Case No. 78701

In the Supreme Court of Nevada

MOTOR COACH INDUSTRIES, INC.,

Appellant,

VS.

KEON KHIABANI; ARIA KHIABANI, MINORS, by and through their Guardian MARIE-CLAUDE RIGAUD; SIAMAK BARIN, as Executor of the Estate of KAYVAN KHIABANI, M.D.; the Estate of KAYVAN KHIABANI; SIAMAK BARIN, as Executor of the Estate of KATAYOUN BARIN, DDS; and the Estate of KATAYOUN BARIN, DDS,

Respondents.

Electronically Filed Dec 04 2019 05:21 p.m. Elizabeth A. Brown Clerk of Supreme Court

APPEAL

from the Eighth Judicial District Court, Clark County The Honorable Adriana Escobar, District Judge District Court Case No. A-17-755977-C

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			46	11251–11360
115	Appendix of Exhibits in Support of	04/24/18	46	11361–11500
	Plaintiffs' Verified Memorandum of		47	11501–11735
	Costs (Volume 2 of 2)			
32	Appendix of Exhibits to Defendant's	12/07/17	7	1584–1750
	Motion in Limine No. 7 to Exclude		8	1751–1801
	Any Claims That the Subject Motor			
	Coach was Defective Based on Alleged			
	Dangerous "Air Blasts"			
34	Appendix of Exhibits to Defendants'	12/07/17	8	1817–2000
	Motion in Limine No. 13 to Exclude		9	2001–2100
	Plaintiffs' Expert Witness Robert			
	Cunitz, Ph.D., or in the Alternative, to			
	Limit His Testimony			

38	Appendix of Exhibits to Plaintiffs'	12/21/17	9	2176–2250
	Joint Opposition to MCI Motion for		10	2251-2500
	Summary Judgment on All Claims		11	2501–2523
	Alleging a Product Defect and to MCI			
	Motion for Summary Judgment on			
	Punitive Damages			
119	Appendix of Exhibits to: Motor Coach	05/07/18	48	11770–11962
	Industries, Inc.'s Motion for New Trial			
76	Bench Brief in Support of	02/22/18	22	5321–5327
	Preinstructing the Jury that			
	Contributory Negligence in Not a			
	Defense in a Product Liability Action			
67	Bench Brief on Contributory	02/15/18	18	4309-4314
	Negligence			
51	Calendar Call Transcript	01/18/18	11	2748 – 2750
			12	2751–2752
125	Case Appeal Statement	05/18/18	49	12098–12103
140	Case Appeal Statement	04/24/19	50	12462-12479
21	Civil Order to Statistically Close Case	10/24/17	3	587–588
127	Combined Opposition to Motion for a	06/08/18	49	12113–12250
	Limited New Trial and MCI's		50	12251–12268
	Renewed Motion for Judgment as a			
	Matter of Law Regarding Failure to			
	Warn Claim			
1	Complaint with Jury Demand	05/25/17	1	1–16
10	Defendant Bell Sports, Inc.'s Answer	07/03/17	1	140–153
	to Plaintiff's Amended Complaint			
11	Defendant Bell Sports, Inc.'s Demand	07/03/17	1	154-157
	for Jury Trial			
48	Defendant Bell Sports, Inc.'s Motion	01/17/18	11	2720–2734
	for Determination of Good Faith			
	Settlement on Order Shortening Time			
7	Defendant Motor Coach Industries,	06/30/17	1	101–116
	Inc.'s Answer to Plaintiffs' Amended			
	Complaint			
8	Defendant Sevenplus Bicycles, Inc.	06/30/17	1	117–136
	d/b/a Pro Cyclery's Answer to			
	Plaintiffs' Amended Complaint			

9	Defendant Sevenplus Bicycles, Inc. d/b/a Pro Cyclery's Demand for Jury Trial	06/30/17	1	137–139
19	Defendant SevenPlus Bicycles, Inc. d/b/a Pro Cyclery's Motion for Determination of Good Faith Settlement	09/22/17	2	313–323
31	Defendant's Motion in Limine No. 7 to Exclude Any Claims That the Subject Motor Coach was Defective Based on Alleged Dangerous "Air Blasts"	12/07/17	7	1572–1583
20	Defendant's Notice of Filing Notice of Removal	10/17/17	$\frac{2}{3}$	324–500 501–586
55	Defendant's Reply in Support of Motion in Limine No. 17 to Exclude Claim of Lost Income, Including the August 28 Expert Report of Larry Stokes	01/22/18	12	2794–2814
53	Defendant's Reply in Support of Motion in Limine No. 7 to Exclude Any Claims that the Subject Motor Coach was Defective Based on Alleged Dangerous "Air Blasts"	01/22/18	12	2778–2787
71	Defendant's Trial Brief in Support of Level Playing Field	02/20/18	19 20	4748–4750 4751–4808
5	Defendants Michelangelo Leasing Inc. dba Ryan's Express and Edward Hubbard's Answer to Plaintiffs' Amended Complaint	06/28/17	1	81–97
56	Defendants Michelangelo Leasing Inc. dba Ryan's Express and Edward Hubbard's Joinder to Plaintiffs' Motion for Determination of Good Faith Settlement with Michelangelo Leasing Inc. dba Ryan's Express and Edward Hubbard	01/22/18	12	2815–2817
33	Defendants' Motion in Limine No. 13 to Exclude Plaintiffs' Expert Witness	12/07/17	8	1802–1816

	Dahaut Carrita Dh. d. amin tha			
	Robert Cunitz, Ph.d., or in the			
0.0	Alternative, to Limit His Testimony	10/00/15		0100 0100
36	Defendants' Motion in Limine No. 17	12/08/17	9	2106–2128
	to Exclude Claim of Lost Income,			
	Including the August 28 Expert			
	Report of Larry Stokes			
54	Defendants' Reply in Support of	01/22/18	12	2788–2793
	Motion in Limine No. 13 to Exclude			
	Plaintiffs' Expert Witness Robert			
	Cunitz, Ph.D., or in the Alternative to			
	Limit His Testimony			
6	Demand for Jury Trial	06/28/17	1	98–100
147	Exhibits G–L and O to: Appendix of	05/08/18	51	12705–12739
	Exhibits to: Motor Coach Industries,		52	12740–12754
	Inc.'s Motion for a Limited New Trial			
	(FILED UNDER SEAL)			
142	Findings of Fact and Conclusions of	03/14/18	51	12490–12494
	Law and Order on Motion for			
	Determination of Good Faith			
	Settlement (FILED UNDER SEAL)			
75	Findings of Fact, Conclusions of Law,	02/22/18	22	5315–5320
	and Order			
108	Jury Instructions	03/23/18	41	10242–10250
			42	10251–10297
110	Jury Instructions Reviewed with the	03/30/18	42	10303–10364
	Court on March 21, 2018			
64	Jury Trial Transcript	02/12/18	15	3537-3750
			16	3751–3817
85	Jury Trial Transcript	03/06/18	28	6883-7000
			29	7001–7044
87	Jury Trial Transcript	03/08/18	30	7266–7423
92	Jury Trial Transcript	03/13/18	33	8026–8170
93	Jury Trial Transcript	03/14/18	33	8171–8250
			34	8251-8427
94	Jury Trial Transcript	03/15/18	34	8428-8500
			35	8501–8636
95	Jury Trial Transcript	03/16/18	35	8637–8750

			36	8751–8822
98	Jury Trial Transcript	03/19/18	36	8842-9000
			37	9001-9075
35	Motion for Determination of Good	12/07/17	9	2101–2105
	Faith Settlement Transcript			
22	Motion for Summary Judgment on	10/27/17	3	589–597
	Foreseeability of Bus Interaction with			
	Pedestrians or Bicyclists (Including			
	Sudden Bicycle Movement)			
26	Motion for Summary Judgment on	12/01/17	3	642–664
	Punitive Damages			
117	Motion to Retax Costs	04/30/18	47	11743–11750
			48	11751–11760
58	Motions in Limine Transcript	01/29/18	12	2998–3000
			13	3001–3212
61	Motor Coach Industries, Inc.'s Answer	02/06/18	14	3474–3491
	to Second Amended Complaint			
90	Motor Coach Industries, Inc.'s Brief in	03/12/18	32	7994–8000
	Support of Oral Motion for Judgment		33	8001–8017
	as a Matter of Law (NRCP 50(a))			
146	Motor Coach Industries, Inc.'s Motion	05/07/18	51	12673–12704
	for a Limited New Trial (FILED			
	UNDER SEAL)			
30	Motor Coach Industries, Inc.'s Motion	12/04/17	6	1491–1500
	for Summary Judgment on All Claims		7	1501–1571
1 4 5	Alleging a Product Defect	07/07/10	- -	10045 10050
145	Motor Coach Industries, Inc.'s Motion	05/07/18	51	12647–12672
	to Alter or Amend Judgment to Offset			
	Settlement Proceed Paid by Other			
0.0	Defendants (FILED UNDER SEAL)	09/10/10	200	0000 0000
96	Motor Coach Industries, Inc.'s	03/18/18	36	8823–8838
	Opposition to Plaintiff's Trial Brief			
	Regarding Admissibility of Taxation Issues and Gross Versus Net Loss			
	Income			
52	Motor Coach Industries, Inc.'s Pre-	01/19/18	12	2753–2777
92	Trial Disclosure Pursuant to NRCP	01/13/10	14	4100-4111
	16.1(a)(3)			
	10.1(a)(0)			

120	Motor Coach Industries, Inc.'s	05/07/18	48	11963–12000
	Renewed Motion for Judgment as a		49	12001-12012
	Matter of Law Regarding Failure to			
	Warn Claim			
47	Motor Coach Industries, Inc.'s Reply	01/17/18	11	2705–2719
	in Support of Its Motion for Summary			
	Judgment on All Claims Alleging a			
	Product Defect			
149	Motor Coach Industries, Inc.'s Reply	07/02/18	52	12865-12916
	in Support of Motion to Alter or			
	Amend Judgment to Offset Settlement			
	Proceeds Paid by Other Defendants			
	(FILED UNDER SEAL)			
129	Motor Coach Industries, Inc.'s Reply	06/29/18	50	12282-12309
	in Support of Renewed Motion for			
	Judgment as a Matter of Law			
	Regarding Failure to Warn Claim			
70	Motor Coach Industries, Inc.'s	02/16/18	19	4728-4747
	Response to "Bench Brief on			
	Contributory Negligence"			
131	Motor Coach Industries, Inc.'s	09/24/18	50	12322-12332
	Response to "Plaintiffs' Supplemental			
	Opposition to MCI's Motion to Alter or			
	Amend Judgment to Offset Settlement			
	Proceeds Paid to Other Defendants"			
124	Notice of Appeal	05/18/18	49	12086–12097
139	Notice of Appeal	04/24/19	50	12412-12461
138	Notice of Entry of "Findings of Fact	04/24/19	50	12396–12411
	and Conclusions of Law on			
	Defendant's Motion to Retax"			
136	Notice of Entry of Combined Order (1)	02/01/19	50	12373-12384
	Denying Motion for Judgment as a			
	Matter of Law and (2) Denying Motion			
	for Limited New Trial			
141	Notice of Entry of Court's Order	05/03/19	50	12480-12489
	Denying Defendant's Motion to Alter			
	or Amend Judgment to Offset			
	Settlement Proceeds Paid by Other			

	Defendants Filed Under Seal on			
4.0	March 26, 2019	01/00/10		
40	Notice of Entry of Findings of Fact	01/08/18	11	2581–2590
	Conclusions of Law and Order on			
	Motion for Determination of Good			
105	Faith Settlement	00/04/40		10007 10007
137	Notice of Entry of Findings of Fact,	02/01/19	50	12385–12395
	Conclusions of Law and Order on			
	Motion for Good Faith Settlement	0.11.01.0		10007 10071
111	Notice of Entry of Judgment	04/18/18	42	10365–10371
12	Notice of Entry of Order	07/11/17	1	158–165
16	Notice of Entry of Order	08/23/17	1	223–227
63	Notice of Entry of Order	02/09/18	15	3511–3536
97	Notice of Entry of Order	03/19/18	36	8839–8841
15	Notice of Entry of Order (CMO)	08/18/17	1	214–222
4	Notice of Entry of Order Denying	06/22/17	1	77–80
	Without Prejudice Plaintiffs' Ex Parte			
	Motion for Order Requiring Bus			
	Company and Bus Driver to Preserve			
	an Immediately Turn Over Relevant			
	Electronic Monitoring Information			
	from Bus and Driver Cell Phone			
13	Notice of Entry of Order Granting	07/20/17	1	166–171
	Plaintiffs' Motion for Preferential Trial			
	Setting			
133	Notice of Entry of Stipulation and	10/17/18	50	12361–12365
	Order Dismissing Plaintiffs' Claims			
	Against Defendant SevenPlus			
	Bicycles, Inc. Only			
134	Notice of Entry of Stipulation and	10/17/18	50	12366–12370
	Order Dismissing Plaintiffs' Claims			
	Against Bell Sports, Inc. Only			
143	Objection to Special Master Order	05/03/18	51	12495-12602
	Staying Post-Trial Discovery Including			
	May 2, 2018 Deposition of the			
	Custodian of Records of the Board of			
	Regents NSHE and, Alternatively,			
	Motion for Limited Post-Trial			

	Discovery on Order Shortening Time			
	(FILED UNDER SEAL)			
39	Opposition to "Motion for Summary	12/27/17	11	2524 - 2580
	Judgment on Foreseeability of Bus			
	Interaction with Pedestrians of			
	Bicyclists (Including Sudden Bicycle			
	Movement)"			
123	Opposition to Defendant's Motion to	05/14/18	49	12039–12085
	Retax Costs			
118	Opposition to Motion for Limited Post-	05/03/18	48	11761–11769
	Trial Discovery			
151	Order (FILED UNDER SEAL)	03/26/19	52	12931–12937
135	Order Granting Motion to Dismiss	01/31/19	50	12371–12372
	Wrongful Death Claim			
25	Order Regarding "Plaintiffs' Motion to	11/17/17	3	638–641
	Amend Complaint to Substitute			
	Parties" and "Countermotion to Set a			
	Reasonable Trial Date Upon Changed			
	Circumstance that Nullifies the			
	Reason for Preferential Trial Setting"			
45	Plaintiffs' Addendum to Reply to	01/17/18	11	2654–2663
	Opposition to Motion for Summary			
	Judgment on Forseeability of Bus			
	Interaction with Pedestrians or			
	Bicyclists (Including Sudden Bicycle			
4.0	Movement)"	04/40/40		
49	Plaintiffs' Joinder to Defendant Bell	01/18/18	11	2735–2737
	Sports, Inc.'s Motion for			
	Determination of Good Faith			
4.1	Settlement on Order Shortening Time	01/00/10		0501 0011
41	Plaintiffs' Joint Opposition to	01/08/18	11	2591–2611
	Defendant's Motion in Limine No. 3 to			
	Preclude Plaintiffs from Making			
	Reference to a "Bullet Train" and to			
	Defendant's Motion in Limine No. 7 to			
	Exclude Any Claims That the Motor			
	Coach was Defective Based on Alleged			
	Dangerous "Air Blasts"			

				7
37	Plaintiffs' Joint Opposition to MCI	12/21/17	9	2129–2175
	Motion for Summary Judgment on All			
	Claims Alleging a Product Defect and			
	to MCI Motion for Summary			
	Judgment on Punitive Damages			
50	Plaintiffs' Motion for Determination of	01/18/18	11	2738–2747
	Good Faith Settlement with			
	Defendants Michelangelo Leasing Inc.			
	d/b/a Ryan's Express and Edward			
	Hubbard Only on Order Shortening			
	Time			
42	Plaintiffs' Opposition to Defendant's	01/08/18	11	2612–2629
	Motion in Limine No. 13 to Exclude			
	Plaintiffs' Expert Witness Robert			
	Cunitz, Ph.D. or in the Alternative to			
	Limit His Testimony			
43	Plaintiffs' Opposition to Defendant's	01/08/18	11	2630–2637
	Motion in Limine No. 17 to Exclude			
	Claim of Lost Income, Including the			
	August 28 Expert Report of Larry			
	Stokes			
126	Plaintiffs' Opposition to MCI's Motion	06/06/18	49	12104–12112
	to Alter or Amend Judgment to Offset			
	Settlement Proceeds Paid by Other			
	Defendants			
130	Plaintiffs' Supplemental Opposition to	09/18/18	50	12310–12321
	MCI's Motion to Alter or Amend			
	Judgment to Offset Settlement			
	Proceeds Paid by Other Defendants			
150	Plaintiffs' Supplemental Opposition to	09/18/18	52	12917–12930
	MCI's Motion to Alter or Amend			
	Judgment to Offset Settlement			
	Proceeds Paid by Other Defendants			
	(FILED UNDER SEAL)			
122	Plaintiffs' Supplemental Verified	05/09/18	49	12019–12038
	Memorandum of Costs and			
	Disbursements Pursuant to NRS			
	18.005, 18.020, and 18.110			

91	Plaintiffs' Trial Brief Regarding	03/12/18	33	8018–8025
	Admissibility of Taxation Issues and			
	Gross Versus Net Loss Income			
113	Plaintiffs' Verified Memorandum of	04/24/18	42	10375–10381
	Costs and Disbursements Pursuant to			
	NRS 18.005, 18.020, and 18.110			
105	Proposed Jury Instructions Not Given	03/23/18	41	10207–10235
109	Proposed Jury Verdict Form Not Used	03/26/18	42	10298–10302
	at Trial			
57	Recorder's Transcript of Hearing on	01/23/18	12	2818–2997
	Defendant's Motion for Summary			
	Judgment on All Claims Alleging a			
	Product Defect			
148	Reply in Support of Motion for a	07/02/18	52	12755–12864
	Limited New Trial (FILED UNDER			
	SEAL)			
128	Reply on Motion to Retax Costs	06/29/18	50	12269–12281
44	Reply to Opposition to Motion for	01/16/18	11	2638–2653
	Summary Judgment on Foreseeability			
	of Bus Interaction with Pedestrians or			
	Bicyclists (Including Sudden Bicycle			
	Movement)"			
46	Reply to Plaintiffs' Opposition to	01/17/18	11	2664–2704
	Motion for Summary Judgment on			
	Punitive Damages			
3	Reporter's Transcript of Motion for	06/15/17	1	34–76
	Temporary Restraining Order			
144	Reporter's Transcript of Proceedings	05/04/18	51	12603–12646
	(FILED UNDER SEAL)			
14	Reporter's Transcription of Motion for	07/20/17	1	172–213
	Preferential Trial Setting			
18	Reporter's Transcription of Motion of	09/21/17	1	237–250
	Status Check and Motion for		2	251–312
	Reconsideration with Joinder			
65	Reporter's Transcription of	02/13/18	16	3818–4000
	Proceedings		17	4001–4037
66	Reporter's Transcription of	02/14/18	17	4038–4250
	Proceedings		18	4251–4308

68	Reporter's Transcription of	02/15/18	18	4315–4500
200	Proceedings	00/10/10	1.0	4501 4505
69	Reporter's Transcription of	02/16/18	19	4501–4727
	Proceedings			
72	Reporter's Transcription of	02/20/18	20	4809–5000
	Proceedings		21	5001–5039
73	Reporter's Transcription of	02/21/18	21	5040-5159
	Proceedings			
74	Reporter's Transcription of	02/22/18	21	5160 - 5250
	Proceedings		22	5251-5314
77	Reporter's Transcription of	02/23/18	22	5328-5500
	Proceedings		23	5501-5580
78	Reporter's Transcription of	02/26/18	23	5581-5750
	Proceedings		24	5751-5834
79	Reporter's Transcription of	02/27/18	24	5835-6000
	Proceedings		25	6001–6006
80	Reporter's Transcription of	02/28/18	25	6007–6194
	Proceedings			
81	Reporter's Transcription of	03/01/18	25	6195–6250
	Proceedings		26	6251-6448
82	Reporter's Transcription of	03/02/18	26	6449–6500
	Proceedings		27	6501–6623
83	Reporter's Transcription of	03/05/18	27	6624–6750
	Proceedings		28	6751–6878
86	Reporter's Transcription of	03/07/18	29	7045-7250
	Proceedings		30	7251 - 7265
88	Reporter's Transcription of	03/09/18	30	7424-7500
	Proceedings		31	7501-7728
89	Reporter's Transcription of	03/12/18	31	7729–7750
	Proceedings		32	7751-7993
99	Reporter's Transcription of	03/20/18	37	9076–9250
	Proceedings		38	9251-9297
100	Reporter's Transcription of	03/21/18	38	9298–9500
	Proceedings		39	9501–9716
101	Reporter's Transcription of	03/21/18	39	9717–9750
	Proceedings		40	9751–9799
	1 100ccumgs		40	5101 <u>—</u> 1010

102	Reporter's Transcription of	03/21/18	40	9800–9880
	Proceedings			
103	Reporter's Transcription of	03/22/18	40	9881-10000
	Proceedings		41	10001-10195
104	Reporter's Transcription of	03/23/18	41	10196–10206
	Proceedings			
24	Second Amended Complaint and	11/17/17	3	619–637
	Demand for Jury Trial			
107	Special Jury Verdict	03/23/18	41	10237–10241
112	Special Master Order Staying Post-	04/24/18	42	10372–10374
	Trial Discovery Including May 2, 2018			
	Deposition of the Custodian of Records			
	of the Board of Regents NSHE			
62	Status Check Transcript	02/09/18	14	3492–3500
			15	3501–3510
17	Stipulated Protective Order	08/24/17	1	228–236
121	Supplement to Motor Coach	05/08/18	49	12013–12018
	Industries, Inc.'s Motion for a Limited			
	New Trial			
60	Supplemental Findings of Fact,	02/05/18	14	3470–3473
	Conclusions of Law, and Order			
132	Transcript	09/25/18	50	12333–12360
23	Transcript of Proceedings	11/02/17	3	598–618
27	Volume 1: Appendix of Exhibits to	12/01/17	3	665–750
	Motion for Summary Judgment on		4	751–989
	Punitive Damages			
28	Volume 2: Appendix of Exhibits to	12/01/17	4	990–1000
	Motion for Summary Judgment on		5	1001–1225
	Punitive Damages			
29	Volume 3: Appendix of Exhibits to	12/01/17	5	1226–1250
	Motion for Summary Judgment on		6	1251–1490
	Punitive Damages			

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1	automatic brake disablement; correct?
2	MR. RUSSELL: Objection. Foundation.
3	Incomplete hypothetical.
4	THE WITNESS: I don't know. Depends on the
5	kit and what it does.
6	BY MR. KEMP:
7	Q. Okay. The next item is do you want a
8	break?
9	MR. RUSSELL: Yeah. If you're moving on to
10	7.
11	MR. KEMP: Yeah. I want to move to
12	something else.
13	THE VIDEOGRAPHER: We're going off the
14	record. The time is 10:33.
15	(A break was taken.)
16	THE VIDEOGRAPHER: We are back on the
17	record. The time is 10:44.
18	BY MR. KEMP:
19	Q. Okay. Taking a look back at Exhibit 1,
20	Item Number 7, which discusses meetings between MCI
21	and its divisions, including but not limited to the
22	Universal Coach Parts and Mark Barron or salespeople
23	for S-1 Gards. Do you see that one?
24	A. Yes.
25	Q. And you know in general what an S-1 Gard

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- 1 is?
- 2 A. I do now.
- Q. Okay.
- 4 A. In general.
- 5 Q. Okay. In general. I've got one here if
- 6 you want to look at it.
- 7 Do you know whether or not there were any
- 8 meetings between MCI or any of its divisions,
- 9 including but not limited to, Universal Coach Parts
- 10 and S-1 Gard personnel?
- 11 MR. RUSSELL: Subject to the objections on
- 12 those two entities.
- 13 THE WITNESS: Not that I know of.
- 14 BY MR. KEMP:
- 15 Q. Okay. We took the deposition of a man
- 16 named Pablo Ferraros. Does that name sound familiar
- 17 to you?
- 18 A. Yeah. He ran the parts group for a little
- 19 while.
- 20 Q. And he indicated that he met with -- I take
- 21 so many depositions I can't remember what they say
- 22 sometimes. I think he indicated that he had a
- 23 meeting with Mr. Barron and/or some other gentleman
- 24 whose name's eluded me, but I can bring it in. Do
- 25 you have any information about that one way or the

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1	other?
2	MR. RUSSELL: I object. It actually does
3	misstate his testimony.
4	THE WITNESS: No.
5	BY MR. KEMP:
6	Q. Okay. Have you talked to Pablo about
7	whether or not he knew about the S-1 Gard or had any
8	meetings about it?
9	A. No. I have not talked to Pablo.
10	Q. Okay. But as far as you know as the PMK
11	again, that's 30(b)(6). As the 30(b)(6), you don't
12	think there was any contact between MCI and anyone
13	at S-1 Gard?
14	A. For what time period?
15	Q. Well, let's say '98 through let's go
16	back a little bit. Let's go '96 to 2016.
17	A. Not that I know of.
18	Q. Okay. Do you know of any investigation or
19	analysis that MCI did with regards to the S-1 Gard?
20	A. Not that I can find.
21	Q. Okay. And prior to April 18, 2017, had you
22	personally heard of an S-1 Gard?
23	A. I had not.
24	Q. And so your only knowledge of S-1 Gards
25	came in the course of this litigation?

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1 A. That's where it started, yes.

- Q. Okay. Have you seen the S-1 Gard video?
- 3 A. I pulled it. After this came about, I did
- 4 go on the website and saw the video.
- 5 Q. Okay. And that's the video where the stunt
- 6 guy goes under the bus and gets pushed out of the
- 7 way?
- 8 A. I don't know if it was a stunt guy or not,
- 9 but an individual went under the bus.
- 10 Q. Well, the video says "stuntman" on it.
- 11 A. I didn't recall that, but if you say so.
- 12 Q. Okay. All right. But that was the first
- 13 time you'd seen that video?
- 14 A. Yes.
- Q. And the first time you'd heard of S-1 Gard?
- 16 A. That's the first time I heard of -- when I
- 17 heard about S-1 Gard was in relationship to this
- 18 case, and that's when I looked and pulled it up on
- 19 the internet.
- 20 Q. And did you see the -- whether it was a
- 21 stuntman or not, but he was dressed in stuntman
- 22 clothing; right?
- 23 A. That's correct.
- Q. Okay. Did you see the portion of the video
- 25 where he's on -- he's simulating a bicyclist being

1	Page 85 moved out of the way of the rear tires?
2	A. There was several scenes that they had put
3	together and I don't recall that one, but it could
4	have been there.
5	Q. Okay. Let me ask it a little differently.
6	Do you recognize that there's a theoretical
7	potential that pedestrians or bicyclists could
8	potentially be run over by rear tires of a bus under
9	some scenarios?
10	A. There may be a scenario where that could
11	occur.
12	Q. Okay. And generally you understand
13	generally that that could happen under some
14	scenarios?
15	A. It's possible that that could happen.
16	Q. Okay. And basically bus manufacturers have
17	always known that?
18	MR. RUSSELL: Objection. Foundation.
19	Outside the scope.
20	THE WITNESS: Have always known what?
21	BY MR. KEMP:
22	Q. Well, let's put it differently. You knew
23	back in, let's say, 2000 that this was a potential
24	scenario?
25	A. There's a potential that a bus tire can

000755

Page 86 roll over something, that's correct. 1 2 Q. Okay. Including people? Anything, yeah. Tires on all vehicles can 3 Α. run over something. And you knew that back in 2000? 5 Q. Okay. 6 Α. Yes. 7 Probably before that time? Q. Probably before that time. Α. What exploration, if any, did MCI do 9 Okay. Q. that you're aware of with regards to some sort of 10 11 protective barrier, whether it's an S-1 Gard or some 12 other type of barrier, a protective barrier for the 13 rear tires? What do you mean by "protective barrier"? 14 Well, the S-1 Gard would be something that 15 Q. 16 would be a protective barrier; right? I don't know that. 17 Α. Okay. You saw the video? 18 Q. I saw the video. 19 Α. 20 Q. Looked like it worked pretty good in the video? 21 22 Α. As long as you're going 1 mile an hour, it seemed to kind of work and the stuntman seemed to be 23 helping himself to move out of the way. 24

Okay. But the video appeared to work

25

Q.

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pretty good; right?
A. As I said

- A. As I said previously, it looked like the
- 3 stuntman was helping himself move out of the way.
- 4 But at 1 mile an hour, it seemed to be okay.
- 5 Q. You think they were only going 1 mile an
- 6 hour in that video?
- 7 A. That's my guess. He wasn't going very
- 8 fast.
- 9 Q. All right. You remember the old trains
- 10 that had the cow catchers on them?
- 11 A. Yes.
- 12 Q. Okay. Has MCI given any consideration to
- 13 having a cow catcher, a diversionary device,
- 14 anything of the sort with regards to the rear tires?
- 15 A. I don't know of any cow catcher we've ever
- 16 looked at for the rear tires.
- 17 Q. Okay. Any type of protective device?
- 18 A. Protect for what?
- 19 Q. Protect people or objects that could
- 20 potentially be run over by the rear tires?
- 21 A. Well, objects that get underneath the bus,
- there is a potential that the rear tires can run
- 23 over them. That's true.
- 24 Q. Okay.
- 25 A. I don't understand your question.

- Page 88 Have you looked at designing any type of 1 Q.
- 2 device that could mitigate that potential hazard?
- Well, you have to have clearance underneath
- the vehicle for it to be able to operate on the 4
- streets. 5
- 6 Q. True. But do you have to have the
- clearance that the vehicle has now?
- 8 Α. Yes. It's for the suspension.
- 9 So the suspension now is the minimum height Q.
- 10 you can operate the coach on on the streets in your
- 11 view?
- 12 In our opinion for its market, the
- 13 suspension on a coach travels more than suspension
- 14 on a transit bus.
- When you say "travels more," you mean going 15 Q.
- up and down? 16
- 17 Α. Correct.
- 18 Q. Okay.
- And the reason for that is because the 19 Α.
- 20 market requires a better ride because you ride on a
- coach much longer than you do on a transit bus. 21
- By "better ride," you're talking about a 22 Q.
- more comfortable ride? 23
- 24 Correct. So the suspension travel, that
- 25 defines some of those clearances as well as tire

- 1 cooling, brake cooling. So some of those clearances
- 2 are defined by that.
- 3 Q. Okay. Is there a standard clearance
- 4 between the bottom of the suspension and the road?
- 5 A. No.
- 6 Q. Is there a specification that you try to
- 7 hit?
- 8 A. The suspension -- first off, the suspension
- 9 on a coach is above the bottom of the axle
- 10 components.
- 11 Q. Okay.
- 12 A. So the axle components are actually the
- 13 closest to the road. That's the components that you
- 14 mount the brakes and the tires and rims to.
- 15 Q. And the axle component is how high up from
- 16 the road?
- 17 A. It varies depending -- the drive axle is
- 18 more than the front axle. But the exact number I
- 19 don't know off the top of my head.
- 20 Q. Okay. And the axles are one, two, and
- 21 three?
- 22 A. Three-axle bus, correct.
- Q. So assuming for the sake of argument that
- 24 the two and three axles were involved in this
- 25 accident, how high up is the axle from the road, the

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two and three? 1

- 2 Α. I don't know. Not as I sit here. I don't
- keep that in my head. 3
- Okay. But the axle is the closest thing to
- the road when you look at the axle, the suspension, 5
- and the chassis; right? 6
- 7 Well, Motor Coach doesn't really have a Α.
- 8 chassis, per se. We're a monocoque construction.
- We really don't have a chassis. So you have an 9
- 10 axle, and then on this bus with the Meritor axle,
- 11 you have the suspension supports that mount to the
- axle and the airbags above that, and that's your 12
- suspension. And so the closest thing to the road is 13
- the axle, which is -- I don't remember the distance 14
- 15 from the axle to the road. Off the axle are the
- 16 brakes, the rims, and the tires. And that defines
- 17 how high it is off the road.
- 18 Q. Okay.
- 19 And then the body frame is -- I mean, Α.
- 20 you've got to have -- for its market, you have to --
- what do you call it? It has to have clearance so 21
- 22 that as you go through various street conditions
- 23 that it can operate. You can't have zero ground
- 24 clearance.
- 25 I called the body frame a chassis Q. Okay.

	VIRGIL HOOGESTRAAT - 10/13/2017
1	Page 91 and you're calling it a body frame?
2	A. If you're calling the frame between the
3	axles a chassis, then I'm calling it a body frame.
4	Q. Okay. And the body frame is higher up than
5	the axle? The bottom of the body frame?
6	A. I'm not sure that's true. They get fairly
7	close they could be. I don't remember.
8	Q. So earlier you told me the axle was the
9	closest thing to the road, and now you think the
10	axle and the body frame are the same?
11	A. I don't know that the body frame is higher
12	or about the same. I don't recall.
13	Q. Okay. Is there occasions where you'll have
14	a broken axle because it hits a rock or some other
15	obstruction in the road?
16	A. That can happen.
17	Q. Okay. And how do you mitigate against
18	that?
19	A. Mitigate a broken axle?
20	Q. No. Is there any effort made to mitigate
21	the axle striking whatever potentially could break
22	it?
23	A. That's basically the driver tries to
24	mitigate from hitting obstacles that could break the

axle.

