONALD:

Q Mr. Hutton was present also, is that correct?

A Yes, he was.

Q All right. Did you ever have any conversation  
with Mr. Hutton concerning the inspection of Defendants'

Exhibit 5, the 700 rifle involved in this litigation, when Mr. Headley was not present?

A I don't know. I can tell you what the conversation was. He said that we had the rifle for one day.

MR. HEADLEY: I'm going to object to that.

THE WITNESS: That's the only thing I can remember.

MR. HEADLEY: We have gotten witnesses here that we have noticed for deposition, and I would rather have them testify than to have you recount what you may have heard from somebody with me present talking about it. That's the only reason, and it wouldn't be hidden from the attorneys for the plaintiff.

THE WITNESS: It wouldn't make any difference if it was hidden. It doesn't amount to anything.

MR. McDONALD: If it didn't amount to anything, let's go ahead and get it out.

MR. HEADLEY: Object. I instruct you

not to answer.

BY MR. McDONALD:

Q Now, did you participate in the decision to change or modify the design of F52 to F53?

A No, I never.

Q Who did make that decision?

A I don't know.

Q Who would typically make that decision?

A This would have come out of research, as far as a change in the design.

Q Who was in charge of research at the time the design was changed?

A Clark Workman.

Q Are you aware what tests research did prior to modifying the design of F52 to F53?

A No, I'm not.

Q Beyond a design change request, is there other paper work that might concern the work done by, for instance, research prior to recommending a design change?

A No. That's the work. The record is on the design change request.

Q Working papers, would there be working papers on the part of the people involved?

A Not necessarily. It would depend upon the person.

Q If there were tests performed, say, by the lab on behalf of research, would there be test results in the laboratory's records?

A Depends upon the tests.

Q In this instance, would you expect to find test results in the laboratory concerning the modification to F52?

A I don't know.

Q Were there any dimensions of the material changed from F52 to F53?

A It would be covered in the alterations. 53 shows no alterations.

Q All right. That would be an indication, then, that the thickness of the material and the kind of the material and the heat treatment, and so on and so forth, are identical between the two parts, is that correct?

A Yes.



Q Does the portion, if you are facing the print F53, the portion to the right, the surface -- I'll call it the toe, or whatever else you want to call it. Does that perform any work whenever the safety is activated on a 700 fire control system?

A No, it does not.

Q Okay. Does the hole, as you face the print, that portion to the left on F53, does that perform any work whenever the safety is activated in a 700 fire control system?

A What do you mean "perform any work"?

Q Well, you knew before.

A Well, that doesn't work against anything.

Q That's what I mean. That's the same thing you thought before. Okay. Tell me what F54 is, please.

A F54 is a bolt stop release blank.

Q C91917 is the print, is that correct?

A Yes.

Q Is that tied to F55 in some fashion?

A F55 is C15478. What is the question?

Q The question is, is there a relationship between the two?

A Yes. One is the bolt stop release, and the other is the bolt stop release blank.

Q All right. Are they final design prints, as far as the 700 is concerned?

A Yes.

Q Predecessor drawings?

A It doesn't say predecessor. It shows a reference drawing.

Q Where is the reference drawing?

A B17038.

Q Do you know if this particular bolt stop release had been used in other models other than the 700?

A Yes, I do.

Q What other models?

A It has been used in the 40XB, 40XC, 40XR, 40XC center fire.

Q Ever been used in the 521, 522?

A I don't know if that was used in that or not.

Q Would you have to use the reference drawing?

MR. HEADLEY: You mean seven, don't you?

A That would be a place to start, yes.

BY MR. McDONALD:

Q Yes. I'm sorry. 721, 722. That would be a place to start?

A Yes.

Q Do you know if it has ever been used in the 600 or 660?

A Yes.

Q Has it?

A No.

Q Has it ever been used in the 725?

A I don't know.

Q 788?

A No, it has not.

Q XP100?

A No, it has not.

Q F56 is drawing number -- can you make that out?

A D26845 or 345. I think it is D26345.

Q Is that a final assembly drawing of the trigger housing and safety mechanism on the 700?

A No. It is a trigger assembly drawing.

Q Trigger assembly drawing. Now, it shows the

safety lever as depicted in F53, does it not?

A Yes, it does.

Q It does not show the safety lever as depicted in F52, correct?

A Correct.

Q We can agree, can we not, that this is not the safety lever that's involved in the subject firearm that is involved in this case?

A Yes, we can.

Q All right. We do not have an assembly drawing for that particular weapon, do we?

A I don't see it, no.

MR. McDONALD: I want that before we go forward, please.

MR. HEADLEY: What?

MR. McDONALD: I want that drawing before we go forward, please.

MR. HEADLEY: Oh.

(Discussion off the record.)

MR. McDONALD: Go ahead and explain that on the record, please.

MR. HEADLEY: Yes. The question is,

since this drawing F56 is a drawing of the trigger assembly as presently used, is there anything about that drawing that suggests that it also was used for the trigger assembly as previously used?

THE WITNESS: Yes. You can check the date that it was drawn, and you can go back and check the alteration numbers, and you can see that the safety lever has been altered.

MR. HEADLEY: Does that suggest that there is not a separate drawing?

THE WITNESS: Yes, it does. It documents it, in fact, and shows there is not a separate drawing.

BY MR. McDONALD:

Q Is there a DCR that would reflect what you just said?

A It is covered by DCR number -- it is right here. It is revision 17. It looks like it is DCR 11486.

Q Now, let me see if I understand what you are saying. Are you saying that when your bolt lock was

removed, that its assembly was shown as being removed on this drawing right here?

