

1 DIRECT EXAMINATION (resumed)

2 BY MR. CORSON:

3 Q. Mr. Hemming, we left off yesterday and I
4 believe we pick up right where we left off on the
5 same page here.

6 Are you ready to proceed?

7 A. Yes.

8 (The following testimony was read into
9 the record by Mr. Corson and Mr. Hemming.)

10 Q. Did Deere consider a backup protection
11 system that -- a sensor system that could detect and
12 protect -- and detect people behind the lawn mower
13 to be an improvement to its RIO system?

14 A. Again, I don't -- I don't know.

15 Q. If I approached it a different way, if a
16 backup protection sensor system would not be an
17 improvement to RIO, why would you be looking at
18 developing a backup sensor system?

19 A. I don't know.

20 Q. I mean, what was the purpose of developing
21 a backup sensor system 15-plus years ago?

22 A. I'd have to reread the document again.

23 Q. So this engineering report on a backup
24 sensor is dated August 8th, 2002. I just want to
25 make sure I'm on the same page with you, so let's

1 start over again.

2 With Exhibit 152, there's something called
3 an engineering report dated August 8th, 2002. And
4 that starts on a page marked 31276, and it goes on
5 for about ten pages.

6 Are you on the first page of that
7 engineering report?

8 A. Yes.

9 Q. And you see where it describes tests?

10 A. What would you like me to focus on?

11 Q. Well, first of all, can you see what's
12 written on that page of this engineering report?
13 And then I can ask some questions.

14 A. Yes.

15 Q. It describes that Deere personnel who
16 evaluated the performance of this device requested a
17 wider beam transducer, have a wider sensor, so to
18 speak. Is that right?

19 A. The text says John Deere personnel who
20 evaluated the performance of the 46 by 22 beam
21 transducer had requested a wider beam transducer.

22 Q. That's just referring to sort of how wide
23 a field of vision, so to speak, the sensor has, in
24 layperson's terms?

25 A. Yes.

1 Q. Then it goes on to say after that one of
2 our tests included the determination of a comparable
3 target to that of a person.

4 Do you see that?

5 A. Yes.

6 Q. And it goes on to show that actually
7 several different test subjects, a 5-10 adult, a
8 49-inch-tall child, a 40-inch-tall child, and a
9 two-year-old child, 34 inches, 30 pounds.

10 Do you see all that?

11 A. Yes.

12 Q. So these are different sort of test-size
13 human beings being tested behind the Deere lawn
14 mower with this backup sensor back in 2002?

15 A. Yes.

16 Q. And then if you go to the page marked by
17 the lawyers, 31279, part of that same engineering
18 report -- do you have that in front of you?

19 A. Yes.

20 Q. And do you see where the report describes
21 a doll sitting up 18 inches tall behind the lawn
22 mower?

23 A. Yes.

24 Q. And the sensor detected the doll every
25 time the lawn mower was backed up.

1 A. It's not exactly what the document says.

2 Q. It says, quote, this included backing up
3 with each wheel lined up with the doll. The doll
4 sat up 18 inches high. The distance from the doll
5 to the tractor was not recorded. With the doll
6 lying on its side, it could not get any detection,
7 unquote.

8 Was it your understanding they're able to
9 detect it when it was sitting up?

10 A. If that's what the document says, yes.

11 Q. So these backed up 12 times, it says,
12 quote, the doll sitting upright was detected by
13 E394A, unquote, the sensor, quote, every time I
14 backed up 12 times, closed quote.

15 Do you see that?

16 A. Yes. And the document goes on to say
17 the -- quote, with the doll lying on its side, I
18 could not get any detection, a nine-inch diameter
19 bump ball was also not detectable.

20 Q. So the detector worked for things, in this
21 case, 18 inches high, like a two-year-old child
22 sitting up, but not for things like a bump in the
23 ground like maybe a lawn toy or something.

24 Is that right, as you read it?

25 A. As I read it, yes.

1 Q. Then if you go back to the preceding page
2 there's some graphs, part of the engineering report,
3 and then there's a narrative part towards the bottom
4 where it says, quote, I drove the tractor backwards
5 at least 12 times on the lawn in the parking lot,
6 without a single false detection by the E394A,
7 closed quote, the sensor.

8 Do you see that?

9 A. That's what the document says.

10 Q. And that's part of what you're looking for
11 in a sensor, is something that will detect children
12 or pets behind the machine, but not give false
13 alarms, not get a false signal?

14 A. Right.

15 Q. So Exhibit 152, we see an email dated
16 August 19th -- excuse me -- moving for -- date is
17 August 19th, 2002, with the subject line -- maybe I
18 made a mistake here in my dating -- with the subject
19 line updated quotations for 300K or 300,000 pieces.

20 Do you see that?

21 A. Yes.

22 Q. And behind the email are some Deere
23 quotation forms starting on the next page.

24 A. Yes.

25 Q. My eyes aren't so good, but as you read

1 this, if you total up all the costs for the sensor,
2 are you seeing a price of about 13.50 per sensor
3 unit for each lawn mower.

4 And then Mr. Crawford asks -- where would
5 you be referring to that, please?

6 And I say page 031268.

7 And I say it's a Deere & Company
8 construction and forestry division part quotation
9 form, confidential, showing a grand total cost
10 13.4999, about 13.50 per unit.

11 Do you see that?

12 A. That's what the document states.

13 Q. So what was being looked at -- and this is
14 back in 2002, looking at a sensor that costs about
15 13.50 per riding lawn mower?

16 A. Yes.

17 Q. So part of this package on backup sensors
18 is entitled Specification for Backup Presence
19 Sensor, Revision .02, dated 15th of January 2003.

20 Do you see that?

21 A. Yes.

22 Q. And it shows -- and it's prepared by
23 Mr. Rob Henson, the John Deere commercial and
24 consumer equipment division, North Carolina.

25 Who is or was Mr. Rob Henson?

1 A. I don't know.

2 Q. At the top of the next page of the
3 Deere & Company specification for backup presence
4 sensor, there's a heading entitled -- called Device
5 Purpose.

6 Do you see that?

7 A. Yes.

8 Q. Can you read that out loud, please,
9 slowly?

10 A. Quote, to detect objects including small
11 children and humans behind a riding lawn mower,
12 closed quote.

13 Q. And is there a cost target shown?

14 A. Yes.

15 Q. What's the cost target for this sensor to
16 detect objects, including small children and humans,
17 behind a riding lawn mower?

18 A. Ten dollars.

19 Q. Does it show a minimum test target on the
20 same document?

21 A. Yes.

22 Q. And what's the minimum test target?

23 A. What's written on this page is, quote,
24 simulated two-year-old child in a standing position,
25 see Figure 1, clothing TBD.