Page 92 From a design engineering point of view, 1 Q.

- 2 have you attempted to design the body frame to
- provide some sort of protection to the axle? 3
- Well, the body supplies -- the axles are 4
- mounted to the body with what we call radius rods. 5
- 6 If you strike something, the radius rods will bend
- and the structure starts to bend the axle -- before
- 8 you actually snap off the axle. So you have bodies
- 9 deforming, components deforming, before the axle
- actually breaks it if I understand your question 10
- 11 correctly.
- 12 Q. Okay. So snapping the axle was not
- 13 something you typically see. It comes off from the
- part where it hooks up to the frame? 14
- 15 No. You don't see that either. Α.
- 16 see is parts start to deform and eventually,
- 17 depending on the strike, how heavy it is, it's
- 18 possible a component will break.
- 19 0. Well, let's get back to the S-1
- 20 I'm not an artist, but I've tried to place
- the S-1 Gard before the two axles. 21
- 22 Α. Okay.
- 23 Is that your general understanding of how
- 24 the S-1 Gard is supposed to be installed?
- 25 Α. Roughly.

Page 93 1 Q. All right. Now, with regards to this 2 installation, is there a reason it could or couldn't be done on the J4500 if you wanted to? 3 As I said previously, if we did install the 5 S-1 Gard, you have to take into account the more suspension travel than it was designed originally for a transit bus, which is much less suspension You would have to take that into account. travel. We also know that, as a result of the 9 10 suspension travel on a motor coach, that when you 11 strike something, there's a lot more movement in 12 suspension; that when that strikes, whatever it strikes, that we don't create some other issue that 13 is more -- that doesn't have some other failure mode 14 15 that we're not aware of as we speak today. As we sit here today, do you know whether 16 17 or not an S-1 Gard could be placed on a J4500 18 without impacting the functionality or integrity of 19 other systems in the bus or coach -- excuse me. 20 Α. I don't know that at this time. 21 So you don't know one way or the other? Q. 22 Α. I do not know. Okay. So could be done, couldn't be done. 23 24 We just don't -- you just don't know?

I don't know. I don't know.

25

Α.

If we tried

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Page 94
1 to do that, we would also have to look at what would
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- 2 happen if it did get damaged.
- Q. Okay. With regards to PMK Item Number 11,
- 4 could you look at that? See, I told you there was
- 5 some repetition here. I'm down to 11.
- 6 A. Okay.
- 7 Q. So the PMK or 30(b)(6) topic is, quote,
- 8 "Whether it is feasible to place an S-1 Gard on a
- 9 2008 MCI J4500," unquote. Did I read that right?
- 10 A. Yes.
- 11 Q. So if I understand you correctly, you don't
- 12 know one way or the other, as we sit here today,
- 13 whether it's feasible to put the S-1 Gard on the
- 14 2008 MCI J4500; is that correct?
- 15 A. I don't know if it's feasible or prudent.
- 16 Q. Okay.
- 17 A. Because if it fails in a manner where it
- 18 would cause problems with the tires and the brakes,
- 19 then it's causing an issue.
- MR. KEMP: Why don't we mark that.
- 21 (Exhibit 4 marked.)
- 22 BY MR. KEMP:
- Q. Have you seen Exhibit 4 before?
- A. Recently.
- Q. In connection with this litigation you saw

Page 95 1 it? 2 Α. Yes. Prior to the litigation, you didn't know 3 4 that someone at New Flyer had written a letter with regards to the S-1 Gard? 5 Α. That's correct. 6 Q. Okay. And, as I understand it, last year sometime New Flyer purchased MCI? 8 9 Α. I think it was --10 Or a year before rather? 11 Α. I think it was the end of the year before 12 that. So sometime in November 2015? 13 Q. November, December time frame someplace, 14 Α. 15 yeah. 16 So in the fall of 2015, New Flyer purchased 17 MCI; correct? 18 Α. That's my understanding. 19 Okay. And do you know Mr. Ellis, the Q. 20 New Flyer engineer that wrote the letter? Α. 21 No. 22 He says, quote, "By way of this Q. Okay. 23 letter, New Flyer engineering maintains the position that the installation of the S-1 Gard in New Flyer 24 25 facilities does not compromise the integrity of the

Page 96 chassis or suspensions of the coach on which it is 1 2 installed, nor is it expected to impact the functionality or integrity of other systems in the 3 4 coach, " end quote. Did I read that right? 5 Α. Yes. Do you have any reason to disagree with 7 him? 8 MR. RUSSELL: Objection. Foundation. First off, New Flyer doesn't 9 THE WITNESS: make a coach. 10 11 BY MR. KEMP: 12 Q. Okay. Number one. 13 Α. Well, his word is "coach" twice in this 14 sentence; right? 15 16 Α. That's correct. But they don't make one. MCI does. 17 Q. 18 Α. MCI does. Okay. All right. 19 Q. 20 Α. And, secondly, as I said before, if the --21 with our suspension travel and we damage the 22 S-1 Gard in normal operation and it comes -- where it would come into the tire or the brake system, we 23 could create a serious issue. So I don't agree with 24 this letter because I don't know -- but I don't 25

- Page 97 disagree either because I don't know what studies 1
- 2 they did to come to this conclusion.
- Okay. As we sit here today, MCI hasn't 3
- done any studies? 4
- 5 Α. No, sir.
- 6 Q. Now, one option for protective barrier
- would be an S-1 Gard. But another option would be 7
- 8 just to put a piece of metal on the chassis that is
- 9 at a -- let's see if I can get this right --
- 10 45-degree angle heading towards the back of the bus?
- That would be an option? 11
- 12 Α. I don't know. I mean, you could do that.
- 13 Q. Well, that's what I'm asking. In theory,
- 14 you could do that; right?
- In theory you could put a piece of metal 15
- 16 underneath the bus.
- Okay. And if you did put a piece of metal 17
- like that, if you had an object, it would 18
- potentially divert the object? 19
- 20 MR. RUSSELL: Objection. Foundation.
- Incomplete hypothetical. 21
- 22 THE WITNESS: I don't know that. Ιt
- potentially could. But I don't know that it would. 23
- BY MR. KEMP: 24
- 25 Q. But it might?

```
I'm just saying I don't
 1
         Α.
              I don't know that.
     know how stiff that object, piece, whatever you put
     underneath that is, whether it would just go over
     the whatever or if it was so stiff that it didn't do
     that what it would then cause. I don't know.
 5
         Q.
              Has MCI given any consideration to a
 7
     protective device such as the one we have drawn on
 8
     this drawing?
 9
              Not that I'm aware of.
10
                    And, as we sit here today, can you
11
     see that there would be advantages potentially to
12
     having this device because it would keep objects
13
     from impacting the tires?
              MR. RUSSELL: Objection.
14
                                         Foundation.
     Incomplete hypothetical.
15
16
     BY MR. KEMP:
17
              And the axle.
         Ο.
18
         Α.
              It could have more disadvantage than
19
     advantages.
                  I don't know that as we sit here today.
20
         Q.
              The one potential advantage would be that
21
     it would prevent, in some cases, objects from
22
     impacting the tires and the axle; correct?
23
              MR. RUSSELL:
                            Same objections.
                            I don't know if it would have
24
              THE WITNESS:
25
     done that or not. I mean, you would have to do
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- Page 99 1 testing to find that out. I don't know. And then
- 2 under what conditions do you do the testing? So I
- 3 don't know if it would do that or not.
- 4 BY MR. KEMP:
- 5 Q. Okay. But no consideration has been given
- 6 at MCI that you know of to testing or designing or
- 7 installing a kind of barrier like we have depicted
- 8 on the drawing?
- 9 A. A fortified piece of something that you put
- on what, I presume, is underneath the bus, we have
- 11 not done anything like that, stuck something
- 12 underneath it.
- 13 Q. Okay. Can you see how in some instances it
- 14 might be advantageous to have a device like this or
- 15 some sort of cow catcher to protect the rear tires
- 16 or rear axles?
- 17 MR. RUSSELL: Same objections. Asked and
- 18 answered.
- 19 THE WITNESS: I don't know that it would.
- 20 BY MR. KEMP:
- Q. But you don't know that it wouldn't?
- 22 A. Again, it would be depending on the
- 23 situation what test you're running -- under one
- 24 scenario I don't know that it would.
- Q. Okay. All right. Why don't we mark this

1 next in order just so we have a record of what we're 2 talking about. What number is that? 3 THE COURT REPORTER: 5 (Exhibit 5 marked.) 6 THE WITNESS: Are we done with 4? BY MR. KEMP: 7 8 Q. The letter, yeah, we're done. Are we done with 3? Α. 9 10 Is 3 the wind tunnel? Yeah, we're done 11 with 3. We try to keep them all kind of together so 12 the court reporter doesn't lose them. 13 MR. RUSSELL: Just for the record, Number 5 was a drawing by Mr. Kemp so it's not confusing 14 15 as --16 MR. KEMP: That is true. This is going to 17 be great evidence in the patent fight 20 years from 18 now as to who originated this concept; right? That's right. 19 MR. RUSSELL: 20 BY MR. KEMP: 21 Okay. 12 is customer requests. Do you 0. 22 know of any customer requests to MCI for S-1 Gards 23 or any -- let's stick with S-1 Gards. 24 Just recently we found one oral request of it. Just found that very, very recently in talking 25

- Page 101 1 to an individual who mentioned that one customer in
- 2 a preproduction meeting brought it up.
- Q. Okay. And do you know who that customer
- 4 was?
- 5 A. Austin, Texas, Capital Metro.
- 6 Q. Capital Metro. What kind of buses or
- 7 coaches do they purchase?
- 8 A. D Coaches.
- 9 Q. And what'd they use those for?
- 10 A. They use them in the commuter market in
- 11 Austin, Texas, we presume.
- 12 Q. And so they asked about the S-1 Gard?
- 13 A. They asked, as I understand, orally.
- 14 O. Is there another way to ask?
- 15 A. Well, it is a bid contract. It wasn't in
- 16 the bid contract.
- 17 Q. Okay. Is this what is sometimes referred
- 18 to as a pre-bid submittal meeting?
- 19 A. Well, there's pre-bid submittal meetings.
- 20 Transit authorities come out with a specification
- 21 for the vehicle in the bid contract, and it was not
- 22 in the specification of the vehicle. But it was
- 23 found that they made this comment in this
- 24 preproduction meeting, where they're buying six
- buses, whether MCI had ever installed an S-1 Gard.

1	Page 102 Q. Was an S-1 Gard subsequently put on these D		
2	Coaches?		
3	A. MCI no.		
4	Q. Did MCI get the bid?		
5	A. Yes.		
6	Q. And sold them 60 D Coaches?		
7	A. Six.		
8	Q. Six?		
9	A. Six.		
10	Q. But there was no S-1 Gard put on the D		
11	Coaches?		
12	A. By MCI.		
13	Q. And what was was it put on by someone		
14	else?		
15	A. We understand that to be the case.		
16	Q. Okay. And what kind of MCI buses were		
17	these? D Coaches?		
18	A. Yes.		
19	Q. Okay. And when did this happen, if you		
20	know?		
21	A. 2016 sometime. When they were installed?		
22	Q. Uh-huh.		
23	A. We don't know.		
24	Q. Okay. But this is a coach as opposed to		
25	what you would refer to as a transit bus?		

VIRGIL HOOGESTRAAT - 10/13/2017				
1	Page 103 A. It was what we call a commuter bus. It is			
2	based on a coach.			
3	Q. And I know it's been almost or only two			
4	years, but are you aware of any problems that			
5	they've had with the S-1 Gard on the D series			
6	coaches purchased by the Austin transit authority?			
7	A. The only information we have at this time			
8	is that they've had a lot of damage with the			
9	S-1 Gards.			
10	Q. And what's your source of information for			
11	that?			
12	A. The service rep. I asked him, What's their			
13	experience? He said they just have a lot of damage			
14	problems.			
15	Q. What's his name?			
16	A. Carl Puncick.			
17	Q. Can you spell the last name?			
18	A. P-u-n-c that I recall. I'm not sure the			
19	spelling is correct.			
20	Q. Is he an MCI employee?			
21	A. Yes.			
22	Q. Is he stationed in Texas?			
23	A. I think so.			
24	Q. Do you know what part of Texas?			

000773

25

Α.

I do not.

And do you know who made the oral request 1 Q. 2 to MCI other than just Austin transit? 3 Α. That's all I know. Okay. So it would have to be someone 4 Q. involved in Austin transit? 5 Α. I believe they call it Capital Metro. 7 Capital Metro. Yeah, you did say that. Q. 8 Austin being the capital of Texas; right? 9 Α. I don't know where the Capital Metro comes 10 from, but I presume so. Austin is the capital of 11 Texas. 12 Okay. Was there a reason that someone Q. 13 other than MCI installed the S-1 Gards on these six 14 coaches? 15 MR. RUSSELL: Objection. Foundation. THE WITNESS: 16 I have no idea. I mean, they 17 ask a question had we installed S-1 Gards. 18 answer was no, and that was the end of it. BY MR. KEMP: 19 20 Q. When we deposed Mr. Ellis, he said that 21 New Flyer had installed S-1 Gards in its factory 22 before delivering buses.

23 That may be true.

24 Okay. Do you know whether or not MCI has Q.

25 ever installed S-1 Gards in their factory before

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VIRGIL HOOGESTRAAT - 10/13/2017

1 delivering buses?

- 2 No, they have not.
- Okay. And how is it that you know that? 3 Q.
- I asked. I asked anybody. And it's not an Α.
- It's not a special. It's nothing we've 5 option.
- ever done. We've never even had a request on a J
- Coach.
- 8 Q. Okay. Moving over to Item 13, I think
- you've said that there's no test that MCI has done 9
- on S-1 Gards? 10
- 11 That's correct. Α.
- Going to 14, I think we talked about 12 Q.
- protective barriers. As we sit here today, you 13
- don't know of any effort MCI has made to design or 14
- 15 engineer a protective barrier to protect human
- 16 beings from coming into contact with the rear tires
- of a bus; is that correct? 17
- 18 Other than the shape of the vehicle and the Α.
- way the fenders are, that's what we have. 19
- 20 Q. Are there fenders on the rear tire of a
- 21 J --
- 22 Α. We call them fenders.
- Are they fenders really? 23 0.
- Well, they're wheel housing closeouts. 24 Α.
- we call them fenders. 25

1	Page 106 Q. Okay. Has there been any consideration		
2	made to making a more extensive fender for the		
3	J4500?		
4	A. I don't know what that means.		
5	Q. Have you seen buses that they have the wall		
6	just cover the entire or coaches, excuse me,		
7	cover the entire rear wheel section with surface		
8	material?		
9	A. Coaches?		
10	Q. Yeah.		
11	A. I've seen transit buses.		
12	Q. Okay. You've seen transit buses like that.		
13	A. I have not seen coaches.		
14	Q. Okay. And what do you call a transit bus		
15	when it does that?		
16	A. I don't know.		
17	Q. Have you heard the term "spat"?		
18	A. You can call it that, I guess, if that's		
19	what they call it.		
20	Q. Have you heard that term?		
21	A. I've heard the term "spat."		
22	Q. Okay. And what does that mean to you?		
23	A. It's just the decorative closeout over the		
24	tires, tire area.		
25	Q. And would I be correct that spats preclude		

Page 107 humans from coming into contact with the tires to a 1 greater extent than the fender on a J4500 would? 2 Objection. Foundation. 3 MR. RUSSELL: THE WITNESS: I don't know that. see why it would. 5 BY MR. KEMP: Okay. If you have a person next to a 7 Q. 8 J4500, there's basically no barrier between the tires and the person; right? 9 Certainly the tires are exposed if that's 10 11 what you mean. 12 Yeah, the tires are exposed. And in the Q. transit bus with spats, the tires are not exposed; 13 14 right? Yeah, part of the tire is not exposed. 15 16 Q. Okay. And by -- basically there's 3 or 4 inches of the tire exposed. That's it; right? 17 I don't know the exact dimension. I know 18 Α. part of the tires are exposed. 19 20 Q. Has there been any consideration given to making the fender of the J4500 larger or more 21 22 encompassing so less of the tire's exposed? In a motor coach, we can't do that. 23

A motor coach has tremendous -- is used in

Why is that?

24

25

Q.

Α.

- Page 108
 1 multiple applications at high speed. And as a
- 2 result, the tire heat -- you have to have exposure
- 3 to be able to cool the tires because at high speeds
- 4 the tires get extremely hot. And those have to be
- 5 able -- you have to allow cooling.
- 6 You also have to allow, because we know in
- 7 mountainous terrains and various terrains, brake
- 8 cooling so we cannot just close off the tire
- 9 compartment because of all the heat problems we have
- in trying to maintain heat control.
- 11 Q. Okay. Are you telling me you can't close
- 12 it off entirely?
- 13 A. We cannot close it off entirely.
- 14 Q. But you could close off more than it's
- 15 currently closed off?
- 16 A. We don't think so because we already have
- 17 concerns on heat that we work with all the time
- 18 trying to keep the heat down.
- 19 Q. Have you done any testing to determine if
- 20 you could close it off more than it's closed off
- 21 now?
- 22 A. Not in recent years.
- Q. When you say "not in recent years," that
- 24 implies that there was testing done at some point in
- 25 the past.

	VIRGIL HOOGESTRAAT - 10/13/2017			
1	Page 109 A. There may have been.			
2	Q. Do you know of any?			
3	A. Not that I was involved with or know of.			
4	Q. Okay. So the direct answer to my question			
5	is, as you sit here today, you don't know of any			
6	testing done to determine whether or not you could			
7	enclose the J4500 rear tire, the fender area, more			
8	than it is now and still have a functional coach?			
9	A. I'm telling you today that right now we			
10	have a problem with heat problem already. To close			
11	it off seems illogical that that would improve			
12	reduce the temperature in that area.			
13	Q. Well, you could add a vent at the same time			
14	you close it off; right?			
15	A. Vent where?			
16	Q. To vent air into the area you're concerned			
17	being hot.			
18	A. Venting from where?			
19	Q. From the outside to the area that you're			
20	concerned being hot.			
21	A. You talking about blowing air in there?			
22	Q. No. I'm just talking about designing the			
23	fender with a vent in it.			
24	A. Right now we have air moving, quite a bit			
1				

000779

25

of air. Even a vent will reduce the airflow.

- Page 110
 don't see how we could design a vent with a small
- 2 area. I'm not sure I understand exactly what you're
- 3 saying, but that would maintain that much cooling --
- 4 because the brakes, you keep in mind, are toward the
- 5 inside of the tires.
- 6 Q. Okay. Basically what I've drawn is what we
- 7 have now with the J4500; right? Rear tires?
- 8 A. Well, you're showing two circles. One is a
- 9 dual and one's a single tire.
- 10 Q. Yeah. Now, one option here would be to
- 11 separate the axles a little bit to drop down -- drop
- 12 down part of the, I guess, fender is what you're
- 13 calling it?
- 14 A. You can't do that.
- 15 Q. Some companies do do that.
- 16 A. I know, but then we have to put -- some of
- 17 our markets may have to allow for chains. So you
- 18 can't just drop that down like you've drawn. Some
- 19 markets --
- Q. Okay. Maybe you have to have a little more
- 21 space here. But some buses -- some coaches are made
- 22 exactly as I've drawn it; right?
- 23 A. Maybe for their markets that works for
- 24 them.
- Q. Okay. In fact, I think the Prevost is like

Page 111 this? 1 Α. Not that much. You've got that piece almost going to the ground. 3 4 All right. Okay. Prevost is like this. 5 Is that better? Α. It's closer. Okay. Did MCI give any consideration to 7 0. 8 doing an extension of the fender in the area between 9 the two rear tires at any time that you're aware of? MR. RUSSELL: Objection. It's outside the 10 11 scope. THE WITNESS: We have some, but not as much 12 as you've drawn. 13 BY MR. KEMP: 14 Okay. You've given some to maybe that 15 Q. 16 extent? To that little extent, yeah. 17 Α. 18 And what is the purpose for doing that? Q. 19 Α. Styling, and to close off the area in the 20 suspension area. 21 Would that also not give you better Q. 22 aerodynamic or drag coefficiency? Objection. Foundation. 23 MR. RUSSELL: 24 THE WITNESS: According to the test report

in there, it did not do that.

Page 112 BY MR. KEMP: 1 2 This was one of the items tested? Q. Α. But they put in -- in the aerodynamic 3 test report, they just closed off that whole area to see the effect and it didn't work out that it 5 improved the aerodynamics. That's completely closed off; that's not partially closed off? 8 That's correct. 9 Α. 10 Okay. And what is your understanding, if any, with regards to whether or not rotating tires 11 in the rear of a bus creates some sort of a suction 12 effect? 13 MR. RUSSELL: Objection. Outside scope. 14 Incomplete hypothetical. 15 Foundation. THE WITNESS: Creates a suction effect? 16 17 BY MR. KEMP: 18 Q. Right. Never noticed any suction effects. 19 Α. 20 Q. Have you ever heard of that as being a 21 potential hazard? 22 Α. No. 23 Q. Okay. I only have one of these. 24 Why don't we mark that.

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(Exhibit 6 marked.)

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Page 113
1 BY MR. KEMP:
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- Q. What number do you have on there?
- 3 A. 6.
- 4 Q. Exhibit 6 purports to be a publication in
- 5 an engineering journal by a man named Green
- 6 discussing potential rear tire suction. Have you
- 7 ever seen that article before?
- 8 MR. RUSSELL: Objection. Predicate.
- 9 THE WITNESS: I think I saw it here
- 10 recently.
- 11 BY MR. KEMP:
- 12 Q. Prior to the litigation, have you seen this
- 13 article before?
- 14 A. I have not.
- Q. And so now that you have seen the article,
- 16 you are aware of Mr. Green's contention, I will call
- 17 it, that the rotating tires create some sort of
- 18 suction?
- 19 A. That's what he contends.
- Q. In fact, if you flip over to "Conclusion,"
- 21 could you read me the first sentence? Do you see
- 22 his conclusion there?
- 23 A. In paragraph 1, yes.
- Q. What does the first sentence say?
- 25 A. "As described in the Bernoulli" --

Page 114 Bernoulli; right? 1 Q. 2 Α. Bernoulli. 3 0. Okay. Is that the Bernoulli analysis he did? 5 I think he's referring to the Bernoulli Q. Principle. Do you know what that is, in general? 6 7 Α. In general. Why don't I quote directly from 8 Q. 9 Bernoulli, 1738 publication, hydrodynamica. "An increase in the speed of a fluid occurs 10 simultaneously with a decrease in pressure or 11 decrease in the fluid's potential energy, " end 12 quote. Do you understand that being Bernoulli's 13 14 Principle? 15 MR. RUSSELL: Objection. Outside the 16 scope. THE WITNESS: That's what I understand the 17 18 basis for it is. BY MR. KEMP: 19 Okay. Now, applying Bernoulli's Principle 20 Q. to the rotating rear tires of an MCI J4500, would 21 22 you agree or disagree that that creates a negative 23 pressure zone that can act as a suction? MR. RUSSELL: Same objection. Incomplete 24 25 hypothetical.

1	Page 115 THE WITNESS: I don't know that.		
2	BY MR. KEMP:		
3	Q. Don't know one way or the other?		
4	A. I don't know it creates a negative pressure		
5	zone.		
6	Q. And do you know one way or the other		
7	whether it's a suction effect?		
8	A. I don't know that.		
9	Q. You do not know that?		
10	A. I do not know that.		
11	Q. Okay. But Mr. Green contends there is. Do		
12	you see that?		
13	A. He says that.		
14	Q. Okay. Has MCI done any sort of testing or		
15	analysis to determine whether or not what Mr. Green		
16	claims is true?		
17	A. Not that I'm aware of.		
18	Q. Okay. And what's the date of Mr. Green's		
19	paper?		
20	A. 2001.		
21	Q. What's the year that the J4500 came out?		
22	A. 2000, 2001.		
23	Q. Okay. And since you don't know whether or		
24	not there is a suction from rotation of the rear		
25	tires, can I assume that MCI did not do anything, in		

terms of design engineering, to try to decrease the 1 amount of suction in the rear tires? 2 Since we don't know there is a suction in 3 the rear tires, no, we did not do any design work to 4 solve something we don't know occurs. 5 6 And since you don't know whether or not that occurs, you also didn't provide any sort of 8 warnings to purchasers with regards to that potential hazard; correct? 9 10 I don't know that that's a potential Therefore, if it's not a potential hazard, 11 12 we wouldn't give a warning. 13 Q. Do you think, if there is suction from the 14 rear tires, that that would be a potential hazard to 15 pedestrians or adjacent bicyclists? MR. RUSSELL: Objection. Outside the 16 Foundation. Incomplete hypothetical. 17 scope. THE WITNESS: I don't know that it is. 18 BY MR. KEMP: 19 20 Q. I know you don't know it is a -- whether it is a potential hazard. But assuming, for the sake 21 22 of argument, that Mr. Green is correct, would you

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No.

Same objections.

agree with me that it's a potential hazard?

MR. RUSSELL:

THE WITNESS:

23

24

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- BY MR. KEMP: 1
- 2 Q. Why not?
- Because I don't know how little that 3
- suction is, if it is a suction. 4
- Okay. So it would have to reach a certain 5
- 6 threshold in terms of suction before you would
- consider it a potential hazard. Is that what you're
- 8 saying?
- I'm saying, if it's like a pound of 9 Α.
- suction, I wouldn't consider that a potential hazard 10
- if it is a suction. 11
- 12 Q. Okay. And when you say "a pound of
- suction, " are you referring to side forces, or what 13
- are you referring to in terms of pound? 14
- 15 I'm just saying pounds force. If it was a
- 1 PSI of suction, if that's all it is, it's not a 16
- potential hazard, if it is a suction. 17
- Okay. And let's make sure we're talking 18 Q.
- about the same thing here. Pounds per square inch 19
- 20 is the reference you're giving me?
- 21 Α. Yes.
- And so you think, if it's 1 pounds per 22
- square inch of suction, it's not a potential hazard; 23
- 24 is that correct?
- In my opinion, that would not be a hazard. 25 Α.

Page 118 1 Would 2 pounds --Q. Okay. I don't know what the threshold --Α. Just a second. Outside the 3 MR. RUSSELL: Foundation. Incomplete hypothetical. 4 scope. 5 THE WITNESS: I don't know what the 6 threshold is. We'd have to determine that. don't even know that we have a suction. 8 BY MR. KEMP: Why would, in your view, 1 pound of 9 Q. Okay. 10 PSI not be a potential hazard? 11 MR. RUSSELL: Same objections. THE WITNESS: 12 It's insignificant. 13 BY MR. KEMP: 14 And when you say "insignificant," Q. 15 you mean what? 16 It will not cause anything. How much pounds per square inch -- can I 17 use the term side force or suction? What's a 18 19 term --20 Α. I don't know. As long as you tell me what 21 you're referring to. 22 Okay. Assuming for the sake of argument 23 that there is a side force, wind going sideways, do 24 you think 1 pound per square inch of side force 25 would be a potential hazard?

Page 119 Same objections. 1 MR. RUSSELL: 2 THE WITNESS: I don't think so. BY MR. KEMP: 3 And how much pounds per square inch Okay. of side force do you think you would need to cause a 5 bicyclist to wobble? MR. RUSSELL: Same objections. 8 THE WITNESS: If he's riding his bicycle? BY MR. KEMP: 9 10 Q. Right. Between the inertia and the gyroscopic 11 Α. effect of the wheels, I don't know. 12 I'm not assuming he's under the wheels. 13 Q. I'm assuming he's by the wheels. 14 I'm just saying, if a bicyclist is riding 15 Α. 16 his bicycle, has inertia going forward, some gyroscope with respect to the tires rotating, how 17 much force it would take him to wobble, I wouldn't 18 19 know. 20 Q. Could it be 1 pound per square inch? I find that highly unlikely because 21 Α. that's -- a breeze could be more than that, I'm 22 23 sure. Okay. Do you ride bicycles? 24 25 Α. Used to.

1 And when you have a constant breeze, Q. Okay. 2 you tend to lean into it; right? Α. 3 Yes. And so you kind of operate the bicycle to 4 Q. compensate for the potential breeze; right? 5 6 MR. RUSSELL: Objection. Incomplete hypothetical. Outside the scope. 8 THE WITNESS: Depending on how much the 9 breeze is, yeah. 10 BY MR. KEMP: Do you think a bicyclist has sufficient 11 12 reaction time to compensate for a side force in the amount of, say, 1 pound per square inch? 13 14 Α. Yes. Objection. Foundation. 15 MR. RUSSELL: 16 Incomplete hypothetical. Outside the scope. BY MR. KEMP: 17 The answer is "yes"? 18 Q. 19 Α. I think so. 20 Okay. Would you agree with me that there's a theoretical hazard if a bus generates a side 21 22 force -- whether it's 1 PSI or 2 or 3, there's a 23 theoretical hazard to bicyclists in terms that it 24 may cause them to wobble?

MR. RUSSELL: Same objections.