A Yes, rather than taking the drawing and completely redraw the drawings, all they did was took and made the alteration on this part on the drawing and noted it on the drawing.

Q In that sense, an erasure and redrawing?

A That's right.

MR. HEADLEY: What was the DCR again?

THE WITNESS: 11486.

BY MR. McDONALD:

Q Would there be a drawing depicting the safety lever prior to the modification in existence at Remington?

A There would not be drawing, no.

Q What would there be?

A Might be some old print.

Q Where would they be?

A In somebody's desk.

Q Would you find any in manufacturing, or would those only be shop drawings over there?

A What?

Q Would you find any in manufacturing, a final assembly print such as this?

A No.

Q Okay. All right. What is F57 -- Strike that. Off the record.

(Discussion off the record.)

BY MR. McDONALD:

Q I show you what is F57, which is drawing C24475, correct?

A Yes.

Q What is it?

A It is a pin.

Q For what?

A It is used for many things, depending on which pin is called out. It is a multiple pin drawing. It is a drawing of many pins.

Q In a 700 fire control system, what is it used for?

A It is a trigger pin.

Q Anything else?

A Yes. And sear pin.

Q Anything else?

A It is a bolt stop pin.

Q Anything else?

A No.

Q Did it have the same function in the Mohawk 600?

A Just a minute. I'll have to check. I can't answer that.

Q How about the 721?

A Yes.

Q 600 is also a trigger pin, isn't it?

A It has a trigger pin, yes.

Q Was it used as a trigger pin in the 600?

A What was used as a trigger pin?

Q This pin as is shown by P57?

A This pin is not a specific pin. This is just a drawing of a number of pins. This is a multiple pin. This is a common drawing for many different pins.

Q Exactly. It is a common design for all of these functions shown on the right-hand side, isn't that true?

A No. There is different pins for these different functions. Each one of those different



functions is calling out a different part number.

Q Are you saying that the design is different?

A On some of the pins, yes.

Q In what way would it be different?

A In the diameter and in the length.

Q Other than that?

A A pin is a pin. Some of them have chamfers and some of them don't.

Q Chamfers have the same angle?

A This does, yes.

Q Is there any indication that the chamfers have a different angle?

A On what?

Q On any of the pins that you use a chamfer surface.

A Yes, some of the pins called out in here have a ten by forty-five degree chamfer as shown in this drawing. Some of the pins have a forty by sixty thousandths chamfer on one end.

Q How can you tell that by looking at the legend?

A I can tell that part number 24475 and 24476 only have this chamfer on them.

Q All right. Other than those two parts?

A The rest of them have this kind of a chamfer.

Q "This" being which figure, the middle figure, the top?

A Yes.

Q All right. F58 through 63 is one group, is that correct?

(Discussion off the record.)

MR. HEADLEY: Here's a drawing on a pin that you don't have.

BY MR. McDONALD:

Q F106, which is B24475, is related to F57, is that correct?

A It is a predecessor.

Q All right. F58, which is A17029; F59, which is A17029; F60, A17058; F61 is A17058, and F62 is A17058. F63 is A17058. All of those are related, is that correct?

A Yes.

MR. HEADLEY: Just wait a minute.

BY MR. McDONALD:

Q What is that?

A This is the main compression spring, main spring.

Q What is its function?

A It is the firing pin spring.

Q All right. Is this a spring that is used in virtually all of the bolt action models that Remington has produced over the last twenty years?

A The spring has been used on the 721, 725, 700. It has been used on those three models.

Q How about 600?

A It is not used on the 600.

Q F64 and F65 are what, sir -- Strike that.

Should F64 and F65 and F66 be read together?

A Yes.

Q F64 is B27975. F65 is B23320, and F66 is C23320, is that correct?

A Yes.

Q What is depicted in these two drawings?

A Firing pin head.

Q Is this firing pin head -- Strike that.

Is F66 the current design for the 700?

A Yes, it is.

Q Has this firing pin head, as depicted in 64, 65 and 66, been used in the 721, 722 and 600?

A It has been used in the XP100, 40X center fire, 700 BDL, 700 ADL, 40XB, 700 Varmint and Mohawk 600.

Q Are there design changes between the F66, 65 and 64?

A Yes, there are alterations. In fact, all I see is just things added.

Q Any alterations at all?

A Yes, there are.

Q When was that?

A Made in '68.

Q From 1968 to present, isn't it true that that firing pin head has been used in all bolt action center fired rifles designed by Remington?

A No.

Q From 1968 to the present, what bolt action center fired rifles has that head pin been used in?

A The ones I listed for you previously.

Q Has it been used in the 725?

A Yes, it has.

Q F67 is what, sir -- Well, strike that.

Should F67 and 68 be read together?

A Yes, they should.

Q What are they? What do they generally depict?

A Pins.

Q F67 is A17022, and F68 is B17022, is that correct?

A Yes.

Q Same situation as to the pin previously, a universal type pin?

A Yes, it is, except it is a universal pin drawing.

Q F68 is the current design drawing?

A Yes, it is.

Q F67, when was it first drawn?

A 1945. Just a minute. I read that wrong.  
It was drawn in 1952.

Q F69, F70, F71, should they be read together?

A Yes, they should.

Q In which order should they be placed, chronologically?

A Should be this one first.

Q 70 should be first?

A 69, 71.

Q All right. F70 is -- I'm just going to renumber them to put them in the proper order. As numbered, are they now in the proper order?

A Yes.

Q All right. F69 is B22020, is that correct?  
Did I read that right?