```
Page 121
 1
              THE WITNESS:
                             No.
 2
     BY MR. KEMP:
              How about if it was 10 PSI of side force
 3
 4
     being generated?
                             Same objections.
 5
              MR. RUSSELL:
                             I don't know.
 6
              THE WITNESS:
     BY MR. KEMP:
              That wouldn't be a theoretical hazard or it
 8
         Q.
 9
     would?
10
              MR. RUSSELL:
                             Same.
              THE WITNESS: I don't know.
11
12
     BY MR. KEMP:
              But you don't think 1 is?
13
         Q.
              I think 1 is so insignificant I'm sure it's
14
     not an effect.
15
              2, 3, 4, 5, do you have an answer for that?
16
              No, I do not.
17
         Α.
18
              MR. RUSSELL: Same objections.
     BY MR. KEMP:
19
20
         Q.
              So anything over 1 you don't know whether
21
     it could potentially be a significant hazard to a
22
     bicyclist?
23
              MR. RUSSELL:
                             Same.
              THE WITNESS: I don't know that because we
24
     haven't run tests to determine that.
25
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- 1 BY MR. KEMP:
- Q. Okay. And to do that you'd have to do
- what? 3
- You'd have to determine what -- that would
- 5 vary so much by the bicyclist, the bicycle, the
- distance from the vehicle. There's so many
- variables you'd have to run some kind of test in
- 8 that regard. So many variables.
- 9 Okay. Where were we on -- okay. Q. Since you
- 10 didn't design or engineer protective barriers,
- there's no patent applications, 15; is that correct? 11
- 12 Α. That's correct.
- 13 Q. All right. 16, did the New Jersey Transit
- 14 Authority buy thousands of buses from MCI in 2015 or
- 15 2016?
- 16 Α. They bought buses from MCI, yes.
- 17 it's a --
- 18 Q. Continuing contract?
- -- continuing contract. So I don't know if 19
- 20 it's thousands.
- 6,500 buses in that contract? 21 Q.
- 22 Α. 6,500? I doubt that.
- 23 How many do you think is in this contract?
- 24 Α. Well, it's probably closer to a thousand.
- 25 But, I mean, every year it has to be approved, the

1	Page 123 quantity, for us in the contract. So it's not all		
2	one it's not an order for automatically that		
3	number of buses.		
4	Q. And it's a thousand over how many years?		
5	Do you know?		
6	A. No, I don't know.		
7	Q. Okay. Is that a big contract?		
8	A. For a bus market, that's a big contract.		
9	Q. Okay. Is that the biggest contract MCI has		
10	ever had?		
11	A. Not that I'm aware of.		
12	Q. Okay. And when the New Jersey Transit		
13	Authority put that contract out for bid, was there a		
14	presubmittal process?		
15	A. Yes.		
16	Q. Were you involved in the presubmittal		
17	process?		
18	A. No.		
19	Q. But you're here to testify to the type and		
20	nature of the buses sold to the New Jersey Transit		
21	Authority; right?		
22	A. Yes.		
23	Q. What kind were they?		
24	A. D Coaches. D4500s		
25	THE COURT REPORTER: ED?		

```
Page 124
                             No.
                                  They're D4505s.
 1
              THE WITNESS:
 2
     BY MR. KEMP:
              If you need to take a break at any time,
 3
         Q.
     just let me know.
                        Okay. Would that be considered a
 5
     transit bus?
         Α.
              They were called commuter buses.
 7
              But that would be considered a coach?
         Q.
         Α.
              It was a coach in a commuter configuration.
         0.
              So it was a D Coach in a commuter
     configuration.
10
                     Yes?
11
         Α.
              Yes.
12
              Do you make J Coaches in commuter
         0.
13
     configurations?
14
         Α.
              No.
15
                     And with regards to the D Coach that
              Okay.
16
     was sold to the New Jersey Transit Authority, what
     protective barriers, if any, do they have to protect
17
18
     human beings, including but not limited to
19
     pedestrians or bicyclists, from coming into contact
     with the tires of the bus?
20
              MR. RUSSELL: Objection. Vaque.
21
2.2
                             Beyond what is inherent in
              THE WITNESS:
23
     the design of the bus, that's the protective
24
     barriers.
25
     ///
```

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- 1 BY MR. KEMP:
- Does that have the same fender 2 Q. Okay.
- configuration that we've discussed with regards to 3
- the J4500 on the D Coaches sold to the New Jersey
- Transit Authority? 5
- Α. It's a similar design, but it's not exactly
- the same. 7
- 8 Q. Okay. It's similar in the sense that
- there's tire exposure? 9
- 10 Α. Yes.
- There's no -- there's no spat? 11 Q.
- There's no spat as you defined it. 12 Α.
- 13 Is there a spat in any other definition?
- I just said -- you said this is called a 14
- 15 spat and it's a covering over the tire area.
- 16 said, as you defined it, it is not on that bus.
- Is there any sort of covering over the area 17
- 18 of the buses sold to the New Jersey Transit
- 19 Authority?
- 20 Α. Over what area?
- 21 The rear tire area. 0.
- 22 No, there's not, beyond what's in the
- 23 original design of the D Coach.
- 24 And you're saying that's similar to the J
- Coach in terms of the fender? 25

1	A. It's similar. It	Page 126 's not exactly the same.		
2	Q. Okay. Was there a	Okay. Was there a discussion with the		
3	New Jersey Transit Authority with regards to			
4	S-1 Gards?			
5	A. Not that we can fa	Not that we can find.		
6	Q. Okay. Who did	Okay. Who did you make some sort of		
7	effort to discuss with the MCI employees what they			
8	said and to whom of the New Jersey Transit			
9	Authority?			
10	A. Yes. In research	for that, yes.		
11	Q. Okay. And who, i	f you know, was the a		
12	point person is that the right term? on this			
13	contract?			
14	A. In what area?			
15	Q. Okay. Was there	a bid team?		
16	A. There was a guy i	n charge of the bid.		
17	Q. Who was that?			
18	A. Dale Majury.			
19	Q. Could you spell the	hat last name for me?		
20	A. M-a-j-u-r-y.			
21	Q. Okay. And have yo	ou talked to him?		
22	A. Yes.			
23	Q. With regards to t	his particular item?		
24	A. Yes.			
25	Q. Okay. And what d	id he say with regards to		

Page 127 his memory of the discussions with the New Jersey 1 2 Transit Authority? In regard to --S-1 Gards or protective barriers. They did not ask for S-1 Gards or any 5 Α. protective barriers in that contract. Was there any discussion about potential 7 0. 8 safety features that could protect human beings from coming into contact with tires of a bus? 9 10 Α. Not in that regard. And are the D series buses being sold to 11 12 the New Jersey Transit Authority equipped with the 13 Meritor side guard system? MR. RUSSELL: Just objection --14 BY MR. KEMP: 15 16 Q. Or WABCO. Excuse me. Objection as laid out in the 17 MR. RUSSELL: letter as to any discovery on the D Coaches. 18 THE WITNESS: Could you repeat the 19 20 question, please? BY MR. KEMP: 21 22 As I understand it, the D series uses 23 Meritor brakes; right? 24 Α. Correct. 25 So if you were going to marry a proximity Q.

sensor to it, you would have to use WABCO; right? 1 2 Are you talking about a side? 3 Well, is it your understanding that the Ο. buses sold to the New Jersey Transit Authority, the 4 D series, have some sort of proximity sensor? 5 6 Α. Are you talking about -- what kind -- for 7 where? 8 Q. Let's just use the more expansive term to include all of them, and then we'll try to get to 9 10 which one it is. 11 Well, it doesn't have collision mitigation. 12 Q. Okay. It does not have adaptive cruise. 13 It does 14 not have rear camera or anything like that. 15 have a wheelchair lift and, therefore, has what you 16 call a proximity sensor in the wheelchair area 17 because that's required by FMVSS. 18 And that's the only proximity sensor on the D series being sold to the New Jersey Transit 19 20 Authority? Well, the C and Gs had the field door 21 22 sensor required by the NFPA. As I sit here today, I 23 cannot think of any other proximity sensor that's on There may be some small proximity sensors in 24 the wheelchair lift operation. But it's -- but I 25

Page 129 1 can't think of any others today. 2 Q. Did MCI offer the WABCO side proximity sensor to New Jersey Transit Authority? 3 Α. Not that I'm aware of. 5 Q. Is there a reason why you wouldn't offer 6 that? We don't -- we -- first off, this is a Α. 8 public sector procurement. You respond to the 9 procurement. They have -- the New Jersey Transit 10 has their own engineering group and we responded to the procurement. It was not in the bid spec. 11 New Jersey Transit has recently decided to put the 12 13 360-degree-camera system on. But they have not elected to be interested in any other system. 14

- And would that 360 camera be on new buses, 15 Ο.
- 16 retrofitted old buses, or what?
- 17 My understanding it's on new, and they were
- even looking at retrofitting old. 18
- 19 And how would the 360-degree-camera system, Q.
- 20 if it would, assist in detecting objects or persons
- 21 on the side of the bus?
- 22 MR. RUSSELL: Objection. Incomplete
- 23 hypothetical.
- 24 THE WITNESS: Under what condition?
- /// 25

- VIRGIL HOOGESTRAAT 10/13/2017 Page 130 BY MR. KEMP: 1 Maybe you could just tell me how the 2 Q. 360-degree-camera system works in general. 3 In general, below 17 miles an hour, because above is turned off -- below 17 miles an hour, you 5 get a screen that looks -- if you're turning to the 6 right, the camera comes on and it shows one-third of the screen -- or two-thirds of the screen what that 8 camera is seeing. And the rest of what's on the 9 10 screen is all around the vehicle when you're turning in that direction. 11
- 12 Q. But it only works at 17 miles and below?
- 13 Α. Yes.
- Why was that chosen? 14
- Otherwise, it's a nuisance. Considered by 15 Α.
- NHTSA to be a nuisance to the driver and a driver 16
- distraction. 17
- Who makes the 360-camera system? 18 Q.
- 19 Α. Can't remember the name right now.
- 20 Q. Some supplier though?
- A supplier. 21 Α.
- 22 Q. How long has that been available?
- It became available in -- I believe it was 23 Α.
- 24 2016.
- 25 Now, with regards to the other types of Q.

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- WABCO proximity sensor side detection that's 1
- 2 available, you said that was not offered to the
- 3 New Jersey Transit Authority; is that correct?
- We did not offer it. Suppliers I'm sure
- did, but we did not offer it. 5
- 6 0. Okay. So the next PMK or 30(b)(6) topic is
- 7 Do you see that? So would I be correct that
- 8 the MCI policy was not to offer or alert potential
- purchasers of the need for S-1 Gards or other 9
- 10 protective barriers?
- MR. RUSSELL: Objection. Compound. 11
- 12 Misstates prior testimony.
- 13 MR. KEMP: Let me try to get rid of the
- compound part. 14
- BY MR. KEMP: 15
- 16 Did MCI, at any point, have a policy to
- 17 offer potential purchasers S-1 Gards or protective
- 18 barriers?
- Assuming the S-1 Gard is a protective 19 Α.
- 20 barrier, we do not offer the S-1 Gard as an option.
- And that's the policy? 21 Q.
- 22 Α. No, it's not a policy. We presently --
- when we come across a feature that we think would be 23
- 24 assistance, we offer it.
- 25 Okay. And obviously you think the Q.

- collision mitigation system for the J Coach is a 1
- 2 good feature because it's a standard feature now;
- 3 right?
- We issued it as an option initially because Α.
- we thought it would be a driver-assistance feature. 5
- 6 Q. Did you offer a collision mitigation system
- to the New Jersey Transit Authority?
- 8 Α. New Jersey Transit would -- New Jersey
- 9 Transit is a very large agency with their own
- engineering staff. They knew about collision 10
- mitigation systems already, and they did not choose 11
- 12 to have it.
- But the direct answer to my question is, 13 Q.
- no, MCI did not offer it? 14
- I don't know that it did not offer it. But 15 Α.
- this is not how buses in that public sector are 16
- procured. Usually they will ask for it, if they 17
- want it, because they already are aware of it. 18
- And in this case did you ask Majury 19 Q.
- 20 whether or not New Jersey Transit Authority was
- 21 aware of the potential of collision mitigation
- 22 systems?
- They knew already about collision 23
- 24 mitigation systems.
- 25 Did you ask Mr. Majury that? Q.

- Page 133 Α. He told me they already knew about it. 1 2 This is a -- in this industry, the vendors go to our
- customers many times to discuss various features. 3
- So they are very aware of the stuff in that market.
- Okay. So New Jersey Transit Authority is
- what you would consider to be a sophisticated 6
- 7 purchaser of buses?
- 8 Α. Yes.
- 9 Q. Okay. Are there other people that purchase
- MCI J4500s that are not as sophisticated as the 10
- 11 New Jersey Transit Authority?
- 12 MR. RUSSELL: Objection. Incomplete
- 13 hypothetical. Vague.
- THE WITNESS: I don't know what you mean by 14
- 15 "sophisticated." But, I mean, there is smaller
- 16 operators that do not have direct contact with
- 17 vendors.
- 18 BY MR. KEMP:
- 19 Q. And smaller operators like tour companies,
- for example; right? 20
- Some of them are small. 21 Α.
- Okay. Like the tour company in this case, 22 Q.
- 23 relatively small?
- Objection. Foundation. 24 MR. RUSSELL:
- I don't know that much about 25 THE WITNESS:

1 this tour company. I'm just saying there are small tour companies that do not have direct vendor 3 contact. BY MR. KEMP: And you know that as -- MCI knows 5 Q. Okay. that; right? 6 We know we have small customers. And with regards to those small 8 Q. Okay. 9 customers, does MCI advise them that there are 10 collision mitigation systems available that can be 11 put on the buses? Obviously we released it in 2014, so 12 Α. obviously we did that. 13 Okay. And prior to that time did you? 14 Q. No, because it wasn't available. 15 Α. 16 That system wasn't available? 0. 17 Α. That system was not available. 18 Q. We've already gone through that there were other potential add-ons that could provide warnings 19 20 that were available? MR. RUSSELL: Objection. Misstates 21 22 testimony. 23 THE WITNESS: There may have been, but we did not -- we considered the collision mitigation 24 25

needed to have braking.

- Page 135
- 1 BY MR. KEMP:
- Q. And then 19 I think we pretty much talked
- 3 about, so let's skip 19.
- 4 Okay. 20. Is there a process used to
- 5 identify hazards when you design a bus?
- A. That's part of the engineering process.
- 7 Q. And what's that called?
- 8 A. Engineering process.
- 9 O. I know, but is there a formal name for that
- 10 process?
- 11 A. No.
- 12 Q. There's not a formal name for the hazard
- 13 identification process?
- 14 A. No. We review -- when we have design
- 15 reviews if there's a hazard. And if there is a
- 16 hazard, that gets brought up at that time.
- 17 Q. Okay. And I think -- you did not identify
- 18 what we've talked about as air blasts or side force
- 19 as a hazard; is that correct?
- 20 A. We do not believe that's a hazard, that's
- 21 correct.
- 22 Q. And so you also do not believe that the
- 23 rear tire suction is a hazard; is that correct?
- A. We don't even know that there is a suction
- 25 on the rear tires.

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- 1 Q. And so for that reason you don't believe
- 2 it's a hazard?
- 3 A. We don't think the rear tire situation is a
- 4 hazard.
- 5 Q. Okay. And we've already talked about
- 6 right-side visibility obstructions; right?
- 7 A. We said -- I said the mirror can be an
- 8 obstruction that the driver has to look around, as
- 9 well as an A post can be an obstruction, but it's
- 10 not a problem.
- 11 Q. So you would agree that that is a potential
- 12 hazard?
- 13 A. No.
- 14 Q. Well, right-side visibility, in general, is
- 15 a potential hazard that you have either mitigated or
- 16 attempted to mitigate?
- 17 A. We try to mitigate it as best as possible
- any blind spot so it does not become a problem.
- 19 Q. But you would agree it's a potential hazard
- 20 in theory?
- 21 A. I agree that the driver has to take actions
- 22 sometimes to move in his seat to be able to look
- 23 around the A post and the mirror. You're right, if
- 24 that's what you mean.
- Q. Okay. All right. And 22 is "Prior

incidents in which pedestrians or bicyclists came 1 2 into contact or were involved in accidents with a bus provided by MCI or any of its past and present 3 divisions, sectors, subsidiaries, or testing 4 facilities, including but not limited to Universal 5 6 Coach Parts and Transportation Manufacturing Corporation." Did I read that right? 8 Α. Yes. 9 And are you aware of any prior accidents in 10 which, first, pedestrians came in contact with an MCI bus? 11 12 MR. RUSSELL: And we'll assert our 13 objection as noted in the letter. It would be 14 limited to E or J models within that defined scope. 15 THE WITNESS: In my research on the E and J

model that's been in production for 20 years, with

thousands out there, I did not find one with contact

BY MR. KEMP: 19

16

17

18

- 20 0. How about pedestrians?
- Α. I found three. 21

with a bicyclist.

- 22 Q. Was that the E or J or combination?
- 23 Α. I did not separate them. It was one or the
- 24 other.
- 25 And with regards to these three Q. Okay.

- pedestrian accidents, can you tell me in general 1
- what happened?
- One occurred in Hawaii. Passenger ran out 3
- in the street and got hit by the bus.
- By what part of the bus? 5 0.
- I believe it was toward the front. 6
- Okay. Was he run over by the tires? Q.
- Α. Not that I recall. 8
- Next one -- before we leave Hawaii, 9 Okay.
- do you remember when this occurred approximately? 10
- 11 Α. No.
- Okay. Was there a lawsuit if you know? 12 Q.
- Not that I'm aware of. 13 Α.
- Okay. What about the other two? 14
- 15 Α. The other two, one was, I think, in
- New Jersey and, again, it was somebody was crossing 16
- the street and got hit in the front of the bus. 17
- This was a passenger or not a passenger? 18 Q.
- It was just an It was not a passenger. 19 Α.
- 20 individual. The other one was an individual that
- was not a passenger. Both of them were crossing the 21
- 22 street.
- The New Jersey one, do you remember 23 0. Okay.
- when that was? 24
- 25 Α. No.

Page 139 1 Q. Okay. 2 And the third one, again, was individual that -- when the bus was turning, hit the passenger. 3 I presume on the street. 5 Are you aware if it was a left-hand turn or a right-hand turn? 6 I don't remember. Α. And the third one, do you remember the date Q. of that? 9 10 Α. No, I do not. You don't remember the date of the 11 12 New Jersey one either? No, I do not. Α. 13 Do you know whether or not right-side or 14 15 even left-side visibility was an issue in any of 16 these three instances? Not that I'm aware of. There may have 17

- 18 been, but I don't recall any right-side visibility
- 19 complaint.
- 20 O. And were lawsuits filed in the second and
- 21 third case?
- 22 A. There may have been. Not that I found at
- 23 this time.
- Q. And how did you research whether or not
- 25 there were prior incidents involving pedestrians or

Page 140

- 1 bicyclists?
- 2 We have a reporting system that comes in
- 3 that is -- it comes from various methods.
- in through the service organization. It comes
- 5 through the sales organization. It comes through
- Google alerts. It comes through -- customers will 6
- 7 call in when they have an issue. These kind of
- 8 incidents, they're all accumulated within the legal
- 9 department.
- Would -- do you take trade publications? 10
- Subscribe? 11
- 12 Α. Some.
- And is there one called Motor Coach or 13 Q.
- something like that? Which ones do you take? Why 14
- 15 don't we start with that.
- Well, there's one that's called Motor Coach 16
- News or something like that. And there's one that's 17
- 18 ABA something. That's the ones I get.
- 19 And the Motor Coach News, that comes twice Q.
- 20 a month?
- Well, it comes -- they send it out 21
- electronically now. It seems to show up more often 22
- than that now. 23
- Okay. MCI advertises in that publication? 24 0.
- 25 Α. Yes.

- 1 Q. And would I also be correct that the Okay.
- 2 U.S. Department of Transportation has statistics on
- accidents involving buses and pedestrians and 3
- bicyclists?
- 5 The DOT does have, if you're referring to Α.
- 6 the FARS data -- or what data are you referring to?
- There is data from the DOT? Ο.
- 8 Α. There's a lot of data in DOT. I'm just not
- 9 sure which data you're referring to.
- 10 If you go back to Mr. Green's paper, he
- 11 indicates that there's some data that indicates that
- 12 bicyclists, pedestrians, and buses have accidents
- 13 frequently and that it typically occurs at the rear
- 14 axle. Did you see that part in his article?
- I saw that in his article. 15 Α.
- 16 Okay. Do you agree or disagree that that's
- 17 the spot where these accidents usually occur?
- 18 Α. I have no position to argue that because I
- don't know where he got his data from. 19
- 20 Q. So you --
- 21 I can't disagree or agree. Α.
- 22 Assuming, for the sake of argument, that a
- 23 number of accidents occurred in one specific
- 24 location of a bus, would you agree with me that's a
- potential hazard that should be investigated? 25

```
Page 142
1
              MR. RUSSELL:
                            Objection. Foundation.
2
              THE WITNESS: I certainly would look at it.
3
     Again, I don't know if that's where that information
     came from. As you noted in the article, it seems to
5
    be centered around transit buses, so I don't know.
6
    BY MR. KEMP:
              Okay. But as we sit here today, MCI hasn't
         Q.
8
     investigated whether or not the rear tires are more
9
     frequently involved in accidents, not frequently
10
     involved in accidents, or whether there's a
     potential hazard involved with that particular area
11
12
     of the bus; is that correct?
13
              On each E Coach we just went through the
         Α.
     accidents we've had, so we don't know of any major
14
     issue in that regard. These buses have millions of
15
16
     miles on them and have been out for 20 years and all
     we have is three incidents. So we don't have -- we
17
18
     have not investigated it.
19
              Okay. Let me go through my notes real
         Q.
20
     quick.
              (Exhibit 7 marked.)
21
     BY MR. KEMP:
22
23
              Have you seen Exhibit 7 before?
         Q.
24
         Α.
              Yes.
25
              What is Exhibit 7?
         Q.
```

- 1 Α. That's a Bendix Blindspotter Side Detective 2 System.
- Is that the same system that's currently 3 Q.
- being used by MCI?
- 5 Α. No.
- Is this a system that MCI looked at? 6 Q.
- 7 It's a system that we got inform- -- well, Α.
- 8 I saw the predecessor to this in 2013 and it had
- very serious problems with false positives. 9
- Predominantly it had a -- had some problems. 10
- they have done an upgrade as we understand it. 11
- 12 in fact, this is the 2013 one that they had the
- issue with. 13
- There's an upgrade to this that 14
- 15 works better?
- 16 It's coming out.
- 17 Q. Okay.
- We don't know that it works better, but 18 Α.
- they say they have an upgrade coming. 19
- 20 Q. Okay. All right. Turning to page 2970,
- the one I've got --21
- Α. 22 Yes.
- So this system is designed to detect things 23
- 24 on the side of, in this case, a truck; right?
- 25 Α. That's what it depicts, yeah.

- Page 144

 Q. Is there a reason it's good to have safety
- 2 features in trucks to detect things to the side of
- 3 you?
- 4 A. Trucks have -- especially Class A trucks
- 5 with trailers turning right, they have a higher
- 6 incidence of striking things than other vehicles
- 7 apparently, according to NHTSA.
- 8 Q. Okay. And would those statistics be before
- 9 or after NAFTA?
- 10 A. Before what?
- 11 Q. NAFTA. Has it increased after NAFTA?
- 12 A. I don't know that to be a fact.
- 13 Q. Okay. You know why some people think it's
- 14 increased after NAFTA; right?
- 15 A. Well, there's a lot of rumors out there.
- 16 And I don't go by rumors.
- 17 Q. Okay. All right.
- 18 A. I presume we're done with this?
- 19 O. Yeah, we're done with that.
- 20 A. Would you mind if we take a break?
- 21 Q. No, not at all.
- 22 THE VIDEOGRAPHER: We're going off the
- 23 record. The time is 11:58.
- 24 (A break was taken.)
- 25 THE VIDEOGRAPHER: We are back on the

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```
Page 145
1
     record.
              The time is 12:04.
2
              (Exhibit 8 marked.)
     BY MR. KEMP:
3
4
              With regards to Number 8, this is an
     article by someone named Sherlock that says, quote,
5
     "Many buses have built-in blind spots that make
6
7
     driving them dangerous," end quote.
                     First of all, have you ever seen
8
     this article before?
9
              I believe I have.
10
         Α.
              Outside the context of this litigation,
11
         Q.
12
     have you seen it?
              I don't think so.
13
         Α.
              In the context of litigation you've seen
14
         Q.
15
     it?
              I've seen it.
16
         Α.
              Okay. All right. On the first page --
17
     second page of Exhibit 8, it says, quote,
18
     "Essentially all transit buses in the United States
19
     are built as cheaply as possible with mirrors and
20
     pillars that create blind spots that are over a foot
21
             Do you see that statement?
22
              Yes, I do.
23
         Α.
24
         Q.
              Do you agree or disagree?
25
         Α.
              Disagree.
```

```
1
         Q.
              Okay.
                     Do you agree that they're built as
2
     cheaply as possible?
              I disagree with that.
3
         Α.
                     And you disagree, I assume, that
     there's blind spots over a foot wide?
5
              Well, he's referring to transit buses --
 6
         Α.
              Right.
         Q.
         Α.
              -- we don't build. But if you're using it
     in the context of a coach, I disagree.
10
              Okay. All right. But you would agree that
         Q.
     there's some blind spot less than a foot; right?
11
12
     We've already talked about that.
13
              MR. RUSSELL:
                             Objection.
                                        Foundation.
                             I already discussed the fact
14
              THE WITNESS:
     that a mirror by itself is a blind spot, the A
15
16
     pillar can be a blind spot, and the driver has to
17
     move in his seat or whatever is necessary to look
     around.
18
19
     BY MR. KEMP:
              That's the rock-and-roll technique?
20
         Q.
21
         Α.
              It can -- some people refer to it that way.
              Do you have a CDL? I forgot to ask.
22
         Q.
23
         Α.
              Not anymore.
24
              You did for a while?
         Q.
25
         Α.
              Yes, I did.
```

1	Page 147 Q. For how long?						
. 2	A. Until about 2006.						
3	Q. Okay. All right. The fourth paragraph on						
4	the second page he says, quote, "In the case of						
5	these blind spots, policymakers have failed at the						
6	highest level: Engineering. If we want to end						
7	fatalities, safe street engineering must not end at						
8	the curb," end quote. Did I read that right?						
9	A. Yes.						
10	Q. I assume you'll agree that the highest						
11	level is engineering?						
12	MR. RUSSELL: Objection. Foundation.						
13	THE WITNESS: Highest level of what?						
14	BY MR. KEMP:						
15	Q. Does it matter? The highest level of						
16	anything should be engineering; right?						
17	A. Well, certainly engineering people would						
18	think that, but I'm not sure everybody else would.						
19	Q. Okay. I thought you were an engineer.						
20	A. Huh?						
21	Q. You're an engineer?						
22	A. Yes.						
23	Q. I was making a joke.						
24	You recognize that there's a hierarchy of						
25	safety here, that design, and things you can't						

- VIRGIL HOOGESTRAAT 10/13/2017 1 design around and rely upon human beings to do the 2 right thing? Generally you know what I'm saying? There's a guideline of that nature, correct. 5 Q. And the best thing to do, if you can do it, is to design around it because you don't want to 6 7 rely upon humans; right? 8 MR. RUSSELL: Objection. Incomplete 9 hypothetical. Outside the scope. 10 THE WITNESS: You try, if you have a 11 hazard, to try to design it out. That's the first 12 step. 13 BY MR. KEMP: 14 That's a fail-safe design? You've heard Q. 15 that term? 16 MR. RUSSELL: Same objection. THE WITNESS: 17 That's another potential way 18 of addressing it. 19 BY MR. KEMP: Okay. All right. Do you think that MCI 20 Q.
- 21 has done everything it possibly can to design out
- the right-side blind spot issue? 22
- In my opinion, based on what technology we 23
- 24 have today and complying with the regulations we
- 25 have today, we've done everything we can.

1	Page 149 Q. Okay. Would you agree or disagree that						
2	there's buses other than MCI buses that have less						
3	visibility obstruction with regards to the right						
4	side?						
5	MR. RUSSELL: Objection. Outside the						
6	scope. Foundation.						
7	THE WITNESS: I don't know if that's true						
8	or not.						
9	BY MR. KEMP:						
10	Q. Don't know one way or the other?						
11	A. I don't know.						
12	Q. Do you know who Mr. Hanley is on the next						
13	page?						
14	A. Mr. Hanley?						
15	Q. Uh-huh. He's the president of ATU.						
16	A. I'm not sure. I'm not sure the largest						
17	I'm not sure.						
18	Q. Do you know what the ATU is?						
19	A. It's the union for the transit union.						
20	Q. That's the Amalgamated Transit Union?						
21	A. Okay.						
22	Q. Yes?						
23	A. I've heard of it. That's all I know about						
24	it.						
25	Q. Okay. So the president of the largest						

1 transit union reportedly describes, quote, "Safety 2 and engineering failures that have transformed buses 3 into, " quote, "'mobile manslaughter machines, '" Do you see that statement? unquote. 5 Α. What page are you on? (Indicating.) Q. I see that statement. Α. Okav. It's pretty colorful? Q. 9 I would say that's a colorful statement. Α. Have you heard that statement before 10 11 outside the context of this litigation that buses or 12 coaches are, quote, "mobile manslaughter machines"? 13 No, I have not. Α. Okay. All right. Page 5 of 11. 14 Q. I'm not 15 trying to cherry-pick here. If you want to take some time to read it --16 17 Α. Go ahead. Under the title "Changing Buses Means 18 Q. 19 Changing Laws and Culture. " Do you see that? 20 Α. Yes. And he says, quote, "Currently neither the 21 Q. 22 bus designers nor agency decision makers are being held legally responsible, " unquote. Do you see that 23 statement? 24 25 Α. Yes.

1	Page 151 Q. Do you agree with that?						
2	A. No.						
3	MR. RUSSELL: Objection. Foundation.						
4	BY MR. KEMP:						
5	Q. How many cases are you aware of where MCI						
6	has been held legally responsible for design						
7	engineering problems with buses?						
8	MR. RUSSELL: Objection. It's outside the						
9	scope.						
10	THE WITNESS: Meaning lawsuits? We have a						
11	number of lawsuits.						
12	BY MR. KEMP:						
13	Q. Have you been held responsible in some of						
14	them?						
15	MR. RUSSELL: Objection. Calls for a legal						
16	conclusion. Outside the scope. Foundation.						
17	Argumentative. And calls for a legal conclusion.						
18	THE WITNESS: I'm not a lawyer, and I don't						
19	get involved. I don't know if we're held legally						
20	responsible or not.						
21	MR. KEMP: Okay. All right. We'll mark						
22	that.						
23	(Exhibit 9 marked.)						
24	BY MR. KEMP:						
25	Q. Okay. I'm handing you Exhibit 9, which is						

```
a portion of the Answer to Plaintiffs' Complaint by
1
 2
     Defendant Motor Coach Industries. And specifically
     I'd ask you to look at page 2, lines 19 through 20.
3
     You understand in this case we're talking about a
     2008 model J4500 that was sold in 2007; right?
 5
     you understand that?
                    But I'm confused by you saying 19
 7
         Α.
              Yes.
     through 20.
              No.
                   Lines 19 through 20.
 9
         Q.
              Oh, lines. Okay. I'm sorry.
10
         Α.
                     This says, quote, "Defendant" --
              Okay.
11
         Q.
     referring to Motor Coach Industries -- quote,
12
     "Defendant did not design or manufacture the motor
13
     coach referenced in the amended complaint and denies
14
     such allegations, " unquote. Do you see that
15
     statement?
16
17
         Α.
              Yes.
              Did you, in fact, assist in the design of
18
         Q.
     the J4500?
19
              Personally?
20
         Α.
21
         Q.
              Yeah.
              No, not really.
22
         Α.
23
              I thought you told me you were part of the
         Q.
     design team?
24
                    I helped assign people to design.
25
         Α.
              No.
```

Page 153 Do you know whether or not MCI, Q. 1 Okay. 2 referring to MCI U.S., was involved in the design of the motor coach? 3 The MCI U.S. did a little drafting. Α. That's it. But it was under the direction of somebody in 5 6 Winnipeg. 7 Q. Mr. Couch? Α. Yeah. Okay. 9 Q. Α. But we --10 So would it be more correct to say that MCI 11 Q. Limited, the Canadian company, and MCI U.S. jointly 12 designed the motor coach? Would that be more 13 correct? 14 No, it would not. Α. 15 Okay. Why not? 16 Q. Because the engineering concept and the 17 Α. engineering direction came out of Winnipeg. 18 because they drew a few parts in New Mexico, we also 19 had contract people doing parts as standard 20 engineering practice. 21 So it was MCI Limited contract people and 22 the people in New Mexico? 23 I'm just saying -- maybe I stated it Α. 24

wrong -- that -- in order to get enough people

1	Page 154 working on a project, sometimes you source some of					
2	the work to various entities, but the engineering					
3	3 requirements and responsibility was in MCI Limited.					
4	Q. Okay. All right. And we talked about drag					
5	coefficient a little bit. As we sit here today, do					
6	you know what the drag coefficient of a J4500 is?					
7	A. I do not.					
8	Q. Can you give me any kind of range like .35					
9	to .55? Anything?					
10	A. No.					
11	Q. Okay. Same question for the E series. Do					
12	you know what the drag coefficient of that is?					
13	A. No, I do not.					
14	Q. All right. Did I ask you what kind of car					
15	you drive?					
16	A. No, you did not.					
17	Q. What kind of car do you drive?					
18	A. My wife drives a Honda, 2006.					
19	Q. Does that have a proximity sensor?					
20	A. Nope.					
21	Q. Okay. You're a one-car family?					
22	A. No.					
23	Q. What do you drive?					
24	A. A pickup.					
25	Q. What kind?					

1	Α.	Page 155 2013 GMC.
2	Q.	Does it have a proximity sensor?
3	A.	No.
4	Q.	Okay. Have you ever driven a car with a
5	proximit	y sensor?
6	Α.	Yes.
7	Q.	What kind?
8	Α.	I have no idea. It was a rental.
9	Q.	Side proximity sensor?
10	A.	Not that I recall.
11		MR. KEMP: Okay. No further questions.
12		MR. RUSSELL: Thank you.
13		THE VIDEOGRAPHER: We're going off the
14	record.	The time is 12:16.
15		(Proceedings concluded at 12:16 p.m.)
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

1	Page 156 CERTIFICATE OF REPORTER
2	STATE OF NEVADA)
3) SS COUNTY OF CLARK)
4	I, Holly Larsen, a duly commissioned and
5	licensed Court Reporter, Clark County, State of
6	Nevada, do hereby certify: That I reported the
7	taking of the deposition of the witness, Virgil
8	Hoogestraat, commencing on Friday, October 13, 2017,
9	at 9:09 a.m.
10	That prior to being examined, the witness was,
11	by me, duly sworn to testify to the truth. That I
12	thereafter transcribed my said shorthand notes into
13	typewriting and that the typewritten transcript of
14	said deposition is a complete, true, and accurate
15	transcription of said shorthand notes.
16	I further certify that I am not a relative or
17	employee of an attorney or counsel of any of the
18	parties, nor a relative or employee of an attorney
19	or counsel involved in said action, nor a person
20	financially interested in the action.
21	IN WITNESS HEREOF, I have hereunto set my hand,
22	in my office, in the County of Clark, State of
23	Nevada, this 18th day of October, 2017.
24	Holly dust
25	HOLLY LARSEN, CCR NO. 680
1	

1	Page 157 ERRATA SHEET						
2							
3	I declare under penalty of perjury that I have read						
4	the foregoing pages of my testimony, taken on						
5	(date) at (city),						
6	(state),						
7							
8	and that the same is a true record of the testimony						
9	given by me at the time and place herein above set						
10	forth, with the following exceptions:						
11							
12	Page Line Should read: Reason for change:						
13							
14							
15							
16							
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1	Page 15 ERRATA SHEET (Continued)					Page 158	
2	Page	Line	Should read:		Reason	for	change:
3							
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21							
22	Date:			Signat	ure of	Witn	ess
23							
24							
25			-	Name I	Typed or	Pri	nted

000828

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In the Matter Of:

Khiabani, et al. vs. Motor Coach Industries, et al.

MARK B. BARRON

September 26, 2017

Job Number: 418647

EXHIBIT 2

EXHIBIT 2

In the Matter Of:

Khiabani, et al. vs. Motor Coach Industries, et al.

BRYAN COUCH

October 12, 2017

Job Number: 425415