MR. HEADLEY: Yes.

MR. McDONALD: F70 is C28805?

MR. HEADLEY: Right.

MR. McDONALD: And F71 is C22020?

MR. HEADLEY: Right.

BY MR. McDONALD:

Q F71 is a current design drawing for the Model 700 -- well, it is not the firing control system, is it?

A No.

Q 71 is a current design drawing for the Model 700?

A Yes.

Q As a generality, this pin, of course, has

been used in other weapons, but -- or other firearms, but in terms of the caliber, do you get into the process of lengthening and shortening the pin based on the caliber?

A No.

Q In other words, you use pretty much the universal length regardless of caliber?

A Yes.

Q Okay. This pin has been used in the 721, 722 and 725 in addition to 700 series, is that correct?

A Yes.

Q Without alteration, correct?

A Well, there was a three degree incline taper, and there is one or two minor alterations here on this page.

Q But basically the same design in all weapons, right?

A No. It is the same design for the ones we talked about.

Q Well, all the ones we talked about.

MR. HEADLEY: All the ones you just named, because we have talked about a lot of

things.

BY MR. McDONALD:

Q Yes. All right. F72, 73, 74, these go with this?

A I don't know.

Q Why don't you take a peek and see.

A These two go together.

Q All right. F72 and 73 should be read together, is that correct?

A Yes.

Q Is that a bolt head?

A That's a bolt head blank.

Q Bolt head blank?

A Pardon me. Bolt plug blank.

Q F72 is C19894, correct?

A Yes.

Q F73 is C17012, correct?

A Yes.

Q Bolt plug is the terminology, is that correct?

A It is a bolt plug, yes.

Q And F72 is a blank, and F73 is a finished product?



A Yes.

Q Is F73 the current design for the 700?

A Yes, I believe it is.

Q When was 72 first drawn?

A In 1953.

Q When was 73 first drawn?

A 1952.

Q Have they been used in other bolt action rifles other than the 700?

A They have been used in the 700, 722, 721, 725.

Q Without modification?

A I don't know.

Q All right. What is F74?

A It is an assembly.

Q What does it mean?

A It means that it is an assembly. It shows what the assembled parts are.

Q In other words, if you follow this list and gather all these parts and assemble them properly, you will have a finished assembled product?

A You will have a firing pin assembly.

Q All right. That's B22040, is that correct?

A Yes.

Q Should it be read with any other drawing or other document?

A It says, "See B22040." This one right here.

Q F75, is that correct?

A Yes.

Q And F76?

A Yes.

Q Are these the current assemblies or firing pin assemblies for the 700?

A Yes, they would be.

MR. McDONALD: Would you have the numbers on those?

MR. HEADLEY: All set.

BY MR. McDONALD:

Q F77 and F78 are what?

A They are springs.

Q For what?

A They are ejector springs.

Q Currently used in the 700?

A Yes, they are.

Q Also used in the 660?

A The ejector spring is used or has been used in the 721, 722, 725, 760, 700, 40X, 600, 760, 700 Varmint, 660.

MR. HEADLEY: Are they both read together, or does one succeed the other?

THE WITNESS: I'll just check to see if there was anything I left out.

MR. HEADLEY: Are they both read together?

THE WITNESS: Yes.

MR. HEADLEY: Okay.

BY MR. McDONALD:

Q F79 through 82, should they be read as a group?

A Okay. Yes.

Q Okay. I'm reading their numbers in chronological order. They are numbers A91802, A17676, A17676 and A17676, correct?

A Yes.

Q What do they depict?

A Let me read it. They depict a pin.

Q Again, universal type pin?

A It is an ejector pin, yes.

Q This particular -- well, which one is the current design drawing for the 700?

A It would be the blank and the last one here.

Q F what?

A F82 and F79.

Q All right. F79 and 82 have been used in what firearms?

A Okay. It has been used in the Model 700, XP100, 788, and it has been used for a front swivel screw pin on a 40X. It has been used as a magazine extension kit on an 870. It has been used as an ejector pin on the Mohawk 600. It has been used as a turn plug retainer pin on the Model 1100.

MR. HEADLEY: Is the 1100 a shotgun?

THE WITNESS: Yes. It has been used on a bolt plunger cross pin on the Sports 58. It has been used as an ejector pin on the 721, the trigger pin on the 514, and it has been used as a trigger pin on the 514A. It has been used on a 788. It has been used as

an ejector pin, the XP100 ejector pin,  
Sports 58 bolt return plunger cross pin.

BY MR. McDONALD:

Q F83, F84 and F85, should they be read as a group?

A Yes. No. Excuse me. These two should be read as a group, F84 and F83.

Q Okay. In what order, 84 first?

A It would be 83, and then 84.

Q Okay. What do they depict?

A Ejector.

Q All right. And their numbers are A13974 and A170177

A Yes.

Q F83 and F84 are the current design for the Model 700?

A Yes.

Q Also used in other models?

A Yes.

Q Which models?

A 700, Mohawk 600, 40X center fire, 760 Export, XP100.

Q What's the 760 Export?

A It doesn't concern this case.

Q What is it?

A It doesn't have anything to do with it.

MR. HEADLEY: Well, what is it?

THE WITNESS: It is a rifle.

BY MR. McDONALD:

Q What kind of rifle?

A It is a pump action rifle.

Q P85 is A20185. What is it?

A It is a shim.

Q Where is that used?

A It is a brazing shim.

Q What does that mean?

A It means it is a piece of brazed material  
cut to a determined size.

Q What is it used for?

A Used in a brazing process for holding two  
parts together.