```
1
                           DISTRICT COURT
                        CLARK COUNTY, NEVADA
     KEON KHIABANI and ARIA
     KHIABANI, minors by and
     through their natural
                                 ) CASE NO.:
     mother, KATAYOUN BARIN;
                                 ) A-17-755977-C
     KATAYOUN BARIN,
     individually; KATAYOUN
 6
     BARIN as Executrix of
     the Estate of Kayvan
     Khiabani M.D.
     (Decedent), and the
     Estate of Kayvan
 8
     Khiabani,
     M.D. (Decedent),
 9
10
                 Plaintiffs,
11
     vs.
12
     MOTOR COACH INDUSTRIES,
     INC. A Delaware
13
     corporation;
     MICHELANGELO LEASING
     INC. D/b/a RYAN'S
14
     EXPRESS, an Arizona
15
     corporation; EDWARD
     HUBBARD, a Nevada
16
     resident; BELL SPORTS,
     INC. D/b/a GIRO SPORT
17
     DESIGN, a California
     corporation; SEVENPLUS
     BICYCLES, INC. D/b/a Pro
18
     Cyclery, a Nevada
     corporation; DOES 1
19
     through 20; and ROE
20
     CORPORATIONS 1 through
     20.
21
                 Defendants.
22
               VIDEOTAPED DEPOSITION OF BRYAN COUCH
23
                          LAS VEGAS, NEVADA
                       THURSDAY, OCTOBER 12, 2017
24
25
      REPORTED BY:
                    KAREN L. JONES, CCR NO. 694
                     JOB NO.:
                               425415
```

BRYAN COUCH - 10/12/2017

```
Page 2
             DEPOSITION OF BRYAN COUCH, taken at Kemp,
1
    Jones & Coulthard, located at 3800 Howard Hughes
    Parkway, 17th Floor, Las Vegas, Nevada, on Thursday,
3
    October 12, 2017, at 10:05 a.m., before Karen L.
    Jones, Certified Court Reporter, in and for the
5
     State of Nevada.
8
    APPEARANCES:
    For the Plaintiffs:
 9
10
             KEMP, JONES & COULTHARD, LLP
                 WILL KEMP, ESQ.
             3800 Howard Hughes Parkway, 17th Floor
11
             Las Vegas, Nevada
                               89169
             702.385.6000
12
             E.pepperman@kempjones.com
13
14
             CHRISTIANSEN LAW OFFICES
                 PETE CHRISTIANSEN, ESQ.
             BY:
             810 Casino Center Boulevard
15
             Las Vegas, Nevada
                                 89101
             702.240.7979
16
             kworks@christiansenlaw.com
17
     For Motor Coach Industries, Inc.:
18
             WEINBERG, WHEELER, HUDGINS, GUNN & DIAL, LLC
19
                 HOWARD RUSSELL, JR., ESQ.
             6385 South Rainbow Boulevard, Suite 400
20
             Las Vegas, Nevada 89118
             702.938.3838
21
             lroberts@wwhgd.com
22
     Also Present: J.P. Marretta, Videographer
23
                    Timothy Nalepka
24
25
```

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1	Page 4 LAS VEGAS, NEVADA; THURSDAY, OCTOBER 12, 2017
2	10:05 A.M.
3	-000-
4	THE VIDEOGRAPHER: This is the beginning
5	of Media Number 1 in the deposition of Bryan Couch
6	in the matter of Khiabani versus Motor Coach
7	Industries held at Kemp Jones & Coulthard on
8	October 12th, 2017, at 10:05 a.m.
9	The court reporter is Karen Jones. I am
10	J.P. Marretta, videographer, an employee of
11	Litigation Services.
12	This deposition is being videotaped at
13	all times unless specified to go off of the video
14	record.
15	Would all present please identify
16	themselves, beginning with the witness.
17	THE WITNESS: Bryan Couch.
18	MR. KEMP: Will Kemp for plaintiffs.
19	MR. CHRISTIANSEN: Pete Christiansen for
20	plaintiffs.
21	MR. RUSSELL: Howard Russell for MCI.
22	MR. NALEPKA: Timothy Nalepka for MCI.
23	THE VIDEOGRAPHER: Will the court
24	reporter please swear in the witness.
25	///

1	Whereupon,
2	BRYAN COUCH,
3	having been first duly sworn to testify to the
4	truth, the whole truth and nothing but the truth,
5	was examined and testified as follows:
6	
7	EXAMINATION
8	BY MR. KEMP:
9	Q. State your name and spell it for the
10	court reporter.
11	A. Bryan Couch. B-r-y-a-n, C-o-u-c-h.
12	Q. And Mr. Couch, have you ever had your
13	deposition taken before?
14	A. I have.
15	Q. On how many different occasions?
16	A. I think three.
17	Q. Can you tell me the circumstances of the
18	prior three depositions, as best you can recall.
19	A. One was an employee. One was a seat
20	belt it was an accident. And another one was an
21	accident. From what I remember.
22	Q. A bus accident?
23	A. Yeah.
24	Q. And the seat belt, was that also a bus
25	accident?

1	Α.	Page 6 Yeah.
2	Q.	And did those involve suits against MCI?
3	Α.	Yes.
4	Q.	And was it MCI U.S. as opposed to
5	MCI Canada	
6	Α.	I don't remember.
7	Q.	if you know? Okay.
8		And with regards to the third one, do
9	you remembe	r approximately when that was?
10	Α.	I don't remember the date, sorry.
11	Q.	Or the year even?
12	Α.	I don't.
13	Q.	Decade?
14	Α.	Yeah, I think they were in there
15	was they	were probably in both, I think. So like
16	in after	2010 and before 2010. So in the last
17	20 years, 1	7 years.
18	Q.	All three of these?
19	Α.	They were I think the first one was
20	the employe	e, and that would have been before 2010.
21	Q.	Okay. And that was an employee
22	termination	suit of some sort, or something
23	like that?	
24	Α.	Yeah.
25	Q.	Okay. And then the seat belt one, that

```
1
     was some kind of allegation that the bus should or
     shouldn't have a seat belt or it didn't work right
 2
     or something like that?
 3
                 It was an accident.
 5
         Q.
                 And why was the seat belt an issue?
         Α.
                 That's -- was -- what was -- MCI was --
     one of the reasons MCI was sued, was --
 7
         Q.
 8
                 Is it because there was not a seat
 9
     belt --
10
                 Correct.
         Α.
11
         Q.
                  -- or because -- because there was not a
12
     seat belt?
                  (Nods head in the affirmative.)
13
         Α.
                 And you nodded your head. You have to
14
         Q.
15
     answer "yes" or "no" for the record.
16
                 Okay, sorry.
17
         Q.
                  Okay. So the reason MCI was sued in the
     seat belt case was because there was no seat belt on
18
19
     the bus?
20
                 Right.
         Α.
21
                 Okay. And then what particular
         Q.
     knowledge, if anything, do you have on that issue?
22
23
     Were you involved in seat belt design?
                 Yes, I was.
24
         Α.
25
         Q.
                 We'll get back to seat belts in a
```

	* 1	Page 8
1	second.	1430
2		The third one, you said it was a bus
3	accident. V	Was that also a suit alleging some kind
4	of design p	roblem?
5	Α.	I'm trying to think.
6		It was.
7	Q.	And what was the design problem being
8	alleged in	that case?
9	Α.	It was about thermal incidence in the
10	vehicle.	
11	Q.	What does that mean?
12	Α.	Fire. There was a fire.
13	Q.	So there was a fire on the bus?
14	Α.	(Nods head in the affirmative.)
15	Q.	You have to say "yes" or "no."
16	Α.	Yes.
17	Q.	And so they were arguing that the
18	material in	the bus was not fireproof, or what?
19	Α.	That the fire shouldn't have happened.
20	Q.	What part of the bus did the fire
21	occur in?	
22	Α.	The wheel bearing.
23	Q.	And do you remember what the ultimate
24	outcome of,	first of all, the bus fire case was?
25	Α.	I do not.
İ		

1	Q. And how about the seat belt case?
2	A. I do not.
3	Q. Okay. All right. Let me go through the
4	deposition process, just because it's been a while
5	since you've done it.
6	The purpose of a deposition is to
7	discover facts relevant in a lawsuit. In this case
8	it's a lawsuit arising out of an accident that
9	occurred here in Las Vegas on April 18th, 2017,
10	involving an MCI bus and a bicyclist.
11	I'm going to be asking you questions
12	focused on primarily on bus design, and hopefully
13	you'll be able to answer those questions.
14	In any event, my answer my questions
15	and your answers are typed up by the court reporter.
16	She gives you a booklet that's called a deposition
17	transcript. That will probably come in three or
18	four weeks, or since you're going to be on vacation,
19	probably more like well, sooner or later you'll
20	get the booklet.
21	When you get the booklet, you'll have
22	the opportunity to review it and see if your answers
23	as you've given them today are correct. If they're
24	not correct, you can make changes.
25	So and you should make changes if

Page 10 something's not right. However, if you do make 1 2 changes, everybody has the right to comment upon the fact you made a change. So, for example, counsel 3 can say: Oh, he said A originally and then Mr. Couch changed it to B. 5 6 So there's a little bit of premium here on accuracy, and I ask that you give me the best 7 8 answer you can. Yesterday I noticed -- we did 9 Mr. Lamothe's deposition, and we didn't really seem 10 to get into a lot of technical terms, but there were 11 a couple of areas there where he was talking about a 12 process that was used or something and used an 13 acronym or a phrase that seemed to be kind of a 14 15 vernacular for MCI that people wouldn't necessarily 16 So if you see that I'm not understanding your question [sic], ask me to stop and rephrase it. 17 I'll be more than happy to do so. 18 19 Finally, the oath you've taken is the 20 same oath administered in a court of law and has the same force and effect. 21 22 Do you understand all that before we get 23 started? 24 Α. Yes. 25 Where are you currently employed? Q.

۱ -	7\	Page 11
1	Α.	I'm retired.
2	Q.	Can you tell me the extent of your
3	education?	Give me the history.
4	Α.	I have an engineering technology diploma
5	in electric	al and one in electronic.
6	Q.	And when did you get that?
7	Α.	Exact years, I don't know. It was like
8	30-some yea	rs ago.
9	Q.	What school was that from?
10	Α.	Red River College.
11	Q.	In Winnipeg?
12	Α.	Yeah.
13	Q.	And did you get a bachelor's, master's,
14	or what?	
15	Α.	No. It's an engineering diploma.
16	Engineering	technology diploma.
17	Q.	And after getting that diploma, what, if
18	anything, d	id you do?
19	Α.	For education?
20	Q.	Did you get a job?
21	Α.	Oh, sorry. Yes.
22	Q.	Where at?
23	Α.	First job was at with the federal
24	government	as a weights and measures inspector.
25	Q.	And by "federal government" are we

	· · · · · · · · · · · · · · · · · · ·	De 10
1	talking the	Page 12 Canadian federal
2	Α.	Canadian.
3	Q.	And what does a weights and measures
4	inspector d	0?
5	Α.	Inspects scales and fuel pumps and
6	things like	that, make sure they're accurate.
7	Q.	Okay. Gasoline pumps?
8	Α.	Yeah.
9	Q.	And how long did you do that?
10	Α.	Just about a year.
11	Q.	Okay. And roughly what time was that?
12	Α.	I don't recall the exact year. It
13	was so I	went to school, got my electrical
14	diploma. T	hen I did that for a year. Then I went
15	back to sch	ool. Got my electronic diploma. And
16	then I got	another job as a working for an
17	agriculture	equipment manufacturer in the testing
18	department.	
19		And then
20	Q.	Again in Canada?
21	Α.	Yes. All in Canada.
22	Q.	And then when you said you went back to
23	school, you	went back to Red River?
24	Α.	Correct.
25	Q.	Okay, go ahead.

1	Α.	Page 13 And then I worked at a company that made
2	fiber optic	cable.
3	Q.	For how long?
4	Α.	Again about a year.
5	Q.	Then where did you go?
6	Α.	Then I went to MCI after that.
7	Q.	And approximately when was that?
8	Α.	30 years ago.
9	Q.	Okay. Does MCI have some kind of
10	program whe	re you can retire after 20, 25, 30 years?
11	Α.	They have a 30-years plus an age.
12	Q.	Okay. And did you hit the
13	30 years or	
14	Α.	I did, yeah.
15	Q.	So you were there 30 years?
16	Α.	Yeah.
17	Q.	So when did you retire?
18	Α.	In September.
19	Q.	Of this year?
20	Α.	Yeah.
21	Q.	So you were there approximately 9/'87
22	through 9/'	17?
23	Α.	Roughly, yeah.
24	Q.	Okay. All right. And when you first
25	got there i	n approximately '87, what was your job

		Page 14
1	title, if an	ny?
2	Α.	I was the lead in electrical
3	engineering	, in sustaining engineering, in Winnipeg.
4	Q.	Sustaining would be ongoing
5	Α.	Right.
6	Q.	for buses that were already in the
7	field, right	: ?
8	Α.	Well, or small changes to orders.
9	Q.	Okay. That would be existing buses as
10	opposed to	new buses?
11	Α.	Correct.
12	Q.	Okay. How long did you keep that job?
13	Α.	I don't remember exactly.
14	Q.	Okay. And what was your next job,
15	if any?	
16	Α.	Then I worked in the there was a
17	program for	the E Coach, and I was the head of the
18	systems area	a.
19	Q.	Okay. Was the E Coach an existing
20	product at	that time?
21	Α.	No. It was new.
22	Q.	Okay. So you were designing a new bus,
23	basically?	
24	Α.	Right.
25	Q.	And when I say "you," I mean MCI.

		Page 15
1	Α.	The whole team.
2	Q.	Okay. All right. And when you say
3	"team," the	re were people in Winnipeg that were on
4	that team?	
5	Α.	Correct.
6	Q.	And they were employed by MCI Limited?
7	Α.	Yes.
8	Q.	Were you employed by MCI Limited?
9	A.	Yes.
10	Q.	Okay. As opposed to MCI, Inc.?
11	Α.	Right.
12	Q.	Okay. All right. Was there anyone on
13	the team th	at was employed by MCI, Inc.?
14	Α.	Yes.
15	Q.	And would that have been the people in
16	Roswell, Ne	w Mexico?
17	Α.	No.
18	Q.	Okay. Who was employed by
19	MCI, Inc. t	hat was on the design team for the
20	E Coach?	
21	Α.	There was one or two people from our
22	plant in Pe	embina, North Dakota.
23	Q.	And that's P-e-m-b-e-r-t-o-n?
24	Α.	It's Pembina, P-e-m-b-i-n-a. Pembina.
25	Q.	P-e-m-b-i-n-a. Okay. Got it.

		Dogo 16
1		Page 16 Have you been to that plant?
2	Α.	I have, yeah.
3	Q.	Okay. So there were one or two people
4	on the E Co	each design team from MCI, Inc. that came
5	from the Pe	mbina plant; is that correct?
6	Α.	Correct.
7	Q.	Okay. Do you remember what their
8	names were?	
9	Α.	One was Steve Kiner. I don't remember
10	the other o	one.
11	Q.	Kiner would be K-i-n-e-r?
12	Α.	Yeah.
13	Q.	And what were their job positions on the
14	design team	for the E Coach, in general?
15	Α.	Looking after looking out for
16	manufactura	bility. Their input that was
17	their input	. .
18	Q.	Okay. They were the people that made
19	sure that w	hatever's being designed was
20	manufacture	erable?
21	Α.	Correct.
22	Q.	That's like an architect's
23	designabili	ty, they are all round, and then when the
24	contractor	comes in they're all square. Right?
25	Kind of sin	nilar to that? Is that the concept here?

1	Α.	Yeah. It was to make sure that the
2	designs fit	our manufacturing systems.
3	Q.	What time period was the E Coach
4	designed?	
5	A.	From '92, is probably the earliest,
6	until '97.	
7	Q.	And that's pretty much all you did
8	during that	time period?
9	A.	Correct.
10	Q.	Okay. Now, we've been told that there
11	was some in	volvement from some people down in
12	Roswell, New	w Mexico, in the design of the E Coach.
13	Does that r	ing any bells with you?
14	A.	I know Virgil was involved near the end.
15	Q.	And Virgil's last name is?
16	A.	Virgil Hoogestraat.
17	Q.	Can you spell that for the court
18	reporter?	
19	A.	H-o-g-g no.
20	Q.	H-o-g-e-n-s-t-r-a-t?
21	Α.	Could be. I'd have to write it down.
22	Q.	Okay. We have him coming up tomorrow.
23		So he was involved at the end of the
24	E Coach pro	ject?
25	Α.	Yeah.

1	Q.	Page 18 And what was Virgil's role?
2	Α.	And Harold Zuschlag.
3	Q.	How do you spell that one?
4	Α.	I don't know. Last name, I can't
5	Q.	"Douchelag"?
6	Α.	Zusch. Zed. Z.
7	Q.	Z?
8	Α.	Zed-U.
9	Q.	Z-what?
10		MR. NALEPKA: Do you want me to give you
11	the spellir	ıg?
12		MR. KEMP: Yeah.
13		MR. NALEPKA: Z-u-s-c-h-l-a-g.
14		MR. KEMP: I knew that.
15		MR. NALEPKA: And Hoogestraat is
16	H-o-o-g-e-s	s-t-r-a-a-t.
17		MR. KEMP: Two A's?
18		MR. NALEPKA: Yeah.
19		MR. KEMP: Okay. I was close. I was
20	close.	
21	BY MR. KEMI):
22	Q.	All right. And Mr. Zuschlag is that
23	how you pro	onounce it?
24	Α.	Yeah.
25	Q.	Mr. Zuschlag was from the New Mexico
	-	_

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1	Page 19 area, too, was your understanding?
2	A. Yeah.
3	Q. Now we have two people. It's been
4	suggested to us that there were as many as 20 people
5	from New Mexico involved. Does that ring any bells?
6	A. On the E Coach?
7	Q. Yeah.
8	A. (Shakes head in the negative.)
9	Q. Just those two are the ones?
10	A. That's my that's what I recall, yeah.
11	Q. And what was your understanding, if any,
12	as to where Mr. Hoogestraat and Mr. Zuschlag were
13	employed? Who was their employer?
14	A. Who was their employer?
15	Q. Uh-huh.
16	A. MCI, Inc.
17	Q. Inc.? Okay.
18	Was there a subdivision of MCI at or
19	near this time that was TRW or TCS or something
20	like that?
21	A. I don't know.
22	Q. You don't know? Okay.
23	And did you interact with
24	Mr. Hoogestraat and Mr. Zuschlag in the design of
25	the E Coach?
I	

1	Α.	Yes. Page 20
2	Q.	Did they actually come to Canada?
3	Α.	They did.
4	Q.	So and when they came to Canada, were
5	they there f	or weeks, months, at a time?
6	Α.	They would come back and forth.
7	Q.	Back and forth. Okay.
8		Did you guys have some sort of sharing
9	program wher	e the design was on CAD or something and
10	it could be	shared back and forth between Canada and
11	New Mexico?	
12	Α.	I don't we did have the ability to
13	share. I do	n't recall whether we did or not.
14	Q.	And what was Mr. Hoogestraat's primary
15	involvement	in the E Coach design?
16	Α.	He came in near the end and was just
17	helping out	with getting it into production.
18	Q.	Okay. And when you say "helping out,"
19	was there a	particular issue or problem that he was
20	there to hel	p out with?
21	Α.	No.
22	Q.	Okay. And why was he needed in
23	that role?	
24	Α.	He was just a senior technical guy for
25	the company,	and so he it was an important launch
1		

	, ,
1	Page 21 and he was there for help.
2	Q. And what was Mr. Zuschlag? What was
3	his role?
4	A. Same. Same thing. He was there at the
5	end to get it into production.
6	Q. Okay. When you designed the
7	E Coach, was there someone that was in charge of
8	product safety, someone specifically in charge of
9	product safety?
10	A. Well, everybody was.
11	Q. Okay.
12	A. All the there was probably about a
13	hundred people, and so everybody had responsibility
14	for safety for their area.
15	Q. Okay. A hundred people on the design
16	team?
17	A. Yeah, roughly.
18	Q. And that would include everybody in
19	Canada, everybody from North Dakota, everybody from
20	New Mexico? That's the whole group?
21	A. Yeah, it was just about all in
22	Canada, yeah.
23	Q. Okay. But the hundred number is the
24	whole group?
25	A. Right.

		Page 22
1	Q.	Okay. Was there an overall person in
2	charge of t	he product?
3	Α.	Mark Sealy for quite a bit of it.
4	Q.	And how do you spell that last name?
5	Α.	S-e-a-l-y.
6	Q.	And then did someone else take over
7	his	
8	Α.	That would have been Harold at the
9	after wh	en we were getting it into production.
10	Q.	So Sealy was there for most of the
11	project and	then Zuschlag took over when you put it
12	into produc	tion?
13	Α.	Right. Sealy wasn't an MCI employee.
14	He was a co	nsultant.
15	Q.	And do you know where he was located at?
16	Α.	He's from England.
17	Q.	Was he living in England at the time the
18	bus was bei	ng designed?
19	Α.	He was living in Canada.
20	Q.	Is he back in England now, if you know?
21	Α.	He is. As far as I know.
22	Q.	Is he retired?
23	Α.	Don't know.
24	Q.	Was the E Coach a successful bus series?
25		MR. RUSSELL: Objection. Vague.

		Page 23
1		THE WITNESS: I don't know what
2	you mean.	
3	BY MR. KEME	· ·
4	Q.	Did you sell a lot of them?
5	Α.	Yeah.
6	Q.	Was it the number-one seller in
7	North Ameri	ca for a time period?
8	A.	I don't believe it was number-one,
9	but	
10	Q.	Top three?
11	Α.	Yeah.
12	Q.	Okay. And did there come a time that
13	the E Coach	was used as a platform to design the
14	J Coach?	
15	Α.	Yeah.
16	Q.	When was that?
17	Α.	The J Coach happened in '99 to 2000,
18	roughly.	
19	Q.	And were you also involved in that?
20	Α.	I was.
21	Q.	And what was your role in that?
22	Α.	Well, I was in product planning then, so
23	I was more	on the concept and how it fit into the
24	MCI's produ	act offering.
25	Q.	Why is it it took five years to

	Page 24
1	design the E Coach and only two years to design the
2	J Coach?
3	A. The J Coach is just a facelift of
4	the E, really.
5	Q. Okay. So basically the J Coach is an
6	E Coach updated a little bit?
7	A. Well, it has it was changed, so a
8	different look and a different look and different
9	features.
10	Q. Okay. Could you tell me the three
11	primary changes?
12	A. So the look, the styling, was changed;
13	the electrical was changed; and the tag axle was
14	changed.
15	Q. The tag axle?
16	A. Yeah.
17	Q. Okay. Anything else?
18	A. Those are the
19	Q. Top three?
20	A. (Nods head in the affirmative.)
21	Q. Okay. And when you say the look was
22	"changed," what does that mean to a layperson?
23	A. So the E was designed as a to look
24	and be a very high-end tour coach, and the J Coach
25	was designed to be not so high-end.

1		Page 25 So we had a D coach, a J Coach and an
2	E Coach. S	So it's kind of a more I guess it would
3	be attracti	ve to more of the customer base, whereas
4	the E was j	ust a very high-end. That's how it was
5	styled and	designed.
6	Q.	And by "high-end," would that be
7	pricier?	
8	A.	Yes.
9	Q.	So the E Coach cost more than the
10	J Coach?	
11	A.	Yes.
12	Q.	And just in general, what would an
13	E Coach cos	st, in U.S. dollars?
14	A.	Price?
15	Q.	Yeah. In the 2000 time period.
16	A.	Probably \$400,000, 450.
17	Q.	And how about the J Coach?
18	A.	Probably \$20,000 less.
19	Q.	And the D coach?
20	Α.	The D coach would depend a lot on the
21	spec. Beca	ause we so it would depend on how it
22	was specifi	Led.
23	Q.	Okay. But would that be less than the
24	E and J?	
25	Α.	Sometimes it would be more.

1	Page 26 Q. Okay. So basically the idea here was
2	that the J Coach would be slightly cheaper than the
3	E Coach, to attract a different market segment?
4	A. It would have a lower price, with not as
5	much technology.
6	Q. What is on the E Coach in terms of
7	technology that's not on the J Coach?
8	A. A steerable tag axle. It has a it
9	had an electronic dash instead of individual gauges.
10	It had a multiplexed electrical system. Those are
11	some of the main.
12	Q. These are all things the E had that the
13	J didn't have?
14	A. Correct.
15	Q. Okay. All right. Did the E have seat
16	belts in 2000?
17	A. It did not.
18	Q. How about the J?
19	A. No.
20	Q. Okay. When if you know, when did
21	seat belts first become standard equipment for the
22	J series?
23	A. Standard?
24	Q. Right. Are they standard now?
25	A. They are.

		Page 27
1	Q.	Okay. When did that happen?
2	Α.	I don't remember the exact date.
3	Q.	Can you give me a year?
4	A.	No. It was it was around the time
5	that the ru	ule came in effect.
6	Q.	Are you talking about the FMSV [sic]
7	rule?	
8	Α.	FMVSS rule.
9	Q.	So shortly before that time?
10	Α.	That's what I recall.
11	Q.	So if we get the effective date of that
12	rule, it's	sometime before that for both the E Coach
13	and the J	Coach?
14	Α.	Yes. And the D Coach.
15	Q.	Why weren't they put on before that rule
16	came into	effect?
17		MR. RUSSELL: Objection; foundation.
18	BY MR. KEMI	?:
19	Q.	Referring to seat belts.
20	Α.	Sorry?
21	Q.	Referring to seat belts, why weren't
22	they added	to the E Coach or J Coach before the rule
23	came into	effect?
24		MR. RUSSELL: Same objection.
25		THE WITNESS: They were added before the

Page 28 1 rule came into effect. BY MR. KEMP: Why weren't they added, say, five Okay. 3 Q. years before the rule came into effect? 4 They were -- if memory serves me 5 correct, I believe we first put them on in 2005. 6 At that time they were optional? 7 Q. Α. Correct. 8 And so from 2005 until whenever the 10 federal regulation came into effect, they were 11 optional? 12 Α. Correct. Okay. Why weren't they standard, if 13 Q. you know? 14 Some customers didn't want them. 15 Α. And you do know that passenger vehicles 16 in the United States were required to have -- all of 17 them were required to have seat belts from 1968 18 19 forward? You know that? 20 MR. RUSSELL: Objection; foundation. THE WITNESS: I know that seat belts 21 22 were on cars before they were on coaches, yeah. BY MR. KEMP: 23 Does that seem odd to you, that seat 24 Q. belts were required to be on cars in 1968 and yet 25

```
Page 29
     they weren't put on buses until 2005 and after?
 1
 2
                 MR. RUSSELL: Objection; foundation.
     Speculation.
 3
     BY MR. KEMP:
 5
         0.
                 It doesn't seem odd?
         Α.
                 No.
 7
         Q.
                 Okay. Would there be a reason why
     seat belts would be needed more in automobiles than
     in buses?
10
                 MR. RUSSELL: Objection; incomplete
11
     hypothetical.
     BY MR. KEMP:
12
                 In terms of, you know, protecting people
13
         Q.
     from injuries in accidents?
14
15
                 MR. RUSSELL: And foundation.
16
                 THE WITNESS: Sorry. Could you repeat
17
     that?
     BY MR. KEMP:
18
19
         Q.
                 Is there a reason why seat belts would
20
     be used in automobiles, in terms of a safety device
21
     to protect people from injuries in accidents, that
22
     doesn't apply to buses?
23
                 I don't know that I'm qualified to
24
     answer that.
25
         0.
                 Okay. As we sit here today, do you know
```

	Page 30
1	of any reason?
2	MR. RUSSELL: Same objections.
3	THE WITNESS: Any objections to
4	sorry. I don't
5	BY MR. KEMP:
6	Q. Do you know of any reason why a seat
7	belt would not be a good safety feature for a bus as
8	it is for an automobile?
9	A. The main thing is the vehicle size. So
10	a coach is a very safe vehicle. It's very high. It
11	has a very high interior. And it was a very safe
12	means of travel. It is a very safe means of travel.
13	Q. Am I not correct that a car and a coach
14	or a bus would either one of them runs into a
15	wall, they're both going to stop, right?
16	MR. RUSSELL: Objection; foundation.
17	Incomplete hypothetical.
18	THE WITNESS: Depends.
19	BY MR. KEMP:
20	Q. Okay. And you know airbags are required
21	now for cars, right?
22	A. Yeah.
23	Q. Was any consideration given to putting
24	airbags in buses?
25	A. I don't know.
Ì	

1	Page 31 Q. Okay. How about the driver seats?
2	A. What about them?
3	Q. Were seat belts standard equipment in
4	the driver seats prior to 2005?
5	A. I believe so, yes.
6	Q. So the driver had a seat belt as a
7	standard piece of safety equipment, but the
8	passengers did not; is that correct?
9	A. Seat belts were in for the driver long
10	before they were for the passengers.
11	Q. And what's the rationale for that?
12	A. I believe it's to keep the driver in his
13	seat so he can maneuver, in the event of he has
14	to make an evasive maneuver.
15	Q. Okay. But what is the rationale for
16	keeping the driver in the seat with a standard seat
17	belt but not keeping the passengers in their seat
18	with a standard seat belt?
19	MR. RUSSELL: Objection; foundation.
20	THE WITNESS: The seating in a in a
21	vehicle in a bus provides some
22	compartmentalization. So the passengers
23	BY MR. KEMP:
24	Q. Okay. Let's go back to airbags.
25	Are airbags a standard safety feature

for the driver seat in buses now, in the J4500? 1 2 Α. Not to my knowledge. Has any consideration, that you know 3 Q. of, been given to putting airbags in driver seat of buses? 5 Α. I am not sure whether MCI has looked at it or not. 8 Q. Okay. As part of bus design, do the designers do what's sometimes referred to as a 9 10 general hazard assessment or potential hazard 11 assessment? 12 Α. We do a failure mode and effect analysis. 13 And as part of that you look at 14 Q. 15 potential accidents and safety issues? 16 We would look at a whole range of things A. 17 that could happen. 18 Okay. And that was done for the Q. 19 E Series? There would have been some done on 20 Α. 21 certain high-risk systems. 22 Was there an overall -- is that FMEA? 23 Α. Yeah. Was there an overall FMEA for the 24 25 E Series in general?

	75	Page 33
1	Α.	I don't recall.
2	Q.	And same question for the J Series: Was
3	there an ov	rerall FMEA?
4	Α.	Again, I don't recall if there was.
5	Q.	But you recall that there was some FMEA
6	on the E Se	eries for what you referred to as
7	high-risk s	systems; is that right?
8	Α.	Right.
9	Q.	And would the same be true for the
10	J Series?	
11	Α.	Yes.
12	Q.	And what would the high-risk systems be?
13	A.	I don't so the probably the
14	electrical	system.
15	Q.	Anything else?
16	Α.	Steering. Brakes.
17	Q.	Do you have an understanding that a
18	rectangular	object moving through air will
19	displace ai	ir?
20	Α.	A rectangular object will, yeah.
21	Q.	Okay. And what do you call that?
22	Α.	What do I call what, sir?
23	Q.	The air displacement.
24		Let's make it a little more specific.
25		Do you have an understanding that if a

		Days 24
1	bus is movi	Page 34 ng, say, 25 miles an hour, it will
2	displace	the front of the bus will displace air?
3	Α.	A coach will displace air, yeah.
4	Q.	And what do you call that?
5	Α.	It would be part of drag.
6	Q.	Okay. Have you heard the term "side
7	force"?	
8	Α.	No.
9	Q.	Okay. Ever heard the term "air blast"?
10	Α.	No.
11	Q.	Okay. But what you would call it would
12	be "drag"?	
13	Α.	Right.
14	Q.	Okay. Are there different ways to
15	minimize th	e amount of air that a coach will
16	displace wh	en it's moving?
17	Α.	This isn't my area of expertise, so
18	Q.	Okay. Was there an aerodynamic engineer
19	involved in	the development of the E Series?
20	Α.	There were engineers that would be
21	looking at	that.
22	Q.	Okay. And who were they?
23	Α.	I don't recall.
24	Q.	Okay. And when you said there were
25	engineers t	hat were looking at that, how do you

	Page 35
1	know that?
2	A. There was a a design goal to try to
3	improve the drag coefficient of the E Coach compared
4	to the D Coach.
5	Q. Okay. That was one of the goals going
6	into the E Series project, to
7	A. Correct.
8	Q to to improve the drag
9	A. To reduce the drag.
10	Q. And the drag coefficient is expressed in
11	terms of .4, .8, something like that?
12	A. I don't know that.
13	Q. You don't know that, okay.
14	And that's why you think that there were
15	some aerodynamics engineers involved, because that
16	was one of the goals?
17	A. Right.
18	Q. Other than that, do you have any
19	knowledge as to aero aerodynamic engineers
20	specifically being involved?
21	A. No.
22	Q. Okay. And since the E Series ultimately
23	was converted into the J Series, was there another
24	design goal to try to improve the drag coefficient
25	measurement for the J Series?

		Page 36
1	Α.	There was.
2	Q.	So
3	Α.	And it was further improved. There
4	was some wo	rk done on the on the back shape, to
5	make it rou	nder on the J, and also on the front, to
6	improve the	drag.
7	Q.	Okay. And you do recognize that
8	rounding the	e edges of a flat object is one way to
9	potentially	improve the drag coefficient
10	measurement	?
11		MR. RUSSELL: Objection; foundation.
12		THE WITNESS: All I know is we were
13	working on	the back end as part of the styling, to
14	increase the radiuses on the corners.	
15	BY MR. KEMP:	
16	Q.	And it was your understanding that was
17	done to att	empt to improve the drag coefficient
18	measurement	?
19	A.	Correct.
20	Q.	Do you know whether or not it did
21	improve the	drag coefficient measurement?
22	Α.	I don't know.
23	Q.	And you said the design goal was to
24	improve the	drag coefficient measurement. Do
25	you know if	there was a specific drag coefficient

```
Page 37
 1
     measurement that there was -- was the goal, like,
 2
     .3, .4, .5?
                 I remember seeing it on a chart.
 3
         Α.
     was .4 or something was the design goal for the E.
 5
         Q.
                 So you were trying to get to .4 or
     better?
 6
 7
         Α.
                 Right.
                 And what was the goal for the J?
 8
         Α.
                 I don't know that we had a number.
     just thought that there was an opportunity on the
10
     back, because the E Coach rear corners were -- the
11
     radiuses were fairly tight.
12
                 And does that mean they were more of a
13
         Q.
14
     box than a circle, when you say "tight"?
15
         Α.
                 Correct.
16
                        Tight would be a 90-degree angle,
                 Okay.
17
     is that what you're saying?
18
         Α.
                 Yes.
                        It would be 90, yeah.
19
         Q.
                 Yeah.
                        All right.
20
                 Okay. What was the motivating factor
     for the design goal of trying to improve the drag
21
22
     coefficient measurement?
23
                 MR. RUSSEL: Objection; foundation.
24
                 THE WITNESS: Sorry. Could you repeat
25
     that?
```

1	Page 38 BY MR. KEMP:
2	Q. What was the reason that MCI was trying
3	to improve the drag coefficient measurement for the
4	E Series?
5	A. So the vehicle would move through the
6	air with easier. Less disturbance.
7	Q. Was fuel economy one of the reasons?
8	A. Fuel, dust.
9	Q. Any other reason that you know of?
10	A. Those would be the main ones.
11	Q. And basically, if it moves with less of
12	a drag coefficient, it uses less fuel; is that
13	basically it?
14	A. It that depends.
15	Q. Okay. But in general, if the drag
16	coefficient is lower it's going to be better fuel
17	economy?
18	A. Again, that depends.
19	Q. Depends on what?
20	A. On the speed that the vehicle's used at.
21	Q. Oh, okay.
22	All things being equal, if you have less
23	drag coefficiency, you will use less fuel?
24	A. Not necessarily. It I believe it has
25	to be because weight and rolling resistance plays

- a big factor in fuel economy for these vehicles, and 1
- 2 draq doesn't come into effect until, I believe it's
- 3 over 55 miles per hour.
- And how does dust factor into drag
- 5 coefficiency?
- Well, so you're not -- when the vehicle 6 Α.
- goes down the road, it's not disturbing the air so
- much so that it ... 8
- 9 Okay. And why would you not want to Q.
- have the vehicle disturbing the air? 10
- Well, it's used in cities and open 11
- country, passing by people. 12
- 13 Is the concern about safety to passersby Q.
- or is there a concern about exposing them to dust? 14
- 15 Α. I'm not sure.
- 16 All right. Q.
- 17 And by the way, Mr. Couch, this is not a
- 18 contest to see how long we can go before a break, so
- 19 if you need a break at any time, just let me know.
- Α. All right. 20
- (Exhibit 1 marked.) 21
- 22 BY MR. KEMP:
- 23 Mr. Couch, I'm handing you a
- document that's on a stationery of an entity known 24
- 25 as A D R Systems.

		Page 40
1	Α.	Mm-hmm.
2	Q.	Do you see that they're in Winnipeg?
3	Α.	Yep.
4	Q.	And this was written by, if you look
5	at page 3,	a man named George Fleming. Do you
6	see that?	
7	Α.	Yep.
8	Q.	Do you know George Fleming?
9	Α.	I do not.
10	Q.	Okay. All right. Flipping over a
11	little bit,	there's an attachment here, after the
12	patent d	lo you see the United States patent?
13	Α.	Yeah.
14	Q.	After that, we have an article by a man
15	named Kevin	Cooper entitled, quote, "The Effect of
16	Front-Edge	Rounding and Rear-Edge Shaping on the
17	Aerodynamic	Drag of Bluff Vehicles in Ground
18	Proximity,"	unquote.
19		Do you see that? Are you with me?
20	Α.	No, not yet. Yep.
21	Q.	Okay. First of all, do you know
22	Kevin Coope	er?
23	Α.	I do not.
24	Q.	And prior to today did you know of this
25	article?	

- Page 41 I do not. 1 Α. 2 And apparently this article was produced Q. to us from some sort of box that MCI keeps with 3 4 regards to the design of its --5 Α. Okay. 6 Q. Do you know how that works? 7 some sort of file for the design of buses or 8 something? 9 MR. RUSSELL: And just to clarify the 10 The box wasn't necessarily an MCI box. 11 These were documents that we pulled, so I don't 12 want to mislead you to think it was a single box that we got. 13 14 BY MR. KEMP: 15 Do you know where -- is there a process Q. 16 at MCI where, if you're designing something and you 17 have an article of interest, you file it somewhere? 18 Is there a design file or something like that? 19 Α. There are files that the engineer --
 - 21 Okay. Let's start with you. Q. When you

engineers keep, and there's -- yeah.

- 22 were helping design the E Series, did you have your
- 23 own file system or something?
- 24 Α. I did not. There was a central file
- 25 system.

20

		Page 42
1	Q.	There was a project file?
2	Α.	Yeah.
3	Q.	Is that what it was called, a project
4	file?	
5	Α.	No. I don't remember what it was called
6	exactly.	
7	Q.	Okay. But in essence, it was a
8	project fil	.e?
9	Α.	There was a file system kept for the
10	E Coach, ye	eah.
11	Q.	Okay. Same for the J Coach?
12	A.	I don't know that.
13	Q.	Okay. And the file system for the
14	E Coach, wh	nat are we talking about? Are we talking
15	ten boxes,	a thousand boxes, what?
16	A.	I don't know, no.
17	Q.	Who's in charge of that?
18	Α.	Don't know.
19	Q.	Okay. How is it you know there was a
20	file system	n?
21	Α.	I was on the team, and there was a
22	central are	ea where we all sat and there was a
23	file system	n in there. But that's been gone for a
24	long time.	
25	Q.	Okay. Back to Mr. Cooper here.

```
Page 43
 1
                 Did I ask you if you've seen this
2
     article before?
                 I don't remember. I haven't.
 3
         Α.
                 Okay. And the article says that, quote,
 5
     "Commonly, aerodynamic drag is reduced on such
     bodies by modifying the shapes of the front and rear
 6
7
     edges to reduce the average front-face pressure and
 8
     to increase the average base pressure,
9
     respectively."
                 Did I read that right?
10
11
                 I don't know what bodies they're
     referring to.
12
                 They're referring to bluff vehicles.
13
         Q.
                 What is a bluff vehicle?
14
         Α.
15
                 Well, one thing that's a bluff vehicle
         ο.
     would be a bus.
16
                 How about a coach?
17
         Α.
18
         Q.
                 Okay. A coach.
                 I don't know. It talks about something
19
         Α.
     that's very -- with 90-degree corners, it looks
20
     like, like a semi-trailer. So I'm not sure what the
21
     definition of bluff is or what the bodies is.
2.2
23
                 Okay. Did the E Series have 90-degree
     corners at the front?
24
```

25

Α.

No.

1	Q.	Page 44 What were they?
2	Α.	I don't remember, but they were
3		guite a bit of work done on the styling of
	•	
4		f to make it slope back so the front
5	wasn't vert	cical. So it was sloped back, and the
6	edges were	we had we did a lot of work with
7	windshields	s, trying to make put contours in the
8	windshields	s, both side to side and top to bottom, so
9	they were o	quite a complex windshield to make in
10	order to re	educe the drag.
11	Q.	The drag coefficient?
12	Α.	Yeah.
13	Q.	Okay. All right. Well, let's try to
14	get a conti	nuum here that we can talk about.
15		You're familiar with the Japanese bullet
16	train that	came out in 1964?
17	Α.	I'm familiar with what bullet trains
18	look like,	but specifically that one, no.
19	Q.	Okay. Bullet trains generally have more
20	rounded con	mers than buses, would you agree?
21		MR. RUSSELL: Objection; foundation.
22		THE WITNESS: I don't know.
23	BY MR. KEMI	?:
24	Q.	Okay.
25	Α.	It would depend, I think, on the

	Page 45
1	comparison.
2	Q. Okay. How about it would depend on
3	the comparison. What's that mean?
4	A. What bullet train with what bus and what
5	coach.
6	Q. Why don't we start with the E Series
7	bus, okay, and compare it to the 1964 bullet train.
8	You would agree with me that the bullet
9	train is more aerodynamically efficient?
10	MR. RUSSELL: Objection; foundation.
11	THE WITNESS: I don't know.
12	BY MR. KEMP:
13	Q. You think the bullet train has a higher
14	drag coefficient measurement than the E Series bus?
15	MR. RUSSELL: Objection.
16	THE WITNESS: Again, I don't know.
17	I can't visualize what that looks like, so I
18	don't know.
19	BY MR. KEMP:
20	Q. Okay. Are you familiar with any objects
21	that would have a higher drag coefficient
22	measurement than the E Series bus that are
23	fast-moving, like 200-miles-or-above, trains?
24	MR. RUSSELL: Objection; foundation.
25	THE WITNESS: Higher, or?

```
Page 46
     BY MR. KEMP:
 1
 2
         Q.
                 Higher.
                           They all have lower, right?
                 Again, it would -- I would think they
 3
         Α.
     would have -- be more aerodynamic, but I don't know
     for sure.
 5
                 The problem -- the thing on a --
         Q.
                 If they are more aerodynamic --
 8
                 MR. RUSSELL: Let him finish.
 9
     BY MR. KEMP:
10
                 I'll let you expand.
                                        But by "more
11
     aerodynamic, " you mean a lower drag coefficient.
12
     Correct?
                 Right.
13
         Α.
                 Go ahead.
14
         Q.
15
                 A coach has certain requirements for
         Α.
16
     ceiling height inside and passenger capacity and
     driver position that some of these other vehicles
17
     you're talking about do not have.
18
                 And the E Coach, all of those envelopes
19
20
     were considered and pushed to their limit to make it
21
     as aerodynamically -- to make it as aerodynamic as
22
     possible at the time when we did the design, is what
23
     I remember the goals were. Because there was a lot
24
     of work on keeping the high driver position so the
25
     driver has very good visibility.
```

1	Page 47 Whereas, in a bullet train, a bullet
2	train the driver just doesn't have to steer it.
3	It's on a set of tracks and he doesn't have to
4	really see what's coming.
5	Whereas, a coach driver is sitting up
6	high, right at the front, and so it's as aero the
7	E Coach was as aerodynamic as we could make it for
8	the considering all those variables.
9	Q. Does MCI distribute the Setra 417?
10	A. We do now.
11	Q. And does MCI also distribute the
12	Setra 500?
13	A. We do not.
14	Q. Do not?
15	A. MCI does not.
16	Q. Okay. Let's talk about the Setra 417
17	then.
18	Would I be correct that the Setra 417
19	has a lower drag coefficient measurement than either
20	the E Series or the J Series?
21	MR. RUSSELL: Objection. Foundation.
22	THE WITNESS: In my opinion, it does
23	not. The E or J would be have a lower drag
24	coefficient, in my opinion.
25	BY MR. KEMP:

1	Q.	Page 48 Okay. Do we really need opinions here?
2	Don't they	y test for this kind of thing?
3	Α.	I'm not aware of a test. But in my
4	opinion.	
5	Q.	Okay. You are aware that they put buses
6	in wind to	unnel tests?
7	Α.	Who does?
8	Q.	They have facilities, like there's
9	facilities	s in Ohio, Atlanta, other places, where
10	they have	big wind tunnels and you can put buses or
11	other kind	d of vehicles in?
12	Α.	Correct.
13	Q.	Okay. Was this done with regards to the
14	E Series,	first of all?
15	Α.	My recollection is there was a wind
16	tunnel tes	sting on scale models done, is what I
17	recall.	
18	Q.	For the E Series?
19	Α.	Correct.
20	Q.	How about the J Series?
21	Α.	No.
22	Q.	Okay. And on the E Series, by
23	"scale mod	del," they would build a smaller version of
24	the bus?	
25	Α.	Right.

```
Page 49
 1
         Q.
                 And what was the scale, if you can
 2
     recall?
                 I don't recall. Like -- I don't know.
 3
         Α.
     I don't recall what size. It could be a tenth or
     something like that.
 6
                 So if the bus is -- what? -- 48 feet
         Q.
 7
     long?
                 45.
 8
         Α.
 9
         Q.
                 45.
                       So you think that maybe the
     wind tunnel test was done on a 4.5-foot bus?
10
                 Yeah.
11
         Α.
12
                 Okay. Were you involved in that in any
         Q.
     way, shape or form?
13
                 I wasn't.
14
         Α.
                 You just heard about the results?
15
         Q.
                 I just heard that -- I recall that it
16
         Α.
17
     was done a long time ago.
18
         Q.
                 And was that done on various prototypes
19
     that you were considering or was it just done on the
20
     final proto -- model of the E Series?
21
                 MR. RUSSELL: Objection; foundation.
22
                 THE WITNESS: I don't recall that.
23
     BY MR. KEMP:
24
                 But you do recall some sort of
         Q.
25
    wind tunnel test being done on an approximately
```

:	Page 50
1	4-foot-5-feet model 4.5-foot model?
2	A. As I said, I believe there was one done
3	on a scale model. I don't remember the exact size.
4	Q. Okay. And where was that done, if you
5	recall?
6	A. I don't recall.
7	Q. Was it done in Canada as opposed to the
8	United States?
9	A. I don't recall.
10	Q. Does MCI Limited have its own wind
11	tunnel facility for scale models?
12	A. MCI Limited? No, we do not.
13	Q. Okay.
14	A. It does not.
15	Q. So they had to sub it out to somebody?
16	A. Correct.
17	Q. Do you know who they subbed it out to?
18	A. I don't.
19	Q. Do you know who was involved in the
20	subbing out?
21	A. I don't. As I said, it wasn't my area
22	of expertise. I was on the systems at that time.
23	Q. Whose area of expertise was it?
24	A. I believe it would have been in the
25	structural zone.

1	Page 51 Q. And who was in charge of that?
2	A. Ron Bittner.
3	Q. Can you spell his last name for me?
4	A. B-i-t-t-n-e-r.
5	Q. Now, you said the E Coach was designed
6	sometime in '92 through '97?
7	A. Correct.
8	Q. All right. Do you know when the wind
9	tunnel test was done in that frame of time?
10	A. It would have been earlier on. So
11	like
12	Q. Earlier on, before 1992?
13	A. No, it would have been like in so in
14	'93, '94 time frame, I think.
15	Q. And is this wind tunnel test the basis
16	for your belief that you had a .4 drag coefficient?
17	A. No. As I said, that was on a on a
18	that was a design goal.
19	Q. Okay. How did you determine whether or
20	not the design goal was achieved?
21	A. I don't know whether we did or not.
22	Q. Okay. Would I be correct that to
23	determine to really determine whether the design
24	goal had been achieved you would have to take a bus
25	and put it in a full-scale bus and put it in a
1	

	50.1
1	Page 52 wind tunnel, right?
2	MR. RUSSELL: Objection; foundation.
3	THE WITNESS: Or there would be some
4	type of simulation that could be done or on a
5	scale model.
6	BY MR. KEMP:
7	Q. Or a computer simulation?
8	A. Yeah.
9	Q. Do you know if computer simulations
10	were done?
11	A. I don't.
12	Q. And more specifically, do you know if
13	computer simulations for drag coefficiency with
14	regards to the E Series were done?
15	A. I don't.
16	Q. Who do you think would be the person who
17	would know the most about that?
18	A. I don't know right now.
19	Q. Mr. Bittner maybe?
20	A. I don't know. He's been out of that
21	he doesn't work at MCI anymore, and he
22	Q. Where where does he work at now?
23	A. I'm not sure.
24	Q. Now, you said that the two reasons that
25	you attempted to improve the drag coefficiency were

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1	Fage 53 fuel and dust, right?
2	A. Yeah, uh-huh.
3	Q. Was one of the reasons to attempt to
4	reduce air displacement that a bystander or bicycle
5	would see?
6	A. Well, that would be the effect.
7	Q. Okay. Was that a safety concern?
8	MR. RUSSELL: Objection; foundation.
9	THE WITNESS: I don't know.
10	BY MR. KEMP:
11	Q. Okay. In other words, was there any
12	sort of concern that if you had a higher amount of
13	air displacement, it would potentially cause a
14	bicyclist to wobble or pedestrians to, you know, be
15	disrupted in some way?
16	MR. RUSSELL: Same objection.
17	THE WITNESS: Not to my knowledge.
18	We I mean, the drivers, there's you have to be
19	a licensed professional driver to drive our
20	vehicles, and they're trained in obstacles on the
21	road and how to drive.
22	BY MR. KEMP:
23	Q. So you think a licensed professional
24	driver would be a CDL license; is that right?
25	A. Correct.

Page 54 1 So you think someone with a CDL would Q. 2 understand that there's this air-displacement potential from driving the bus? 3 MR. RUSSELL: Objection; foundation. 5 Speculation. THE WITNESS: A CDL is -- when you get 6 7 your CDL you're trained on hazards on the road, and hazards on the road are pedestrians, bicyclists. Those are all hazards that you're trained on how to 9 10 behave when driving -- operate the vehicle in their 11 presence. BY MR. KEMP: 12 13 Okay. Well, let's stick with the air Q. 14 displacement. Do you think a licensed driver with a 15 CDL would understand that there's a potential for air displacement from a J4500? 16 MR. RUSSELL: Objection; foundation. 17 18 Speculation. 19 THE WITNESS: I believe that somebody 20 with a CDL understands that they -- it's a big 21 vehicle, and when you are driving at a high rate of speed, that there's a possibility that the air going 22 around the vehicle would kick up dust or get in 23 people's eyes or -- that's what I believe somebody 24 25 with a CDL understands.

1	Page 55 That's why they're trained to consider a
2	pedestrian or a bicyclist as a hazard and to operate
3	the vehicle in such a way as to reduce any
4	accidents.
5	BY MR. KEMP:
6	Q. Okay. We're kind of dancing around it,
7	but let me be a little more specific.
8	Do you think that someone with a CDL
9	would know, have the knowledge, that there would be
10	air displacement from the front of a J4500 if it's
11	traveling down the road?
12	MR. RUSSELL: Same objections and asked
13	and answered.
14	THE WITNESS: I don't know for sure.
15	BY MR. KEMP:
16	Q. Okay. Then why did we start down
17	this road by you saying that you think a licensed
18	driver would realize that there was some air
19	displacement?
20	A. Well, because he's trained to he
21	he would see that there's dust and whatever is
22	picked up if he drives by somewhere at a high rate
23	of speed. So he would understand that there's air
24	going out from the side of the vehicle, from the
25	front of the vehicle. And that's why he's trained

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- Page 56 and why a licensed driver's required to drive our 1 2 vehicles. And unless he's traveling at a very high rate of speed, he would also understand that it 3 doesn't have a great effect, I believe. 5 So let's try to quantify this "high rate of speed" term that you're using. 6 7 Would you consider 25 miles an hour a high rate of speed? 8 9 MR. RUSSELL: Objection; foundation. Incomplete hypothetical. 10 11 THE WITNESS: It would depend. Like, I don't understand what you're -- what "high rate of 12 speed" means. 13 14 BY MR. KEMP:
- 15 You're the one that used the term "high Q.
- rate of speed" initially. What did you mean by it? 16
- As I said earlier, the drag coefficient 17
- 18 doesn't really come into effect, as I understand it,
- anything I've read, for fuel economy, unless you're 19
- above 55 miles an hour. 20
- And so we're talking about a coach that 21
- is built for highway speed, highway driving, and 22
- 23 that's what I consider -- above that -- to be a high
- rate of speed. 24
- 25 If you were below 55 miles, what Q. Okay.

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1 is your understanding, if any, as to whether or not
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- 2 you would have air displacement?
- MR. RUSSELL: Objection; foundation.
- 4 THE WITNESS: It would just -- the air
- 5 displacement would diminish with the speed, and I'm
- 6 not sure how much force it has at what speed.
- 7 BY MR. KEMP:
- 8 Q. Okay. And force is referred to as
- 9 side level?
- 10 A. It's going -- it's going to be going --
- 11 there's obviously a side factor to it, but there's
- 12 also a swirling vector.
- Q. And by "swirling vector" are you talking
- 14 about the phenomena where the initial side force
- 15 creates a negative pressure zone --
- MR. RUSSELL: Objection.
- 17 BY MR. KEMP:
- 18 Q. -- and then the air entrains back into
- 19 the bus? Is that what you are talking about?
- 20 MR. RUSSELL: Objection; foundation.
- 21 Incomplete hypothetical.
- 22 THE WITNESS: So what I'm talking about
- 23 is when it comes out and then at the ends it kind of
- 24 swirls out like that (indicating). That's what I
- 25 understand.

1	Page 58 BY MR. KEMP:
2	Q. Swirls out of at the end of the bus
3	or the side of the bus?
4	A. No well, if the bus is going down the
5	road, at the front it goes out and then it curves
6	around and continues to go out. (Indicating.)
7	Q. It's not your understanding that it
8	comes back into the bus?
9	MR. RUSSELL: Same objections.
10	THE WITNESS: Not again, that's not
11	my area of expertise, but it's not significant.
12	BY MR. KEMP:
13	Q. Okay. Why do you think it's not
14	significant?
15	MR. RUSSELL: Same objections.
16	THE WITNESS: The air also is compressed
17	underneath the bus.
18	BY MR. KEMP:
19	Q. Uh-huh.
20	A. And so that air's trying to get out.
21	Q. Do you have a commercial driver's
22	license?
23	A. I do.
24	Q. You do?
25	A. I do. Well, I have a Canadian version,

	D 50.1
1	Page 59 so I have my Class 2 with air endorsement.
2	Q. Does that allow you to drive a J4500?
3	A. It does.
4	Q. And also allows you to drive the
5	E Series?
6	A. It does.
7	Q. Now back to air displacement.
8	Okay. So assuming the bus is going
9	25 miles an hour, what is your belief as to whether
10	or not there is air displacement enough to, say,
11	kick up dust, as you've said?
12	MR. RUSSELL: Objection. Foundation.
13	Incomplete hypothetical.
14	THE WITNESS: Again, at 25 miles an hour
15	it would be, in my opinion, would be quite minimal.
16	BY MR. KEMP:
17	Q. And by "quite minimal," would it be
18	enough to cause a bicycle to wobble?
19	MR. RUSSELL: Same objections;
20	speculation.
21	THE WITNESS: I'm not qualified to
22	answer that.
23	BY MR. KEMP:
24	Q. Okay. And how about 45 miles an hour,
25	do you think it's still quite minimal?
l	

	Page 60		
1	MR. RUSSELL: Same objections.		
2	THE WITNESS: Again, I don't know		
3	whether it would have enough force to affect		
4	somebody on a bicycle. And again, it depends how		
5	close they are to the vehicle.		
6	BY MR. KEMP:		
7	Q. The closer they are the more impact it		
8	would have?		
9	MR. RUSSELL: Same objections.		
10	THE WITNESS: I don't know. Yeah, I		
11	think so.		
12	BY MR. KEMP:		
13	Q. Okay. All right. Getting back to the		
14	air displacement.		
15	When the air is displaced by the front		
16	of the bus, immediately behind the front of the bus		
17	air's coming out this way. Is there not a negative		
18	pressure zone?		
19	MR. RUSSELL: Objection. Asked and		
20	answered. Foundation.		
21	THE WITNESS: There's it's my		
22	understanding, it's very, very close to the bus,		
23	though, like inches.		
24	BY MR. KEMP:		
25	Q. Okay. And would not the negative		

Page 61 1 pressure zone cause air to be entrained back into 2 the bus? MR. RUSSELL: Same objections. Calls 3 for expert opinion. 4 5 THE WITNESS: There may be some. But 6 again, it's not my area of expertise, so ... BY MR. KEMP: 8 Q. Okay. Do you recognize that -- you, 9 as -- with your commercial driver's license, do you 10 recognize that as a potential hazard when you're 11 driving a bus, that there -- there's air 12 displacement that may have air entrainment back to the side of the bus? 13 Not so much as that the -- a pedestrian 14 Α. or a bicyclist doesn't see you coming, and that's 15 16 why they're a hazard, because they're in front of you, they're in front of you and you're going to 17 overtake them. 18 And so you should either pull over into 19 another lane or somehow communicate to them that 20 you're coming up or stay behind them. That's how --21 22 that's how you're taught with a CDL, when you 23 encounter a hazard like a bicyclist. 24 So you do not think that air 25 displacement and potential air entrainment back into

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- 1 the side of the bus is a potential hazard when
- 2 you're passing a bicyclist, or you do think that's a
- 3 potential hazard?
- A. Again, it depends how fast you're going
- 5 and how close the bicyclist is to you. So there's a
- 6 lot of factors.
- 7 Q. So in some instances you recognize that
- 8 air displacement and potential air entrainment is a
- 9 potential hazard to a bicyclist? In some instances.
- MR. RUSSELL: Objection; foundation.
- 11 Incomplete hypothetical.
- 12 THE WITNESS: Again, it would depend.
- 13 BY MR. KEMP:
- 14 Q. Well, when you say it depends, you are
- 15 in effect saying that there are some cases where it
- 16 would be a potential hazard, correct?
- 17 MR. RUSSELL: Same objections.
- 18 THE WITNESS: It's my understanding, in
- 19 the event we're talking about here, that the
- 20 speed --
- 21 BY MR. KEMP:
- 22 Q. I don't want you to analyze the event
- 23 we're talking about here. My question is: You do
- 24 recognize that in some circumstances this is a
- 25 potential hazard, correct?

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Page 63
                 MR. RUSSELL: Objection; foundation.
 1
 2
     Speculation. Incomplete hypothetical.
                 THE WITNESS: Again, it depends on how
 3
     fast you're going and where the vehicle -- and how
 4
     close the bicycle is to the vehicle.
 5
     BY MR. KEMP:
 6
                 So if you're going fast, like 55 miles
         Q.
 8
     an hour, and the bicycle's two feet away, in that
 9
     event you would agree with me that air displacement
     and potential entrainment back into the side of the
10
11
     bus is a potential hazard, correct?
12
                 MR. RUSSELL: Same objections.
                 THE WITNESS: Again, it depends on the
13
     direction of the wind at the time and if the
14
     bicyclist -- how good a bike rider he is. It may
15
     not affect the bicycle at all.
16
     BY MR. KEMP:
17
18
                 I said potential hazard, not an actual
         Q.
19
     hazard.
20
                 MR. RUSSELL: It's not a question.
     BY MR. KEMP:
21
22
         Q.
                 Let's try one more time.
23
                 Assuming a bus was going 55 miles an
24
     hour, the bicyclist is within two feet, would you
25
     agree with me that air displacement and entrainment
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back into the side of the bus is a potential hazard
 1
 2
     to the bike rider?
                 MR. RUSSELL: Same objections.
 3
                 THE WITNESS: No, I can't agree with
     that.
 5
     BY MR. KEMP:
 6
                 Why not?
         Q.
                 Well, the air blast would push the
         Α.
 9
     bicyclist away from the vehicle.
                 So you think that if a bus is
10
     traveling 55 miles an hour and a bicyclist is
11
12
     within two feet, that the air blast will simply
13
     push the bicyclist away as opposed to making the
     bike wobble; is that correct?
14
                 MR. RUSSELL: Objection; foundation.
15
     Speculation. Assumes facts not in evidence.
16
                               Again, I don't know.
17
                 THE WITNESS:
     not an expert in this, and so --
18
     BY MR. KEMP:
19
20
                 I'm just asking what you think as a
     commercial CDL holder.
21
                 And again, it's -- I don't know.
2.2
         Α.
23
                 But you just told me like ten minutes
         Q.
     ago that CDL drivers were trained to --
24
25
         Α.
                 To make sure that situation doesn't
```

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- occur and that the bus stays away from the 1
- 2 bicyclist.
- All right. You said that the air 3
- blast will make the bicyclist and the bus move away.
- Can you tell me what mechanism you think that will 5
- occur by? 6
- MR. RUSSELL: Objection; incomplete
- hypothetical. Speculation. 8 Foundation.
- 9 THE WITNESS: It would be the air coming
- from the front of the bus. 10
- 11 BY MR. KEMP:
- 12 So you think the air is going to Q.
- just move the bicyclist and the bicycle away from 13
- the bus? 14
- That's -- would be my -- with your 15 Α.
- situation that you're putting forth here, that's 16
- 17 what I would say would happen. It's not pertinent
- 18 to this situation, though. But in your case that
- you're providing. 19
- 20 Okay. And how do you know -- well, tell Q.
- me the facts, as you understand, of, quote, "this 21
- 22 situation" is, unquote, as you're referencing?
- 23 Well, it's my understanding this was at
- low speed and the bicyclist was in his own separate 24
- bike lane, a ways from the side of the vehicle. 25

1	Page (Q. And low speed would be how fast?	66
2	A. My understanding is it's around 25 miles	
3	an hour.	
4	MR. RUSSELL: Whenever you're at your	
5	next break.	
6	MR. KEMP: You need a break?	
7	MR. RUSSELL: Yeah. An hour and 15.	
8	MR. KEMP: Any time.	
9	THE VIDEOGRAPHER: We're going off the	
10	record. The time is 11:11.	
11	(A recess was taken.)	
12	THE VIDEOGRAPHER: We're back on the	
13	record. The time is 11:18.	
14	BY MR. KEMP:	
15	Q. Mr. Couch, you said, I think, that the	
16	commercial the CDL holder, the driver of the bus,	
17	should recognize that pedestrians and bicyclists are	
18	a potential hazard	
19	A. Right.	
20	Q correct? Okay.	
21	And that would especially be true when	
22	he's passing a pedestrian or bicyclist, right,	
23	that's a potential hazard?	
24	A. Yeah. Well, they are a potential	
25	anything any slow-moving object on the road is	

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1 considered a hazard.
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- Q. Okay. And since the CDL holder
- 3 recognizes bicyclists and pedestrians as a potential
- 4 hazard, you, as the bus manufacturer, also recognize
- 5 pedestrians and bicyclists as a potential hazard,
- 6 right?
- 7 A. We don't specialize in the driving of
- 8 the vehicles. We require that a licensed
- 9 professional person drive the vehicle. So we
- 10 consider that in -- as part of the --
- 11 Q. Okay. I'm not talking about how we deal
- 12 with a potential hazard. I'm saying you recognized
- 13 that buses passing bicyclists and pedestrians were
- 14 potential hazards?
- 15 A. No. Because we leave that up to the --
- 16 to the driver.
- 17 O. So the bus driver should know that
- 18 bicyclists and pedestrians are potential hazards,
- 19 but the bus manufacturer does not know they're
- 20 potential hazards; is that where you want to
- 21 leave it?
- 22 A. The bus driver --
- MR. RUSSELL: Hang on.
- Objection; argumentative. Foundation.
- 25 THE WITNESS: The bus manufacturer's

Page 68 responsibility is to make sure that that driver 1 2 can -- has good visibility and can do his job properly. 3 BY MR. KEMP: 5 Okay. Before we get to the bus Q. manufacturer's responsibility, you have a CDL 6 7 license, correct? I do. Α. So when you drive a bus, you recognize 9 Q. that when you're passing a bicyclist or a pedestrian 10 11 that's a potential hazard, right? Uh-huh. 12 Α. "Yes"? 13 ο. As a CDL holder, yes, I do. 14 Α. Okay. And why does that knowledge 15 Q. not translate to you when you put on your hat as a 16 17 bus designer? 18 Α. Well, as a bus designer, you want to make sure that the driver has good visibility of 19 where he's driving the vehicle. That's our focus, 20 on -- it could be any number of hazards on the road. 21 22 Are you saying that you recognize Q. Okay. 23 bicyclists and pedestrians as a potential hazard as a bus manufacturer and your solution to that is good 24

25

visibility?

1	Α.	One of them.
2	Q.	Is that what you're saying? Is that
3	what you're	saying?
4	Α.	One of the solutions.
5	Q.	Okay. So first starting out, you
6	recognize b	icyclists and pedestrians that the bus
7	may pass as	a potential hazard, correct?
8	A.	We recognize that any that any
9	slow-moving	, stationary, difficult roads. There's a
10	whole range	of things that we consider hazards.
11	Q.	Including bicyclists that you're
12	passing, ri	ght? A potential hazard?
13	Α.	Yeah, I can't say that specifically we
14	have that.	It would be lumped in with any
15	slow-moving	object on the road.
16	Q.	Okay. And now let's move to the second
17	part. What	does the bus manufacturer do to
18	potentially	eliminate potential hazards such as some
19	slow-moving	object on the right of the bus?
20		MR. RUSSELL: Objection; foundation.
21	Incomplete	hypothetical.
22		THE WITNESS: We we can't eliminate
23	hazards.	
24	BY MR. KEMP	:
25	Q.	Reduce risk?