Q Is it something that is laid in a gap, and  
then further soldered in?

A No.

Q Brazed in?

A It is used in the brazing operation.

Q What is the brazing operation?

A It is where you braze two parts together.

This is the material that you use to make the joint.

Q Is brazing similar to soldering?

A Similar.

Q Similar to welding?

A No.

Q Okay. Where in the 700 is that brazing process used?

A It is the bolt handle brazing shim.

Q Okay. Should F85 be read with F86?

A Yes, it should.

Q And F87 also?

A No.

Q All right. F85 I have given the number.

F86 is C20285, correct?

A Yes.

Q What is F87?

A It is the bolt handle blank.

Q Should F87 through 90 be read together?

A Yes, they should.

Q F85 is D91562, correct?

A No. That's F87.

Q I'm sorry. D91562. When was that first drawn?

A 1980.

Q Okay. Is there any significance to the fact that this corner has an B rather than an D?

A No. They must have made a mistake.

Q F88 is D26330, correct?

A Yes.

Q F89 is D26330, correct?

A Yes.

Q F90 is D26330, correct?

A Yes.

Q Other than the 40XB, this truly is a part designed for the 700, correct?

A Yes. This is for the 700 Varmint, 700 BDL, 700 ADL and 40XB.

MR. HEADLEY: All right. Let's take a break.

(A short recess was taken.)



BY MR. McDONALD:

Q F91 and F92, should they be read together, sir?

A Yes.

Q The numbers are what?

A F91 is A17011, and F92 is B17011.

Q F91 was first drawn when?

A '52.

Q Has it been changed or altered since '52?

A No, it doesn't look like it has any changes.

Q What models does it apply to?

A It applies to the 721, 722, 725, 40X, 700, XP100, 600, 700 Varmint, 660 and Mohawk 600.

Q What is it, first of all?

A It is an ejector washer.

Q What function does it have?

A It has the function of a washer.

Q Very good. Beyond that, what does it do?

A It is a back-up support on the ejector spring.

Q All right. F93, is that read by itself?

A Appears to be, yes.

Q Doesn't connect with the next bulletin in

any way?

A No.

Q Okay. What is F93, the part depicted?

A Bolt pin.

Q All right. And it is a -- Strike that.

It is A18758, correct?

A Yes.

Q First drawn when?

A First drawn in 1949.

Q Been altered since then?

A Yes.

Q When?

A 1950.

Q Since 1950, has it been altered?

A No, it has not.

Q Current design for the 700?

A Yes.

Q Used in what models?

A 721, 722, 725, 40X, the 700, XP100, 600, 660.

Q Okay. F94, which is drawing C32820, is what,

sir?

A It is a bolt head blank.

Q Is it a current design for the 700?

A No, that is not.

Q Should it be read in conjunction with anything else?

A Yes.

Q Which one?

A It would be C32620, which is your F95; C32820, which is your F96, and D28665, which is your F97.

Q Which is the current design for the 700?

A It would be C32820, which is your F96, and D28665, which is your F97.

Q Is this particular bolt head used in any other models -- Well, strike that.

When was it first drawn?

A This one here?

Q Yes.

A It was drawn in 1979.

MR. HEADLEY: What's that, F97?

BY MR. McDONALD:

Q F97. Are there predecessor drawings?

A Not to this, no.

Q Okay. What is the function of the bolt head?

A It is attached to the bolt body.

Q What does it do?

A It is the part of the structure which supports the firing load.

Q The firing pin would be pointed away from the rear of the bolt head?

A No. The firing pin would come through that.

Q Through the bolt head?

A Through the bolt head.

MR. McDONALD: Off the record.

(Discussion off the record.)

BY MR. McDONALD:

Q What is F98, sir?

A F98 is the bolt assembly.

Q The drawing which tells how to assemble the bolt on the 700?

A No. It is the components of the bolt itself.

Q Okay. It is number what?

A D33305.

Q When was it first drawn?

A 1973.

Q Did it have a predecessor drawing?

A No, this would not have.

Q Okay. F997

A Brazing slug.

Q What is its number?

A A18493.

Q What is this particular brazing slug used for?

A It is a bolt body brazing slug.

Q Meaning what?

A Meaning that's what it is used for.

Q Well, where is it used in?

A It is used for brazing the bolt body to the bolt head.

Q F100, should that be read in conjunction with any other drawing?

A Yes, it should.

Q Which one?

A The bolt body assembly would be F100, which is C20195, and F101, which is C20195. And it appears to go to D28695, which is your F104.

Q What order should they be read?

A It appears that it should go F100, F101 and

F104.

Q Okay. F104 is the current design drawing for the Model 700?

A Yes.

Q When was -- well, first of all, what do the three drawings depict?

A They depict part of the assembly of the bolt parts.

Q Okay. F102 is what?

A F102 is the bolt body.

Q It is C20200, is that correct?

A Yes.

Q F103 is what?

A It is the bolt body also.

Q Should they be read in conjunction with one another?

A Yes, they should.

Q Should F105 be --

A No.

Q Which is the current design drawing for the 700?

A It would be F103.

Q Same bolt body used in various models?

A Yes.

Q What models was this bolt body used in?

A 700 Varmint, 700, 725, 722, 40X, 721 and 722.

Q Was it ever used in the 600?

A No, it was not.

Q F105 is what, sir?

A That is a bolt assembly.

Q Its drawing number is what?

A D28710.

Q Current design for the 700?

A Yes, it is.

Q When was it first drawn?

A 1980.

Q I show you what has been marked as F107 through 115 and ask if you recognize those.

A Yes.