	Page 70
1	A. Sorry?
2	Q. You can reduce the risk, right?
3	MR. RUSSELL: Same objections.
4	THE WITNESS: Of what?
5	BY MR. KEMP:
6	Q. You said that one of the things you try
7	to do is provide the bus driver with good
8	visibility?
9	A. Right.
10	Q. Okay? That is one of the things
11	you as a bus manufacturer do to attempt to
12	reduce or eliminate the potential hazard of a
13	slow-moving object on the right side of the bus;
14	is that correct?
15	A. Sorry I'm getting stuck on this, but
16	the we cannot reduce the hazard. The hazards are
17	there, and so we give the driver the ability to
18	minimize the risk that that hazard poses.
19	Q. Okay, that's fair.
20	And one of the things you do to
21	minimize the risk of a bus passing a bicyclist is
22	attempt to provide the driver with good visibility;
23	is that correct?
24	A. We do provide good visibility, yes.
25	Q. Okay. But you do that to attempt to

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1	minimize the risk of the potential hazard of a bus
2	passing a bicyclist, correct?
3	A. We do that to give the driver the
4	opportunity to react to a hazard.
5	Q. Okay. And other than providing good
6	visibility, what other things does the bus
7	manufacturer do to attempt to minimize the risk of
8	the potential hazard of passing a bicycle?
9	A. We provide very good brakes. We provide
10	very good mirrors. We have a forward seating
11	position. We have very smooth body surfaces.
12	Q. Anything else?
13	A. Those are the main ones.
14	Q. And do you recognize that A frame
15	placement
16	A. Sorry?
17	Q A frame placement A frame. Do you
18	know what an A frame is?
19	A. No.
20	Q. What is the pillar on the right-hand
21	side of the bus called?
22	A. Sorry?
23	Q. The bus has a pillar on the right-hand
24	corner; yes?
25	A. Which corner?

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1 Q. The right-hand corner.	1	Q.	The right-hand corner.
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- 2 A. Front?
- 3 Q. Front, yeah.
- 4 A. Right-hand front corner is the A post.
- 5 Q. Okay. Do you recognize that the way you
- 6 design the A post, whether it's smaller, two or
- 7 three inches, or larger, two or three feet, can
- 8 potentially affect visibility?
- 9 A. It depends on the -- what you're trying
- 10 to see, but typically we design for as small an
- 11 A pillar as possible.
- 12 Q. Now, I called it an A pillar. Then you
- 13 called it an A post. Which is the correct term?
- MR. RUSSELL: You called it an A frame.
- THE WITNESS: You called it an A frame.
- 16 BY MR. KEMP:
- 17 Q. Okay. Sorry.
- 18 A. It's pillar or post.
- 19 Q. Okay. Was the A pillar changed in any
- 20 way when you designed the E Series?
- 21 A. Yes.
- 22 Q. And in general, what was done?
- 23 A. It was raked back, so curved to rake
- 24 back, so that the front came back more, to make it
- 25 more aerodynamic, was one change.

```
1
                 When you say "curved to rake back," does
         Q.
     that mean that the top of the A pillar would be
2
     closer to the back of the bus than the bottom of the
 3
     A pillar?
         Α.
                 Correct.
 5
                 Okay.
 6
         Q.
                 And the A pillar was -- the size of it
         Α.
     was minimized.
                 And generally from what to what?
 9
         Q.
                 I don't remember the dimensions.
                                                     I --
10
         Α.
11
                 But it went from a larger dimension to a
     smaller dimension in terms of width?
12
                 Correct.
13
         Α.
14
                 And was there any change made when you
     went from the E Series to the J Series, in terms of
15
16
     the width of the A pillar?
                      I believe they're the same.
17
                 No.
         Α.
18
         Q.
                 Okay. Is this something you worked on?
                 I was involved in the styling.
19
         Α.
                 And what about sill placement?
20
         Q.
                                                   Is there
     something called a sill between the window and the
21
22
     body of the right-hand side of the bus?
                 So the -- a big change on the E Coach
23
     and that carried over into the J Coach was the first
24
     window behind the B post, so the first window, had a
25
```

1	significant	Page 74 drop to it, we call it a pentangular
2	window, so	it gives the driver better visibility of
3	the side, a	s well as the entrance door has two
4	windows, ha	s an upper window and a lower window.
5	Q.	A lower window pane?
6	Α.	It has an upper window and a lower
7	window.	
8	Q.	Okay.
9	Α.	They're separated.
10	Q.	And those changes were made when you
11	designed th	ne E Series?
12	Α.	Yeah.
13	Q.	And the reasons for those changes was so
14	that driver	s would have better visibility in the
15	right corne	er of the bus?
16	Α.	Yeah. Yes.
17	Q.	Did you okay. Now back to my
18	question ab	oout the sill.
19		Was the sill raised or lowered on the
20	right side	of the bus?
21	A.	Can you help me understand what you mean
22	by "sill"?	It's not a term I am
23	Q.	Yesterday Mr. Lamothe used the term
24	"sill" to d	describe the line between the window and
25	the bottom	of the bus on the right side.
I		

1	A. Oka	Page 75
2		s that help?
3		lewall? Between the bottom of the
4	window and the	
5	Q. Yea	h. He called that the "sill."
6	A. Oka	
7		t would you call that?
8		bottom of the windows, or the
9	threshold.	·
10	Q. Oka	y. Was the location of the bottom of
11	the windows mov	red up or down when you designed the
12	E Series?	
13	A. As	I said, the front one was dropped
14	brought signifi	cantly down.
15	Q. Wha	at about the side one?
16	A. Tha	at is the side one.
17	Q. Oka	y. And by "significantly down," are
18	we talking inch	nes, feet, what?
19	A. I t	hink it would be over a foot at the
20	front edge.	
21	Q. And	l was there any consideration given
22	to dropping it	even further, another five or
23	seven inches?	
24	A. I d	don't recall that.
25	Q. Oka	y. Do you understand that some buses

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1	Page 76 have lower sills than the J4500?	
2	MR. RUSSELL: Objection; foundation.	
3	THE WITNESS: No.	
4	BY MR. KEMP:	
5	Q. Not buses made by MCI.	
6	A. Relative to what?	
7	Q. Relative to the bottom of the bus.	
8	Relative to the ground.	
9	A. Why is that important?	
10	Q. It's important because you can have	
11	better visibility. Right?	
12	A. It depends on your driver position,	
13	I think.	
14	Q. Okay. First of all, do you recognize	
15	that some buses have lower sills than the J4500?	
16	MR. RUSSELL: Foundation.	
17	THE WITNESS: The coaches that we	
18	compete against I'm not sure that we would be	
19	higher. I don't know exactly. But the main	
20	competitor would be a Prevost H. The J, it would be	
21	higher. It's a taller vehicle. So that line, I	
22	think the bottom of the side windows is higher, and	
23	it doesn't have a curve down at the front. And	
24	sorry.	
25	BY MR. KEMP:	

Page 77

- 1 Q. No. Were you done?
- 2 A. And -- yeah, so I don't know that that's
- 3 true with the coaches that we compete against.
- 4 Q. Okay. All right. You don't know one
- 5 way or the other?
- A. Well, I know for sure we're better than
- 7 the Prevost.
- 8 Q. And better is a term that is
- 9 referring to the height of the sill; your sill being
- 10 lower is better?
- 11 A. That's what I meant.
- 12 Q. And the reason it's better is because
- 13 you have more visibility potentially, right?
- MR. RUSSELL: Objection.
- THE WITNESS: I was answering --
- 16 MR. RUSSELL: Incomplete hypothetical.
- 17 THE WITNESS: -- your question.
- 18 BY MR. KEMP:
- 19 Q. I didn't use the term "better."
- 20 A. You said "lower," so, yeah.
- 21 Q. Lower is better?
- 22 A. Could be.
- Q. Okay. All right. Now, you said, I
- 24 think, that the reason you changed the A pillar to
- 25 make it rake more, I think was the term you used --

Page 78

- 1 A. Uh-huh.
- Q. -- and the reason that you put these
- 3 additional windows or -- in the right-hand corner
- 4 was to improve visibility, right?
- 5 A. Well, no. You asked me what changes we
- 6 made to the A pillar. So as I was explaining, we
- 7 did two things, mainly. One, we put a radius to
- 8 them, so they raked back, so the front of the
- 9 vehicle was not as vertical. And that was more
- 10 for drag.
- 11 And then we also moved the A post back
- 12 slightly, and that's -- the windshields were a lot
- 13 more rounded, and that's to improve visibility.
- 14 And we made the A post smaller, and the
- 15 coverings on it smaller, to again improve
- 16 visibility.
- 17 And then the windows in the doors -- in
- 18 the entrance door was changed to improve visibility.
- 19 And the front side window was -- the
- 20 front of it curves down, to, again, improve
- 21 visibility.
- 22 And then we did a lot of work with
- 23 mirrors also, that attached to the A post.
- Q. To improve visibility?
- 25 A. Yeah.

	Page 79
1	Q. And why did you want to improve
2	visibility?
3	A. As I said earlier, to help the driver do
4	his job.
5	Q. Did you recognize that the previous
6	edition of the bus had a right-side blind-spot
7	problem?
8	A. No.
9	Q. You thought the previous version of the
10	bus was fine?
11	A. All our vehicles are safe, and if
12	Q. So the previous version was fine, but
13	you did all these things we described to improve
14	visibility just for the heck of it?
15	A. Not just for the heck of it. We always
16	try to improve.
17	Q. Because there's a potential for a
18	right-side blind-spot problem, correct?
19	A. No. It makes the driver's job easier.
20	Q. Is that a recognized hazard for a bus
21	manufacturer, right-side blind spots?
22	A. I don't believe so.
23	Q. So when you were designing the E Series
24	or the J Series, you didn't do anything to attempt
25	to alleviate or minimize right-side blind spots; is

1	Page 80 that correct?	
2	A. We make always try to improve, to	
3	make the driver's job easier. That's what we'd try	
4	to do.	
5	Q. Let's go back to where we started,	
6	which was your understanding or your belief as to	
7	what drivers know or don't know about air	
8	displacement from the J4500. Okay? Do you remember	
9	where we were?	
10	A. Uh-huh.	
11	Q. Okay. "Yes"?	
12	A. Yes.	
13	Q. And I think you said that you think a	
14	driver would know that there in general, that	
15	there's air displacement from the J4500, right?	
16	MR. RUSSELL: Objection; foundation.	
17	BY MR. KEMP:	
18	Q. That's what you said?	
19	A. I said the driver would know that at	
20	high speeds, that there's air coming off from the	
21	front of the vehicle to the side.	
22	Q. Do you know David Dorr?	
23	A. Dave Dorr. Yup.	
24	Q. You do know Dave Dorr.	
25	And you understand he has a commercial	

```
Page 81
 1
     driver's license, right?
 2
         Α.
                 Right.
 3
                 And you know he's been selling J4500's
         Q.
 4
     for 20 years?
         Α.
                 Yeah.
 6
                 So you think Dave Dorr would know, if
         Q.
 7
     anyone would, about the air displacement coming off
     the front of the bus, right?
 8
 9
                 MR. RUSSELL: Objection; foundation.
     BY MR. KEMP:
10
                 You would expect he would know that?
11
         Q.
12
         Α.
                 I don't know. He would know that if you
13
     drove past something that would move quickly, that
     that would -- it would -- like leaves on a tree or
14
15
     something like that, that it would move.
16
                 MR. KEMP:
                             Could you mark that, please.
17
                  (Exhibit 2 marked.)
18
     BY MR. KEMP:
19
                 This is Mr. Dorr's deposition.
         Q.
20
     refer you to -- a little more than is probably
21
     needed here, but I would refer you to line 26 -- or
22
     page 26, line 11 -- or lines 4 through 13.
23
                 Question, line 4:
                  "What is your understanding, if you have
24
25
          an understanding, as to whether or not when a
```

```
1
          2007 vintage J4500 is traveling 35 to 40 miles
          an hour, what is your understanding as to
 2
          whether or not it causes air blasts or air
 3
          displacement from the bus?
 5
                 "Answer:
                           I don't know.
                 "Question: Okay. You don't know one
 6
 7
          way or another whether it would cause air
          blasts or air displacement?
 9
                 "Answer: No, I don't."
10
                 Okay. Does that surprise you?
11
                 MR. RUSSELL: Objection; foundation.
     Speculation.
12
                 THE WITNESS: I don't know.
13
     BY MR. KEMP:
14
15
                 You just told me Mr. Dorr would know
         Q.
16
     this, and he says here he doesn't know this.
                 I didn't tell you that Mr. Dorr would
17
18
     know this.
19
                 You just did.
                                You told me that
         0.
     Mr. Dorr, since he had a CDL license and sold this
20
    bus for 20 years, would know about the air
21
22
     displacement coming off the front of the bus.
23
                 And he just says in this testimony that
24
     he doesn't know.
25
                 MR. RUSSELL: Objection; misstates prior
```

	Page 83
1	testimony.
2	THE WITNESS: He responded to these
3	questions. I think if you asked Mr. Dorr if he
4	drives by something like a flag or some leaves at
5	that rate of speed, that it would move when he drove
6	the bus by that, I think he would know that.
7	BY MR. KEMP:
8	Q. Oh, okay. So
9	A. Probably the question about air blasts
10	or displacements, he may not understand that.
11	Q. So you think Mr. Dorr, when we were
12	asking about air blasts and air displacements,
13	didn't understand what we were talking about,
14	and that's why he said he didn't know whether a
15	bus would cause that? That's what you're telling
16	me today?
17	MR. RUSSELL: Objection; foundation.
18	Speculation.
19	THE WITNESS: Again, that's I don't
20	know. I think he would be able to tell you that
21	if you asked him if he drove by something that's
22	easily movable, at that rate of speed, he'd be able
23	to tell you that it would move. That it would move
24	if you were close.
25	BY MR. KEMP:

```
Page 84
 1
         Q.
                 Well, I asked him, quote:
                 "What is your understanding as to
 2
          whether or not it causes air blasts or air
 3
          displacements from the bus?"
 5
                 And his answer was, quote, "I don't
 6
     know," unquote.
                      Right?
 7
         Α.
                 Yeah.
                        Yes.
                 Okay. But you said you thought he would
 8
         Ο.
 9
     know, and you still think he really does know; he's
10
     just for some reason answering the question wrong?
11
                 Well, I don't know.
         Α.
12
                 MR. RUSSELL: Objection -- Bryan.
                 Objection; misstates prior testimony.
13
14
     Speculation. Foundation.
15
     BY MR. KEMP:
16
         Q.
                 Go ahead. Do you think it would be a
17
     good idea to tell people like Mr. Dorr that there is
     some air displacement when the bus is traveling, air
18
19
     blasts, so they do know that for sure; that there's
```

22 A. I think Mr. Dorr knows as a commercial

no uncertainty here as to what he knows, what he

23 driver how to avoid hazards that are on the road.

20

21

doesn't know?

- Q. Okay. We weren't talking about road
- 25 hazards. We were talking about air blasts and air

```
Page 85
 1
     displacement that he just said he didn't know
 2
     anything about.
                      Okay?
 3
                 Do you think it would be a good idea for
 4
     the bus manufacturer to inform people like Mr. Dorr
     with the CDL license that the bus causes air blasts
 5
     or air displacements?
 7
         Α.
                 I think the training that is given to
     commercial drivers is done in a way that people can
 8
     understand how to interact with hazards that they
 9
     will come -- that they will meet on the road.
10
11
                 Okay. Let me show you Mr. Bartlett's
12
     deposition, who is the safety director of the bus
13
     company, and we'll see what he knows about air
14
     blasts and air displacement.
15
                 MR. KEMP: Mark that, please.
16
                 (Exhibit 3 marked.)
17
     BY MR. KEMP:
                 All right.
                            Mr. Bartlett --
18
         Q.
19
                 MR. RUSSELL: What page, Will?
20
                 MR. KEMP: Let me just find it real
21
     quick.
22
     BY MR. KEMP:
23
         Q.
                 Let's start with 137, line 11.
```

whether or not, if a large bus is traveling,

24

25

"So as we sit here today, you don't know

1	Page 86 say, 30 to 35 miles an hour, that would create
2	air turbulence that could potentially affect a
3	bicycle?
4	"Answer: I don't know, but I would say
5	it happens, you know, a lot during the day.
6	"Question: Okay. But you don't know
7	one way or the other whether there's air
8	turbulence?
9	"Answer: Whether it would cause a
10	problem to a bike? No.
11	"Question: Do you think if a
12	manufacturer knew that there was a potential
13	hazard, that they should alert the motor coach
14	operators of that air turbulence?
15	"Answer: I've never heard of that, no."
16	MR. RUSSELL: And just for the record,
17	there were objections, and the witness asked a
18	question as well in there. So it's not an exact
19	reading. But go ahead. Ask your question.
20	MR. KEMP: All right.
21	BY MR. KEMP:
22	Q. Let's read the whole thing then.
23	"Mr. Roberts: Objection. Foundation.
24	"The Witness: What's the potential
25	hazard?
1	

```
Page 87
 1
                 "Answer:
                           The air turbulence.
 2
                 The Witness -- "Answer: I've never
                 heard of that, no?"
 3
                 Okay? So we have a second commercial
 5
     driver's license holder, that in this case is a
 6
     safety director for a bus company, that also says he
 7
     doesn't know about the potential for air turbulence
 8
     from a moving bus.
                         Right?
 9
         Α.
                 Well, what he says is --
10
                 MR. RUSSELL: Objection; foundation.
11
     BY MR. KEMP:
12
                 Go ahead. Do you think he didn't
         Q.
     understand the question either and he really knew
13
14
     about it and was just telling me he didn't know one
15
     way or the other?
16
                 MR. RUSSELL: Objection; foundation.
17
     Speculation.
     BY MR. KEMP:
18
19
         Q.
                 That's what you think?
                                          Is that what
20
     you think?
                 As I said, drivers are taught how to
21
         Α.
22
     deal with hazards on the road.
23
         Q.
                 I've shown you the testimony of
     Mr. Dorr, the MCI employee for over 20 years, and
24
25
     the testimony of the safety director of the bus
```

Page 88

- 1 company, both of whom said that they don't know one
- 2 way or the other about the potential air blasts or
- 3 air turbulence. I've shown you that testimony. And
- 4 you're still telling me that they are trained to do
- 5 that? That's what you're telling me?
- 6 MR. RUSSELL: Objection; misstates prior
- 7 testimony. Foundation. Speculation.
- 8 THE WITNESS: So what I'm telling you is
- 9 that they are trained to -- how to deal with the
- 10 hazards on the road, which are slow-moving vehicles,
- 11 including pedestrians, bicycles. That's what
- 12 they're -- how they're trained.
- 13 BY MR. KEMP:
- 14 Q. Okay. But they're not trained or told
- 15 about air blasts or air turbulence, correct?
- MR. RUSSELL: Same objection.
- 17 THE WITNESS: They're taught how to
- 18 avoid the hazards they find on the road.
- 19 BY MR. KEMP:
- 20 Q. Do you think the manufacturer should at
- 21 least share the information that the manufacturer
- 22 has about the air blasts or air turbulence with
- 23 people like its salesman, Mr. Dorr, and safety
- 24 analysts like Mr. Bartlett? Do you think that would
- 25 be a good idea?

```
Page 89
 1
                 MR. RUSSELL: Objection; incomplete
 2
     hypothetical.
 3
                 THE WITNESS: I don't know.
                                               I'm not an
     expert in training commercial -- how to best train
 5
     people for commercial drivers.
     BY MR. KEMP:
 6
 7
         Q.
                 Okay. You would agree with me that MCI
     did not provide information to its purchasers about
 8
 9
     air blasts or air turbulence, correct?
10
                 MR. RUSSELL: Objection; foundation.
11
     BY MR. KEMP:
12
         Q.
                 Would you agree with that?
13
                 MR. RUSSELL: Objection; foundation.
14
                 THE WITNESS: What I would agree is that
15
     MCI counts on the bodies that train drivers on how
16
     to best avoid hazards on the road, whatever they
17
     may be.
18
     BY MR. KEMP:
19
                 Including -- including air blasts or air
         Q.
20
     turbulence?
                  That's someone else's problem, to train
21
     the drivers about that, right?
22
                 MR. RUSSELL: Objection; incomplete
23
     hypothetical.
                              Well, they are trained in
24
                 THE WITNESS:
25
     a way -- they're trained in a way, I guess, that
```

```
the -- they can best avoid any hazards they find on
 1
 2
     the road.
 3
     BY MR. KEMP:
                 Okay.
                       Earlier you used the term "bus
     manufacturer's responsibility." Do you remember
 5
 6
     that?
         Α.
                 Yeah.
                 Do you think the bus manufacturer has a
 8
 9
     responsibility to alert purchasers of the potential
10
     for air blasts or air turbulence that may arise from
11
     the front of the bus?
12
                 MR. RUSSELL: Objection; foundation.
     Calls for expert opinion.
13
14
                 THE WITNESS: Again, I said that the --
15
     MCI is not the expert in how to train the drivers,
16
     and that there's a whole government organization
17
     that does that.
18
     BY MR. KEMP:
19
                 Is that a "no" answer to my question?
         0.
20
     No, you do not think MCI has a responsibility to
21
     train its -- or to inform its purchasers about air
22
     blasts or air turbulence? Or is that a "yes," you
23
     do think they should inform purchasers about the
     potential for air blasts or air turbulence?
24
25
                 MR. RUSSELL: Same objections.
```

1	Page 91 THE WITNESS: I think no, because we are	
2	not the experts on how to train drivers.	
3	BY MR. KEMP:	
4	Q. Okay. I'm not talking about training.	
5	I'm talking about alerting them to a potential	
6	hazard.	
7	You don't think that air blasts and air	
8	turbulence coming from the front of the bus is a	
9	potential hazard that the manufacturer should inform	
10	purchasers of; is that correct?	
11	MR. RUSSELL: Objection; incomplete	
12	hypothetical. Calls for improper opinion.	
13	You can answer.	
14	THE WITNESS: So again, no. MCI is not	
15	the expert in how to train drivers on operating our	
16	vehicles safely on the road.	
17	BY MR. KEMP:	
18	Q. I'm not talking about operating the	
19	vehicle. I'm talking about knowledge of a potential	
20	air blast or air turbulence hazard. Okay? I'm	
21	talking about telling them about the potential	
22	hazard. Do you think MCI should do that?	
23	MR. RUSSELL: Same objections and	
24	predicate.	
25	THE WITNESS: No. Again, it's up to	

1 there's a licensed professional that has to drive 2 our vehicles, and they know best -- the body that regulates them knows best how to -- what to 3 communicate to the drivers or not. BY MR. KEMP: So you would agree with me that 6 Okay. Q. this potential for air blasts or air turbulence is a 7 risk or hazard that arises from the use of the bus? 8 9 You would agree with that, right? MR. RUSSELL: Objection; incomplete 10 hypothetical. Improper opinion. Misstates prior 11 testimony. 12 THE WITNESS: The hazard is the 13 slow-moving vehicle or the pedestrian on the road, 14 15 not the vehicle. 16 BY MR. KEMP: No, the hazard is the air blast or air 17 Q. turbulence. That's the hazard. 18 19 Α. Again, it -- it depends. You don't think that's a hazard? 20 Q. 21 Α. No. 22 And since you didn't think it was a 23 hazard, you didn't do anything to design the vehicle to eliminate that hazard, correct? 24 25 Α. Again, I communicated that we did a

Page 93 lot of work to reduce the drag coefficient of 2 the vehicle. That was to save gas; you already told 3 Q. me that was the primary reason. 5 And prevent dust, and make it easier to move through the -- for the vehicle to move through 6 7 the air. Honestly, Mr. Couch, you -- you honestly 8 Q. 9 believe that Mr. Dorr and Mr. Bartlett and other drivers out there should understand from some 10 11 training from someone that you can't identify that 12 there's air blasts and air turbulence coming off the 13 side of these buses? That's what you're telling me? 14 MR. RUSSELL: Objection; misstates prior 15 testimony. Argumentative. And foundation. 16 THE WITNESS: What I said was that the 17 drivers with a CDL are trained on how to deal with hazards that they come upon on the road. 18 19 BY MR. KEMP: 20 Q. Do you think the drivers with a CDL are trained about air blasts or air turbulence? 21 22 MR. RUSSELL: Same objections. 23 THE WITNESS: They're trained how to deal with the hazards on the road. 24

25

BY MR. KEMP:

```
Page 94
 1
         Q.
                 Okay. Well, I appreciate your answer.
                 Are they trained to deal with air blast
 2
     or air turbulence hazards?
 3
                 MR. RUSSELL: Objection. Asked and
 5
     answered.
                Foundation.
                 THE WITNESS: Can you ask me that again?
 6
 7
     BY MR. KEMP:
                 Are they trained to appreciate air
 8
         Q.
 9
     blasts or air turbulence hazards?
10
                 MR. RUSSELL: Same objections.
11
                 THE WITNESS: I'm not sure what the
     people that put together the training for drivers
12
13
     take into consideration when they teach them how to
14
     properly drive a vehicle, test them, and give them
     a license.
15
16
     BY MR. KEMP:
17
                 So you don't know one way or the
18
     other whether or not drivers are trained to
19
     appreciate the air blasts or air turbulence hazard;
20
     is that correct?
                 I don't know that.
21
22
                 Okay. And since you don't know whether
         Q.
23
     or not they're trained for that, why don't you think
     the manufacturer should simply tell them of this
24
25
    potential hazard?
```

```
Page 95
                 MR. RUSSELL:
                              Objection.
                                            Predicate.
 1
 2
                 THE WITNESS:
                               Because, as I said
 3
     earlier, MCI's not the expert in how to train
     people, to train drivers that operate our vehicles.
     So what information they should get and shouldn't
     get is -- we leave it up to the government body that
 6
     does that.
     BY MR. KEMP:
 9
         Q.
                 Okay. And in this case the government
     body is the State of Nevada, right?
10
                 It's the commercial -- whoever governs
11
12
     the commercial vehicle licensing.
13
         Q.
                 The Nevada Department of Motor Vehicles?
14
         Α.
                 Okay.
15
                 So you think the Nevada Department of
     Motor Vehicles knows as much or more about air
16
17
    blasts or air turbulence arising from the operation
18
     of a J4500 as MCI does?
19
                 MR. RUSSELL: Objection; foundation.
20
     Speculation.
                 THE WITNESS: I don't -- I don't know
21
22
     that.
23
     BY MR. KEMP:
24
                 You don't know one way or the other
25
     whether or not the Nevada Department of Motor
```

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1 Vehicles knows anything about air blasts or air
```

- 2 turbulence arising from bus operation, correct?
- 3 MR. RUSSELL: Same objections.
- 4 THE WITNESS: I don't know that. I
- 5 don't know what they take into consideration when
- 6 they come up with their driver training.
- 7 BY MR. KEMP:
- 8 Q. So you don't know if the regulator knows
- 9 about it. You don't know if the drivers are trained
- 10 about it. I've shown you that the drivers don't
- 11 know about it. But you think that MCI shouldn't
- 12 alert anybody of this potential risk?
- MR. RUSSELL: Objection.
- 14 BY MR. KEMP:
- 15 Q. Is that right?
- 16 MR. RUSSELL: Objection; predicate.
- 17 Counsel testifying. Foundation.
- 18 THE WITNESS: As I said, we count -- MCI
- 19 counts on the people that govern the people that
- 20 drive our -- licensed professional drivers. We
- 21 count on them to properly train the drivers.
- 22 BY MR. KEMP:
- Q. Okay. What kind of car do you drive?
- 24 A. I have Chevy half-ton.
- 25 Q. Does that have a proximity sensor?