Q What, generally, do those drawings depict?

A They depict a sear and a safety cam.

Q Two-part sear?

A No.

Q Well, all right. F107, should it be read in

conjunction with any other drawing?

A Yes.

Q Okay. Which one?

A Well, the safety cam is F109, 111, 107, 110 and 112.

Q In that order?

A I don't know for sure.

Q Okay. F109 is 2B17945. F111 is 2B17945. F110 is 2B17945, and F112 is 2B17945, is that correct?

A Yes.

Q You say the series of drawings depict the safety cam, is that correct?

A Yes.

Q As opposed to F108, 113, 114 and 115, which depict what type of cam?

A They depict the sear.

Q All right. The same cam, safety cam and sear appear to be virtually the same dimension, is that correct?

A No.

Q In what respect are they different?

A They are different in their dimensions.



Q All right. Tell me this. When did Remington utilize this two-piece system, or when did it stop utilizing this two-piece system?

A It would be like 1966.

Q All right. Were any of these two-piece systems installed in 700's?

A Yes.

Q Why did Remington abandon this design for the one-piece sear?

A It came out to be a question of economics.

Q In what respect? Is the two piece more expensive to produce than the one piece?

A Yes.

Q Let me ask you this. Were there reasons of safety for doing so?

A No.

Q Did it have any effect on the operation of the safety, which would be different from the one-piece sear?

A No.

Q P108 is drawing 1B17946, is that correct?

A Yes, it is.

Q And F113 is 2C17946, correct?

A Yes.

Q And 114 is 2C17946, correct?

A Yes.

Q And F115 is 2C17946, correct?

A Yes.

Q Did you participate in the decision to abandon, if you will, the two-piece sear?

A No.

Q When did you start working for Remington?

A In '65.

Q So this occurred virtually at the same time?

A About a year later.

Q Okay. Were there statistics generated within Remington dealing with the f.o.s. phenomenon as it might apply to the 700 with the two-piece sear?

A What do you mean?

Q Fire on safe.

A Fire on safe?

Q Yes.

A Not that I am aware of.

Q Have you ever known of any such tests or any

such statistical gathering to have been made?

A No, I don't.

Q Did you examine the two-piece sear when you headed up the design group that developed the Classic?

A No, I never.

Q Did you ever consider it as a design alternative to the one-piece sear?

A No, I never.

MR. McDONALD: At this time, I would offer into evidence Exhibits F1 through F115, inclusive.

BY MR. McDONALD:

Q By the way, all drawings, F1 through F115, were made in the normal course of business for Remington, is that correct?

A Yes.

Q And they truly and accurately depict what is contained therein, do they not?

A Yes, they do.

Q Are they fair and accurate representations of what are contained therein?

A Yes, they are.

(Transcripts were marked as Plaintiffs' Exhibits H through L for identification.)

BY MR. McDONALD:

Q Mr. Linde, from your examination of Exhibit G, which was the rifle -- it wasn't the subject rifle of this litigation, but the other rifle which I showed you this morning. From your external examination, did you find any alteration or change to it based on what you saw?

A The 700 ADL?

Q Yes.

A No, I never.

Q Okay. Realizing, of course, you had no opportunity to give it a thorough examination.

A I just looked at it, yes.

Q All right. I'm going to offer -- Well, strike that.

It was clear from your examination that it was a Remington rifle, is that correct?

A Yes.

Q And it was manufactured here at the Ilion plant?

A Yes.

MR. McDONALD: I offer Exhibit G. You already identified Exhibit A yesterday, which is your history card. I will offer Exhibit A.

BY MR. McDONALD:

Q Sir, I'm going to show you what has been marked as Plaintiffs' Exhibit B and ask if you recognize this.

A No, I don't.

Q I show you what has been marked as Plaintiffs' Exhibit C and ask if you recognize that.

A I don't know if I have seen it or not.

Q Have you read it?

A Before today?

Q No. Today.

A Yes, I did.

Q What do the first two pages of the exhibit describe?

A It says, "Safety Switch-Cycle of Operations."

Q All right.

A And it talks about the normal operation, and

it talks about the trickable operation, and its concern pretty much is with the Model 600, which I thought we weren't going to discuss.

Q And the second page?

A It is about the 600.

Q But what is its title, "Safety Switch-Cycle of Operation"?

A Yes.

Q Now, forget for a moment the model.

A I'm not going to forget the model, because I have been instructed not to answer questions for the 600.

MR. HEADLEY: You listen to the question first.

BY MR. McDONALD:

Q Do those paragraphs fairly and accurately describe normal operations and the trickable operation?

MR. HEADLEY: We object for the same reasons as stated earlier in the deposition, and I instruct the witness not to answer.

BY MR. McDONALD:

Q Well, assume that it is Model 700 rather than

Model 600. Would that fairly and accurately describe the normal operation of the 700?

MR. HEADLEY: I'm going to ask him not to answer that question, because I think it is trying, by indirection, to do the same thing that we are not letting him answer directly.

BY MR. McDONALD:

Q Do you understand the question?

A Yes.

Q Are you refusing to answer the question?

A Yes.

Q On advice of counsel?

A Yes.

MR. McDONALD: Certify it.

BY MR. McDONALD:

Q I show you the last page of Plaintiffs' Exhibit C and ask you if you recognize that page.

MR. HEADLEY: Does that relate to the 600?

THE WITNESS: Yes, it does.

MR. HEADLEY: Then I ask you not to

answer any questions concerning that.

BY MR. McDONALD:

Q Do you understand the question?

A Yes.

Q Refusing to answer it?

A Yes.

Q Advice of counsel?

A Yes.

MR. McDONALD: Certify the question.

BY MR. McDONALD:

Q Since you are not going to answer it --

A I'd just like to read it.

MR. McDONALD: Let the record reflect  
that the witness is reading the last page and  
has read the first two pages.

BY MR. McDONALD:

Q Have you thoroughly read Plaintiffs' Exhibit  
C?

A Not thoroughly.

Q Well, take your time and thoroughly read it,  
then.

MR. HEADLEY: Have you read it sufficiently



for the purposes of determining that it relates to the Model 600, for the purposes of my objection here and my instructions for you not to answer anything concerning that exhibit?

THE WITNESS: Yes.

MR. HEADLEY: Okay.

MR. McDONALD: Offer Plaintiffs' Exhibit C.

BY MR. McDONALD:

Q Sir, have you had an opportunity to read Plaintiffs' Exhibit D?

A Yes, I did.

Q Do you recognize it?

A I recognize what it is about, yes.

Q What is it about?

A It is a recommended disassembly and inspection of Remington Model 700, bolt action rifle, serial number 12291.

Q Do you know what particular rifle that might be in terms of any litigation?

A Yes, I do.

Q Which rifle is it?

A It is the Thomsen rifle.

Q Did you prepare that document?

A I don't know. I could have.

Q Does it fairly and accurately describe the steps that Remington took to inspect the Thomsen rifle?

A No, it does not.

Q All right. What additional steps or different steps did Remington take in that regard?

A The rifle was inspected at Failure Analysis. The people at Failure Analysis did a tremendous number of tests disrupting any type of a fluid analysis performed.

MR. HEADLEY: Who is Failure Analysis?  
Is that somebody other than Remington?

THE WITNESS: Yes.

MR. HEADLEY: Is that an organization for the plaintiff in that case?

THE WITNESS: Yes, very definitely.

BY MR. McDONALD:

Q Did you perform all the tests indicated in Plaintiffs' Exhibit D on the Thomsen rifle?

A No.

Q Which ones did you not perform?

A We did not photograph a complete view of the top, bottom, left and right.

Q Is that indicated by paragraph number?

A One. The barrel assembly was not checked for fingerprints.

Q Which paragraph is that?

A Paragraph six.

MR. HEADLEY: You know, I understand this Thomsen litigation is still pending, and apparently, the plaintiffs' attorneys here have some exhibit that they have obtained from the attorneys in the Thomsen case, and certainly not from attorneys for defendant in this case, and I am going to instruct the witness not to answer any more questions about that, because that involves another rifle in another case, and I just don't feel comfortable about him answering questions when the attorneys for Remington that are handling the defense of that case, which is

out in California, aren't here, and I don't feel adequate to protect this company with respect to that litigation, and therefore, I request you, Mr. Linde, not to answer any more questions concerning this particular exhibit involved in another case, which is still pending.

THE WITNESS: That's excellent advice.

BY MR. McDONALD:

Q Have you had an opportunity to read Plaintiffs' Exhibit D, sir?

A Yes.

Q Are you refusing to answer my prior question?

A Yes, I am.

Q On advice of counsel?

A Yes, I am.

MR. McDONALD: Certify it.

BY MR. McDONALD:

Q By the way, were you clear on what that question was, namely that I wanted you to go through here and ascertain what tests you actually ran?

MR. HEADLEY: We'll admit to any question

you can think of concerning that question, so long as you are using it, and it is as I stated, the exhibit in the Thomsen case.

BY MR. McDONALD:

Q All right. Are you familiar with any tests that were run on Defendants' Exhibit 5 in this case?

A No, I'm not.

MR. McDONALD: Offer into evidence Plaintiffs' Exhibit D.

BY MR. McDONALD:

Q I hand you what has been marked as Plaintiffs' Exhibit E and ask if you recognize it.

A Yes, I do.

Q What is it?

A It is the process record for gauging of parts manufactured as planned.

Q Is it a fair and accurate representation of the production operation and gauging control flow chart, general procedure one for production?

A Yes.

Q Was this made in the normal course of Remington's business?

A Yes, it was.

Q At or near the time indicated on the exhibit?

A Yes, it would be.

Q Has it been changed or altered in any way that you can tell?

A Yes. It shows the first part as the older procedure, and then it has got the present procedure.

Q All right. Where does that break?

A Well, it says "obsolete" on the front. You can see the whole thing duplicates itself or repeats itself.

Q Okay. For the record, that was furnished to us by Remington's attorneys, so if there is any duplication or obsolescence or change, then we got it in that fashion.

A No. What I'm telling you -- you asked for the 700. What it does is 700 overlaps the changes in this. You have got both the old and the new.

Q I didn't ask you that.

A That's the way I understood it.

MR. HEADLEY: I think he thought there was some inference in your statement, Mr. McDonald,

that there was something bad about giving you the previous as well as the present, and I guess the witness is saying a part of this on some of the pages is written "obsolete," and you can follow through, and you can see them, not only the prior, but the present, so it gives you the complete document, as I understand it.

BY MR. McDONALD:

Q Again, my question deals with whether or not it has been changed or altered in any way other than what would normally be the course of business for Remington.

A No.

MR. McDONALD: All right. Offer into evidence Plaintiffs' Exhibit E.

BY MR. McDONALD:

Q Can you tell me if this was the production operation gauging control flow chart and accompanying documents in effect at the time the Lewy rifle, which is Defendants' Exhibit 5, was run through production here at Ilion?

A Yes, it should be.