```
What do you mean by "proximity sensor"?
 1
         Α.
                 A sensor that shoots out and either
2
         Q.
     disables the cruise control or detects objects in
 3
     the back or detects on the side.
                                        A proximity
 5
     sensor.
 6
         Α.
                 It has a rear sensor that detects at
7
     the back.
                 So it has a rear proximity sensor?
         Q.
 9
         Α.
                 Correct.
                 And in general how does that work?
10
         Q.
11
     you're backing up into something, it goes, "beep,"
12
     "beep"?
         Α.
                 Yeah.
                        Yes.
13
14
         Q.
                 And do you think that's a good
15
     safety feature?
                 I'm not sure it's a safety feature.
16
         Α.
17
     It's a -- probably a cost avoidance feature, in that
     it would reduce the number of objects that you would
18
19
     run into.
                 Okay. You'd rather have your vehicle
20
         Q.
     with that safety feature than have a vehicle without
21
     that safety feature, correct?
22
23
                 MR. RUSSELL: Objection; predicate.
                 THE WITNESS: I don't consider it a
24
25
     safety feature. I consider it an assist, so that I
```

don't hit objects when I back up. And actually, it 1 2 causes problems at times, because it doesn't work 3 some of the time and it makes you lazy, in my opinion, when you're backing up. 5 BY MR. KEMP: Okay. What consideration, if any, did Ο. MCI give to putting a proximity sensor of any sort 7 in the E Series? 8 Α. I'm not -- I don't know for sure. 9 I -- we -- the first time, my recollection, that we 10 11 looked at it was about -- we looked at a rear proximity sensor in around 2006 or '7, as a backup 12 13 sensor. 14 But what I recall is at that time that the technology wasn't capable of being reliable 15 16 enough; it wouldn't work at cool temperatures, it 17 wouldn't work if it got ice on it, things like that. That's what you recall about the 18 19 technology surrounding proximity sensors in 2006, 20 that it wasn't reliable enough; is that what you're 21 telling me? 22 2006, 2007. Α. 23 0. Why, then, did the Setra 417 that was 24 made in 2005 have proximity sensors? MR. RUSSELL: Objection; foundation. 25

Page 99 THE WITNESS: I don't know. 1 I don't 2 know that it did. And if it did, I don't know where 3 they were located. BY MR. KEMP: 5 Okay. You do know the Setra's made by Q. Mercedes, correct? 6 I do, yeah. Α. And that's one of MCI's partners, right? 8 Ο. 9 Α. Not then. 10 I thought MCI formed a partnership with Q. 11 Mercedes in approximately 2005, 2006, to attempt to 12 utilize safety features for vehicles that Mercedes 13 could provide? 14 Not to my knowledge. Α. 15 Q. What was your understanding of the 16 arrangement? We didn't have a partnership with them 17 18 until 2012. 19 Okay. And what was the purpose of that Q. partnership? 20 For MCI to be able to sell and service 21 22 the 417 and 407 in North America, the U.S. and 23 Canada. 24 So MCI and Mercedes became partners to 0. 25 sell the Setra 417 in North America, correct?

1	Page 100 A. I don't think we were partners. We
2	didn't have a partnership. We had a license
3	agreement to be able to sell and service a couple of
4	models in the U.S. and Canada.
5	(Exhibit 4 marked.)
6	BY MR. KEMP:
7	Q. Directing your attention to Exhibit 4,
8	if you would take a look at page 15, the bottom. Do
9	you see in 2005 it says that for the Setra 417 they
10	have launched a new proximity-controlled cruise
11	control?
12	Do you see that statement?
13	A. Where is it?
14	Q. On the bottom.
15	A. Oh, yeah, okay. Yes.
16	Q. Do you have any reason to disagree that
17	Mercedes was using a proximity sensor in 2005 with
18	the Setra 417?
19	A. I don't have anything that would say
20	that they didn't have what they what is described
21	here, which is cruise control.
22	Q. Now, you you said that MCI didn't use
23	it in 2006, the year afterwards, because you thought
24	proximity sensors couldn't be utilized for heat
25	reasons or coolness or something to that effect?
1	

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1	Page 101 A. What I said was we tried to find a	
2	proximity sensor to use as a backup sensor in that	
3	time frame, and as I recall, the testing that we did	
4	from the suppliers that were available to us in	
5	North America, we couldn't find one that was	
6	reliable enough, that met our test criteria.	
7	Q. Okay. But Mercedes apparently found in	
8	2005, the year before, a proximity sensor that at	
9	least Mercedes considered reliable enough to use in	
10	its buses, right?	
11	A. In Europe.	
12	Q. So proximity sensors work good in Europe	
13	but they don't work good in the United States; is	
14	that what you're telling me?	
15	MR. RUSSELL: Objection; foundation.	
16	THE WITNESS: I don't know that the	
17	supplier of this would work in North America because	
18	of our temperature extremes. It's a big challenge	
19	for a lot of European vehicles to work properly in	
20	North America because of our extreme climates that	
21	we have here.	
22	BY MR. KEMP:	
23	Q. You don't think Europe, which has Sweden	
24	and Finland, cold, and Italy, where you're going,	
25	relatively warm, you don't think they have extreme	

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	Dags 100		
1	Page 102 temperatures just like North America does?		
2	MR. RUSSELL: Objection; foundation.		
3	Speculation.		
4	THE WITNESS: That's been my experience		
5	in dealing with the suppliers; that they don't go		
6	below minus 20, and we routinely have minus 20.		
7	BY MR. KEMP:		
8	Q. So you're telling me that the reason		
9	that MCI did not further explore proximity sensors		
10	in 2005 is because you thought there was a potential		
11	that buses would be exposed to minus-20 degrees and		
12	the proximity sensors would not work; is that		
13	correct?		
14	MR. RUSSELL: Objection; misstates		
15	testimony.		
16	THE WITNESS: No. What I said was MCI		
17	never quit looking for a proximity sensor. We just		
18	couldn't find one from the suppliers that were		
19	available to us, to supply us product at our		
20	volumes. We just we couldn't find a product that		
21	met our requirements.		
22	Because the problem with proximity		
23	sensors, if they don't work properly and they give		
24	you too many false positives or they're not reliable		
25	and they don't work when they should, is drivers		

Page 103 rely on them and then it ends up causing more 1 problems than not. 2 (Exhibit 5 marked.) 3 BY MR. KEMP: 5 Okay. I'm handing you another document, Q. which is Exhibit 5, and this is a chart of car 6 manufacturers that use proximity sensors in their vehicles and the date they started. 8 9 So for example, we have the 1995 Diamante made by Mitsubishi with a proximity sensor. 10 A 1997 Celsior, C-e-l-s-i-o-r, made by Toyota --11 1997, excuse me, with a proximity sensor. A 1990 12 Ome, O-M-E, made by Nissan, with a proximity sensor. 13 A 1999 Mercedes CL class made with a proximity 14 sensor. A 1999 S class Mercedes with a proximity 15 A 1999 Jaguar with a proximity sensor. 16 2000 BMW with a proximity sensor. And a 2000 Lexus 17 18 made with a proximity sensor. And if we continue on, there are about 19 140 cars with proximity sensors on this chart, 20 21 Exhibit 5. Okay? 22 Α. Uh-huh. 23 Now my question is: Why is it that Q. Mitsubishi, Toyota, Nissan, Mercedes, Jaguar, BMW, 24 25 Lexus and the others can put proximity sensors in

1 their vehicles in 1995 through 2000 time frame and 2 not have this 20-degree problem, but MCI could not? 3 MR. RUSSELL: Objection; foundation. Predicate. 4 5 THE WITNESS: I quess a couple of these you're making the assumption that they didn't have 6 7 the problem. And all I can tell you is when MCI looked at it and tried to find a source that met our 8 9 testing requirements, we could not do that. not able to do that at that time. 10 11 BY MR. KEMP: 12 Okay. But apparently Mitsubishi, Okay. Q. Toyota, Nissan, Mercedes, Jaguar, BMW, Lexus, and 13 14 the others, could find some source. Right? 15 MR. RUSSELL: Objection; foundation. Predicate. 16 17 THE WITNESS: Again, you're making the 18 assumption that they had the same test requirements 19 that we did. BY MR. KEMP: 20 21 So you think Mercedes has a lower Q. 22 test standard than MCI? 23 MR. RUSSELL: Objection. Misstates 24 testimony. 25 THE WITNESS: That's quite possible as

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- 1 far as the temperatures, yes.
- 2 BY MR. KEMP:
- 3 Q. Okay. All right. Why was it that MCI
- 4 wanted proximity sensors in 2005? Or 2006, I think
- 5 you said. I don't want to misstate the year.
- 6 A. It was about that time. As I --
- 7 Q. Why was it that MCI wanted proximity
- 8 sensors for its buses in 2005, 2006?
- 9 A. It was a request from customers to
- 10 reduce the body damage caused by drivers backing
- 11 into things.
- 12 Q. Okay. Were side sensors also requested?
- 13 A. Not at that time, that I'm aware of.
- 14 Q. But they were requested at some time?
- 15 A. We had a request -- it was about 2015,
- 16 2014 -- to come up with some way of warning a driver
- 17 when he was making a lane change or in a turning
- 18 maneuver to alert him to stationary objects that he
- 19 ran the side of the bus into.
- 20 Q. So there was a request from a customer,
- 21 and that's what motivated MCI to look for a side
- 22 proximity sensor?
- 23 A. Again, this is a proximity sensor that
- 24 helped the driver in a turning situation. Not
- 25 moving straight ahead, but in turning.

1	Page 106 So as you can imagine, if you had a side	
2	proximity sensor, it would be going off constantly	
3	while you were driving in a straight line, warning	
4	of stop signs, trash cans, pedestrians standing on	
5	the side of the road, all kinds of cars in the	
6	lane.	
7	Q. Bicyclists?	
8	A. It would be going off constantly.	
9	Q. Warning of bicyclists, too?	
10	A. And then the driver	
11	Q. Yes, warning of the	
12	MR. RUSSELL: Let him finish.	
13	THE WITNESS: What's the driver supposed	
14	to do about it? So any	
15	BY MR. KEMP:	
16	Q. Not run over the bicyclist, I think	
17	would be one option.	
18	MR. RUSSELL: Objection; argumentative.	
19	Please let him finish his answer.	
20	THE WITNESS: So the problem with	
21	side-facing proximity sensors that are active all	
22	the time when you're traveling in a straight line is	
23	that they would be going off constantly, and the	
24	driver would soon put tape over them, ignore them,	
25	because it would be going off constantly and it	

Page 107 would be a distraction to him. 1 2 BY MR. KEMP: So you don't think buses like the J4500 3 ο. 4 should have side-facing proximity sensors; is that 5 correct? 6 MR. RUSSELL: Objection; misstates testimony. 8 THE WITNESS: My opinion is that a 9 side -- if there's a side-sensing device that detects objects on the side, it would only be active 10 11 in a turning situation, activated by a turn signal, 12 not driving in a straight line, because it would be 13 ignored. 14 BY MR. KEMP: 15 Q. Okay. So in your opinion -- these are 16 opinions now -- MCI should not put side sensors on

- 17 buses unless they're activated by a turn somehow,
- 18 because of these potential distractions to the
- 19 driver you've outlined?
- 20 MR. RUSSELL: Objection; misstates
- 21 testimony.
- 22 THE WITNESS: Again, I said that if a
- 23 side sensor could be found that would work, it would
- 24 have to be controlled in such a way that it wouldn't
- 25 distract the driver and give him false positives.

		Page 108
1	BY MR. KEMP:	rage 100
2	Q. So	you don't think side sensors should
3	be put on buse	s; is that correct?
4	MR	. RUSSELL: Same objection.
5	TH	E WITNESS: That's not what I said.
6	Wha	at I said was that if a reliable side
7	sensor could be	e found, it would have to be designed
8	into the vehic	le in a way that it wouldn't distract
9	the driver and	give him false positives.
10	BY MR. KEMP:	
11	Q. Mm	-hmm. And did you look for that kind
12	of side sensor	when you were with MCI, back in the
13	2005, 2006 time	e frame?
14	A. It	wasn't available, that I'm aware of.
15	Q. So	you did look for it?
16	A. I	don't know. Just wasn't available.
17	The	e one I recall that we looked for was
18	the rear one.	
19	Q. Ok	ay.
20	A. An	d, again, all it does is
21	Q. Do	you recall any efforts to find a side
22	sensor at MCI?	
23	A. We	ll, as I said, that there was a in
24	the 2014, '15	time frame, there was a initiative to
25	look at someth	ing on the side.

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1	Page 109 Q. What is your understanding as to whether		
2	or not J4500s made from January 2017 forward have		
3	side proximity sensors?		
4	A. I don't believe they have side proximity		
5	sensors. I don't know for sure. But they do have a		
6	360-degree camera system.		
7	Q. So as we sit here today, you don't think		
8	the J4500 from January 2017 forward has proximity		
9	sensors on the side; is that correct?		
10	MR. RUSSELL: Objection; predicate.		
11	THE WITNESS: Proximity sensors that do		
12	what?		
13	BY MR. KEMP:		
14	Q. That have side detection.		
15	A. In what in what circumstance?		
16	Q. Why don't we just start with any type of		
17	side proximity sensor in any circumstance. What is		
18	your understanding as to whether or not the J4500		
19	has those, with regards to buses made after		
20	January 2017?		
21	A. As I said, the only aid that I'm aware		
22	of is the 360-degree camera.		
23	Q. So as we sit here today, it's your		
24	understanding that J4500s made in January 2017		
25	forward do not have side proximity sensors; is that		

1	correct?	Page 110	
2	Α.	As I said, I don't know. The only thing	
3	I'm aware o	f is the 360-degree camera.	
4	Q.	Have you heard of a Wingman proximity	
5	sensor made	by Bendix?	
6	Α.	The Wingman radar unit	
7	Q.	Yeah.	
8	Α.	that controls cruise, yeah.	
9	Q.	And it also controls braking?	
10	Α.	It can, I think, yeah.	
11	Q.	Okay. And and is it your	
12	understanding one way or the other whether that can		
13	also be a side sensor?		
14	Α.	Not that I'm aware of. It was only	
15	forward-fac	ing, is the one that I'm aware of.	
16		MR. KEMP: Why don't we mark 6.	
17		(Exhibit 6 marked.)	
18	BY MR. KEMP	:	
19	Q.	All right. Directing your attention to	
20	Exhibit 6,	which appears to be some sort of	
21	installatio	n guide for a Bendix BlindSpotter	
22	side-object	detection system.	
23	Α.	Uh-huh.	
24	Q.	Okay? Are you familiar with this	
25	potential p	roduct from Bendix?	

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1	A. I'm not.
2	Q. And did you know that apparently in
3	April do you see the date, April 2013 there?
4	A. Uh-huh.
5	Q. "Yes"?
6	A. Yes.
7	Q. Did you know that in or around
8	April 2013 Bendix was offering a side object
9	detection system?
10	A. I did not.
11	Q. And flip over to page 19. Do you see
12	that there appears to be some sort of radar going
13	out of the side of this truck to detect objects on
14	the side?
15	A. I see that.
16	Q. And you see the six feet and ten feet,
17	zero feet center, six feet?
18	A. Mm-hmm.
19	Q. "Yes"?
20	A. Yes.
21	Q. Any reason why this system couldn't be
22	used for a bus?
23	A. I don't know.
24	Q. Okay. Okay. As we sit here today, do
25	you know whether or not MCI in fact is using the

1	Bendix side-object detection system on J4500s?
2	A. I do not know that.
3	Q. Okay. Assuming that they are using it
4	now, is there any reason that you can think of why
5	MCI did not have some sort of side detection
6	proximity sensor in 2007, 2006, 2005?
7	MR. RUSSELL: Objection; foundation.
8	THE WITNESS: I'm not sure it was
9	available and would work on the coach.
10	BY MR. KEMP:
11	Q. Well, the Setra 417 didn't rely on some
12	outside vendor to provide it with its proximity
13	sensor, right?
14	MR. RUSSELL: Objection; foundation.
15	THE WITNESS: I don't know what you
16	mean.
17	BY MR. KEMP:
18	Q. Mercedes developed their own proximity
19	sensor, correct?
20	MR. RUSSELL: Same objection.
21	THE WITNESS: Which one?
22	BY MR. KEMP:
23	Q. I'm talking about the one that was used
24	for the Setra 417.
25	A. The forward-facing one?

	Page 113
1	Q. Whichever one you want to focus on, the
2	Mercedes developed their own proximity sensor,
3	right?
4	MR. RUSSELL: Objection; foundation.
5	THE WITNESS: I don't know that.
6	BY MR. KEMP:
7	Q. You do know that some automobile and bus
8	manufacturers have developed their own proximity
9	sensors, right?
10	MR. RUSSELL: Same objection.
11	THE WITNESS: I'm not sure that the
12	any bus/coach manufacturer developed their own
13	sensor.
14	BY MR. KEMP:
15	Q. MCI, if I'm not mistaken, in
16	2007 was the largest bus manufacturer in
17	North America, right?
18	MR. RUSSELL: Objection; foundation.
19	THE WITNESS: Coach manufacturer.
20	BY MR. KEMP:
21	Q. So in terms of the total number of
22	coaches sold in 2007, MCI was the largest coach
23	manufacturer in North America, correct?
24	MR. RUSSELL: Same objection.
25	THE WITNESS: In what year? 2007?

1	Page 114 BY MR. KEMP:
2	Q. Right.
3	A. It would have been I believe in 2007
4	MCI did sell the most coaches of any North American
5	bus manufacturer. Not in the world.
6	Q. Is there a reason why the largest coach
7	manufacturer in North America could not develop its
8	own proximity sensor, as opposed to waiting for
9	someone like Bendix to sell it off-the-shelf parts?
10	MR. RUSSELL: Objection; foundation.
11	Speculation. Incomplete hypothetical.
12	THE WITNESS: MCI does not make or
13	design the electronic components. That's not our
14	expertise. MCI's expertise is integrating products
15	from other companies, and so that's not MCI does
16	not have that expertise.
17	BY MR. KEMP:
18	Q. Okay. So safety features like proximity
19	sensors, MCI doesn't use them until they're
20	available from other companies, even if
21	theoretically they could do it themselves?
22	MR. RUSSELL: Same objections.
23	Predicate.
24	THE WITNESS: Proximity sensors are
25	assists, assistants, they assist the driver.

1	Page 115 BY MR. KEMP:
2	Q. Right.
3	A. The and MCI does not have the
4	resources to design and build them.
5	Q. So one of the reasons that MCI did not
6	put proximity sensors on the 2007 buses was because
7	MCI doesn't have the resources to design and build
8	proximity sensors; is that correct?
9	MR. RUSSELL: Same objections.
10	THE WITNESS: MCI could not find a
11	product that was available in 2007 to be a back-up
12	proximity sensor.
13	BY MR. KEMP:
14	Q. Okay. And the reason MCI didn't do it
15	itself, design a proximity sensor itself, is, you
16	said, it didn't have the resources to do so?
17	A. Well, even the experts that whose
18	expertise is building that type of component
19	Q. I'm asking you what you said. You said
20	the reason MCI didn't do it in 2007 is because MCI
21	didn't have the resources to do it itself. Right?
22	A. No. What I said was we couldn't find a
23	product available in North America
24	Q. Made by someone else?
25	A made by anybody, that we could get

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1 access to, that's correct.
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- Q. And the reason it didn't do it itself,
- 3 you said, is because MCI didn't have the resources.
- 4 Right?
- 5 A. And I don't think the technology was
- 6 available.
- 7 Q. Okay. Why is it the largest bus
- 8 manufacturer in North America in 2007, in your view,
- 9 didn't have the resources to design or build its own
- 10 proximity sensor?
- MR. RUSSELL: Objection; foundation.
- 12 Predicate. Argumentative.
- 13 THE WITNESS: It's not the business that
- 14 MCI is in.
- 15 BY MR. KEMP:
- 16 Q. Well, that's not the business that all
- 17 these car companies are in either, right, building
- 18 proximity sensors? They're building cars.
- 19 MR. RUSSELL: Objection; foundation.
- 20 BY MR. KEMP:
- 21 Q. Right?
- 22 A. And as I said, the proximity sensors
- 23 that were available at the time, the actual sensors
- 24 themselves, that they wouldn't meet our test
- 25 requirements. Any that we could get hold of.

1	Q.	Page 117 Okay.
2		MR. KEMP: How are we doing time-wise
3	here? Do y	ou want to just run it? We can stop for
4	lunch, but	I think I will get done in 10, 20
5	minutes.	
6		MR. RUSSELL: If you've only got 10 or
7	20 minutes.	
8		MR. KEMP: I mean, if you're starving
9		MR. RUSSELL: Bryan, are you okay?
10		THE WITNESS: I'm okay.
11		MR. RUSSELL: Are you doing okay?
12		THE REPORTER: Yes.
13	BY MR. KEMI).
14	Q.	Did customers complain about blind spot
15	problems or	the right side?
16	Α.	Can you be more specific?
17	Q.	Did someone who purchased an MCI bus
18	register a	complaint to you that they thought the
19	right side	had blind spots?
20		MR. RUSSELL: Objection; foundation.
21		THE WITNESS: On a J Coach?
22	BY MR. KEMI	·:
23	Q.	On any coach. E Coach, J Coach.
24	Α.	Not that I recall on a J Coach.
25	Q.	On an E Coach, they did?

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Page 118 I just --Α. I don't know. 1 2 You do recall complaints about Q. right-side blind spots on some buses? 3 No. We don't have a blind-spot problem 5 that I'm aware of. Q. Okay. Whether there's a problem or not, 7 do you recall people complaining about it? 8 Α. Not on the -- not on the right-hand side. 9 On the left-hand side do you recall 10 0. 11 complaints? 12 Α. I recall that we moved a driver's window bar and a mirror relative proximity to one another. 13 14 0. Okay. That was on the left-hand side. 15 Α. 16 Q. Were safety advocates in the bus 17 industry concerned about right-side blind-spot 18 problems? MR. RUSSELL: Objection; foundation. 19 20 Predicate. Vague. THE WITNESS: In the coach industry, 21 22 I'm -- not that I'm aware of. BY MR. KEMP: 23 24 When you say "the coach industry," are Q. you excluding the transit industry from that? 25

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They're significantly different,
 1
         Α.
                 Yeah.
     a coach and a bus.
 2
                 So transit buses have right-side
 3
         Q.
     blind spots, but you're not aware of coaches having
 4
     right-side blind spots?
 5
 6
         Α.
                 I don't know.
                                 I can't comment on the
     transit side, is my point.
 8
                  (Exhibit 7 marked.)
 9
     BY MR. KEMP:
10
                 Okay. This is an article entitled "Many
     Buses Have Built-in Blind Spots That Make Driving
11
12
     Them Dangerous, " unquote, by Mr. Sherlock, that I've
     marked as Exhibit 7.
13
14
                 First of all, have you ever seen this
     article before?
15
                 I haven't, and it's dealing with buses,
16
17
     not coaches, as far as I can tell from the first
18
     page.
19
                 Okay.
                         So --
         0.
20
                 MR. RUSSELL:
                               I didn't hear you, Bryan.
21
     You have or you have not?
22
                 THE WITNESS:
                               I have not.
23
     BY MR. KEMP:
24
         0.
                 Okav.
                         So this article talks in detail
25
     about the blind-spot problems. Do you see that?
```

1	Page 120 A. I see it's talking about transit buses.
2	Q. Okay. Page 2 says, quote, "Essentially,
3	all transit buses in the United States are built as
4	cheaply as possible, with mirrors and pillars that
5	are over a foot wide," unquote.
6	Do you think that's a true statement?
7	MR. RUSSELL: Objection; foundation.
8	THE WITNESS: I don't know. And it's
9	dealing with transit buses, not coaches.
10	BY MR. KEMP:
11	Q. You're owned by New Flyer, MCI?
12	A. MCI is now, for just over a little more
13	than a year.
14	Q. And New Flyer is the number-one
15	manufacturer of transit buses in North America?
16	MR. RUSSELL: Objection; foundation.
17	THE WITNESS: That's correct.
18	BY MR. KEMP:
19	Q. Okay. So with regards to the transit
20	buses made by New Flyer, do you think they're built
21	as cheaply as possible, with mirrors and pillars
22	that create blind spots that are over a foot wide?
23	MR. RUSSELL: Objection; foundation.
24	THE WITNESS: I'm not qualified to
25	answer that.

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Page 121
     BY MR. KEMP:
 1
 2
         Q.
                 Okay. Moving on to the fourth full
     paragraph, it says, quote: "In the case of these
 3
    blind spots, policymakers have failed at the highest
 5
             engineering. If we want to end fatalities,
     level:
 6
     safe street engineering must not end at the curb,"
     period, unquote.
 8
                 Did I read that right?
 9
         Α.
                 Yeah. Yes.
10
                 Do you agree with the general
     proposition that you as a design engineer for
11
12
     coaches has an obligation to eliminate blind spots,
13
     if possible, through the design process?
                 MR. RUSSELL: Objection; foundation.
14
     Predicate.
15
                               As I said, MCI's coaches
16
                 THE WITNESS:
     do not have a problem with blind spots.
17
     BY MR. KEMP:
18
                 Whether there's a problem or not, do you
19
         0.
20
     agree that you as a design engineer have an
     obligation to design the coaches to minimize or
21
22
     eliminate blind spots?
23
                 MR. RUSSELL: Objection; predicate.
24
                 THE WITNESS:
                               Me personally, I -- that's
     not my area of the -- of the vehicle when I was
25
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in -- in engineering. And it's one of the things
1
     that, as I said before, that we've given -- MCI's
     given consideration to, is the visibility of the
3
     driver.
     BY MR. KEMP:
5
 6
         Q.
                 Okay. Why don't we talk about it not
     being your job for a minute.
7
8
                 MR. KEMP: Could you get that marked
 9
     first.
                  (Exhibit 8 marked.)
10
11
     BY MR. KEMP:
12
                 So here's an organizational chart from
         Q.
     September 2009 that we've marked as Exhibit 8.
13
                 And who is that at the top?
14
15
         Α.
                 Myself.
16
         Q.
                 And what's your title?
                 VP of design engineering and product
17
         Α.
     planning.
18
                 Okay. And that was your title in
19
         Q.
20
     September 2009?
                 That's what that says, yeah. I don't
21
         Α.
     recall exactly.
22
                 Okay.
                         So you were the head person on
23
         0.
     design engineering at this point in time, right?
24
                 MR. RUSSELL: Objection; predicate.
25
```

Page 123 1 Misstates testimony. 2 THE WITNESS: No. I was the vice president of the area. I wouldn't have been doing 3 any designing. BY MR. KEMP: But you are overall responsible for the 6 Q. design engineering at this point in time, referring 7 to September 2009, right? 8 9 MR. RUSSELL: Same objection. 10 Predicate. THE WITNESS: Again, as I said, I was 11 head of the -- those departments. 12 BY MR. KEMP: 13 Okay. So a couple questions ago you 14 Q. 15 told me it wasn't your job to design buses that eliminate -- or excuse me, coaches that eliminate 16 blind spots. 17 You're the head guy. 18 You asked me now. As I said, I said Α. 19 20 when -- I wasn't in engineering anymore, is what I And when I was in engineering doing the 21 actual design, my area was electrical and 22 23 electronics, not --In 2007, you were the head guy, right, 24 Q. 25 for design engineering?

1	Page 124 A. No, I don't think so, not in 2007.
2	Q. In 2009 you were?
3	A. This I had this position in
4	2009, yeah.
5	Q. You're the top, top person?
6	A. Of that department, yep, in 2009.
7	That's what it says.
8	Q. And you're the top person of that
9	department, the design engineering department,
10	through January 2016, right?
11	A. If that's what that says. I don't
12	recall.
13	(Exhibit 9 marked.)
14	THE WITNESS: Well, no. This is a
15	different in 20 2010, I was the vice president
16	and general manager of operations.
17	BY MR. KEMP:
18	Q. Okay. But on the organizational charts
19	I've given you as Exhibit 8 and 9 hang on, let me
20	catch Howard up here you're listed as the top
21	person in the design engineering department, right?
22	A. In 2009.
23	Q. And 2016 as well?
24	A. No.
25	Q. No? There's someone on top of you that

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1 I'm missing?
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- 2 A. This is in charge of operations, as the
- 3 general manager of the --
- 4 Q. So in 2000 -- how long were you the top
- 5 person in the design engineering department?
- 6 A. I don't recall. But in 2010, I had this
- 7 position (indicating).
- 8 Q. Referring to Exhibit 8?
- 9 A. Exhibit 9. So in 2010, that's when I
- 10 got the general manager of operations position.
- 11 Q. Okay. And prior to that you were head
- 12 of the design engineering department; yes?
- 13 A. Well, it says in 2009, and I don't
- 14 recall for how long that was, because as I recall,
- in 2007 and maybe '8 I was in product planning and
- 16 technical support, is what I recall.
- 17 Q. So for some period of time in or
- 18 around 2009, you were the head design engineer at
- 19 MCI Limited, correct?
- 20 A. No.
- 21 Q. No?
- 22 A. No.
- 23 Q. You were head of the design engineering
- 24 department at MCI Limited?
- 25 A. Correct.

Page 126 And as head of the design engineering 1 Q. 2 department at MCI Limited in at least 2009, did you have responsibility for design engineering to 3 eliminate or reduce right-side blind spots? 4 I had the responsibility to make sure 5 that the coach met a certain level of safety, along with manufacturability and reliability and 8 functionality. That's what I had the responsibility of. 9 10 And is part of safety right-side 11 blind spots? 12 Α. It would be a consideration. 13 Q. Okay. So what did you do as head of the 14 design engineering to eliminate, mitigate, reduce, whatever term you want to use, right-side blind 15 16 spots for the J4500? 17 MR. RUSSELL: Objection. Vaque as to 18 time. I don't believe that we THE WITNESS: 19 20 had any active initiatives at that time because we didn't have a problem. 21 22 BY MR. KEMP: 23 So since you didn't believe there were 24 any right-side blind spot problems, you didn't do anything to eliminate, reduce or mitigate them; is 25

Page 127 1 that correct? 2 MR. RUSSELL: Objection; predicate. THE WITNESS: We always are looking at 3 mirrors and making sure that the drivers has the proper visibility of the vehicle. 5 6 BY MR. KEMP: 7 Let's do it this way. From the time Q. 8 period 2000 to 2009, can you tell me about any one 9 single thing you did to eliminate, reduce or mitigate right-side blind spot problems? 10 11 As I said, we didn't have a blind spot Α. problem. 12 13 Q. So there was nothing you did during that time frame to eliminate, reduce or mitigate blind 14 spots because you had no blind-spot problem? 15 16 MR. RUSSELL: Objection; predicate. THE WITNESS: We -- MCI J Coach does not 17 have a blind-spot problem. 18 19 BY MR. KEMP: 20 Q. So you as the head of design engineering didn't do anything to eliminate, reduce or mitigate 21 22 the problem because you didn't think there was a 23 problem; is that correct? 24 MR. RUSSELL: Same objection. 25 THE WITNESS: Again, as I said, we did

```
not have -- the J Coach does not have a blind-spot
1
2
    problem.
3
     BY MR. KEMP:
                 Can you tell me anything you did during
4
         Q.
     the time period 2000 to 2009 to eliminate, reduce or
 5
 6
    mitigate right-side blind-spot problems on the
     J4500? Right-side blind spot problems, if any, on
8
     the J4500.
                              Objection; predicate.
9
                 MR. RUSSELL:
                 THE WITNESS: Like I said, we didn't
10
               We always look at mirrors, to make
11
     have any.
12
     sure our mirrors are optimized as best they can be.
13
     But I don't recall whether there was anything
     specific done.
14
                 The only thing I recall is that the --
15
16
     that there wasn't the problem, and --
17
     BY MR. KEMP:
                 Okay. I don't want to argue with you
18
         Q.
     about whether it was a problem or not.
                                              I want to
19
20
     know what, if anything, was done that would
     eliminate a potential right-side blind spot problem
21
22
     on the J4500 from 2000 to 2009. Can you identify
23
     any specific action taken?
24
                 MR. RUSSELL: Objection; asked and
25
     answered.
```

1	Page 129 THE WITNESS: As I said, that's when we	
2	did the J Coach design, would have been in 2000,	
3	roughly, '99, 2000. And so we looked at the we	
4	would have looked at to make sure the visibility of	
5	the driver was to our requirements.	
6	BY MR. KEMP:	
7	Q. Is there some sort of standard for the	
8	visibility of a driver through the right side of	
9	the bus?	
10	A. There's a guideline to check in SAE, as	
11	I recall.	
12	Q. And what's that called?	
13	A. I don't know. I just know that there is	
14	an SAE guideline for measuring visibility.	
15	Q. And SAE means Society of Automobile	
16	Engineers?	
17	A. Correct.	
18	Q. And you think there's some sort of	
19	guideline for measuring visibility?	
20	A. Right.	
21	Q. For the driver?	
22	A. Yeah.	
23	Q. And is there a term we could use for	
24	that guideline, or that you use?	
25	A. Just no it would just be driver	

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Page 130
     visibility, I believe.
 1
 2
                 Okay. All right. New area.
         Q.
                  (Exhibit 10 marked.)
 3
     BY MR. KEMP:
                 Mr. Couch, you probably want to look at
 5
         Q.
     this one first, to put that one in context.
 6
                  (Exhibit 11 marked.)
                 MR. RUSSELL: Counsel, do yo know how
 8
     much longer you will be?
 9
10
                 MR. KEMP: Probably another five
11
     minutes.
                 MR. RUSSELL: So you did the letters?
12
                 MR. KEMP: Yeah, I did it backwards.
13
     BY MR. KEMP:
14
                 So referring to Exhibit 11, Mr. Couch,
15
         Q.
     that is product literature for a device known as an
16
17
     S-1 Gard, and if you take a look at the mark, PO 318
18
     on the top right there, you'll see how it's
     installed in a bus for the rear.
19
20
                 You kind of -- you get an idea of what
21
     we're talking about here?
22
         Α.
                 Yep.
23
                 Prior to today, had you ever heard of an
         Q.
     S-1 Gard?
24
25
                 I heard about it in -- in relation to
         Α.
```

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1	this case.	
2	Q. Okay. Prior to April 18th, 2017, had	
3	you ever heard of an S-1 Gard?	
4	A. No.	
5	Q. Do you know Mr. Ellis?	
6	A. I do not.	
7	Q. Okay. So prior to April 18th, 2017, did	
8	you know Mr. Ellis was an engineer in New Flyer and	
9	had written a letter dated December 2nd	
10	A. No.	
11	Q. Mr. Ellis says that there is nothing	
12	about mounting the S-1 Gard to a New Flyer chassis	
13	and suspension that would, quote, "impact the	
14	functionality or integrity or other systems in the	
15	coach," unquote.	
16	Do you see that statement?	
17	A. I do.	
18	Q. Okay. And do you think there's	
19	anything can you think of any reason, with	
20	regards to functionality or integrity of systems	
21	in the coach, why an S-1 Gard cannot be mounted on	
22	the J4500?	
23	MR. RUSSELL: Objection; foundation.	
24	THE WITNESS: I haven't had a lot of	
25	exposure to this, but just looking at it quickly,	

		Page 132
1	and as I ha	ve as I've explained, there's a big
2	difference between a bus and a coach.	
3	BY MR. KEMP	:
4	Q.	Excuse me. What is the word that
5	Mr. Ellis u	ses in the last sentence there?
6	A.	Which word?
7	Q.	On Exhibit 10.
8	A.	Yeah, he says "coach." But
9	Q.	He says "coach."
10	Α.	Right.
11	Q.	So he says that the S-1 Gard can be used
12	and it does	n't impact the functionality or integrity
13	or other systems "in the coach," unquote, right?	
14	Α.	Yeah.
15	Q.	So, okay. Go ahead.
16	Α.	I'm not sure that's accurate,
17	would be	
18	Q.	So like Mr. Dorr and Mr. Bartlett,
19	Mr. Ellis's	choice of words is inaccurate?
20		MR. RUSSELL: Objection; foundation.
21	Speculation	
22		THE WITNESS: I would just say in this
23	case Mr. El	lis is talking about a transit bus.
24	BY MR. KEMP	:
25	Q.	Okay. And how is it you know that?

1	Α.	Page 133 Well, we had no relation with them at
2	that time, s	so I don't know why he would be
3	commenting o	on a coach. Flyer didn't make a coach.
4	They made to	cansit buses. So
5	Q.	Okay. Go ahead. Is there a reason you
6	can think of	f why an S-1 Gard would not be functional
7	or harm the	integrity of a J4500?
8	Α.	A couple things that come to mind would
9	be the abil:	ity to put on a tire chain. Coaches are
10	required	snow chains. Coaches are required by
11	law in some	states to have clearance for a snow
12	chain. And	the snow chains whip out when you drive,
13	so it looks	like it's very close to impinging on
14	that space.	
15		And the other is
16	Q.	Okay, stop, stop.
17		What you're saying is that in some
18	colder state	es, like I guess North Dakota maybe
19	А.	Colorado.
20	Q.	Colorado, they have a requirement
21	that coaches	s can be outfitted with snow chains?
22	Α.	Have to. Have to have them. Have to be
23	able to fit	snow chains.
24	Q.	And you think that potentially the snow
25	chain and th	he S-1 Gard would not interact

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- 1 appropriately?
- 2 A. Correct.
- 3 Q. But you don't know one way or the other
- 4 because you don't know how far away the S-1 Gard is
- 5 from the tire?
- 6 A. Correct.
- 7 Q. And could you alleviate that concern by
- 8 moving the S-1 Gard an inch or two away?
- 9 MR. RUSSELL: Objection; foundation.
- 10 THE WITNESS: I don't know.
- 11 BY MR. KEMP:
- 12 Q. Okay. All right. Go ahead. What else?
- 13 A. And the other is clearance. Coaches are
- 14 required to go over rural railway tracks. Again,
- 15 they travel at very high rates of speed, and I'm not
- 16 sure how -- what happens if you run into an obstacle
- 17 at a highway speed with this device.
- 18 So those would be just my concern about
- 19 putting it on a coach.
- 20 Q. Mr. Lamothe -- Lamothe --
- 21 told us that -- I think he told us that the coach
- 22 has about -- excuse me, a J4500 has approximately
- 23 eight inches of clearance.
- 24 MR. RUSSELL: Objection; misstates --
- 25 BY MR. KEMP:

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1 Q. From this portion of the coach to the
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- 2 street.
- 3 MR. RUSSELL: I believe that misstates
- 4 prior testimony.
- 5 THE WITNESS: I don't know the exact
- 6 dimension, but it's significant.
- 7 BY MR. KEMP:
- 8 Q. Okay. So as we sit here today, you
- 9 don't know whether or not this clearance concern
- 10 would preclude mounting an S-1 Gard on a J4500; is
- 11 that correct?
- 12 A. That wasn't my point. My point would be
- 13 that we try to -- the requirements of a coach are to
- 14 have clearance to make sure it can operate in the
- 15 environment that it's required to operate, which are
- 16 rural roads; Alaska Highway, which I've been on,
- 17 which has potholes that are a foot deep or deeper.
- 18 And the concern would be that this would
- 19 hang the vehicle up. That would be my biggest --
- 20 because we spend -- we go to significant efforts to
- 21 make sure we have a certain clearance in order to
- 22 meet our breakover angle specs and approach.
- Q. To your knowledge, has MCI put on an
- 24 S-1 Gard on a coach?
- A. Not to my knowledge.