Q Okay. Did you testify in the trial of Lange, L-a-n-g-e, versus Smith and Remington Arms Corporation, Case Number 80L11, by way of deposition on the 18th day of December, 1981?

A Yes, I told you that yesterday.

Q I'll show you Plaintiffs' Exhibit H. Do you recognize that?

A Yes.

Q What is it, sir?

A Yes, that's the deposition.

Q Is it your deposition?

A Yes.

MR. HEADLEY: Let the record show that the witness has admitted that he gave a deposition in the Lange case, and of course, you haven't read every question and every answer. We have no reason to believe that it is not a correct copy.

BY MR. McDONALD:

Q That's my question, sir. Assuming that this is a correct copy, and of course, you haven't had an



opportunity to read every page, and I recognize that, were you placed under oath in the Lange case when you testified?

A Yes, I was.

Q Did you tell the truth?

A Yes, I did.

MR. McDONALD: Offer into evidence  
Plaintiffs' Exhibit H.

BY MR. McDONALD:

Q Oh, were you testifying as a representative of Remington Arms Corporation when you testified in the Lange deposition?

A Yes.

Q Did you testify, sir, by way of deposition in the case of See versus Remington Arms Corporation on August 18th, 1982, that being a case in the United States District Court for the District of Oregon?

A Yes, I did.

Q And I hand you what's been marked as Plaintiffs' Exhibit I, and I ask you if you recognize it.

MR. HEADLEY: Would you make the same

answers, if Mr. McDonald were to ask you the same questions regarding this particular deposition of the See case that he asked you about the Lange deposition?

THE WITNESS: Yes, I would.

BY MR. McDONALD:

Q All right. Same questions with regard to the Hass case, Hass versus Remington Arms case in the District Court of Harris County, Texas, Case Number 80-00764, and I will show you what has been marked as Plaintiffs' Exhibit J, and I'd ask the same questions as I have on the two prior exhibits.

A And I'll give you a different answer. No, I won't say anything on this case.

Q Are you refusing to do so on the advice of counsel?

A No, but if the counsel knew that it was a Model 600 --

MR. HEADLEY: Oh, this concerned a Model 600?

THE WITNESS: Yes, only.

MR. HEADLEY: I'm going to object to the

use of the deposition for any purpose with this witness, at this time, in this case.

MR. McDONALD: Well, that may be, but all I'm trying to do right now is identify the exhibit. I'm not asking any questions based on it.

MR. HEADLEY: I'm not going to let him even identify it.

BY MR. McDONALD:

Q You're refusing to answer the question, sir?

A Yes, I am.

Q On advice of counsel?

A Yes.

Q You understood the questions that were asked, is that correct?

A Yes, I do.

MR. McDONALD: All right. Certify the questions. I want you to repeat the same questions that I asked with regard to the Lange deposition, which is Plaintiffs' Exhibit H, and certify each one of them and make them applicable to the Hass case. We have an

understanding, Mr. Headley, that that's what came on the record?

MR. HEADLEY: Absolutely.

(Discussion off the record.)

BY MR. McDONALD:

Q Sir, I'm going to hand you what has been marked as Plaintiffs' Exhibits K and L and ask you this. Did you testify in the case of Thomsen versus Messer and Remington Arms by deposition?

A No.

Q Thomsen?

A Yes, I did on Thomsen.

Q Did you do so on November 1st, 1983?

A Yes.

Q All right. If I asked you the same questions with regard to your testimony only, would your answers be the same as in the Lange deposition?

A Yes.

MR. McDONALD: All right. Offer into evidence Plaintiffs' Exhibits K and L dealing with Mr. Linde's testimony only.

(Process Records were marked as

Plaintiffs' Exhibit M for identification.)

MR. McDONALD: Is it agreed and stipulated to that Plaintiffs' Exhibit M are records provided by Remington pursuant to our request for production, and that they are fair and accurate representations, and they are made in the ordinary course of Remington's business, and that they are, in all respects, business records and admissible, at least, under the business records rule, saving any other objections that may be pertinent?

MR. HEADLEY: I'm going to tell you that they are business records, and everything else, but when you say whether they are admissible, you are asking me to rule like a judge.

MR. McDONALD: No. I said that they are admissible for all purposes under the business records rule, saving any other objections that might be applicable.

MR. HEADLEY: Well, we will certainly

admit that these records are records you obtained from us, and these are Remington's records, and we produced them pursuant to either interrogatories or requests to produce documents, and that they are authentic, and you can take that and fit it into your business records law, and you have got everything factually from us that you can get from this witness, because we are saying they are accurate, authentic and correct.

MR. McDONALD: All right. Offer M. The record should reflect that they had been changed from the order given.

MR. HEADLEY: There are eighteen pages in Plaintiffs' Exhibit M as I have counted.

(A design change request was marked as Plaintiffs' Exhibit N for identification.)

BY MR. McDONALD:

Q I hand you what's been marked as Plaintiffs' Exhibit N and ask you if you recognize that.

A It is a design change request.

Q Is it made in the normal, ordinary course of

Remington's business?

A Yes.

Q What is the date?

A Its originating date was 4/14/82.

Q And it is design change request number what?

A 11569.

Q What does it deal with, sir?

A It deals with the sear safety cam blank on the 700 Model.

Q Does it deal with the sear safety cam blank on any other models?

A Yes. It is the 40XB and the XP100.

Q Have you ever seen this document before?

A No, I haven't.

MR. McDONALD: Offer Plaintiffs' Exhibit N. We would request that you produce DCR 10309, and we are going to reserve the letter O for that particular exhibit.

(Design change requests were marked as Plaintiffs' Exhibit P for identification.)

MR. McDONALD: All right. For the record, Exhibit P is the first set of DCR's

that was produced by Remington pursuant to our request for production, pursuant to interrogatories. The problem is, I don't want it out of sequence on the exhibits. I want all the DCR's in one group.

MR. HEADLEY: All right. Without counting the pages, compared to our copy that we have with us, it appears that our office copy of what we provided the plaintiff, which is Plaintiffs' Exhibit P, it looks like we have ninety-four pages to it, so --

MR. McDONALD: We represent we haven't added or detracted, to our knowledge, from the group provided.

MR. HEADLEY: That is the copy of the record we gave you.

MR. McDONALD: Assuming the page numbers are correct, do we have the same stipulation that we had before?

MR. HEADLEY: That's right, whatever it was that we all said.

MR. McDONALD: Okay.



(Design change requests were marked as Plaintiffs' Exhibit Q for identification.)

MR. McDONALD: I offer Plaintiffs' Exhibit P into evidence. I will make the same representation with regard to Exhibit Q, that this is a group of DCR's that was produced by Remington. With regard to Plaintiffs' Exhibit Q, do we have the same stipulation, since those were records -- assuming that those records match up with your copy -- that you provided to us, that we had previously?

MR. HEADLEY: Yes, that is correct.

MR. McDONALD: Offer into evidence Plaintiffs' Exhibit Q.

BY MR. McDONALD:

Q Now, Mr. Linde, I'm going to refer you to DCR 11193, which appears to be a four-page DCR dealing with -- Strike that -- a six-page DCR -- no. I was right to begin with. It is a four-page DCR dated 5/15/80, and I ask you if you recognize that. Have you ever seen that DCR before?

A No, I haven't.

Q Can you tell me, after reviewing it, what it deals with?

A Yes, I can.

Q What?

A It is a request by the MRP Section for the initial part numbers that they needed for the MRP system.

Q What is MRP?

A Material Requirements Planning.

Q When did MRP come into existence?

A Came in -- it started in 1979, or thereabouts.

Q Now, prior to May 15th, 1980, were there plans or specifications that called for the same blanks that are shown in this DCR 11193?

A No.

Q Are these all new?

A Yes.

Q Now, what was the purpose for starting a series of blanks in the manufacturing process for the 700?

A It was required from Material Requirements Planning, a computer software.

Q Were these blanks all new to the manufacturing process?

A No.

Q Okay. Is this simply a paper work situation more than anything else?

A That's what it is.

Q Did you initiate -- Strike that.

I'll hand you what's been marked as Plaintiffs' Exhibit Q, and that contains DCR number 10524 consisting of two sheets. I'll ask you if you recognize that DCR.

A Are you ready?

Q I'm ready.

A Yes.

Q Is that in your hand?

A No, it is not.

Q Did you authorize that DCR?

A Yes, I did.

Q What was your position on the date that it was made, which is what, by the way?

A Twenty-fourth of October, '77.

Q What was your position at that time?

A I was the manager of manual firearms design.

Q All right. What was the purpose of this DCR?

A The purpose of the DCR was to change the sear safety cam. The edge that I showed you yesterday when you were confused about the one surface, that edge was put around each side of the sear safety cam.

Q For what purpose?

A The sear safety cam was made with the powdered metal steel process, and when the part is formed in the die, the two punches come down forming a tremendous amount of pressure, and this causes the die to expand, and it will form a little burr around the side of the part, and by putting this recess on it, what happens is it allows you to form the burr up when you put it in your subsequent tumbling operation, and it is easier to remove.

Q Were you experiencing operating difficulties with the 600 and 700 prior to instituting this DCR?

A No. Every so often we would get some sear

safety cans where we would have to manually remove the burr.

Q If the sear safety cam were placed into a Model 700 without the burr or some portion or small portion of the burr being removed, what would be the operational effect within this 700 fire control system?

A The operator puts a sear safety cam into the housing. They always check for freeness, check for position to see if there is any drag, and if there is any drag, then they have to remove the part, and then they have to deburr it.

Q If, however, that was not detected in the assembly process, what would be the effect of the operation of the rifle?

A I don't know. It would depend on how big the burr would actually be.

Q Let's assume it is a small or a slight burr, that it does not completely freeze up the operation of the sear, that it would be an intermittent effect on the operation.

A It couldn't have an intermittent effect between the two side plates. It is either there or

isn't there.

Q What are the specified tolerances between the sear and the two side plates?

A I'd have to get the drawings and calculate it out.

Q Which drawing would you look to in that regard, and we will provide it to you in the morning.

A You would need the housing and the sear safety cam.

MR. McDONALD: Okay. Thank you, for today.

THE WITNESS: Okay.

(Whereupon, the proceedings were adjourned.)

C E R T I F I C A T E

I, ANN SHORT, a Shorthand Reporter  
and Notary Public in and for the State of  
New York, DO HEREBY CERTIFY that the foregoing  
is a true and accurate transcript of my  
stenographic notes in the above-entitled  
matter.

Dated: April 23, 1984

Ann Short

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF MISSOURI  
SOUTHERN DIVISION

I, JOHN P. LINDE, being duly sworn,  
heroby state that I have read the above  
deposition of my testimony in the above-entitled  
action taken on March 28, 1984 before ANN SHORT,  
a Shorthand Reporter and Notary Public, at  
Remington Arms Company, 14 Hoeffler Avenue,  
Ilion, New York, and that the same is true and  
correct.

Sworn to before me this \_\_\_\_\_  
day of \_\_\_\_\_, 1984.