1	Q. Do you know one way or the other?
2	A. As far as I know, we have not, and we've
3	never been asked for it, to my knowledge.
4	Q. Mr. Ellis said that New Flyer put them
5	on in the New Flyer factory. Do you know anything
6	one way or the other about that?
7	A. No.
8	Q. Now, back to the S-1 Gard. Whether it's
9	an S-1 Gard or a barrier, say a triangular barrier
10	that you put on as part of the chassis manufacture
11	or after the chassis manufacture, would you agree
12	with me that if it wanted to, MCI could have put
13	some sort of deflector before the rear tires to
14	potentially deflect objects out of the way?
15	MR. RUSSELL: Objection; foundation.
16	Speculation.
17	THE WITNESS: I don't know. We I
18	don't know that. We go to great lengths to get to
19	the design we're at for the environment that a coach
20	has to operate in.
21	BY MR. KEMP:
22	Q. Okay. I think you're misunderstanding
23	me. When we were talking about proximity sensors,
24	we were talking about expertise and MCI didn't have
25	this type of expertise and things of that vein. Do
I	

Page 137 you recall that discussion? 1 2 Α. Yep. Does MCI have sufficient expertise to 3 Q. put on a mechanical object like an S-1 deflector or 5 something comparable of its own design? MR. RUSSELL: Objection; foundation. 6 Speculation. THE WITNESS: MCI has the expertise to 9 build structural components. BY MR. KEMP: 10 And did MCI, to your knowledge, give any 11 12 consideration to building a structural component that would act as a deflector for the rear tires? 13 MR. RUSSELL: Same objections. 14 15 THE WITNESS: To my knowledge, we did not look at something like that. 16 BY MR. KEMP: 17 18 Q. Do you think that's something that 19 should at least be explored? 20 MR. RUSSELL: Same objections. THE WITNESS: As I said, a coach is not 21 2.2 operated in the same environment or have the same --23 it's not built the same as a transit. We don't have a rear door. We don't have people coming in and out 24 25 every 20 minutes. And quite frankly, although this

1	Page 138 incident is tragic, I have never heard prior to this
2	of this type of accident in one of our coaches.
3	It's
4	BY MR. KEMP:
5	Q. You've never heard of a bus running over
6	a bicyclist before?
7	A. A coach, I have not.
8	Q. Okay. In any fashion. The front of the
9	bus or excuse me, the coach hits the bicyclist.
10	You've never heard of a coach hitting a bicyclist
11	before?
12	A. Not to my knowledge.
13	Q. Okay. All right.
14	Go ahead. So I think you were going to
15	say something more about whether MCI could make a
16	barrier protector for the rear if it wanted to?
17	A. No. I just said that MCI has the
18	expertise to design a structural component.
19	Q. And now that you have heard about this
20	case, do you think it would be a good idea to at
21	least explore designing a structural component like
22	this deflector for MCI coaches?
23	MR. RUSSELL: Objection; foundation.
24	Incomplete hypothetical and improper opinion.
25	THE WITNESS: MCI looks at any and all

new features that come out, and so we will review 1 2 I'm not sure that we'll do it, but MCI will, I'm sure, look at it. 3 BY MR. KEMP: And you think that's an appropriate 5 0. thing to do from a design engineering point of view? 6 MR. RUSSELL: Same objections. THE WITNESS: I don't know. 8 BY MR. KEMP: 9 10 Well, why would they look at it then, if 0. 11 it's not an appropriate thing to do from a design engineering point of view? 12 We will look at it because it's come up 13 Α. in this lawsuit. 14 15 And by "it" we're talking about Q. potentially designing a deflector similar to the 16 That's "it"? 17 S-1 Gard? 18 I think what MCI will do is we'll review the S-1 Gard to see if it's a feature that should be 19 offered or not. 20 21 Or something similar to an S-1 Gard, Q. 22 right? I don't know. 23 Α. I mean, if there's a concern that 24 Okay. 25 the S-1 Gard hangs too low -- which is what I think

	Page 140
1	you're saying. Right?
2	A. Uh-huh.
3	Q. "Yes"?
4	A. That's in my opinion, yeah, that
5	would be one of the concerns, is that it's
6	Q. Okay. But you could make an S-1 Gard
7	that doesn't hang as low for a
8	A. I don't know. I'm not the expert. From
9	what I saw of the video of how this S-1 Gard works,
10	it's pretty critical how the device hits the person.
11	The other thing to keep in mind is that
12	a coach has two axles. And so something hitting
13	spinning a person around, the second axle is a
14	concern, I would think, with a on a coach, where
15	the transit bus doesn't have that.
16	Q. Okay. And by the video that you're
17	referencing, you're talking about the S-1 Gard
18	promo video?
19	A. I looked it up online.
20	Q. Okay. And that's the video where the
21	stunt guy goes under the bus?
22	A. Right.
23	Q. And do you recall that the stunt guy in
24	one case was on a bicycle and he went under the bus?
25	MR. RUSSELL: Objection; foundation.

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Page 141
                               I do.
                                       And actually in
1
                 THE WITNESS:
     that case what I recall is he adjusted himself
2
     before the S-1 Gard struck him.
 3
     BY MR. KEMP:
                 Okay. You would agree with me that at
 5
         Q.
     the time the S-1 Gard video was made, at least the
     S-1 Gard people foresaw the potential for a
 8
    bicyclist to go under the rear tires of a bus,
     right?
 9
                                 They were doing all kinds
10
         Α.
                 I don't know.
     of different things.
11
                 But that was one scenario they showed in
12
         0.
     their video?
13
                 They did show that.
14
         Α.
                 Okay. And is there a reason why they
15
         Q.
     could foresee that as a potential risk, a bicyclist
16
17
     going under the rear tires of a bus, and MCI could
18
     not foresee that as a potential risk?
                 As I said, they were dealing strictly
19
         Α.
20
     with transit buses, and MCI makes coaches. And the
21
     interaction with people and the vehicles are quite
     different.
22
                             I have no further questions.
23
                 MR. KEMP:
24
                 MR. CHRISTIANSEN:
                                     I have a couple.
25
     111
```

	Page 142
1	EXAMINATION
2	BY MR. CHRISTIANSEN:
3	Q. Mr. Couch, my name's Pete Christiansen.
4	I also represent the plaintiffs in this case. I
5	just have some follow-up questions for you.
6	Have you read the driver, Mr. Hubbard's,
7	deposition in this case?
8	A. I have not.
9	Q. Did anybody tell you what he testified
10	to related to this accident?
11	A. Not not the whole thing.
12	Q. Without telling me what Mr. Russell or
13	any of your counsel told you, what do you have an
14	understanding, separate and aside from what your
15	lawyers have told you, about what the driver said
16	happened, or does it just come from your lawyers?
17	A. No. Just from lawyers.
18	Q. Did you know that Mr. Hubbard said he
19	passed the bicyclist some 400 feet north of the
20	intersection where he struck him? Did you know
21	that?
22	A. No.
23	Q. Did you know he said that he didn't see
24	the bicyclist for 400 feet, until the bicyclist just
25	appeared in the window on the door right prior to

	Page 143
1	him striking the cyclist?
2	MR. RUSSELL: Objection; foundation and
3	to the extent it misstates prior testimony.
4	BY MR. CHRISTIANSEN:
5	Q. Did you know that?
6	A. I don't know.
7	Q. So he drove some 400 feet next to a
8	cyclist not being able to see him. That's his
9	testimony. Were you aware of that?
10	MR. RUSSELL: Same objections.
11	THE WITNESS: No.
12	BY MR. CHRISTIANSEN:
13	Q. And in light of that testimony, assuming
14	he's under oath and telling the truth, it's still
15	your position there's no blind spot on these J4500s;
16	is that right?
17	MR. RUSSELL: Same objections.
18	THE WITNESS: It's my understanding
19	that
20	BY MR. CHRISTIANSEN:
21	Q. No, that's not my I didn't ask you
22	for your understanding.
23	I asked you: Is it your position, as
24	you sit here today, knowing that this driver, on the
25	day in question, April the 18th, 2017, when he my

client, a 51-year old father of two, was run over 1 2 and killed, did you know that for 400 feet he traveled southbound next to a bicyclist without being able to see him? Did you know that? 4 MR. RUSSELL: Objection; foundation and 5 to the extent it misstates prior testimony. THE WITNESS: I don't know that. 8 BY MR. CHRISTIANSEN: And assuming that that testimony of 9 Q. 10 Mr. Hubbard is true, and a driver paying attention by all accounts, driving 400 feet next to a cyclist 11 12 unable to see him, wouldn't you agree with me there must be some kind of blind spot on this bus? 13 MR. RUSSELL: Same objections. 14 THE WITNESS: I can't know one way or 15 the other. 16 17 BY MR. CHRISTIANSEN: What explanation do you have for his 18 Q. inability to see a bicyclist traveling next to him 19 20 southbound on Pavilion Center? MR. RUSSELL: Objection; foundation. 21 22 Calls for speculation. I don't know, because I 23 THE WITNESS: 24 don't know the situation of the accident. It was my 25 understanding that he just overtook the bicyclist.

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Page 145
     BY MR. CHRISTIANSEN:
1
2
                      His testimony unequivocally is that
         Q.
                 No.
     for 400 feet after he passed the bicyclist, until
 3
     the second before he struck him, he couldn't see a
                 That's his testimony.
 5
    bicyclist.
                 So in light of that testimony I want you
 6
     to tell me, tell the jury, is it still your position
     that there's no blind spot on this J4500?
 8
                 MR. RUSSELL: Same objections.
 9
                 THE WITNESS: That's correct.
10
     BY MR. CHRISTIANSEN:
11
                 And because there's no blind spot, I
12
         0.
     mean, all the things Mr. Kemp spoke to you about
13
     this morning -- the placement of the mirrors, the
14
     pillars, the size of the pillars, the windows -- do
15
16
     you remember all that testimony --
                 Uh-huh.
17
         Α.
                 -- all of those items were modified
18
         Q.
     and/or looked at between the E Coach and the J Coach
19
20
     to ensure visibility of the driver, correct?
                 MR. RUSSELL:
                               Objection; misstates
21
22
     testimony.
                                As I said, they were all
23
                 THE WITNESS:
24
     looked at to see if there were any areas where we
     could improve visibility.
25
```

Page 146 BY MR. CHRISTIANSEN: 1 2 Q. Visibility? Of the driver. 3 Α. And that's because as a designer and 4 manufacturer and distributor of buses, you all 5 6 recognized the visibility of the driver on these big, 45-foot vehicles is important, right? 8 Α. Visibility is very important, yes. And so if a driver like Mr. Hubbard 9 Q. couldn't see a bicyclist for 400 feet as he's 10 driving next to it because it's in a blind spot, 11 12 that would be a problem, right? MR. RUSSELL: Objection; foundation. 13 14 Speculation. 15 I can't say one way or the THE WITNESS: 16 other whether that happened. 17 BY MR. CHRISTIANSEN: Do you have an explanation for why he 18 Q. couldn't see the bicyclist for 400 feet? 19 20 MR. RUSSELL: Same objection. Asked and 21 answered. 22 THE WITNESS: Not sure that he couldn't or that that's actually what happened. 23 2.4 BY MR. CHRISTIANSEN: 25 Q. That's his testimony.

1	А.	Page 147 I don't know.	
2	Q.	Do you have reason to doubt his	
3	testimony.		
4	Α.	I said, again, I don't know. I've	
5	driven a co	each, and you can it's quite easy to	
6	you have ve	ry good visibility, because you're at the	
7	front, you'	re up high, and if you're driving down	
8	the street,	you can see a bicyclist or something.	
9	Q.	Why couldn't Mr. Hubbard see my client?	
10	Α.	Not sure.	
11		MR. RUSSELL: Objection; foundation.	
12	BY MR. CHRI	STIANSEN:	
13	Q.	Well, I would like an explanation from	
14	you. Why	couldn't he see my client?	
15	Α.	I don't	
16		MR. RUSSELL: Asked and answered. He	
17	doesn't know what Mr. Hubbard saw.		
18		MR. CHRISTIANSEN: Don't testify for	
19	him.		
20		MR. RUSSELL: I am not testifying for	
21	him.		
22		MR. CHRISTIANSEN: Make your objection.	
23		THE WITNESS: As I said, I don't know.	
24	BY MR. CHRI	STIANSEN:	
25	Q.	Did you have any reason to dispute	

Page 148 Mr. Hubbard's testimony as you sit here today? 1 2 MR. RUSSELL: Asked and answered. 3 Foundation. Speculation. Again, I don't know. 4 THE WITNESS: BY MR. CHRISTIANSEN: 5 Q. Yes or no, you do or you don't have a 7 reason to dispute his testimony? 8 MR. RUSSELL: Same objections. Asked 9 and answered. THE WITNESS: Can you ask that again? 10 11 BY MR. CHRISTIANSEN: 12 Sure. I'm asking you: Do you have any Q. 13 reason one way or another to dispute Mr. Hubbard's 14 testimony? 15 Α. I would dispute that. 16 Q. What part of it? That he drove beside him for 400 feet 17 Α. 18 and couldn't see a bicyclist. That's his testimony, is that he passed 19 Q. 20 him at a cutout 400 feet north and didn't see him until the second before he ran him over. 21 22 Tell me your explanation for how he

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couldn't see him for 400 feet traveling southbound

on Pavilion Center if there's not a blind spot on

23

24

25

this bus.

```
Page 149
                 MR. RUSSELL: Objection; foundation.
 1
     Speculation. Asked and answered several times.
 2
                 THE WITNESS: Again, I don't know.
 3
     not that familiar with the whole situation.
                 MR. CHRISTIANSEN: Nothing else.
 5
                 MR. RUSSELL: Will?
 6
                 MR. KEMP: (Shakes head in the
     negative.)
 8
 9
                 MR. RUSSELL: All right.
                                            Thank you.
10
                 THE VIDEOGRAPHER: We're going off the
11
     record. The time is 12:53.
12
             (The deposition concluded at 12:53)
13
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13				
14		* * * *	*	
15	I, BRYAN C	COUCH, deponent he lare the within ar	erein, do hereby nd foregoing	
16	transcription to	o be my deposition		
17		id deposition unde		
18		YAN COUCH, Deponer	nt	
19		_		
20				
21				
22				
23				
24				
25				

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1	Page 151 CERTIFICATE OF REPORTER		
2	STATE OF NEVADA)		
3) SS: COUNTY OF CLARK)		
4	I, Karen L. Jones, a duly commissioned and		
5	licensed Court Reporter, Clark County, State of		
6	Nevada, do hereby certify: That I reported the		
7	taking of the deposition of the witness, BRYAN		
8	COUCH, commencing on Thursday, October 12, 2017, at		
9	10:05 a.m.		
10	That prior to being examined, the witness was,		
11	by me, duly sworn to testify to the truth. That I		
12	thereafter transcribed my said shorthand notes into		
13	typewriting and that the typewritten transcript of		
14	said deposition is a complete, true and accurate		
15	transcription of said shorthand notes.		
16	I further certify that I am not a relative or		
17	employee of an attorney or counsel of any of the		
18	parties, nor a relative or employee of an attorney		
19	or counsel involved in said action, nor a person		
20	financially interested in the action.		
21	IN WITNESS HEREOF, I have hereunto set my		
22	hand, in my office, in the County of Clark, State of		
23	Nevada, this 25th day of October, 2017.		
24	Karen J. Jones		
25	KAREN L. JONES, CCR NO. 694		

000982

EXHIBIT 3



DANGERZONE DEFLECTOR

Installed on over 30,000 buses worldwide since 1993

PRODUCT INFORMATION

P01316

51 6772 DANGERZONE DEFLECTOR

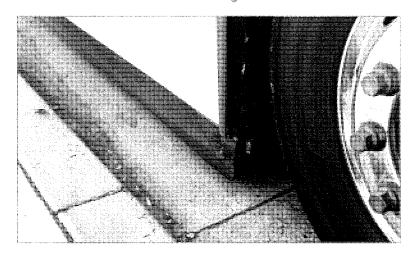


The S-1 GARD Dangerzone Deflector a securely mounted maintenance-free barner installed in front of the right rear wheels of a transit bus or motor coach, designed to deflect a person out of the path of the wheels, preventing catastrophic injury or death.

Its patented new impact-resistant receiver design, guaranteed for the life of the bus, has improved energy absorption and is engineered to withstand poor road conditions and operator's abuse.

The S-1 GARD Dangerzone Deflector and S-1 GARD Dangerzone Barrier are cast using only the best BASF polyurethane available and will last for as long as any transit bus is in service. Each part is custom fit to accommodate any bus configuration.

5-1 GARD DANGERZONE BARRIER

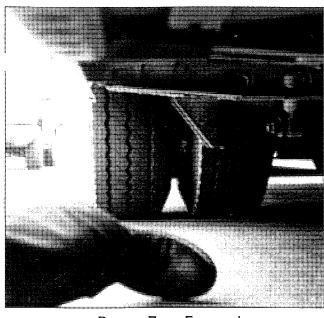


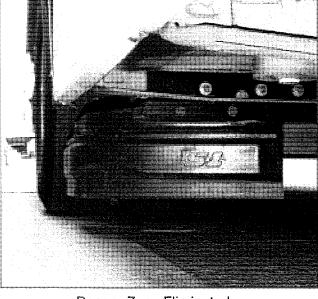
Ideal for low-floor buses, the S-1 GARD Dangerzone Barrier covers the entire gap between the front and rear wheels.

Cast from heavy-duty polyurethane, the Barrier is strong enough to deflect pedestrians and cyclists from the path of the wheels, yet flexible enough to withstand impact from road obstacles.

A patented energy absorption mounting receiver allows for barrier movement against impact for, is customizable to fit any compatible frame, and is guaranteed for the life of the bus.

www.s1gard.com





Danger Zone Exposed

Danger Zone Eliminated

THE S-1 GARD IS WORKING

"We seldom have a need to do any maintenance on the S-1 GARD."

- Tom Barrio, Vehicle Maintenance Manager, Montebello Bus Lines, Montebello, CA

.n pleased to report that since the complete installation of the product six years ago, we have not had a right rear tire fatality. In addition, one preventable variable we did not factor in was the efficacy of the guard to apparently warn pedestrians to stand clear of the rear tires."

- Fred Goodine, Assistant General Manager, Safety and Risk Management, WMATA, Washington, D.C.

Washington Metropolitan Transit Authority (WMATA) in Washington, D.C., installed the S-1 GARD in 2000. At the time, WMATA was averaging two severe accidents or fatalities per year; since installing the S-1 GARD, WMATA has reported zero right rear wheel incidents.

"In continuous service through our harsh winters for 12 years, the S-1 GARD is still in good condition firmly attached."

- Daniel G. Holter, General Manager, Rochester City Lines, Rochester, MN

Capital Metro Transit in Austin, TX, installed the S-1 GARD in 2005. Prior to installation, Capital Metro had been averaging one severe accident or fatality every two years. Since installing the S-1 GARD, Capital Metro has reported zero right rear wheel incidents.

ENDORSED BY PEDESTRIAN AND CYCLIST ADVOCATES NATIONWIDE

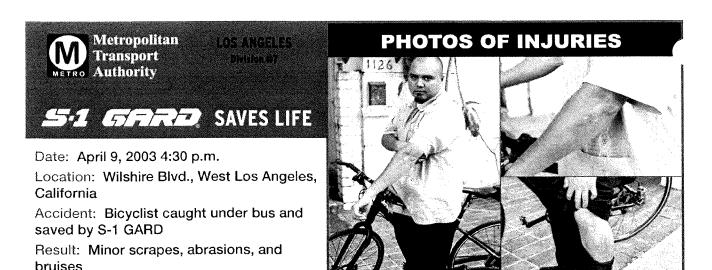
CONTROL CASUALTY LOSSES: INSTALL A PRODUCT PROVEN TO SAVE LIVES

With the continued rise of fuel prices, transit properties all over North America have continued to see increased ridership, which will demand more emphasis on safety. Because of the increased safety risks, transit properties' exposure rate is increasing by the day.

In order to reduce mounting casualty losses to risk reserves and insurance pools, major transit properties have installed the S-1 GARD. The S-1 GARD has been a proven safety device for over two decades and your entire fleet can be retrofitted for less than the cost of one settlement. The S-1 GARD will:

- Prevent Catastrophic Losses. Fatalities, dismemberment, and degloving injuries can result in verdicts and settlements in excess of \$5 million.
- Reduce Legal Costs. Attorney costs in catastrophic cases can exceed \$250,000.
- Avoid Adverse Publicity. Press coverage of accidents and large settlements are damaging to the image of your transit system.
- Improve Public Image. Dedication ceremonies upon installation demonstrate the concern of your transit property for public safety.
- Minimize Exposure of your Drivers. Even non-fault accidents causing serious injuries have resulted in operators being unable to return to duty.
- Improve Loss Experience. For favorable underwriting and rating at time of renewal.

000987



Hult LAPE) report a vallable tipon reques

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P01319

MAJOR TRANSIT FLEETS WORLDWIDE RETROFITTING WITH THE S-1 GARD

Transit agencies and bus OEMs around the world have made the decision to install the S-1 GARD:

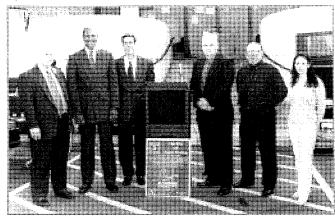
Transit Agencies including:

- LAMTA (Los Angeles, CA)
- · SFMTA (San Francisco, CA)
- · Keolis Sverige (Stockholm, Sweden)
- · CapMetro (Austin, TX)
- WMATA (Washington, D.C.)
- MTA (Baltimore, MD)
- · Riverside TA (Riverside, CA)
- Santa Clara Valley TA (San Jose, CA)
- · Montebello Bus Lines (Montebello, CA)
- Big Blue Bus (Santa Monica, CA)
- Norwalk Transit System (Norwalk, CA)
- SDMTS (San Diego, CA)
- AC Transit (Oakland, CA)
- · Glendale Beeline (Glendale, CA)
- Sun Tran (Tucson, AZ)
- OTS (Honolulu, Hawaii)

Bus OEMs including:

- · New Flyer Industries
- · Gillig Corp.
- Daimler Buses
- · North American Bus Industries (NABI)
- · Volvo Buses
- · Veolia Transportation
- · Fiba Canning
- · Orion Bus
- ElDorado National
- · MAN Bus (Sweden)

... As well as major theme parks and international airport shuttles.



Dedication Ceremony, City of Santa Monica



PTS representative inspecting installation on buses in Stockholm

WORLDWIDE MANUFACTURER OF THE S-1 GARD

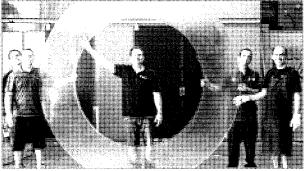


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066000 Weinberg, Wheeler, Hudgins, Gunn & Dial, LLC

S. Rainbow Boulevard, Suite 400

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Electronically Filed

12/1/2017 4:05 PM Steven D. Grierson CLERK OF THE COURT

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DISTRICT COURT

CLARK COUNTY, NEVADA

KEON KHIABANI and ARIA KHIABANI, minors by and through their Guardian, MARIE-CLAUDE RIGAUD; SIAMAK BARIN, as Executor of the Estate of Kayvan Khiabani, M.D. (Decedent); the Estate of Kayvan Khiabani, M.D. (Decedent); SIAMAK BARIN, as Executor of the Estate of Katayoun Barin, DDS (Decedent); and the Estate of Katayoun Barin, DDS (Decedent); (Decedent);

Plaintiffs,

Defendants.

V.

27

MOTOR COACH INDUSTRIES, INC., a Delaware corporation; MICHELANGELO LEASING INC. d/b/a RYAN'S EXPRESS, an Arizona corporation; EDWARD HUBBARD, a Nevada resident; BELL SPORTS, INC. d/b/a GIRO SPORT DESIGN, a Delaware corporation; SEVENPLUS BICYCLES, INC. d/v/a PRO CYCLERY, a Nevada corporation, DOES 1 through 20; and ROE CORPORATIONS 1 through 20,

Case No.: A-17-755977-C

Dept. No.: XIV

VOLUME II: APPENDIX OF EXHIBITS TO MOTION FOR SUMMARY JUDGMENT ON PUNITIVE DAMAGES

8888-886 (20<u>1</u>)

Howard J. Russell, Esq., a resident of the State of Nevada, declares as follows:

I am a licensed attorney currently in good standing to practice law in the state of Nevada and before this Court.

I am an attorney in the law firm of WEINBERG, WHEELER, HUDGINS, GUNN & DIAL, LLC, 6385 South Rainbow Boulevard, Suite 400, Las Vegas, Nevada 89118, and am counsel representing Defendant Motor Coach Industries, Inc., in this action.

I have personal knowledge of the matters contained in this declaration and am competent to testify regarding them.

The exhibits below are true and correct copies as noted:

	VOLUME I			
<u>Exhibit</u>	<u>Description</u>			
1	Deposition of Virgil Hoogestraat, 10/13/2017			
2	Deposition of Bryan Couch, 10/12/2017			
3	S1 Gard Product Information			
	VOLUME II			
Exhibit	<u>Description</u>			
4	Deposition of Edward Hubbard, 09/20/2017			
	VOLUME III			
<u>Exhibit</u>	<u>Description</u>			
5	Deposition of Mark Barron, 09/26/2017			
6	Transit Cooperative Research Program, Report 125			
7	Deposition of Pablo Fierros, 10/08/2017			
8	Report of Thomas P. Flanagan dated 10/05/2017			

I declare under penalty of perjury that the foregoing is true and correct.

DATED this 1st day of December, 2017.

WEINBERG, WHEELER, HUDGINS,

GUNN & DIAL, LLC

D. Lee Roberts, Jr., Esq.
Howard J. Russell, Esq.
David A. Dial, Esq.
Marisa Rodriguez, Esq.
Weinberg, Wheeler, Hudgins,
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8750 N. Central Expressway, Suite 1600
Dallas, TX 75231

Attorneys for Defendant Motor Coach Industries, Inc.

CERTIFICATE OF SERVICE

1 2 I hereby certify that on the 1st day of December, 2017, a true and correct copy of the 3 foregoing APPENDIX OF EXHIBITS TO MOTION FOR SUMMARY JUDGMENT ON 4 **PUNITIVE DAMAGES** was served by e-service, in accordance with the Electronic Filing 5 Procedures of the Eight Judicial District Court. 6 Will Kemp, Esq. Peter S. Christiansen, Esq. Eric Pepperman, Esq. Kendelee L. Works, Esq. 7 KEMP, JONES & COULTHARD, LLP CHRISTIANSEN LAW OFFICES 3800 Howard Hughes Pkwy., 17th Floor 810 S. Casino Center Blvd. Las Vegas, NV 89169 8 Las Vegas, NV 89101 e.pepperman@kempjones.com pete@christiansenlaw.com 9 kworks@christiansenlaw.com Attorneys for Plaintiffs 10 Attorneys for Plaintiffs 11 Keith Gibson, Esq. C. Scott Toomey, Esq. James C. Ughetta, Esq. LITTLETON JOYCE UGHETTA PARK & KELLY 12 LITTLETON JOYCE UGHETTA PARK & KELLY LLP LLP 201 King of Prussia Rd., Suite 220 The Centre at Purchase Radnor, PA 19087 4 Manhattanville Rd., Suite 202 Scott.toomey@littletonjoyce.com Purchase, NY 10577 Keith.Gibson@LittletonJoyce.com Attorney for Defendant Bell Sports, Inc. d/b/a James.Ughetta@LittletonJoyce.com Giro Sport Design Attorneys for Defendant Bell Sports, Inc. d/b/a Giro Sport Design 18 Michael E. Stoberski, Esq. Eric O. Freeman, Esq. Joslyn Shapiro, Esq. SELMAN BREITMAN LLP 19 OLSON CANNON GORMLEY ANGULO & 3993 Howard Hughes Pkwy., Suite 200 **STOBERSKI** Las Vegas, NV 89169 9950 W. Cheyenne Ave. 20 efreeman@selmanlaw.com Las Vegas, NV 89129 21 mstoberski@ocgas.com Attorney for Defendants Michelangelo jshapiro@ocgas.com Leasing Inc. d/b/a Ryan's Express and 22 Edward Hubbard Attorneys for Defendant Bell Sports, Inc. 23 d/b/a Giro Sport Design 24 /// 25 /// 26 /// 27 ///

Weinberg, Wheeler, Hudgins, Gunn & Dial, LLC

000993

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Attorney for Defendants Michelangelo Leasing Inc. d/b/a Ryan's Express and Edward Hubbard

An Employee of WEINBERG, WHEELER, HUDGINS, GUNN & DIAL, LLC

EXHIBIT 4

```
1
                           DISTRICT COURT
 2
                        CLARK COUNTY, NEVADA
 3
     KEON KHIABANI and ARIA
     KHIABANI, minors by and
     through their natural
                                 ) CASE NO.:
     mother, KATAYOUN BARIN;
                                 ) A-17-755977-C
 5
     KATAYOUN BARIN,
     individually; KATAYOUN
 6
     BARIN as Executrix of
     the Estate of Kayvan
 7
     Khiabani M.D.
     (Decedent), and the
     Estate of Kayvan
 8
     Khiabani,
 9
     M.D. (Decedent),
                 Plaintiffs,
10
11
     vs.
12
     MOTOR COACH INDUSTRIES,
     INC. A Delaware
     corporation;
13
     MICHELANGELO LEASING
14
     INC. D/b/a RYAN'S
     EXPRESS, an Arizona
15
     corporation; EDWARD
     HUBBARD, a Nevada
     resident; BELL SPORTS,
16
     INC. D/b/a GIRO SPORT
17
     DESIGN, a California
     corporation; SEVENPLUS
18
     BICYCLES, INC. D/b/a Pro
     Cyclery, a Nevada
19
     corporation; DOES 1
     through 20; and ROE
20
     CORPORATIONS 1 through
     20.
21
                 Defendants.
22
              VIDEOTAPED DEPOSITION OF EDWARD HUBBARD
23
                          LAS VEGAS, NEVADA
                    WEDNESDAY, SEPTEMBER 20, 2017
24
25
      REPORTED BY: KAREN L. JONES, CCR NO. 694
                      JOB NO.: 417421
```

1	Page 2 DEPOSITION OF EDWARD HUBBARD, taken at Kemp,
2	Jones & Coulthard, located at 3800 Howard Hughes
3	Parkway, 17th Floor, Las Vegas, Nevada, on
4	Wednesday, September20, 2017, at 10:01 a.m., before
5	Karen L. Jones, Certified Court Reporter, in and for
6	the State of Nevada.
7	
8	APPEARANCES:
9	For the Plaintiffs:
10	KEMP, JONES & COULTHARD, LLP
11	BY: WILL KEMP, ESQ. BY: ERIC PEPPERMAN, ESQ.
12	3800 Howard Hughes Parkway, 17th Floor Las Vegas, Nevada 89169
13	702.385.6000 e.pepperman@kempjones.com
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18	For Motor Coach Industries, Inc.:
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1	

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1	Page 3 APPEARANCES:
2	For Michelangelo Leasing, Inc., and Edward Hubbard:
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6	efreeman@selmanlaw.com
7	
8	For Bell Sports, Inc.:
9	LITTLETON, JOYCE, UGHETTA, PARK & KELLY, LLP BY: SCOTT TOOMEY, ESQ., ESQ.
10	201 King of Prussia Road, Suite 220 Radnor, Pennsylvania 19087
11	484.254.6220 scott.toomey@littletonpark.com
12	
13	
14	Also Present: JP Muritta, Videographer
15	
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16	Exhibit 8A	Copy of Photograph	189
17	Exhibit 8B	Copy of Photograph	189
18	Exhibit 8C	Copy of Photograph	189
19	Exhibit 8D	Copy of Photograph	189
20	Exhibit 8E	Copy of Photograph	189
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